Pub.302 sup.

Sailing Directions for Northwest Coast of Honshu

Supplement No.3

27 September 2024

Japan Coast Guard

Explanatory Notes

Sailing Directions for Northwest Coast of Honshu - Supplement No.3 is issued to correct the outdated information in Publication No.302 Sailing Directions for Northwest Coast of Honshu which was published in March 2023.

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

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

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

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.302 Sailing Directions for Northwest Coast 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 148	AKITA-FUNAGAWA KO AKITA	W 148
JP 1155A	WESTERN PART OF NIIGATA KO	W 1100
JP 1155B	EASTERN PART OF NIIGATA KO	W 1155B
JP 1162A	FUSHIKI-TOYAMA KO FUSHIKI FUSHIKI-TOYAMA KO TOYAMA	W 1162A
JP1162B	FUSHIKI-TOYAMA KO SHINMINATO	W 11622B
JP1192	OGA HANTO	W 1192
JP1197	APPROACHES TO NIIGATA KO	W 1197

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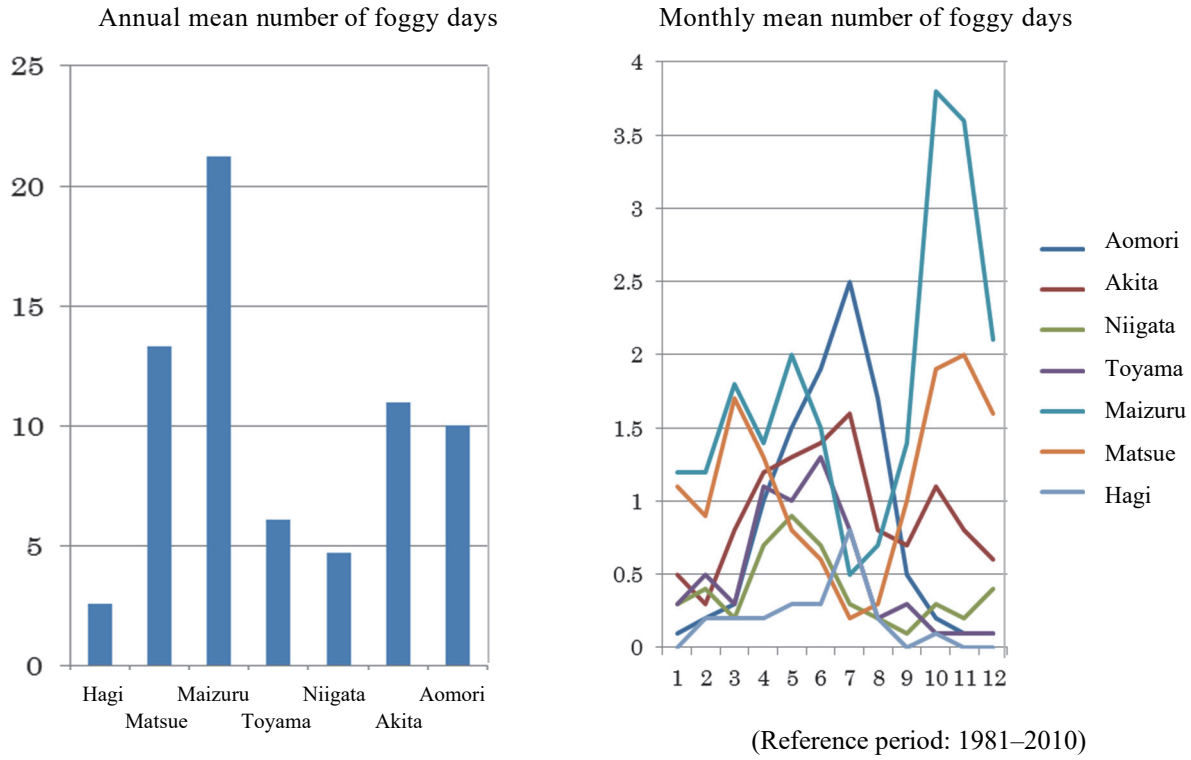
Fig. 3 Number of foggy days at observation locations



(Reference period: 1981–2010)

Number of sunny days. Generally, the number of the sunny days is greater in SW part compared to other parts. On yearly average, there are 16 sunny days in Tottori and Shimane, and there are 12 sunny days in Aomori, Akita and Niigata.

Commonly, there are more sunny days from spring through autumn, May, August and October are the sunniest particularly. There is less sunshine during the rainy season from June through late July, and winter.

Lighting. Tsuruga, Kanazawa and Wajima, located between E of Wakasa Wan and the vicinity Noto Hanto peninsula, Niigata, Sakata and Akita experience thunders frequently. There are about 35 days with thunder on yearly average in these locations. Most of thunder heard during the summer, from late autumn through early winter. Thunders prone to occur in summer in further W of Maizuru, and the yearly average number of days with thunder is 24.

Weather Information

Marine forecast and warnings. The Japan Meteorological Agency (JMA) Headquarters issue analysis results, forecasts and warnings of marine affairs via Inmarsat SafetyNET Service and radiofacsimiles (JMH) for the sea area enclosed by an equator, the 60° N line, 100° E line and 180° E line.

SafetyNET is an international broadcast service, consisting of 21 regions of the world, for the promulgation of maritime safety information. JMA is responsible for coordinating and promulgating navigational and meteorological warnings, meteorological forecast and other safety-related messages for the North Pacific Ocean Region everyday at the following times: 0530, 1130, 1730 and 2230 [JST]). They are transmitted via Inmarsat Pacific Ocean Region (POR) satellite by SafetyNET of the Inmarsat C Enhanced Group Call (EGC) system. In cases that a typhoon with a wind speed of 48kn is observed or expected to strike within 24 hours, forecasts and warning messages are broadcast 3 hours after regular broadcasting.

Local marine forecasts and warnings. Forecasts and warnings related to the area covered by this volume and the vicinity that issued by the observatory are provided Japan Coast Guard (JCG) coast radio station equipped with radio-telephone 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” on page 18.)

Graphical information.

Weather charts created by the Japan Meteorological Agency are broadcast by the agency's meteorological facsimile service (JMH).

Call sign	Class of emission	Frequency (kHz)
JMH	F3C	3622.5
JMH2		7795
JMH4		13988.5

Other information services can be obtained through NHK radio 2 broadcasting, and the facsimile broadcasting by Kyodo News.

Marine Weather Information Service. 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.

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

Main Headquarter or District Meteorological Observatory	Local Meteorological Observatory	
Fukuoka Regional Headquarters, JMA Address: 1-2-36, Ohori, Chuo-ku, Fukuoka-shi Phone: +81-92-725-3601	Shimonoseki	Phone: +81-83-234-4006
Osaka Regional Headquarters, JMA Address: 4-1-76, Otemae, Chuo-ku, Osaka-shi Phone: +81-6-6949-6304 and +81-6-6949-6303	Matsue Tottori Kyoto	Phone: +81-852-21-5270 Phone: +81-857-29-1312 Phone: +81-75-823-4302
Tokyo Regional Headquarters, JMA Address: 3-235, Nakakiyoto, Kiyose-city, Tokyo Phone: +81-42-497-7182 Weather Information Office, JMA Address, 3-6-9, Toranomon, Minato-ku, Tokyo Phone: +81-3-3434-9085	Fukui Kanazawa Toyama Niigata	Phone: +81-776-24-0096 Phone: +81-76-260-1461 Phone: +81-76-432-2332 Phone: +81-25-281-5871
Sendai Regional Headquarters, JMA Address: 1-3-15, Gorin, Miyagino-ku, Sendai-shi Phone: +81-22-297-8104	Yamagata Akita Aomori	Phone: +81-23-622-2262 Phone: +81-18-823-8291 Phone: +81-17-741-7412
Sapporo Regional Headquarters, JMA Address: Nishi 18-2, Kita 2-Jo, Chuo-ku, Sapporo-shi Phone: +81-11-611-0170	Hakodate	Phone: +81-138-46-2212

Pilot Associations

Pilot associations and the pilotage areas are summarised as below.

Name of associations Telephone and facsimile numbers	Boarding point	Remarks
Sakai Pilot Association Phone. +81-859-30-2124 Fax. +81-859-30-2128	· For large passenger ship and large chip carrier, position about 35° 33.0' N 133° 19.0' E · For other ships, position about 35° 32.5' N 133° 18.6' E	· Pilot ladders will be requested from the agency on a case-by-case basis. · The quarantine anchorage is not suitable for large vessels. The recommended anchorage for large vessels is position about 35° 32.5' N 133° 18.6' E. · Many ships use Miho Wan as an evacuation site, and the pilot boarding area for general ships is often occupied, so it is important to secure an anchorage early. Caution is necessary for the aquaculture rafts in the vicinity of 2M being 143° from the Sakai Ko Breakwater Light.
Maizuru Pilot Association Phone. +81-773-77-5587 Fax: +81-773-77-5587	Position about 35° 33.1' N 135° 19.4' E.	The pilot ladder should be on the lee side of the vessel.
Nanao Pilot Association Phone. +81-767-53-1192 Fax. +81-767-53-1193	There are two boarding points on a line bearing 258.8° toward Notoshima Directional Light on Arakami Hana: · For vessels of less than 30,000t, position about 37° 07.4' N 137° 05.6' E. · For vessels of 30,000t or more, position about 37° 07.6' N 137° 07.0' E.	· VHF radio contact is available when entering the port. · Vessels approaching the port entrance at night should navigate with directional lights from at least 3M offshore. Care must be taken for the fishing nets set on the both side of the fairway. · There are many fishing facilities during all seasons in the port and around the entrance.
Fushiki Pilot Association Phone. +81-766-44-0173 Fax. +81-766-44-3391	· For vessels entering Fushiki Ku or Shinminato Ku, position about 36° 49.9' N 137° 5.5' E, 2.5M from Fushiki Ko W Breakwater Light (36° 47.7' N 137° 04.1' E) on a line bearing 029°. · For vessels entering Toyama Ku, position about 36° 46.8' N 137° 14.0' E, distant between 0.8 and 1.0M from Toyama Ko E Breakwater Light (36° 45.9' N 137° 13.7' E), on a line bearing between 015° and 020°.	· The charted quarantine anchorage in Toyama Ku is not suitable for large vessels as the depth is insufficient and swells occur suddenly with N winds. · Extra care must be taken for the large number of stationary nets laid in Toyama Wan when approaching closer than 3M offshore.
Niigata Pilot Association Phone. +81-25-244-2320 Fax. +81-25-244-9551	For vessels entering Nishi Ku within Niigata Ko: - Position around the quarantine anchorage1.5M from Niigata Ko Nishi Ku W Jetty Light (37° 57.5' N 139° 04.1' E), on a line bearing 303°. - Position around the anchorage for large vessels carrying	· Throughout the year, boarding and disembarking should be done using a pilot ladder or combination ladder, not a gangway. · The pilot ladder or combination ladder should be prepared on the side that is shielded from wind, waves and swells. In addition, before boarding, the pilot may ask the vessel to increase or decrease the boat speed and steer in order to create a calm water surface.

	· dangerous cargoes are the area within a circle radius of 800m, centred a position 1.8M from Niigata Ko Nishi Ku W Jetty Light (37° 57.5' N 139° 04.1' E). · For vessels entering Higashi Ku within Niigata Ko: - ~~Position about 38° 02.2' N 139° 14.3' E, 1.5M from~~ Near 005°1.5M from the Niigata Ko Higashi Ku No.2 E Breakwater ~~(38° 00.8' N 139° 14.2' E)~~. - Position around the anchorage for large vessels carrying dangerous cargoes is the area within a circle radius of 800m, centred a position 1.8M from Niigata Ko Higashi Ku W Breakwater Light (38° 01.2' N 139° 13.9' E) on a line bearing 252°. · LNG Ship 290° 1.4M from the tip of the No.2 West Breakwater in the West District of Niigata Port (about 37° 59' N 139° 03' E)	· If an anchored vessel is able to be boarded, the vessel should weigh anchor and prepare for boarding of the pilot by making a lee side. · The pilot boat is equipped with a VHF radio, and is opened about 45 minutes before the designated boarding time. If necessary, the pilot can be called on channel 16 (Niigata Pilot), and communication is usually done on channel 06. There is no port radio station in Niigata Port. · In principle, entry into port is from sunrise to sunset, so-called DAY TIME. · Departure is generally by 2100, taking into consideration the work for the next day. · Operations will be suspended if the following weather and sea conditions are unsuitable for manoeuvring. - When there is a strong wind with a wind speed of 15 m/s or more. However, LNG carriers, LPG carriers, and other ships with individual safety standards are subject to those standards. - When visibility is 1,000m or less. - When a tsunami or storm warning has been issued and gusts of wind are expected.
Sakata Pilot Association Phone. +81-234-43-8306 Fax. +81-234-43-8309	· For vessels less than 30,000t, position about 1,090m from Sakata Ko S Breakwater Light, on a line bearing 254°. · For vessels 30,000t or more, position about 38° 55.0' N 139° 58.2' E, 3M from Sakata Ko S Breakwater Light (38° 56.2' N 139° 47.6' E), on a line bearing 246°.	· During all seasons, pilot ladder shall be used and accommodation ladder should not be used. · When strong winter monsoon is accompanied by swells, be the pilot boarding point before the boarding time and rig a pilot ladder on amidships of lee side. · Stay clear of the port entrance during the winter as vessels liable to be swept away by strong currents flow there. Vessels must due caution when mooring there at night as there is a risk of anchor dragging in strong winds, with a speed of 15m/s and more.
Akita-Funakawa Pilot Association Phone. +81-18-845-3178 Fax. +81-18-845-7661	· For vessels entering Akita Ku, position about 39° 47.4' N 139° 58.2' E, 5,500m from Akita N Breakwater Light (39° 46.1' N 140° 01.7' E), on a line bearing 295°. · For vessels entering Funagawa Ku, position about 39° 50.7' N 139° 54.0' E, 4,300m from Funagawa Breakwater Light (39° 52.4' N 139° 51.9' E), on a line bearing 138°.	· Caution is necessary for the fishing nets laid out up to 3M offshore in Akita Ku in the port. · Large ferries transit the port between 0500 and 0930. Vessels are required to comply with the traffic regulation of Akita-Funakawa port (For further details, please contact Akita Coast Guard Office). · It is possible to navigate over the three fish havens lie in the middle of the Akita Wan, but anchoring is prohibited in the vicinity of them.

Senzaki Ko (34° 23.5' N 131° 12.8' E) (Chart W1175) (Port code; JP SZK)

(Photographed in June 2020)

Port classification. Port designated by Port Regulation Law.

Outline. The port is situated in the SW part of Senzaki Wan and is a fishing port. It is connected to Fukawa Wan (34° 24.2' N 131° 09.4' E) by Senzaki Seto. The inlet extends S for about 1.5M, with an entrance of 0.7M in width. The port is sheltered from winds from all directions. The depth of the centre of the port is about 9m. The bottom is sand and mud. Shoal water with a depth of 5m or less extends around the offshore breakwater. The port is busy with vessels of 10,000 to 16,000t classes loading limestone.

Although the navigable width of Senzaki Seto is narrow, it is used as a regular coastal route for cruise boats with draughts of 1.8 to 3m. Shoal water extends in coastal area of the W entrance of the strait.

Tidal streams. In Senzaki Seto, the flood current flows E, with a speed of 1.3kn or more, and the ebb current flows S, with a speed of 1.3kn or more. Both cuurents flow 2 – 3 hours after High Water and Low Water.

Landmarks.

Landmarks	Position	Remarks
Omi O-hashi Bridge	34° 23.9' N 131° 11.9' E	12m in vertical clearance. Illuminated by mercury lights at night.
Fishermen's Association	34° 23.5' N 131° 12.0' E	Four-storey building, white in colour. Radio tower on the upper part and two radio towers on the N side.

Overhead bridge. There is an overhead bridge called Omi O-hashi Bridge (See the item *Landmarks*) spanning Senzaki Seto.

Directions. From the S of O Shima (34° 24.9' N 131° 16.1' E) proceed on a course of 270°. Then, pass the N of Mochiga Hana [Yakawa Hana] and steer for the vicinity of Senzaki Ko Oki Breakwater S Light.

Facilities. A basin exists in the NW part of the port, which is surrounded by breakwaters and quays.

Anchorage. In Senzaki Ko, vessels up to 5,000t can obtain anchorage in the port except for the area where aquaculture facilities are situated. The E part of the bay affords shelter anchorage, but caution is necessary as rough waves may penetrate the port when NE winds are blowing.

Typhoon and tsunami safety measures. In order to prevent disasters due to typhoon, tsunami and other abnormal weather, Vessel Concerned Parties of Nagato City is established and they manage prevention countermeasures of abnormal weather damage for all vessels in the harbour.

Moreover it should be noted that the Chief of Coast Guard Office may recommend subject to Port Regulation Law concerning actions for each vessel to take at the time of abnormal weather. (Inquiries: Senzaki Coast Guard Office)

Proceed one of the passages between Hitsu Shima (34° 30.9' N 131° 23.3' E) and O Shima (34° 29.9' N 131° 24.9' E), between Hi Shima (34° 29.1' N 131° 22.8' E) and O Shima (34° 29.9' N 131° 24.9' E) or between Hi Shima (34° 29.1' N 131° 22.8' E) with a depth of 3.6m and Ha Shima (34° 27.9' N 131° 22.6' E), then steer for the centre of the port entrance.

The passage between O Shima (34° 30.1' N 131° 20.4' E) and Hi Shima (34° 29.1' N 131° 22.8' E) is not recommended as Hashima Guri (34° 29.1' N 131° 21.5' E, 3.6m deep) lies in the middle of the passage.

Cautions for entering port. On occasions, fishing boats tow nets in the vicinity of the entrance of Gataminato (34° 26.4' N 131° 25.1' E), located E of Kitsune Shima, and in the vicinity of the entrance of commercial port section, located W side of Matsu-ga-Hana (34° 25.6' N 131° 24.1' E). Vessels must keep clear of them.

Pilotage. As the Pilotage Law is not applied to Hagi Ko, pilotage is not compulsory. Pilots are available for vessels of 4,000t class loading timbers when they enter Gataminato. Pilotage is provided by Kanmon Pilot Association (telephone phone number: +81-93-332-2384). The pilot boarding position is about 1.1M SW of Kasa Yama.

Facilities.

Name	Position	Length (approx. m)	Depth (approx. m)	Capacity (D/W×vessel)	Remarks
- 4m Quay	34° 25.7' N 131° 24.9' E	445 in total	1 to 2		Hagi Gyoko, S side of a jetty.
Gataminato Quay	34° 26.2' N 131° 25.2' E	110	5 to 6.5	3,000 × 1	
- 4m Quay for landing materials		38	5.5		E neighbor of Gataminato Quay.
- 4m Quay	34° 26.8' N 131° 24.6' E	157	3 to 5		Hagi Gyoko.

Anchorage. The bottoms of Obata Ura, Naka-Obata Ura and the shoals along Kiku-ga-Hama (34° 25.0' N 131° 23.3' E) are mud or fine sand, but there is risk of dragging when NW winds attain a speed of 10m/s and more.

The centre of Gataminato is sheltered from the wind from all direction and affords good shelter, but the space is very limited which is capable of accommodating a vessel of 500t or less.

Typhoon and tsunami safety measures. In order to prevent disasters due to typhoon, tsunami and other abnormal weather, Typhoon and ~~other abnormal weather~~ Tsunami Countermeasures Committee of Hagi Ko is established and they manage prevention countermeasures of abnormal weather damage for all vessels in the harbour.

Moreover, it should be noted that Captain of the port may recommend subject to Port Regulation Law concerning actions for each vessel to take at the time of abnormal weather. (Inquiries: Hagi Coast Guard Station)

Maritime authorities and facilities.

Name	Telephone number
Hagi Coast Guard Station (Captain of the Port)	+81-838-22-4999
Hagi Sub-branch, Shimonoseki Branch of Moji Customs	+81-838-25-5120

Medical facility.

Name	Telephone number	Remarks
Hagi Civil Hospital	+81-838-25-1200	

Supplies. Fresh water can be supplied. Fuel oil supply barges are available.

Maritime Traffic. There are passenger liner and car ferry services from commercial port section in Hamasaki area of Hagi Ko to Mi Shima, Ai Shima and O Shima.

Mi Shima (34° 46.3' N 131° 08.3' E) (Chart W136)

(Photographed in June 2020)

Outline. Mi Shima is an isolated island, about 15km in circumference, lying about 22M N of Senzaki Wan. The terrain of the island looks undulated when viewed from the NW and the summit (175m in height) is located in the centre near the W coast.

The coasts of the island are mostly pebble beaches, except for the W and S, which consist of rocks. Rocky reefs are scattered off the coast, and there are no dangers seaward of them. There are two villages called Honmura and Utsu. Two fishing ports are situated in the E and S coast respectively.

Koyama Misaki to Hamada Ko (Chart JP149)

Outline. The coast between Koyama Misaki (34° 39.9' N 131° 36.8' E) and Hamada Ko, for about 25M, is fringed with small islets within about 1M off the coast. A stretch of sandy beach near the mouth of Takatsu Kawa, located in the SW part, is conspicuous.

There are several fishing ports including Masuda Ko (34° 41.9' N 131° 49.1' E, Port code; JP MSD) and Misumi Ko in the middle part of the coast.

Tidal streams. The tidal stream is a weak in the vicinity of this coast.

~~**Fishery.** Vessels should stay clear of the fishing traps for Dorado made of bamboo bundles which are set up from 5 to 60M offshore along the coast from May to November. And also, from spring to autumn, traps with a bundle of bamboos for Dorado are placed 10M or more offshore around Hamada Ko, caution is required.~~

Landmarks.

Landmark	Position	Remarks
Sansho Shima	34° 41.4' N 131° 42.0' E	41m in height. A circular islet with steep cliffs.
Uomachi-no-Hana	34° 45.3' N 131° 51.9' E	There is a lighthouse.
Taka Shima	34° 50.1' N 131° 50.3' E	117m in height, an island with a lighthouse. A good landmark.
Ka Shima	34° 49.0' N 131° 56.2' E	An islet, 25m in height. The summit is covered with weeds and pine trees.
Taima San	34° 49.3' N 132° 00.4' E	A mountain, 574m in height. A good landmark.
Uma-no-Kura	34° 52.0' N 132° 00.4' E	It appears as a huge rock from W. Prominent.

Misumi Ko (34°47.3'N 131°55.6'E) (Chart W1294) (Port code; JP MMI)

(Photographed in July 2020)

Port classification. Port designated by the Port Regulation Law, important port.

Outline. The port is situated about 3M NE of Uomachi-no-Hana (34° 45.3' N 131° 51.9' E), and is composed of Misumi Power Station of Chugoku Electric Power and a public quay.

Landmarks. A directional light is displayed at the quay for coal loading situated in Misumi Power Station of Chugoku Electric Power. The signal is displayed only for the vessels entering the port. A chimney, 205m in height, painted in white, stands inside the site of the power plant.

Pilotage. As the Pilotage Law is not applied, pilotage is not compulsory in Misumi Ko, but private pilot is available.

Facilities.

Name	Position	Length (approx. m)	Depth (approx. m)	Capacity (D/W×vessel)	Remarks
- 7.5m Quay	34° 47.0' N 131° 55.7' E	150	6.5 to 7.5	5,000 × 1	Public quays.
- 5.5m Quay		90	5	2,000 × 1	

Typhoon and tsunami safety measures. In order to prevent accidents due to typhoons and tsunamis and other abnormal weather, Typhoon and Tsunami Safety Countermeasure Committee of Hamada Ko and its surrounding waters is established and they manage typhoon and tsunami damage prevention countermeasures, such as the communication of typhoon and tsunami information, warnings, and the issuing and cancelling of evacuation advisories for all vessels in the harbour. (Inquiries: Hamada Coast Guard Office)

Hamada Ko (34° 53.4' N 132° 03.0' E) (Chart W1175) (Port code; JP HMD)

(Photographed in July 2020)

Port classification. Specified port, open port, quarantine port, immigration port, domestic animal quarantine port, plant protection port, important port.

Outline. Hamada Ko is situated about midway between Sakai Ko and Kanmon Ko. The port consists of two sections, ~~commercial~~ port section which occupies the S part, and fishing port section which occupies N part.

A large number of vessels loading timber, cement and container enter the port section. This section has a capacity of accommodating vessels of 50,000t class, but temporarily, is limited to vessels of 30,000t.

The fishing port section is one of the major fishery bases of the W area of the coast of the Japan Sea, and a large number of fishing boats of 300t class enter this section. A group of islets and island including Uma Shima, lies around the NE part entrance. When the westerly wind blows, the port section affords good shelter.

To-no-Ura (34° 54.7' N 132° 04.6' E) and Matsubara Ura (34° 54.4' N 132° 04.6' E) are situated in the NE part and Hinashi Ura (34° 52.4' N 132° 01.5' E) lies in the SW part of the port.

Tides. In Hamada Ko, Mean Higher High Water is 0.5m, Mean Lower Low Water is 0.2m, and Mean Sea Level is 0.29m.

Secondary undulation (Seiche). In this port, secondary undulation with a period of 15 to 20 minutes may occur, which sometimes cause a variation of as much as 0.5m.

Tidal streams. At the entrance of Hamada Ko, the flood tidal current sets into the port and the ebb tidal current sets out of the port, both currents are weak.

Landmarks.

Landmark	Position	Remarks
Uma Shima	34° 54.2' N 132° 02.9' E	An island, 52m in height. A lighthouse and a radio tower, 100m in height, painted red and white, are situated near the W end.
Yana Shima	34° 53.9' N 132° 03.1' E	An island, 54m in height.
Takao Yama	34° 54.0' N 132° 04.1' E	A mountain, 77m in height. Two radio towers are situated on the top.
Sankai San	34° 52.4' N 132° 05.0' E	A mountain, 379m in height. Two radio towers, each with a dish aerial, painted gray, with mercury lights, are established on the mountainside, about 480m NNW of the summit. They exhibit mercury lights and serve as a conspicuous mark at night.
O Shima〔Tenjin Shima〕	34° 52.7' N 132° 02.7' E	
Eight Silos	34° 52.8' N 132° 03.4' E	Cement silos.
Radio tower	34° 54.1' N 132° 04.5' E	101m in height, painted red and white.

Overhead bridge. There is an overhead bridge called Hamada Marine Bridge (34° 53.8' N 132° 03.7' E, about 18m in vertical clearance) spanning the Gyoko Wharf and Seto-ga-Shima.

Cautions for entering the port. Vessels should keep clear of dangerous reefs including Tsurushima Guri and a submerged jetty lying in the passage between Uma Shima and Seto-ga-Shima.

Uma Shima Breakwater, which extends NE from the NE coast of Uma Shima, has a considerable height. Vessels should watch out for other vessels coming up behind Uma Shima Breakwater when entering and leaving the fishing port section.

In winter, high waves occur at the port entrance and render navigation difficult. A large number of fishing boats and ferryboats transporting fishing customers to the breakwater operate there when the weather is calm.

At night, Ko-Ise Shima (34° 54.0' N 132° 02.2' E, 1.5m in height) is illuminated from a spotlight of Umashima Light. However, it is not clearly distinguished when approaching from the N and E.

At the harbour entrance, other vessels entering or leaving the harbour are difficult to see due to the city lights in the background when approaching from the W.

Entry restriction. In order to prevent accidents due to ignition, general vessels are prohibited from entering a sea area within 30m a tanker loading inflammable materials, including a tank ship, mooring in the harbour. Tanker carrying dangerous inflammable materials display a banner visible at night, reading *Dangerous Flammable Cargo Aboard*, when moored in the harbour.

Pilotage. As the Pilotage Law is not applied to Hamadai Ko, pilotage is not compulsory. Private pilots are available upon request. (Inqueries: Hamada Koun Co., Ltd. Phone number: +81-855-27-0072). Private pilots board the vessel anchored near 304° 0.5M from the Hamada Ko Shakkuri Light Beacon or 270° 0.6M from the same light beacon. ~~The pilot boards in the quarantine anchorage.~~

Facilities. The Nagahama Wharf and the Fukui Wharf are situated on the W side and the E side of the ~~commercial~~ port section respectively.

The Gyoko Wharf is situated in the middle of the fishing port section.

Facilities of the ~~commercial~~ port section

Name		Position	Length (approx. m)	Depth (approx. m)	Capacity (D/W×vessel)	Remarks
Nagahama Wharf	No.1 Quay	34° 52.6' N 132° 02.7' E	185	9 to 9.5	15,000 × 1	
	No.2 Quay	34° 52.6' N 132° 02.6' E	130	6.5 to 7	5,000 × 1	
	No.3 Quay	34° 52.6' N 132° 02.8' E	70	5 to 7	1,000 × 1	
	No.4 Quay	34° 52.7' N 132° 02.6' E	90	6	2,000 × 1	
	No1 – 3 material landing quays	34° 52.5' N 132° 02.5' E	Total 330	3 to 4.5	500 ×3	
Nagahama Pier		34° 52.5' N 132° 02.6' E	120	N side 3 to 7.5 S side 3 to 7.5		
Fukui Wharf	No.1 Quay	34° 52.7' N 132° 03.4' E	130	7 to 7.5	5,000 × 1	Two light buoys indicating a shallow area are established.
	No.2 Quay	34° 52.7' N 132° 03.5' E	90	5 to 7	2,000 × 1	
	No.3 Quay	34° 52.9' N 132° 03.3' E	240	11 to 14	30,000 × 1	A crane.
	No.4 Quay	34° 52.8' N 132° 03.3' E	170	8	5,000 × 1	A gantry crane.

Facilities of the fishing port section

Name		Position	Length (approx. m)	Depth (approx. m)	Remarks
Gyoko Wharf	- 5m Quays	34° 53.5' N 132° 03.9' E	230	4 to 5	A wholesale market is located.
		34° 53.6' N 132° 03.8' E	420	4 to 5.5	The W side of Gyoko Wharf.
	- 4m Quay	34° 53.7' N 132° 03.9' E	380	3 to 3.5	The E side of Gyoko Wharf.
- 6m Quay		34° 53.4' N 132° 03.6' E	570	5.5 to 6.5	

Maximum size of vessel handled. Cruise ship *COSTA NEOROMANTICA* (57,150t, with a draught of 7.8m) berthed at Fukui Wharf No.3 Quay on 4th August 2019.

Anchorage. A quarantine anchorage (34° 53.3' N 132° 03.2' E) is designated in area of southward direction from Yana Shima.

Cautions for anchoring. As the anchorage space is limited, vessels attempt to anchor within the port should take anchorage in the E of the New West Breakwater (34° 52.9' N 132° 02.5' E) or N of O Shima〔Tenjin Shima〕to keep clear of the fairways used by the vessels transiting the ~~commercial~~ port section. The water depth in the vicinity of the anchorage is approximately 20m. Vessels waiting for cargo loading or taking refuge should moor to the quay and avoid anchoring as much as possible.

Typhoon and tsunami safety measures. In order to prevent accidents due to typhoons and tsunamis and other abnormal weather, Typhoon and Tsunami Safety Countermeasure Committee of Hamada Ko and its surrounding waters is established and they manage typhoon and tsunami damage prevention countermeasures, such as the communication of typhoon and tsunami information, warnings, and the issuing and cancelling of evacuation advisories for all vessels in the harbour. (Inquiries: Hamada Coast Guard Office)

Maritime authorities and facilities.

Name	Telephone number
Hamada Coast Guard Office (Captain of the Port)	+81-855-27-0770
Hamada Branch Customs, Kobe Customs	+81-855-27-0366
Hamada Detached Office, Hiroshima Quarantine Station	(Contact to Hiroshima Quarantine Station) +81-82-251-4785
Hiroshima Sub-station, Kobe Head Office, Plant Protection Station	+81-82-251-5881
Shimane Prefectural Hamada Port and Harbour Office	+81-855-27-0088

Tugboats. Tugboats are available.

Supplies. Fresh water and ice can be supplied. Fuel oil supply barges are available.

Repairs. There are two shipyards: one on the E side of Seto-ga-Shima and the other on the W bank of an estuary located S of Gyoko Wharf. Each of them has a cradle capacity of 100t.

Medical facility.

Name	Telephone number	Remarks
Hamada Medical Center, National Hospital Organization	+81-855-25-0505	

Hamada Ko to Hi-no-Misaki (Chart JP149)

Outline. The coast between Hamada Ko and Hi-no-Misaki, for about 45M, consists mostly of sandy beaches, and contains small ports such as Gotsu Ko (35° 01.8' N 132° 13.7' E, Port code; JP GOT), Yunotsu Ko (35° 06' N 132° 20' E), Nima Ko (35° 09.6' N 132° 23.9' E, Port code; JP NIM), and Kute Ko (35° 13.9' N 132° 29.9' E, Port code; JP KUT). The water depth is more than 20m within 0.5 to 1M offshore.

A channel, about 400m in width, lies between reefs near Kogame Shima, E of Tomo Shima (35° 25.3' N 132° 36.6' E, about 1M SW of Hi-no-Misaki), and a foul ground off Oise Hana (35° 25.1' N 132° 37.4' E, ESE of the opposite shore of Kogame Shima).

Tidal streams. Tidal currents are weak in the vicinity of this area.

It is reported that the flood current flows SW, and the ebb current flows NE, with a speed of 0.5kn, from about 40 minutes after Low Water to about 40 minutes after High Water.

In the area about 3M WSW of Taisha Ko (34° 24.0' N 132° 39.8' E, Port code; JP TIA), the flood current flows S, and the ebb current flows N, with a speed of 0.5kn.

A tidal current setting S, attaining a speed of 0.8kn, has been observed in the area about 1M W of Hi-no-Misaki.

Fishery. Vessels should stay clear of the drift gill-net for flying fish which may be set up from 5 to 10M offshore (but without 2M offshore) along the coast from 20 May to 20 July. And stationary nets are set. In addition, from spring to

Conspicuous building	35° 30.8' N 133° 15.0' E	An 8-story, white building hotel.
Conspicuous building	35° 31.2' N 133° 15.6' E	A building with glass wall, 43m in height.
Eshima O-hashi Bridge	35° 31.1' N 133° 12.0' E	33m in vertical clearance, equipped with bridge lights.

Overhead bridge. There are Sakaisuido O-hashi Bridge (41 to 44m in vertical clearance) and Eshima O-hashi Bridge (33m in vertical clearance) (See item *Landmarks*).

Overhead cable. An overhead cable, 39m in vertical clearance, runs E of Sakaisuido O-hashi Bridge.

Passages. A prescribed passage (about 1.7M in length and 160m in width, 6.2 to 14m in depth) extends from about 0.5M ENE of Sakai Ko Breakwater Light (35° 33.1' N 133° 16.3' E) to the E side of Sakaisuido O-hashi Bridge.

A fairway dredged to 9m extends SW from the prescribed passage to Section 3, and a fairway dredged to 7m branches off previously-mentioned fairway and runs to Nakaura Suido.

Directions. Approaching Section 1 or Section 3

1 From a position about 1M S of Mihonoseki Light (35° 34.0' N 133° 19.5' E), vessels should steer for the midway between Sakai Ko No.1 and No.2 Light buoys on a course of 273°. Then, proceed to the prescribed passage.

2 In the vicinity of Sakai Ko Breakwater Light, alter course gradually to starboard, then steer for Sakai Ko Direction Light on a bearing of 255.5°.

3 Then proceed to an appropriate berth keeping slightly N of the centre of the fairway.

Approaching Gaiko-Showa Minami Chiku in Section 2

Take a route mentioned in *Approaching Section 1 or Section 3* until entering the prescribed passage. Then, alter course gradually to starboard and steer for Sakai Ko Nakano E Breakwater Light (35° 31.9' N 133° 15.0' E) on a bearing of 227°.

Hazards.

· Vessels must exercise caution to avoid collusion as the entrance of the fairway is narrow and congested with a large number of vessels including fishing boats, vessels loading dangerous substances and vessels coming from quarantine anchorage.

· Tidal currents are very changeable in the port. Large vessel mooring alongside the berth is a minor cause of change.

· When the wind blows strongly from between the S and WSW, vessels may be set to the N shore, and when the NE wind blows strongly, vessels may be set to the leeward, and difficulty may be experienced in maneuvering.

· The Obstacle Limitation Surfaces are established near the harbour limit on the S side of Section 3 in the port to define an airspace for the aeroplanes taking-off from / landing at Yonago Airport. Care must be taken not to exceed the prescribed height. (See Chart W1174).

· Stationary nets are established between Jizo Saki and Mihonoseki Gyoko, so caution is required when entering or leaving the port.

Pilotage. Pilotage is available upon request. (Inquiries: Sakai Pilot Association. See *Chapter 6 PILOTAGE* in Part 1 for details.)

Port communications. Communication between a vessel and the Captain of the Port can be made through radiotelephone.

Call name	Frequency (call/contact)	Hours of operation	Contact
MAIZURU COAST GUARD RADIO	ch16/12	24 hours	Sakai Coast Guard Office(Captain of the Port)

Entry restriction. In order to prevent accidents due to ignition, general vessels are prohibited from entering a sea area within 30m a tanker loading inflammable materials, including a tank ship, mooring in the harbour. Tanker carrying dangerous inflammable materials displays a banner visible at night, reading *Dangerous Inflammable Cargo Aboard*, when moored in the harbour.

Facilities.

Name		Position	Length (Approx. m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks
Showa-North No.1 Quay		35° 33.0' N 133° 15.8' E	140	4.5 to 5.5	700 × 2	Jib crane × 1
Showa-North No.2 Quay			220		700 × 2	
Showa-South No.1 Quay		35° 32.3' N 133° 15.2' E	270	13	40,000 × 1	
Showa-South No.2 Quay			185	10	15,000 × 1	
Showa-South No.3 Quay			130	7.5 to 8	5,000 × 1	
Showa-South No.4 Quay			280	13 to 14	50,000 × 1	Gantry crane × 2
Nakano No.1 Quay		35° 32.2' N 133° 15.1' E	240	12	30,000 × 1	
Outer Harbour Wharf No.1 Quay		35° 32.9' N 133° 15.3' E	370	9	10,000 × 2	
Outer Harbour Wharf No.2 Quay			260	7.5	5,000 × 2	
Mooring Quay		35° 32.9' N 133° 14.4' E	980	3 to 7		Used by patrol vessels, regular service boats and ferries.
Inner harbour	No.1 Quay	35° 32.8' N 133° 13.4' E	200	6	3,000 × 2	
	No.2 Quay		91	4.5	1,000 × 1	
	No.3 Quay		163	4 to 5.5	3,000 × 1	
	No.4 Quay		130	6.5	3,000 × 1	
Takenouchi	No.1 Quay	35° 31.7' N 133° 15.2' E	100	7.5	2,000 × 1	
	No.2 Quay		100	7	2,000 × 1	
	No.3 Quay		100	7.5	2,000 × 1	
	No.4 Quay		130	7.5 to 8	5,000 × 1	
Takenouchi-South No.1 Quay		35° 31.4' N 133° 15.5' E	300	10	About 130,000t × 1	Used by cruise ship.
Moriyama Quay		35° 32.9' N 133° 13.1' E	300	2 to 4.5	700 × 5	
Tonoe No.1 Quay		35° 32.5' N 133° 12.9' E	300	3.5 to 6	700 × 5	
Tonoe No.2 Quay		35° 32.3' N 133° 12.6' E	300		700 × 5	
Nakano Quay		35° 32.0' N 133° 14.7' E	550	3.5 to 4	700t × 8	
Eshima No.1 Quay		35° 31.2' N 133° 11.5' E	165	9	10,000 × 1	
Eshima No.2 Quay			130	7.5	5,000 × 1	

In addition to the above, piers (No.1 – 4) are established in front of a petroleum terminal situated about 1km SW of Sakai Ko Breakwater Light.

Maximum size of vessel handled. Cruise ship *MSC BELLISSIMA* (171,598t, with a draught of 8.7m) berthed at Takenouchi-south No.1 Quay on 25 June 2023.

Safety measures during stormy weather. Sakai Coast Guard Office requests vessels to refrain from anchoring in order to prevent marine accidents caused by stormy weather (e.g., anchor dragging) in the sea area around Yonago Airport.

The area required to refrain from anchoring; the sea area within a circle of radius 3M centered on the Yonago Airport Aviation Light on the W side, excluding Miho Wan.

The period required to refrain from anchoring; From the time a wind storm or snow storm warning for Yonago region, Tottori Prefecture and/or Matsue region, Shimane Prefecture is issued (or expected to be issued) by JMA, until the warning is cancelled.

Maki Yama	35° 30.3' N 135° 18.6' E	A mountain, 483m in height. Four radio relay towers (painted silver) and a radar dome are situated near the summit. A good landmark for identifying the entrance to Maizuru Ko.

Obstruction. A submerged obstruction (35° 32.9' N 135° 14.5' E) lies about 1.8M WSW of Muso-ga-Hana.

Kunda Wan (35° 32.7' N 135° 15.4' E, Chart W118) The inlet extends for about 1.8M, with a width of 1.5M. The water is gradually shallowing off 30m from the harbor entrance. The depth is 10m within 300m off shore. The bottom is generally mud, good holding. The coast consists of rocks except for the W coast, which is low and flat, sandy beach.

An anchorage can be obtained about 300m offshore in the inner part of the bay situated W of Shiro Yama (35° 33.4' N 135° 15.1' E) where the depth is about 12m. The anchorage is sheltered from the winds from all directions except for winds blowing down from NE due to the influence of the topography.

Kana-ga-Saki to Bakuchi Misaki {Maizuru Wan} (Charts W1164, W1167)

Outline. Maizuru Wan is a good natural harbour entered between Kana-ga-Saki and Bakuchi Misaki. To Shima (35° 29.8' N 135° 20.5' E) is separating the bay into E part and W part.

The coastline is well-indented, backed by mountains. Several islands are scattered in the middle of the bay.

Generally, the water is deep except for the vicinity of the previously-mentioned islands and the cape protruding N from the S coast. The bottom of the bay is generally mud, good holding. The bay is sheltered from winds from all direction and serves as a good anchorage for vessels of any sizes.

The whole area of the bay belongs to Maizuru Ko.

Landmarks.

Landmark	Position	Remarks
Bakuchi Misaki	35° 33.1' N 135° 20.6' E	~~A cape with reddish cliffs.~~ A lighthouse is situated.
Radio mast	35° 32.1' N 135° 20.5' E	216m in height, standing on the summit of the mountain.
Goro Take	35° 27.9' N 135° 20.6' E	A mountain, 301m in height. Two radio towers and an observation tower (white, light brown in colour) are established near the summit.

Maizuru Ko (35° 30.1' N 135° 20.5' E) (Chart W1167) (Port code; JP MAI)

Port classification. Specified port, open port, quarantine port, immigration port, domestic animal quarantine port, plant protection port, important port.

Outline. A good natural harbour situated in the W part of Wakasa Wan and is entered between Kana-ga-Saki and Bakuchi Misaki.

Bordered by To Shima (35° 29.8' N 135° 20.5' E), the W side is commonly called Nishi Ko {West harbour} and the E side is called Higashi Ko {East harbour}. Section 1 occupies the head of Nishi Ko {W harbour} and Section 2 occupies the head of Higashi Ko {East harbour}. The rest of the port area is comprised of Section 3 and the prescribed passages.

Nishi Ko {West harbour} has many public facilities. Maizuru Gyoko (35° 27.7' N 135° 19.6' E) is situated on the E side of Section. Shipyards, ferry terminals, private facilities and the base for the Japan Maritime Self-Defense Force are situated in Higashi Ko {East harbour}.

Weather and Climate. The port is not exposed to the NW monsoon in winter as it is blocked by mountains, while the outer port is greatly affected by monsoon winds. The amount of the sunshine is low from November through March. The amount of precipitation is greater from December through February, which reaches 120 to 150mm per month. Average number of rainy or snowy days are 15 to 18, sunny day is only 1 during this period. Weather turns better in spring. The amount of precipitation is lowest in April and May. The humidity is also low during this period. Typhoons strike in September. However, they are less violent compared to the storms brought by typhoons to the Pacific Ocean. Great care must be exercised as violent storm and winds are generated when a typhoon passes along Kii Hanto. August is the hottest month of the year with the average temperature of 26°C approximately, while January is coldest with the average temperature of 3°C approximately.

Port classification. Specified port, open port, quarantine port, immigration port, plant protection port, important port.

Outline. This port lies in the head of Tsuruga Wan, which is situated in the E part of Wakasa Wan. The port is divided into five sections. Mooring facilities are established in Section 1. Section 2 is about 25m in depth, and the bottom in most parts of Section 2 is mud. Section 3 occupies Jogu Wan (35° 41.1' N 136° 02.1' E), and is sheltered from the winds from all directions and affords good holding ground. Urasoko Wan (35° 44.2' N 136° 02.1' E), located in Section 5, affords shelter for small and medium vessels.

Weather and Climate. There are only a few sunny days throughout the year. The monthly average number of sunny days during the winter snow season is only 1. South-easterly winds prevail from spring through autumn. North-westerly winds prevail in winter. N and S winds blow any time of the year as a general tendency. Temperatures rarely go down to -5℃ or less owing to the influence of Tsushima Warm Current. The climate in summer is hot and humid.

Tidal streams. The flood sets S and ebb sets N with a speed of 0.2kn or less. However, in the area S of a breakwater lighthouse of Section 1, the flood sets E and ebb sets W with a speed of 0.6kn.

Secondary undulation (Seiche). In this port, secondary undulation with a period of 10 to 65 minutes occurs, which may sometimes reach 0.2m in the difference of the sea level. A fatal accident induced by secondary undulation have occurred in Tsuruga Ko in February 2013.

Landmarks.

Landmark	Position	Remarks
Saiho-ga-Take	35° 42.6' N 136° 00.6' E	A mountain, 764m in height, capped with a blackish rock.
Radio tower	35° 42.3' N 136° 02.5' E	Stands on near Washi Saki.
Tezutsu Yama	35° 39.7' N 136° 04.9' E	A mountain, 171m in height. There is an observatory near the top.
Chimney	35° 40.3' N 136° 04.9' E	A chimney, 263m in height.

Obstruction. Jogu Wan is fringed with foul ground.

Cautions for entering the port. The water depths between the port entrance and the head of the bay are considerably deep, and the passage is clear so that entering the port presents no difficulties by day or at night. Vessels should stay clear of the stationary nets laid in the E and W side of the bay entrance. When entering Urasoko Wan, vessel completely avoid the light buoy (35° 44.0' N 136° 02.6' E) in the entrance of the bay, then proceeds to the middle of bay.

Entry restriction. In order to prevent accidents due to ignition, general vessels are prohibited from entering a sea area within 30m a tanker loading inflammable materials, including a tank ship, mooring in the harbour. Tanker carrying dangerous inflammable materials displays a banner visible at night, reading *Dangerous Inflammable Cargo Aboard*, when moored in the harbour.

Facilities.

Name		Position	Length (Approx. m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks
Mariyama North Quay	A	35° 40.5' N 136° 04.5' E	130	7.5 to 12.5	5,000 × 1	
	B		240	12 to 13	30,000 × 1	
	C		240	12 to 14	30,000 × 1	
	D	35° 40.7' N 136° 04.3' E	240	9.5	20,000t ×1	For car ferries.
Mariyama South Quay	A	35° 40.1' N 136° 03.9' E	280	13.5 to 14	50,000 × 1	Crane × 1.
	B	35° 40.1' N 136° 04.1' E	180	13.5 to 14	50,000 × 1	
Kanegasaki Quay	C	35° 39.8' N 136° 04.2' E	170	9 to 9.5	10,000 × 1	
	D		130	7.5	5,000 × 1	
Sakura Quay	E	35° 39.6' N 136° 04.3' E	100	5 to 6	2,000t × 2	
	F		90			
Horai Quay	G	35° 39.6' N 136° 04.1' E	390	5.5 to 6.5	6,000t × 3	
	H					
	I					

Port classification. Specified port, open port.

Outline. Fukui Ko is situated at the S side of the mouth of Kuzuryu Kawa. The port is divided into two sections; Mikuni Ku and Fukui Ku.

Fukui Ku is an artificial inner port, which is being developed as the core of Fukui Industrial Zone and is a major oil storage centre. Facilities such as Fukui Petroleum Stockpiling Base are situated in Fukui Ku.

Weather and Climate. From April to mid-September, the weather is generally fine, and the sea is calm in July and August. Southerly winds are common throughout the year. During the period from December to February, the number of days with strong NW winds is high, and rough seas are experienced most frequently.

Tidal streams. Flood current sets N, and ebb current sets S, with a speed of 0.2 to 0.4kn. However, the N setting current is dominant throughout the day under the influence of ocean current. The S setting current flows from 3 to 4 hours after Higher High Water for a period of about 2 to 3 hours. In the mouth of Kuzuryu Kawa, surface water always flows downstream, while deep water flows upstream during the flood, downstream during the ebb. As a consequence, surface water and deep water flow in the opposite direction during the flood.

Marine accidents. Large waves are caused when strong winds are blowing from between W and NNW continuously in Mikuni Ku, and the waves penetrate into the mouth of Kuzuryu Kawa breaking over the breakwater. The current direction becomes complicated where river current (with a speed of about 1.5kn) and waves meet. A small vessel has been distressed while sailing under such rough condition.

Landmarks.

Landmark	Position	Remarks
O Shima	36° 15.0' N 136° 07.1' E	An island with a lighthouse, 42m in height.
Tower	36° 14.2' N 136° 07.6' E	Tojinbo tower, 100m in height, painted white, Prominent.
Chimney	36° 12.5' N 136° 07.9' E	206m in height, painted white. It stands on the premises of power station.

Obstruction. Foul ground (36° 11.8' N 136° 07.2' E) lies about 390m S of Fukui N Breakwater.

Precautions for entering the port. When strong NW winds blow, it is necessary to maintain course at a position 0.5M offshore as high waves occur at the mouth of the Kuzuryu Kawa. The depths are liable to change around there, and the depths become 0.5 to 2.5m shallower SE from the S side of Mikuni Breakwater. Therefore, vessels should keep to the N part of Kuzuryu Kawa. Currents attain maximum speed of 7kn during the rainy, typhoon and thaw seasons. During that period, the condition of the fairway is liable to change greatly due to the sand accumulation caused by heavy precipitation.

In the vicinity of N Breakwater, water depth is liable to change due to drifting sands from Kuzuryu Kawa and tend to be shallower than charted. Vessels entering Fukui Ku are advised to obtain the latest information from the local authorities and Notices to Mariners. Also, operational adjustments are being made for ships of 20t or more.

Vessels approaching from the W, are recommended to contact *MAIZURU COAST GUARD RADIO* on VHF ch16 and make an inquiry about the weather condition of Fukui Ko when passing off Maizuru Ko. Vessels are advised to take refuge in Miyazu Wan, situated in the W of Wakasa Wan when entry into the harbor is difficult. (See *Port operation communication* in Maizuru Ko).

Pilotage. As the Pilotage Law is not applied to Fukui Ko, pilotage is not compulsory, but pilots are available upon request. (Inquiries: Fukui Futo Co., Ltd. Telephone number: +81-776-82-5330)

Entry restriction. In order to prevent accidents due to ignition, general vessels are prohibited from entering a sea area within 30m a tanker loading inflammable materials, including a tank ship, mooring in the harbour. Tanker carrying dangerous inflammable materials displays a banner visible at night, reading *Dangerous Inflammable Cargo Aboard*, when moored in the harbour.

Facilities.

Name	Position	Length (Approx. m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks
Public Dolphin	36° 12.0' N 136° 07.4' E	188	7.5	6,000 × 1	

N Wharf	No.1 to 3 Quays	36° 12.0' N 136° 07.9' E	555	8.5 to 9.5	15,000 × 3	
	No.4 to 8 Quays		650	4.5 to 7	5,000 × 5	
	No.10 Quay	36° 12.3' N 136° 07.9' E	130	2 to 3.5	5,000 × 1	
	-5.5m Quay	36° 12.1' N 136° 07.7' E	180	4.5	2,000 × 2	
	Aseismatic Quay I		100	1.5 to 4.5	2,000 × 1	

(Note) The depth of water alongside the quays is likely to change due to drifting sands from the river. Vessels are advised to obtain the latest information from the local authorities and Notices to Mariners.

Maximum size of vessel handled. Cruise ship *PACIFIC VENUS* (26,594t, with a draught of 6.5m) berthed at North Wharf No.1 Quay on 11 May 2013.

Sea berth. Fukui Sekiyu Bichiku Sea-Berth (36° 10.8' N 136° 04.8' E) (capacity; 300,000D/W × 1) for Fukui Petroleum Stockpiling Base is established about 2.2M SW of Fukui S Breakwater Light.

Anchorage. An area between the SE side of Kekachi Iwa (36° 13.2' N 136° 08.3' E), located near the mouth of Kuzuryu Kawa in Mikuni Ku, and about 450m upstream from there, has a depth of 4 to 6m and affords anchorages for vessels about 500t class.

Subject to conditions, an area S of N Breakwater in Fukui Ko is available for anchoring.

Precautions for anchoring. The bottom of Kuzuryu Kawa is composed of sand accumulated about 1m on rock ground, affords poor holding ground. There is a risk of dragging anchor during the rainy, typhoon and thaw season. An area extending between Mikuni Breakwater and Katsu Saki has a depth of 4m or less, and the bottom is sand or rock, poor holding ground, not suitable as anchorage except when easterly winds blow.

Typhoon and tsunami safety measures. In order to prevent disasters due to typhoon, tsunami and other abnormal weather, Countermeasures Committees of Fukui Ko is established and they manage damage prevention countermeasures, such as the communication of information, warnings, and the issuing and cancelling of evacuation advisories for all vessels in the port. (Inquiries: Fukui Coast Guard Station)

Maritime authorities and facilities.

Name	Telephone number
Fukui Coast Guard Station (Captain of the Port)	+81-776-82-4999
Fukui Branch Office, Nagoya Regional Immigration Services Bureau	+81-776-28-2101
Fukui Sab-branch, Tsuruga Branch Customs	+81-776-22-1832
Fukui Port and Harbour Office, Fukui Prefectural Government	+81-776-82-1120

Tugboats. Tugboats are available.

Supplies. Fresh water, fuel oil and ice can be supplied in Mikuni Ku. Fresh water can be supplied on quays of N Wharf in Fukui Ku.

Repairs. A shipyard that can accommodate vessels up to 100t is situated W of N Wharf in Fukui Ku.

Medical facility

Name	Telephone number	Remarks
Sakai Municipal Mikuni Hospital	+81-776-82-0480	

Anto Misaki to Taki Saki (Chart JP1169)

Outline. The coast between Anto Misaki and Taki Saki is a stretch of sandy beaches extending NE, for about 50M. Ports including Shioya Ko (36° 18' N 136° 15' E), Hashitate Gyoko (36° 21' N 136° 19' E), Kanazawa Ko, Taki Ko (36° 55.2' N 136° 45.4'E, Port code; JP TKI) are situated along the coast.

Tidal streams. It is reported that flood current sets onshore and the ebb current sets offshore. An onshore setting current with a speed of about 0.9kn has been observed during the flood.

The flood current sets S and ebb sets N with a speed of 0.3kn or less off Taki Ko.

Facilities.

Name		Position	Length (Approx. m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks
Ohama Wharf		36° 37.6' N 136° 36.4' E	400	12 to 13	30,000 ×1	Multipurpose international container terminal.
Sekiyu Quay		36° 37.1' N 136° 36.6' E	600	5 to 7	5,000 × 6	
Gorojima Wharf		36° 36.9' N 136° 37.0' E	240	2.5 to 6	10,000 × 1	
Gokuden Wharf		36° 36.6' N 136° 37.3' E	540	7 to 10.5	12,000 × 3	Two gantry cranes.
Tomizu Wharf		36° 36.5' N 136° 37.1' E	370	7.5 to 8.5	12,000 × 2	
Muryoji Wharf	No.1	36° 36.5' N 136° 36.8' E	70	2.5 to 3.5	2,000 × 1	
	No.2, No.3		320	4 to 10	100,000 × 1	Kanazawa port cruise terminal.
Muryoji Jetty		36° 36.6' N 136° 36.6' E	270	2.5 to 5.5	2,000 × 3	
Ono Quay		36° 36.8' N 136° 36.5' E	180	3.5 to 4.5	1,000 × 3	

Maximum size of vessel handled. Cruise ship *MSC BELLISSIMA* (171,598t, with a draught of 8.7m) berthed at Ohama Wharf on 11 May 2023.

Anchorage. The bottom is fine sand in the area around 0.7 to 1M NW from N of the former Kanaiwa Ko (36° 36.2' N 136° 35.4' E), with a depth of 11 to 16m, slopes gently to seaward. A number of fishing facilities are set out. Care must be exercised when anchoring. A quarantine anchorage is situated about 1.4M NW of Ono Light.

Cautions for anchoring. The port is not suitable for anchorage because there is a risk of dragging anchor when strong NW winter monsoon is blowing.

Typhoon and tsunami safety measures. In order to prevent disasters due to typhoon, tsunami and other abnormal weather, Typhoon and other abnormal weather Countermeasures Committee of Kanazawa Ko is established and manages communication of information for all vessels in the port. Moreover, it should be noted that Captain of the Port may recommend subject to Port Regulation Law concerning actions, such as warnings, and the issuing and cancelling of evacuation advisories. (Inquiries: Kanazawa Coast Guard Office)

Maritime authorities and facilities.

Name	Telephone number
Kanazawa Coast Guard Office (Captain of the Port)	+81-76-267-0511
Kanazawa Branch Customs, Osaka Customs	+81-76-268-9181
Kanazawa-Nanao Detached Office, Niigata Quarantine Station	+81-761-21-3767 (Komatsu Airport Branch Office)
Komatsu Sub-branch, Chubu Airport Branch, Animal Quarantine Station	+81-761-24-1407 (Komatsu Airport)
Komatsu Airport Sub-branch, Fushiki-Toyama Sub-station, Nagoya Plant Protection Station	+81-761-24-1406
Kanazawa Sub-branch, Nagoya Regional Immigration Services Bureau	+81-76-222-2450
Kanazawa Port and Harbour Office, Ishikawa Prefectural Government	+81-76-268-1201

Ferryboats. Ferryboats are available.

Tugboats. Tugboats are available.

Supplies. Fresh water can be supplied. Fuel oil supply barges are available.

Repairs. There is a shipyard that can accommodate vessels of up to 100t.

vertical clearance) near the mouth of Oyabe Kawa.

Precautions for entering the port. Large stationary nets are established on both sides of the Fushiki Passage. Therefore, navigable area for large vessel is limited. A directional light indicates the navigable width. Vessels transiting the passage should not deviate from the area illuminated by a directional light. Care must be taken not to confuse Oyabe Kawa with Sho Kawa which is located E of Oyabe Kawa. Water tends to be shallower due to drifting sand from Oyabe Kawa.

Facilities.

Name	Position	Length (Approx. m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks
Left Bank No.1 – 2 Quays	36° 47.6' N 137° 03.8' E	310	3 to 5.5	10,000 × 2	
Left Bank No.3 – 4 Quays	36° 47.5' N 137° 03.6' E	370	2.5 to 4.5	15,000 × 2	
Left Bank No.5 Quay	36° 47.4' N 137° 03.5' E	90	2	1,000 × 1	
Right Bank No.1 – 2 Quays	36° 47.5' N 137° 04.0' E	440	3 to 5	5,000 × 4	
Right Bank No.3 – 4 Quays	36° 47.5' N 137° 03.8' E	370	3 to 4.5	15,000 × 2	Crane× 1
Right Bank No.5 Quay	36° 47.4' N 137° 03.7' E	130	2.5	5,000 × 1	
Man-yo No.1 Quay	36° 48.1' N 137° 04.0' E	130	6 to 7.5	5,000 × 1	
Man-yo No.2 Quay		190	9.5 to 10	15,000 × 1	
Man-yo No.3 Quay	36° 48.2' N 137° 03.9' E	280	11.5	30,000 × 1	Gantry crane. Aseismic quay.

Maximum size of vessel handled. Cruise ship *MSC BELLISSIMA* (171,598t, with a draught of 8.7m) berthed at the Man-yo No.3 Quay on 6 July 2023.

Maritime authorities and facilities.

Name	Telephone number
Fushiki Coast Guard Office (Captain of the Port)	+81-766-44-0196
Fushiki Branch Customs	+81-766-44-6173
Toyama Transport Branch Office, Hokuriku-shin'etsu District Transport Bureau	+81-766-44-1367
Fushiki Toyama Detached Office, Niigata Quarantine Station	+81-76-428-4160 (Toyama Airport detached office)
Fushiki Toyama Sub-station, Nagoya Head Office, Plant Protection Station	+81-766-44-0954
Fushiki Port and Harbour Office, Toyama Prefectural Government	+81-766-44-0277

Ferryboats. Ferryboats are available.

Supplies. Fresh water can be supplied. Water supply barges and fuel oil supply barges are available.

Repairs. Small shipyard is available.

Oil waste disposition facility.

Name	Application	Hours of operation	Waste oil to be disposed	
			Waste heavy oil	Waste light oil
Daiseki Co., Ltd.	Hokuriku Works Phone number: +81-76-275-6585	0900 – 1600	Water ballast, slop oil, collect oil, tank cleaning water, bilge, sludge, and etc.	Water ballast, tank cleaning water, slop oil, sludge, and etc.

Medical facilities.

Name	Telephone number	Remarks
Takaoka City Hospital	+81-766-23-0204	
Takaoka Fushiki Hospital	+81-766-44-1181	

Facilities.

Name		Position	Length (Approx. m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks
Public Wharf	No.1 – 2 Quays	36° 46.2' N 137° 06.3' E	560	9.5 to 14	55,000 × 2	
	No.3 – 4 Quays		275	9.5 to 10	15,000 ×2	
	No.5 – 6 Quays		260	7.5	5,000 × 2	
	No.7 – 8 Quays		120	4	700 × 2	
N No.1 Quay		36° 46.4' N 137° 06.3' E	280	12 to 13	30,000 × 1	Gantry crane. Aseismic quay (East side 280m).
N No.2 Quay		36° 46.4' N 137° 06.1' E	185	8.5 to 10	15,000 × 1	
N No.3 Quay		36° 46.4' N 137° 06.0' E	60	5 to 5.5	700 × 1	
N No.4 Quay		36° 46.4' N 137° 06.5' E	128	12	3,000t × 1	Gantry crane.
S Suiro Pier		36° 46.0' N 137° 06.7' E	36	6	3,000 × 1	
E No.1 – 2 Quays		36° 45.4' N 137° 07.7' E	370	6 to 9.5	15,000 × 2	
Kaio Quay		36° 46.7' N 137° 06.6'E	220	7	15,000t × 1	

Maximum size of vessel handled. LNG carrier *SERI AMANAH* (95,729t, with a draught of 12.43m) berthed at the LNG Berth in the Toyamashinko Thermal Power Station on 17 March 2018.

Anchorage. On E side of Shinminato Passage, there is an anchorage surrounded by six light buoys including Shinminato Offing Vessel Anchorage East A – C Light Buoys (36° 47.3′ N 137° 8.7′ E) and Shinminato Offing Vessel Anchorage West A – C Light Buoys (36° 47.4′ N 137° 08.3′ E). Anchoring is prohibited from sunset to sunrise. Vessels should stay clear of the stationary nets laid in the E and W of the anchorage area.

Maritime authority and facility.

Name	Telephone number
Toyama-Shinko Administration Office, Toyama Prefectural Government	+81-766-84-8292

Medical facility.

Name	Telephone number	Remarks
Imizu Municipal Hospital	+81-766-82-8100	

Maritime traffic. Ferryboats (commonly known as Koshinogata Ferry) (44t and 46t) ply frequently, across the fairway located S of the Shinminato O-hashi Bridge.

Toyama Ku and Approaches (Chart JP1162[A])

(Photographed in September 2020)

Maritime authority and facility.

Name	Telephone number
Regional Construction Division, Itoigawa Regional Promotion Bureau, Niigata Prefectural Government	+81-25-552-9674

Tugboats. Tugboats can be brought from Naoetsu Ko.

Supplies. Fresh water can be supplied. The Fisheries Cooperative has a refueling facility at the E wharf.

Medical facility.

Name	Telephone number	Remarks
Itoigawa Sogo Hospital	+81-25-552-0280	

Naoetsu Ko (37° 12.6' N 138° 15.8' E) (Chart W1182) (Port code; JP NAO)

(Photographed in September 2016)

Port classification. Specified port, open port, quarantine port, immigration port, domestic animal quarantine port, plant protection port, important port.

Outline. Naoetsu Ko is located at the mouth of Seki Kawa, extending E, for about 7.5M, forming an industrial area along the coast. There are LNG berths and a LNG thermal power station.

Marine disasters. There has been a stranding on W breakwater resulted from a dragging anchor caused by strong NW wind.

Landmarks.

Landmark	Position	Remarks
Chimney	37° 12.4' N 138° 16.8' E	156m in height (painted silver).
Tanks	37° 11.6' N 138° 15.7' E	A number of tanks painted light green.
~~Wind turbine~~	~~37° 11.2' N 138° 15.3' E~~	~~57m in height, painted white.~~

Obstruction. There are sunken concrete blocks (5m in depth) in an area about 300m S (37° 11.8' N 138° 16.0' E) of the N end of a groin.

Pilotage. As the Pilotage Law is not applied to Naoetsu Ko, pilotage is not compulsory, but pilots are available upon request. (Inquiries: Nanao Pilot Association. See *Chapter 6 PILOTAGE* of Part 1 for details)

Entry restriction. In order to prevent accidents due to ignition, general vessels are prohibited from entering a sea area within 30m a tanker loading inflammable materials, including a tank ship, mooring in the harbour. Tanker carrying dangerous inflammable materials should display a banner visible at night, reading *Dangerous Inflammable Cargo Aboard*, when moored in the harbour.

Anchorages. As a general rule, large vessels anchoring in the outer area of the breakwaters. The area around the quarantine anchorage (37° 11.9' N 138° 13.8' E), about 2,300m NW of the mouth of Seki Kawa, affords good anchorage, with a depth of about 20m, sand and mud bottom.

Facilities.

Name		Position	Length (Approx. m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks
East Wharf	Dangerous Cargo No.1 Quay	37° 11.7' N 138° 15.5' E	90	6 to10	5,000 × 1	
	Dangerous Cargo No.2 Quay	37° 11.7' N 138° 15.6' E	130	5.5	5,000 × 1	
	Dangerous Cargo No.3 Quay	37° 11.8' N 138° 15.8' E	130	5.5 to 7.5	5,000 × 1	
	No.1 Quay	37° 11.4' N 138° 15.4' E	130	8.5	5,000 × 1	
	No.2 Quay		240	8 to 10.5	15,000 × 1	
	No.3 Quay	37° 11.5' N 138°15.4' E	185	8 to 10	15,000 × 1	
	No.4 Quay	37° 11.6' N 138° 15.5' E	170	10	12,000 × 1	Gantry crane. Aseismic quay.
	No.5 Quay	37° 11.7' N 138° 15.7' E	130	6	5,000 × 1	For dangerous cargo.
	Fishing port Quay	37° 11.8' N 138° 16.0' E	385	4.5 to 7	256t × 1	
Central Wharf	No.1 Quay	37° 11.1' N 138° 15.1' E	130	4 to 5	5,000 × 1	
	No.2 Quay	37° 11.2' N 138° 15.0' E	185	8 to 8.5	15,000 × 1	
	Mineral Quay	37° 11.4' N 138° 15.2' E	270	11.5 to 13	50,000 × 1	
	Lumber Quay	37° 11.3' N 138° 15.3' E	185	8 to 10	15,000 × 1	
Uchibo Wharf N Quay	No.2	37° 11.1' N 138° 15.2' E	60	3.5 to 4.5	700 × 1	
	No.3	37° 11.1' N 138° 15.3' E	120	2.5 to 4	700 × 1	
Uchibo Wharf S Quay	No.1	37° 11.0' N 138° 15.1' E	200	7.5 to 9.5	6,000t × 1	For hydrofoil. Aseismic quay.
	No.3	37° 11.0' N 138° 15.2' E	75	4.5	700 × 1	
	No.4	37° 11.0' N 138° 15.2' E	120	4 to 4.5	700 × 1	
	No.5	37° 11.0' N 138° 15.3' E	60	3	700 × 1	
West Wharf	No.1 Quay	37° 11.0' N 138° 14.9' E	174	7 to 8.5	15,000 × 1	Unloader × 1
	No.2 Quay	37° 11.1' N 138° 14.9' E	185	7.5 to 8.5	15,000 × 1	

Maximum size of vessel handled. LNG carrier *PACIFIC BREEZE* (144,987t, with a draught of 12.2m) berthed at the LNG pier in the Joetsu Thermal Power Station of the JERA on 31 October 2018.

Typhoon and tsunami safety measures. In order to prevent disasters due to typhoon, tsunami and other abnormal weather, Typhoon and other abnormal weather Countermeasures Committee of Naoetsu Ko is established and manages damage prevention countermeasures, such as the communication of information, warnings, and the issuing and cancelling of evacuation advisories for all vessels in the port. (Inquiries: Joetsu Coast Guard Station)

Maritime authorities and facilities.

Name	Telephone number
Joetsu Coast Guard Station (Captain of the Port)	+81-25-543-4118
Naoetsu Sub-branch, Niigata Branch Customs	+81-25-543-2388

Nishi Ku and Approaches (Chart JP1155[A])

(Photographed in July 2020)

Landmarks.

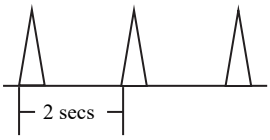
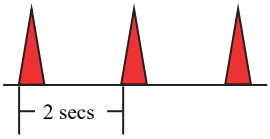
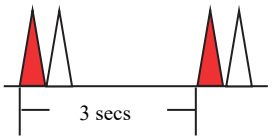
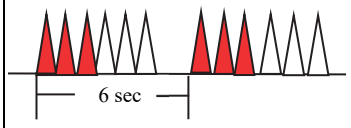
Landmark	Position	Remarks
Chimney	37° 56.8' N 139° 04.9' E	122m in height, painted red and white, situated within the premises of a thermal power station.
Conspicuous building	37° 56.7' N 139° 04.3' E	A tower called Yamanoshita Minato Tower, 40m in height. It is a pit of Niigata Minato Tunnel. Cylindrical objects can be seen on its top.
Conspicuous building	37° 56.6' N 139° 03.7' E	A tower called Irifune Minato Tower, 40m in height. It is a pit of Niigata Minato Tunnel. Cylindrical objects can be seen on its top.
Radio tower	37° 55.3' N 139° 03.1' E	93m in height, with dish aerial, painted red and white.
Conspicuous building	37° 55.5' N 139° 03.6' E	A 31- story building called Tokimesse, about 140m in height, gray in colour, marked by red lights on the roof.
Conspicuous building	37° 55.1' N 139° 03.4' E	A 20-story building, about 105m in height with glass curtain wall which is named *Niigata Nippo Media Ship*. Marked by red lights on the roof.
Conspicuous building	37° 55.4' N 139° 02.6' E	A 20-story building with pyramidal-shaped roof, gray in colour. The roof is illuminated at night and marked by flashing red lights.

Directions. Vessels entering Nishi Ku in winter are recommended to approach from NNW No.2 W Breakwater because strong NW winds and the river current may set vessels seaward when entering from NNE of the same breakwater.

After arriving the harbour entrance, vessels should steer for a radio tower (37° 55.3' N 139° 03.1' E), which is described in *Landmarks*, in line with Niigata Signal Station (37° 56.7' N 139° 03.8' E). When vessels reach the vicinity of Niigata Ko Nishi Ku W Jetty Light (37° 57.5' N 139° 04.1' E), alter course as necessary to enter the middle part of the fairway.

Signals. Niigata Signal Station (37° 56.7' N 139° 03.8' E) which is located near the root of W Breakwater, displays traffic control signals.

Traffic control. In order to prevent meeting situation between vessels in Nishi Ku, specific vessels shall be subject to traffic signals made by the Niigata Signal Station pursuant to the provisions of Article 36, paragraph (3), item (i) of the Port Regulation Law, and Article 20, paragraph (2) of the Regulation for Enforcement of the Port Regulation Law.

Designation	Signal		Meaning of signal
	Unlighted marks (Day signals)	Lighted marks (Day and Night signals)	
Entering signal	One black cone (point up). 	One white flash every 2 seconds. 	Inbound vessels may enter. Outbound vessels of 500t or more (in the case of oil tankers, 300t or more) shall not leave but wait. Outbound vessels less than 500t (in the case of oil tankers, less than 300t) can leave.
Leaving signal	One black square. 	One red flash every 2 seconds. 	Outbound vessels may leave. Inbound vessels of 500t or more (in the case of oil tankers, 300t or more) shall wait out the fairway. Inbound vessels less than 500t (in the case of oil tankers, less than 300t) can enter.
Free signal	Two black cones (points together). 	One red flash and one white flash every 3 seconds. 	Inbound vessels of 500t or more (in the case of oil tankers, 300t or more) shall wait out the fairway. Outbound vessels of 500t or more (in the case of oil tankers, 300t or more) shall not leave but wait. Vessels less than 500t (in the case of oil tankers, less than 300t) can enter or leave.
Prohibition signal	The combination of two black cones (points together) and one red flag. 	Three red flashes and three white flashes every 6 seconds. 	The traffic is prohibited except for vessels permitted by the Captain of the Port.

Facilities.

Name		Position	Length (Approx. m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks
Yamanoshita Wharf	N Side Quay	37° 56.5' N 139° 04.0' E	330	6.5 to 8.5	10,000 × 2	Both N and S ends of the quay are shallow.
	S Side Quay	37° 56.3' N 139° 04.1' E	260	6.5 to 8.5	5,000 × 2	For car ferries. Aseismic quay (Bay entrance side 130m)
Tsusen Kawa Right Bank Quay		37° 56.2' N 139° 04.1' E	90	3 to 4	2,000 × 1	
Tsusen Kawa Left Bank Quay		37° 56.2' N 139° 04.1' E	95	3	700 × 1	
North Wharf	No.1 Quay	37° 56.1' N 139° 04.0' E	330	8.5 to 9	10,000 × 2	
	No.2 Quay	37° 56.0' N 139° 04.0' E	97	7	5,000 × 1	
East Wharf		37° 55.9' N 139° 04.0' E	231	7	5,000 × 2	
Central Wharf	N Side Quay	37° 55.9' N 139° 03.9' E	294	8.5 to 9	10,000 × 2	
	Face Quay	37° 56.0' N 139° 03.9' E	137	7 to 7.5	5,000 × 1	For car ferries.
	S Side Quay	37° 55.8' N 139° 03.9' E	307	5.5 to 7	5,000 × 2	

South Wharf Quay			37° 55.7' N 139° 03.9' E	288	5.5 to 7	5,000 × 2	
Bandaijima Wharf	Wharf Quay		37° 55.6' N 139° 03.7' E	391	3 to 6	3,000 × 3	
	Oil Pier		37° 55.7' N 139° 03.8' E	30		2,000 × 1	Out of service.
	Face Quay		37° 55.8' N 139° 03.8' E	90	4.5 to 5	300 × 2	For hydrofoils.
	Right Bank of Shinano Kawa	No.1 Berth Quay	37° 55.8' N 139° 03.7' E	193	4.5 to 6.5	6,000 × 1	For car ferries.
		No.2 Berth Quay	37° 55.7' N 139° 03.6' E	193	4 to 5	6,000 × 1	For car ferries.
		No.3 Berth Quay	37° 55.6' N 139° 03.6' E	136	3 to 5	2,000 × 1	Both ends of N and S of Berth Quay are shallow.

In addition to the above, there is the Rinko Wharf.

Maritime authorities and facilities.

Name	Telephone number
The 9th Regional Coast Guard Headquarters	+81-25-285-0118
Niigata Coast Guard Office (Captain of the Port)	+81-25-244-1008
Hokuriku Shinetsu District Transport Bureau	+81-25-285-9156
Niigata Branch Customs	+81-25-244-9312
Niigata Quarantine Station	+81-25-241-2323
Niigata Sub-station, Yokohama Plant Protection Station	+81-25-244-4401
Niigata Branch Office, Tokyo Regional Immigration Services Bureau	+81-25-275-4735
Niigata Port and Harbour Office, Niigata Prefectural Government	+81-25-247-9131

Supplies. Water supply ~~barges~~ facilities and fuel oil supply barges are available.

Repairs.

Name	Telephone number	Remarks
Niigata Shipyard, Niigata Shipbuilding & Repair. Inc.	+81-25-222-6121	

Oil waste disposition facilities.

Name	Application	Hours of operation	Waste oil to be disposed	
			Waste heavy oil	Waste light oil
~~Narisawa Seiyu Co., Ltd.~~	~~+81-25-275-1311~~	~~0830 – 1700~~	~~Water ballast, Tank cleaning water, Bilge.~~	~~Water ballast, Tank cleaning water, Sludge.~~
Aoki Environmental Enterprise Co., Ltd.	+81-25-255-3360	0800 – 1700	check in advance.	~~Water ballast, slop oil, Tank cleaning water, Sludge, etc.~~

Medical facilities.

Name	Telephone number	Remarks
Niigata Rinko Hospital	+81-25-274-5331	
Niigata Bandai Hospital	+81-25-244-4700	

Maritime traffic. There are services of car ferries (5,862t etc.) and hydrofoils between Niigata Ko and Ryotsu Ko

East Wharf No.1 Quay		37° 58.6' N 139° 14.1' E	280	14	50,000 × 1	Crane.
South Wharf	Timber No.1 Quay	37° 58.3' N 139° 14.2' E	185	9.5 to 10	18,000 × 1	Timber marshalling yard is located E side of this quay.
South Wharf	Timber No.2 Quay	37 °58.3' N 139° 14.1' E	185	9.5 to 10	18,000 × 1	
West Wharf	No.1 Quay	37° 58.1' N 139° 13.9' E	130	6 to 7	5,000 × 1	Aseismic quay. Container crane.
West Wharf	No.2 Quay	37° 58.2' N 139° 13.8' E	185	9 to 9.5	15,000 × 1	Container crane.
West Wharf	No.3 Quay	37° 58.2' N 139° 13.6' E	350	11.5 to 12	30,000 × 1	Container crane × 2.
West Wharf	No.4 Quay	37° 58.1' N 139° 13.4' E	250	11.5 to 12	30,000 × 1	Aseismic quay. Container crane.
Central Wharf W Quay		37° 59.0' N 139° 13.5' E	232	12 to 12.5	40,000 × 1	
West No.3 Pier		37° 59.5' N 139° 13.1' E	118	7.5	5,000 × 2	These piers have two faces, namely, A and B, and each face can accommodate one vessel.
West No.2 Pier		37° 59.5' N 139° 13.0' E	135	7 to 7.5	5,000 × 2	
West No.1 Pier		37° 59.6' N 139° 13.0' E	135	6.5 to 7.5	5,000 × 2	

In addition to the above, there is a basin (about 4m in depth) inside the breakwater in the head of port.

Supplies. Fresh water and fuel oil can be supplied.

Maritime authorities and facilities.

Name	Telephone number
Higashi Ko Branch Office, Niigata Port and Harbour Office, Niigata Prefectural Government	+81-25-256-2503
Higashi Ko Sub-branch, Niigata Branch Customs	+81-25-256-3458

Paragraph 7 Sado Shima (38° 06.2' N 138° 21.0' E) (Chart W122)

Outline. Sado Shima has a length of about 65km in a N-S direction and width of about 35km at its widest point, and is separated from the mainland by Sado Kaikyo with a least width of about 17M between Kakuda Misaki and the opposite shore, depths of about 100 to 500m.

Two ranges of mountains run parallel, and they appear to be two islands when seeing from NE or SW.

N mountain range is called O-Sado Sanchi, whose highest peak is Kinpoku San (1,172m in height). S mountain range is called Ko-Sado Kyuryo whose highest peak is Ochi Yama (646m in height). Kuninaka Heiya lies between these mountain ranges. Ryotsu Wan lies E end, and Mano Wan lies W end of Kuninaka Heiya, respectively. The area N of the plain is called O-Sado, and the area S of the plain is called Ko-Sado.

The vicinities of SW end of Ko-Sado, and the NW coast of O-Sado called Soto-Kaifu Kaigan, both are designated as Quasi-national parks. These coasts are composed of sea-eroded cliffs. Numerous rocks (above water or sunken) are scattered along the coast up to about 1M offshore. These coasts are exposed to wind and waves except the coastline of Mano Wan.

There are no dangers beyond 0.5M off the E coast except for the S part of it. The 200m contour line runs about 1M offshore in places.

Tidal streams. The flood current sets SE and the ebb current sets NW at a speed of 0.5kn or less. Currents reverse its direction about 1 hour after High Water and Low Water.

Sawasaki Hana to Dai-ga-Hana (Charts W122, W167)

Landmarks.

Landmark	Position	Remarks
Sawasaki Hana	37° 49.3' N 138° 12.3' E	A cliffy cape at the SW end of Sado Shima, a lighthouse stands on it.

which is located about 9M NNE of Nezugaseki Ko. The bay affords temporary anchorages while winds are blowing from between E and S except when high waves are experienced in the bay.

Landmarks.

Landmark	Position	Remarks
Production platform	38° 07.9' N 139° 20.3' E	A production platform with white 4 lights. (Iwafune Ko Oki Oil Drilling Tower Light) A submarine oil pipeline extends SW from there.
Oshima Saki	38° 23.4' N 139° 27.3' E	A cape with a high mountain. O Shima (a reddish brown coloured rock) lies in front of the cape.
Awa Shima	38° 27.2' N 139° 14.3' E	Koshiba Yama (266m in height) is the summit of the island and is situated a little S from the centre of the island. A lighthouse is established on the island. Most part of the W coast consists of rocks and E coast consists of boulder.
Gassan	38° 33.0' N 140° 01.6' E	A mountain, 1,984m in height.
Towers	38° 36.8' N 139° 35.3' E	Two radio towers, both of which are equipped with red lights.
Atsumi Take	38° 37.2' N 139° 37.8' E	A pointed mountain, 736m in height.
Tate Iwa	38° 38.8' N 139° 35.7' E	A blackish coloured pinnacle rock, 59m in height.
Ryutoan Shima	38° 41.3' N 139° 37.1' E	An islet, 3.7m in height, with a light beacon which is good radar target.
Ara Saki	38° 45.8' N 139° 43.4' E	A cape with a lighthouse.

Sakata Ko (38° 56.5' N 139° 48.1' E) (Charts JP145, W1160) (Port code; JP SKT)

(Photographed in August 2020)

Port classification. Specified port, open port, quarantine port, immigration port, domestic animal quarantine port, plant protection port, important port.

Outline. Sakata Ko lies in the middle of the coast between Niigata Ko and Akita-Funagawa Ko. The port is divided into three sections: Section 1, Section 2 and Section3.

Sakata Ko consists of Main Port, Outer Port and North Port. The port was originally situated in the mouth of Mogami Kawa. A breakwater, which separates dredged fairway from the river, had been built as a countermeasure against outflow of sand from the river.

Section 2 has a narrow entrance, with a navigable width of about 190m, and is opened to NNW. In winter, wind waves and snowstorms may make entry into the port difficult.

Weather and Climate. Strong winter monsoon accompanied by snowstorm prevail during the winter. The port has average of 90 days with winds, with a speed of more than 10m/s, each year, and about 70% of them occur from November to March.

When a low pressure system moves E towards Pacific Ocean, wind may shift from the E through SE to W through NW suddenly, and bring a storm around Sakata Ko from March to May.

Directions. Vessels approaching Akita Ku from the N should steer a course of 105° from a position about 2M S of Shiose Saki (39° 51.5' N 139° 45.4' E). With chimneys (described in *Landmarks*) standing on the premises of a thermal power plant (in Akita Ku) bearing 095°, steer for the entrance of Section 1.

Approaching Akita Ku from the S should steer for Kanpu San (39° 56.0' N 139° 52.5' E), bearing 000°, until previously mentioned chimneys are sighted. Then, alter course to 095°, steering the chimneys and proceed to the entrance of Section 1.

When approaching the entrance, proceed in the mid-channel between New N and No.2 S Breakwaters, keeping clear of stationary nets (marked by four yellow buoys with yellow lights) laid near the end of No.2 S Breakwater and the area within about 0.8 to 6.1M northwestward of New N Breakwater. Then, head for the berth passing through dredged fairway.

Precautions for entering the port. During strong NW wind, entering the port is dangerous. After a heavy rain, an outgoing current, with a speed of about 2kn, may occur at the entrance to the inner harbour of Akita Ku. A beacon light at the head of the former N Breakwater (39° 45.7' N 140° 02.6' E) (green) is low in intensity which must be noted.

Destinational Signals. Indication of course and destination (Japan Coast Guard Public Notice No.35 of 1995) and Symbol showing Destination of Automatic Identification System. (Japan Coast Guard Public Notice No. 94 of 2010)

Signal		Symbol showing the route in the port.	Meaning of signal
Second substitute over Flag N		N	Proceeding to the mooring facilities located N of a line drawn from Akita N Breakwater Light to the head of the former N Breakwater.
Second substitute over Flag E		E	Proceeding to the mooring facilities located N of a line (hereinafter called *line A*) drawn from the end of the former N Breakwater to the shore on a bearing of 099°.
Second substitute over Flags E and N		E+N	Proceeding to ENEOS Pier.
Second substitute over Flags E and C		E+C	Proceeding to the mooring facilities located between Nakashima Quay and Shimohama Quay on the E side of the Kyu-Omono Kawa (S of the *line A*).
Second substitute over Flags E and S		E+S	Proceeding to the mooring facilities located on the E side of the Kyu- Omono Kawa (S of the *line A*) and, at the same time, S of Terauchi Wharf.
Second substitute over Flag W		W	Proceeding to the mooring facilities on the W side of the Kyu-Omono Kawa (S of *line A*).

Facilities.

Name		Position	Length (Approx. m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks
Outer Harbour	Outer Harbour - 13m No.1 Quay	39° 45.9' N 140° 02.4' E	270	12.5	50,000 × 1	Crane
	Outer Harbour - 13m No.2 Quay	39° 46.1' N 140° 02.3' E	260	13	40,000 × 1	Container crane
Iijima	Iijima -11m Quay	39° 46.9' N 140° 02.1' E	190	9.5 to 10.5	18,000 × 1	
	Iijima -7.5m Quay	39° 46.9' N 140° 02.2' E	260	3.5 to 7	5,000 × 2	
	Iijima -5m Quay	39° 47.2' N 140° 02.2' E	130	4 to 4.5	1,000 × 1	

Ohama	Ohama - 4.5m No.1 Quay	39° 46.2' N 140° 02.9' E	60	3	700 × 1	
	Ohama - 4.5m No.2 Quay	39° 46.2' N 140° 03.0' E	60	2 to 3	700 × 1	
	Ohama - 10m No.1 Quay	39° 46.4' N 140° 03.0' E	185	9.5 to 10	15,000 × 1	
	Ohama - 10m No.2 Quay	39° 46.2' N 140° 02.9' E	185	9 to 9.5	15,000 × 1	
	Ohama - 10m No.3 Quay	39° 46.0' N 140° 02.9' E	185	9 to 9.5	15,000 × 1	
Honko	Nakashima No.1 Quay	39° 45.3' N 140° 03.5' E	161	8.5 to 9	10,000 × 1	
	Nakashima No.2 Quay	39° 45.4' N 140° 03.4' E	185	9.5	15,000 × 1	
	Nakashima No.3 Quay	39° 45.5' N 140° 03.3' E	185	9 to 9.5	15,000 × 1	
	North Wharf A Quay	39° 45.3' N 140° 03.5' E	122	6 to 7	5,000 × 1	
	North Wharf B Quay	39° 45.3' N 140° 03.6' E	155	6 to 6.5	5,000 × 1	
	South Wharf C Quay	39° 45.2' N 140° 03.6' E	155	4.5 to 5	2,000 × 1	
	South Wharf D Quay	39°45.1' N 140° 03.6' E	90	5.5	2,000 × 1	
Shimohama - 5m Quay		39° 45.0' N 140° 03.8' E	345	3.5 to 5	1,000 × 4	Fish market.
Inter Horbour Naiko	Terauchi Wharf	39° 44.7' N 140° 04.0' E	200	6 to 7	5,000 × 2	
Mukaihama	Mukaihama - 7.5m No.1 Quay	39° 44.9' N 140° 03.7' E	130	7	5,000 × 1	
	Mukaihama - 7.5m No.2 Quay		130		5,000 × 1	
	Mukaihama - 10m No.1 Quay	39° 45.0' N 140° 03.4' E	186	8.5 to 9	15,000 × 1	
	Mukaihama - 10m No.2 Quay	39° 45.1' N 140° 03.3' E	186	8 to 8.5	15,000 × 1	
	Mukaihama - 10m No.3 Quay	39° 45.2' N 140° 03.2' E	185	8.5 to 10	15,000 × 1	
	Mukaihama - 12m Quay	39° 45.3' N 140° 03.1' E	240	12	30,000 × 1	

Maximum size of vessel handled. Cruise ship *MSC BELLISSIMA* (171,598t, with a draught of 8.7m) berthed at the Nakashima No.2-3 Quays on 29 October 2023.

Anchorage. Vessels carrying dangerous cargos shall anchor in Section 2.

Maritime authorities and facilities.

Name	Telephone number
Akita Coast Guard Office (Captain of the Port)	+81-18-845-1624
Akita Funakawa Branch Customs	+81-18-845-0735
Akita Transport Branch Office, Tohoku District Transport Bureau	+81-18-863-5811
Akita Branch Office, Sendai Regional Immigration Service Bureau	+81-18-895-5221
Akita Sub-branch, Niigata Branch Office, Yokohama Plant Protection Station	+81-18-845-1411
Akita-Funakawa Detached Office, Sendai Quarantine Station	+81-18-846-8280
Akita Port and Harbour Office, Akita Prefectural Government	+81-18-845-2021

Tugboats. Tugboats are available.

Supplies. Fresh water and fuel oil can be supplied. Fuel oil supply barges are available.

Medical facilities.

Name	Telephone number	Remarks
Akita City Hospital	+81-18-823-4171	
Akita Welfare Medical Center	+81-18-880-3000	

Maritime traffic. There are services of car ferry (18,229t) between Tsuruga Ko and Tomakomai Ko, calling at Akita Ko and Niigata Ko.