

Safety Advisory Bulletin: Deep Water Anchoring

Spill Prevention, Preparedness & Response Program

Anchors have been lost when anchoring in Puget Sound.

Puget Sound ports are naturally deep-water ports, and anchorages can be in excess of 40 meters. Designated anchorages in Commencement and Elliott Bays can exceed 100 meters. When designated anchorages are full, ships may have to anchor in depths approaching 125 meters.

A bulk carrier attempting to anchor in 125 meters of water walked out three shackles of chain and then attempted to drop the anchor the remaining two shackles to the bottom. The brake had no effect, and the anchor was lost.

In other cases, anchors were walked out under power to within 15 meters of the bottom in depths of 100 and were still lost. The condition of the anchor windlass was suspect in these losses.

Losing an anchor is expensive and a runaway anchor can cause injury to the anchoring equipment and the foredeck crew. In a crowded anchorage in bad weather, a lost anchor can lead to close quarters situations, or worse. It is extremely important that ship owners, operators, and masters ensure the anchor windlass and ground tackle are properly maintained and the anchor is deployed following proper procedures.

Anchoring procedures

Nautical publications caution against dropping the anchor from the brake in deep water, instead the anchor should be walked out under power from the windlass. *Knight's Modern Seamanship* suggests when anchoring in depths of 70 to 90 meters, it is advisable to walk out the anchor to its desired scope. *Towards Safer Ships & Cleaner Seas* takes a more cautious approach and suggests walking the anchor to its desired scope in any water over 40 meters.

Most vessels anchoring in Puget Sound will anchor with a Puget Sound pilot on board who will work with the master and crew to safely anchor the vessel. Inform the pilot of the condition of the anchors either using the pilot card or communication with the pilot while approaching the anchorage. Include information such as:

- The number of operational anchors.
- The scope of chain available for each anchor.
- The nature of any recent damage to the anchors, chain or windlass and any repairs effected.
- The nature of any temporary repairs.
- The condition of the anchor brake.

Additional Information:

- Knight, A. M. (1991). Knight's Modern Seamanship. 18th ed. edited by John V. Noel, Jr., associate editors, Frank E. Bassett, Carvel Blair, Dee Fitch.
- Dudley, J.; Scott, B.; Gold, E. (1994). Toward Safer Ships & Cleaner Seas.
- DNV (2022), https://www.dnv.com/maritime/anchor-loss-prevention.html.



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