

ASSESSING THE RISK OF COLLISION

WOULD AN APPRECIABLE
CHANGE IN BEARING
BE ENOUGH?



Would an appreciable change in bearing be enough to assess the risk of collision?

When the risk of collision is assessed using a series of compass or radar bearings, it is important to understand its limitations, both at short and long range.

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As an example of short range assessments, a bearing change of 5 degrees at 2 nautical miles may still result in a close quarter situation as the closest point of approach (CPA) could be about 0.1 nautical mile (*A Guide to Collision Avoidance Rules* by A. Cockcroft, J. Lameijer, 7th Ed., 2017).

Mariners should therefore understand that a large change in the bearing at short range may give a misleading indication that a risk of collision no longer exists. Same is true for long ranges where an appreciable change of bearing may still result in a close quarter situation, if the other vessel is making small course alterations during the approach.

We therefore recommend using the radar and ARPA's target plotting together with visual/radar bearing for assessing the risk of collision.

For more information, see our

Insight [Collisions at sea - Unavoidable?](#)

Insight [Collisions - Why do they occur?](#)

Insight [A collision that should have been avoided](#)

Case study type: asset-hyperlink id: 214e46b62b294a858b1ef5b574ef7476

Alert [Why wait until the last mile to avoid a collision?](#)

Loss Prevention Posters Risk of collision [Low resolution](#) type: asset-hyperlink id: aad178481fb04f2fb8d0ce3d9dc1f17c