

Pub.301 sup.

Sailing Directions for South and East Coasts of Honshu

Supplement No.7

27 September 2024



Japan Coast Guard

Explanatory Notes

Sailing Directions for South and East Coasts of Honshu - Supplement No.7 is issued to correct the outdated information in Publication No.301 Sailing Directions for South and East Coasts of Honshu which was published in March 2021.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 7 June 2024.

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.

27 September 2024

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.

The nautical charts in English (JP charts) on the left-hand side of the following table have been withdrawn. These chart numbers in Publication No.301 Sailing Directions for South and East Coasts of Honshu (including any Supplement) should be replaced by chart numbers with “W” instead of chart numbers with “JP”.

Withdrawn Nautical Charts		Substitute
No.	Title	No.
JP 63	ONAHAMA KO	W 63
JP 64A	SENDAI-SHIOGAMA KO SHIOGAMA	W 64A
JP 64B	SENDAI-SHIOGAMA KO SENDA	W 64B
JP 65	HACHINOHE KO	W 65
JP 79	ISHINOMAKI WAN	W 79
JP 1100	ISHINOMAKI KO	W 1100

Page	Updated parts (title, port name, etc.)	Remarks
Insert after 'CAUTION' / Withdrawal of Nautical Charts		
5	Weather Information	
13	Passages, Signals, Aids to Navigation	
27	Fisheries	
56	TOKYO WAN ~ BUNGO SUIDO	The said page of supplement No.5 is cancelled.
67	Mutsu-Ogawara Ko	
69	Hachinohe Ko	The said page of supplement No.4 is cancelled.
73	Same Kado ~ Todo-ga-Saki	The said page of supplement No.4 is cancelled.
75	Miyako Ko	The said page of supplement No.4 is cancelled.
76	Miyako Ko	The said page of supplement No.6 is cancelled.
87	Ofunato Ko	
88	Ofunato Ko	The said page of supplement No.1 is cancelled.
89	Ofunato Ko	
90	Kesenuma Wan	
91	Kesenuma Ko	The said page of supplement No.4 is cancelled.
92	Kesenuma Ko	
99	Ishinomaki Wan	The said page of supplement No.4 is cancelled.
100	Ishinomaki Wan, Ishinomaki Ko	
101	Ishinomaki Ko	The said page of supplement No.4 is cancelled.
102	Ishinomaki Ko	The said page of supplement No.3 is cancelled.
105	Sendai-Shiogama Ko	
106	Sendai-Shiogama Ko	The said page of supplement No.6 is cancelled.
107	Sendai-Shiogama Ko	The said page of supplement No.6 is cancelled.
109	Soma Ko	The said page of supplement No.6 is cancelled.
113	Onahama Ko	
114	Onahama Ko	The said page of supplement No.4 is cancelled.
226	IRAGO SUIDO	
246	Mikawa Ko	The said page of supplement No.2 is cancelled.
247	Chita Wan	
250	Kinuura Ko	The said page of supplement No.6 is cancelled.
263	Nagoya Ko	
264	Nagoya Ko	The said page of supplement No.1 is cancelled.

269	Nagoya Ko	The said page of supplement No.1 is cancelled.
271	Nagoya Ko	
272	Nagoya Ko	The said page of supplement No.4 is cancelled.
273	Nagoya Ko	The said page of supplement No.4 is cancelled.
285	Tsu Ko	
287	Kaburako Suido ~ Hansu Hana	
288	Kaburako Suido ~ Hansu Hana	
294	Goza Misaki ~ Aikuchi Hana	
298	Owase Ko	The said page of supplement No.6 is cancelled.
316	Kochi Ko	
317	Kochi Ko	The said page of supplement No.6 is cancelled.
320	Susaki Ko	
321	Susaki Ko	
343	Futami Ko	
	Blank below	

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 are sent 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 Navigation in Publication No.411.

15

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:

District meteorological observatory (telephone)	Local meteorological observatory (telephone)
Sendai (+81-22-297-8100)	Aomori (+81-17-741-7412) *
	Morioka (+81-19-622-7869)
	Fukushima (+81-24-534-6724)
Tokyo (+81-42-497-7182)	Mito (+81-29-224-1107)
	Choshi (+81-479-22-0374)
	Yokohama (+81-45-621-1563)
	Shizuoka (+81-54-286-6919)
	Nagoya (+81-52-751-5577)
	Tsu (+81-59-228-4745)
Osaka (+81-6-6949-6300) *	Kochi (+81-88-822-8883)
	Wakayama (+81-73-432-1328) *
	Tokushima (+81-88-622-2265) *

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

20

described in Pub. 901 “Catalogue of Charts and Publications.”

Passages prescribed by Port Regulations Law. These passages are used by vessels entering or leaving the ports specified by the same law. Each port of Hachinohe, Sendai-Shiogama, Kisarazu, Chiba, Keihin, Shimizu, Nagoya, Yokkaichi, and Kochi has the passage (Refer to Article 11 of the Port Regulations Law and Article 8 of the Regulations for the Enforcement of the Port Regulations Law).

Signals

Traffic control signals. Traffic control signals based on the Port Regulations Law are in forth at Hachinohe Ko, Sendai-Shiogama Ko, Kashima Ko, Chiba Ko, Keihin Ko, Nagoya Ko, Yokkaichi Ko, and Kochi Ko. (Refer to Article 38 Paragraph 1 of the Port Regulations Law, contained in Part 3 “COASTAL ROUTES AND HARBOURS”)

Private Signals. Private signals for the use of mooring facilities is specified in the port of Chiba Ko. (Refer to Japan Coast Guard Notice No. 34 of 1995, Private Signals for the Use of Mooring Facilities", and Japan Coast Guard Notice No.13 of 2023, The Notice for Partial Revision of “Private Singnals for the Use of Mooring Facilities”, contained in Part 3 “COASTAL ROUTES AND HARBOURS”)

Aids to Navigation

General Information. Aids to navigation may be temporally installed, moved or removed in order to maintain or repair and others the facilities of ports and passages. The state of the aids to navigation must be checked by referring to Notices to Mariners, Navigational Warnings, and Safety Information, etc.

Also, caution is needed to aids to navigation in and around ports and harbours, or just off the coasts, as they sometimes becomes difficult to distinguish from background lights and fishing lights.

Buoyage System. In Japan, IALA (International Association of Lighthouse Authorities) Maritime Buoyage System (Region B) is used.

Origin of Water. “Origin of Water”, which is the conventional direction of buoyage both starboard-hand mark and port-hand mark is regulated in the following.

1. In the passages connecting main traffic routes to harbour, the harbour side is “Origin of Water”. In the passage within the harbour area, the side where vessel gets alongside and cargo operation is done is “Origin of Water”.

2. Others than above 1 are regulated in the following.

Water area	Origin of Water
Port, harbour, bay, river and the connecting areas	The head of harbour or bay, or the upper stream on the river
Other than that above areas	Yonakuni Shima (Nansei Shoto)

Loran C Station.

Name	Main station	Secondary station	Rate
Russian Chain	Aleksandrovsk (Russia)	Petropavlovsk (Russia)	7950-W
		Ussuriisk (Russia)	7950-X
		Okhotsk (Russia)	7950-Z
Korean Chain	Pohang (Korea)	Kwangju (Korea)	9930-W
		Ussuriisk (Russia)	9930-Z

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

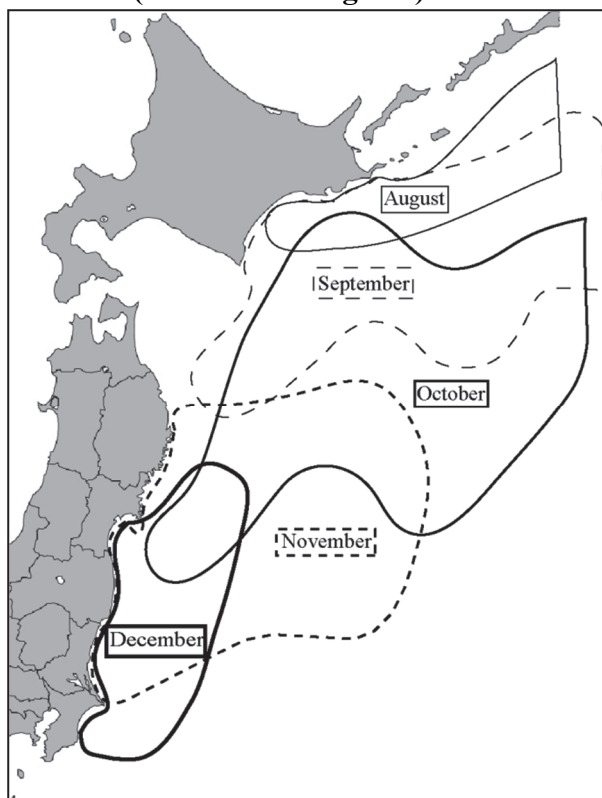
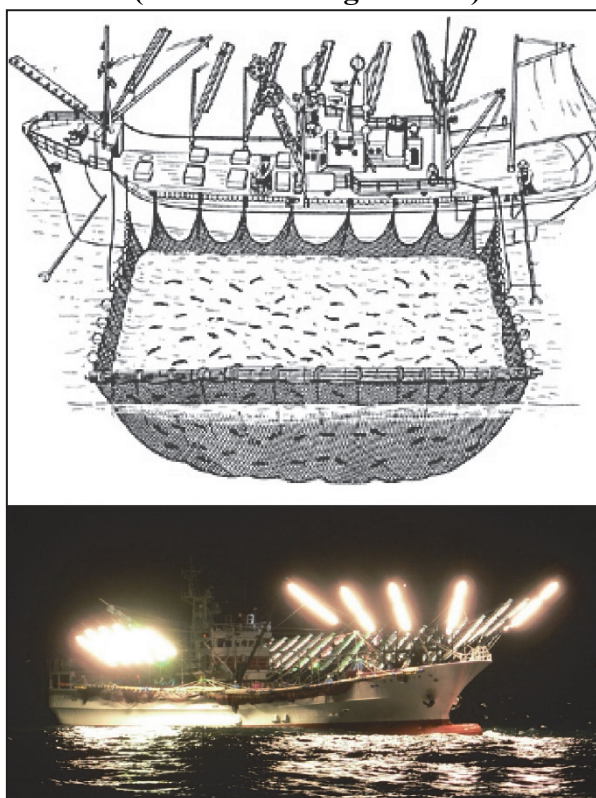


Fig. 8 Fishing method of Pacific sauries stick held dip net fishery (Schematic diagram etc.)



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.** Large light buoys 15 sets of surface type fish aggregating device for fishery 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.

4. Off the coast of Shio-no-Misaki ~ Toi-Misaki.

Steer 295° from a position about 5 M S of Shio-no-Misaki Light; at a position about 5 M SW of Ichie Saki Light (33° 35.3' N, 135° 23.9' E), alter course to 315°, which leads to a position about 5.5 M SW of Kii Hino Misaki Light (33° 52.9' N, 135° 03.7' E).

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Off the coast of Shio-no-Misaki or I Shima {Kii Suido} ~ Ashizuri Misaki(Charts W157, JP77, JP108)

(1) The route passing through off Muroto Saki.

Steer 262° from a position about 5 M S of Shio-no-Misaki Light, or steer 222° from a position about 5 M E of I Shima Light (33° 50.7' N, 134° 48.9' E); at a position about 5 M S of Muroto Saki Light (33° 14.8' N, 134° 10.5' E), alter course to 242°, which leads to a position about 5 M S of Ashizuri Misaki Light (32° 43.4' N, 133° 01.2' E).

Proceeding to Kochi Ko, steer 303° or 028° from a position about 5 M S of Muroto Saki or Ashizuri Misaki respectively with Kochi Light (33° 29.8' N, 133° 34.4' E) ahead.

(2) Direct route to Ashizuri Misaki.

15 From a position about 5 M S of Shio-no-Misaki Light, steer for a position about 5 M S of Ashizuri Misaki Light bearing 253°.

Caution:

When navigating from a position about 20 M S of Shio-no-Misaki Light to a position about 20 M S of Ashizuri Misaki Light, caution is necessary with ~~Tosa Kuroshio Bokujo Light 6 buoys surface type fish aggregating diveces~~ and numerous fishing vessels operating in the vicinity.

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Ashizuri Misaki ~ Bungo Suido or Toi Misaki. (Charts W157, JP108)

(1) Proceeding to Bungo Suido (32° 57' N, 132° 12' E), from a position about 5 M S of Ashizuri Misaki Light, steer 268° for a position about 5 M S of Tosa Okino Shima Light (32° 42.3' N, 132° 32.6' E), then proceed to Hayasui Seto (33° 19' N, 131° 59' E) passing through the W of Oki-no-Shima, keeping away from Shibiko Se (32° 56.8' N, 132° 16.2' E).

25

(2) Proceeding to Toi Misaki, steer 242° from a position about 5 M S of Ashizuri Misaki Light and pass through a position about 24 M SSW of Tosa Okino Shima Light, or navigate from a position about 5 M S of Ashizuri Misaki Light to a position about 5 M SE of Toi Misaki Light (31° 22.0' N, 131° 20.7' E).

30

(3) Proceeding from off the coast of Shio-no-Misaki to Toi Misaki directly, navigate from a position about 5 M S of Shio-no-Misaki Light, pass through a position about 25 M S of Ashizuri Misaki Light, then pass through the naval sea training area used by U.S. Military Forces stationed in Japan (Area Lima: Refer to Chapter 7 "NAVIGATIONAL PRECAUTIONS" in Part 1 "GENERAL INFORMATION") clearing its N limit, and proceed to off Toi Misaki.

35

Eastbound.

Follow the routes described in above 1 ~ 4 backward.

Proceeding to Kochi Ko, steer 028° from a position about 5 M S of Ashizuri Misaki respectively with Kochi Light (33° 29.8' N, 133° 34.4' E) ahead.

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Proceeding to Shimizu Ko, steer 060° from a position about 4.5 M SSE of Kashino Saki Light (33° 28.3' N, 135° 51.7' E); when Gozen Iwa Light (34° 35.9' N, 138° 15.6' E) abeam, alter course to 027°, which leads to a position about 2 M E of Shimizu Light (35° 00.6' N, 138° 31.8' E).

Mutsu-Ogawara Ko (40° 56' N, 141° 24' E) (Chart W1028) (Port Code: JP MUT)

(Photographed May. 2018)

Port classification. Specified port, Important port.

5 **General information.** This port divided into four sections; Obuchi area, Takahoko area, Shinnaya area and Gaiko area of off E Breakwater. There is the Mutsu-Ogawara National Petroleum Stockpiling Base W of Obuchi-Numa.

The depth in some parts of the port is getting shallower due to quicksand. The S side of the E Breakwater is recommended for navigation due to the shallow depth of the NW side of the E Breakwater.

10 **Safeguards against Typhoon and Tsunami.** In order to prevent marine disasters caused by typhoon and tsunami etc., Mutsu-Ogawara Ko Tsunami and Typhoon etc. Vessels 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: Hachinohe Coast Guard Office).

15 **The largest vessel to enter the port.** On 22 September 2002, the tanker "TENRYU" (152,139t, draught 20.4m) moored alongside the sea-berth.

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.

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.

Caution: It should be noted that a sea training area used by the U.S.Forces, Japan is established in the area S of port (Refer to the section "Sea Training Areas" of Chapter 7 "NAVIGATIONAL PRECAUTIONS" of Part 1).

Sea-berth. One yellow mooring buoy for larger vessels with a capacity of 315,000 D/W×1, fitted with a white light and fog signal, is situated in the position (40° 56.9' N, 141° 25.2' E) NE of E Breakwater.

25 **Facilities.**

Name	Position	Length (m)	Depth (approx. m)	Capacity (D/W×vessel)	Remarks
Takahoko A, B Quays	40° 56.2' N, 141° 22.7' E	260	6~7.5	5,000 × 2	
Takahoko C Quay	40° 55.9' N, 141° 23.0' E	100	10.5~13	2,000 × 1	
Shinnaya Quay	40° 55.5' N, 141° 23.5' E	630	3.5~4.5	2,000 × 7	

Apart from the above table, a basin is located in Shin-naya area, near the entrance to Takahoko-Numa and another one in the vicinity of the entrance of Obuchi Numa N of the former basin.

Hachinohe Ko (40° 32' N, 141° 32' E) (Chart JP65) (Port Code: JP HHE)

(Photographed May, 2018)

Port classification. Specified port, Open port, Quarantine port, Immigration port, Domestic animal quarantine port, Plant protection port, Important port.

General information. This port is divided into three sections, (No.1 ~ No.3), and has two passages, the E and the W Passage.

The harbour area is sheltered from waves from the open sea by the completed offshore the Middle Breakwater and No.2 Middle Breakwater (under construction). However, a passage in the W Passage sometimes becomes difficult affected by the rebound waves in strong E winds; and moored vessels in Section 1 and Section 2 may experience difficulty to remain on the berths safely due to swells entering in strong N winds.

Safeguards against Typhoon and Tsunami. In order to prevent marine disasters caused by typhoon, tsunami and low atmospheric depression etc., Hachinohe Ko Tsunami and Typhoon etc. Vessels 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. When an evacuation advisory is issued by Captain of the Port, a self-control area for anchoring is set in the waters in front of the Hachinohe LNG Terminal. (Inquiries: Hachinohe Coast Guard Office).

Weather. WSW land breezes are most frequent throughout year. Strong easterly or northerly winds blow when a depression passes close S of Hachinohe Ko. Thick fog, which may restricts visibility for a whole day, sometimes set from June through August. There are a few days of snowstorms which extremely restrict visibility in winter.

Tides. In Hachinohe Ko, mean higher high water is 1.2 m, mean lower low water is 0.3 m, and mean sea level is 0.85 m.

Marine disasters. Stranding cases of drifting ashore have been reported during strong E winds due to the development of swells and ocean waves outside of the breakwater.

The largest vessel to enter the port. On 31 August 2019, the LNG tanker "MEGARA" (113,263t, draught 12.5m) berthed at ENEOS LNG Service Hachinohe LNG terminal Private pier.

Port communications. Port communications by a VHF radiotelephone system between a vessel and Captain of the Port is available through the SHIOGAMA COAST GUARD RADIO.

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

Medical facilities.

Name	Telephone	Remarks
Hachinohe City Hospital	+81-178-72-5111	
Aomori Rosai Hospital	+81-178-33-1551	

Maritime traffic. There are car ferry services (10,536 G/T etc.) to and from Tomakomai.

5 **Same Kado ~ Todo-ga-Saki** (Chart JP53)

General information. Besides some bays and inlets such as Kuji Wan, Noda Wan, Miyako Wan etc. the coast between Same Kado and Todo-ga-Saki is mostly regular in shape.

The water is generally deep and there are no dangerous reefs in areas more than 1 M offshore except inside bays and islets; in waters close to shores, however, numerous rocky reefs are scattered, on which waves break violently in summer even in gentle sea condition. In the area less than 1 M offshore between Hajikami Light (40° 27.1' N, 141° 40.9' E) and Yagi Ko (40° 21' N, 141° 46' E) in particular, numerous sunken reefs are interspersed and the depths are irregular.

The coast between Kuji Wan and Kesenuma Wan is designated as the Sanriku Fukko National Park.

The coast between Kabu Shima in Hachinohe Ko and Oshika Hanto has been dedicated as the Sanriku Fukko National Park (designated on March 31, 2015). Also, the Coast about 14 M between Myoujin Saki and Todo-ga-Saki (39° 33' N, 142° 04' E) having varied scenic changes without dangerous reefs of 0.5 M beyond along the Coast with ample depth.

It should be noted that in summer, particularly in June and July, fog is frequent and large number of fishing vessels may be encountered; such fishing vessels appear in autumn, too.

Landmarks.

Landmark	Position	Remarks
Benten Hana	40° 13' N, 141° 50' E	A point of brown surface and wooded cliffs. There is a lighthouse in Ushi Shima in the vicinity of the SE of this point.
Mi Saki	40° 09' N, 141° 53' E	A cape; the foot of its end consists of gray cliffs. Todo Iwa, a bare rock, 7 m high; lying E about 0.5 M of the cape is seen whitish due to guano covering it.
Toshima Yama	40° 01' N, 141° 39' E	A mountain, 1,263 m high; the peak of which is pointed.
Nanatsu Mori	39° 59' N, 141° 56' E	A summit, 429 m high; rising close W of a headland of steep cliffs lying between Kuro Saki and Benten Saki. It is thickly wooded, seen black and conspicuous; the peak is very rugged.
Benten Saki	39° 57' N, 141° 58' E	A cape surmounted by a lighthouse. A steep cliffs extend 4 M between this cape and Kuro Saki.
Ma Saki	39° 45' N, 142° 00' E	A thickly wooded cape of cliffs surmounted by a lighthouse. A good mark from N and S. It gives a good radar response.
Toge-no-Kami Yama	39° 44' N, 141° 47' E	1,230 m high, the highest peak in this area.
Hei Saki	39° 39' N, 142° 02' E	A roundish cape of cliffs surmounted by a lighthouse.
Gassan	39° 37' N, 142° 00' E	A mountain, 456 m high, showing a pointed peak to NE and SE. There are 3 TV towers on the top, which exhibit some red lights at night.
Todo-ga-Saki	39° 33' N, 142° 04' E	A low cape of cliffs surmounted by a lighthouse. It sometimes is difficult for inbound vessels to distinguish the cape from the background.
Todo Yama	39° 33' N, 142° 03' E	465 m high. The peak is seen pointed from N and S.

20 **Miyako Wan** (39° 40' N, 142° 00' E) (Chart JP54)

General information. Miyako Wan is entered about 5 M between Ane-ga-Saki and Hei Saki; the entrance opens to the NE. The water is mostly deep; 74 m deep at the center of the entrance then becomes shallow gradually as it goes inwards. No shoals of 5 m deep or less exist in the area outside 400 m offshore except in the vicinity of the head.

There is a detached breakwater, about 200 m long, between Hide Shima on the W side of the entrance and the westward opposite shore, where navigation is not recommended.

Traffic of fishing vessels is heavy and the large vessels dose port the inward-bound and the outward-bound, too.

Inside the port, there is a fishing port and Desaki Wharf in (Kuwagasaki) Section, ~~Fujiwara Wharf for importing and exporting timbers in Fujiwara Section, and a log pond in Sokei Section.~~ But each section is now under construction for an earthquake disaster restoration. In recent years, Fujiwara Section has become a port of call for large passenger ships, with many foreign ships as well as Japanese ships calling at the port.

Safeguards against Typhoon and Tsunami. In order to prevent marine disasters caused by typhoon and tsunami etc., Miyako Ko Tsunami and Typhoon etc., Abnormal Weather Vessels 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: Miyako Coast Guard Station).

Weather. NE to NNE winds prevail in summer while WSW winds are dominant in other seasons. Fog is most frequent in Jun. and Jul.; it occurs for about 10 days in each month.

The largest vessel to enter the port. On 4 August 2023, the passenger vessel “MSC BELLISSIMA” (171,598t, draught 8.7m) berthed alongside with - 10 m Quay, Fujiwara No.2 Wharf.

Pilotage. There is not sea area of pilotage to establish in the Pilotage Law, but pilotage of private qualification is available.

Landmarks.

Landmark	Position	Remarks
Radio towers group	39° 38.8' N, 141° 58.0' E	2 radio towers (each 66 m, 67 m high), an observation tower (white, 59 m high) , and a chimney (59 m high).
A radio tower	39° 38.1' N, 141° 57.5' E	Red and white, 127 m high.
A conspicuous house	39° 37.7' N, 141° 57.8' E	City Culture Center (white, triangular).

Directions. Approaching from N, steer for Heisaki Light (39° 39.3' N, 142° 01.5' E), bearing 190° at a position ENE about 7 M from Rikuchubentensaki Light (39° 56.8' N, 141° 57.6' E); at a position E 2 M from Ane-ga-Saki (39° 41.3' N, 141° 59.3' E), steer 216° with Miyako Ko Fujiwara Breakwater Light (39° 37.7' N, 141° 58.6' E) ahead, and proceed to the entrance properly after passing Tate-ga-Saki (39° 38.8' N, 141° 59.0' E).

Approaching from S, course to 320° with Rikuchumasaki Light (39° 45.1' N, 142° 00.0' E) ahead; at a position NE about 2.7 M from Hei Saki Light, steer 250° for the S extremity of Hide Shima (39° 40.1' N, 141° 59.3' E) ahead; at a position N 1.4 M from same lighthouse, steer 216° with Miyako Ko Fujiwara Breakwater Light ahead, and proceed to the entrance after passing Tate-ga-Saki. Caution should be paid for the following in approaching the port.

Precaution for entering the port. The precautions below are necessary after the Great East Japan Earthquake.

- Care is necessary against foul substances scattered in the port.
- Construction of a sluice gate is underway at the mouth of the Hei Kawa river.

Caution: Many stationary nets are laid along both coasts of Miyako Wan throughout year. A caution with the stationary nets and aquaculture facilities laid within about 800 m offshore on the coast between SW about 1.2 M from Heisaki Light and W about 0.6 M from same lighthouse is particularly necessary.

The water S of Desaki Wharf around the estuary of Hei Kawa, depths between 1 m to 3 m, waves sometimes break over it in strong winds. The streams in this area become to be strong after heavy rain, with which caution should be also exercised.

Wave meter. A wave meter is installed in an undersea of a position E about 0.2 M from Ryujinzaki Breakwater.

Anchorage. Large vessels usually use the area near to the quarantine anchorage (39° 38.0' N, 141° 59.1' E) E of Fujiwara Breakwater. The mouth of Miyako Wan other than near the quarantine anchorage area is deep, and there are stationary nets and other aquaculture facilities. Therefore care should be taken when anchoring.

Facilities.

Name		Position	Length (m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks
Hitachi Hama Quay		39° 38.6' N, 141° 58.4' E	240	3.5 ~ 6	300 G/T × 4	
Kuwa-ga-Saki Quay		39° 38.6' N, 141° 58.1' E	505	3 ~ 5	500 G/T × 7	
Desaki Wharf	- 9 m Quay	39° 38.4' N, 141° 58.3' E	175	7 ~ 8	10,000 × 1	
	- 7.3 m Quay	39° 38.5' N, 141° 58.2' E	218	6.5	3,000 × 2	
Fujiwara No.1 Wharf	- 12 m Quay	39° 38.0' N, 141° 58.2' E	240	10	30,000 × 1	
	- 7.5 m Quay	39° 38.1' N, 141° 58.0' E	260	7	5,000 × 2	
Fujiwara Wharf		39° 38.1' N, 141° 57.9' E	180	4 ~ 6.5	700 × 3	
Fujiwara No.2 Wharf	- 10 m Quay	39° 37.7' N, 141° 58.2' E	740	9 ~ 10	12,000 × 4	
	- 7.5 m Quay	39° 37.9' N, 141° 58.2' E	260	6.5 ~ 7.5	5,000 × 2	

Apart from the above table, a log pond (39° 37.3' N, 141° 58.0' E) surrounded by breakwaters lies SW of Fujiwara No.2 Wharf and a yacht basin is situated immediately S of the log pond.

5 **Supply.** Fresh water and fuel oil are available.

Maritime authorities and facilities.

Name	Telephone
Miyako Coast Guard Station	+81-193-62-6560
Miyako sub-branch, Kamaishi Branch Customs of Hakodate Customs	(Kamaishi Branch Customs) (+81-193-22-3010)
Miyako Chosha, Iwate Branch of Tohoku District Transport Bureau	+81-193-62-3500
Miyako Detached Office of Sendai Quarantine Station (To be contacted to Sendai Quarantine Station)	(+81-22-367-8100)
Shiogama Branch of Yokohama Plant Protection Station	+81-22-362-6916
Miyako Civil Engineering Center, Wide-area Coastal Promotion Bureau of Iwate Prefecture	+81-193-64-2221

Medical facilities.

Name	Telephone	Remarks
Iwate Prefectural Miyako Hospital	+81-193-62-4011	

10

Paragraph 2 TODO-GA-SAKI ~ KINKASAN

(Chart JP54)

15 **General information.** The Coast between Kabu Shima in Hachinohe Ko and Oshika Hanto has been dedicated as Sanriku Fukko National Park (designated on March 31, 2015). The coastline between Todo-ga-Saki and Kinkasan is extremely rugged forming a Ria Coast. Many bays and inlets lie along the coast, but most of which, except Yamada Wan and Ofunato Wan, are open to the E and subjected to swell.

20 Generally deep water lies close to the shore. However, islands and dangerous reefs are interspersed along the shore. Especially both O Ne (s), each of which is located outside Yamada Wan and Otsuchi Wan, vessels should exercise caution when navigating along the coast. In the vicinity of Ohako Saki (39° 21' N, 142° 00' E), tidal races may be experienced when tidal currents and S winds meet.

Along this coasts, there are Kamaishi, Ofunato and some other ports which are classified as Port Designated by Port Regulations Law. In addition, there are anchorages for large vessels such as Yamada Wan, Kesenuma Wan, Ogatsu Wan and Onagawa Wan.

Ofunato Ko (39° 03' N, 141° 44' E) (Chart W1093) (Port Code: JP OFT)

(Photographed Aug. 2018)

Port classification. Port designated by Port Regulations Law, Open port, Quarantine port, Immigration port, Plant protection port, Important port.

General information. This port lies in a long and narrow inlet which is entered to the NW about 2 M between Koori Saki (39° 01.1' N, 141° 45.5' E) and Goishi Saki (38° 59.2' N, 141° 44.5' E), then is further entered to the N about 2.5 M. It is well sheltered from wind waves and the water is deep. Sango Shima lies in the center of the port (See item “Landmarks”), the channel E of which is 28 ~ 39 m deep and another channel to the W is 11 ~ 19 m deep. The water is always calm sheltered by high and densely wooded mountains rising close to the shore, which gives vessels safe berths and cargo works without impediment; but strong gusts from the inland are sometimes encountered.

It should be noted that there are aquaculture facilities of shellfish and seaweed everywhere inside the port.

Fishing port (39° 01.0' N, 141° 42.9' E) is located in Hosoura on the SW coast.

Safeguards against Typhoon and Tsunami. In order to prevent marine disasters caused by typhoon and tsunami etc., Ofunato and Rikuzen-Takata Districts Vessels 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, cancellation of them, etc. (Inquiries: Kamaishi Coast Guard office, TEL +81-193-22-3830).

Landmarks.

Landmark	Position	Remarks
Sango Shima	39° 02.2' N, 141° 43.6' E	A densely wooded, hemisphere shaped islet, 25 m high. Lighthouses stand on the S and N ends. Prominent.
A radiomast	39° 02.5' N, 141° 44.3' E	106 m high, red and white, ball shape.
Benten Yama	39° 03.2' N, 141° 44.1' E	62 m high. The SW slopes are sliced and appear white cliffs. A monument stands near on the top.
A chimney	39° 04.4' N, 141° 43.9' E	161 m high, red and white, located in a factory yard.

Directions.Approaching from N.

1. Proceed S from Ryori Saki Light (39° 01.8' N 141° 51.0' E). Then, alter course to 272° at a position about 11M ESE from Goishi Saki Light (38° 59.2' N 141° 44.5' E).

2. When Koguro Saki (39° 01.5' N 141° 47.8' E) is abeam, alter course to starboard so as to proceed to the navigable channel indicated by Ofunato Ko Directional Light (white light, bearing 311°).

3. At a position abeam of O Saki (39° 01.7' N 141° 43.7' E), alter course to starboard as necessary for the anchorage.

Approaching from S.

1. Steer for Ryori Saki Light, on a course of 002°.

2. When Kuro Saki (38° 57.2' N, 141° 43.7' E) is earlier than abeam, alter course gradually to starboard so as to proceed to the navigable channel indicated by Ofunato Ko Directional Light (white light, bearing 311°). And proceed to the course indicated by above "3" afterwards.

It is recommended that vessels entering to this port for the first time should avoid entering the harbor at night or in poor visibility.

Precaution for entering the port. The precautions below are necessary after the Great East Japan Earthquake.

1. Public quays (water depths of 4.5 m or greater) may be tentatively used; however, before entering port, detailed information related to port facilities, etc., must be acquired from the port authority, etc.

2. Drifting debris or flotsam may be found within the port when the wind direction changes or because of flotsam drifting in from the river; therefore, ships should navigate taking adequate precautions. Care should also be taken to avoid obstacles on the sea bed such as vehicles, fishing appliances, etc.

3. There is an island (Sango Shima) within the harbour. There are two routes: one that goes along the west side of the island, and one that goes along the east side {Sangojima higashi Suido}.

Both routes are narrow and adjacent to aquaculture facilities; care must be taken when entering the harbour.

In addition, the Ofunato and Rikuzen-takata Districts Vessels Safety Measure has been established, which instructs foreign ships and large ships (generally over 10,000t) as follows:

(1) Enter and depart the harbour by sailing through Sangojima Higashi Suido.

(2) Coordination of water use with other ships is required to prevent ships from meeting each other at Sangojima Higashi Suido.

Anchorage. The most part of the water of the innermost area is 10 ~ 20 m deep with muddy bottom, the holding ground of which is not very good. The outbursts of NW wind coming along Sakari Kawa are sometimes so strong that it may cause the anchor to drag. In this case, anchorage S of Nonoda is recommended. Most vessels usually anchor in the area in front of the above quays in Nonoda Section, about 400 m offshore and depths between 15 and 16 m.

The quarantine anchorage is located WSW of Koori Saki in position (39° 00.9' N, 141° 44.7' E).

Facilities.

Name		Position	Length (m)	Depth (approx. m)	Capacity (D/W×vessel)	Remarks
Chayamae	- 9 m Quay	39° 03.9' N, 141° 43.6' E	330	9	10,000 × 2	
	- 6 m Quay	39° 03.9' N, 141° 43.4' E	210	5 ~ 5.5	2,000 × 2	
	- 4 m Lading place	39° 04.0' N, 141° 43.3' E	195	3	—	
Nonoda	- 13 m Quay	39° 03.5' N, 141° 43.5' E	270	12.5	40,000 × 1	
	- 7.5 m Quay	39° 03.6' N, 141° 43.6' E	260	6.5 ~ 8	5,000 × 2	
	- 4.5 m Quay	39° 03.4' N, 141° 43.4' E	120	4.5	1,000 × 2	
Yamaguchi Quay		39° 03.7' N, 141° 44.1' E	160	7.5 ~ 9.5	5,000 × 1	
Nagahama Quay		39° 03.4' N, 141° 44.0' E	290	12 ~ 13	40,000 × 1	Emergency use only

Apart from the above table, there is a quay (- 13 m) in the Nagahama Yamaguchi areas, but berthing is only for emergency because it is under construction.

Many berthing facilities are provided for small craft, and many private berthing facilities and roadsteads (39° 04.2' N, 141° 43.8' E) are located in Kamihira on the W shore and along the N shore. In addition, a log pond (39° 03.1' N, 141° 44.3' E) is located in a small cove NE of Biwa Shima on the E shore of the port.

5 **Supply.** Fresh water, ice and fuel oil are available.

Repair. Repairs can be arranged.

Maritime authorities and facilities.

Name	Telephone
Ofunato Branch Customs	+81-192-26-2326
Ofunato • Kesenuma Detached Office of Sendai Quarantine Station (To be contacted to Hanamaki Airport Detached Office)	(+81-198-29-6725)
Ofunato Civil Engineering Center, Wide-area Coastal Promotion Bureau of Iwate Prefecture	+81-192-27-9919

Tugboats and Ferryboats. Tugboats and ferry boats are available.

10 **Medical facilities.**

Name	Telephone	Remarks
Iwate Prefectural Ofunato Hospital	+81-192-26-1111	

Hirota Wan (38° 57' N, 141°42' E) (Chart W56)

15 **General information.** Hirota Saki and Osaki Saki. The coast is very rugged on the both side and mostly consists of Cliffs, each projection is fringed by many dangerous reefs. A round the head stretch sandy beaches is shallow to a good distance from shore. It should be noted that there are stationary nets and aquaculture facilities of seaweeds in the bay (There is Hirota ko (Port designated by Port Regulations Law)(JP HTA)).

Landmarks.

Landmark	Position	Remarks
Nida Yama	38° 59' N, 141° 41' E	A mountain, 253 m high.
No Shima	38° 59' N, 141° 38' E	An islet of white rocks, 15 m high, of which upper part is thickly covered with woods.
Ide Yama	38° 58' N, 141° 38' E	A conical shaped mountain, 120 m high; thick woods grow on the top. The S side is excavated and has become cliffy.
Otsuki Shima	38° 57' N, 141° 39' E	An islet, 42 m high. The lower part consists of white cliffs.
Kita-Yotome Iwa	38° 55' N, 141° 40' E	A rock, 6 m high. The central part is white and easy to be distinguished.
Osaki Saki	38° 52' N, 141° 40' E	A cape of steep cliffs lying at the S end of a low and long peninsula. A lighthouse stands on the top. Oiso Shima lies SE about 150 m of the cape.

Approaches to Hirota Wan

20 Seen from the ESE



Kesenuma Wan (38° 51' N, 141° 38' E) (Chart W1099)

25 **General information.** This bay lies between Osaki Saki and Iwai Saki and is divided into To Wan and Sei Wan by O Shima. Both of To Wan and Sei Wan are open to the S and experience some wind waves in strong S winds. There is strait of O Shima Seto (38° 53' N, 141° 37' E) connecting both bays between O Shima N side and the opposite shores. Kesenuma Ko lies at the head of Sei Wan.

It should be noted that there are **fishing nets and many oyster farms** in To Wan, Sei Wan and around their entrances.

To Wan. The E coast {the Karakuwa Hanto side} of To Wan is very rugged with many small projections; rocky reefs are scattered in the area within 200 ~ 300 m offshore from each projection. Fishing port lies on the E side of the interior; the water is deep to the shore; depths in the central part are 10 ~ 20 m; bottom is sand or mud, where the holding ground is good.

5 Its W coast is the E coast of O Shima; it is indented at the center. The center part of the channel is about 30 m deep. Mile posts stand on the E coast.

Oshima Seto. (38° 53.2' N, 141° 37.2' E) Bansho Ne (a light beacon and spotlighting light is located at the W end) lies near the center of the E entrance. The width at the narrowest part of the fairway comes to about 100 m due to aquaculture facilities of many oyster farms laid all over the coast of this strait.

10 **Sei Wan.** In the vicinity of the entrance lie many dangerous reefs, and aquaculture many oyster farms and seaweeds are laid all over the coast on the both sides of the bay, which cause the fairway to become narrow. There is Hajikami fishing port on the W side of Sei Wan.

Landmarks.

Landmark	Position	Remarks
Hayama San	38° 54' N, 141° 39' E	A mountain, 219 m high; many trees grow on the top. It is seen pointed from SE and NE.
Kara Shima	38° 52' N, 141° 38' E	An islet with a lighthouse at the N end. Dangerous reefs are scattered all around the islet within 50 ~ 250 m offshore.
O-Maemi Shima	38° 51' N, 141° 38' E	An islet, about 30 m high.
Ko-Maemi Shima		An islet, 30 m high; it is connected with O Shima by drying rocky reefs.
Kame Yama	38° 52' N, 141° 37' E	234 m high.
Hokki Shima	38° 52' N, 141° 36' E	A reddish rock, 6 m high.
Tatsumai Saki	38° 50' N, 141° 38' E	A cape with many pine trees. There is a lighthouse in the vicinity of the head.
Iwai Saki	38° 50' N, 141° 36' E	A cape with a lighthouse at the end. Drying rocks are jugged into the area N of the cape.

15 **Overhead cables.** Power transmission cable with a vertical clearance of 32 m span in the vicinity of the W entrance of Oshima Seto.

Bridgre building. There is the Kesennuma Oshima Ohashi Bridge (38° 52.7' N, 141° 36.4' E, about 32 m high) on the W side of the Overhead cables.

Directions.

20 Approaching from To Wan.

Entering through To Wan, Oshima Seto is quite twisting and the fairway is narrow. When a vessel approached the entrance of To Wan, steer for the heads of the bay according to a Kesennuma Ko To Wan directional light (38° 53.6' N, 141° 37.6' E) on the fairway of navigable waters. The white light directing toward 332° with beam width of about 2° points the fairway which avoid a group of dangerous reefs lying around the entrance of To Wan and Nakataira Ne. The green light and the red light (both beam width of about 1.5°; turn on day and night) point the port side or starboard side of the fairway respectively.

25 Many of small vessels make passage in To Wan.

Approaching from Sei Wan.

30 Entering through Sei Wan, it is dangerous to take the course 000° because of dangerous reefs, aquaculture facilities and O Ne etc. scattered in the area S of Iwai Saki; O Ne (38° 48.5' N, 141° 37.7' E; minimum depth 11.8 m) is situated almost on the center of the bay entrance. Entering Sei Wan, steer for Iwai Saki Light, bearing 295°; when Rikuzen Oshima Light (38° 49.8' N, 141° 37.5' E) abeam, alter course as necessary for the entrance of the bay. Aquaculture facilities in the bay spread from both sides to the center and narrow the fairway.

35 **Approaches to Kesennuma Wan**

Seen from SE about 2.5 M of O Shima



Kesenuma Ko (38° 54' N, 141° 35' E) (Chart W1099) (Port Code: JP KSN)

(Photographed Aug. 2018)

Port classification. Port designated by Port Regulations Law, Quarantine port.

5 **General information.** The port is located in the N end of Sei Wan.

The inner part is well sheltered and affords good anchorage with muddy bottom and depth of 5 ~ 9 m. The fairway becomes to be very narrow in the vicinity of Hachi-ga-Saki (See item “Landmarks”) at the entrance of the inner harbour, so large vessels may encounter difficulties in passing.

There is **commercial port quay, Asahi Wharf** on the left bank at the estuary of O Kawa SSE of Hachi-ga-Saki.

10 **Safeguards against Typhoon and Tsunami.** In order to prevent marine disasters caused by typhoon and tsunami etc., **Kesenuma City Earthquake and Tsunami Disaster Measures Conference is established to Information** on typhoons, tsunamis etc. **is issued** to vessels and concerned parties in the port and give countermeasures to be taken including warning arrangements, evacuation orders and instructions, restrictions on entry into the port, cancellation of them, etc. (Inquiries: Kesenuma Coast Guard Station).

15 **Landmarks.**

Landmark	Position	Remarks
Hachi-ga-Saki	38° 53.7' N, 141° 35.3' E	It is surmounted by a steel tower, 64 m high. (There is a steel tower of 60m high on the opposite bank.)
A conspicuous building	38° 54.3' N, 141° 34.7' E	Hotel, on a cliff about 1.3 km northwest of Hachi-ga-Saki

Directions. From a position S about 1.5 M of the entrance, steer for Kesenuma Ko Leading lights (front light: 38° 53.7' N, 141° 35.7' E; rear light: 38° 54.0' N, 141° 35.7' E) in line, bearing 354.8°, then proceed to the anchorage properly from the estuary of O Kawa.

20 **Precaution for entering the port.** There were some quays that suffered ground settlement and were partially damaged after the Great East Japan Earthquake. These should be confirmed from the port authority before entering port.

Overhead bridge. Kesenumawan-Odankyo Bridge (38° 53.6' N 141° 35.6' E, with a vertical clearance of about 32m, a spans of 480m) which is a part of Sanriku Coastal Highway, crosses the passage between Asahi Wharf and Kogoshio in a SW-NE direction.

25 **Anchorage.** The quarantine anchorage is located near the entrance of To Wan (38° 51.4' N, 141° 38.8' E).

Facilities.

Name	Position	Length (m)	Depth (approx. m)	Capacity (D/W×vessel)	Remarks
Asahi Wharf	- 4.5m Quay (No.1~3)	186	7 ~ 9.5	1,000 × 3	
	- 7.5m Quay (No.1~3)	390	6 ~ 8	5,000 × 3	
S Quay in front Fish Market (- 6 m Quay)	38° 53.6' N, 141° 35.1' E	200	5		
Fish Market Pier (- 6 m Quay)	38° 53.9' N, 141° 35.0' E	470	4.5 ~ 5.5	300 × 7	There is an unsurveyed area
Fish Market Quay (- 6 m Quay)	38° 54.0' N, 141° 34.8' E	297	4.5 ~ 6		A fish market on it.
Resting Pier (- 6 m Quay)	38° 54.1' N, 141° 34.8' E	499	3.5 ~ 5.5		

Supply. Fresh water, ice and fuel oil are available.

Repair. Available

5

Maritime authorities and facilities.

Name	Telephone
Kesennuma Coast Guard Station	+81-226-22-7084
Kesennuma Sub-branch of Sendai-Shiogama Branch Customs	+81-226-23-1023
Kesennuma Maritime Branch of Tohoku District Transport Bureau	+81-226-22-6906
Ofunato Kesennuma Detached Office of Sendai Quarantine Station (To be contacted to Sendai Quarantine Station)	(+81-22-367-8100)
Miyagi Prefectural Kesennuma Civil Engineering Office	+81-226-24-2539

Oil waste disposition facilities.

Name	Application	Hours of operation	Waste oil to be disposed	
			Waste heavy oil	Waste light oil
Miyagi Ken	Kesennuma Seikokai +81-226-24-1777	0830 ~ 1715	Bilge and water ballast	

Medical facilities.

Name	Telephone	Remarks
Kesennuma City Hospital	+81-226-22-7100	

10

Koizumi Wan (38° 47' N, 141° 34' E) (Charts JP54, W1047)

General information. This bay is entered between Tatehana Saki SW about 2 M of Iwai Saki and Sue-no-Saki S about 4 M of Tatehana Saki; it is open to the E and does not afford anchorage.

It should be noted that there are stationary nets and aquaculture facilities of seaweeds in the bay.

15

Landmarks.

Landmark	Position	Remarks
Tatehana Saki	38° 49' N, 141° 34' E	A black and low cape.
Chonomori Yama	38° 50' N, 141° 31' E	487 m high. There are such as TV tower near the top.
Tatsugane Yama	38° 45' N, 141° 28' E	511 m high. There are 2 white houses (rest house and cottage and a tower) near the top.
Sue-no-Saki	38° 44' N, 141° 34' E	A cape thickly covered by coppices; the small hill at its N end is black.

Shizugawa Wan (38° 40' N, 141° 32' E) (Charts JP54, W1047)

General information. This bay is entered between Utatsu Saki and Matsu Shima; the coastline is very rugged. In the bay, small islets and rocks are scattered and stationary nets and aquaculture facilities of seaweeds are laid everywhere; so care is necessary when navigating.

20

Shizugawa Ko (Port Code: JP SZG) lies at the head.

Paragraph 3 KINKASAN ~ SHIOYA SAKI

(Chart JP1098)

General information. In the N part of the coast between Kinkasan and Shioya Saki lie Ishinomaki Wan and Matsushima Wan and islands such as Aji Shima and Tashiro Shima. The coast between Matsushima Wan and Shioya Saki runs in a N-S direction with regular coastline and there are neither bays nor islands.

This coast contains Ishinomaki Ko and Sendai-Shiogama Ko each of which classified as a Specified port by the Port Regulations Law.

The 20 m depth contour lies 2 ~ 4 M offshore except in the vicinity of Aji Shima, Tashiro Shima and outside Sendai-Shiogama Ko.

The channel, which separates Aji Shima and Tashiro Shima from Oshika Hanto is a route for small vessels taking the nearest track for Ayukawa Ko, Ishinomaki Ko and Sendai-Shiogama Ko by Kinkasan Seto.

Weather. Dense fogs are frequent in the vicinity of Shioya Saki from May to August, especially in rainy season (Baiu).

Ishinomaki Wan (38° 20' N, 141° 20' E) (Chart JP79)

General information. This is a large bay, of which E coast is Oshika Hanto and the W coast is Miyato Shima. There are many ports and bays such as Ayukawa Ko, Kugunarihama Wan, Ohara Wan, Oginohama Wan of the Aji Shima on the E coast, Ishinomaki Ko on the N coast and Nobiru Wan on the W coast.

The E coast of Miyato Shima consists of steep cliffs and is fringed with rocky islets and reefs.

The 10 m depth contour lies close to the shore on the E coast; it lies about 0.5 ~ 1 M offshore on the N coast. There are many dangerous reefs in the surrounding of Aji Shima and Tashiro Shima.

It should be noted that there are many stationary nets and aquaculture facilities of seaweeds in the bay.

Landmarks.

Landmark	Position	Remarks
Aji Shima	38° 16' N, 141° 29' E	A flat island, 101 m high. There is a lighthouse at the SE end.
Tashiro Shima	38° 18' N, 141° 25' E	95 m high. A lighthouse stands on the N end.
Hitoishi Yama	38° 20' N, 141° 29' E	319 m high. A thickly wooded mountain.
Omuro Saki	38° 21' N, 141° 25' E	A black cape, prominent from a distance. Pine trees thinly grow on the top.
4 chimneys	38° 25' N, 141° 17' E	Red and white one is 100 m high. Grey ones are 90 m and 85 m high. Light green is 100 m high. All of those are located in the yard of a paper factory and are prominent from a distance.

Directions.

To Ishinomaki Ko from the N.

1. Alter course to 259° at a position ESE about 10.5 M of Kinkasan Light (38° 16.6' N, 141° 35.0' E).
2. When Domiki Saki Light (38° 14.8' N, 141° 30.0' E) abeam about 4.8 M, steer 290° with Hanabuchi Light (38° 17.7' N, 141° 05.1' E) ahead.
3. At a position 132° about 7.4 M from Hashima Light (38° 18.9' N, 141° 11.1' E), steer 357° for 4 chimneys (38° 25.1' N, 141° 17.3' E; Refer to item "Landmarks" of the above.) of Nippon Paper Industries Co., Ltd.
4. Alter course to 335° when Hashima Light abeam, which leads to the port entrance.

To Sendai-Shiogama Ko Shiogama Ku from the N.

1. From a position SSE about 4.8 M of Aji Shima, steer 290° with Hanabuchi Light ahead.
2. At a position 132° about 7.4 M from Hashima Light (38° 18.9' N, 141° 11.1' E), steer 298° for Sendai-Shiogama Ko Passage, which leads to the port entrance appropriately.

To Sendai-Shiogama Ko Sendai Ku from the N.

Take the same track as one to Shiogama Ku until a position SSE about 4.8 M of Aji Shima, then alter course to 282°, and proceed to the port entrance.

From the S.

Refer to Chapter 1 “TOKYO WAN ~ TSUGARU KAIKYO” in Part 2 “OFFSHORE AND THROUGH ROUTES” .

Anchorage.

- 5 ~~1. The water NW about 1 M of Nigishiro Saki Light (38° 18.7' N, 141° 25.1' E) on Tashiro Shima, about 20 m deep, muddy bottom, affords shelter in E-SE wind waves.~~
12. About 5 M SE of Ishinomaki Ko Hibarino Breakwater Light (38° 23.9' N 141° 15.9' E) the about 28 m in depth and the muddy bottom. You can avoid wind waves coming from the east to southeast.
- 10 23. About 1.5 M SSE of Namishima Light, the water is about 22 m in depth and the bottom is muddy. It is protected from northwesterly wind waves.

Ishinomaki Ko (38° 24' N, 141° 18' E) (Chart JP1100) (Port Code: JP ISM)



(Photographed Oct. 2018)

- 15 **Port classification.** Specified port, Open port, Quarantine port, Immigration port, Domestic animal quarantine port, Plant protection port, Important port.

General information. This port lies on the N coast of Ishinomaki Wan. Excavated port situated in a cove in the W part of the harbour area is generally called an industrial port and the inside of the mouth of Kyu-Kitakami Kawa in the central part is called the inner harbour. A fishing port is located E side of the mouth of Kyu-Kitakami Kawa.

- 20 **Safeguards against Typhoon and Tsunami.** In order to prevent marine disasters caused by typhoon and tsunami etc., Ishinomaki District Tsunami and Typhoon Vessels 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, cancellation of them, etc. (Inquiries: Ishinomaki Coast Guard Station).

- 25 **Weather.** Winds are weak throughout year.

The largest vessel to enter the port. On 3 August 2023, the passenger vessel “MSC BELLISSIMA” (171,598t, with a draught of 8.7m) berthed alongside with Hibarino Central Wharf.

Tides. In Ishinomaki Ko, mean higher high water is 1.3m, mean lower low water is 0.3m, and mean sea level is 0.90m.

- 30 **Pilotage.** Pilotage is available on request to Licensed Pilots’ Association, Sendai Pilotage District (Refer to Chapter 6 “PILOTAGE” of Part 1).

Landmarks.

Landmark	Position	Remarks
A bridge building	38° 24.9' N, 141° 18.7' E	The Hiyori O hashi, about 17 m high.
Hiyori Yama	38° 25.5' N, 141° 18.5' E	A thickly wooded mountain, 54 m high, surmounted by a shrine and a tower.
4 chimneys	38° 25.2' N, 141° 17.3' E	Red and white is 100 m high. Grey are 90 m and 85 m high. Light green is 100 m high. All of those are located in the yard of a paper factory and are prominent from a distance.

Directions.Industrial port.

- 5 On approaching the port entrance, it is recommended to proceed to the center of the fairway midway between Ishinomaki Ko Hibarino Breakwater Light (38° 23.9' N, 141° 15.9' E) and Ishinomaki Ko No.1 Light Buoy to the W about 400 m, parallel to the same breakwater. The breakwater may sometimes be difficult to identify from a distance.

Inner harbour.

- 10 Follow the mid-stream of Kyu-Kitakami Kawa paying attention to the depths at the entrance which are variable. In addition, a caution is necessary because the E Breakwater and W Breakwater on the estuary may be submerged under the sea by storm surges.

Fishing port.

Steer Ishinomaki Gyoko Leading lights (38° 24.9' N, 141° 20.8' E; both of the front light and the rear light) in line, bearing 000.6°, then proceed parallel to W Breakwater to get in the basin.

15 **Precaution for entering the port.**

1. ~~Public quays (water depths of 4.5 m or greater) almost may be used; however, Before~~ entering port, detailed information related to port facilities, etc., must be acquired from the port authority, etc.
2. Care is necessary against foul substances scattered in the port.

Bridge building. Hiyori O Hashi spans across the mouth of Kyu-Kitakami Kawa (Refer to item "Landmarks").

20 **Mooring buoy.** A mooring buoy lies S of the Minamihama Wharf Large Pier.

Anchorage. The quarantine anchorage (38° 23.2' N, 141° 17.8' E) is settled near SE of Hibarino Breakwater Light.

Facilities.

Name	Position	Length (m)	Depth (approx. m)	Capacity (D/W×vessel)	Remark	
Minamihama Wharf	Large Pier	38° 24.8' N, 141° 16.4' E	165	11 ~ 11.5	15,000 × 1	
	10,000 t Quay	38° 24.9' N, 141° 16.5' E	165	9	10,000 × 1	
	5,000 t Quay	38° 24.9' N, 141° 16.6' E	130	7 ~ 7.5	5,000 × 1	
Shiomi Wharf, No.1 ~ 5 Quays	38° 25.1' N, 141° 17.1' E	290	3 ~ 4.5	1,000 × 5	Unsurveyed area at a part	
Hiyori Mikawa No.1 Quay	38° 25.1' N, 141° 17.0' E	110	4.5	1,000 × 1		
Hiyori Mikawa No.2 Quay	38° 25.1' N, 141° 17.0' E	110	4.5	1,000 × 1		
Hiyori Wharf	No.1 ~ 5 Quays	38° 25.1' N, 141° 16.6' E	380	2.5 ~ 4.5	1,000 × 5	
	No.6 Quay	38° 25.0' N, 141° 16.4' E	165	9 ~ 10.5	10,000 × 1	crane
	No.7 Quay	38° 25.1' N, 141° 16.4' E	185	11	15,000 × 1	crane
Oie Wharf	No.1, 2 Quays	38° 25.2' N, 141° 16.3' E	260	7.5	5,000 × 2	
	No.3 ~ 5 Quays	38° 25.2' N, 141° 16.1' E	320	5 ~ 5.5	2,000 × 3	
Nakajima Wharf	No.1 Quay	38° 25.1' N, 141° 16.0' E	130	5 ~ 5.5	2,000 × 1	
	No.2, 3 Quays	38° 25.0' N, 141° 16.0' E	370	10	15,000 × 2	
	1,000 t Quay	38° 24.9' N, 141° 16.0' E	60	7.5	1,000 × 1	
Hibarino Central Wharf	No.1 Quay	38° 24.3' N, 141° 17.2' E	260	11.5 ~ 12.5	40,000 × 1	
	No.2 Quay	38° 24.4' N, 141° 17.1' E	260	12 ~ 12.5	40,000 × 1	

Hibarino North Wharf	38° 25.0'N, 141° 16.8'E	170	5 ~ 10.5	12,000 × 1		
Ishinomaki Gyoko	-7 m Quay	38° 24.7' N, 141° 20.0'E	1,481	5.5 ~ 8	—	Fishing market on it.
	-6 m Quay	38° 24.7' N, 141° 19.2' E	1,157	4.5 ~ 6	—	
	-7 m Pier	38° 24.6' N, 141° 19.9' E	716	5.5 ~ 7	—	

Apart from the above table, landing piers, depths 4.5 m or less lies in the inner harbour and a private mooring facility is located in the industrial port.

The largest vessel to enter the port. On 3 August 2023, the passenger vessel “MSC BELLISSIMA” (171,598t, with a draught of 8.7m) berthed alongside with Hibarino Central Wharf.

5 **Repair.** Available.

Maritime authorities and facilities.

Name	Telephone
Ishinomaki Coast Guard Station (Captain of the Port)	+81-225-22-8088
Ishinomaki Sub-branch of Sendai-Shiogama Branch Customs	+81-225-22-4649
Ishinomaki Maritime Branch of Tohoku District Transport Bureau	+81-225-95-1228
Ishinomaki Detached Office of Sendai Quarantine Station(To be contacted to Sendai Quarantine Station)	(+81-22-367-8100)
Ishinomaki Sub-branch, Shiogama Branch of Yokohama Plant Protection Station	+81-225-95-0261
Miyagi Prefectural Ishinomaki Port and Harbour Office	+81-225-95-6271
Miyagi Prefectural Eastern Regional Development Office Fisheries fishing port part	+81-225-95-7318

Tugboats. Tugboats are available.

Ferryboats. Available.

10 **Medical facilities.**

Name	Telephone	Remarks
Ishinomaki Municipal Hospital	+81-225-25-5555	
Ishinomaki Japanese Red Cross Hospital	+81-225-21-7220	

Maritime traffic. Liner services are available to Aji Shima by Tashiro Shima, Aji Shima from Inner harbour.

Approaches to Sendai-Shiogama Ko (Chart W79)



15 Entrance of Sendai-Shiogama Ko (Shiogama Ku)

General information. Matsushima Wan is entered between Kayano Saki (38° 19' N, 141° 11' E) at the SE extremity of Miyato Shima and Hanabuchi Saki (38° 18' N, 141° 05' E) situated about 4.5 M WSW of Kayano Saki. The water is shallow and interspersed with many islands and rocks; there are many dangerous reefs inside and outside the bay.

20 The islands in the bay are called Matsushima Shoto. Miyato Shima, Sabusawa Shima, Nono Shima, Katsura Shima and Mahanashi Shima of Matsushima Shoto lie in a line in E-W direction and collectively form the N side of outer harbour of Sendai-Shiogama Ko. There are channels such as Wanigafuchi Suido, Sabusawa Suido, Ishihama Suido and

			Vessels of less than 500 G/T may enter the port.
Prohibition inward and outward signal	1 red flashing and 1 white flashing every 3 seconds.	1 black cone shapes (points together).	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 Post 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 departing from Sections 1 and 2, and Sendai Thermal Power Station quay shall stop navigating and stand by. 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	3 red flashings and 3 white flashings every 6 seconds.	1 black cone shape (points together) , above 1 red square flag.	All traffic prohibited except vessels instructed by 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.
Sendai Ku	A chimney	38° 20.2' N, 141° 02.7' E	67 m high, grey.
	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.

5 **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 is dangerous reefs on both sides of the route.

10 **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 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”
15 (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.

Vessels of 100 t or more are prohibited to enter the area in front of and adjacent upstream of Teizan Petroleum Base

~~while a tanker carrying flammable dangerous substance is berthed in the said area.~~

Precaution for entering the port. In the case of vessels intending to enter to Shiogama Ku, should be kept enough distance from O Ne Light Buoy (38° 15' 56.2" N, 141° 09' 51.5" E, Morse code A (· —), Green light, every 8s) and Oki-no-Taka Ne Light Bouy (38° 17' 26.8" N, 141° 09' 18.5" E, Morse code B (— · · ·), Green light, every 8s) and be navigated on the E of those. In addition, the precautions below are necessary after the Great East Japan Earthquake.

1. Public quays (water depths of 4.5 m or greater) may be tentatively used; however, before entering port, detailed information related to port facilities, etc., must be acquired from the port authority, etc.
2. Care is necessary against foul substances scattered in the port.

~~The waters south of Sendai Ku have been designated as a fishing ground where aquaculture facilities are planned to be installed, and it is extremely dangerous to enter and leave the port between the eastern end of the Sendai South Breakwater and the southwestern end of the Sendai Offing Breakwater.~~

~~There have been several accidents where ships attempting to enter port from this area have run aground on aquaculture facilities.~~

Overhead cables. An overhead cable (38° 20.0' N, 141° 06.3' E; 24 m high) spans between the NE coast of Katsura Shima and the W coast of Nono Shima, and another one (38° 20.3' N, 141° 07.0' E; 25 m high) between the E coast of Nono Shima and the W coast of Sabusawa Shima. Besides that it is also in between the E coast of Sabusawa Shima and Miyato Shima (38° 20.3' N, 141° 07.9' E, 15m high).

Anchorage. The anchorage in the outer harbour of Sendai-Shiogama Ko is protected on the E side by the reefs around Funairi Shima and Karakai Shima and on the S side by reefs extending to the NE from Hanabuchi Saki; it is suitable for vessels, 6 m or less in draughts, but the holding ground is not very good with sandy bottom. In the vicinity of the anchorage E of Karakai Shima, waves may suddenly rise in strong E to SE winds due to the shape of the sea bed, so care is necessary to prevent dragging anchor and

shifting cargoes. It should be noted that aquaculture facilities of seaweed are laid N of a line joining Mizu Shima and the N extremity of Funairi Shima, and the N side of the anchorage situated E of Karakai Shima.

A quarantine anchorage (38° 18.5' N, 141° 08.5' E) is provided at the entrance of Shiogama Ku, and another one in position (38° 13.2' N, 141° 06.5' E) SE of Sendai Ku. The designated anchorages for vessels carrying dangerous substance are provided in Shiogama Ku Sections 3 and 4, and in Sendai Ku.

Facilities.

Name		Position	Length (m)	Depth (approx. m)	Capacity (D/W×vessel)	Remarks		
Shiogama Ku	Teizan Wharf	No.1 Quay	38° 19.1' N, 141° 02.6' E	160	5.5 ~ 7	10,000 × 1	There is a pier at NE end.	
		No.2 Quay	38° 19.1' N, 141° 02.7' E	213	5.5 ~ 8	10,000 × 1		
		No.3, 4 Piers	38° 18.9' N, 141° 02.6' E	130 each	6 ~ 8.5	7,500 × 2		
	E Wharf No.1 ~ 3 Quays		38° 19.1' N, 141° 02.5' E	320	6 ~ 7	4,500 × 3		
	Naka Wharf	No.4 ~ 6 Quays		38° 19.1' N, 141° 02.4' E	130 128	3.5 ~ 9	7,500 × 1 1,500 × 2	
		No.7, 8 Quays		38° 19.1' N, 141° 02.2' E	157	3 ~ 5.5	700 × 2	
		Front Pier		38° 19.2' N, 141° 02.3' E	168	3 ~ 5.5	3,000 × 2	
		West Wharf Pier		38° 19.2' N, 141° 02.0' E	320	3 ~ 4.5	1,500 × 2 2,000 × 2	
	Togu Wharf Pier		38° 18.7' N, 141° 02.9' E	180	4.5	3,000 × 2		
Sendai Ku	Takamatsu Wharf Quay		38° 16.5' N, 141° 01.5' E	240	12	30,000 × 1		
	Takamatsu Wharf No.2 Quay		38° 16.3' N, 141° 01.4' E	280	13.5	55,000 × 1		
	Takasago Wharf No.1 Quay		38° 16.1' N, 141° 01.2' E	310	11.5 ~ 12.5	30,000 × 1	Container crane	
	Takasago Wharf No.2 Quay		38° 16.1' N, 141° 01.4' E	330	13 ~ 13.5	50,000 × 1	Container crane	
	Koyo Wharf No.1 Quay		38° 16.0' N, 141° 01.9' E	240	10 ~ 12	30,000 × 1		

Nakano Wharf	No.1 Quay	38° 16.3' N, 141° 01.2' E	240	11 ~ 11.5	40,000 × 1	Crane
	No. 2 ~ 6 Quays	38° 16.3' N, 141° 00.9' E	925	7.5 ~ 10	15,000 × 5	
	Raijin Wharf No.1, 2 Quays	38° 16.4' N, 141° 00.1' E	440	8.5 ~ 9	5,000 × 2	

Apart from the above table, there are private berths in Shiogama Ku and Sendai Ku.

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

Repair. Available.

5

Maritime authorities and facilities.

Name	Telephone
2nd Regional Coast Guard Headquarters	+81-22-363-0111
Miyagi Coast Guard Office (Captain of the Port)	+81-22-367-3917
Shiogama Office of Sendai-Shiogama Branch Customs	+81-22-259-4306
Tohoku District Transport Bureau	+81-22-299-8851
Sendai Quarantine Station	+81-22-367-8100
Shiogama Branch of Yokohama Plant Protection Station	+81-22-362-6916
Sendai Regional Immigration Bureau	+81-570-02-2259
Miyagi Prefectural Sendai-Shiogama Port and Harbour Office	+81-22-254-3132~3133

Tugboats and ferryboats. Tugboats and ferryboats are available.

Oil waste disposition facilities.

Name	Application	Hours of operation	Waste oil to be disposed	
			Waste heavy oil	Waste light oil
Asahi kosan	+81-22-362-1510	0830 ~ 1730	Bilge, Sludge etc.	Sludge etc.

10 Apart from the above table, there are several facilities that can process oil waste.

Medical facilities.

Name	Telephone	Remarks
Shiogama City Hospital	+81-22-364-5521	
Saka General Hospital	+81-22-365-5175	

15 **Maritime traffic.** There are car ferry services (15,795 G/T etc.) between Nagoya or Tomakomai. In addition, between Shiogama Ku and each island within Matsushima Wan is served by passenger boats.

Hanabuchi Saki ~ Unoo Saki (Chart JP1098)

General information. The coast extending about 31 M between Hanabuchi Saki and Unoo Saki forms a bow-shaped line and consists of sandy beaches. The inland is generally low with few landmarks.

20 Yuriage Gyoko lies at the estuary of Natori Kawa and Arahama Gyoko is situated at the estuary of Abukuma Kawa.

Soma Ko lies at the S extremity of this area; Matsukawaura Gyoko is located at the entrance of Matsukawa Ura in the SE part of Soma Ko, which is used by small vessels.

The 10 m depth contour runs mostly within 0.5 M offshore except about 7 M of the coast in the S part, where the contour lies within about 1 M offshore.

25 It should be noted that there are aquaculture facilities of seaweeds along this coast.

Landmarks.

Landmark	Position	Remarks
Unoo Saki	37° 49' N, 140° 59' E	A cape formed of cliffs of red clay, is at the E end of an isthmus separating Matsukawa Ura from the open sea. Pine trees grow on the cape, and there is a lighthouse on the top.

(including tank ship) carrying flammable dangerous substance at berthing or anchoring in the port except the vessels permitted by Caption of the Port. It is required that such tankers show a sign “Loaded flammable dangerous substance” which is discernible by night which berthing or anchoring in the port. (October 1, 2017, No.1 Advertisement, Caption of the Port, Soma)

5

Facilities.

Name		Position	Length (m)	Depth (approx. m)	Capacity (D/W×vessel)	Remarks
No.1 Wharf	No.1, 2 Quays	37° 50.0' N, 140° 57.6' E	Each 90	4 ~ 6	2,000×2	
	No.3 Quay	37° 50.1' N, 140° 57.5' E	Each 130	5.5 ~ 7	5,000×1	
	No.4 Quay				5,000×1	
	No.5 Quay				5,000×1	
	No.6~ 8 Quays	37° 50.2' N, 140° 57.3' E	Each 90	4 ~ 4.5	2,000×3	
No.2 Wharf	No.1 Quay	37° 50.3' N, 140° 57.3' E	90	5	2,000×1	
	No.2, 3 Quays	37° 50.4' N, 140° 57.5' E	Each 130	6 ~ 8	5,000×2	
	No.4 Quay	37° 50.5' N, 140° 57.4' E	240	12	30,000×1	
No.3 Wharf	No.1 Quay	37° 50.6' N, 140° 57.3' E	240	12	30,000×1	Aseismatic quay
	No.4 Quay	37° 50.8' N, 140° 57.4' E	170	10	10,000×1	
No.4 Wharf	No.1 Quay (JAPEX Berth)	37° 51.0' N, 140° 57.3' E	480	14.5	143,000 × 1 G/T	LNG dolphin
	No.2 Quay (JAPEX Berth)	37° 51.1' N, 140° 57.2' E	110	6.5 ~ 7	5,700 × 1 G/T	LNG dolphin
No.5 Wharf	No.1, 2 Quays	37° 51.3' N, 140° 57.2' E	560	14	60,000 × 1	Coal pier (Crane)
	No.3 Quay	37° 51.4' N, 140° 57.4' E	140	8	5,000 × 1	Oil dolphin
	No.4 Quay	37° 51.5' N, 140° 57.4' E	100	5 ~ 5.5	2,000×1	

Caution: There are loading restrictions on the apron at Pier 1.

Each of the wharves listed at Pier No. 4 is a private mooring facility for use by a company. In addition, a mooring for small vessels is located on the west side of the base of the S Breakwater.

Maritime authorities and facilities.

Name	Telephone
Fukushima Coast Guard Office (Captain of the Port, Onahama and Soma)	(Location, Iwaki City) +81-246-54-3450
Soma Sub-branch of Onahama Branch Customs	+81-244-38-6130
Fukushima Prefectural Soma Port and Harbour Construction Office	+81-244- 26-7214

10

Tugboats. Available.

Medical facilities.

Name	Telephone	Remarks
Public Soma General Hospital	+81-244-36-5101	

Unoo Saki ~ Shioya Saki (chart JP1098)

15

General information. The coast between Unoo Saki and Shioya Saki extends roughly in a N-S direction for about 50 M and has neither particular inlets nor projections. There are some cliffy beaches accompanied by sandy beaches here and there, but no noticeable capes. The inland is of many mountains, but no particular peaks. The 10 m depth contour lies 0.5 ~ 1 M offshore.

The ports on this coast are not capable of shelters to large vessels but some ports such as Hisanohama Ko (37° 09' N, 141° 00' E), Yotsukura Ko (37° 06' N, 141° 00' E Chart W 1096, port designated by Port Regulations Law, Port Code: JP YOT), Ukedo Gyoko (37° 29' N, 141° 03' E) are suitable for small vessels and fishing vessels.

20

Landmarks.

Landmark	Position	Remarks
A chimney	37° 40' N, 141° 01' E	221 m high, located in the yard of a thermal power station.

of June; it increases gradually afterwards, and reaches at the peak in July, during which dense fog appears from early morning to noon, and becomes to be little in the end of August.

Breakers have run into the port over the breakwaters in strong S winds accompanied by typhoons and the like, and have inflicted damages on port facilities and vessels. When a typhoon approaches and vessels seek shelter, a narrow area between No.1 W Breakwater and adjacent wharves is congested with fishing boats, and general ships converge into an area between No.2 W Breakwater and Fujiwara Wharf, which shall be noted.

Tides. In Onahama Ko, mean higher high water is 1.2 m, mean lower low water is 0.3 m, and mean sea level is 0.84 m.

The largest vessel to enter the port. On September 11, 2016, the tanker "PASIFIC AQUARIUS" (57,949 t, draught 13.5 m) berthed at Onahama Sekiyu Sea-berth.

Port communications. Port communications by a VHF radiotelephone system between a vessel and Captain of the Port is available through the SHIOGAMA COAST GUARD RADIO.

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

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

Landmarks.

Landmark	Position	Remarks
A tower	36° 56.4' N, 140° 55.2' E	The Iwaki Marine Towor (Refer to photograph on page 114.), 106 m high. The upper part consists of blue glasses; lower part is white.
Chimneys	36° 56.5' N, 140° 53.0' E	79 m high, red and white.
	36° 56.6' N, 140° 52.9' E	174 m high, red and white.
	36° 56.9' N, 140° 52.4' E	122 m high, red and white.

Directions. From a position ESE about 1.8 M of Obama Hana (36° 54.5' N, 140° 50.5' E), steer 018° with Onahama Ko No.2 W Breakwater E Light (36° 55.2' N, 140° 53.1' E) ahead until Onahama Ko Offing Breakwater W Light (36° 54.5' N, 140° 53.0' E) comes abeam, then proceed toward the inner harbour altering courses as necessary. Vessels should not enter the area W of a line joining the tall chimney (174 m high; refer to item "Landmarks") and the Onahama Ko Sea-berth Light (36° 55.2' N, 140° 52.8' E) to avoid Tsurikurai Iso (36° 54.5' N, 140° 52.6' E; a sunken reef, minimum 8.3 m deep).

Entry prohibited. There is prohibited area in front of the SE side of No.7 Wharf.

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. In the peripheral sea area of No.1 West Breakwater, the construction such as large-scale wharf facilities is carried out. Therefore, the Inward-bound, confirm the latest information in Notice mariners beforehand. Moreover, the area. And, there is Navigation and Staying restricted in front of the SE side of Fujiwara Wharf.

Sea-berth. There is Onahama Sekiyu Sea-berth (36° 55.3' N, 140° 52.8' E; length 360 m, a project depth 15 m, capacity 75,000 D/W×1) on the N side of No.2 W Breakwater.

Mooring buoys. There are 4 mooring buoys to Basin of the E side depths in the port. No.1 West Breakwater is located within the SSE of No.2 Wharf. And there is a mooring buoy close to No.1 West Breakwater. In addition, there is No.3 Pier on the W of Otsurigi Wharf. And there is a mooring buoy in the N side.

Bridge building. There is the Onahama Marine Bridge (36° 56.3' N, 140° 53.9' E; height about 24m) between the No.3 Wharf and the Higashi Kor reclaimed land located in the SE of No.3 Wharf.

Anchorage. The quarantine anchorage is designated in the vicinity of a position (36° 54.3' N, 140° 53.5' E) SE of Onahama Ko Offing Breakwater W Light.

Facilities.

Name		Position	Length (m)	Depth (approx. m)	Capacity (D/W×vessel)	Remarks
No.1 Wharf	No.1, 2 Quays	36° 56.7' N, 140° 54.4' E	213	7	300 G/T × 4	
	No.3 Quay	36° 56.6' N, 140° 54.4' E	150	8	300 G/T × 3	
No.2 Wharf	No.3, 4 Quays	36° 56.6' N, 140° 54.0' E	Each 130	6.5 ~ 8.5	5,000 × 2	
	No.5, 6 Quays	36° 56.6' N, 140° 53.9' E	Each 94	4 ~ 6	700 × 2	
No.3 Wharf	No.1 ~ 4 Quays	36° 56.5' N, 140° 53.8' E	Each 175	9 ~ 10	12,000 × 4	
	No.5, 6 Quays	36° 56.5' N, 140° 53.7' E	Each 73	4 ~ 4.5	1,000 × 2	
	No.7 Quay	36° 56.5' N, 140° 53.6' E	74	3.5 ~ 4	1,000 × 1	
No.4 Wharf	No.1 Quay	36° 56.5' N, 140° 53.6' E	90	4 ~ 4.5	1,000 × 1	
	No.2, 3 Quays	36° 56.4' N, 140° 53.5' E	Each 200	8.5 ~ 9.5	12,000 × 2	
	No.4 ~ 6 Quays	36° 56.3' N, 140° 53.4' E	Each 100	4.5 ~ 6	3,000 × 3	
No.5 Wharf No.1 Quay		36° 56.1' N, 140° 53.2' E	240	11~12	30,000 × 1	
No.6 Wharf	No.1 Quay	36° 56.0' N, 140° 53.0' E	280	13~13.5	55,000 × 1	Fronted by foul ground
	No.2, 3 Quays	36° 56.0' N, 140° 52.8' E	Each 130	6~8.5	5,000 × 2	
No.7 Wharf	No.1, 2 Quays	36° 55.9' N, 140° 52.8' E	Each 270	12~13	40,000 × 2	Fronted by foul ground
	No.3, 4 Quays	36° 55.8' N, 140° 52.7' E	Each 185	7~10.5	12,000 × 2	
	No.5 Quay	36° 55.9' N, 140° 52.6' E	130	6.5~7	5,000 × 1	
Fujiwara Wharf	No.1 Quay	36° 55.8' N, 140° 52.4' E	185	9.5~10.5	12,000 × 1	The vicinity of NE end is shallow.
	No.2 Quay	36° 55.7' N, 140° 52.4' E	240	10.5~12	30,000 × 1	
	No.3 Quay	36° 55.7' N, 140° 52.3' E	185	6.5~9	10,000 × 1	
	No.4 Quay	36° 55.7' N, 140° 52.3' E	130	6~7	5,000 × 1	
Otsurugi Wharf	No.1, 2 Quays	36° 55.6' N, 140° 52.2' E	Each 130	4.5~7	5,000 × 2	
	No.3, 4 Quays	36° 55.5' N, 140° 52.3' E	Each 185	8.5~9	12,000 × 2	Crane
	No.5 ~ 8 Quays	36° 55.4' N, 140° 52.2' E	Each 130	6.5~9.5	5,000 × 4	
Higashi Ko	No.1 Quay	36° 55.8' N, 140° 53.6' E	370	18	120,000 × 1	Crane
	No.2 Quay	36° 56.0' N, 140° 53.7' E	222	17~17.5	90,000 × 2	

5 Apart from the above table, there are private mooring facilities for an oil compare located at the SE end and the SW side of Otsurugi Wharf.

Supply. Fresh water, ice and fuel oil are available.

Repair. Repairs can be arranged.

Maritime authorities and facilities.

Name	Telephone
Fukushima Coast Guard Office (Captain of the Port, Onahama and Soma)	+81-246-54-3450
Onahama Branch Customs	+81-246-92-5151

Landmarks.

Landmark	Position	Remarks
Irago Misaki	34° 35' N, 137° 01' E	A cape with a lighthouse and Ise Wan Vessel Traffic Service Center at the end.
Choppori Yama	34° 35' N, 137° 02' E	A separate mountain, 140 m high.
Kami Shima	34° 33' N, 136° 59' E	An island, 171 m high; with a lighthouse on the NE part. The top part is reddish and on the E side stands steep cliffs.

Caution: Kami Shima and Choppori Yama may be easily confused with each other when seen from a distance SE.

Clearing line. The E extremity of shoals with 20 m deep or less spreading over the area from in the vicinity of Segiyo Se (34° 30.4' N, 136° 59.9' E, 9.5 m deep) to Kami Shima lies about 0.2 M W of the line (355°) joining Irago Misaki Light (34° 34.8' N, 137° 01.0' E) and Owari No Shima Light (34° 39.5' N, 137° 00.5' E).

Directions etc. (Refer to Fig. 48)

Vessels navigating Irago Suido should observe provisions of the Maritime Traffic Safety Law and rules applicable to the passages in Irago Suido Traffic Route.

10 Entering Ise Wan through Irago Suido, proceed on the right side passage from the center of Irago Suido Traffic Route. Strict caution should be exercised with dangers S of Kami Shima and on the both sides of the channel.

Facilities.

Name		Position	Length (m)	Depth (Approx. m)	Capacity (D/W × vessel)	Remarks	
Tahara	Tahara Wharf	No. 1 Quay	34° 41.9' N, 137° 15.7' E	120	4.5	700 × 2	The S interior is shallow.
		No. 2 Quay	34° 42.0' N, 137° 15.8' E	400	5.5 ~ 7.5	2,000 × 4	A part is aseismatic quay.
Toyohashi	Jinno E Wharf	No. 1 Quay	34° 43.8' N, 137° 20.6' E	360	1 ~ 2.5	700 × 6	With A landing place on the E
		No. 2 Quay	34° 43.7' N, 137° 20.4' E	270	5.5	2,000 × 3	
		No. 3 Quay	34° 43.8' N, 137° 20.0' E	910	6 ~ 7.5	5,000 × 7	
		No. 4 Quay	34° 43.9' N, 137° 19.5' E	740	10	15,000 × 4	
	Jinno W Wharf	No. 7 Quay	34° 44.0' N, 137° 19.0' E	720	12	30,000 × 4	
		No. 8 Quay	34° 44.3' N, 137° 18.5' E	240	12	30,000 × 1	
	Funato Wharf	No. 1 Quay	34° 43.6' N, 137° 20.7' E	500	1.5 ~ 2.5	500 × 6	
No. 2 Quay		34° 43.6' N, 137° 20.4' E	450	5.5	2,000 × 5		
No. 3 Quay		34° 43.4' N, 137° 20.3' E	360	4.5	2,000 × 6	Aseismatic quay	
Mito	Mito Wharf	No. 1 Quay	34° 47.9' N, 137° 18.4' E	200	5.5	2,000 × 2	Steel
Gamagori	Hama-Cho Wharf	No. 1 Quay	34° 48.5' N, 137° 12.2' E	185	10	15,000 × 1	Log
		No. 2 Quay	34° 48.5' N, 137° 12.1' E	130	6.5 ~ 7.5	5,000 × 1	Log
	Gamagori Wharf	No. 1 Quay	34° 49.2' N, 137° 13.1' E	600	2.5 ~ 4	700 × 10	Scrap
		No. 2 Quay	34° 49.0' N, 137° 13.3' E	180	6	2,000 × 2	Gravel and Stone
		No. 3 Quay	34° 49.0' N, 137° 13.3' E	90	5 or less	2,000 × 1	
		No. 4 Quay	34° 48.9' N, 137° 13.2' E	185	9 ~ 9.5	15,000 × 1	Log and Steel
		No. 5 Quay	34° 49.0' N, 137° 13.1' E	390	7.5 ~ 8	5,000 × 3	Log
		No. 6 Quay	34° 49.0' N, 137° 13.0' E	90	5.5	2,000 × 1	Log
		No. 7 Quay	34° 48.9' N, 137° 12.9' E	90	6	2,000 × 1	Log
		No. 8 Quay	34° 48.8' N, 137° 13.0' E	390	7.5	5,000 × 3	Transportation Machinery
		No. 9 Quay	34° 48.7' N, 137° 13.1' E	185	10 ~ 10.5	15,000 × 1	Transportation Machinery
		No. 10 Quay	34° 49.0' N, 137° 12.9' E	250	3.5 ~ 4	700 t class	
	No. 11 Quay	34° 48.2' N, 137° 12.9' E	250	11	18,000 × 1		
Take Shima Wharf	No. 1 Quay	34° 49.1' N, 137° 13.5' E	96	3.5 ~ 4	3,000 × 1		
	No. 2 Quay		131	4.5 ~ 6	5,000 × 1		
	No. 3 Quay		134	4 ~ 6		Ferry	

There is a log pond (34° 41.9' N, 137° 19.2' E) at the estuary of Kamida Kawa.

Supplies. Fresh water is available at Jinno E Wharf and Jinno W Wharf in Toyohashi district, and at Gamagori Wharf and Hama-Cho Wharf in Gamagori district.

Repairs. Vessels of less than 500 t are available in Gamagori district.

Maritime authorities and facilities.

Name		Telephone
Toyohashi	Mikawa Coast Guard Station (Captain of the Port)	+81- 532-34-0118
	Toyohashi Branch Customs	+81- 532-32-6566
	Mikawa Fukue Detached Office of Nagoya Quarantine Station (To be contacted to Nagoya Quarantine Station)	(+81- 52-661-4131)
	Shimizu Sub-station, Nagoya Plant Protection	+81- 52-651-0112
	Toyohashi Port Branch Office of Nagoya Regional Immigration Bureau	+81- 532-32-6567
	Aichi Prefectural Mikawa Port and Harbor Management Office	+81- 532-31-4156
Gamagori	Gamagori Sub-branch of Toyohashi Branch Customs	+81- 533-68-6008

Aichi Prefectural Gamagori Branch of Mikawa Port and Harbor Management Office	+81- 533-69-5381
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Tugboats. Available in Toyohashi district and Gamagori district.

Medical facilities.

Name	Telephone	Remarks
Toyohashi Municipal Hospital	+81- 532-33-6111	
Gamagori City Hospital	+81- 533-66-2200	

5 **Chita Wan** (Charts JP1052, JP1056)

General information. This bay is situated on the E side of Chita Hanto; the N half of the bay is Kinuura Ko. The E and W coast are low and the water along the E coast is shallow to a good distance from the shore.

The depths are 15 m or less except in the vicinity of Morozaki Suido; shoals, 5 m deep or less, spread over the E side of the S part of the bay.

10 It should be noted that there are many aquaculture facilities of seaweeds along the coast of the bay.

Landmarks.

Landmark	Position	Remarks
Hase Saki	34° 43.0' N, 136° 58.3' E	A cape of the top is 136 m high. There is a high-rise building to about 500 m W.
A chimney	34° 49.6' N, 136° 55.5' E	The chimney is about 184 m high, gray, located in the yard of Taketoyo thermal power station.
2 chimneys	34° 50.0' N, 136° 57.6' E	Chimney stacks, each 204 m high, gray, located in the yard of Hekinan thermal power station.

Kinuura Ko (34° 51' N, 136° 57' E) (Chart JP1056) (Port Code: JP KNU)



(Photographed Apr. 2018)

15

Port classification. Specified port, Open port, Quarantine port, Immigration port, Plant protection port, Important port.

General information. The port occupies the northern half of Chita Wan. The inland on the E side of the port is mostly flat, where Yahagi Kawa flows into the sea. The W side is Chita Hanto with a range of low mountains running in an N-S direction and Sakai Kawa flows into the sea at the head. In the center of the port, there is “Chuo Passage” with the depth of 11 ~ 12 m and the width of 200 ~ 300 m from the entrance of the E and W Breakwaters toward the north. Depths in the port are about 12 m near the entrance, about 11 m in front of 8 Go Chi at the head and 2 m or less in the vicinity of the estuary of Sakai Kawa. The southeastern part of 3 Go Chi is reclamation under construction.

25 **Safeguards against Typhoon and Tsunami.** In order to prevent marine disasters caused by typhoon and tsunami etc., Kinuura Ko Typhoon and Earthquake Tsunami etc., Measures Committee are individually established to issue information on typhoons, earthquakes and tsunamis etc. to vessels and concerned parties in the port and give

Facilities.

Name		Position	Length (m)	Depth (Approx. m)	Capacity (D/W × vessel)	Remarks
Central Wharf (E)	E No. 1 Quay	34° 52.4' N, 136° 58.3' E	630	3 ~ 4.5	2,000 × 7	Scrap metal
	E No. 2 Quay	34° 52.3' N, 136° 58.1' E	130	5.5 ~ 6	5,000 × 1	Scrap metal
	E No. 3 Quay	34° 52.2' N, 136° 58.0' E	185	10	15,000 × 1	Scrap metal
	E No. 4 Quay	34° 52.1' N, 136° 57.9' E	240	12	30,000 × 1	Aseismatic quay Scrap metal
Shinkawa	No. 1 Quay	34° 53.7' N, 136° 59.0' E	100	4	700 × 2	Coke
	No. 2 Quay	34° 53.7' N, 136° 59.0' E	150	4 or less	500 × 3	
Takahama Wharf	No. 1 Quay	34° 55.2' N, 136° 58.7' E	180	3 or less	700 × 3	
	No. 2 Quay	34° 55.1' N, 136° 58.7' E	130	5 ~ 7.5	5,000 × 1	
Kamezaki Wharf	No. 1 Quay	34° 54.8' N, 136° 58.2' E	370	9 ~ 10	15,000 × 2	
	No. 2 Quay	34° 54.7' N, 136° 58.3' E	185	10	15,000 × 1	Gravel, Sand
	No. 3 Quay	34° 54.6' N, 136° 58.3' E	190	11	15,000 × 1	Scrap metal
Central Wharf (W)	W No. 1 Quay	34° 52.8' N, 136° 57.5' E	300	3 ~ 3.5	500 × 6	
	W No. 2 Quay	34° 52.7' N, 136° 57.7' E	520	6 ~ 6.5	5,000 × 4	Coke
	W No. 3 Quay	34° 52.5' N, 136° 57.6' E	185	10	15,000 × 1	Aseismatic quay
	W No. 4 Quay	34° 52.5' N, 136° 57.4' E	185	8.5 ~ 10	15,000 × 1	
	W No. 5 Quay	34° 52.4' N, 136° 57.6' E	240	10.5 ~ 11	30,000 × 1	Coal
	W No. 6 Quay	34° 52.4' N, 136° 57.4' E	240	11	30,000 × 1	Wood chips
S wharf Quay		34° 52.7' N, 136° 56.2' E	705	0.5 ~ 4	500 × 13	
Taketoyo Quay		34° 50.8' N, 136° 55.6' E	180	—	700 × 3	Limestone
Taketoyo N Wharf	No. 1 Quay	34° 51.5' N, 136° 55.8' E	185	10	15,000 × 1	Aseismatic quay Scrap iron
	No. 2 Quay	34° 51.5' N, 136° 56.0' E	240	12	30,000 × 1	Steel material
	No. 3 Quay	34° 51.4' N, 136° 56.1' E	130	7.5 ~ 12	5,000 × 1	Petroleum products

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

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

5

Maritime authorities and facilities.

Name	Telephone
Kinuura Coast Guard Station (Captain of the Port)	+81-569-22-4999
Kinuura Sub-branch of Toyohashi Branch Customs	+81-569-21-0160
Kinuura Detached Office of Nagoya Quarantine Station (To be contacted to Nagoya Quarantine Station)	(+81-52-661-4131)

Tugboats and Ferryboats. Tugboats and ferryboats are available.

Medical facilities.

Name	Telephone	Remarks
Handa City Hospital	+81-569-22-9881	
Hekinan Municipal Hospital	+81-566-48-5050	

10

Paragraph 6 ISE WAN

(Chart JP1051)

15

General information. This bay is entered to the NNW about 35 M along the W side of Chita Hanto. The entrance, between Irago Misaki and Toshi Shima, is about 6 M wide. The deepest part mainly runs in mid-bay along the coast of Chita Hanto from the entrance to off the estuary of Ibi Kawa. The depth is more or less 35 m except in the vicinity of the entrance. The bottom is flat and consists of mud. The water in the bay gets shallower as going from the deepest area to the shore. The 20 m depth contour on the SW coast of Chita Hanto (the area between Toyohama Ko ~ Noma Saki) comes close to about 500 m from the shore; in other area, it lies mostly about 3 M offshore.

Aquaculture facilities such as seaweed are laid within 1.2 M along the coast of the bay.

Under calm weather, temporary anchorages are obtainable anywhere in the bay.

20

Ise Wan is a water to which the Maritime Traffic Safety Law is applied.

Indication of Course and Destination etc. (Refer to Fig. 54)

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
	1st substitute and E	—	Proceeding in E Passage to take departure.
	1st substitute and W	—	Proceeding in W Passage to take departure.
	2nd substitute, E and 1	E 1	Proceeding to mooring facilities on the W side of Kitahama Wharf (form J2 to G1 Piers) or the anchorage for vessels carrying dangerous substance located in the area within a radius of 300 m from the position 089° 1,270 m from Nagoya Ko Storm Tide Breakwater E Signal Station.
	2nd substitute, E and 2	E 2	Proceeding to mooring facilities on the S side of Tokaimotohama Wharf, on the N side of Kitahama Wharf (from G6 to G4 Piers) or Yokosuka Wharf.
	2nd substitute, E and 3	E 3	Proceeding to mooring facilities on the W side of Tokaimotohama Wharf.
	2nd substitute, E and 4	E 4	Proceeding to mooring facilities on the N side of Tokaimotohama Wharf.
	2nd substitute, E and 5	E 5	Proceeding to mooring facilities in Shinpo Wharf.
	2nd substitute, B and 1	B 1	Proceeding to mooring facilities on the S side of Shiomi Wharf (BL and BK Piers) or the anchorage for vessels carrying dangerous substance located in the area enclosed by the line drawn from the SW extremity of Shiomi Wharf to the position 180° 400 m, the line drawn thence to the position 083° 430 m, the line drawn thence at 000°, and the shore line.
	2nd substitute, B and 2	B 2	Proceeding to mooring facilities on the E side of Shiomi Wharf (from BH2 to BY Piers).
	2nd substitute, B and 3	B 3	Proceeding to mooring facilities on the N side of Shiomi Wharf (from Q1 to B3 Piers).
	2nd substitute, B and 4	B 4	Proceeding to mooring facilities on the W side of Shiomi Wharf (from B4 to BJ Piers).
	2nd substitute, N and 1	N 1	Proceeding to mooring facilities in Showa Wharf or Funami Wharf.
	2nd substitute, N and 2	N 2	Proceeding to mooring facilities in Garden Wharf, Ote Wharf, Tsukiji E Wharf or Oe Wharf.
	2nd substitute, N and 3	N 3	Proceeding to piers in Isshu Cho, or mooring facilities in Inaei Wharf or Shionagi Wharf.
	2nd substitute, N and 4	N 4	Proceeding to mooring facilities on the E side of Sorami Wharf.
	2nd substitute, K and 1	K 1	Proceeding to Kinjo Wharf from No.52 to No.57 Quays.
	2nd substitute, K and 2	K 2	Proceeding to Kinjo Wharf from No. 58 to No. 62 Wharfs.
	2nd substitute, K and 3	K 3	Proceeding to Kinjo Wharf from No. 76 to No. 85 Quays.
	2nd substitute, W and 1	W 1	Proceeding to Kinjo Wharf from No. 71 to No. 75 Quays, or mooring facilities on the W side of Sorami Wharf or on the E side of Kibakanaoka Wharf.
	2nd substitute, W and 2	W 2	Proceeding to mooring facilities on the E side of Tobishima Wharf.
	2nd substitute, W and 3	W 3	Proceeding to mooring facilities on the S side of Tobishima Wharf.
	2nd substitute, W and 4	W 4	Proceeding to mooring facilities on the W side of Tobishima Wharf or on the E side of Yatomi Wharf, or mooring buoys in Section 4.

	2nd substitute, W and 5	W 5	Proceeding to mooring facilities on the S side of Yatomi Wharf or in Nabeta Wharf.
	2nd substitute, P and 1	P 1	Proceeding to the anchorage for vessels carrying dangerous substance located in the area within a radius of 350 m from the position 022° 2,010 m from Nagoya Ko Storm Tide Breakwater E Signal Station.
	2nd substitute, S and 1	S 1	Proceeding to mooring facilities in Minamihama Wharf or the anchorage for vessels carrying dangerous substance located in the area enclosed by the line drawn from the position (hereinafter referred to as "Point A") 144.5° 820 m from Nagoya Ko Storm Tide Breakwater E Signal Station to the position 214° 800 m, the line drawn thence to the position 128° 250 m, the line drawn thence to the position 066.5° 460 m, the line drawn thence to the position 034° 400 m, and the line drawn thence to "Point A".

Passages. N Passage (about 2.7 M long, 200 ~ 400 m wide, and 10 ~ 14 m deep) leads from the vicinity of the S end of Shionagi Wharf in Section 1 to the vicinity of the SE end of Kinjo Wharf, and its S entrance connects with E Passage (about 5.5 M long, 580 ~ 1,060 m wide, and 15 ~ 16 m deep) which leads towards the harbour limit through the main opening of the port between Storm Tide Breakwater Middle Breakwater and Storm Tide Breakwater Chita Breakwater.

In addition, on the W side of the E Passage, there is W Passage (about 4.3 M long, 350 ~ 400 m wide, and 12 ~ 16 m deep) in a dog-leg shape which passes through the sub-opening between Storm Tide Breakwater Middle Breakwater and Storm Tide Breakwater Nabeta Breakwater.

In each passage traffic control is implemented (Refer to item "Signals").

Entry restricted. In order to prevent fire hazard, no vessel is allowed to enter within a radius of 30 m, or 20 m in case in the canal or river, from tankers (including tank ships) carrying flammable dangerous substance at berthing or anchoring in the port except the vessels permitted by the 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. (2018, No.30-1 Public Notice, Captain of the Port, Nagoya)

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 East Fairway, West Fairway and North Fairway 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 said principal vessel.

Navigation Rules. Vessels shall observe the following in addition to navigation pursuant to the provisions of the Port Regulations Law within Nagoya Ko:

1. Observation of information provided by the Captain of the Port (Article 41 of the Port Regulations Law, Article 20-3, 20-4 of the Regulations for the Enforcement of Port Regulations Law).

Nagoya Ko Vessel Traffic Service Center provides the following information by the VHF radiotelephone system to specified vessels (Vessels of 500 G/T or more navigating the sea areas shown in Fig. 55 at Nagoya Ko E, W, N Passages and peripheral waters). The specified vessels shall listen to the information provided by Nagoya Ko Vessel Traffic Service Center.

(1) Information concerning to traffic rules when there is a possibility of specified vessels navigating the traffic routes and the sea areas surrounding the traffic routes (Refer to Fig. 55) against the traffic rules applied to the areas.

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

(3) Information pertaining to the sea areas which are under construction or other work, extremely shallow, or difficult

(1) Applicable vessels, Report time, Means of reports

Applicable vessels	Report time	Means of reports
Arrival	1) When passing position reporting line. (Refer to Fig. 55) 2) In case of vessels anchoring in the information service area, when 30 minutes before starting the operation and also after starting the operation.	1) VHF radiotelephone system Call Name; “Nagoya Harbour Radar” Call frequency; 156.8 MHz (16ch) Communication frequency; 156.65 MHz (13ch) 156.7 MHz (14ch) 156.325 MHz (66ch)
Departure	1) When 30 minutes before untying ropes and also after untying ropes. 2) In case of vessels anchoring in the information service area, when 30 minutes before starting the operation and also after starting the operation.	2) Telephone +81-52-398-0712

* “Vessels Towing Object etc.” means that vessels navigating while pushing or towing vessels or rafts or other objects and with a distance of 50 m or more from the tugboat bow to the back end of the objects or from push boat stern to the head of the objects.

5

(2) Matters of reports

Arrival	1) Name of vessel and call sign 2) Estimated time of passing position reporting line or time of starting the operation 3) Name of the position reporting line being passed (NW line / NS line) 4) Berth name or anchoring position 5) Name of passage intended to proceed (E Passage / W Passage / N Passage)
Departure	1) Name of vessel and call sign 2) Estimated time of starting the operation 3) Berth name or anchoring position 4) Name of passage intended to proceed (E Passage / W Passage / N Passage)

4. Maintaining a communication state with Nagoya Ko Vessel Traffic Service Center

Because there are cases that information about navigational safety is provided by Nagoya Ko Vessel Traffic Service Center, vessels which equipped with a VHF radiotelephone system shall keep watching 16ch (156.8 MHz) within the information service area and maintain a communication state with the Center.

In addition, the Center may call vessels by 13ch (156.65 MHz) when 16ch is busy, therefore vessels should keep watching 13ch as long as possible within the sea area if vessels equip with 13ch.

Bridge buildings and Overhead cables.

Name	Position	Clearance height (m)	Remarks
Meiko West Bridge	35° 03.1' N, 136° 50.0' E	32 ~ 39	Between Kibakanaoka Wharf and Kinjo Wharf
Meiko Central Bridge	35° 03.2' N, 136° 51.6' E	45 ~ 55	Between Kinjo Wharf and Shiomi Wharf
Meiko East Bridge	35° 03.2' N, 136° 52.7' E	40	Between Shiomi Wharf and Shinpo Wharf
An overhead cable (power)	35° 03.9' N, 136° 53.0' E	40 high	Between Shiomi Wharf and Shinpo Wharf
An overhead cable (power)	35° 04.1' N, 136° 52.9' E	9.3 high	Between Shiomi Wharf and Funami Wharf

15

Isewan Sea-Berth. This sea-berth is located in position (34° 55.6' N, 136° 44.4' E), almost halfway between Nagoya Ko and Yokkaichi Ko, the capacity of which is D/W 310,000 × 1. It is equipped with a sea-berth light with radar reflector and four subsidiary lights. A subsidiary light at S extremity is fitted with siren.

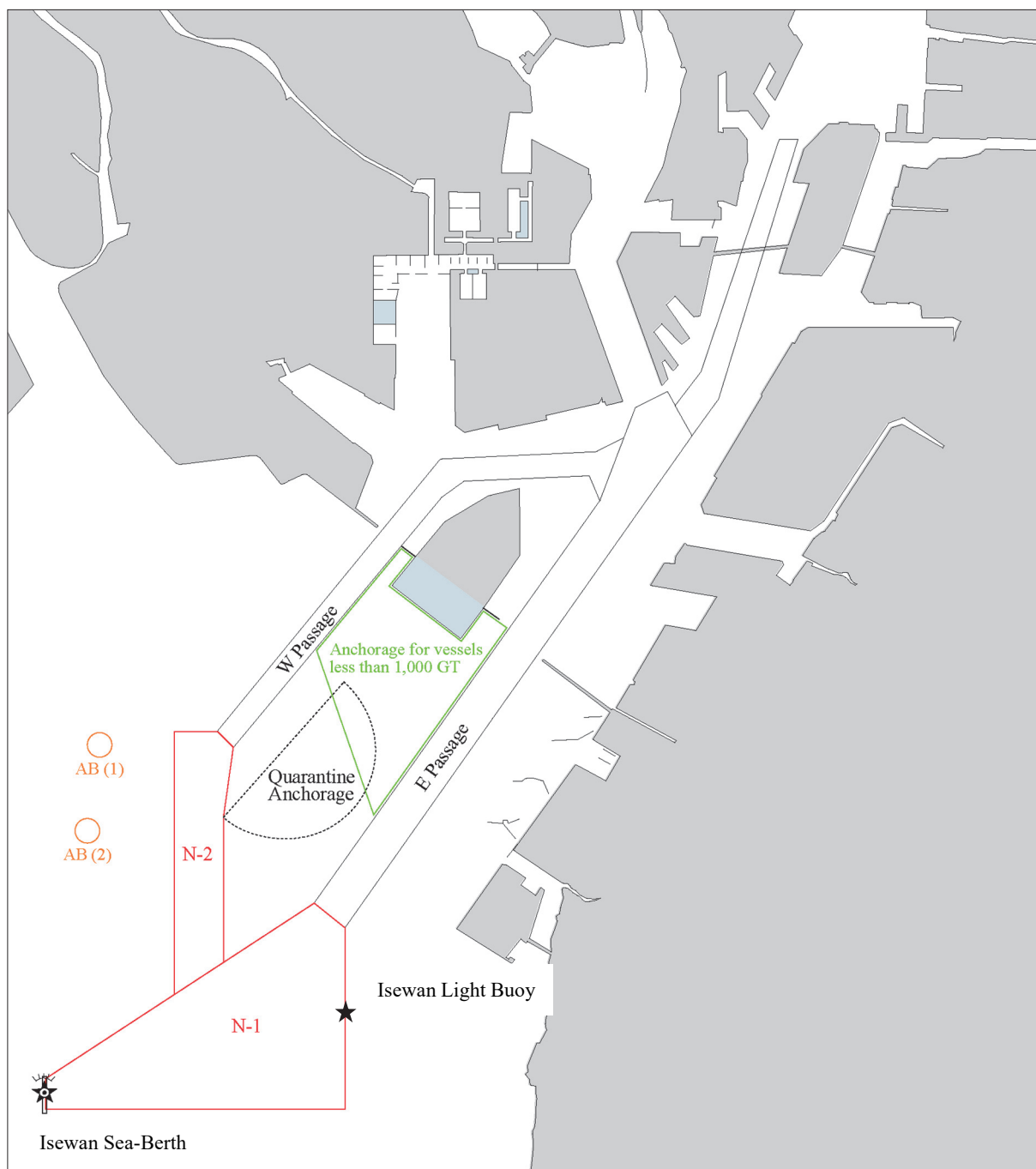
Mooring buoys. There are 8 mooring buoys with capacities 15,000 D/W class in the log pond handing pond in Section 4.

20

Anchoring. The Quarantine anchorage lies near the entrance of E and W passages (34° 58.5' N, 136° 47.1' E).

Also, anchorages for ships carrying dangerous cargos are designated as follows in District No. 2 to District No. 5 (2018, No.30-2 Public Notice, Caption of the Port, Nagoya) (Refer to Fig.54).

1. The area enclosed by the line drawn from the SW extremity of Shiomi Wharf to the position 180° 400 m, the line drawn

Fig. 56 Anchorage and Self-imposed restraint waters of anchoring in Nagoya Ko**Facilities.**

Name	Position	Length (m)	Depth (Approx. m)	Capacity (D/W × vessel)	Remarks	
Garden Wharf	No. 1 Quay	35° 05.4' N, 136° 53.1' E	245	5-10	700 × 1 15,000 × 1	
	No. 2 Quay	35° 05.3' N, 136° 53.0' E	185	10	10,000 × 1	Miscellaneous goods.
	No. 3 Quay	35° 05.4' N, 136° 52.9' E	290	10	20,000 t × 1	For passengers.
	No. 5 Quay	35° 05.4' N, 136° 52.8' E	60	3	500 t × 1	For passengers.
Ote Wharf No. 11, 12 Quays	35° 05.3' N, 136° 52.4' E	260	6.5 ~ 7.5	3,500 × 2	Miscellaneous goods.	

Oe Wharf	No. 38 Quay	35° 05.3' N, 136° 53.4' E	185	10	10,000 × 1	Miscellaneous goods and Heavy objects, etc. (Aseismatic quay.)
	No. 39 Quay	35° 05.2' N, 136° 53.4' E	213	9	10,000 × 1	Miscellaneous goods and Heavy objects, etc.
Showa Wharf No. 40, 41 Quays		35° 04.7' N, 136° 53.4' E	240	7.5	3,000 × 2	Fertilizers and Chemicals.
Funami Wharf	No. 43 ~ 45 Quays	35° 04.4' N, 136° 53.2' E	420	5 ~ 6	450 × 1 1,500 × 4	Silica sand, Soil stones.
	No. 46 ~ 48 Quays	35° 04.4' N, 136° 53.1' E	571	5 ~ 5.5	450 × 1 15,000 × 5	Silica sand. Soil stones.
Inaei Wharf	No. 17, 18 Quays	35° 04.8' N, 136° 52.1' E	320	9	10,000 × 2	Cotton, Wool, Grains, etc.
	No. 22 ~ 24 Quays	35° 04.6' N, 136° 51.9' E	540	10	10,000 × 3	Miscellaneous goods and Automobiles.
	No. 25 Quay	35° 04.5' N, 136° 51.8' E	200	10	10,000 × 1	Miscellaneous goods and Automobiles.
Shionagi Wharf	No. 27 Quay	35° 04.4' N, 136° 51.7' E	90	5.5	1,500 × 1	Coal.
	No. 28 Quay	35° 04.4' N, 136° 51.7' E	130	7.5	3,500 × 1	Coal. Aseismatic quay
	No. 29 Quay	35° 04.3' N, 136° 51.8' E	185	10	10,000 × 1	Coal. Aseismatic quay
	No. 31 Quay	35° 04.3' N, 136° 51.6' E	60	3 ~ 6.5	500 × 1	Coal and Mineral products.
	No. 32 Quay	35° 04.3' N, 136° 51.7' E	130	6.5 ~ 7.5	3,500 × 1	Coal and Mineral products.
	No. 33 Quay	35° 04.2' N, 136° 51.7' E	185	10	10,000 × 1	Coal and Mineral products.
Sorami Wharf	No. 50 Quay	35° 03.4' N, 136° 51.3' E	180	10	10,000 × 1	Miscellaneous goods.
	No. 51 Quay	35° 03.4' N, 136° 51.3' E	120	4 or less	500 × 2	Miscellaneous goods.
	No. 70 Quay	35° 03.7' N, 136° 50.6' E	360	5.5	1,500 × 4	Miscellaneous goods.
	No. 95 ~ 97 Quays	35° 04.2' N, 136° 51.5' E	540	5 ~ 5.5	500 × 1 1,000 × 1 1,500 × 4	Steel.
Kirijo Wharf	No. 52, 53 Quays	35° 03.2' N, 136° 51.2' E	497	8.5 ~ 12	25,000 × 2	Automobiles.
	No. 54 ~ 57 Quays	35° 02.8' N, 136° 51.2' E	800	10	10,000 × 4	Automobiles.
	No. 58 ~ 62 Quay	35° 02.6' N, 136° 50.9' E	1,000	10	10,000 × 5	General merchandise and Automobiles.
	No. 71 Quay	35° 03.4' N, 136° 50.5' E	450	-	1,500 × 5	General merchandise.
	No. 72 ~ 75 Quay	35° 03.2' N, 136° 50.3' E	520	7.5	3,500 × 4	General merchandise.
	No. 76, 77 Quays	35° 03.0' N, 136° 50.3' E	400	10 ~ 10.5	10,000 × 2 20,000 × 1	Container.
	No. 78, 79 Quays	35° 02.8' N, 136° 50.4' E	400	10	10,000 × 2	Heavy items. Automobiles.
	No. 80, 81 Quays	35° 02.6' N, 136° 50.5' E	400	10	10,000 × 2	General merchandise and Automobiles.
	No. 82 ~ 84 Quays	35° 02.3' N, 136° 50.6' E	600	9 ~ 12	10,000 × 3	Miscellaneous goods.
No. 85 Quay	35° 02.1' N, 136° 50.7' E	280	11.5 ~ 12	25,000 × 1	Miscellaneous goods.	
Yatomi Wharf	No. 6 Quay	35° 01.8' N, 136° 47.9' E	270	12	25,000 × 1	General merchandise and Automobiles.
	No. 7 Quay	35° 01.8' N, 136° 47.8' E	240	12	25,000 × 1	General merchandise and Automobiles.
	No. 88, 89 Quays	35° 02.2' N, 136° 48.0' E	260	7.5	3,500 × 2	Wood and Miscellaneous goods.
Nabeta Wharf	T1 Quay	35° 01.4' N, 136° 47.7' E	350	13 ~ 14	50,000 × 1	Container. (Aseismatic quay)
	T2 Quay	35° 01.5' N, 136° 47.5' E	350	13 ~ 14	50,000 × 1	Gantry crane.
	T3 Quay	35° 01.6' N, 136° 47.4' E	285	12	30,000 × 1	Container. Gantry crane.

Tobishima Wharf	No. 90 ~ 92 Quays	35° 02.8' N, 136° 49.9' E	620	10 ~ 12	10,000 × 2 25,000 × 1	Container. Gantry crane.
	No. 93, 94 Quays	35° 02.0' N, 136° 50.2' E	700	14 ~ 15	50,000 × 2	
	TS1 Quay	35°01.6' N, 136°49.2' E	350	16	108,500 × 1	Container. (Aseismatic quay) Gantry crane.
	TS2 Quay	35°01.6' N, 136°49.4' E	400	16	108,500 × 1	
	No. 98, 99 Quays	35° 02.3' N, 136° 48.6' E	370	10	10,000 × 2	For timber carriers.
Shiomi Wharf BX Pier	35° 03.8' N, 136° 52.8' E	200	3.5	300 × 20	Small oil tanker facility Stern attached.	
Yokosuka Wharf No. 86 Quay	35°00.6' N, 136° 52.2' E	420	4~4.5	500 × 7	Construction materials.	
Kitahama Wharf No. 87 Quay	35°00.3' N, 136° 52.0' E	240	4.5	500 × 4	Light industrial products.	

Apart from the above table, there are many private mooring facilities in various places.

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

Maritime authorities and facilities.

Name	Telephone
4th Regional Coast Guard Headquarters	+81-52-661-1611
Nagoya Coast Guard Office (Captain of the Port)	+81-52-661-1615
Nagoya Ko Vessel Traffic Service Center	+81-52-398-0711
Nagoya Customs Headquarters	+81-52-654-4100
Nanbu Sub-Branch of Nagoya Customs (Located in Chita City)	+81-562-32-5191
Seibu Sub-Branch of Nagoya Customs (Located in Tobishima Village)	+81-567-55-2974
Chubu District Transport Bureau	+81-52-952-8002
Nagoya Quarantine Station	+81-52-661-4131
Nagoya Sub-branch, Chubu Airport Branch of Animal Quarantine Service	+81-52-651-0334
Nagoya Plant Protection Station	+81-52-651-0112
Nanbu Branch of Nagoya Plant Protection Station (Located in Chita City)	+81-562-32-1389
Nagoya Regional Immigration Bureau	+81-52-217-8914
Nagoya Port Authority	+81-52-661-4111

5

Tugboats, Barges and Ferryboats. Available.

Oil waste disposition facilities.

Name	Application	Hours of operation	Waste oil to be disposed	
			Waste heavy oil	Waste light oil
Daiseki Co., Ltd.	+81-52-611-6321	0830 ~ 1700	Bilge and others	
ENEOS Corp.	+81-562-32-3211	0800 ~ 1650	Bilge, water ballast and collect oil.	Water ballast, tank cleaning water.
Idemitsu Kosan Co., Ltd.	+81-562-55-1119	0800 ~ 1700	Bilge, water ballast and collect oil.	Water ballast, tank cleaning water.

Medical facilities.

Name	Telephone	Remarks
Nagoya-Ko Welfare Association Rinko Hospital	+81-52-661-1691	
Chubu Rosai Hospital	+81-52-652-5511	

10

Maritime traffic. There are car ferry services (15,795 G/T etc.) between Tomakomai Ko or Sendai Ku in Sendai-Shiogama Ko. There is also a water bus service that operates between Garden Wharf, Shiomi Wharf and Kinjo Wharf.

Anchorage. A water, around 1 M offshore of the estuary of Iwata Kawa, about 12 m deep, muddy bottom, gives good holding ground and affords anchorage even in the NW wind in winter. However, special caution is required against the strong SE wind which suddenly blows around September.

Precautions for anchoring. Attention must be paid to the **three** mooring chains (with sinkers at their ends) extending about 200 ~ 300 m offshore from the piers No.1 to No.3 of Japan Marine United Corporation (34° 40.7' N, 136° 32.5' E).

Facilities.

Name		Position	Length (m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks
Igurazu Wharf	- 5.5 m Quay	34° 40.5' N, 136° 33.1' E	90	4.5	1,000 × 1	
	- 4.5 m Quay		60	4	1,000 × 1	

Apart from the above table, there are private mooring facilities in Igurazu area.

Supplies. Limited amount of fresh water, fuel oil and ice can be supplied.

Repairs. Available.

Maritime authorities and facilities.

Name	Telephone
Tsu Sub-branch of Yokkaichi Branch Customs	+81-59-225-2030
Mie Prefectural Matsuzaka Construction Office (Located in Matsuzaka City)	+81-59-223-5203

Maritime traffic. There is a high speed passenger liner (100t class) services to Tokoname Ko (Chubu Centrair International Airport) from Niezaki area.

Paragraph 7 KO SAKI ~ HANSU HANA ~ DAIO SAKI

(Chart JP1051)

General information. This paragraph describes the coasts and islands in the area from Momotori Suido, Sugashima Suido and Kaburako Suido to Daio Saki by Hansu Hana.

Momotori Suido ~ Kaburako Suido ~ Hansu Hana (Charts JP1053, W73)

General information. Momotori Suido and Kaburako Suido (34° 28.7' N, 136° 52.6' E) are channels running in the W part of the entrance of Ise Wan, and connect Ise Wan and the open sea together with Sugashima Suido mentioned below. These channels are general routes of relatively small vessels. Vessels entering Ise Wan from the direction of Daio Saki generally take the route passing a narrow channel (34° 27.0' N, 136° 55.4' E) between Ijika Shima and Hansu Hana, Kaburako Suido and Momotori Suido.

Along this route, winds and waves ease through the year, and inlets including Toba Ko are located where vessels are able to seek shelter, take supplies or make communications easily. Consequently many vessels use this route. In navigating these channels, however, careful ship handlings and sharp lookouts are requested because all of these channels are narrow, bend and with small view, many aquaculture facilities such as the laver in addition to other dangerous factors such as complicated tidal currents, many ferry boats and fishing vessels.

Weather. Southwesterly winds are frequent in summer, westerly or northwesterly winds prevail in other seasons.

Momotori Suido and Islands (Charts JP1053, W73)

Momotori Suido. (34° 30.5' N, 136° 50.0' E) This channel separates Toshi Shima, Uki Shima, Tobi Shima and Hinata Shima from the mainland to the SW. It is a good route for small vessels and crafts entering or departing from Ise Wan because of the sufficient depths and many marks despite its largely curved passage.

The narrowest part (34° 30.4' N, 136° 50.5' E) of this channel is situated the interior entrance (between Toshi Shima and Hinata Shima) where the width with the depth of 10 m or more is about 450 m.

(1) Momotori Suido seen from NW



(2) Momotori Suido seen from S

**Kaburako Suido ~ Hansu Hana** (Charts JP1053, W73)

General information. There is Kaburako Suido which separates Suga Shima from the mainland to the SW. The narrowest part ($34^{\circ} 29.0' N$, $136^{\circ} 52.2' E$) of Kaburako Suido is between Seigan Shima and Iwashima Saki and the width with the depth of 10 m or more is about 350 m. There is no serious difficulty in navigating this channel owing to the short way and many marks; but it may be unfit for large vessels because of the many sunken reefs and the bendy passage.

At the S entrance of the channel, shallow reefs lie N and S of Ijika Shima ($34^{\circ} 27.4' N$, $136^{\circ} 55.7' E$). Between these reefs and the mainland to the SW lies a narrow channel, the narrowest part ($34^{\circ} 26.9' N$, $136^{\circ} 55.6' E$) of which is between Hansu Hana and Tanabashi ($34^{\circ} 27.1' N$, $136^{\circ} 55.7' E$; a reef dry to 1.8 m) and the width with the depth of 10 m or more is about 300 m.

The channel ($34^{\circ} 28.8' N$, $136^{\circ} 51.5' E$) separating Sakate Shima from the mainland to the S is mainly used by small vessels going to Toba Ko, especially fishing vessels.

Vessels should not navigate the water between Yosemite ($34^{\circ} 28.1' N$, $136^{\circ} 53.8' E$) and the mainland to the S as there are many sunken reefs.

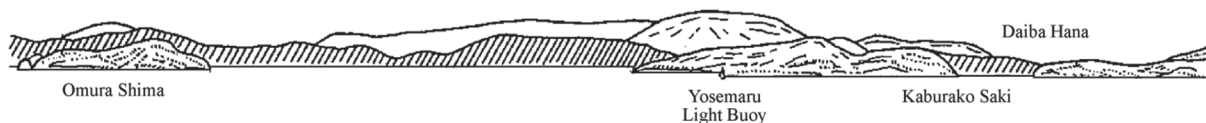
Landmarks.

Landmark	Position	Remark
Sakate Shima	$34^{\circ} 29' N$, $136^{\circ} 51' E$	A summit (110 m high) lies near the center with 2 TV-towers. The E end is Maruyama Saki; a light beacon is located in the vicinity.
Seigan Shima	$34^{\circ} 29' N$, $136^{\circ} 52' E$	A drying rock at the W end of the narrowest part of Kaburako Suido. There is a light beacon close to it.
Suga Shima	$34^{\circ} 29' N$, $136^{\circ} 53' E$	O Yama (236 m high) lies in the center of the island.
Kaburako Saki	$34^{\circ} 28' N$, $136^{\circ} 53' E$	A rocky cape.
Ijika Shima	$34^{\circ} 27' N$, $136^{\circ} 56' E$	A rock, 10 m high, projecting above the water.
Hansu Hana	$34^{\circ} 27' N$, $136^{\circ} 55' E$	A point surmounted by Ijika Light. Good mark when approaching Kaburako Suido.

Approaches to Kaburako Suido

The vicinity of Kaburako Suido seen from E

Kaburako Suido seen from E



Clearing line. Kome Se ($34^{\circ} 28.5' N$, $136^{\circ} 53.8' E$; 8.9 m deep) lies on azimuth line (265°) which joined Kaburako Saki ($34^{\circ} 28.4' N$, $136^{\circ} 52.6' E$) to a mountain ($34^{\circ} 28.3' N$, $136^{\circ} 51.6' E$; 142 m high) about 1.5 km W of Kaburako Saki.

Directions. (Refer to Fig. 59)

N bound route from Hansu Hana to Momotori Suido by Kaburako Suido.

1. Steer for the peak of O Yama ($34^{\circ} 29.5' N$, $136^{\circ} 53.4' E$; 236 m high), bearing 325° from SE of Ijika Light ($34^{\circ} 26.7' N$, $136^{\circ} 55.4' E$; stands on Hansu Hana), then pass through between Ijika Light and Tanabashi Light Buoy ($34^{\circ} 26.8' N$, $136^{\circ} 55.8' E$) and enter the narrow channel.

Proceeding to Kaburako Suido taking the route E of Ijika Shima instead of the route through the narrow channel, steer for the peak of O-Zukumi Shima ($34^{\circ} 32.5' N$, $136^{\circ} 54.6' E$; 83 m high), bearing 335° ; alter course to 300° for the peak of O Yama when Matsu-ga-Hana ($34^{\circ} 27.3' N$, $136^{\circ} 54.6' E$) comes in line with Ijika Shima, bearing 264° ; then alter course to 272° for Kaburako Saki when Uomi Yama ($34^{\circ} 27.1' N$, $136^{\circ} 54.8' E$; 74 m high) bears 219° . Directions thereafter are described the following “4” and after.

2. Alter course to 313° for N of Yosemite Light Buoy when Ijika Shima (10 m high) abeam.

3. Alter course to 272° for Kaburako Saki when Yosemite Light Buoy ($34^{\circ} 28.2' N$, $136^{\circ} 53.8' E$) bears 180° .

4. Alter course to 305° for Seigan Shima Light Beacon ($34^{\circ} 29.0' N$, $136^{\circ} 52.0' E$) when Kame-no-Ko Hana ($34^{\circ} 28.6' N$, $136^{\circ} 53.2' E$) abeam.

5. Alter course to 350° when Iwashiki Saki ($34^{\circ} 29.0' N$, $136^{\circ} 52.4' E$) comes in line with the extremity of a cape ($34^{\circ} 28.7' N$, $136^{\circ} 52.1' E$), about 300 m SSE of Hachi-ga-Saki, and proceed about 450 m until nearly below the overhead cables between Suga Shima and Sakate Shima, then steer to starboard slightly in order to navigate the right side of the channel.

6. Alter course to 295° for the N extremity of Hinata Shima ($34^{\circ} 30.4' N$, $136^{\circ} 50.2' E$) when a conspicuous house ($34^{\circ} 29.5' N$, $136^{\circ} 50.5' E$), about 500 m W of Toba Ko E Breakwater Light ($34^{\circ} 29.5' N$, $136^{\circ} 50.8' E$) abeam.

7. Alter course to 330° for the W extremity of Uki Shima when Shimaga Saki Light ($34^{\circ} 30.5' N$, $136^{\circ} 50.8' E$) abeam.

8. Alter course to 263° for Kozaki Light ($34^{\circ} 30.4' N$, $136^{\circ} 48.5' E$) when Ko Shima ($34^{\circ} 30.9' N$, $136^{\circ} 50.9' E$; 7 m high) abeam.

9. Alter course to 319° when Momotori Suido Omura Shima Light Beacon ($34^{\circ} 30.8' N$, $136^{\circ} 49.0' E$) abeam, then proceed to Ise Wan.

S bound route from Momotori Suido to Hansu Hana by Kaburako Suido.

Follow the route described above in reverse.

Caution: Aquaculture facilities of seaweeds are laid on the both sides of the channel, Hansu Hana ~ Ijika Shima, in the vicinity of Sakate Shima and along the S coast of Suga Shima.

Overhead cable. A power transmission cable ($34^{\circ} 29.2' N$, $136^{\circ} 52.0' E$), the vertical clearance of 34 m, is suspended between Sakate Shima and Suga Shima.

Tidal currents. At the Tanabashi Light Buoy ($34^{\circ} 26.8' N$, $136^{\circ} 55.8' E$) nearby, flood (ebb) stream flows toward the NNW (SSE), with a maximum flow velocity of 0.8kn.

Sugashima Suido and Islands (Charts JP1053, W73)

General information. Sugashima Suido is a nearly straight channel separating Toshi Shima from Suga Shima; the

is well sheltered from winds, but is encumbered with many rocky reefs and pearl culture facilities, and fairways are narrow, allowing only small crafts to enter. **There are tourist boats (166 t) and regular passenger ships (19 t) that cruise around the bay.**

In addition, small-scale stationary nets are located in the NNW of Goza Misaki.

5 Landmarks.

Landmark	Position	Remarks
Shuku-Sengen Yama	34° 18' N, 136° 42' E	182 m high with a silver colored TV tower on the NW side.
Taso-Sengen Yama	34° 18' N, 136° 42' E	174 m high.
Taso Saki	34° 17' N, 136° 41' E	A rocky cape covered with weeds, 73 m high. A lighthouse stands on a hill about 600 m N of the end.
Akaishi Hana	34° 17' N, 136° 38' E	A white cliff lies about 700 m WSW of the end of this point.

Nie Wan. (34° 15' N, 136° 34' E) This bay consists of some inlets, most of which the waters are occupied by pearl culture beds.

10 Reefs such as Katsuo Birashi (34° 15.4' N, 136° 34.5' E; 4.5 m deep, a light buoy is moored on the S side), near Shido-no-Hana on the E side of the entrance, lie on E of azimuth line (150°) which joined Nieura Ko B Breakwater Light (34° 16.6' N, 136° 33.3' E) to the SW extremity of Maki-ga-Shima (34° 16.4' N, 136° 33.6' E; 52 m high).

Care should be taken of stationary nets laid along the E coast of Mie Shima.

The water S of To Shima (34° 16.9' N, 136° 34.0' E; 16 m high and thickly wooded), 16 ~ 18 m deep, affords anchorage, except in S wind.

15 **Kamisaki Wan.** (34° 15' N, 136° 32' E) (Chart W1058) This bay opens to the SE and is divided into three inlets by Tate-ga-Saki (34° 15.6' N, 136° 31.6' E); the E branch is Naya Ura, Onando Ura and Kamisaki Ura lie in the W.

In Kamisaki Ura, Yoshizu Ko at the bay head can afford good shelter for small vessels. There are aquaculture facilities in the port. Naya Ura and Onando Ura are not suitable for shelter as these contain numerous aquaculture facilities.

20 **Hozaura Wan.** (34° 14' N, 136° 31' E) This inlet consists of Hoza Ura and Moto-Hoza Ura. A directional light located at the head of Hoza Ura leads the fairway of this inlet. Both inlets are well sheltered from winds from every direction but navigation is difficult due to culture facilities laid all over the waters.

Care should be taken of stationary nets laid in the vicinity of the entrance.

Kowaura Wan. (34° 13' N, 136° 28' E) This bay is divided into two inlets by Yasaki-no-Hana at the head of the bay, Kowa Ura and Nishi Ura.

25 This bay can afford shelter for vessels of 500 t or less, but attention shall be paid to aquaculture facilities for fish situated all over the bay (September to next May).

It should be noted that there are stationary nets laid in the vicinity of the entrance.

Landmarks.

Landmark	Position	Remarks
Tsubone-ga-Cho	34° 17' N, 136° 37' E	A thickly wooded mountain, 311 m high.
Oshozuka Yama	34° 17' N, 136° 35' E	220 m high and thickly covered with pine trees.
Shido-no-Hana	34° 16' N, 136° 35' E	Miharai Shima (a rocky islet, 30 m high) lies on the end.
Taka Yama	34° 18' N, 136° 33' E	497 m high, a pointed bare peak.
Mie Shima	34° 15' N, 136° 33' E	An island, 150 m high. It separates Nie Wan from Kamizaki Wan. A lighthouse stands on the SE end. This island is seen as a conical shape from the S and a good mark to distinguish entrances of both inlets.
Kamasu Hana	34° 14' N, 136° 31' E	A cliffy point, separating Kamizaki Wan from Hozaura Wan.
Kake Saki	34° 13' N, 136° 29' E	A thickly wooded cape of rocky cliffs. The shows a pointed peak to the SW.

30 **Nishiki Wan.** (34° 12' N, 136° 23' E) This bay is entered between Meto Hana (34° 12.2' N, 136° 23.7' E) and Hirase Hana (34° 11.8' N, 136° 22.5' E; Hirase Shima (79 m high) lies in front of this point) and opens to the S. In the water extending to the S about 1 M from both sides of the entrance lies a stretch of islets and reefs. Reefs extend to the SSE about 600 m from the shore about 500 m SW of Suso Hana (34° 12.6' N, 136° 23.2' E) in the bay. Nishiki Gyoko lies at the head of the bay giving good shelter to small vessels. It should be noted that there are stationary nets and aquaculture facilities of fish in the bay.

35

Safeguards against Typhoon and Tsunami. In order to prevent accidents caused by tsunamis, etc., the Owase Port Typhoon/Tsunami Countermeasures Council has been established to provide guidance to vessels in port regarding disaster prevention measures, such as the dissemination of information, warning systems, evacuation, and the recommendation or lifting of port entry restrictions. (Inquiries: Owase Coast Guard Office).

5 **Weather.** E wind prevails from April to September; swells often enter the port in strong wind. W wind is dominant from October to next March, which gives the port little disturbance.

Tides. In Owase Ko, mean higher high water is 1.5 m, mean lower low water is 0.4 m, and mean sea level is 1.04 m.

10 **The largest vessel to enter the port.** On March 20, 1989, the oil tanker “MINOTAVROS”(68,630 t, draught 15.3 m) berthed at Owase-Mita construction site Pier.

Directions.

1. Large vessels normally pass through between Warigame Shima and Nage Ishi.

(1) From the quarantine anchorage (See item “Anchorage”), steer for Warigame Shima (34° 05.2' N, 136° 14.5' E), bearing 293°.

15 (2) When Nageishi Light (34° 04.7' N, 136° 14.9' E) abeam, alter course to 258° with Suzume Shima (34° 04.7' N, 136° 13.3' E), a brown rocky islet, 17 m high to the top of trees, ahead, then pass through between Warigame Shima and Nage Ishi.

(3) When the E extremity of Warigame Shima abeam, alter course to 245° and proceed to the appropriate anchorage.

2. Small vessels normally pass through between Nage Ishi and Sabaru Shima (34° 04.3' N, 136° 15.2' E).

20 (1) Near the quarantine anchorage, steer for the S extremity of Suzume Shima, bearing 274°, then pass through midway between Nage Ishi and Sabaru Shima.

(2) When Owase Ko Hitose Light Buoy (34° 04.5' N, 136° 14.6' E) abeam, alter course to 264° with Owase Ko No.1 Breakwater Light (34° 04.4' N, 136° 12.4' E) ahead, then proceed to anchorage. In taking this route, attention must be paid to the strong influence of tidal currents.

25 **Precautions for entering the port.**

1. When entering or leaving the basin protected by breakwaters at the head, attention must be paid to the movements of other vessels, as No.1 and No.2 Breakwaters are so high that they may obstruct the clear view.

30 2. In the season for pole and line fishery from April to August, traffic of fishing vessels to and from this port is extremely heavy. In the water around the entrance between Sawa Saki and Miki Saki, numbers of fishing vessels with fish lumps may be encountered at night. In such situation, approaching to the quarantine anchorage is dangerous.

3. The crossing situations often develop with the fishing vessels coming from Hikimoto Ko area.

Anchorage. The quarantine anchorage, 60 ~ 67 m deep, is located in the vicinity of a position (34° 04.4' N, 136° 16.5' E), NE of Toga Shima. There are aquaculture facilities near the quarantine anchorage, so it is necessary to be careful.

35 **When anchoring outside the breakwater, it is best to anchor within the waters enclosed by a line joining Owase Ko No. 1 Breakwater Light, the S end of Suzume Shima, the W end of Owase-Mita Thermal Power Station Pier currently being demolished, and N end of Kunishishousen-cho (34° 04.2' N, 136° 12.4' E), avoiding the waters within a 500 m radius of the same pier. Around the point where the S extremity of Suzume Shima is seen bearing 062° at a distance of 850 m, there is a good anchorage with a depth of 20 m and muddy bottom.**

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.

The 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.

Designation	Methods for displaying signals		Meanings of signals
	By flashing light All day	By shapes and flags Night	
Inward signal	1 white flashing every 2 seconds.	1 black cone shape (point up).	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	1 red flashing every 2 seconds.	1 black square shape.	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 less (tankers of 500 G/T or more).	1 red flashing and 1 white flashing every 3 seconds.	1 black cone shape (points together).	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	3 red flashings and 3 white flashings every 6 seconds.	1 black cone shape (points together), above 1 red square flag.	All traffic prohibited except vessels instructed by Captain of the Port.

Port regulations.

Navigational Precautions (Article 43 of the Regulations for the Enforcement of the Port Regulations Law)	1. Vessels of 1,000 G/T or more (tankers 500 G/T or more) proceeding and taking departure by navigating the passages (hereinafter referred to as "Kochi Fairway" in this Paragraph and next Paragraph) S of the line drawn from Kochi Ko Mimase Light (33° 30' 26" N, 133° 33' 34" E), bearing 90°, shall report the items described in each Item of Article 38 Paragraph 2 of the Port Regulations Law (the items in Item 3 mean the estimated time of arrival near the entrance to Kochi Fairway when proceeding, and the estimated time of departure when taking departure) to Captain of the Port by noon of the day before proceeding or taking departure, respectively. 2. Vessels making reports of the items described in the preceding paragraph, shall report to Captain of the Port immediately when the change has been made on said items. Consultation; the matters described in each Item of the Article 38 Paragraph 2 of the Port Regulations Law: 1) Name of the vessel. 2) Gross tonnage and length of the vessel. 3) Estimated time for the vessel to navigate through the fairway. 4) Means of communicating with the vessel. 5) The mooring facility within the specified port where the vessel is anchored or seeks to anchor.
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Caution: Caution should be exercised with southerly swells developed near the entrance when a depression or a typhoon approaches during spring to autumn.

5 **Bridge buildings.** Urado O-Hashi (33° 30.0' N, 133° 34.1' E; 39 m high) spans across the passage near the entrance.

Overhead cables. Two overhead cables (33° 31.9' N, 133° 33.8' E; height 50 m and 47 m) span crossing the N part of the passage.

The Largest vessel to enter the port. On 15th May, 2023, a cruise ship "MSC BELLISSIMA" (171,598t, with a draught of 8.7m) berthed at No.3 Quay of No.7 Wharf.

10 **Mooring buoys.** There are many mooring buoys in front of a shipyard located in Shinchiku district.

Anchorage. The quarantine anchorage is provided in the vicinity of a position (33° 28.8' N, 133° 35.0' E) SSE of Shimo-Ryuzu Saki.

Facilities.

Name		Position	Length (m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks
No. 1 Wharf	No. 2 Quay	33° 32.4' N, 133° 33.2' E	115	3 ~ 6	3,000 × 1	
	No. 4 Quay	33° 32.4' N, 133° 33.4' E	390	2.5 ~ 7	5,000 × 3	There is rough ground ahead.
	No. 5 Quay	33° 32.3' N, 133° 33.6' E	172	7.5	5,000 × 1	Aseismic quay
	No. 6 Quay	33° 32.5' N, 133° 33.6' E	310	6 ~ 7	5,000 × 2	
	No. 7 Quay	33° 32.6' N, 133° 33.6' E	260	5.5 ~ 7	5,000 × 2	
No. 8 Quay	33° 32.7' N, 133° 33.6' E	180	3.5 ~ 4	700 × 3		
No. 2 Wharf No.1 Quay	33° 33.2' N, 133° 33.6' E	735	0.5 ~ 3	—	Unsurveyed area at a part	
No. 3 Wharf	No. 1 Quay	33° 33.0' N, 133° 33.8' E	242	2 ~ 3	—	Unsurveyed area at a part
	No. 2 Quay	33° 32.7' N, 133° 33.8' E	446	2.5 ~ 4	300 t × 1	
	No. 3 Quay	33° 32.6' N, 133° 33.8' E	110	2.5 ~ 3	300 t × 1	There is notation of the foul ground on chart.
	No. 4 Quay		140	3 ~ 3.5	750 t × 2	
No. 4 Wharf	No. 1 Quay	33° 32.5' N, 133° 34.2' E	167	4.5 ~ 5	3,000 × 1	There is rough ground ahead.
	No. 2 Quay	33° 32.4' N, 133° 34.2' E	180	3.5 ~ 4	300 × 1	
	No. 3 Quay	33° 32.4' N, 133° 34.3' E	90	—	300 × 1	
No. 5 Wharf	No. 1 Quay	33° 31.4' N, 133° 33.9' E	130	5.5 ~ 6	5,000 × 1	
	No. 2 Quay	33° 31.3' N, 133° 33.9' E	140	3.5 ~ 4.5	1,000 × 2	
	No. 3 Quay	33° 31.1' N, 133° 33.9' E	300	2.5 ~ 4	700 × 5	
No. 7 Wharf	No. 1 Quay	33° 30.7' N, 133° 35.1' E	240	7.5 ~ 8	—	Gantry Crane
	No. 2 Quay	33° 30.6' N, 133° 35.1' E	240	12 ~ 12.5	30,000 × 1	Gantry Crane
	No. 3 Quay	33° 30.6' N, 133° 35.4' E	280	12 ~ 12.5	30,000 × 1	There is rough ground ahead.
	No. 4 Quay	33° 30.7' N, 133° 35.5' E	190	11 ~ 11.5	18,000 × 1	Aseismic quay
	No. 8 Quay	33° 30.8' N, 133° 35.0' E	180	7.5 ~ 8	12,000 t × 1	Under construction to the W of this quay.

Apart from the above table, there are private mooring facilities on each wharf.

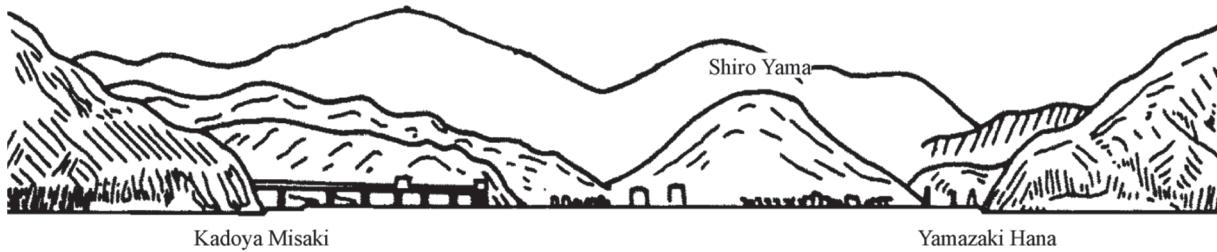
Entrance of Susaki Ko



Susaki Ko seen from the S off the port

5

Susaki Ko seen from the S



Susaki Ko (33° 23' N, 133° 17' E) (Chart W105) (Port Code: JP SUZ)



(Photographed May. 2018)

- 10 **Port classification.** Port designated by Port Regulations Law, Open port, Immigration port, Plant protection port.
- General information.** The port is entered to the N from the entrance, which is between Kogi-no-Hana (33° 22.4' N, 133° 17.9' E) and Kadoya Misaki (33° 22.6' N, 133° 16.8' E); the water is long and narrow. Being protected by mountains against winds from all directions, it is the best port on the S coast of Shikoku. In rough weather, most of vessels navigating off Tosa Wan seek shelter in this port or its vicinities but a few times a year, strong NE winds will
- 15 make difficult for the vessels berthing at the port.

The water in the port is mostly 6 ~ 16 m deep and the bottom is mud. The E side of the port is relatively deep and mountains rise closely to the shore.

Many fishing vessels gather around the entrance of the port. Extending construction at the E-end part of E-Breakwater

~~in the entrance of the port is performed.~~

Weather. NW wind prevails throughout the year.

Secondary undulation. Secondary undulation occurs with a period of about 18 minutes or about 40 minutes and the difference of the heights sometimes attain 20 cm.

5 **Pilotage.** There is not sea area of pilotage to be established in the Pilotage Law, but pilotage of private qualification is available (contact **to NITTETSU MINING Torigatayama Quarry Complex**: TEL +81-889-42-3131).

Directions. (Refer to Fig. 63)

1. From S of Isshi Bae Light Beacon (33° 19.6' N, 133° 19.0' E), steer 310° with Kure Ko Futana Minami-Shima Light (33° 19.7' N, 133° 15.0' E) ahead.

10 2. When Ishi Bae Light Beacon bears 051°, alter course to 002° for Shiro Yama (33° 23.7' N, 133° 17.3' E, height 143 m).

3. When passing Yamazaki Hana after entering the port and navigating between E Breakwater and W Breakwater in the bay entrance of Susaki Ko, navigating in the mid-fairway with five red light buoys in the port and leading toward the destination accordingly.

15 **Facilities.**

Name	Position	Length (m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks	
Minatomachi	- 10 m Quay	33° 23.8' N, 133° 17.5' E	185	6 ~ 10	15,000 × 1	Order from the N.
	- 7.5 m Quay	33° 23.7' N, 133° 17.6' E	260	6	5,000 × 2	There is a shoal with a depth of 3.4 m, in vicinity the boundary between -7.5 m Quay and - 6 m Quay.
	- 6 m Quay		105	5 ~ 6	3,000 × 1	
	- 5.5 m Quay	33° 23.6' N, 133° 17.7' E	180	4 ~ 5.5	2,000 × 2	
Daibo - 9 m Quay	33° 23.9' N, 133° 17.8' E	165	8.5	10,000 × 1		

Apart from the above table, there are private mooring facilities in the E part of the port and inside the W corner of the entrance.

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

20 **Repair.** Repairs can be arranged.

Maritime authorities and facilities.

Name	Telephone
Susaki Sub-branch of Kochi Branch Customs	+81-889-42-0333
Kochi Prefectural Susaki Civil Engineering Office	+81-889-42-1700

Tugboats and Ferryboats. Available.

Medical facilities.

Name	Telephone	Remarks
Susaki-Kuroshio Hospital	+81-889-43-2121	

25

Anchorage. Futami Ko is a safe anchorage in all winds but swells enter the port in SW ~ W winds with the force 6 (wind velocity of 10.8 to 13.8 m/s) or more. When westerly swell is high, it is not suitable for both anchoring and mooring to a quay.

As an disused submarine cable lies in the middle area of the port, the anchorage is limited to the N part or the E part of the port. An anchorage is provided in front of Futami Ko Breakwater Light (27° 05.6' N, 142° 11.7' E) in the N part. The water off Ogi Ura (27° 04.4' N, 142° 12.2' E) in the SE corner reportedly gives good holding ground but the difficulties may be experienced at times in heaving up anchor.

The quarantine anchorage is located in the vicinity of a position (27° 04.7' N, 142° 11.4' E) ENE of Yagi Saki.

Facilities. Futami Pier (27° 05.8' N, 142° 11.8' E; 340 m in overall length and 5 ~ 8 m deep) lies close W of Futami Iwa and a landing place (27° 05.7' N, 142° 11.7' E; 130 m in overall length and about 3 m deep) is located on the SW of the pier.

Supplies. Fresh water and fuel oil are available.

Maritime authorities and facilities.

Name	Telephone
Ogasawara Coast Guard Station	+81-4998-2-7118
Ogasawara General Office of Ministry of Land, Infrastructure, Transport and Tourism (Execution of the customs, quarantine, plant protections and immigrations)	+81-4998-2-2102
Ogasawara Islands Branch Office, Bureau of General Affairs of Tokyo Metropolitan Government	+81-4998-2-2015

Maritime traffic. There is regular passenger service to Tokyo (11,035 t) and regular passenger service to Oki Ko [Haha jima] (499 t).

Hahajima Retto (Chart W50)

General information. Hahajima Retto is a group of islands extending about 11 M in a N-S direction. Haha Shima lies in the N part, and in the S part lie Muko Shima, Hira Shima, Ane Shima, Imoto Shima, Mei Shima, which are slightly smaller than Haha Shima, and some islets. Each of these islands is hilly, and mostly bordered with steep cliffs and fringed with many rocky reefs.

The water is generally deep to the shore but there are reefs and rocky reefs spreading in the area 0.5 ~ 1 M from the shore on the W coast of Haha Shima and in the vicinity of the islands in the S part.

Although Hahajima Retto is of volcanic nature, barren areas are fewer than in Chichijima Retto. The climate is similar to one in Chichi Shima. All the islands are uninhabited except Haha Shima.

There are some inlets which can be used for refuge or temporary anchorage in Haha Shima. Fishing vessels of Chichi Shima occasionally enter Oki Ko.

Haha Shima. (26° 40' N, 142° 09' E) This island, about 13 km long in a N-S direction, hilly and rocky with many inlets, is the largest in Hahajima Retto.

Chibusa Yama (463 m high), the highest peak, lies in the central part and a range of mountains with the height of about 430 m runs northward and southward from it, which suddenly decreases in elevation southward from Higashisaki Hanto. The E side of the range of mountain is generally steeper than the W side is. The mountains in the N and the central part are steep and there are some streams there. The S part is flat with fewer streams and there is a little drinkable well-water.

Haha Shima has many bays of every size, including roads such as Kita Minato, Higashi Minato, Okuzure Wan and Higashizaki Wan on the E side, and Oki Ko on the W side. Iguma Wan and Nishi Ura in the central part of the W side is encumbered with many rocky reefs and consequently is not suitable for anchorage. Inlets on the W side are mostly narrow and shallow but the shores are not very steep and flat beaches are relatively wide.

Hira Shima. (26° 35' N, 142° 09' E) This island is long in an E-W direction; mountains are not steep. It is covered with reeds and some bushes. The grounds in the vicinity of the island are mostly foul.

Muko Shima. (26° 36' N, 142° 08' E) It is thickly covered with woods and weeds, bordered mostly with steep cliffs apart from some sandy and stony beaches on both its E and W sides.

Ane Shima. (26° 33' N, 142° 09' E) Two ranges of mountains lie in N-S direction along each of E and W coast,