

Pub.304 sup.

Sailing Directions for Coast of Hokkaido

Supplement No.4

16 September 2022



Japan Coast Guard

Explanatory Notes

Sailing Directions for Coast of Hokkaido - Supplement No.4 is issued to correct the outdated information in Publication No.304 Sailing Directions for Coast of Hokkaido which was published in February 2020.

This supplement contains the information which has been gathered through the work of Hydrographic and Oceanographic Department, Japan Coast Guard by 8 June 2022.

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 gray background while deletions are marked with strikethrough, in red letter on gray 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.

16 September 2022

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.

<p>Tomakomai Pilot Association Tel: +81-144-34-3070 Fax: +81-144-34-6210</p>	<p>1. When entering Section No. 1 ~ 3: Near a position 195°, about 2,400 m from Tomakomai Ko E Outer Breakwater Light. 2. When entering Section No. 4 (Higashi Ko); Near a position about 2.3 M WSW of Tomakomai Ko Higashi Ko Chiku E Breakwater Light in Higashi Chiku. 3. When entering No. 4 Section 4 (Idemitsu Sea Berth {Idemitsu Hokkaido Sea-berth}); Near a position 2 to 3 M SE of the sea berth.</p>	<p>1. The request shall be made 12 hours prior to the estimated time of commencement of the pilotage. 2. The request shall be made to the Association's joint office by letter, telephone, or other secure methods. 3. When making the application for pilotage in the preceding paragraph, the following items shall be notified; the vessel name, tonnage, length, draft, the presence of appropriate multi-deck boats, the name or the appellation and address of the ship owner (Article 3 of the Pilotage Law), the presence of appropriate export exemption (consumption tax), speed, type of cargo, scheduled pilotage start date, pilot period, necessity of quarantine, and other required items. 4. Pilot ladder in accordance with the IMO requirements and IMPA recommendation shall be provided on the opposite side of wind waves or swell.</p>
<p>Kushiro Pilot Association Tel: +81-154-52-6352 Fax: +81-154-52-6358</p>	<p>1. Higashi Ko Ku; 274°, 2,100 m from Kushiro Ko Higashi Ku S Sub-breakwater Light. 2. Nishi Ko Ku; 201°, 1,600 m from Kaihatsukyoku Kushiro Ko Nishi Ko Ku Shima Breakwater Light.</p>	
<p>Rumoi Pilot Association Tel: +81-164-43-4128 Fax: +81-164-43-4128</p>	<p>1. N passage inward-bound vessels; 300°, 1,500 m from N extremity (Lighthouse) of Rumoi Ko W Breakwater Light. 2. S passage inward-bound vessels; 270°, 1,500 m from the Rumoi Ko W Breakwater S Light. 3. In bad weather; (in cases where pilots cannot embark outside the port because waves are high) 140°, 300 m from the N extremity of Rumoi Ko W Breakwater.</p>	<p>1. During strong winds, particularly in winter, high waves often prevent a pilot from boarding outside the breakwater. In this case a pilot boat (tugboat) waits the vessel near the port entrance of the N end of W Breakwater, and boards while the vessel is proceeding on inbound course. The pilot ladder shall be rigged on the port side. 2. When the weather worsens, vessel intending to enter the port shall be sure to contact Rumoi Coast Guard or the ship's agent for information on weather, oceanographic conditions, etc.</p>
<p>Otaru Pilot Association Tel: +81-134-22-5380 Fax: +81-134-33-0228</p>	<p>Near a position 050°, 0.8 M from Otaru Ko N Sub-breakwater Light (red).</p>	<p>Inbound vessels are recommended to wait for a pilot in the quarantine anchorage.</p>

Chapter 7 PRECAUTIONS

Navigational Precautions

5 **Standards for nautical charts etc.** In order to prevent marine accidents, the Japan Coast Guard is giving the following guideline which includes standards for necessary nautical charts to be carried onboard.

1. Necessary charts for safe navigation should be on board.

Vessels navigating in the seas around Japan are to keep charts covering the areas to be navigated.

Nautical publications, such as "Sailing Directions", "Tide Tables"

Wakkanai (+81-162-22-0118)			
Monbetsu (+81-158-23-0118)	Abashiri (+81-152-44-9118)		
Nemuro (+81-153-24-3118)	Rausu (+81-153-87-2274)	Hanasaki (+81-153-25-4012)	

Note: Three-digit telephone number “118” is available to vessels for urgent reporting of an incident or accident at sea. It covers not only maritime accidents which are encountered or sighted, it is also important to report information on oil spills, suspicious vessels, stowaways and smuggling-related crimes, etc., mariners can report to the nearest Regional Coast Guard Headquarters or Headquarters. Reporting can be used by subscribed/public/mobile telephones and maritime mobile radiotelephone.

Communications Services of the Japan Coast Guard

The following district communications centers of the Japan Coast Guard take part in communications services required in the course of its marine security duties. The coverage of these communications services are port communications, notification of the passage of huge vessels, marine safety information, navigational warnings, weather forecasts, and warnings, position reports from vessels based on the Japanese ship reporting system, and emergency special-purpose communications in case of marine disasters or natural calamities.

Coastal radio stations	Identification Signal	Receiving main frequency	Transmitting main frequency	Telephone
Otaru	HOKKAIDO COAST GUARD RADIO	F3E 156.8MHz (ch16) F3E 156.6MHz (ch12) J3E 2150kHz J3E 2394.5kHz	F3E 156.8MHz (ch16) F3E 156.6MHz (ch12) J3E 2150kHz J3E 2394.5kHz	+81-134-27-6172
	004310101	F1B 2189.5kHz	F1B 2177kHz	
Shiogama	SHIOGAMA COAST GUARD RADIO	F3E 156.8MHz (ch16) F3E 156.6MHz (ch12) J3E 2150kHz J3E 2394.5kHz	F3E 156.8MHz (ch16) F3E 156.6MHz (ch12) J3E 2150kHz J3E 2394.5kHz	+81-22-363-0111
	004310201	F1B 2189.5kHz	F1B 2177kHz	

Japanese Ship Reporting System

The Japan Coast Guard is operating the Japan Ship Reporting System (JASREP) with the following criteria.

1. Outline of the system

Purpose	To ensure efficiency of search and rescue operations ascertaining the movement of the ships based on their position report in case of accidents happen.
Service area	Area of this system is designated within the waters north of the parallel of latitude 17° N and west of the meridian of longitude 165° E, approximately.
Eligibility for participation	Any ships in the above area that can report as specified in the table below.
How to participate	Participation in the system commences when a navigation plan that has the contents described in the table is submitted, and ends with submission of a final report.

Coast station	Call Sign	Language used	Eission	Fequency	Starting time of re-transmission (JST)
Otaru	HOKKAIDO COAST GUARD RADIO	Japanese English	F3E	156.8 MHz (ch16)	10h 25m 00s 16h 25m 00s

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

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

Charts and Publications

The results of hydrographic surveys of oceans, coasts, ports and harbours, the achievements of oceanographic and astronomical observations, and other various information—These are the materials used in compiling charts and publications such as Nautical Charts, Miscellaneous Charts, Sailing Directions, List of Aids to Navigation, Tide Tables, and Nautical Almanacs.

However, the above Sailing Directions and List of Aids to Navigation must be used in conjunction with their respective Supplements being issued to keep their contents up-to-date.

The list of the above charts and publications and the chart agencies are listed in “Pub. No. 901 Catalogue of Charts and Publications.”

Provision of information by the website

1. Navigational Warnings, Notices to Mariners, etc.

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

Classification	URL
Navigational Warnings	https://www1.kaiho.mlit.go.jp/TUHO/keiho/navarea11_en.html
Notices to Mariners	https://www1.kaiho.mlit.go.jp/TUHO/tuho/nm_en.html
Weekly Summary of NAVAREA XI Warnings	https://www1.kaiho.mlit.go.jp/TUHO/weekly_en.html
Addition, List of Aids to Navigation Vol.1	https://www1.kaiho.mlit.go.jp/TUHO/shoshi/toudai/e_toudai.html
Supplement of Sailing Directions	https://www1.kaiho.mlit.go.jp/TUHO/shoshi/tsuiho/supplement_en.html

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

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

Regional Coast Guard Headquarters and offices		URL
1st Region	1st Regional Coast Guard Headquarters	https://www.kaiho.mlit.go.jp/01kanku/
	Hydrographic and Oceanographic Dept., 1st Regional Coast Guard Headquarters.	https://www1.kaiho.mlit.go.jp/index.html

Safety Information of the Sea

5 The Japan Coast Guard operates on real time “Safety Information of the Sea” at Regional Coast Guard Headquarters and such across the nation on pieces of info addresseds to ranging from ship operators as pleasure boats, fishing boats and/or shore anglers to marine leisure affection donates which are observed at

level is 0.95 m.

Secondary undulation. The sea level of this port undulates with an interval of about 53 min but the range rarely exceeds 10 cm.

Sea ice. In 1987, some areas in the port froze over.

5 **The largest vessel to enter the port.** A passenger ship “QUANTUM OF THE SEAS” (168,666 t; draught: 8.5m) was berthed at JXTG Nippon Oil & Energy Wharf on June 24, 2016.

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

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

10 **Pilotage.** Pilotage is available on request through the Muroran Pilot Association (Refer to Chapter 6 “PILOTAGE” of Part 1 on page 18.).

Landmarks.

Landmark	Position	Remarks
A chimney	42° 21.0' N, 140° 58.9' E	A chimney with grey in color, 79 m high.
A chimney	42° 21.1' N, 140° 59.8' E	A chimney, 55 m high.
Iyoshisanbe	42° 20.2' N, 140° 57.1' E	A conical mountain, 140 m high.
A chimney	42° 20.6' N, 140° 59.3' E	A chimney, 154 m high, which has been painted in white and red, and is located at the W end of the chimney group.

15 **Directions.** The passage leads from an area WNW of Daikoku Shima to an area W of Nippon Steel & Sumitomo Metal Wharf.

Six pairs of leading lights are installed on Nippon Steel & Sumitomo Metal Wharf and Nittsu Wharf, and a pair of leading beacons is installed on Central Wharf. These are useful as berthing aids.

20 **Entry restricted.** In order to prevent fire hazard, no vessel is allowed to enter within a radius of 30 m from tankers (including tank ships) carrying flammable dangerous substance at berthing or anchoring in the port except the vessels permitted by Captain of the Port. It is required that such tankers show a sign “Loaded flammable dangerous substance” which is discernible by night while berthing or anchoring in the port.

Precautions for entering the port. Fish preserves and aquaculture facilities are laid along the E side of N Outer Breakwater and other aquaculture facilities in the W of Nima Misaki (42° 20.1' N, 140° 55.8' E), therefore caution needs to be exercised.

25 At night, the various leading lights, light buoys, and the lights on N Breakwater and S Breakwaters are often difficult to distinguish from the background city lights. The sight of harbour is often obstructed when vessels navigate the passage because many vessels are usually at anchor within the port. In addition, it is necessary to exercise caution because vessels entering to or leaving from Nippon Steel Wharf can meet vessels entering to or leaving from each southern wharf of the section 1 in the vicinity of the E end of the passage.

30 **Overhead bridge.** Hakucho O-hashi Bridge (53 m high, with bridge lights) extends from an area S of the root of S Breakwater to an area S of the root of N Breakwater, and is illuminated at night.

35 **Anchorage.** A quarantine anchorage is established WSW about 1.8 M of Poroshireto Misaki (42° 22.4' N, 140° 54.9' E) but it is necessary to exercise caution because there are aquaculture facilities nearby. The anchorage for vessels carrying dangerous cargoes is designated on the N of the passage within Section 3 as a common rule. The bottom of both inner and outer harbours are mostly sand and generally affords a good holding.

Higashi Ku.

Name		Position	Length (m)	Depth (Approx. m)	Capacity (D/W × vessel)	Remarks		
Section 1	Irifune Landing Place	42° 58.8' N, 144° 22.7' E	280	3 ~ 5	—			
	Irifune (B) -6.0 m Quay	42° 58.8' N, 144° 22.9' E	165	4.5 ~ 6	2,000 × 3			
	Omachi Quay	42° 58.8' N, 144° 23.0' E	250	1 ~ 5	—			
	Nishikicho Quay	42° 58.9' N, 144° 23.0' E	201	1 ~ 4	—			
	Saiwaicho Quay	42° 58.9' N, 144° 22.9' E	120	4.5 ~ 5	2,000 × 2			
Section 2	Central Wharf	East Quay No. 7	42° 58.9' N, 144° 22.7' E	370	7.5 ~ 9	10,000 × 1 (50,000t × 1)	An aseismatic quay for passenger vessels	
		East Quays No. 4 ~ 6	42° 58.9' N, 144° 22.4' E	390	6 ~ 6.5	5,000 × 3		
		West Quay No. 3	42° 58.9' N, 144° 22.2' E	180	8 ~ 9	15,000 × 1		
		West Quays No. 1 and 2	42° 59.0' N, 144° 22.3' E	339	7 ~ 8	10,000 × 2		
	N Wharf	East Quays No. 5 and 6	42° 59.1' N, 144° 22.2' E	155	4 ~ 6.5	6,000 × 1		
		South Quay	42° 59.1' N, 144° 22.1' E	126	7 ~ 8	3,000 × 1		
		West Quays No. 1 ~ 3	42° 59.2' N, 144° 22.1' E	396	7 ~ 8	10,000 × 2		
		Chokusenbu -9.0 m Quay	42° 59.3' N, 144° 22.1' E	150	7 ~ 7.5	6,000 × 1		
		Chokusenbu -8.1 m Quay	42° 59.3' N, 144° 22.0' E	157	6.5 ~ 7	3,000 × 1		
		Chokusenbu -5.0 m Quay	42° 59.4' N, 144° 22.0' E	56	3.5 ~ 4	—		
	Gyoko Wharf	East Quays No. 1 ~ 4	42° 59.3' N, 144° 21.9' E	424	7	500 × 6		
		S side Quays No. 1 and 2	42° 59.2' N, 144° 21.8' E	203	7 ~ 7.5	5,000 × 1		
		W side Quays No. 1 ~ 3	42° 59.3' N, 144° 21.7' E	322	7	500 × 5		
		North -6.0 m Quay	42° 59.4' N, 144° 21.7' E	150	5	349 × 2		
		North -5.0 m Quay	42° 59.5' N, 144° 21.7' E	172	4 ~ 5.5	200 × 3		
	Fuku Ko A Quay	42° 59.5' N, 144° 21.7' E	300	5	—	There is a fish market.		
	Fuku Ko B Quay	42° 59.6' N, 144° 21.8' E	250	5	200 × 4			
	Section 3	S Wharf	Coal Loader Quay	42° 58.3' N, 144° 21.8' E	217	6 ~ 8	5,000 × 1	
			General Cargo Quay	42° 58.3' N, 144° 21.9' E	91	5	2,000 × 1	
Mimamishin Wharf		South Dolphin	42° 58.4' N, 144° 21.9' E	130	6	5,000 × 1		
		General Cargo Quay	42° 58.5' N, 144° 22.0' E	130	5.5 ~ 6	5,000 × 1		
		W side Dolphin	42° 58.5' N, 144° 22.0' E	70	5	1,000 × 1	E side of the wharf	
Irifune -7.5 m Quay		42° 58.7' N, 144° 22.4' E	130	6 ~ 7.5	5,000 × 1			
Irifune (A) -6.0 m Quay	42° 58.7' N, 144° 22.5' E	260	5 ~ 6	2,000 × 2				

does not freeze over even in winter, but drift ice can move into the bay in April or May.

Numerous rocky islets lie scattered within about 800 m offshore and to the N of the Seseki Saki.

Tides. In this bay, Mean higher high water is 1.2 m, Mean lower low water is 0.3 m, and Mean sea level is 0.88 m.

5 **Landmarks.**

Landmark	Position	Remarks
Isoyanbetsu Iwa	44° 01.5' N, 145° 49.8' E	A black pointed rock which is situated on the NNE about 2.2 M of Seseki Saki and constitutes a good landmark.

Anchorage. The center of the bay has no obstructions and affords a good holding with around 9 m in depth and a sandy bottom, but vessels should use two anchors to ensure safety because the strong NW winds occasionally blow down violently from the mountains.

10

Furukamappu Ko (44° 01' N, 145° 51' E)

General information. This port is located on the NE shore of Furukamappu Wan, and has a radio tower with a parabolic antenna and 7 to 8 chimneys standing on the hills between Nakajima Saki (44° 01.2' N, 145° 51.1' E; W about 1.2 M of O saki) and the estuary of Furukamappu Kawa lying at the N about 0.5 M of it.

15 Five piers on the N side of Nakajima Saki can be used by large vessels.

Shiranuka Wan (44° 21' N, 146° 26' E) (Chart W42)

General information. This is an open bay entered between Ikabanotsu Hana (44° 19.2' N, 146° 22.0' E) and Akaishi Hana (44° 21.2' N, 146° 29.2' E) situated on the NNE about 5.5 M of it. It has an indentation for about 2 M in length and the entrance opens to the S.

20

The bay is sheltered from winds from the W through N to E as it is surrounded by Chacha Take in the W side and a mountain range of the N of Akaishi Hana in the E side.

Rocky ledges widely extend within 0.2 to 0.4 M offshore in the coast of a bay between Akaishi Hana and its northwestward for about 1.8 M. Some of them appear above water at low tide and give rise to breakers. Rocky ledges also extend up to 500 m offshore along the coast of Ikabanotsu Hana.

25

There are rocky reefs being about 1,000 m in length between the E and W which are called "Ichi-no-Ji-no-Se" (44° 21.1' N, 146° 25.0' E) and located within about 1 M offshore almost in the center of the bay. These are easy to identify for vessels because breakers are often seen there. Some of the reefs can be seen above water at low tide in the vicinity of the W end.

30

Sea ice. Drift ice moves into this bay with winds from between SE and S and is gone away with NE or SW winds.

Anchorage. In winter, a good anchorage can be obtained in an area at a depth of around 20 m with a sandy bottom, at the point where a transit line with Rausu Yama lined up on **Okappu-no-Misaki** (44° 16.6' N, 146° 17.8' E) intersects with Akaishi Hana bearing 089°.

35

The frontal sea area of Tokaisendomari (44° 19.6' N, 146° 21.8' E) is a good anchorage for small vessels and affords shelter in an area on the NE about 0.5 M of Ikabanotsu Hana at a depth of 12 m to 20 m during wind waves from between W and N. A small bay on the W side of Ikabanotsu Hana is used especially as a good shelter for small vessels because of a fine sandy bottom.

40

Kunashiri Suido (44° 27' N, 146° 43' E) (Charts W42, W45)

General information. Kunashiri Suido separates Etorofu To from Kunashiri To and is a short strait connecting the Pacific Ocean with the Sea of Okhotsk. **It is** deep with about 12 M in width.

Nobori Yama	45° 09.6' N, 147° 46.4' E	A mountain, 566 m high.
Sango Saki	45° 07.1' N, 147° 30.4' E	A cape of which Utorochippukoshi (a rock, 5.6 m high, which is prominent from the E and W directions) lies at the tip.
Notoro Misaki	45° 06.6' N, 147° 29.8' E	A black rocky pointed cape on which a beacon stands. Rocky ledges extend between this cape and Notoro Shima (a huge rock, 25 m high, which is prominent) located near the tip of it.
Towatara Iwa	45° 05.6' N, 147° 34.5' E	A rock which consists of two rocks and is located on the S about 800 m of Towatara Saki.

Furebetsu Byochi (45° 05' N, 147° 30' E)

General information. This anchorage is contained in the indentation entered between Notoro Misaki and a cape situated on the SE about 2.8 M of it. A shelter for small vessels can be obtained during winds from between NE and SE.

A rocky reef extends to the W for about 0.2 M, and Haccho Shima (45° 04.3' N, 147° 31.6' E; a black rocky islet, 7 m high, which is prominent) on the N end of the reef and a dried-up rock (0.3 m high) on the further N for about 220 m of Haccho **Shima** lie in the S of the bay.

Oito Wan (45° 01' N, 147° 30' E)

General information. This is a small bay located on the S about 1 M of Ruiru Saki and is entered between Anbashirare Hana (45° 00.5' N, 147° 30.9' E) and Aruutoru Saki (44° 59.8' N, 147° 30.4' E). Small vessels can obtain a shelter there during winds from between NE and S.

A sunken reef lies in the middle of the head of the bay, so that caution needs to be exercised.

Utatsutsu Wan (44° 50' N, 147° 13' E)

General information. This bay is located on the E side of the small peninsula which contains Atosa Take, and is entered between Itopirikaoui (44° 49.9' N, 147° 08.0' E) situated on the **the** N extremity of the small peninsula and Tokkarimoi (44° 52.5' N, 147° 16.6' E) situated on the ENE about 6.5 M of Itopirikaoui.

Small vessels occasionally take shelter in front of the head of the bay, but winds from between SE and SW can strongly blow as the low-lying hinterland extends to the SE coast of Etorofu To. In addition, dense fog frequently moves in from the same coast, so that caution is required.

Naibo Wan (44° 42' N, 147° 07' E)

General information. This bay is located on the SW side of the small peninsula which contains Atosa Take, and is entered between Poronotsu Hana (44° 48.8' N, 147° 05.9' E) and Kabara Misaki (44° 40' N, 147° 01' E) situated on the SSW about 10 M of it. Most of the bottom is fine sand. A shelter can be obtained during winds from between N and S.

An isolated reef at the least depth of 11.4 m lies on the S about 5 M of Poronotsu Hana. This reef is difficult to identify during calm seas, but is easily identifiable because it often gives rise to breakers during strong W winds.

Weather. A mountain range with 500 to 700 m high lies on the hinterland of this bay, and the both sides of it are low-lying lands which extend to the SE coast of Etorofu To, therefore this terrain can often gives rise to strong S winds especially in summer off the entrance of the bay.

Fog. Sea fog often moves in from the SE coast of Etorofu To.

Tides. In this bay, Mean higher high water is 1.1 m, Mean lower low water is 0.3 m, and Mean sea level is 0.70 m.

Water offing Rokko Yama located on the NE about 11 M of Shikaragarashi Misaki affords shelter during N winds. However, no shelter can be obtained on this coast during S winds.

Hitokappu Wan (44° 57' N, 147° 41' E)

5 **General information.** This bay is located near the middle of the SE coast of Etorofu To and is entered between Uenshiri Misaki and Rebusshiri Misaki.

Vessels can obtain an anchorage sheltered **from** winds from between E and W as the bay is surrounded by high mountains on the E and W sides, but the anchorage affords no shelter during strong S winds because wind waves penetrate into the bay.

10 The E coast in the bay is fringed with cliffs extending from Rebusshiri Misaki, but the rest of the coast consists of sand or shingle beaches. Rocky reefs being covered with seaweed spread widely around Uenshiri Misaki within about 550 m offshore.

15 **Weather.** S winds frequently blow from May to August, and then N winds dominate from September to next April, whereas from early February to mid **March**, SE winds sometimes blow and cause rough seas. Wind waves do not become high within the bay during S winds, but these bring about heavy seas when winds turn easterly.

Fine weather lasts in April. It turns rainy in May, but the precipitation is not much.

Snowfall. This bay has heavy snowfall from late December to next mid March and the snow precipitation reaches 90 cm in depth.

Fog. Sea fog rises from late May to July.

20 **Tides.** In this bay, Mean higher high water is 1.2 m, Mean lower low water is 0.3 m, and Mean sea level is 0.86 m.

Tidal currents. The tidal current is weak in this bay and the rate does not exceed 1 kn even at the time of spring tides. In addition, the direction is irregular.

25 **Sea ice.** This bay seldom freezes over in winter. Drift ice can penetrate into the bay during April, but that is not frequent.

Landmarks.

Landmark	Position	Remarks
Rakko Shima	44° 57.7' N, 147° 37.3' E	An islet, 2.7 m high, which is located on the NNW about 2.8 M of Uenshiri Misaki. It will become a good landmark for vessels intending to enter the bay.

30 **Anchorage.** The anchorage can be obtained within 0.6 M offshore in front of Toshimoe at a depth of 10 m with a sandy bottom. However, it may cause the dragging anchor during southerly strong winds in particular because it affords a poor holding, therefore caution is required.

Shionami Hana ~ Meekushi Hana [E coast of Etorofu To]

35 **General information.** This coast contains Moyoro Wan which lies in between Shionami Hana situated on the N end of the SE coast of Etorofu To and Meekushi Hana (45° 33.0' N, 148° 50.2' E) situated on the N end of the E coast of the same island.

The bottom along the coast is steep. A 20 m contour line runs along about 0.5 M offshore and a 200 m contour line lies between 0.8 M and 2.8 M offshore. No dangerous reefs lie outside the 20 m contour line.