

**NAVIGATION SAFETY ADVISORY COUNCIL (NAVSAC)  
TASK STATEMENT**

**Task # 14-02**

**I. TASK TITLE**

**Automatic Identification Systems (AIS) Aids to Navigation**

**II. BACKGROUND**

The Council has advised the Coast Guard on this topic on at least two occasions:

Task 11-07 in which the Coast Guard sought input from the Council on the possible, practical applications of virtual aids to navigation

This resulted in Resolution 11-04 in which the Council noted that both recreational and professional operators of small craft rely almost exclusively on physical aids to navigation; and large commercial vessels are more likely to use physical aids to navigation in addition to electronic navigation aids. The Council recognized that there are locations where the installation and maintenance of physical aids to navigation is impracticable and times when a mark is needed more expeditiously than a physical aid can be installed. In conclusion, the Council recommended that virtual aids to navigation be employed only where it is impracticable to install or maintain a physical aid to navigation, or used temporarily only until a physical mark can be expeditiously installed.

Task 12-02 asked for input from mariners to determine the U.S. Government's position when the matter of AIS-ATON symbology is discussed at IMO.

Resolution 12-01 recommended a symbology set that was adopted at IMO.

The Coast Guard has deployed 50+ virtual and synthetic AIS aids to navigation (ATON). To reiterate, a Virtual AIS AtoN is information transmitted from an AIS shore station to establish an aid to navigation that does not physically exist. A synthetic AIS ATON is information transmitted from an AIS station to augment an aid to navigation that does physically exist. No physical aids have been removed in this process. The virtual aids mark VTS check in points. Synthetic aids provide improved identification and bearing and range information for existing aids and are used to mark bridge piers.

**III. PROBLEM STATEMENT**

The Coast Guard needs information on the practical applications and uses of AIS ATON with respect to where they would be most useful and where they should not be used.

**IV. TASK**

- Review the various AIS ATON already in use.
- Discuss the value of these applications and whether there might be other opportunities for deploying AIS ATON.
- Propose a course of action to the Coast Guard for the future deployment of AIS ATON.

**V. ESTIMATED TIME TO COMPLETE TASK**

The AIS ATON discussion should provide recommendations by the Spring 2015 meeting.

**VI. COAST GUARD TECHNICAL REPRESENTATIVE/NAVSAC CONTACT**

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