§ 164.40 Devices to indicate speed and distance.

(a) Each vessel required to be fitted with an Automatic Radar Plotting Aid (ARPA) under § 164.38 of this part must be fitted with a device to indicate speed and distance of the vessel either through the water or over the ground.

(b) The device must meet the following specifications:

1. The display must be easily readable on the bridge by day or night.

2. Errors in the indicated speed, when the vessel is operating free from shallow water effect, and from the effects of wind, current, and tide, should not exceed 5 percent of the speed of the vessel, or 0.5 knot, whichever is greater.

3. Errors in the indicated distance run, when the vessel is operating free from shallow water effect, and from the effects of wind, current, and tide, should not exceed 5 percent of the distance run of the vessel in one hour or 0.5 nautical mile in each hour, whichever is greater.

§ 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 Federal Radionavigation Plan must have the following capabilities:

1. The display must be easily readable on the bridge by day or night.

2. Errors in the indicated speed, when the vessel is operating free from shallow water effect, and from the effects of wind, current, and tide, should not exceed 5 percent of the speed of the vessel, or 0.5 knot, whichever is greater.

3. Errors in the indicated distance run, when the vessel is operating free from shallow water effect, and from the effects of wind, current, and tide, should not exceed 5 percent of the distance run of the vessel in one hour or 0.5 nautical mile in each hour, whichever is greater.

§ 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