

Loss Prevention Bulletin

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Advice For Masters Proceeding To Chittagong Outer Anchorage To Carry Out Ship-To-Ship (STS) Transfer Operations



There had been considerable increase in the number of vessels calling the port of Chittagong, resulting in congestion at the Chittagong Outer Anchorage as most of the vessels carrying bulk cargo discharge their bulk cargoes into the lighter barges by Ship-to-Ship (STS) transfer operation at outer anchorage.

Last year, average number of vessels lying at anchorage at any time was between 60 and 90. The increase in the number of vessels in an anchorage open to South West Monsoon, with strong prevailing current (between 4 to 6 knots) and poor holding ground have contributed to a large number of accidents.

Three anchorage areas, lettered 'A', 'B' and 'C', at Chittagong Outer Anchorage lie off the entrance of the Karnaphuli River . The minimum charted depths in each anchorage are marked on the chart.

The general instruction provided by the Port Authority does not mention the required draft for shifting vessel from Kutubdia to Chittagong outer Anchorage. Generally, vessels with 10.5 m draft can safely anchor at Outer Anchorage, but some vessels with higher draft of 11.5 m are also seen arriving at Outer Anchorage. Most of these vessels are owned and operated by local owners, who have their own lighter vessels and the vessels are lightened immediately on arrival, to reduce her draft and reduce risk of dragging.

Most of the accidents have been caused due to the following reasons:

1. Trying to cross the bow of an anchored vessel while maneuvering to drop anchor or while shifting anchor position;
2. Arriving at Chittagong Outer Anchorage with excessive draft and inadequate under-keel clearance (UKC) resulting in dragging of anchor;
3. Allowing too many lighter vessels alongside at one time resulting in increased drag and dragging of anchor;
4. Allowing lighter vessels with inadequate fenders alongside;
5. Failure to keep the engine ready for immediate maneuvering in case the anchor starts dragging.

Guideline For Master's Anchoring At Chittagong Outer Anchorage

1. Anchor at a safe distance from other vessels at anchorage;
2. If the UKC is less than two meters, there is a possibility that the vessel will drag anchor. The risk increases during spring tides and during monsoons. The tide can be strong as 6 to 7 knots per hour. The vessels draft should ideally be reduced to less than 10.5 m at Kutubdia before she arrives at Chittagong Outer Anchorage if safe conditions are to be maintained throughout. Risk of dragging is greatest when UKC is minimum and the tide changes from low water to high water and the risk persists until the vessel had been adequately lightened.
3. For vessel's lightering with lighter vessels' alongside the chance of dragging anchor is even more. As a precaution vessels should use more chains (at least 9 shackles in the water), keep main engine on standby throughout and keep the number of lighter vessels' alongside to minimum.
4. When maneuvering for dropping anchor or for picking pilot vessels should never attempt to cross other vessel's bow at a close range. Master should remember that the current is very strong and the vessel may ride on other's cable.
5. Deep draft vessels lightering at Alpha Anchorage should shift to Bravo or Charlie once they attain required draft to make room for safe anchoring of newly arrived deep draft vessel.
6. Complete reliance on ECDIS is discouraged, cross check against up to date paper chart is advised.
7. Ship's Master are required to anchor clear off the prohibited anchorage.
8. Ship's Master must not anchor near the river entrance.

9. Ship's Master must manoeuvre with great care when slowing down for embarking and/ disembarking pilot as the vessel at low speed may be overcome by the current and start to drift uncontrollably.
10. Masters should ensure that the lighter vessels provided for STS operation have adequate fenders and moorings should be attended regularly. Lighter vessels should be cast off immediately if the weather deteriorates.