# Sailing Directions for Seto Naikai

Supplement No.2

31 October 2025



Japan Coast Guard

# **Explanatory Notes**

Sailing Directions for Seto Naikai - Supplement No. 2 is issued to correct the outdated information in Publication No.303 Sailing Directions for Seto Naikai which was published in December 2024.

This supplement contains the information which has been gathered through the work of Hydrographic and Oceanographic Department, Japan Coast Guard by 25 April 2025.

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

31 October 2025

Hydrographic and Oceanographic Department, Japan Coast Guard

# **CAUTION**

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

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

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

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

Page	Updated parts (title, port name, etc.)	Remarks
After 'CAUTION' / Withdrawal of Nautical Charts		
10	Aids to Navigation	The said page of suppliment No.1 is cancelled.
10-1	Aids to Navigation	
87	Ushimado Ko - Uno Ko	
253	Onomichi-Itozaki Ko	
289	Mitajiri-Nakanoseki Ko	
290	Ube Ko	
291	Ube Ko	
293	Onoda Ko	
294	Kanda Ko	
302	Oita Ko	
306	Matsuyama Ko	
322	Kanmon Ko, Hibiki-Shinko Ku	
323	Kanmon Ko, Wakamatsu Ku	
327	Kanmon Ko, Wakamatsu Ku	
328	Kanmon Ko, Wakamatsu Ku	
330	Kanmon Ko, Kokura Ku	

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.303 Sailing Directions for Seto Naikai (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 101A	HANSHIN KO KOBE	W 101A
JP 101B	HANSHIN KO WESTERN PART OF KOBE	W 101B
JP 104	KURUSHIMA KAIKYO AND APPROACHES	W 104
JP 107	HIGASHI-HARIMA KO	W 107
JP 112	NARUTO KAIKYO	W 112
JP 123	HANSHIN KO OSAKA	W 123
JP 126	TOKUYAMA-KUDAMATSU KO AND APPROACHES PLAN: TOKUYAMA-KUDAMATSU KO HIKARI	W 126
JP 127	EAST ENTRANCE OF KANMON KAIKYO AND APPROACHES	W 127
JP 128	UBE KO	W 128
JP 129	KANDA KO	W 129
JP 131	AKASHI KAIKYO AND APPROACHES	W 131
JP 132	KURUSHIMA KAIKYO	W 132
JP 134B	WESTERN PART OF HIMEJI KO	W 134B
JP 135	KANMON KAIKYO	W 135
JP 137A	EASTERN PART OF BISAN SETO	W 137A
JP 137B	WESTERN PART OF BISAN SETO	W 137B
JP 141	AKI NADA AND APPROACHES PLAN: NEKO SETO	W 141
JP 142	HIROSHIMA WAN	W 142
JP 150A	OSAKA WAN PLAN: TOMOGASHIMA SUIDO	W 150A
JP 150 C	KII SUIDO	W 150C
JP 165	MISHIMA-KAWANOE KO	W 165
JP 201	KURARA SETO TO TSUNO SHIMA	W 201

JP 1103	EASTERN PART OF OSAKA WAN	W 1103
JP 1106	TOKUYAMA-KUDAMATSU KO TOKUYAMA	W 1106
JP 1107	HANSHIN KO AMAGASAKI-NISHINOMIYA-ASHIYA	W 1107
JP 1109	KURE KO AND APPROACHES	W 1109
JP 1110	HANSHIN KO SENBOKU	W 1110
JP 1112A	EASTERN PART OF HIROSHIMA KO	W 1112A
JP 1112B	WESTERN PART OF HIROSHIMA KO	W 1112B
JP 1120	NIIHAMA KO	W 1120
	CONTINUATION OF NIIHAMA KO TAKIHAMA	
JP 1121	SAKAIDE KO	W 1121
ID 1127 A	EASTERN PART OF MIZUSHIMA KO	W 1107 A
JP 1127A	CONTINUATION OF EASTERN PART OF MIZUSHIMA KO	W 1127A
JP 1127B	WESTERN PART OF MIZUSHIMA KO	W 1127B
JP 1133C	TOKUYAMA-KUDAMATSU KO SHIN-NAN-YO	W 1133C
JP 1137	FUKUYAMA KO	W 1137
	CONTINUATION OF FUKUYAMA KO	
JP1141	HANNAN KO	W7 11 41
JP1141	CONTINUATION OF SOUTHWEST PART OF HANNAN KO	W 1141
JP1144	WAKAYAMA-SHIMOTSU KO ARIDA AND SHIMOTSU	W 1144
JP 1146	HANSHIN KO SAKAI	W 1146
JP 1150	WAKAYAMA-SHIMOTSU KO WAKAYAMA	W 1150
JP 1247A	EASTERN PART OF OITA KO	W 1247A
JP 1247B	WESTERN PART OF OITA KO	W 1247B
JP 1262	EASTERN PART OF KANMON KO	W 1262
JP 1263	MIDDLE PART OF KANMON KO	W 1263
JP 1265	KANMON KO WAKAMATSU	W 1265
	CONTINUATION OF WAKAMATSU	
JP1266	KANMON KO SHIRA SHIMA AND APPROACHES	W 1266
JP 1267	WESTERN PART OF KANMON KO	W 1267

Caution is required as lights of aids to navigation around ports and just off the coasts sometimes become difficult to distinguish from background lights and fishing lights.

Buoyage system. In Japan, IALA Maritime Buoyage System (Region-B) is used.

**Conventional direction of buoyage.** The conventional direction of buoyage, which is the standard direction of port or starboard hand marks defined by the IALA Maritime Buoyage System, is provided as follows:

- 1. The conventional direction of buoyage in a fairway which leads from a main route to a port/harbour is on the side of the port/harbour. In a fairway of a port/harbour, it is on the side which is close to the area where vessels are usually berthed for cargo work.
- 2. In addition to the above 1, the conventional direction of buoyage within the sea areas covered by this volume is as follows:

Water area	Conventional direction of buoyage
Ports, bays, rivers, and the adjacent waters	Inner ports or bays, or upper stream of rivers
Seto Naikai (including Kanmon Kaikyo, excluding Uko East and West Traffic Routes)	Hanshin Ko
Uko East and West Traffic Routes	Uno Ko

AIS aids to navigation. AIS aids to navigation transmit radio signals to show the symbols of aids to navigation, which serves as navigation marks, on vessel's display of AIS receiver or radar capable of multi-layered display or Electronic Chart Display and Information System (ECDIS). There are two types of AIS aid to navigation: real aid to navigation which is fitted with the existing aid to navigation and virtual aid to navigation which is shown on the display, but does not exist.

In the areas covered by this volume, there are 24 AIS aids to navigation as follows:

Name of AIS aid to navigation	Position	Type	Remarks
Sumoto Offing	34°21.3′N 135°00.5′E	Real	Fitted with Sumoto Offing Light Buoy.
Akashi Kaikyo Traffic Route NE	34°36.3′N 135°04.9′E	Virtual	
Yura-seto N	34°17.9′N 134°58.8′E	Virtual	
Yura-seto S	34°16.0′N 134°58.8′E	Virtual	
Akashi Kaikyo Traffic Route Center	34°37.4′N 135°00.6′E	Real	Fitted with Akashi Kaikyo Traffic Route Center No.2 Light Buoy.
Kurushima Kaikyo W Entrance A	34°09.4′N 132°53.9′E	Virtual	
Kurushima Kaikyo W Entrance B	34°09.6′N 132°55.1′E	Virtual	
Yashima S	33°41.6′N 132°08.1′E	Real	Fitted with Iyo Nada Track No.5 Light Buoy.
Iyo Nada Track No.2	33°44.1′N 131°53.9′E	Virtual	
Iyo Nada Track No.4	33°42.4′N 132°03.4′E	Virtual	
Iyo Nada Track No.6	33°42.8′N 132°13.0′E	Virtual	
Iyo Nada Track No.9	33°52.7′N 132°35.7′E	Virtual	
Suo Nada Track No.2	33°49.4′N 131°23.7′E	Virtual	
Suo Nada Track No.4	33°47.3′N 131°35.5′E	Virtual	
Suo Nada Track No.6	33°45.7′N 131°44.7′E	Virtual	
Seibu Oil Sea-Berth	33°50.0′N 131°12.8′E	Real	Fitted with Seibu Oil Sea-Berth Light.
Kanmon Passage E Entrance	33°56.8′N 131°03.0′E	Real	Fitted with Shimonoseki SE Suido No.1 Light Buoy.
Kanmon Passage W Entrance	33°59.8′N 130°53.1′E	Real	Fitted with Kanmon Passage No.1 Light Buoy.
Kanmon Ko Hibiki Nada Offshore Wind Turbine A11	33°58.4′N 130°42.0′E	Real	Fitted with Kanmon Ko Hibiki Nada Offshore Wind Turbine A11 Mark Light.
Kanmon Ko Hibiki Nada Offshore Wind Turbine A15	33°58.3′N 130°45.7′E	Real	Fitted with Kanmon Ko Hibiki Nada Offshore Wind Turbine A15 Mark Light.
Kanmon Ko Hibiki Nada Offshore Wind Turbine B2	33°57.3′N 130°44.6′E	Real	Fitted with Kanmon Ko Hibiki Nada Offshore Wind Turbine B2 Mark Light.
Kanmon Ko Hibiki Nada Offshore Wind Turbine C1	34°00.1′N 130°46.6′E	Real	Fitted with Kanmon Ko Hibiki Nada Offshore Wind Turbine C1 Mark Light.

# Part 1 GENERAL INFORMATION

Kanmon Ko Hibiki Nada Offshore Wind Turbine C4	33°58.2′N 130°48.6′E	Real	Fitted with Kanmon Ko Hibiki Nada Offshore Wind Turbine C4 Mark Light.
Hibiki Nada Offshore Floating Wind Turbine	34°03.2′N 130°43.4′E	Real	Fitted with Hibiki Nada Offshore Floating Wind Turbine Mark Light.

Displaying point	Method of signals (Daytime)	Method of signals (Nighttime)	Meaning of signals
Near a point 1,500m 230° from Nabeshima Light (34°22.9′N 133°49.4′E)	Hoisting L signal flag under First substitute	RZS signal of Morse code by light signal (·-···)	Vessels of 70m or more in length (except for Huge Vessels) intending to navigate Mizushima Traffic Route to the S shall wait outside the Traffic Route.
	Hoisting L signal flag under Second substitute	RZN signal of Morse code by light signal (······)	Vessels of 70m or more in length (except for Huge Vessels) intending to navigate Mizushima Traffic Route to the N shall wait outside the Traffic Route.

**Fisheries.** (See Section "Fisheries", Chapter 7 "ITEMS TO CONSIDER FOR SAFE NAVIGATION", Part 1 "GENERAL INFORMATION".)

The sea areas near the connection part of Mizushima Traffic Route and Bisan Seto S Traffic Route, near the crossing part of Mizushima Traffic Route and Bisan Seto N Traffic Route, and around Mukuchi Shima (34°25.4′N 133°46.1′E) may be congested with fishing boats in operation of stow-net fishery from February to September (peak season: February to August).

#### Ushimado Ko – Uno Ko (Charts JP137A, W1114)

**Outline.** This sea area is generally used not only by small vessels entering/leaving neighbouring harbours but also by large vessels entering/leaving Uno Ko. Vessels proceeding towards Shimotsui Seto (34°25.8′N 133°48.0′E) generally pass through the sea areas between I Shima (34°29.6′N 134°01.0′E) and Ikada Shima (34°30.8′N 134°01.0′E), between Tsubone Shima (34°29.0′N 133°59.5′E) and Kyo-no-Joro Shima (34°29.4′N 133°58.9′E), and between Nao Shima (34°27.6′N 133°59.2′E) and Kazura Shima (34°28.4′N 133°57.3′E). Many dangerous sunken reefs are situated around Inujima Shoto (34°33.8′N 134°06.1′E).

# Landmarks.

Landmark	Position	Remarks	
Chiburi Shima	34°31.8′N 134°09.6′E	An island with a lighthouse on the E end. This island serves as a good mark at the S part of the sea area between Ushimado Ko and	
		Uno Ko.	
Inujima Shoto 34°33.8′N 134°06.1′E		Of several islands, two main islands are Inu Shima and Inu-no-Shima. The former has six red brick chimneys in the E part, conspicuous from a distance. The latter has four white-coloured chimneys, conspicuous from a distance.	
De Saki	34°30.7′N 134°00.2′E	A cape of small trapezium peninsula projecting SE. There are two pylons for overhead cable and one beacon.	
Ikada Shima	34°30.8′N 134°01.0′E	An island with a lighthouse on the W end. A pointed rock (12m in height) lies close to the N.	
I Shima	34°29.6′N 134°01.0′E	An island with a lighthouse on the S end. Dango Yama is situated in the centre (157m in height).	
Kyo-no-Joro Shima	34°29.4′N 133°58.9′E	An island with a lighthouse on the SE end. Both sides of the top (84m in height) are significantly eroded and appears pale brown due to stone quarrying.	
Tsubone Shima	34°29.0′N 133°59.5′E	An island, 76m in height. Rokuro Shima is situated to the E.	

#### Overhead cables.

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Approximate po	sition	Number of cables	Vertical clearance (m)		
Ushigakubi Shima – Nakayama 34°30.3′N 133°58.5′E		1	13		
Nakayama – Kihe Shima	34°30.2′N 133°58.5′E	2	8.5 (W side) 11 (E side)		
Kihe Shima – Kine Shima	34°29.9′N 133°58.5′E	1	About 18		

Section 6:

Name	Position	Length (m)	Water depth (m)	Mooring capacity (D/W×vessel)	Remarks
Matsuhama Quay	34°22.9′N 133°06.9′E	_	7.5	_	
Itozaki Quay (No.1)	34°23.3′N 133°06.3′E	135	8	6,000×1	
Itozaki Quay (No.2)	34°23.3°N 133°00.3°E	185	10	10,000×1	
Kohama Quay	34°23.6′N 133°05.5′E	185	3 - 5	1,000×2	
Kaino Quay	34°22.9′N 133°05.5′E	_	7.5	_	
Wada Quay (No.1)	2.4022 7/NI 122005 2/E	90	2.5 - 3	2,000×1	
Wada Quay (No.2)	34°22.7′N 133°05.3′E	180	2 - 2.5	700×1	

**Overhead bridges.** Onomichi O-hashi Bridge (with a vertical clearance of 34m) spans Onomichi Suido at the W of Boji-ga-Hana (34°24.5′N 133°13.1′E). Shin-Onomichi O-hashi Bridge (with a vertical clearance of 36m) is located just W of Onomichi O-hashi Bridge. Mukaishima O-hashi Bridge (with a vertical clearance of about 13m) spans Miyuki Seto in the S part.

**Overhead cables.** An overhead cable spans Onomichi Suido between the N end of Iwashi Shima and the opposite shore to the N (with a vertical clearance of 51m); another overhead cable spans Miyuki Seto at the S of Mukaishima Ohashi Bridge (with a vertical clearance of about 22m). In addition, near the mouth of Wakuhara Kawa in Section 6, there is an overhead cable spanning the inner port (34°23.7′N 133°05.2′E, with vertical clearances of about 14 – 17m).

**Safety measures against typhoon and tsunami.** In order to prevent marine disasters due to typhoon, tsunami, etc., Onomichi Chiku Typhoon, etc. Countermeasure Committee has been established. Vessels in the port, etc. are given guidance on disaster prevention measures such as the provision of information about typhoon, tsunami, etc., the provision of warnings, issuing recommendations for evacuation, and the restriction of port entry and the cancellation thereof.

(Inquiries: Onomichi Coast Guard Office.)

#### Maritime authorities and facilities.

Name	Phone number
Onomichi Coast Guard Office (Captain of the Port)	+81-848-22-2109
Onomichi-Itozaki Sub-Branch Customs, Fukuyama Branch Customs,	+81-848-23-2792
Kobe Customs Headquarters	
Onomichi Branch, Kobe Plant Protection Station	+81-848-22-6642
Onomichi Maritime Office, Chugoku District Transport Bureau	+81-848-23-5235
Eastern Construction Office, Hiroshima Prefectural Government	+81-84-921-1311

**Tugboats.** Several tugboats are available.

Ferryboats. Several ferryboats are available.

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

#### Repair facilities.

Name	Phone number
Onomichi Dockyard	+81-848-37-1111
Hiroshima Shipyard, Imabari Shipbuilding	+81-848-69-1200
Mukaishima Zoki	+81-848-44-0600
Kuwata Dockyard	+81-848-73-5115
Takahara Dockyard	+81-848-44-2605
Mukaishima Dock Yard	+81-848-44-0001

**Anchorage.** Vessels can take anchorage, depending on their sizes, either in the W side of the fairway in Mitajiri Chiku or in the S side or N side of the fairway in Nakanoseki Chiku.

#### Port facilities.

Name	Position	Length (m)	Water depth (m)	Mooring capacity (D/W×vessel)	Remarks
Tsukiji Quay (No.4)	24002 20N 121025 5/E	260	7.5	5,000×2	
Tsukiji Quay (No.3)	34°02.2′N 131°35.5′E	180	5.5	2,000×2	
Tsukiji No.4 Landing Place	34°02.3′N 131°35.5′E	600	4	500t class	
Tsukiji No.3 Landing Place	34°02.1′N 131°35.2′E	120	4	500t class	
Tsukiji Quay (No.1)	2.4002.0MI 12.1025.2/E	240	5.5 - 6	2,000×3	
Tsukiji Quay (No.2)	34°02.0′N 131°35.3′E	130	6.5 - 7.5	5,000×1	
Nakanoseki Quay (No.1)	34°00.8′N 131°33.8′E	360	5.5	2000×4	
Nakanoseki Quay (No.2)	34°00.5′N 131°33.7′E	520	7.5 - 8	5,000×4	Travelling crane.
Nakanoseki Quay (No.3)	34°00.4′N 131°33.5′E	480	12	30,000×2	

Safety measures against typhoon and tsunami. In order to prevent marine disasters due to typhoon, tsunami, etc., Mitajiri-Nakanoseki Ko Subcommittee of Typhoon, Tsunami, etc. Marine Disaster Countermeasure Committee has been established. Vessels in the port, etc. are given guidance on disaster prevention measures such as the provision of information about typhoon, tsunami, etc., the provision of warnings, issuing recommendations for evacuation, and the restriction of port entry and the cancellation thereof.

(Inquiries: Tokuyama Coast Guard Office.)

#### Maritime authorities and facilities.

Name	Phone number	
Mitajiri-Nakanoseki Detachment, Tokuyama Coast Guard Office	+81-835-23-9898	
Hofu Sub-Branch Customs, Tokuyama Branch Customs,	+81-835-22-2385	
Moji Customs Headquarters		
Hofu Port Office, Yamaguchi Prefectural Government	+81-835-22-6209	

**Tugboats.** Tugboats are available from Tokuyama-Kudamatsu Ko.

Ferryboats. Ferryboats are available from Tokuyama-Kudamatsu Ko.

Supplies. Fuel oil supplies are available at Tsukiji Quay {Heiwa Wharf}.

Repair facilities. There are several dockyards.

#### Medical facilities.

Name	Phone number	
Yamaguchi Prefectural Grand Medical Center	+81-835-22-4411	

Maritime traffic. Passenger liners bound for No Shima are operated, which depart from and arrive at Mitajiri Chiku.

# **Yamaguchi Ko** (34°00.9′N 131°23.5′E) (Charts JP127, W1454) (JP YMG)

Port classification. Port designated by the Port Regulations Act, Plant protection port.

**Outline.** Yamaguchi Ko is located about 10M W of Mitajiri-Nakanoseki Ko. The port area extends about 2.5M in length to the N from the vicinity of Iwaya-no-Hana (33°59.1′N 131°23.8′E) which is situated at the port entrance. Fushino Kawa flows into the head of the port. Aio Ko (34°00.2′N 131°25.5′E, a port designated by the Port Regulations Act) (JP AII) is situated to the E and Maruo Ko (33°58.6′N 131°21.3′E, a port designated by the Port Regulations Act) (JP MRU) is to the SW.

#### **Ube Ko** (33°55.8′N 131°12.9′E) (Chart JP128) (JP UBJ)

**Port classification.** Specified port, Major Port, Open port, Quarantine port, Immigration port, Plant protection port. **Outline**. Ube Ko faces Suo Nada, located in the SW part of Yamaguchi Prefecture. The port is heavily used for loading petrochemical products, cement, and pharmaceuticals, as well as for unloading coal. The roadstead at the middle of the inner port is called Nai Ko {Inner Port} or Hon Ko {Main Port}; the one in the SE part is called Higashi Ko; the one in the NW part is called Nishi Ko, which consists of Kogyo Unga, Sakae Kawa Unga, and the mouth of Koto Kawa and its vicinity.

Yamaguchi Ube Airport is located at the N side of the E part of Ube Ko. Ubemisaki Gyoko is located just W of the airport. From September to April, vessels should navigate with caution to the nets for laver cultivation which are set in a wide area along the coastal waters within the port area.



Ube Ko (Photographed in October 2021)

Oceanographic phenomena. The port area is generally calm. Storm surge can occur when a typhoon passes.

**Pilotage.** Pilotage is available upon request to Licensed Inlandsea Pilots' Association (see Chapter 6 "PILOTAGE", Part 1 "GENERAL INFORMATION").

Pilot boarding positions for vessel berthing at Ubekosan No.6 Quay are as follows.

- 1. Vessels entering from E: position about 33°51.2'N 131°15.2'E.
- 2. Vessels anchoring off Ube Ko or vessel entering from S: position about 33°50.5'N 131°13.8'E.
- 3. Vessel entering from W: position about 33°53.1'N 131°08.8'E.

#### Landmarks.

L'anumai Ks.				
Landmark	Position	Remarks		
1 A chimney 1 33°57/17N 131°14 07E 1		164m in height, painted grey, situated within the premises of a		
		chemical factory.		
22057 001 121014 1/5		Painted red and white, situated within the premises of a cement		
A chimney	33°56.9′N 131°14.1′E	plant.		
A chimney 33°56.4′N 131°11.0′E		125m in height, painted red and white, situated within the premises		
		of an oil company.		
Motoyama Misaki	33°55.8′N 131°10.8′E	A cape with a steep cliff at its tip.		

Fairways. There is no passage under the Port Regulations Act, but four fairways leads to each roadstead.

- 1. A fairway leading to Nai Ko is about 240m in navigable width and about 13m in depth.
- 2. A fairway leading to Higashi Ko is about 110m in navigable width and 5 9m in depth, indicated by Ube Ko E Leading Lights (33°56.2′N 131°15.2′E, aligned in line at 058.2°).
- 3. A fairway leading to the entrance of Kogyo Unga is about 100m in navigable width and with depths of 2.5 4.5m.
- 4. A fairway leading to the private piers of Seibu Oil and Cement W Okinoyama Pier at the W end of the port is about 140m in navigable width and about 7.5m in depth.

All fairways are marked by several light buoys. Mainly in winter, numerous aquaculture facilities are set outside the fairways in the port area.

**Anchorage.** Quarantine anchorage is located about 1.6M WNW of Motoyama Light Beacon (33°52.9'N 131°15.0'E) at the S harbour limit. Anchorage for the vessels of less than 1,000t carrying dangerous goods is designated about 1M SW of Ube Ko W Breakwater Light (33°56.3'N 131°13.9'E).

**Cautions for navigation.** In the E and W sides of Yamaguchi Ube Airport, approach surface areas have been established according to the Civil Aeronautics Act. (Inquiries: Yamaguchi Ube Airport Office, Yamaguchi Prefectural Government. Phone number: +81-836-21-5841).

Port facilities.

Name	Position	Length (m)	Water depth (m)	Mooring capacity (D/W×vessel)	Remarks
Shibanaka E Quay	33°56.1′N 131°14.9′E	162	7.5 - 8	10,000×1	Crane.
Shibanaka W Quay (No.1)	33°55.9′N 131°13.9′E	270	13	50,000×1	
Shibanaka W Quay (No.2)	33°56.0′N 131°14.0′E	240	12	30,000×1	
Shibanaka Quay (No.1)	33°56.3′N 131°14.2′E	185	8.5	15,000×1	
Shibanaka Quay (No.2·3)	33°56.3′N 131°14.3′E	260	6 - 7.5	3,000×2	
Onda Quay	33°56.4′N 131°14.7′E	240	4.5	700×4	
Minatomachi Wharf	33°56.6′N 131°14.6′E	240	3 - 4	500×4	
Shinmachi Quay (No.1·2)	33°56.9′N 131°14.4′E	260	5 - 6.5	5,000×2	
Shinmachi Quay (No.3)	33°56.8′N 131°14.5′E	90	3 - 4	2,000×1	
Okinoyama Quay (No.1)	22057 7DI 121014 1/F	185	7.5 - 9.5	15,000×1	
Okinoyama Quay (No.2)	33°56.7′N 131°14.1′E	185	8 - 8.5	15,000×1	
Okinoyama Quay (No.6)	33°56.5′N 131°14.0′E	325	15	90,000×1	

<sup>\*</sup> In addition to the above table, there are some private mooring facilities for use by companies.

**Overhead bridges.** Kosan O-hashi Bridge (with a vertical clearance of about 25m) spans the entrance of Nishi Ko. **Overhead cables.** Over Sakae Kawa Unga, an overhead cable (with a vertical clearance of 32m) spans the S entrance; two overhead cables (with vertical clearances of 52m and 28m) span the central part. An overhead cable (with a vertical clearance of 44m) spans Kogyo Unga.

Maximum size of vessel handled. A vessel of 73,583t berthed at Okinoyama Quay (No.6) in July 2017.

Safety measures against typhoon and tsunami. In order to prevent marine disasters due to typhoon, tsunami, etc., Ube and Sanyo-Onoda Chiku Abnormal Weather Countermeasure Council has been established. Vessels in the port, etc. are given guidance on disaster prevention measures such as the provision of information about typhoon, tsunami, etc., the provision of warnings, issuing recommendations for evacuation, and the restriction of port entry and the cancellation thereof.

(Inquiries: Ube Coast Guard Station.)

#### Maritime authorities and facilities.

Name	Phone number	
Ube Coast Guard Station (Captain of the Port)	+81-836-21-2410	
Ube Sub-Branch Customs, Shimonoseki Branch Customs,	191 927 21 7201	
Moji Customs Headquarters	+81-836-21-7391	
Ube Port Management Office, Yamaguchi Prefectural Government	+81-836-31-3311	

**Tugboats.** Tugboats (with the maximum power of 4,400PS) are available.

Ferryboats. Many ferryboats are available.

**Supplies.** A small fuel oil supply boat is available.

Name	Position	Length (m)	Water depth (m)	Mooring capacity (D/W×vessel)	Remarks
Landing Place	33°58.4′N 131°10.5′E	340	3.5 – 4	500t class	Fronted by foul ground.
Higashioki Quay	33°58.5′N 131°09.7′E	185	4 – 8	10,000×1	

<sup>\*</sup> In addition to the above table, there are some private mooring facilities for use by companies.

**Safety measures against typhoon and tsunami.** In order to prevent marine disasters due to typhoon, tsunami, etc., Ube and Sanyo-Onoda Chiku Abnormal Weather Countermeasure Council has been established. Vessels in the port, etc. are given guidance on disaster prevention measures such as the provision of information about typhoon, tsunami, etc., the provision of warnings, issuing recommendations for evacuation, and the restriction of port entry and the cancellation thereof.

(Inquiries: Ube Coast Guard Station.)

**Supplies.** A small fuel oil supply boat is available.

#### Repair facilities.

Name	Phone number
Taiyo Dockyard	+81-836-83-2362

#### Waste oil disposal facilities.

Nama	Cantast	II C	Kind of waste oil processed		
Name	Contact	Hours of operation	Waste heavy oil	Waste light oil	
Toshisangyo Phone: +81-836-83-2830		0800 - 1700	All kinds	All kinds	

#### Medical facilities.

Name	Phone number	
Yamaguchi Rosai Hospital	+81-836-83-2881	

#### Subchapter 2 SOUTHERN PART OF SUO NADA AND WESTERN PART OF IYO NADA

**Kanda Ko** (33°48.1′N 131°01.3′E) (Chart JP129) (JP KND)

**Port classification.** Port designated by the Port Regulations Act, Major Port, Open port, Immigration port, Plant protection port.

**Outline.** Kanda Ko is in the W part of Suo Nada, located about 10M S of the E entrance of Kanmon Kaikyo. The NW part of the port, which is surrounded by breakwaters, is called Hon Ko {Main Port}, and the S part is called Nan Ko {South Port}. Kitakyushu Airport is situated to the NE of Kanda Ko.

**Weather and climate.** E winds blow most frequently throughout the year. From the beginning of spring to summer, easterly winds blow frequently. When strong easterly winds blow, swells invade the port area. Although winds from between W and NW blow frequently from autumn to winter, the port is comparatively calm as the winds are blocked by mountains. From autumn to winter, fog occurs occasionally, but generally does not last long.

**Pilotage.** Pilotage is available upon request to Licensed Inlandsea Pilots' Association (see Chapter 6 "PILOTAGE", Part 1"GENERAL INFORMATION").



Kanda Ko (Photographed in October 2021)

#### Landmarks.

Landmark	Position	Remarks		
Ko-no-Shima	33°47.5′N 131°00.6′E	A long, narrow island, 53m in height, stretching in an E-W direction.  It appears as a small island with a round peak when seen from the		
K0-110-3111111		entrance of the port.		
A chimney 33°47.2′N 130°59.9′E		204m in height, painted blue and white, situated within the premises		
		of a power station.		
Matsu Yama 33°48.4′N 130°59.1′E		A mountain, 128m in height. It has wide reddish brown-coloured		
		bare mountainside.		

#### Fairways.

- 1. A fairway runs from the ENE outside of the port to the inner ports of Kanda Ko, with a width of about 200m and with depths of 10 12m, marked by light buoys.
- 2. Off the NE of Ko-no-Shima, the above fairway divides into two fairways; one leads to Hon Ko, about 200m in width and with depths of 10 12m; the other leads to Nan Ko, about 300m in width and with depths of 9 10m. These fairways are indicated by several light buoys.

**Communication.** Port operation communication via VHF radiotelephone is available between vessels and the Port Authority (see Section "Port Operation Communications", Chapter 8 "PREVENTION OF MARINE ACCIDENTS", Part 1 "GENERAL INFORMATION").

Identification signal	Call/Response	Communication	Operation	Remarks
KANDA PORT RADIO	ch16	ch12, ch14, ch64, ch20, ch07	24 hours	Phone: +81-93-383-0106

Cautions for navigation. In the N and S sides of Kitakyushu Airport, approach surface areas are established according to the Civil Aeronautics Act.

# Port facilities.

Name	Position	Length (m)	Water depth (m)	Mooring capacity (D/W×vessel)	Remarks
Honko Quay (No.4)	33°47.4′N 130°59.5′E	386	3 - 4.5	700×6	Travelling crane.
Honko Quay (No.5)	33°47.7′N 130°59.6′E	150	2.5 - 4.5	2,000×2	Crane.
Honko Quay (No.6)	33-47.7N 130-39.0 E	110	5.5 - 6.5	3,000×1	
Honko Quay (No.7)	33°47.7′N 130°59.7′E	130	5.5 - 6	5,000×1	
Honko Quay (No.10)	33-47./N 130-39./E	370	8 - 10.5	10,000×2	
Honko Quay (No.13)	33°47.7′N 131°00.0′E	260	11.5 - 13	40,000×1	Travelling crane.

#### Medical facilities.

Name	Phone number
Oita Medical Center, National Hospital Organization	+81-97-593-1111
Oita Prefectural Hospital	+81-97-546-7111

**Maritime traffic.** Car ferries bound for Hanshin Ko are operated within Nishi-Oita Hakuchi. In addition, air cushion vehicles are navigating in Beppu Wan.

# **Saganoseki Ko** (33°15.3′N 131°51.9′E) (Chart W1225) (JP SAG)

Port classification. Port designated by Port Regulations Act, Open port, Quarantine port, Immigration port.

**Outline.** Saganoseki Ko is located about 9M E of Oita Ko, situated in a bay at the N side of a peninsula projecting to Hayasui Seto. Saganoseki Gyoko is situated in a bay, which is commonly called Shita Ura, on the S coast of the peninsula.

Saganoseki Ko has been developed as a base for importing raw materials and exporting products for metal smelting industry.



Saganoseki Ko (Photographed in October 2021)

**Pilotage.** Pilotage is available upon request to Licensed Inlandsea Pilots' Association (see Chapter 6 "PILOTAGE", Part 1"GENERAL INFORMATION").

#### Landmarks.

Landmark	Position	Remarks
A chimney	33°15.5′N 131°52.6′E	About 325m in height, painted red and white.

**Directions.** When reaching near Saganoseki Hoppo Koro Light Buoy (33°16.2′N 131°51.6′E), take course to 165° to steer for Saganoseki Ko W Breakwater Light (33°15.1′N 131°52.0′E) at the SW side of the port and proceed until Wakamiko-no-Hana is abeam; then change course as required to proceed into the port appropriately.

**Anchorage.** The port area where the water is 10 - 17m in depth and the bottom is good holding ground with mud affords favourable anchorage except when NW winds blow. Quarantine anchorage area is located to the NW of the port entrance.

Safety measures against typhoon and tsunami. In order to prevent marine disasters due to typhoon, tsunami, etc., Matsuyama Ko Natural Disaster Countermeasure Committee has been established. Vessels in the port, etc. are given guidance on disaster prevention measures such as the provision of information about typhoon, tsunami, etc., the provision of warnings, issuing recommendations for evacuation, and the restriction of port entry and the cancellation thereof.

(Inquiries: Matsuyama Coast Guard Office.)

#### Maritime authorities and facilities.

Name	Phone number
Matsuyama Coast Guard Office (Captain of the Port)	+81-89-951-0553
Matsuyama Branch, Takamatsu Regional Immigration Service Bureau	+81-89-932-0895
Matsuyama Branch Customs, Kobe Customs Headquarters	+81-89-951-0301
Matsuyama detached office, Hiroshima Quarantine Station	+81-89-951-0068
Matsuyama Branch, Sakaide Sub-Station, Kobe Plant Protection Station	+81-89-951-2418
Ehime Transport Branch Office, Shikoku District Transport Bureau	+81-89-956-9951
Matsuyama Port Office, Matsuyama City	+81-89-951-2148

Tugboats. Tugboats are available.

Ferryboats. Several ferryboats are available, departing from and arriving at Mitsuhama Pier.

Supplies. Fresh water supply vessels and fuel oil supply vessels are available.

Repair facilities. There are dockyards for large vessels and for small vessels (less than 350t).

Name	Phone number	
Kadota Dockyard	+81-89-952-1551	
Ouchi Dockyard	+81-89-997-1211	

#### Waste oil treatment facilities.

Name Contact	G	Hours of	Kind of waste oil processed		
	operation	Waste heavy oil	Waste light oil		
Cosmo Matsuyama Oil	Phone: +81-89-951-1111	0830 – 1700	Bilge water, ballast water, tank cleaning water.	Ballast water, tank cleaning water.	

#### Medical facilities.

Name	Phone number
Ehime Prefectural Central Hospital	+81-89-947-1111

**Maritime traffic.** Passenger liners and car ferries are operated, bound for Kanmon Ko, Kure Ko, Hiroshima Ko, Yanai Ko, and nearby islands.

# Washigasu Wan (33°53.9′N 132°39.6′E) (Chart W1124)

**Outline.** Washigasu Wan is a bay located at the SW of Gogo Shima. The port area is suitable for refuge anchorage as it is sheltered from the winds from between N, E and SE, and not affected by tidal currents. Kamose Shima (a small island, 19m in height) is located about 400m from the shore in the E part of bay entrance. The sea area about 400m WNW of Kamose Shima has depths of around 12m and mud and sand bottoms, affording favourable anchorage.

Submarine cables and aquaculture facilities are situated in the bay. Tidal currents flow strongly in a channel called Ko Seto between the entrance to the bay and Tsuru Shima.

light buoy on the N side) lies about 1.1M NNE of Hachiman Misaki (33°56.1′N 130°43.7′E). Shoals are scattered around Shira Su (33°59.0′N 130°47.5′E, a lighthouse standing on it) lying about 1.3M SW of Ai-no-Shima.

In the S part of the port area, a waterway for usual passage of coastal vessels crosses in a E-W direction, where the traffic is congested with vessels of 2,000t class or less.

#### Landmarks.

Landmark	Position	Remarks
Two tanks	33°55.9′N 130°46.7′E	Painted white, situated within the premises of an LNG terminal.

#### Port facilities.

Name	Position	Length (m)	Water depth (m)	Mooring capacity (D/W×vessel)	Remarks
Hibikinada-Nishi Quay (No.1·2)	22057 ODI 120047 1/E	160	5	_	
Hibikinada-Nishi Quay (No.3·4)	33°56.0′N 130°46.1′E	340	10	15,000×2	
Hibikinada-Nishi Quay (No.5·6)	33°56.0′N 130°45.9′E	701	15	100,000×2	

<sup>\*</sup> In addition to the above table, there are some private mooring facilities for use by companies.

**Sea-berths.** Shiraishi National Oil Storage Sea-Berth (34°01.3′N 130°44.3′E) is situated NE of O Shima.

**Overhead bridges.** Shin-Hibikinada O-hashi Bridge (with a vertical clearance of 12m) and Hibikinada O-hashi Bridge (with a vertical clearance of 12m, lying along the border of port districts) span Hibikinada Fairway.

**Overhead cables.** Two overhead cables (with vertical of clearances of about 20m and 19m) span Hibikinada Fairway at both E and W sides of Hibikinada O-hashi Bridge.

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

#### **6 Wakamatsu Ku** (33°55.4′N 130°52.3′E) (Charts JP1263, W1264, JP1265) (JP KNM)

**Outline.** Wakamatsu Ku is located in the SW part of Kanmon Ko. The main port area occupies Dokai Wan, a long, narrow, intricated water where many port facilities fills the coast. Numerous factories surround the port area. Wakamatsu Ku is divided into Section 1-6. Four passages under the Port Regulations Act are situated: Tobata Passage, Wakamatsu Passage, Okudokai Passage, and Anse Passage. A submarine tunnel crosses Dokai Wan at the N side of Wakato O-hashi Bridge. Wakamatsu Ku is connected to Hibiki-Shinko Ku through Hibikinada Fairway.



Wakamatsu Ku (Photographed in October 2021)

**Cautions during typhoons.** During a typhoon, many small vessels and barges taking shelter anchorage congregate in Wakamatsu Ku.

#### Landmarks.

Landmark	Position	Remarks
Eight tanks	33°55.1′N 130°52.0′E	Painted light blue, situated within the premises of an LNG terminal.

Landmark	Position	Remarks
		Two of them are 206m and 123m in height, both painted red and
Three chimneys	33°55.5′N 130°50.9′E	white. The other is 202m in height, painted grey. Each is situated
		within the premises of a power station or a steelworks.
Wakamatsu Entrance	22056 ADI 120050 TIE	F
Traffic Signal Station	33°56.4′N 130°50.7′E	Equipped with conspicuous electric signboard.
Maki Yama	33°53.3′N 130°48.7′E	A mountain, 75m in height, with a signal station standing on it.

# Passages under the Port Regulations Act.

- 1. Wakamatsu Passage leads to Yahata Hakuchi after branched off from Kanmon Passage, with depths of 8.5 10m.
- 2. Tobata Passage leads to Seitetsu-Tobata Hakuchi after branched off from Kanmon Passage, with depths of 12 17m.
- 3. Okudokai Passage leads to the head of Dokai Wan after branched off from Wakamatsu Passage, with depths of 8 10m.
- 4. Anse Passage leads to Anse Hakuchi after branched off from Kanmon Passage No.2, with a depth of about 13m.

Each passage is marked by many light buoys and light beacons. Caution is necessary because the water outside each passage become shallow suddenly.

In Dokai Wan, especially in Okudokai Passage, vessels may be affected by side-wall effects and shallow-water effects, so full caution is required. Near the area where Wakamatsu Passage and Okudokai Passage meet, the view between two passages is poor because it is blocked by Katsurajima. Therefore, a dangerous situation may arise when a vessel from Yahata Hakuchi and a vessel from Okudokai Passage meet there as it is difficult to recognise until they come close to each other.

**Signals.** Vessel traffic control signals are operated by Wakamatsu Port Traffic Control Office of Wakamatsu Coast Guard Office for the water W of a line drawn at 349° from a point 1,335m 184.5° from Wakamatsu Entrance Traffic Signal Station within Wakamatsu Passage (hereinafter referred to as "Wakamatsu Fairway" or "Wakamatsu Waterway" in this article and next article of "Pre-entry report"), Okudokai Passage, and Wakamatsu Ku (except for Section 5 and Section 6).

Each Traffic Signal Station of Wakamatsu Entrance, Makiyama, and Futajima have an electric signboard, which indicates vessel traffic control signals for vessels of 300t or more (prohibition signal applies to all vessels) as following table (Article 20-2 of Regulations for the Enforcement of the Port Regulations Act).

Signal		Meaning		
Flashing letter "I"	Inbound signal	<ul> <li>Inbound vessels are permitted to navigate.</li> <li>Outbound vessels of 300t or more shall stop and wait.</li> <li>Outbound vessels of less than 300t are permitted to navigate.</li> </ul>		
Flashing letter " O "	Outbound signal	<ul> <li>Outbound vessels are permitted to navigate (however, vessels of 300t or more are prohibited from moving between Yahata Hakuchi in the S of Line A in Section 2 of Wakamatsu Ku and Okudokai Passage).</li> <li>Inbound vessels of 300t or more shall wait outside the passage at the E of Line B and give way to outbound vessels.</li> <li>Inbound vessels of less than 300t are permitted to navigate.</li> </ul>		
Flashing letter " <b>F</b> "	Free signal	<ul> <li>Inbound vessels of 500t or more shall wait outside the passage at the E of Line B and give way to outbound vessels.</li> <li>Outbound vessels of 500t or more shall stop and wait.</li> <li>Inbound and outbound vessels of less than 500t are permitted to navigate.</li> </ul>		

**Provision of information on maritime traffic.** Makiyama Traffic Signal Station (Wakamatsu Port Traffic Control Office) provides the information such as other vessels' movements, weather conditions, etc. to ensure the traffic safety of Wakamatsu Passage and Okudokai Passage in Dokai Wan.

wakamatsu Passage and Okudokai Passage in Dokai wan.			
Information provided	Method		
1. Information provided by reporting.	Identification Signal: WAKAMATSU HARBOR		
The following matters in Dokai Wan:	COAST GUARD RADIO.		
(1) marine accidents which may affect the navigation of	1. By AIS (in English).		
vessels and measures has been taken for them,	004310704 (Hinoyama Transmitter Station).		
(2) restriction or prohibition of vessel traffic,			
(3) abnormalities in aids to navigation,			
(4) construction works, other operations, or obstacles which			
may hinder safe navigation of vessels,			
(5) other matters necessary for the safety of vessel traffic.			
2. Information provided by communication.	2. For communication.		
(1) Via VHF radiotelephone:	(1) By VHF radiotelephone (in Japanese):		
(i) latest condition and advance notice of traffic control	ch12, ch14, ch66.		
signal in Wakamatsu Fairway, Okudokai Passage and	(2) By AIS (in English):		
Wakamatsu Ku (except for Section 5 and Section 6),	004310704 (Hinoyama Transmitter Station		
(ii) movements of the vessels of 300t and more in Dokai wan,	3. For call and response:		
(iii) wind direction and wind speed observed at Maki Yama,	ch16.		
(iv) visibility in Dokai Wan,			
(v) matters from (3) to (5) listed in "Information provided by			
reporting" above.			
(2) By AIS: matters necessary for safe navigation of vessels			
equipped with AIS in Dokai Wan.			

**Anchorage.** As a general rule, in Section 1-4, all vessels shall not take anchorage. In Section 5 and Section 6, vessels of 300t or more and vessels carrying dangerous goods shall not take anchorage unless they are not given the instruction of the Captain of the port.

#### Cautions for entering.

- 1. The port areas of Section 1 4 are narrow, intricated, including several waterways branching off from main passage; towing boats such as steam launch, etc. frequently pass through. In addition, since the quays are situated close to the passage, vessels should navigate with caution for mooring vessels and vessels during berthing/unberthing operations.
- 2. On both E and W shores of the S side of Wakato O-hashi Bridge, pontoons are situated for the use of passenger ferries crossing frequently Wakamatsu Passage.

### Port facilities.

Name	Position	Length (m)	Water depth (m)	Mooring capacity (D/W×vessel)	Remarks
Anse Public Quay	33°56.7′N 130°48.8′E	450	5.5	1,000t class	
Hibikinada S Public Quay (No.0 – 3)	33°55.9′N 130°49.7′E	615	9 – 10	10,000×1 6,000×2	
Hibikinada No.1 Dolphins		429	Unsurveyed	10,000×2	
Kita-Minato Public Quay (No.1 – 8)	33°55.0′N 130°48.7′E	620	2.5 - 5	600×7	

Name	Position	Length (m)	Water depth (m)	Mooring capacity (D/W×vessel)	Remarks
Wakamatsu Public Quay (No.4·5)	22052 001 120040 2/5	354	5.5 - 6.5	4,000t×2	
Wakamatsu Public Quay (No.6 – 8)	33°53.8′N 130°48.3′E	269	4 – 5	1,000 t×3	
Futajima <del>Public</del> Quay (No.1·2)	33°52.9′N 130°45.9′E	250	5.5 – 8	3,500×1 1,000×1	
Wakamatsu Horikawa Public Quay (No.1 – 4)	33°52.6′N 130°44.9′E	380	4.5 – 5.5	1,000×4	
Kurosaki Public Quay (No.1·2)	22052 001 120016 617	331	8	4,000×2	
Kurosaki Public Quay (No.3 – 7)	33°52.8′N 130°46.6′E	310	4 – 5	400×5	
Shinkawa Public Quay	33°53.8′N 130°48.8′E	350	5.5 – 7	$7,000 \text{ t} \times 2$	
Tobata Tenraiji Quay	33°53.9′N 130°48.9′E	94	Unsurveyed	2,000 t×1	
Tobata Public Quay (No.6 – 8)	33°54.2′N 130°49.2′E	306	4.5 – 5.5	2,000 t×3	Quay of fishing harbour.
Tobata Public Quay (No.3·4)	22054 201 120040 205	230	6 - 7.5	$3,000 \text{ t} \times 2$	
Tobata Public Quay (No.5)	33°54.3′N 130°49.3′E	160	8 – 9	10,000 t×1	
Tobata Public Quay (No.1·2) (Kawashiro Quay)	33°54.3′N 130°49.4′E	170	4 – 5.5	2,000 t×2	
Sakai Kawa Public Quay (No.1 – 5)	22054 401 120050 0/E	316	1 – 7	400 t×5	
Sakai Kawa Public Quay (No.6 · 7)	33°54.4′N 130°50.9′E	260	7	3,500×2	

<sup>\*</sup> In addition to the above table, there are some private mooring facilities for use by companies.

**Overhead bridges.** Wakato O-hashi Bridge (with vertical clearances of 38-42m) connects Tobata and Wakamatsu in the S part of Section 4.

**Overhead cables.** Two overhead cables span Hibikinada Fairway (with vertical clearances of 19m and about 20m) near the border between Section 4 of Wakamatsu Ku and Hibiki-Shinko Ku, where Hibikinada O-hashi Bridge is situated.

Maximum size of vessel handled. Cargo vessel NSS DYNAMIC (233,584 D/W with a draught of 16m) berthed at the quay of Seitetsu-Tobata Hakuchi on 29 November 2003.

**Tugboats.** Several tugboats are available.

Ferryboats. Several ferryboats are available.

**Supplies.** Fresh water supplies are available at major public quays. Fresh water supply vessels and fuel oil supply vessels are available.

**Repair facilities.** There are several dockyards.

**Maritime traffic.** Passenger ferries are operated at just S of Wakato O-hashi Bridge, connecting Tobata and Wakamatsu.

#### 7 **Kokura Ku** (33°53.7′N 130°54.0′E) (Chart JP1263) (JP KNM)

**Outline.** Kokura Ku is a district of commercial and industrial activities, located SW of O Seto in Kanmon Kaikyo. In this district, Sunatsu Passage is situated. Takahama Basin, Sunatsu Hakuchi, Murasaki Kawashiri Basin, and Hiagari Basin are situated in order from E to W. The coastal area is developed as an industrial zone where large ferry terminal, central wholesale market, facilities of power stations, oil companies, etc. are situated.

**Tidal currents.** In Sunatsu Passage, tidal currents flow E or W; the maximum speed at spring tide is 1.9kn; the turn of tidal current occurs almost at the same time as at the middle of Hayatomo Seto.

Maritime traffic. Car ferries bound for Matsuyama Ko are operated, departing from/arriving at Murasakikawa Asano Quay; Passenger liners bound for Ai-no-Shima and Uma Shima are operated, departing from/arriving at Sunatsu Asano S Quay.

# **8 Moji Ku** (33°56.2′N 130°56.5′E) (Charts JP1262, JP1263) (JP KNM)

**Outline.** Moji Ku, located in the middle of Kanmon Ko, has developed as an international trading port. Recently, the area around the port has been developed as a touristic area.



Moji Ku (Photographed in October 2021)

**Tidal currents.** Tidal currents in Moji Ku, except for a narrow area near the coast in the E of Shiraki Saki (33°56.3′N 130°56.8′E), always flow NE except a period from about 1 hour before the turn of tidal current from E-going to W-going at the centre of Hayatomo Seto to about 1 hour after the same turn of tidal current. For the W-going current near No.1 and No.2 Quays of Nishikaigan Wharf in Moji Ku, the maximum speed at spring tide is 1.5 – 2kn, and for the E-going current, 1kn or less.

#### Landmarks.

Landmark	Position	Remarks		
A conspicuous building	33°56.9′N 130°57.8′E	An apartment building, about 127m in height, having 31 storeys, painted dark grey.		
Two radio towers	33°56.3′N 130°57.5′E	Standing near the top of Hiroishi Yama.		
Kanmon Kaikyo Vessel Traffic Service Center	33°53.8′N 130°55.1′E	About 60m in height, painted white.		

**Anchorage.** The sea area off quays at the E of Shiraki Saki in Moji Ku affords favourable anchorage with a bottom of sand mixed by seashells, good holding ground; vessels take anchorage for waiting favourable tide of Hayatomo Seto. Vessels less than 500t are obliged to take anchorage near the coast only.

In the port area of Moji Ku, vessels carrying dangerous goods shall not take anchorage.

Anchorage prohibited area is established along Kanmon Tunnel (for railway) with a length of 300m near the shore of Kyushu.

Port facilities. There are several basins in Moji Ku.

Caution is necessary since drifting sands tend to accumulate at some spots in front of the major quays.