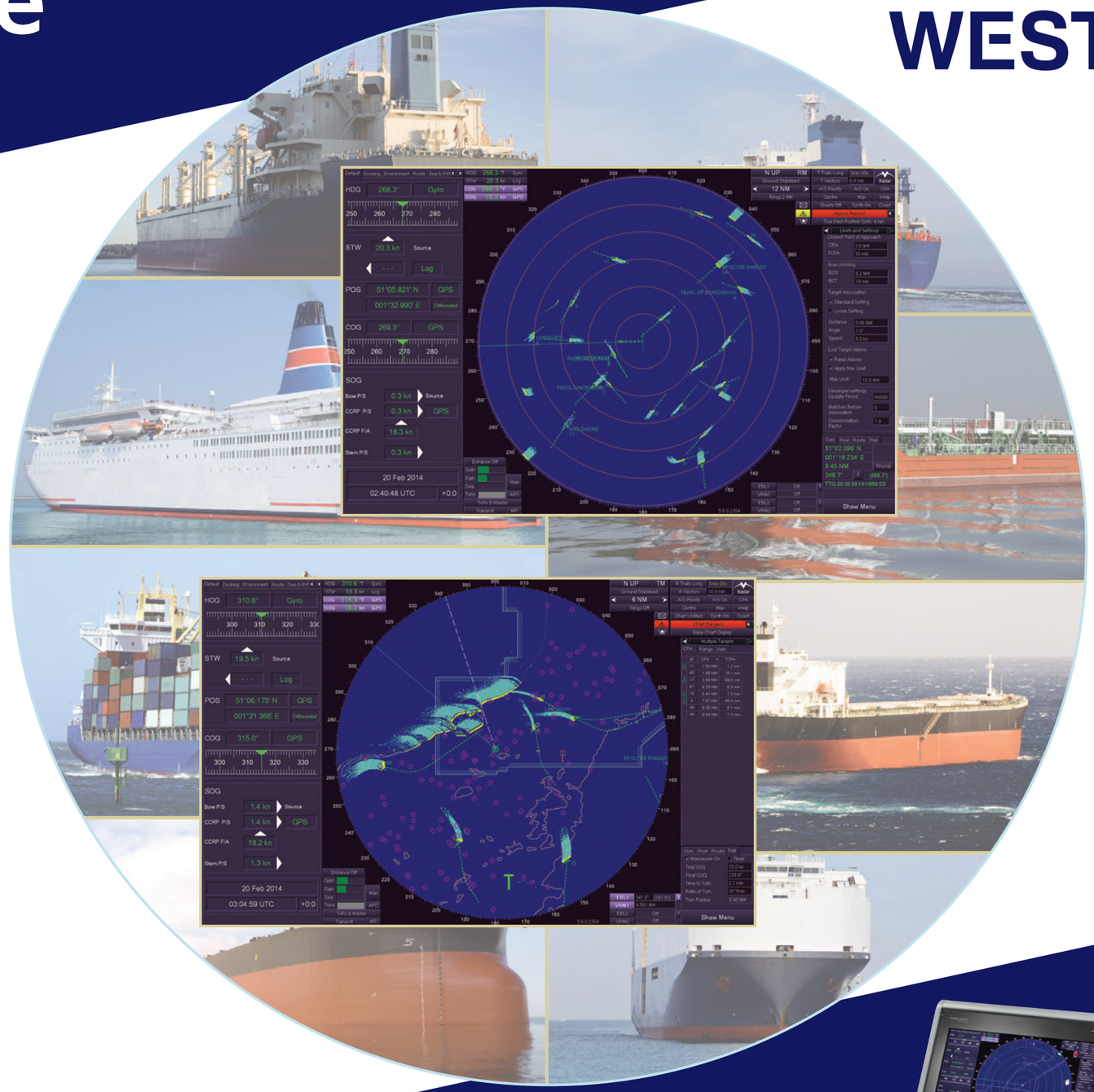
Radar Best Practice

ARPA Usage – Part 2

WEST



When using the ARPA the following points should be considered:

- ✓ When determining whether a close quarters situation is developing and/or risk of collision exists, the use of relative vectors is preferred. However, it is good practice to switch between relative and true vectors to gain a better appreciation of the navigational situation
- ✓ Relative target trails which are sufficiently distinct may provide an early indication of whether a close quarters situation is developing and/or if risk of collision exists
- ✓ Combining true vectors with true trails or true history is not recommended. The resulting visual display will give no indication of the relative movement of other vessels and the risk they present
- ✓ If a target is approaching and successive radar compass bearings remain steady, a risk of collision exists. However, there may still be a risk of collision even if the compass bearing is changing, particularly when targets are at close range, are large or involve tugs and tows
- ✓ It should be remembered that ARPA accuracy may be poor if there is a significant difference in speed between the vessel and a target, or if one or both vessels are continually altering course
- ✓ Some ARPAs may not be able to track small, high speed craft accurately, and it is possible that such targets may be lost
- ✓ Bear in mind that when using ARPA, small alterations of course and/or speed by other vessels may not be readily apparent
- ✓ Be alert to the possibility of target swap/target loss when vessels are in near proximity to each other or pass close to buoys or beacons
- ✓ Be aware that wind farm structures may interfere with radar performance and ARPA may not always be able to detect and track targets in such circumstances
- ✓ Where available, AIS target data on the radar display can give information on the course and speed of another vessel. However, although changes in course and/or speed may be readily apparent, the accuracy of such information should be viewed with caution as the sensors on the transmitting vessel may be poorly configured or calibrated
- ✓ Practice using the ARPA trial manoeuvre function to improve familiarity with its use, capabilities and limitations, but only when safe and practicable to do so
- ✓ When contemplating an alteration of course and/or speed to avoid a close quarters situation and/or risk of collision, particularly in high traffic areas, consider using the ARPA trial manoeuvre function to see the effect of the proposed manoeuvre on all tracked targets. Remember to apply a suitable time delay to ensure the trial reflects the intended action
- ✓ While at anchor, measure speed over the ground by gauging the echo reference function against a fixed object of limited size to indicate whether or not the anchor is dragging. Permanent trails may be switched on for the same purpose and to show if other vessels in the vicinity are dragging anchor
- ✓ Integral ARPA test programmes should be run regularly to check the validity of the plotting data

Important: In order to determine whether a close quarters situation is developing, or risk of collision exists, use all available means appropriate to the prevailing circumstances and conditions

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Important: The above points are listed for guidance only. It is essential that you read the operating manuals for the APRAs aboard your vessel and they are used in accordance with the manufacturers' instructions