



Do you know the safe passages through the Bohai Strait in China?

The Bohai Strait in China is the only entrance and exit for vessels to the Bohai Sea. In recent years, there have been frequent reports of ships being fined by the authorities for crossing the areas with restricted navigation in the Bohai Strait.

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Moreover, vessels often also come into contact with fishery farms or fishing nets when navigating in those areas. Members and masters of vessels calling at ports in the Bohai Sea are advised to familiarize themselves with the safe passages through Bohai Strait to avoid penalties and fishery related claims.

Sources: Lloyd's List Intelligence - Transit Data (2017-2021); HiFleet - Chart image

Case study

In March 2022, a Gard Member's cargo vessel was on an outbound passage in the Bohai Sea having departed from Tianjin. Before arriving at the Laotieshan Channel, the OOW received a VHF call from Dalian VTS stating that due to a military exercise in the area, the Laotieshan TSS was temporarily closed. The Master on the bridge considered the options available and decided to pass between the islands of Daqin Dao and Tuoji Dao. The vessel adjusted her course and passed through the Beituoji Waterway as shown in the below map. The next day the vessel received a message from the China Maritime Safety Administration (MSA) stating that the vessel had passed through the area with restricted navigation and was therefore in breach of China's Marine Traffic Safety Law.

Fines

The local MSA imposed fines for the breach of the provisions for passing through the restricted area:

1 The owner was fined CNY 40,000 (USD 6,000).

1 The Master was fined CNY 8,000 (USD 1,200).

1 The OOW was fined CNY 6,000 (USD 900).

The MSA also warned the vessel of potential claims against it as a result of contact with fishery farms and nets in the area. Fortunately, no such claims have been received to date.

Transit data

The Bohai Strait is the only entrance and exit for vessels to the Bohai Sea. The Miaodao Archipelago, located in the middle and south of the strait, divides the strait into a dozen waterways. From north to south, there are the Laotieshan Channel, Daqin Waterway, Xiaoqin Waterway, Beituoji Waterway, Nantuoji Waterway, Changshan Waterway, Dengzhou Waterway, etc. According to [information obtained from the Yantai MSA](#), most breaches are in the Beituoji Waterway of the Miaodao Archipelago, as also experienced by our Member's vessel in the above case study. According to Lloyd's List Intelligence, there are 125 transits by vessels of various types and larger than 3,000 Gross Tonnage (GT) of Beituoji waterway alone, during the period 2017 to 2021. Among them:

- Foreign vessels account for 94% of the total transits.
- 58% vessels are bulk carriers and 27% are tankers of various types.
- 45% ships are more than 199 metres in Length overall (LOA). In 2017, a fully cellular containership of 400-metre LOA transited the Beituoji Waterway.
- 12% are vessels entered with Gard.

Passing through Bohai Strait safely

Information available in nautical publications

- **Paper charts:** A cautionary note can be found on British Admiralty (BA) Charts (type: asset-hyperlink id: 8ee8e51c8e844fd5ba2b52701d24d7c8), stating that Laotieshan Shuidao, Changshan Shuidao and Miaodao Haixia (Dengzhou Shuidao) are the only navigable channels through the Bohai Strait. It is worth noting that only vessels of 200GT or less are permitted to transit Miaodao Haixia (Dengzhou Shuidao).
- **ECDIS:** The following snapshot indicates how typical cautionary notes are displayed type: asset-hyperlink id: d441d56da6ea48378b0f35428e71e755: *Navigating is prohibited in the fairways of Miaodao Qundao except Changshan Shuidao and Miaodao Haixia (Dengzhou Shuidao). Only vessels of less than 200GT can go through Miaodao Haixia.*

Typical cautionary notes on the ECDIS

- **Admiralty Sailing Directions (ASD):** type: asset-hyperlink id: 6f5cf2957c224556a9b2a8ab13ab9ac5 states that foreign vessels are only permitted to use three of the channels, namely Laotieshan channel, Changshan channel and Miaodao Haixia (Dengzhou Shuidao) (for vessels of 200GT or less only).

Other maritime safety information

Shandong MSA has published several navigational warnings (NWs) and notices to mariners (NTMs) to address the frequent breaches by merchant vessels, such as the NW [SD0434](#) and NTM [No. 068](#) in 2017, NTM [No. 0519](#) in 2020, NW [SD0088](#) in 2022. The recent warning published on 14 March 2022 includes the following information:

BOHAI STRAIT, MIAODAO ARCHIPELAGO, BEITUOJI CHANNEL NOT OPEN.

*PASSING THROUGH PROHIBITED. *

SHANDONG MSA CHINA.

Frequent breaches

1. Mariners on foreign ships are not familiar with the areas with restricted navigation in the waters of the Miaodao Archipelago. The statistics indicate that foreign ships account for 94% of the total transits of the Beituoji Waterway between 2017 and 2021 and Chinese ships account for 6%. The actual number of breaches by Chinese ships may be even less because the statistics also include approved transits by Chinese rescue ships and training ships.
2. Electronic charts do not display cautionary notes as clearly as paper charts. Many merchant vessels have been equipped with two sets of ECDIS to replace paper charts. However, ECDIS users have to query an object on the screen to find out more about it. Safety information such as the cautionary notes may not as readily available as on paper charts and it may take a few clicks to bring up a submenu to find the information.
3. The names of the various waterways as listed on nautical publications are not easily understood by some mariners. Out of respect for local culture or for consistency with information in Chinese publications, many geographical names used in maritime safety information is in [Chinese Pinyin](#) instead of a proper translation. These may not be easily understood by foreign mariners. For example, in nautical publications, quite often Haixia is used for Strait as in Bohai Haixia, Shuidao for Channel or Waterway as in Laotieshan Shuidao, Qundao for Archipelago as in Miaodao Qundao, etc.
4. Vessels may choose alternative passages to avoid any area with military activities in the Bohai and North Yellow Seas. In our case study, the vessel decided to adjust her route because of the information received from Dalian VTS. There are frequent military drills and exercises in the Bohai and North Yellow Sea. Normally MSA will issue notices to mariners warning merchant vessels against entering the area. In order to avoid such area

and possible congestion or delays, vessels may seek to use alternative routes that they normally would not take. Since Laotieshan TSS is within the coverage of Dalian VTS, the waters of the Miaodao Archipelago are under the administration of Yantai MSA. Vessels may find it difficult to obtain effective support or verification of any route adjustment or selection from the relevant VTS.

5. Vessels may also adjust their routes to avoid high concentrations of fishing boats in the Laotieshan Channel or Changshan Waterway. During the fishing season, there are a large number of fishing boats in Bohai Strait and North Yellow Sea. There have been some collisions between merchant vessels and the fishing boats in Laotieshan Channel and Changshan Waterway in the past. For example, [a collision between a merchant vessel and a fishing boat in the Laotieshan Channel in 2020](#) led to the sinking of the fishing boat with the loss of all 10 crew. Mariners may seek “alternative” routes if they expect increasing fishing traffic along their planned routes through the Laotieshan Channel or Changshan Waterway.
6. Relevant maritime safety information (MSI) may not be readily available to mariners. The NWs published by China MSA are in English and Chinese, but NTMs are only in Chinese. And not all NWs or NTMs are picked up by the [China Navy Hydrographic Office \(CNHO\)](#). Since [United Kingdom Hydrographic Office \(UKHO\)](#) uses CNHO products, including Notice to Mariners to keep UKHO products up to date. If relevant MSI published by China MSA is not picked up by CNHO, mariners who relying on British Admiralty publications may not receive such navigationally significant information from UKHO*.*

Consequences of breaches

Penalties for non-compliance

According to the Maritime Traffic Safety Law of China, any breaches of the legislation will be dealt with by the MSA. Article 44 of the law requires that *a vessel shall not enter or pass through the restricted navigation zone in violation of provisions*. Article 103(7) sets out the penalties imposed on vessels entering or passing through restricted navigation zones in violation of the provisions. Accordingly, vessels shall follow the instructions received from the MSA to take corrective action and:

- *The owner, operator or manager of the vessel in violation of the law shall be fined not less than CNY 20,000 (USD 3,000) but not more than CNY 200,000 Yuan (USD 30,000),*
- *The Master and any liable crew members shall be subject to a fine of not less than CNY 2,000 (USD 300) per person but not more than CNY 20,000 (USD 3,000) and suspension of their certificates of competency (COC) for three to twelve months, and*
- *In more serious instances, the Master and any liable crew shall be subject to revocation of their certificates of competency.*

The measure involving the suspension or revocation of certificates is only applicable to COC or COE issued by China MSA.

Risk of navigation incidents

Contact incidents

Fishing and aquaculture are traditionally important livelihoods of local people living on the islands in the Miaodao Archipelago. Fishing nets or marine farms can be found in the waterways prohibited to navigation. Any vessels transiting the area are prone to coming into contact with marine farms or fishing nets.

Grounding

Merchant ships have been prohibited from navigating the waterways of the Miaodao Archipelago for decades due to military activities. The hydrography data for the area shown on nautical publications may not be accurate and reliable. For example, as highlighted in [MSA's information](#), there are reefs in the Beituoji Waterway making it unsafe for vessels, especially large vessels, to transit.

Recommendations

- Masters of vessels calling northern Chinese ports in Bohai Sea are recommended to:
 - familiarize themselves with the safe passages through the Bohai Strait which are the Laotieshan Channel and the Changshan Waterway for vessels over 200GT. Both [the Laotieshan Channel](#) and [the Changshan Waterway](#) are properly surveyed and are under the supervision of respective VTS,
 - plan for potential congestion and delay, and consider using the other channel as an alternative route if one channel is temporarily not available for transit, and
 - refer to up to date nautical publications onboard, paper/ENC charts, ASDs, etc., and NWs/NTMs published by the MSA when preparing a passage plan, include notes in the plan on the safe passages through Bohai Strait, and make user areas on ECDIS to warn OOW of areas with restricted navigation.
- Members with vessels trading to ports in the Bohai Sea are advised to:
 - share fleetwide circulars about the safe passages through Bohai Strait and the consequences for breaches to raise awareness among crew, and
 - exercise due diligence and remind crew to collect all relevant information on safe transit from nautical publications, ships' agents and [China MSA](#) so as to make appropriate passage plans keeping away from areas with restricted navigation.