MTSA Regulations found at 33 CFR
Parts 26, 161, 164, & 165—Automatic Identification System Rule

"The information in this document is for use as an aid to interpretation. Should anything in this document be in conflict with 33 CFR Subchapter P or CG policy, then Subchapter P and the CG policy determinations control."

Q. What is the Automatic Identification System (AIS)?

Ans. Automatic Identification Systems (AIS) technology relies upon global navigational positioning systems, shipboard sensors, and digital VHF radio communication equipment operating according to standardized digital communication protocols that permit the voiceless exchange of navigation information between vessels and shore-side vessel traffic centers. The information is continually updated in near real-time and received by all AIS-equipped ships and shore stations in its vicinity.

Q. What types of information is made available by the Automatic Identification System and what are the advantages of installing the AIS?

Ans. The AIS provides mariners with accurate navigation information, such as:

- Static Information—Vessel call sign, name, IMO identification number, dimensions, type;
- Voyage-Related Information—Draft, cargo type, destination, and estimated time of arrival; and
- Dynamic Information—Time in universal time, coordinated, latitude/longitude position, course over ground, speed over ground, heading, rate of turn, navigational status.

In addition, shore stations will be able to relay pertinent navigational data from other sources, such as the National Oceanic and Atmospheric Administration's Physical Oceanographic Real Time System and U.S. Coast Guard Vessel Traffic Centers.

The advantage of an automatic and continuous exchange of information is that all can access it and since it is digital data, software can be modified to the mariner's requirements by the manufacturer thus reducing the need for voice radio exchanges. In addition, the AIS enhances the mariner's situational awareness, permits more effective and reliable passing arrangements, and provides the Coast Guard with a comprehensive and informative traffic image and maritime domain awareness not possible with radar or video surveillance alone.

Q. What is the Automatic Identification System (AIS) Rule?

Ans. The U.S. Coast Guard has developed rules applicable to both U.S. and foreign-flag vessels that require owners and operators of most commercial vessels to install and use the AIS. The AIS rule is part of our domestic and international effort to increase the security and safety of maritime transportation. See 33 CFR parts 26, 161, 164, and 165.

Q. Who is affected by the Automatic Identification System Rule?

Ans. Owners and operators of U.S. or foreign-flagged vessels in commercial service who meet the applicability provisions are affected. Generally these include:

- Vessels on international voyages that are:
  - Self-propelled commercial vessels of 65 feet or more in length, other than fishing vessels and passenger vessels.
  - Tankers.
  - Passenger vessels that are over 150 gross register tons.
  - Vessels, other than passenger vessels or tankers, over 300 gross tons.
- Vessels operating within U.S. Vessel Traffic Service or a Vessel Movement Reporting System area denoted in 33 CFR 161, that are:
  - Self-propelled commercial vessels of 65 feet or more in length, other than fishing vessels and small passenger vessels certificated to carry 150 or fewer passengers.
  - Towing vessels of 26 feet or more in length and more that 600 horsepower.
  - Passenger vessels, regardless of size, certificated to carry more than 150 passengers for hire.

The terms herewith are as defined in 46 USC 2101, unless noted in 33 CFR § 164.46. Note: the term fishing vessels does not include fish processors or tender vessels. See 33 CFR, Part 164.46.

Q: When must the Automatic Identification System be installed on vessels?

Ans: Vessels on international voyage must install the AIS as specified in the SOLAS Regulation V/19.2.4 implementation schedule adopted by the International Maritime Organization, but, no later than 31 December 2004; as do vessels on domestic voyage within a U.S. Vessel Movement Reporting System or Vessel Traffic Service Area.

Q: If a fishing vessel has a Vessel Monitoring System (VMS) that provides vessel identification and location data, is the VMS an acceptable substitute for the AIS?

Ans: No, it is not. The AIS and VMS are not inter-operable, each uses different communication systems, protocols, and, reporting rates that make them incompatible.

Q: How much will the Automatic Identification System cost?

Ans: An approved AIS can range in price between $3000 and $9000, not including installation cost which will vary considerably depending on the level of integration of the AIS with other shipboard systems (e.g. radar, speed log, rate of turn indicator, navigation positioning system, ECDIS, etc.)

Q: Is the Coast Guard considering requiring the Automatic Identification System for domestic voyages outside of VTS areas?

Ans: Yes. The Coast Guard announced its AIS regulatory intent through a Public Notice Request for Comments and conducted a series of public meetings in New Orleans, La, New Bedford, MA and Seattle, WA requesting the public's input on how to expand AIS carriage.

Q: How will the Automatic Identification System help to increase security?

A: The Coast Guard believes that the AIS will improve security by increasing the Coast Guard's awareness of vessels in the maritime domain, especially vessels approaching U.S. ports. The AIS corroborates and provides identification and position of vessels not always possible through voice radio communication or radar alone.

Q: Are there alternatives to the Automatic Identification System rule for small businesses?

Ans. No, there are no special provisions or alternatives in the AIS rules for small businesses.

Q: Does the installation of the Automatic Identification System require additional equipment in order for the AIS to operate properly?

Ans. Not all AIS units are able to broadcast position, course, and speed without the input of an external positioning device (e.g. dGPS); thus the use of other external devices (e.g. transmitting heading device, gyro, rate of turn indicator) is highly

recommended, however, not required except as stated for certain vessels as required under the Safety of Life at Sea Convention Chapter V, Regulations 19, as stated in 46 CFR § 164.46(a)(2). Note: since AIS is digital data, it may be displayed and integrated into a wide range of devices (e.g. Electronic Charts Systems, Radar, Automatic Radar Plotting Aides (ARPA), personal computers, etc.) however, existing devices would likely need software and/or interfaces updated by their manufactures to ensure proper integration of AIS data.

Q: Will it be necessary to have electronic navigational charts for use with the Automatic Identification System?

Ans. Neither the AIS regulations nor the MTSA specifically require the use of electronic navigational charts as a component of AIS. For the time being, the AIS carriage requirements are met if the unit is equipped with a Minimum Keyboard Display (MKD). The MKD does not use electronic navigational charts. However, the recently enacted Coast Guard and Marine Transportation Act of 2004 (P.L. 108-293) requires that all vessels equipped with AIS also have electronic navigational charts prior to 1 January 2007. Regulations implementing this additional requirement will be issued in the near future.

Q: When do AIS regulations become effective?

Ans. AIS Regulations became effective November 21, 2003. All vessels required to have an AIS as denoted in 33 CFR § 164.46(a), must have a USCG 'type-approved' and 'properly installed' AIS on the vessel no later than December 31, 2004.

Q: When must AIS be in operation?

Ans. Vessels equipped with AIS (either by mandatory carriage or voluntarily) must abide by the requirements set forth in Title 33, Code of Federal Regulations, §§ 164.46 and 161.20, and should especially ensure their AIS is in 'effective operating condition', which entails the continuous operation of AIS and the accurate input and upkeep of AIS data fields during all times that the vessel is navigating (underway or at anchor).

Should continual operation of AIS compromise the safety or security of the vessel or where a security incident is imminent, the AIS may be switched off. This action and the reason for taking it must be reported to the nearest U.S. Captain of the Port or Vessel Traffic Center and recorded in the ship's logbook. The AIS should return to continuous operation as soon as the source of danger has been mitigated.