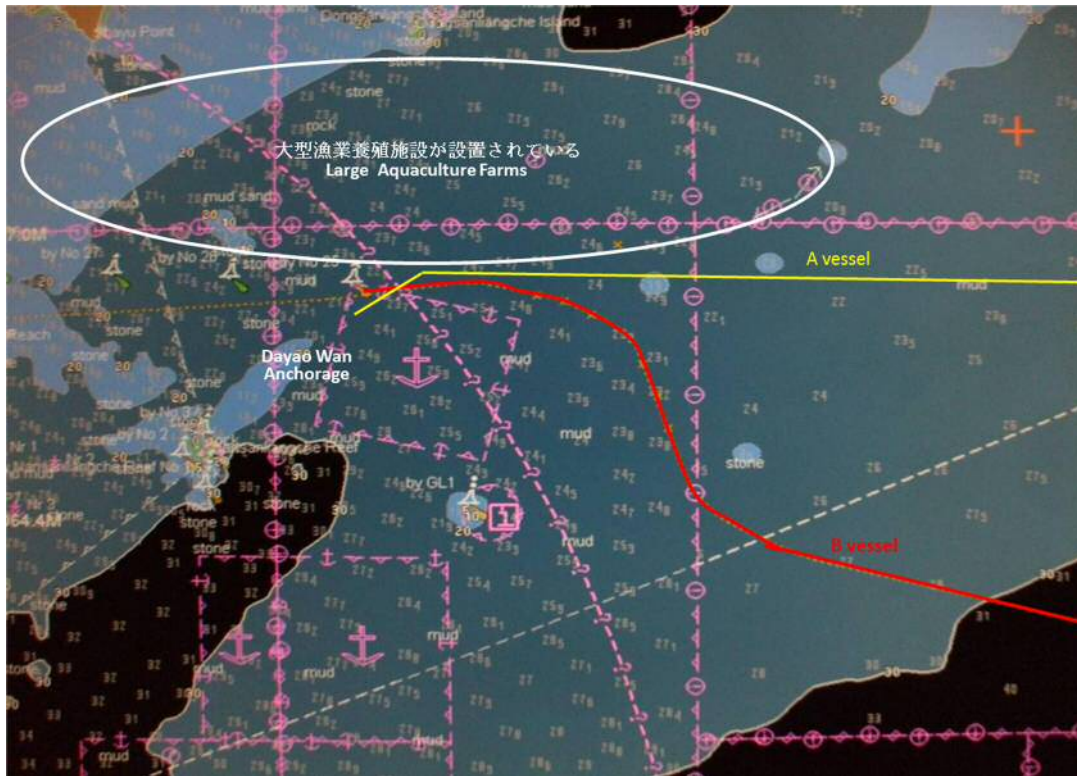


Aquaculture farms off Dalian Xingang

In January and December 2012, significant damage was caused to aquaculture farms off Dalian Xingang, P.R.C. Both incidents involved vessels coming from East of the Dayao Wan anchorage.



Sloma & Co., one of the major law firms in Shanghai, has given us the following advice on the passage to and from Dalian Xingang, and their suggestions as to how to prevent similar accidents in the future.

Here is a summary of the report :

- Foreign vessels on the entry schedule will be ordered by Dalian Vessel Traffic Service (VTS) to sail to the pilot point (38-54.0N, 121-56.5E) of Dalian Xingang. (SSW of Nansanlingche Jiao : approx. 38-57.9N, 121-59.2E)

Then those vessels have to sail to Dalian Xingang, observing Nansanlingche Jiao Light House on the starboard side.

- Foreign vessels not on the entry schedule for the time being will be ordered by VTS to sail to the appropriate anchorage. Please note there are large aquaculture farms North of Dayao Wan Anchorage.

Suggestions on the Passage to and from Dalian Xingang (Sloma Reports)

1. Dalian Xingang, a modern deepwater oil port, is northeast of Dagu Mountain on the Liaodong Peninsula and southwest of Dayao Wan, near the shore of the Yellow Sea. The port boasts total investment of 140 million yuan. It also covers a water area of 180 square kilometres and a land area of 1.57 square kilometres. Dalian Xingang is now a key base for the export of crude oil. Every year, thousands of tonnes of crude oil are shipped from here to the world. Dalian Xingang also has many container terminals, making the traffic there rather busy.
2. In recent years, with rapid economic development in China, the demand for aquatic products has risen. High value-added products from north China, such as fish, sea cucumbers, scallops and seaweed, are popular with consumers at home and abroad. Consequently, more and more investors are attracted to the aquaculture business. In waters near China's northern ports, aquaculture is booming.
3. Usually, aquaculture farmers are required to obtain approval from relevant authorities to breed seafood in a prescribed area of water. However, some farmers engage in the business illegally, without obtaining approval. As a result, the location of some aquaculture areas is unknown to the MSA or other relevant authorities.
4. According to Sloma, vessels navigating in Dalian Xingang must refer to the "Route Directory", the latest version of the "VTS Guide for Users", the Chinese version of charts and information published on the websites of Dalian MSA and Liaoning MSA, including navigation warnings.
5. Foreign vessels entering Dalian Xingang must act as follows:
 - a. Aquaculture areas are usually marked on the chart, but some areas may not be so marked. MSA navigation warnings rarely mention the location of aquaculture fields, either. Out of concern for safety, it is recommended that, at the departure port, the Captain should ask the agent or shipping company to obtain the latest charts and navigation warnings and check the website of MSA Dalian. They may also obtain other relevant materials via the agent at Dalian Xingang. Thereafter, the Captain should work out a feasible navigation plan by referring to the "Route Directory" and the materials so obtained.
 - b. According to Captain CHEN (consultant of Sloma), the location of aquaculture areas is generally fixed but sometimes changes slight, i.e. the areas may move with the change of seasons, change of weather conditions and other factors.
 - c. According to the "VTS Guide for Users" issued by Dalian MSA, the administration of Dalian VTS covers an area with a radius of 13nm from the Dashanshan Dao Light House (38-51.9 N, 121-49.5 E) at the centre. Vessels reaching the reporting line of that area shall contact VTS first and, after receiving instructions from VTS, take appropriate action. Due to the complexity of the waters in that area, it is strictly prohibited to take any action without VTS instructions. See the "VTS Guide for Users" for details.
 - d. Vessels entering the above area shall keep watch on VHF16. Vessels entering the Dayao Wan section of that area shall also keep watch on VHF08.
 - e. An article entitled "Safe Routes for the Avoidance of Aquaculture Areas in Dalian Port" published in "Maritime China" 2007 (11) advises there is a large area of aquaculture fields to the north of Xiaosanshan Dao and to the east of Nansanliangche Jiao, and that the area's location frequently

changes.

f. The article also introduces a recommended route from Dalian Port to Dayao Wan (Dalian Xingang) as follows:

- (1) TC090°, at 0.35nm to the north of Xiaosanshan Dao, then sail to 38°55'.4N, 121°54'.5E, total sailing distance: 3.7nm.
- (2) TC056°, then sail towards Xian Jiao to 38°56'.4N, 121°56'.4E, total sailing distance: 1.8nm.
- (3) TC000°, then sail to 38°57'.8N, 121°56'.4E, total sailing distance: 1.4nm.
- (4) TC329°, then sail towards the entrance of Dayao Wan fairway, total sailing distance: 2.1nm.
- (5) TC304°, then sail towards (34) light buoy, total sailing distance: 1.0nm.

Caution: The location of aquaculture areas to the north of Xiaosanshan Dao often changes. The location of aquaculture areas to the north of points (2), (3) and (4) also changes quite frequently. Vessels are prohibited from crossing the small fairways among the aquaculture areas between Shatuozi and the 300,000DWT crude oil terminal. The crew is required to stay aware of vessels entering and exiting Xingang and clear away from them at an early stage. The vessel shall keep a distance of 2.5nm to the south of Shatuozi and 1.5nm to the east of Shatuozi during the voyage. Be careful of the large-size aquaculture areas to the east of the entrance of Dayao Wan harbor. Due to a high density of traffic, the crew must keep close attention to the position of vessels entering and exiting Dayao Wan harbor, and strengthen communication with them so as to coordinate avoidance actions.

The recommended route only represents a basic choice for vessels under normal situation (the headings mentioned above are for vessels sailing from Dalian Port, and vice versa). What is important is that the crew must correctly position the vessel and enhance the lookout when passing the fairway. With changes of season and development of the port, prompt adjustments will be made to the recommended route if necessary. Duty officers are required to notice any and all changes, no matter how slight they are, in the vicinity and make timely correction of the route so as to facilitate navigation at night and keep the vessel safe.

g. It is a compulsory requirement in China that foreign vessels sail with a pilot. In light of the large aquaculture fields to the east of Nansanliangche Jiao, it is suggested entering Dayao Wan from the south side of Nansanliangche Jiao.

(From Pilot boarding point (38-54.0N, 121-56.5E) to above point (3) of (f))

Be careful of the large-size aquaculture areas to the east of the entrance of Dayao Wan harbor.

h. Generally, vessels on the entry schedule will be ordered by VTS to sail to the pilot point (38-54.0N, 121-56.5E) of Dalian Xingang. The pilot will embark / disembark the vessel within a radius of 0.5nm from that point. Vessels not on the entry schedule for the time being will be ordered by VTS to sail to the appropriate anchorage.

In light of the disordered expansion of aquaculture areas in harbours, the shrinking of navigable areas, and increased complexity of marine traffic, a major concern of the company's safety management team is to find a way of avoiding marine obstacles and securing the safe navigation and safe operation of the vessels.

Attached :

Dalian VTS Guide for Users 3rd Edition by Dalian Maritime Safety Administration of P. R. China, Dalian Vessel Traffic Service Center