

Pub.302 sup.

Sailing Directions for Northwest Coast of Honshu

Supplement No.2

23 February 2024



Japan Coast Guard

Explanatory Notes

Sailing Directions for Northwest Coast of Honshu - Supplement No.2 is issued to correct the outdated information in Publication No.302 Sailing Directions for Northwest Coast of Honshu which was published in March 2023.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 17 November 2023.

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

23 February 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.

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. The port has a capacity of accommodating vessels of 50,000t class, but temporarily, is limited to vessels of 30,000t.

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 the port. A group of islets and island including Uma Shima, lies around the NE part entrance. When the westerly wind blows, commercial 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 (Seishe). 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	A group of tanks, painted white, are situated about 300m W of it.
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.

In winter, high waves occur at the port entrance and render navigation difficult. A large number of fishing boats 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. (Inquiries: Hamada Koun Co., Ltd. Phone number: +81-855-27-0072). 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	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	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	6	

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	8	5,000 × 1	
Showa-South No.4 Quay			280	13 to 14	50,000 × 1	Gantry crane × 1
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.

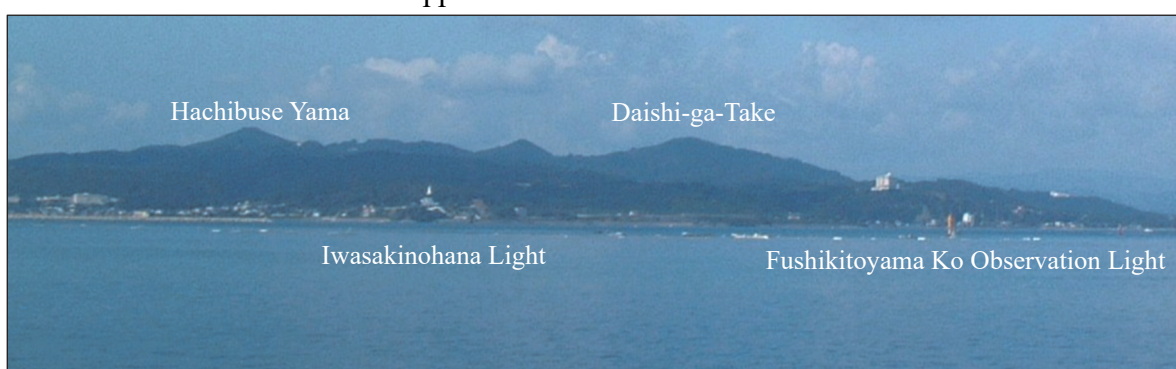
occurred in the vicinity of the entrance of Kokubu Ku. Maritime authority requires vessels entering Kokubu Ku to maintain minimum under keel clearance of $\{\text{draught} \times 1/10 + \text{wave height} \times 2/3\}$.

Facilities.

Name	Position	Length (Approx. m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks
Kokubu No.1 Quay	36° 48.1' N 137° 03.5' E	95	5	2,000 × 1	For the petro-products.
Kokubu No.2 Quay	36° 48.1' N 137° 03.4' E	65	4.5	1,000 × 1	For the petro-products.
Kokubu No.3 Quay		140	3 to 4	1,000 × 2	

Supply. Fresh water can be supplied.

Approaches to Iwasaki-no-Hana



Seen from the NE

Fushiki Ku and Approaches (Chart JP1162^A)



(Photographed in August 2020)

Outline. Fushiki Ku lies in the mouth of Oyabe Kawa and has been one of the major trading ports since old times. The coast is backed by an industrial zone. The main products handled here are timbers and petroleum products. Water may turn yellowish colour when snow thaws in spring and rivers are in flood and the buoys marking fishing nets may not be easily distinguished. Abnormal waves may be caused by the influence of winds and river flow.

Passage. Fushiki Passage, with a length of 2.2M and a width of 350 to 550m, is established from the harbour limit to Fushiki Ku. The channel has some bends, which are marked by light buoys. The Navigable passage is illuminated by Fushiki Directional Light (with a width of 5°, centred on a line bearing of 227.9°).

Overhead bridge. There is a bridge called Fushiki Man-yo O-hashii Bridge (36° 47.3' N 137° 03.5' E, About 9m in

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	5 to 8	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	12 to 12.5	30,000 × 1	Gantry crane. Aseismic quay.

Maximum size of vessel handled. Cruise ship *VOYAGER of the SEAS* (138,194 t, with a draught of 9.1m) berthed at the Man-yo No.3 Quay on 18 May 2015.

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	

Toyama Branch Office, Nagoya Regional Immigration Services Bureau (Located in Toyama Airport)	+81-76-495-1580
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Repairs.

Name	Telephone number	Remarks
NHI Industries Co., Ltd.	+81-76-437-9271	

Oil waste disposition facility.

Name	Application	Hours of operation	Waste oil to be disposed	
			Waste heavy oil	Waste light oil
Kiraku Kougyou	Toyama Energy Factory Phone: +81-76-455-3282	0830 – 1730	Water ballast, tank cleaning water, bilge, and etc.	Water ballast, tank cleaning water, and etc.

Medical facilities.

Name	Telephone number	Remarks
Toyama Ken Saiseikai Toyama Hospital	+81-76-437-1111	
Toyama Red Cross Hospital	+81-76-433-2222	

Ikuji Hana to Naoetsu Ko (Chart JP120)

Outline. The coast between Ikuji Hana and Miyazaki Hana, extending about 10M, is an alluvial fan formed by Kurobe Kawa. The coast consists of pebbles and oval stones and is backed by a forest of pine trees. The board plain extends further inland. The coast between Miyazaki Hana and the mouth of Hime Kawa (W side of Himekawa Ko) extending about 13M, is a low land, backed by high ground, which joins the mountain range in the interior. The water deepens abruptly. The coast between Hime Kawa and Naoetsu Ko, extending about 22M, has similar topographic feature, and is indented by Torigakubi Misaki, which is located in the middle. Nou Ko (37° 06.9' N 138° 00.0' E, Port code; JP NOU) lies almost midway between the mouth of Hime Kawa and Torigakubi Miaki.

Tidal streams. In the vicinity of the mouth of Kurobe Kawa, the flood current sets NE, and the ebb current sets SW, with a speed of 0.5kn or less. Currents setting E with a speed more than 1kn off Torigakubi Misaki on occasions.

Landmarks.

Landmark	Position	Remarks
Miyazaki Hana	36° 58.3' N 137° 35.2'E	A hilly point which gradually rises to high mountains inland. Lighthouses stand on the head of the bay and the breakwater lying N of the head.
Kurohime Yama	36° 58.6' N 137° 47.4'E	A conical mountain. 1,222m in height.
Torigakubi Misaki	37° 10.3'N 138° 05.8' E	The cape rises steeply to the landward and reaches over 300m. Two wind turbines are established on the ridge. There is a lighthouse on the head.
Wind turbines	36° 57.8'N 137° 30.5' E	A submarine power cable connecting each wind turbine is laid from a shoreline at 36° 57.3' N 137° 29.9' E.
	36° 58.1'N 137° 31.2' E	
	36° 58.0'N 137° 31.5' E	Facility lights are installed at each wind turbines.

A mountain range including Aota-Nanba Yama (949m in height), Myoko San (2,446m in height), Hiuchi Yama (2,462m in height) and Yake Yama (2,400m in height) lies inland of Torigakubi Misaki. It is often covered by fogs and clouds in May and June, and its summit is covered by white clouds in summer. Fogs and clouds may dissipate toward sunset.

{Sado Shima}. Also, there are services of car ferries (18,229t etc.) bound for Otaru Ko and Tomakomai Ko, calling at Tsuruga Ko, Niigata Ko and Akita-Funagawa Ko {Akita Ku}.

Higashi Ku and Approaches (Chart JP1155^B)



(Photographed in April 2020)

Landmarks.

Landmark	Position	Remarks
Chimneys	37° 59.9' N 139° 14.5' E	Four chimneys equipped with flashing white lights, 165m, 210m, 209m and 208m in height, respectively. They stand inside the site of a thermal power station.
Tanks	38° 00.0' N 139° 14.1' E	A lot of tanks for the oil stockpile, painted silver, prominent.

Submarine pipelines. Submarine pipelines for gas and oil (37° 59.4' N 139° 13.4' E) are laid between Central Wharf E Quay and MGC Terminal Quay in Higashi Ku. Another submarine pipeline for oil is laid between Iwafune Ko offing oil rig (38° 08.0' N 139° 20.3' E) with white light and the W side of the root of W Breakwater.

Signals. Private signal lights are established at the W end of Timber No.2 Quay in South Wharf (37° 58.3' N 139° 14.1' E) and NW of West No.2 Pier (37° 59.5' N 139° 12.9' E) to indicate the information on flood discharge and outlet from Fukushima Lagoon Flood Control Channel and Shibata Kawa Flood Control Channel.

Signal	Meaning of signal	Remarks
⊂ ⊃	Notice of discharging	Indicate the notice of discharging from Fukushima Lagoon Flood Control Channel and Shibata Kawa Flood Control Channel, and current speed at the mouth of Flood Control Channel.
F H	Fukushima Lagoon Flood Control Channel	
S H	Shibata Kawa Flood Control Channel	
0.0	Current 0.0kn	
0.5	Current 0.5kn	
1.0	Current 1.0kn	
↑	Current More than 1.0kn	

Facilities.

Name	Position	Length (Approx. m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks
East No.1 Pier	37° 59.6' N 139° 13.7' E	84	13.5	50,000 × 1	Dolphin.
East No.3 Pier	38° 00.0' N 139° 13.6' E	394	12 to 13.5	102,000 × 1	Dolphin. A light is established at the NW end.
Central Wharf E No.1 Quay	37° 59.4' N 139° 13.6' E	260	12 to 13	40,000 × 1	
Central Wharf E No.2 Quay	37° 59.2' N 139° 13.7' E	260	12.5 to 13	40,000 × 1	

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.
	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.
	No.2 Quay	37° 58.2' N 139° 13.8' E	185	9 to 9.5	15,000 × 1	Container crane.
	No.3 Quay	37° 58.2' N 139° 13.6' E	350	11.5 to 12	30,000 × 1	Container crane.
	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.

Fog occurs infrequently throughout the year, and usually dissipates within 4 to 5 hours.

Marine Accidents. Strong winds from between W and NW may cause high waves, with heights of 7 to 8m in winter, making entry difficult.

In the past, losses of anchor chains and grounding accidents have been caused in the outside of the port in such circumstances.

Landmarks.

Landmark	Position	Remarks
Chimney	38° 58.0' N 139° 49.9' E	About 184m in height, silver in colour. It stands inside the site of thermal power station.
Lighthouse	38° 56.8' N 139° 49.0' E	Sakata Light, 41m in height, white tower.
Tower	38° 55.1' N 139° 49.7' E	A memorial lighthouse, 28m in height.
Radio tower	38° 54.9' N 139° 50.1' E	Painted red and white, fitted with NTT dish aerials.
Wind turbines	38° 55.7' N 139° 48.9' E	
	38° 55.9' N 139° 48.8' E	100m in height.
	38° 56.1' N 139° 48.9' E	
	38° 56.3' N 139° 49.0' E	

Directions. Vessels approaching Section 1 or 2 should pass the midway between No.2 N and S Breakwaters. Then, alter course to 160° and steer for the head of the port after passing along S breakwater.

Vessels approaching North Port district should pass the middle of the port entrance, and proceed along the N breakwater in North Port district, steer for the chimney which is described in *Landmark*. Then, alter course as necessary for the passage, and head to the berth.

Precautions for entering the port. See also the item *Marine Accidents*. Currents flow rapidly, and outflow of muddy water may reach as far as 2M offshore in the vicinity of the port entrance when the river is flooded during the spring thaw in May or the rainy season. Vessels are liable to be set the N under such circumstances.

Strong westerly winter monsoon hinder entry into the North Port district, and vessels are liable to be set shoreward. When entering Section 1 or 2, extra care is needed to maintain course as vessels may be battered by winds and waves from behind, especially when passing the entrance of Section 2 near the N Breakwater Light in the Main Port district.

The entrance of Section 2 is busy with the numerous pleasure-fishing boats and pleasure boats from summer to autumn, vessels must exercise caution to avoid collision.

Facilities.

Name		Position	Length (Approx. m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks
Takasago	No.1 Quay	38° 57.1' N 139° 49.0' E	152	13.5	50,000 × 1	Warehouse.
	No.2 Quay	38° 57.0' N 139° 49.2' E	280	14	50,000 × 1	Warehouse.
Kominato Wharf	No.1 Quay	38° 57.2' N 139° 49.7' E	270	13	50,000 × 1	
	No.2 Quay		185	10	15,000 × 1	
	No.3 Quay		185	8.5 to 9.5	15,000 × 1	
Kominato Mooring Pillar		38° 57.3' N 139° 50.0' E		5 to 8	15,000 × 1	Log pond is located S of here.
Miyauimi	No.2 Quay	38° 57.6' N 139° 50.2' E	170	9.5	10,000 × 1	Aseismic quay.
	No.3 Quay		130	6.5	5,000 × 1	Warehouse.
	No.4 Quay		130	6 to 7	5,000 × 1	
	No.5 Quay		130	5 to 6	5,000 × 1	
Ohama Wharf	No.1 Quay	38° 55.6' N 139° 48.9' E	330	6.5 to 8.5	10,000 × 2	Warehouse.
	No.2 Quay	38° 55.6' N 139° 49.0' E	90	4	2,000 × 1	

W, and Tsubaki Gyoko (39° 52' N 139° 47' E) and Toga Ko (39° 57.2' N 139° 42.7' E, Port code; JP TOJ) lie on the coast. In winter, groundings have occurred in the coastal area as there is no protection against westerly monsoon winds, and the bottom is poor holding ground. Therefore, Sakata and Akita Coast Guard Offices advise vessels to refrain from anchoring in this area.

Landmarks.

Landmark	Position	Remarks
Mi Saki	39° 07.1' N 139° 52.2' E	A cape with a lighthouse.
Radio tower	39° 07.2' N 139° 53.6' E	A radio tower with dish aerials, 20m in height.
Chokai San	39° 06.0' N 140° 02.9' E	A mountain, 2,236m in height. A conical peak, which appears to have three peaks when viewed from the S, and two peaks from the N. It can be seen for a great distance. The peak is often hidden by clouds and is covered by snow throughout the year except in August and September.
Tobi Shima	39° 12.0' N 139° 33.4' E	A flat and low island. There is a lighthouse on the top of Takamori Yama, situated in the N part of the island. The coast consists of sand and gravel beaches with scattered rocks. Rocks are found especially in the N and NW of the island.
Towers	39° 39.9' N 140° 04.4' E	Six radio towers are established on the summit of Omori Yama. They exhibit red lights.
Kanpu San	39° 56.0' N 139° 52.5' E	A mountain with a conspicuous observation platform, 355m in height. Hachiro Gata rises gradually toward the peaks of the mountain. It has three peaks and the one in the easternmost is the highest. This peak cannot be seen from the W.
U-no-Saki	39° 51.5' N 139° 49.2' E	A cape, 32m in height. A lighthouse is situated there.
Shiose Saki	39° 51.5' N 139° 45.4' E	A cape in trapezoidal shape with a lighthouse.
Hon San	39° 54.4' N 139° 45.2' E	The highest peak of Oga Hanto, 715m in height. A conspicuous radar dome is situated on the top.
Nyudo Saki	40° 00.3' N 139° 42.1' E	The head is steep-to. A lighthouse (painted in black and white bands) stands on it.
Mizu Shima	40° 00.8' N 139° 42.0' E	A rock, 3.7m in height. It extends about 550m in a N to S direction. The sea violently breaks on it when strong westerly wind blows. The current always sets N in the vicinity. The sea breaks heavily on it when strong northerly winds are blowing. A white-painted pillar in the central part of this island is illuminated by a spotlight installed on Nyudosaki Light.

Akita-Funagawa Ko (39° 51.3' N 139° 56.3' E) (Charts W147, JP148, JP1192) (Port code; JP AFG)

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

Outline. Akita-Funagawa Ko used to be two individual ports, namely, Akita Ko, located in the SE side, and Funagawa Ko. The two ports had merged together and became one port. Since then, the port consists of Akita Ku and Funagawa Ku. Facilities such as zinc refinery, thermal power station, paper factory are situated in Akita Ku, and oil storage base, lumber factory are situated in Funagawa Ku. Both Akita Ku and Funagawa Ku are busy with a large number of tankers and timber carriers. In Akita Ku, 13 implantable offshore wind turbines (with yellow lights) and submarine power cable have been installed.

Section 1 of Akita Ko is well protected from the winds from all directions, but the winter monsoon winds hinder entry and departure from there. Funagawa Ku is opened to the E, and entry and departure from there is comparatively easy.

Weather and Climate. Winter monsoon blows intensely and usually lasts for 3 or 4 days.

Marine Accidents. The severe winds from between W and NW accompanied by waves of 7 to 8m in height make entry the port difficult, especially in winter.

There have been grounding accidents due to breakage of anchor chain.

Port operation communications. Communications by radiotelephone between a vessel and the Captain of the Port is available.







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 <i>line A</i>) 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 <i>line A</i>).
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 <i>line A</i>) 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 <i>line A</i>).

Facilities.

Name	Position	Length (Approx. m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks
Outer Harbour - 13m No.1 Quay	39° 45.9' N 140° 02.4' E	270	12.5	50,000 × 1	Two cranes and warehouses.
Outer Harbour - 13m No.2 Quay	39° 46.1' N 140° 02.3' E	260	13	40,000 × 1	
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	- 4.5m No.1 Quay	39° 46.2' N 140° 03.0' E	60	3	700 × 1	
	- 4.5m No.2 Quay		60	3	700 × 1	
	- 10m No.1 Quay	39° 46.4' N 140° 03.0' E	185	9.5 to 10	15,000 × 1	
	- 10m No.2 Quay	39° 46.2' N 140° 02.9' E	185	9 to 9.5	15,000 × 1	
	- 10m No.3 Quay	39° 46.0' N 140° 02.9' E	185	9 to 9.5	15,000 × 1	
Nakashima	No.1 Quay	39° 45.3' N 140° 03.5' E	161	8.5	10,000 × 1	
	No.2 Quay	39° 45.4' N 140° 03.4' E	185	9.5	15,000 × 1	
	No.3 Quay	39° 45.5' N 140° 03.3' E	185	9.5	15,000 × 1	
North Wharf	A Quay	39° 45.3' N 140° 03.5' E	122	6 to 7.5	5,000 × 1	
	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	
	D Quay	39° 45.1' N 140° 03.6' E	90	6	2,000 × 1	
Shimohama - 5m Quay		39° 45.0' N 140° 03.8' E	345	3.5 to 5	1,000 × 4	Fish market.
Terauchi Wharf		39° 44.7' N 140° 04.0' E	195	6 to 7	5,000 × 2	
Mukaihama	- 7.5m No.1 Quay	39° 44.9' N 140° 03.7' E	130	7	5,000 × 1	
	- 7.5m No.2 Quay		130		5,000 × 1	
	- 10m No.1 Quay	39° 45.0' N 140° 03.4' E	186	9	15,000 × 1	
	- 10m No.2 Quay	39° 45.1' N 140° 03.3' E	186	8 to 9	15,000 × 1	
	- 10m No.3 Quay	39° 45.2' N 140° 03.2' E	185	8.5 to 10	15,000 × 1	
	- 12m Quay	39° 45.3' N 140° 03.1' E	240	12	30,000 × 1	

Maximum size of vessel handled. Cruise ship *MSC SPLENDIDA* (137,936t, with a draught of 8.68m) berthed at the Nakashima No.2-3 Quays on 24 October 2018.

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.

Nyudo Saki to Henashi Saki (Chart JP1195)

Outline. The line joining Kyudo Saki and Henashi Saki is about 37M in length. The coastline between these two projections is slightly curved inward.

The N part mainly consists of rocky beaches fringed with rocky reefs, and is backed by mountains. Kyuroku Shima lies about 17M to the WSW of Henashi Saki.

The S part is adjacent coast of the N coast of Oga Hanto, has concave coastline consisting of sandy beaches. The water depth 1 to 2M off the coast is about 20m, and the bottom mainly consists of sand. A large number of stationary nets are laid out there. The coast includes Kitaura Ko (39° 57.8' N 139° 47.4' E, Port code; JP KJT), and Noshiro Ko which is situated at the mouth of Yoneshiro Kawa.

A small bay (40° 34.8' N 139° 54.6' E) situated S of Henashi Saki affords best shelter anchorage in this area as it is backed by high terrains, when winds blow from between the N and E.

The bay is exposed to westerly winter monsoon winds which may result in grounding accidents. Akita and Aomori Coast Guard Offices advise vessels to refrain from anchoring in this area under such circumstances.

Landmarks.

Landmark	Position	Remarks
O Shima	40° 22.0' N 140° 00.7' E	An islet, 14m in height. There is no other island in this region.
Chigoki Saki	40° 24.9' N 139° 56.9' E	A cape with a lighthouse.
Henashi Saki	40° 36.8' N 139° 51.8' E	A cape located at the W extremity of Fukaura Hanto, projecting W. Iwasaki Ko lies on the S side of the base of Fukaura Hanto. A lighthouse is established on this cape. Tsubaki Yama, a small hill at the end of the cape, 56m in height, appears as an islet from a distance and is prominent from the N and the S.

Fishery. The vicinity of Teri Ba (40° 22.3' N 139° 41.0' E), with a depth of 42m, about 17M NW of Noshiro Ko, is busy with the fishing boats engaged in pole-and-line and gill net fishing throughout the year.

Noshiro Ko (40° 12.4' N 139° 59.1' E) (Chart W1292) (Port code; JP NSR)



(Photographed in July 2020)

Port classification. Port designated by Port Regulation Law, open port, immigration port, plant protection port, important port.

Outline. Noshiro Ko lies on the S side of the mouth of Yoneshiro Kawa, located about 19M NE of Nyudo Saki. The port has been developed as an artificial inland port to deal with the sediment delivered by the frequent flood of the river. Lumber factories are situated in the port. **20 wind turbines (with yellow lights) have been installed. Submarine power cable have been laid from each turbine to the shoreline at 40°11.3' N 139°59.1' E.**

Landmarks.

Landmarks	Position	Remarks
Chimney	40° 11.5' N 139° 59.4' E	168m in height, painted blue and white.
Silo	40° 12.5' N 140° 00.1' E	Cement silo, gray in colour.
Observatory	40° 12.5' N 139° 59.9' E	27m in height, painted white.

Pilotage. As the Pilotage Law is not applied to Noshiro Ko, pilotage is not compulsory, but pilots are available upon request. (Inquiries: Akita-Funakawa Pilot Association. See *Chapter 6 PILOTAGE* in Part 1)

Precautions for entering the port. Care is necessary for maintaining course in the vicinity of the port entrance as wind waves and swells hit ship's beam and stern when winds blow from between N and NW.

Facilities.

Name	Position	Length (Approx.m)	Depth (Approx.m)	Capacity (D/W×vessel)	Remarks
Omori Quay	40° 12.7' N 139° 59.6' E	260	13	40,000 × 1	
Nakajima No.1 Quay	40° 13.1' N 140° 00.7' E	130	7.5	5,000 × 1	
Nakajima No.2 Quay	40° 13.1' N 140° 00.8' E	130	7.5	5,000 × 1	
15,000 D/W Quay	40° 12.7' N 140° 00.2' E	185	10	15,000 × 1	

In addition to the above, ~~coal discharging 60,000 D/W~~ pier, ~~(capacity; 60,000 D/W × 1)~~ etc. are located on the N side of base of the Outer Harbour S Breakwater.

Maximum size of vessel handled. Ore carrier *NOSHIRO MARU* (53,935t, with a draught of 12.58m) berthed at the private quay for Noshiro Thermal Power Station of Tohoku Electric Power Co., Inc. on 23 November 2000.

Typhoon and tsunami safety measures. In order to prevent disasters due to typhoon, tsunami and other abnormal weather, Typhoon and Tsunami Countermeasures Committee of Noshiro 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: Akita Coast Guard Office)

Maritime authority and facility.

Name	Telephone number
Noshiro Port and Harbour Office, Akita Prefectural Government	+81-185-54-8246

Precautions for anchoring. Akita and Sakata Coast Guard Offices advise vessel to refrain from anchoring during westerly violent winds, which liable to occur particularly in winter.

Tugboats. Tugboats are available.

Supplies. Fresh water, fuel oil and ice can be supplied.

Medical facility.

Name	Telephone number	Remarks
Noshiro Welfare Medical Center	+81-185-52-3111	