§ 164.41 Electronic position fixing devices.

(a) Each vessel calling at a port in the continental United States, including Alaska south of Cape Prince of Wales, except each vessel owned or bareboat chartered and operated by the United States, or by a state or its political subdivision, or by a foreign nation, and not engaged in commerce, must have a satellite navigation receiver with—

(1) Automatic acquisition of satellite signals after initial operator settings have been entered; and
(2) Position updates derived from satellite information during each usable satellite pass.

(b) A system that is found by the Commandant to meet the intent of the statements of availability, coverage, and accuracy for the U.S. Coastal Confluence Zone (CCZ) contained in the U.S. “Federal Radionavigation Plan” (Report No. DOD–NO 4650.4–P, I or No. DOT–TSC–RSPA–80–16, I). A person desiring a finding by the Commandant under this subparagraph must submit a written application describing the device to the Coast Guard Deputy Commander for Operations (CG–DCO), 2100 2nd St. SW., Stop 7471, Washington, DC 20593–7471. After reviewing the application, the Commandant may request additional information to establish whether or not the device meets the intent of the Federal Radionavigation Plan. Note: The Federal Radionavigation Plan is available from the National Technical Information Service, Springfield, Va. 22161, with the following Government Accession Numbers:

Vol 1, ADA 116468
Vol 2, ADA 116469
Vol 3, ADA 116470
Vol 4, ADA 116471

§ 164.42 Rate of turn indicator.

Each vessel of 100,000 gross tons or more constructed on or after September 1, 1984 shall be fitted with a rate of turn indicator.


(a) Until December 31, 2004, each vessel required to provide automated position reports to a Vessel Traffic Service (VTS) under §165.1704 of this subchapter must do so by an installed Automatic Identification System Shipborne Equipment (AISSE) system consisting of:

(1) Twelve-channel all-in-view Differential Global Positioning System (dGPS) receiver;
(2) Marine band Non-Directional Beacon receiver capable of receiving dGPS error correction messages;
(3) VHF–FM transceiver capable of Digital Selective Calling (DSC) on the designated DSC frequency; and
(4) Control unit.

(b) An AISSE must have the following capabilities:

(1) Use dGPS to sense the position of the vessel and determine the time of the position using Universal Coordinated Time (UTC);
(2) Fully use the broadcast type 1, 2, 3, 5, 6, 7, 9, and 16 messages, as specified in RTCM Recommended Standards for Differential NAVSTAR GPS Service in determining the required information;
(3) Achieve a position error which is less than ten meters (32.8 feet) 2 distance root mean square (2 drms) from the true North American Datum of 1983 (NAD 83) in the position information transmitted to a VTS;
(4) Achieve a course error of less than 0.5 degrees from true course over ground in the course information transmitted to a VTS;
(5) Achieve a speed error of less than 0.05 knots from true speed over ground in the speed information transmitted to a VTS;
(6) Receive and comply with commands broadcast from a VTS as DSC messages on the designated DSC frequency;
(7) Receive and comply with RTCM messages broadcast as minimum shift keying modulated medium frequency signals in the marine radiobeacon.