EQUIPMENT WE LOVE….TO HATE – We-re back in the world of Interior Communication (IC) ratings to look at the equipment every ship relies on and curses at the same time, the Gyrocompass. Gyrocompasses are used to supply directional information to the compass repeaters and Rolland pitch information for radar stabilization, fire control systems, Dead Reckoning Analyzer DRA and anti-submarine fire control information. Shipboard gyrocompasses are North-seeking gyros. The gyro spins axis is kept in the horizontal and in the plane of the meridian.

The gyro picture is a Sperry MK -19 Gyro aboard the USS Sullivans. The Frank Knox also used the same Sperry Mk-19 system. The master gyro is mounted near the center line of the ship No steam or water line pass over, near or under the gyro. The gyro seeks and indicates the meridian and zenith serving as a reference for measurement for the ship's roll, pitch and heading. The reference data is used in navigation, stabilizing surveillance and fire control devices. The 115v power supply and back up supply are maintained by the IC rates. There are different modes, or settings to understand. The ships gyro has three modes of operation, Normal, Directional Gyro and High Latitude. The High Latitude setting is illustrated with a story from USS Midway. Midway's ships' gyros were lit-off and a difference was noted in the compass readings served by each gyro – 8 degrees

difference! No alarms were present. Eventually someone decided to check the mode settings and discovered that one gyro was set in High Latitude sufficient for steaming North of Washington State. The other gyro was set in normal mode. The embarrassed Division officers and petty officers had some explaining to do.
Even in normal mode some exciting things can happen. When lit-off, there is a normal 24-hour “settling” time to ensure proper operation. A fast settle time is sufficient for a ship to get under way. Four hours is the fast-settle time with the Sperry Gyro; 24 hours is the recommended settle rate. IC’s would generally power up the gyrocompass the night before getting underway.