



Maritime On-Line[®] Automatic Identification System (AIS)

Background

Since its inception in 1875, the Maritime Exchange for the Delaware River and Bay has provided port businesses along the Delaware River with accurate, dependable ship reporting services. All commercial cargo vessels that transit the Delaware, entering at the Delaware Capes or through the Chesapeake and Delaware Canal, are logged by the Exchange.

The Maritime Exchange Automatic Identification System (AIS) was developed to complement the vessel schedules, cargo manifest data, and advanced arrival/departure information included in Maritime On-Line. The system displays real-time positions of vessels transiting the Delaware River and Bay and the C&D Canal through a secure and user-friendly web site. Vessels equipped with AIS transponders continually transmit real-time position, course, speed and other relevant data via dedicated VHF frequencies.

Access to real-time vessel position information significantly improves vessel and cargo operations as well as dramatically enhances maritime domain awareness. AIS, when used in conjunction with the other Maritime On-Line modules, provides members and subscribers with a comprehensive and common picture of Delaware River maritime operations.

In 2007, the Exchange received a port security grant to integrate its AIS system with Maritime On-Line. The base system has been dramatically improved and linked to the other modules of Maritime On-Line through a single web interface and system includes an interactive map that can display a street view, satellite view, or a combination of both.

Vessel schedules, manifest data, crew lists, and other data will be available directly from the AIS system. The system will also include functionality to set used defined logical zones that generate email notifications when vessels enter/exit from the zone or exceed speed restrictions within the zone. Historical tracking/replay and trend analysis functionality are some of the other features being developed.

MOL AIS also includes an optional National Oceanic and Atmospheric Administration (NOAA) chart display which can be overlaid the base map, and users have access to other tools such as a distance calculator and a latitude/longitude display. The system also provides the capability to add custom feeds that can be used to display weather, tides and currents, hurricane alerts, and other geospatial information.

Maritime On-Line Features

The MOL system integrates AIS, Ship Reporting, TRACS, and NOAA/D into a single portal for user access. Through the same log-in account, subscribers can switch between each module allowing data input or review of the same vessel for all modules.

AIS Features

- Provides Full AIS coverage of Delaware River and Bay and C&D Canal through interactive maps
- Displays terminal facility locations and anchorages
- Identifies vessel targets through rollover mouse display and optional onscreen labels
- Filters display by vessel type
- Displays unique shapes to identify vessel types
- Uses color coding to designate vessel speeds

Benefits

- Locate vessels quickly
- Obtain real-time position, course and speed
- Promotes cargo operations and port security
- Access AIS data broadcast by the vessel including:

Vessel Name
Call sign
Vessel Type
MMSI
IMO #
Length

Beam
Draft
Latitude
Longitude
Heading
Speed

COG
ROT
Destination
Cargo
ETA