



AIS

Automatic Identification System



What is AIS?

AIS (Automatic Identification System) is a navigational tool that continually broadcasts the name and other information on a vessel to aid navigation safety and the efficiency of vessels' operations. AIS is proving to be the most significant development in navigation safety since radar. Since 2004, AIS has internationally been adopted as required equipment on larger commercial vessels, however as the price of AIS units have dramatically come down to less than \$1,000 (AIS B) more and more vessels are voluntarily installing AIS to enhance safety. AIS transmits a vessel's identity, position, speed and course, and other relevant information to other AIS equipped vessels within 20-40 miles away. Combined with a network of shore receiving stations, the AIS system also offers owners, operators, associates and families the ability to monitor a vessel's location to provide an added safety net as well as to aid the efficiency of shore support operations as well as provide a peace of mind for friends and families. The Coast Guard also monitors AIS transmissions to assist carrying out their Search and Rescue missions as the AIS shore receiving network can immediately locate AIS equipped vessels in distress as well as the locations of other AIS vessels that may be available to provide help.

While AIS does not require a vessel to be equipped with radar, it can offer similar capabilities and enhance a radar image by incorporating AIS data, such as the name, type of vessel, speed, destination and other information to acquired radar contacts.



Due to the way vessel data is broadcast in packet bursts the range of AIS is far greater than VHF voice data, normally extending well past 25 miles. AIS data transmissions also travel around bends and over islands and other land mass giving better coverage than radar.

Benefits of AIS: See and be seen! Safety at night and poor visibility

An AIS receiver continuously receives information from all Class A and Class B equipped vessels in the vicinity and displays this information on a vessel's minimum keyboard display (MKD), chart plotter or computer. At the same time, a vessel's AIS transponder will automatically transmit the vessel's position and other information several times a minute to other AIS equipped vessels and to nearby shore receiving stations that can disseminate the data to others via the internet.



AIS A and AIS B: Which One?

Two types of AIS transponders are available: Class A and Class B. Despite the safety benefits of requiring larger commercial vessels to be equipped with AIS A, the cost of AIS A, originally \$8,000 and now approximately \$3,500, has been a barrier to installing AIS on smaller commercial vessels and pleasure craft. Therefore, less costly Class B AIS transponders been developed that sell for approximately \$1,000 and provide most of the benefits of AIS A. The difference is AIS B transceivers have lower transmit power, thus have less range, and broadcast data less frequently (every 30 seconds vs every 3-6 seconds) however, still aid navigation safety and contribute to the AIS maritime safety net. While the Coast Guard has explored requiring more commercial vessels to be equipped with AIS in the future it is anticipated they will allow AIS B to meet the carriage requirements for slower moving vessels.

