The Seven Step Tuning Method

Tune your radar at the beginning of every watch. 6 miles or 12 miles are common ranges used for tuning. We recommend that the radar be tuned at the highest range scale you expect to use during your watch

1) Set monitor brightness to Maximum.
2) Remove all suppressions (examples below):
    - IR, interference rejection OFF
    - Echo Average, Echo Stretch OFF
    - Auto Tune OFF
    - FTC (Rain) OFF
    - STC (Sea) OFF
    - Trails OFF
3) Adjust Gain to highest level.
4) Tune for Maximum return.
5) Reduce Gain until a lightly speckled background remains up to the limits of the range scale in use.
6) Reduce monitor brightness for comfortable viewing.
7) Add suppressions and other features as required.

Radar Presentations

There are five basic radar presentations:

1) Unstabilized, Head Up, Relative Motion
2) Stabilized, North Up, Relative Motion
3) Stabilized, Course Up, Relative Motion
4) Stabilized, North Up, True Motion
5) Stabilized, Course Up, True Motion

Relative Motion

This presentation represents the own ship in a fixed position on the radar display (either centered or off-centered). Therefore, all target motion is displayed relative to the own ship. Subject to the effects of current and wind, fixed objects appear to move on a reciprocal course with the same speed as the own ship. Vessels proceeding on the same course and speed as the own ship appear to be stationary on the radar display. In order to determine a targets true course and speed with any certainty, it is necessary to perform a plot by applying own ship's course and speed to the relative motion of the target.

True Motion

This presentation uses own ship heading and speed to shift the origin of the heading flash across the display at a speed that corresponds to the ship's speed on a scale proportional to the range scale in use. Therefore, subject to the effects of current or wind, a stationary object should appear stationary on the display and a vessel making the same course and speed as own ship will move across the screen in tandem with the own ship's origin.