

# AIS: What's In It For Me?

By Robert G. Moore

**A**IS is no longer a bright new shiny toy. The initial carriage requirements under SOLAS and the U.S. Code of Federal Regulations have been met or are near fulfillment. Operators and mariners are gaining familiarity with its capabilities, its strengths and its shortfalls. And, as could be anticipated, the growing pains typically attendant upon the introduction of all technical devices are making themselves felt. At the same time there appears to be an all too common feeling that AIS may be, for those doing business upon the seas, more trouble than its worth. Those feelings could well be summed up as follows: *"The government benefits from AIS but I'll be damned if I can see what's in it for me."* If that view spreads the promises inherent in AIS may not be realized and in that case the utility of AIS to coastal states – and mariners – will diminish. Those negative voices need to be taken seriously and steps taken to ensure that AIS offers something for the mariner and ship operator, and that the benefits of AIS to them outweighs the burdens it imposes.

The causes of the dissatisfaction appear to be a complicated blend of factors that include, among others, the technology itself, governmental actions and the perceptions of individuals.

## Cost Issues

For the ship operator there is the cost of the equipment. Installations are in many cases proving less straightforward, and therefore more expensive, than first estimated. Some operators wrestle with the question of whether or not basic equipment, that with only an MKD (minimum keyboard display), is really sufficient operationally and legally, given IALA's statement that

*"...to obtain the full benefit of the AIS capability, the system should be integrated to one of the existing graphical displays on the bridge, or a dedicated graphical display".* And to many, the purpose of the equipment – once installed – is unclear, beyond providing a means for government agencies to keep track of shipping in their waters.

The mariner is left with the reality that AIS currently provides little, other than the identity of other vessels, beyond what is already available by other means. He is also told that AIS neither replaces existing sources of information nor modifies watchstand-

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ing practices but that its input must be considered under the *"...use all available means..."* language of Rule 7 of the COLREGS. Having initially touted AIS as an anti-collision device the IMO now tells mariners that *"The potential of AIS as an anti-collision device is recognized and AIS may be recommended as such a device in due time."* And, if that Catch-22 language is not enough to burden the poor Officer of the Watch there is the fact that training in AIS capabilities needs to extend beyond simply knowing where the "On-Off" switch is located.

Authorities ashore are confronted with the reality that AIS use comes with a significant price tag for the management and other infrastructure necessary to use the technology as a "system", whether that use is for security purposes, integration into a VTS or aids to navigation regime, or for the facilitation of

transportation. All of those capabilities are inherent in AIS, since *"There exist international AIS messages designed to facilitate the reception onboard of online and static information from shore such as hydrographical, hydrological, meteorological, aids to navigation, and warning messages. Local specific messages can also be made available to fit local demands."*

## Useful Tool

In point of fact AIS has the capability to do all of those things plus prove a useful tool for ship operators and mariners, providing the data for which

it serves as a medium is fitted within an appropriate structure. There are those who maintain that the necessary "system" will be evolved by users as experience with AIS increases. While that could be true it also seems probable that by time that occurs

AIS may be viewed by those afloat as just one more seldom-referred-to black box. And the need for system-wide standardization also argues for carefully planned development. National governments, for example, must have a key role in shaping the architecture in order to achieve the high degree of coordination necessary to insure mariners find a common operating environment regardless of where they are operating. The need for standardization also stems from the impact of the shore-to-ship data flow upon shipboard display requirements, given that the display role is to translate and present data as immediately useful information. Shipboard displays cannot become peculiar to only one port or region.

## Plans Needed

In the US, the federal government must clearly lay out a plan for AIS use

throughout the entire spectrum of its capabilities, including articulation of the steps and timeframe required for implementation. This is something easily said but difficult to achieve, involving as it will a variety of agencies and Congressional committees. It is, however, an essential step if the private sector is to benefit from the carriage of AIS. It is not an insurmountable task and elsewhere governments are doing just that. The European Union, for example, has invested millions of Euros in improving waterways management, incorporating AIS, to make riverine and short sea shipping more competitive, with the goal of getting cargo off the highways and into ships and barges. The payoff to the countries involved is reduced highway congestion, less pollution and lower investment in asphalt. There are obviously tangible benefits to vessel operators and mariners as well.

We too have waterways which would benefit from similar efforts and if we put AIS planning and development into the proper perspective, and make the essential investments, the answer to the question "What's in it for me?" will include more waterborne cargo and more jobs for mariners. **PMM**

*Robert G. Moore will speak at Pacific Maritime Magazine's fourth annual conference on AIS. (For registration and sponsorship information, call this magazine at 206-284-8285, or visit our website at [www.pacmar.com](http://www.pacmar.com)) Mr. Moore is the President of Coastwatch, Inc., a maritime consulting firm specializing in government and industry projects to improve safety and vessel operations as well as other coastal zone work. He is a master mariner and retired U.S. Coast Guard officer. He served as a member of the Marine Board Committee on Maritime Advanced Information Systems and the Transportation Research Board's Committee on Shipboard Automatic Identification System Displays.*

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