

A decorative graphic on the right side of the page. It features three blue circles of varying sizes, each composed of concentric circles with a gradient from dark blue to light blue. Two thin blue lines intersect at a point, forming a V-shape that frames the circles. The circles are positioned in the upper right and lower right areas of the page.

Preliminary test Procedure

SG series

Sea Trial Test procedure for new gyro installation

HAT. (Harbour Attendance Test)

1. Check for loose items around gyro, mounts and power cabling
2. Loosen mooring lines so that vessel can roll in the berth.
3. Apply rolling motion to vessel by applying human weight to side of vessel. Enhance the rolling motion in a periodical manner so as to induce maximum roll.
4. Measure the roll period. ie 5 rolls in 15 seconds and roll amplitude.
5. Start up gyro. Record current and compare to specifications. As gyro starts to spin faster, record when gyroscopic precession is first noticed (ie 5 minutes). Apply rolling motion to the vessel every 5 minutes in the manner previously used.
6. Run gyro for 10 minutes once it has reached speed and test the rolling motion. The vessel will become firm. Check for noise, heat and vibration.
7. Turn gyro off and let it spin down. Check equipment.

SAT. (Seatrial Attendance Test)

1. Record trim, vessel's condition, tankage, pax and draft.
2. Depart dock for testing area. Note weather conditions, wave height (wave buoy), wave direction, swell and general wave condition (confused, regular etc)
3. Perform test run in beam seas with no gyro on. Travel for 5minutes at 2/3 knots. Maintain a constant heading. Estimate the roll angles by looking at the sea horizon and a vertical member on the boat. Electronic angle indicators connected to a computer can get better data.
4. Return to start point and run gyro at 40% spin speed. Test as for the above course.
5. Repeat for spin speeds at 60%, 80%, 100%.
6. Note optimum frequency for particular wave height. Increasing frequency past optimum does not necessarily increase the roll reduction.