

Pub.303 sup.

Sailing Directions for Seto Naikai

Supplement No.5

16 September 2022



Japan Coast Guard

Explanatory Notes

Sailing Directions for Seto Naikai - Supplement No. 5 is issued to correct the outdated information in Publication No.303 Sailing Directions for Seto Naikai which was published in February 2019.

This supplement contains the information which has been gathered through the work of Hydrographic and Oceanographic Department, Japan Coast Guard by 24 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 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.

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.

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

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

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

Water area	Origin of Water
Port, harbour, bay, river and the connecting areas	The head of harbour or bay, or the upper stream on the river
Seto Naikai (including Kanmon Kaikyo excluding Uko East and West Traffic Routes)	Hanshin Ko
Uko East and West Traffic Routes	Uno Ko

AIS Signal Station Ship-ridden receivers of AIS (Automatic Identification System) or radars Capable of displaying on AIS multiple display or ECDIS (Electronic Chart Display and Information System) indicating the facilities for emitting radio waves on their display screens in order to show symbol marks and such to be the Marking Fairway to navigating vessels.

In the vicinity of area depicted this volume, there are 17 AIS signal stations.

AIS Signal Station Name	Position	Classification	Remarks
Sumoto Oki	34° 21.3' N 135° 00.5' E	Real	Sumoto Oki Light Buoy adjoining
Akashi Kaikyo Traffic Route NE	34° 36.3' N 135° 04.9' E	Virtual	Osaka Wan Vessel Traffic Service Center control
Yura-seto N	34° 17.9' N 134° 58.8' E	Virtual	Same as above
Yura-seto S	34° 16.0' N 134° 58.8' E	Virtual	Same as above
Akashi Kaikyo Traffic Route Center	34° 37.4' N 135° 00.6' E	Real	Akashi Kaikyo Traffic Route Center No.2 Light Buoy adjoining
Yashima S	33° 41.6' N 132° 08.1' E	Real	Iyo Nada Koro No.5 Light Buoy adjoining
Iyo Nada Koro No.2 Light Buoy	33° 44.1' N 131° 53.9' E	Virtual	Kurushima Kaikyo Vessel Traffic Service Center control
Iyo Nada Koro No.4 Light Buoy	33° 42.4' N 132° 03.4' E	Virtual	Same as above
Iyo Nada Koro No.6 Light Buoy	33° 42.8' N 132° 13.0' E	Virtual	Same as above
Iyo Nada Koro No.9 Light Buoy	33° 52.7' N 132° 35.7' E	Virtual	Same as above
Suo Nada Koro No.2 Light Buoy	33° 49.4' N 131° 23.7' E	Virtual	Same as above
Suo Nada Koro No.4 Light Buoy	33° 47.3' N 131° 35.5' E	Virtual	Same as above
Suo Nada Koro No.6 Light Buoy	33° 45.7' N 131° 44.7' E	Virtual	Same as above
Seibu-sekiyu Ube Oki Sea-Berth	33° 50.0' N 131° 12.8' E	Real	Seibu-sekiyu Ube Oki Sea-Berth Light adjoining
Kanmon Passage E entrance	33° 56.8' N 131° 03.0' E	Real	Shimonoseki SE Suido No.1 Light Buoy adjoining
Kanmon Passage W entrance	33° 59.8' N 130° 53.1' E	Real	Kanmon Passage No.1 Light Buoy adjoining
Hibiki Nada Oki Floating Wind Turbine	34° 03.2' N 130° 43.4' E	Real	Hibiki Nada Oki Floating Wind Turbin Mark Light adjoining

Landmarks.

Landmark	Position	Remarks
Myoken Yama	34°30.0'N 134°57.0'E	522m high, the highest mountain in the N of Awaji Shima.
Kannon Statue	34°30.2'N 134°58.7'E	A white statue 139m high with a red light on the top and 2 in the abdominal. The lights are conspicuous.
Maya San	34°44.0'N 135°12.0'E	699m high and there is a station of ropeway in the SE vicinity.
Hachibuse Yama	34°38.0'N 135°06.0'E	246m high and there is a station of ropeway near the peak. There is a white house lighting white at night.
A tower	34°24.5'N 135°18.0'E	256m high with aeronautical warning light and conspicuous from a distance. Rinku Gate Tower Building
A big chimney	34°19.4'N 135°07.8'E	203m high and painted blue and white.

Directions. (Refer to Fig.10 on page 43.)

1. Yura Seto ~ Akashi Kaikyo

5 Take the course to 015° seeing Sumoto Offing Light Buoy on port side and proceed towards Akashi Kaikyo Traffic Route E Light Buoy (34°35.0'N 135°04.9'E).

2. Yura Seto ~ Hanshin Ko Kobe Ku

Take the course to 023° and reach a quarantine anchorage in the offing of Wada Misaki and the boarding point of pilot.

10 3. Yura Seto ~ Hanshin Ko Osaka Ku

15 Veer the course to 048° from the course 023° to Kobe Ku, after passing Sumoto Offing Light Buoy and reach to the outer of Osaka Ku. There is the route of course to 044° from the N entrance of Yura Seto direct to Osaka Ku, but caution must be paid to a wreck (the depth of 15.6m and 16m) in about 1.5M N of Kansai International Airport. Be careful about placed aquaculture facilities of the laver. Aquaculture facilities are placed from September to next May every year in the middle of Osaka Wan (about 6M S of Wada Misaki).

Navigation rules. The designation of track in the sea areas off the traffic routes (Article 25 Paragraph 2 of Maritime Traffic Safety Law, Notice on Designation of Tracks Pursuant to Provisions of Article 25 Paragraph 2 of the Law (Japan Coast Guard Notice No.92, 2010))

Tracks in the sea areas in the N of Osaka Wan (Refer to Fig.11 on page 45.)

- 20 1. Vessels more than 500t which will navigate by crossing Line B after crossing Line A shall navigate in the area to the N side of Line C.
2. Vessels more than 500t which will navigate by crossing Line A after crossing Line B shall navigate in the area to the S side of Line C.

(Remarks)

25 Line A: line joining the following 2 points.

- a point 7,320m, 117°30' from Kobe Light (34°38'54"N 135°10'05"E).
- a point 4,310m, 180° from the point above.

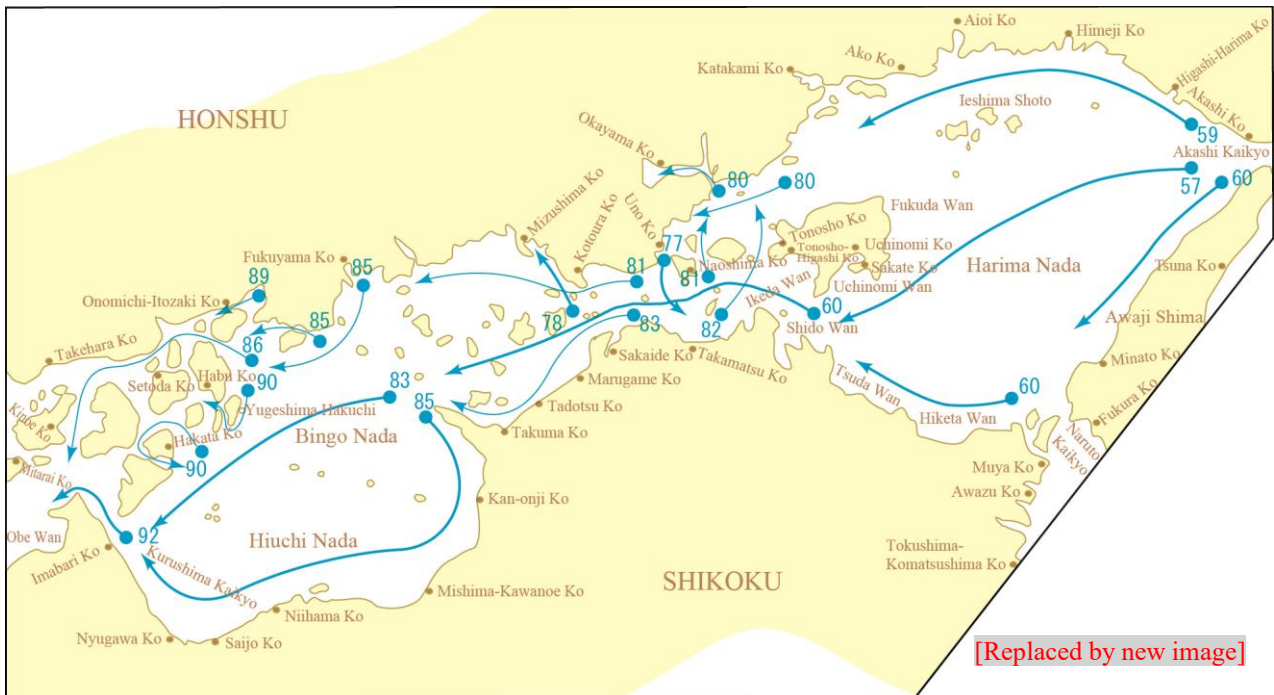
Line B: line joining the following 2 points.

- 30
 - a point 4,630m, 158° from Kobe Light.
 - a point 5,360m, 180° from the point above.

Line C: line joining the following 2 points.

- 35
 - a point 8,840m, 132°30' from Kobe Light. (Kobe Offing No.2 Light Buoy is installed as a landmark for this point.)
 - a point 6,640m, 165° from Kobe Light. (Kobe Offing No.1 Light Buoy is installed as a landmark for this point.)

Chapter 2 HARIMA NADA ~ KURUSHIMA KAIKYO



Harima Nada (Chart JP106)

General Information. Harima Nada is an area surrounded by Awaji Shima and Shodo Shima in E and W and by Shikoku and Honshu in S and N. In the center there is a track (Harima Nada Koro), which is a recommended track. The distance between Akashi Kaikyo and the E entrance of Bisan Seto is about 40M.

In the northern area there is a large vessel navigating in and out of Higashi-Harima Ko, Himeji Ko and Aioi Ko and many small vessels navigating E and W bound in Seto Naikai.

In the southern area there are not many sunken rocks. The area near Ieshima Shoto in the N is dotted with sand shallows and reefs. And all over coast of N and S in Harima Nada, there are many fixed nets and raising facilities.

This chapter describes in the order of the recommended track between the W entrance of Akashi Kaikyo and the E entrance of Bisan Seto, the coastal route of Honshu in the N, the route along the W coast of Awaji Shima and the coastal route of Shikoku between Naruto Kaikyo and the E entrance of Bisan Seto.

Tidal currents. The current flows east-or westbound in Harima Nada except for Naruto Kaikyo, with the current velocity of about 2.5kn at the vicinity of the E entrance of Bisan Seto, and about 1.5kn at the eastern area of Harima Nada and southern and northern side of Shodo Shima, respectively. The condition of tides is mostly the same as at Akashi Kaikyo. However, the current velocity at the center of Harima Nada is about 0.5kn with inconsistent current directions.

W entrance of Akashi Kaikyo ~ E entrance of Bisan Seto (Charts JP106, JP137 A, W150B)

General Information. Near the W entrance of Akashi Kaikyo there are shallow parts both in the S and N sides of the recommended track but the depth is over 20m within 1M from the center line of the track. In the center of Harima Nada there are no dangerous reefs but there are no good landmarks either.

There are many liner services connecting Honshu and Shikoku. In the E coast of Harima Nada, there are many dangerous reefs, fixed nets and aquaculture facilities. And as there are fishing grounds for Stow-nets fishery and Spanish mackerel drift-net fishery (Refer to the section of Fishery in “Chapter 7 NAVIGATIONAL PRECAUTIONS” of Part 1 on page 12.), caution must be paid to the fishing boats in operations and the fishing nets.

Landmarks.

Landmark	Position	Remarks
Kusumi-no-Hana	34°26'N 133°49'E	There is a light beacon.
Washu Zan	34°26'N 133°49'E	113m high. There is an observatory and a hotel.
Nishi-no-Saki	34°26'N 133°47'E	54m high. There is Mizushima Traffic Route Nishi-no-Saki Traffic Control Signal Station.

Overhead bridge. There is Shimotsuiseto O-hash Bridge (vertical clearance of 31m) between Shimotsui (Kurashiki City) and Hitsuishi Shima (Sakaide City).

5

Shimotsui Seto ~ Shiraishi Seto (Chart JP137B)

General Information. In 14M W of Shimotsui Seto there are **Kurotsuchi Seto**, **Shiraishi Seto** and **Kitagi Seto**. W entrance to these straits is connected to Fukuyama Ko and Bingo Nada. Small vessels sail Shimotsui Seto, the S of Ajiro Shoto and Shiraishi Seto. In S of Ajiro Shoto, there are Oki-no-Ishi (rock, 4.1m in depth) and Tokudakino Ishi (rock, 4.1m in depth, with light buoy).

10

According to Traffic Control Signals, some of large vessels entering and leaving Mizushima Ko sail between Noji Shoto and Mukuchi Shima (34°25'N 133°46'E), between **Gantsugase N Light Buoy** and **Tokudakinoishi Light Buoy**, and between **Manabe Shima** (34°21'N 133°35'E) and **Sanagi Shima** (34°20'N 133°38'E), passing through the N area of Te Shima.

15

At about 1M N of the W entrance of Shimotsui Seto there is Mizushima Ko, and **Kasaoka Ko** (Port designated by Port Regulations Law) is located on 3M N of the E entrance to Kurotsuchi Seto.

Anchorage. In the W area of Te Shima, the depth is about 20m and the bottom material is mud.

Landmarks.

Landmark	Position	Remarks
Te Shima	34°24'N 133°40'E	The top (217m high) is conic. Near Takanokoshi Hana at the NW end land is low looking like a solitary island.
Ote Shima	34°23'N 133° 39'E	The top (95m high) is at the N end and most of the land is cultivated land.
Aosa Hana	34°28'N 133°35'E	Isolated hill. Same as Aosa Yama (249m high, conic) in the NW prominent from the distance.
Tsuganomaru Yama	34°28'N 133°30'E	The top (306m high, there is a TV tower (372m high) is a good mark.
Taka Shima	34°26'N 133°30'E	On the top (84m high) there is a stone gateway to shrine. Between Taka Shima and Kogochi Shima via Kotaka Shima, overhead power cable (25m high) exist.
Kitagi Shima	34°23'N 133°32'E	The top (226m high), comparatively big island.

20

Takamatsu Ko ~ Tonosho Ko ~ Okayama Suido (Charts JP137A, JP153)

General Information. This is a route crossing Bisan Seto East Traffic Route starting at Takamatsu Ko and reaching Okayama Ko passing Shodo Shima W side channel. There is a commonly used track for regular passenger vessels between Takamatsu Ko and Tonosho Ko (west coast of Shodo Shima). The depths within the track are more than 10m, but near the center of the track in the W of O Shima, there are shallows in depth less than 10m are extend. There is a car ferry service between Megi Ko (near the center of the E coast of Megi Shima), Ogi Ko (in the W coast of Ogi Shima) and Takamatsu Ko.

25

Tidal currents. The spring rate offshore Takamatsu is about 2kn and the current is especially strong along the S coast of Megi Shima.

Fukuyama Ko ~ Mihara Seto (Chart W1118)

General information. This describes the route in the S of Ta Shima and Yoko Shima reaching the E entrance to Mekari Seto. In the coastal area near Hashiri Shima and Ta Shima, caution must be paid to aquaculture facilities and nets laid.

5 **Landmarks.**

Landmark	Position	Remarks
Hashiri Shima	34°21'N 133°26'E	180m high. 2 peaks (N and S).
Yoko Shima	34°21'N 133°17'E	A mountain of 228m in high is in SE part. Ruined dolphin pier at the SW ends.
Mukai Shima	34°23'N 133°12'E	Takami Yama (283m high) in the SE. There are prominent television towers equipped red lights near its NE part.

Fisheries. In the W of Hashiri Shima, between Fukuyama Ko and the S entrance of Abuto Seto, Ta Shima, Yoko Shima, Hyakkan Shima and in the E coast of Yuge Shima, there are many fixed fish traps and aquaculture facilities for seaweed with some of them about 2M from the shore.

10

Abuto Seto ~ Tosaki Seto (Chart W1118)

General information. Abuto Seto is a channel with about 400m width between **Abuto Saki** (there are a lighthouse and **a temple**) and Ta Shima, and the N entrance is sharply curved where the tidal current is rapid.

In strong winter seasonal winds or rough weather, small vessels navigating in the offing of Ta Shima enter this channel for temporary anchoring. And there is **Utsumi O-hash Bridge** (vertical clearance of 30m) between N end of Ta Shima and Honshu.

15 **Landmarks.**

Landmark	Position	Remarks
A temple	34°21.9'N 133°20.8'E	Located near Abuto Saki. A conspicuous lighthouse stands on NE from the statue.
Ono Zowai	34°22.5'N 133°18.2'E	There is a light beacon.
Kurikuwa Zowai	34°22.9'N 133°17.6'E	
Katabira Zowai	34°22.3'N 133°17.1'E	

20 **Hiuchi Nada** (Chart W1105)

General information. The coast of Shikoku from Mi Saki to O Shima (18M SSW of Mi Saki, E end of Niihama Ko) is a big bay. There is a coastal industrial zone lies between Niihama Ko and Nyugawa Ko, and in some places of this coast there are drying mud bars or sand banks extending about 1M from the shore and a 10m contour lies 1 to 3M offshore.

Anchorage. Except for the area near Mi Saki, the area around 1M from the shore is good conditions for anchorage in depth and bottom material with weak currents.

25 **Fisheries.** In the coast there are many aquaculture facilities and nets laid for seaweed with some of them extending around 2M from the shore.

Mi Saki ~ Kan-onji Ko ~ Niihama Ko ~ E entrance Kurushima Kaikyo (Charts W1128, W1105)

30 **Weather.** In the coast strong S winds of foehn phenomenon sometimes blow from spring to autumn. Locally it is called "Yamaji". "Yamaji" blows in the range of several km of the offing and NE winds blow in the further offing.

35

Ondo-no-Seto {N part of Hiroshima Wan} (Charts JP142, JP1109)
S entrance of Ondo-no-Seto



(Photographed in October 2016)

5 **General information.** Ondo-no-Seto lies between N of Kurahashi Shima and the coastal shore of Honshu (peninsula
 in the S of Kure-shi) and is a track for small vessels navigating between the E-part of Aki Nada and Hiroshima Wan. The
 navigable width (5m or more in depth) at the narrowest channel is only about 60m. The visibility of fairway is bad and
 the current is rapid. High-speed vessels and car ferries sail frequently and ferry boats cross the fairway. And near the
 channel, there are cultivating rafts laid. In case vessels navigating N from the S entrance, they should enter the channel
 10 after reaching the point where they can get an unobstructed view of the fair in order to avoid head-on with S-bound vessels.
 Most of vessels navigating are less than 500t.

Tidal currents. The S (N)-going current begin to flow from about one hour and 30 minutes to 2 hours after low
 (high) water. First maximum current flows about one hour and 30 minutes after the time of the turn of tide. The S-going
 current velocity is about 4kn at spring tides and about 2kn at neap tides. The N-going current velocity is about 4kn at
 15 spring tides and about 2 to 3kn at neap tides. Then after the current velocity is reduced, the current speed is the minimized
 about 3 hour and 30 minutes after the time of the turn of tide (slack water or counter current sometimes occurs). Then
 again S (N)-going current velocity is increased. Second maximum current flows about 4 hour to 5 hours after the time of
 the turn of tide. The S-going current velocity is about 3 to 4kn at spring tides and about 2kn at neap tides, the N-going
 current velocity is about 3 to 4kn at spring tides and about 2 to 3kn at neap tides. Then after the current velocity is reduced.
 20 The N (S)-going current turns about 6 hours after the time of the turn of tide.

Navigational Rules. The designation of track in the sea areas off the traffic routes (Article 25 Paragraph 2 of
 Maritime Traffic Safety Law, Notice on Designation of Tracks Pursuant to Provisions of Article 25 Paragraph 2 of the
 Law (Japan Coast Guard Notice No.92, 2010)).

Tracks in the sea areas around Ondo-no-Seto (Refer to Fig.38 on page 121.)

1. Vessels of 5t or more that have crossed or are intending to cross the line between the point 330 m from Ondo Light (34°11'57"N 132°32'12"E), bearing 085°30', and the point 220 m from that point, bearing 273°, shall navigate with the point 490 m from the same light, bearing 020° (hereinafter referred to as "Point A" in this Paragraph), on the port side.

5 2. Vessels of 5t or more that have crossed or are intending to cross the line between the point 590 m from Ondo Light, bearing 169°, and the point 120 m from that point, bearing 294°, shall navigate with the point 900 m from the same light, bearing 180°, (hereinafter referred to as "Point B" in this Paragraph) on the port side.

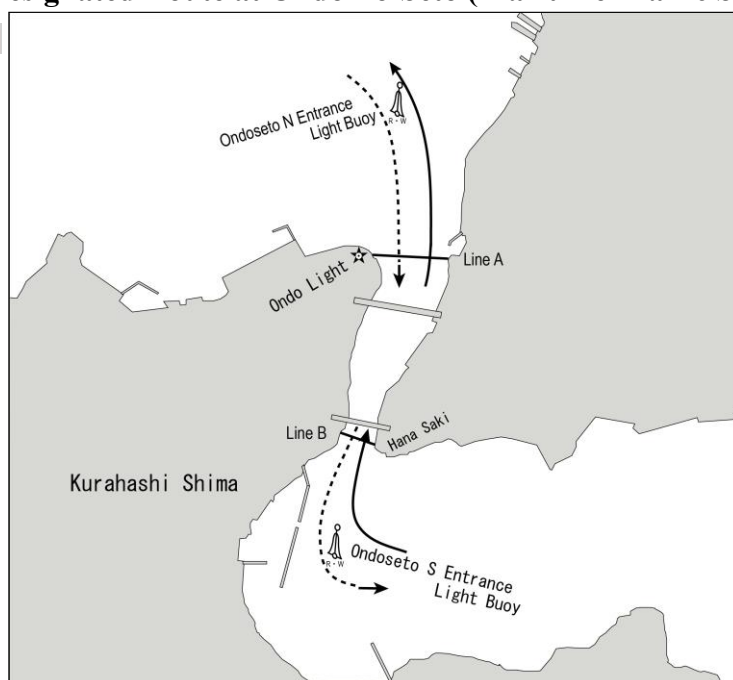
(Remarks) Ondoseto N Entrance Light Buoy is the landmark for Point A.

Ondoseto S Entrance Light Buoy is the landmark for Point B.

10

Fig.38 Designated Route at Ondo-no-Seto (Maritime Traffic Safety Law)

[Replaced by new image]



15 **Overhead bridges.** There is the Ondo O-hashi Bridge (vertical clearance of 23m) at the narrowest part of the channel. The navigable width of the channel under the bridge is about 60m. There is the Second Ondo Bridge (vertical clearance of 39m) at the northern part of the channel. Both bridges are painted red.

Overhead cable. There is an overhead cable (vertical clearance of 28m) in the middle of the channel.

Reference. The 6th Regional Coast Guard Headquarters provides the pictures by live camera on the Internet as reference information in navigating Ondo-no-Seto.

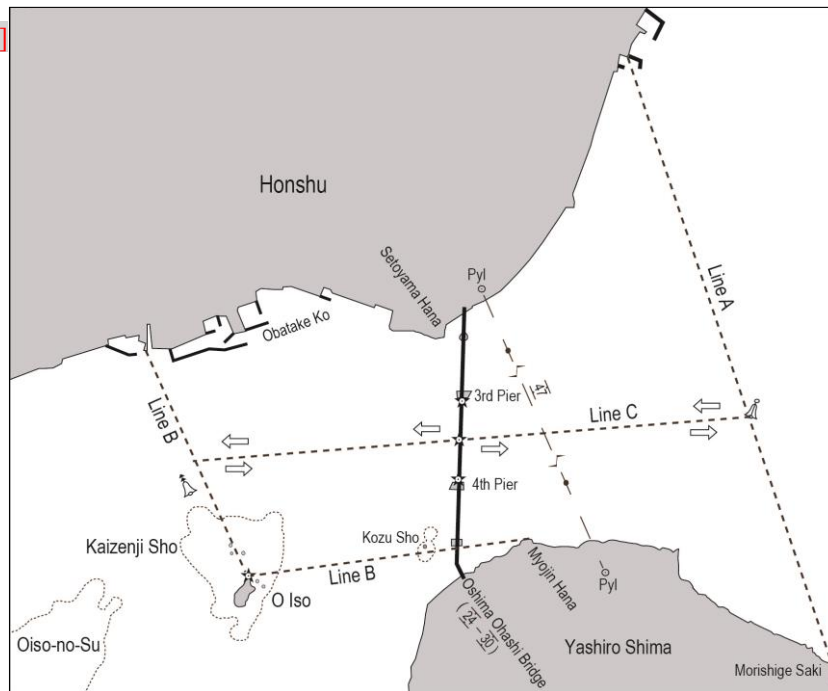
URL <https://www6.kaiho.mlit.go.jp/06kanku/kure/livecamera.html>

Landmarks.

Landmark	Position	Remarks
Setoyama Hana	33°57.7'N 132°11.1'E	It is near the N end of Oshima Ohashi Bridge and in its NNE, there is a big pylon (about 168m high) for overhead cables.
Myojin Hana	33°57.3'N 132°11.3'E	It is near the S end of Oshima Ohashi Bridge and there is a big pylon (about 183m high) for overhead cables in its ESE. On the coast there is a white Torii built of rock.
Kaizenji Sho	33°57.4'N 132°10.5'E	There is a lighthouse at O Iso in the S.
Iino Yama	33°57.0'N 132°11.4'E	It looks conic from every direction and the top of the mountain (263m high), there is an observation platform with light (273m high) being a good mark.
Kasasa Shima	33°56.6'N 132°09.7'E	115m high, With flat top and being wooded with pine trees on the whole island it looks black.
Karasu Shima	33°55.1'N 132°08.1'E	33m high, wooded with trees, Bozu Iwa near the NE end of the island (white round upright rock) is well seen from the distance.

Fig.39 Designated Route through Obatake Seto (Maritime Traffic Safety Law)

[Replaced by new image]



Caution: Vessels navigating Obatake Seto shall not cross Line B, joining Myojin Hana and Oiso Light.

5 **Navigation Rules.** There are designated tracks (see Chart W152) pursuant to Paragraph 1 of Article 25 of Maritime Traffic Safety Law, and vessels of 5t or more passing Obatake Seto must comply with following regulations. (Japan Coast Guard Notice No.59, 1975) (Refer to Fig.39.)

1. Westbound vessels of 5t or more from Line A to Line B shall navigate as follows.
 - (1) Vessels shall navigate in the N area of the Line C. In case the vessel does not meet any other vessels in the area near the bridge piers of Oshima Ohashi Bridge, this shall not apply to the vessel in the area.
 - (2) Vessels shall navigate between The 3rd Pier and The 4th Pier of Oshima Ohashi Bridge.
2. Eastbound vessels of 5t or more from Line B to Line A shall navigate as follows.
 - (1) Vessels shall navigate in the S area of the Line C. In case the vessels do not meet any other vessels in the area

10

With the port traffic control, because AIS information is used, under certain conditions an uncontrolled vessel which has been recognized by and received instructions from the Captain of Mizushima Port may depart via the Mizushima Traffic Route even when the inbound signal “I” is shown only when its destination is in the direction of Shimotsui Seto or the quarantine anchorage.

5 3. Procedure for requesting passage under the port traffic control.

(1) Check the schedule for controlled vessel inbound / outbound passage.

The schedule for inbound / outbound passage of controlled vessels on the Mizushima Traffic Route can be viewed on the Bisan Seto Vessel Traffic Service Center web page.

URL <https://www6.kaiho.mlit.go.jp/bisan/index.htm> (Japanese only)

10 URL <http://www6.kaiho.mlit.go.jp/bisan/m/index.htm> (for Cellular Phone)

(2) Submit a request.

An uncontrolled vessel which would like to pass under the port traffic control should submit a request to the Captain of Mizushima Port (via Bisan Seto Vessel Traffic Service Center) by the means shown below.

(A) Request timing.

15 (a) Control for passage of controlled and uncontrolled vessels on the traffic route.

From 1 hour to 20 minutes before the uncontrolled vessel intends to enter the port traffic route.

(b) Control for departure of uncontrolled vessels before a controlled vessel enters the Mizushima Traffic Route.

From 2 hours to 30 minutes before the uncontrolled vessel intends to depart via the port traffic route.

(B) Request procedure

20 The vessel shall submit a request directly to the Bisan Seto Vessel Traffic Service Center by one of the means listed below.

TEL: +81-877-49-2220 or +81-877-49-2221

FAX: +81-877-49-1413 or +81-877-49-1156

VHF: ch16, call name “BISAN MARTIS”

25 (3) Receive notification of approval or refusal of passage.

The requesting vessel will be notified of the result approving or refusing passage by AIS message, VHF or telephone.

Uncontrolled vessels must confirm the contents of the AIS message, VHF or telephone notification before entering the traffic route.

30 4. Contact for inquiries.

Safety Section, Traffic Department, 6th Regional Coast Guard Headquarters TEL: +81-82-251-5111

Traffic Safety Section, Mizushima Coast Guard Office TEL: +81-86-444-2967

Operations Management Section, Bisan Seto Vessel Traffic Service Center TEL: +81-877-49-5537

Facilities.

Name	Position	Length (m)	Depth (Approx.m)	Capacity (D/W×vessel)	Remarks
Takuma No.1 Quay	34°14.0'N 133°40.6'E	120	5.5~7	3,000t×1	
Takuma No.2 Quay		125	7~7.5	5,000×1	
Takuma No.3 Quay		130	7.5	—	
Matsushita Quay	34°13.9'N 133°40.8'E	120	1.5	700×2	
Mizuide Quay	34°14.1'N 133°41.3'E	120	4.5	700×2	

Maritime authorities and facilities.

Name	Telephone
Takuma Sub-Branch, Sakaide Branch Customs, Kobe Customs	+81-875-83-3071

5 **Tug boat • Ferry boats.** Tug boats for timbers and ferry boats are available.

Supplies. Water could be supplied at Mizuide Quay.

Medical facility.

Name	Telephone
Mitoyo Citizen Hospital	+81-875-83-3001

Marugame Ko (34°18'N 133°47'E) (Chart W1123) (JP MAR)

(Photographed in July 2016)

10

Port designated by Port Regulations Law	Open port	Quarantine port	Immigration port	Domestic animal quarantine port	Plant protection port
○	○		○		○

General information. Marugame Ko lies in about 4M SW of Sakaide Ko and develops as an industrial port following the development of coastal industrial zones. Many large vessels are in and out the port.

15

Landmarks.

Landmark	Position	Remarks
Kami-Ma Shima	34°19.0'N 133°47.5'E	36m high, bowl shaped.
Shimo-Ma Shima	34°18.1'N 133°45.9'E	31m high, a bank to dry, linked with a reclaimed land.
Silo	34°18.5'N 133°47.0'E	
Chimney	34°17.9'N 133°47.8'E	103m high, painted red and white, within the premises of a chemical factory.
Tower of Marugame Castle	34°17.2'N 133°48.0'E	82m high, white wall, illuminated by the lights. Marugame Castle.

Fairways. There are fairways in the E and W side of the harbour, the E is the depth of 7.5m and the W is the depth of 10~13m.