Annex 1
Advisory on Navigating in Fog and through Fishing Vessel Areas in Ningbo-Zhoushan Port

Dear Captain:

Hello, welcome to Ningbo-Zhoushan Port!

Ningbo-Zhoushan Port is located in the north and middle coast of Zhejiang, is one of China's major hub port. There are 235 container routes and cargo throughput ranked 1st for 9 consecutive years in the world. The transportation is very busy on the sea. Zhejiang coast stretches from the north of the Yangtze River, Hua Niao Mountain, to the south Da Chen Island. It is the "T" intersection for China Yangtze River economic belt and China coastal transport. This intersection is a busy maritime highway, rich in fishery resources, and complex meteorological and hydrological conditions. In order to ensure a good maritime transport system, and the safety of ship navigation, we provide special reminders as follows:

(1) Navigation in Fog condition

Zhejiang is located in the East China Sea coastal fog area, with frequent dense fog. The fog is strong throughout the seasons, all year round, but mainly occurred in March-July, and become denser and more frequent during the April-June period. Statistics indicate the lowest fog frequency is in September to November, approximately 0.2-0.5%; December to January fog frequency is 1.4%, February and August frequency is 2 - 2.6%; March and July frequency is 6.5%; and April to June the highest frequency, reaching 12.5%. The total number of foggy days during this period can reach up to 10-11 days per month.
When creating a voyage plan, the Admiralty sailing book states there is a need to carefully review information relating to specific navigation requirements, detailed plan routes, with transits to be completed marked with any navigational hazard. When navigating in poor visibility, the vessel should be in manual steering, with the captain taking command of the bridge. In addition, all the required navigation lights should be turned on, the lookouts on each watch should be increased, the correct use of radar, VHF, AIS and other navigation equipment, collision avoidance are to be taken at earliest opportunity, and identify available anchorage ground in advance and take anchor if necessary.

(2) Safe navigation in fishing areas.

Every year, fishing off season for the eastern China Sea commences on 01 May, 12:00 to 16 September, 12:00. This includes trawlers using spar drag method for shrimp, pots cast method, gill nets method and lighting enclosure (cladding) net method, fishing off season commencing from at 01 May, 12:00, to 01 August, 12:00. The Zhejiang coastal route inter-cross with the East China Sea fishing zone, with fishing vessel navigating mostly in formation or operating in concentration. It is common for fishing vessels to operate in pairs using trawling method (Diagram A), long lining and bottom trawling in the night, fishing net cast using buoy or at anchor. In addition, fishing vessels have a custom of crossing the bow of the large vessel for good luck.

Vessel should as far as possible alter the ship’s course to avoid and maintain safe distance from areas with heavy concentration of fishing vessels. Vessel should not cut across areas where fishing vessels are congregated. When navigating in fishing concentrated areas, the vessel should increase the navigation watch team with additional lookouts, maintaining safe speed and with all engines readily available. In close quarter situation, vessel should use ship horn, signalling light, and any means of communication or navigational aid to prevent the risk from further escalation.

When an incident occurs, aside from reporting to the company Designated Person Ashore (DPA), the vessel should report the incident to the nearest China MSA office directly or through the vessel agent and to the Flag Administration.

Diagram A – Twin trawler
(3) Zhejiang coastal fishing vessels operating characteristics

Zhejiang coastal fishing ground common fishing methods are: light purse, double drag, single drag, drag shrimp, sail net, crab cage, stream net, submarine string and small purse seining net. A brief introduction on the fishing method that has impact to safe navigation:

(a). Trawling

There are mainly twin trawler and single Trawler, two kinds of trawling method. Double trawling boat for fishing refers to two separate fishing vessel, dragging in a fixed distance corresponding the hanging fishing nets. The trawl is 400-500 meters in length, deep into the water, trawl speed under normal weather conditions 3-4 knots. When the casting and retrieving the net, usually during night hours or near daybreak, the crew will be busy on the deck, with deck lights shining on them. The flag symbol for trawling is as follows:

① daytime installing two sharp black cones near the top of the mast;
② during night operations, an all-round green light above an all-round white light in a vertical at the bow, and side navigational lights at the aft masthead, and stern light;
③ when casting a net at night, an all-round green light above an all-round green light in a vertical line at the bow and two all-round white light in vertical at the aft masthead with side navigational light and stern light;
④ when retrieving net at night, an all-round green light above an all-round white light in vertical at the bow and one all-round red light above an all-round white light at the aft masthead with side navigational light and stern light.

A single trawler is a fishing vessel alone, dragged a fish net using side and stern tow. Trawling speed approximately 4-6 knots. The identification mark coincides with the double trawling method.
Diagram B – Single trawler

For double fishing trawling vessels your vessel is to maintain from their stern no less than 1 nautical mile and by no less than 0.5 nautical mile on each side. Your vessel is to maintain safe distance when crossing the fishing vessel’s bow and is prohibited to cut across the middle of a double fishing trawling vessel operation. For single drag fishing trawling vessel, your vessel should take the same precaution and avoidance action as per double trawling fishing vessels.

The vessel is to pay attention and avoid the side of the fishing trawling vessel, especially when the vessel is retrieving or casting net, do expect sudden and frequent change of course. We recommended your vessel keep a minimum distance of 0.5 nautical mile away from the fishing trawling vessel.
(b). Drift net fishing

Drift net fishing is expanded vertical mesh net cast in water, having a wide area of operation, from one to several nautical miles in diameter. The net is marked with buoys and flags, and flag pole with flashing light for night operation. One end of the net going downstream direction, is attached to the bow of the fishing trawler. The bow of the fishing trawler marks the direction and position of the fishing. The fishing vessel and the fishing net are drifting based on the wind direction. The means to identify driftnet is a column buoy, buoy and/or flag, and flag pole with flash lights at night. In the calmer sea surface. The top surface of the pontoon or buoy, and fishing vessel can be detected by the radar, forming almost into a straight line on the screen.

![Diagram C – Drift net](image)

Your vessel should maintain at least 0.5 nautical mile away from this fishing trawler, and is prohibited from sailing close to the fishing trawler bow, and maintain at least 1.0 nautical mile away from the fishing trawler when the driftnet has been cast.

In the event, that your vessel is in close proximity of the drift net, the vessel should immediately stop all engines to avoid the net being entangled on the propeller, and hopefully allow the vessel to coast across the fishing vessel’s net using inertia. The Master or officer on watch should maneuverer with caution, using the vessel’s inertia to bring the vessel to a stop position.
(c) Purse seine fishing

Purse seine fishing is a method using a long strip of net to surround a school of fish. It usually consists of one casting vessel, two lighting vessels and a fishing vessel for transport purpose. The net length ranges from 980-1200 meters, and has a coverage of approximately 350m diameter. Purse seine fishing can be identified with a vertical display of an all-round red light above an all-round white light in vertical, and in the direction of the fishing net, a network shows a white light indicating the net position.

Vessel should keep a minimum safe distance 0.5 nautical mile from the upstream direction of the purse seine fishing trawler.

Diagram D – Purse seine