5 WAYS SATELLITE M2M IS KEEPING THE MARITIME WORLD CONNECTED

Satellite communications is critical maritime companies. With no cellular or radio options at sea, satellite is the only way to keep crews and vessels connected to shore. Since not all maritime communication is about high bandwidth applications like voice, internet and video conferencing for large vessels, satellite-based machine-to-machine (M2M) communications provides critical ship-to-shore communication links for smaller vessels with more moderate data needs. Here are 5 ways that M2M satellite communications is keeping the maritime world connected:

1 SAFETY & SECURITY

Crew safety was one of the first applications for satellite M2M terminals. Safety of Life at Sea (SOLAS), Chapter XI-2/5 requires all ocean-going ships to be provisioned with a Ship Security Alert System (SSAS) which can alert authorities when the security of the ship is under threat by events such as piracy, terrorism or armed robbery.

Recently the International Maritime Organization (IMO) mandated that all ships of a certain size must report identity, position and timestamp at both regular and configurable intervals. This security initiative, Long Range and Identification Tracking (LRIT), allows port and other authorities to track the voyage history of vessels.

Whether it is SSAS, LRIT or any other maritime initiative, satellite M2M provides a reliable, compliant and low cost option for conforming to regulations, crew safety and vessel security. Read how a SkyWave M2M terminal saved the life of one skipper during a maritime voyage.

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2 FISHING REGULATIONS ENFORCEMENT

As the world's fishing population continues to decline, government bodies are increasingly adopting Vessel Monitoring Systems (VMS) to protect the stock and regulate the industry. VMS also helps to monitor the activities of foreign flagged vessels fishing under bilateral or multilateral agreements.

Like in safety and security initiatives, satellite M2M terminals with embedded GPS provide the ability to accurately and reliably track the location of vessels. It offers a low cost option that can meet the tight operating budgets of governments and fishermen.

Read how Ireland's Sea Fisheries Protection Agency and the local fishing community rely on SkyWave satellite M2M technology to track fishing vessels and enforce industry regulations

3 VALUE ADDED SERVICES

Like labor, fuel and maintenance is a major cost for owners of maritime vessels. By monitoring engine operation, weather and other data points in real-time, adjustments can be made that reduce fuel usage and repair expenses.
Satellite M2M terminals with integrated digital/analog/serial ports used in engine and fuel monitoring solutions provide critical information like oil pressure and coolant temperature.
This data then gives early warning when engine efficiency may be decreasing. Satellite M2M terminals can also be used to monitor engine data like RPM, engine load, propeller pitch, propeller load and rudder angle to optimize fuel use and efficiency.

If fuel theft is a concern, read how a Singapore-based company used SkyWave satellite M2M technology to monitor fuel levels

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4 DATA COLLECTION

Weather and environmental buoys equipped with satellite M2M terminals are a reliable and feasible way for year-round monitoring of real-time data of water quality and meteorological parameters.

Environmental buoys equipped with satellite M2M terminals collect and send a host of data in real-time including turbidity, specific conductivity, water temperature, dissolved oxygen, water depth and flow water depth, stream velocity, wind speed and direction, air temperature, relative humidity, pressure and more. The data is then used for a variety of applications such as ocean, wave, port and coast monitoring.

Satellite M2M terminals are a critical component of ocean and water data collection since it is not possible to frequently download the data from buoys once they have been deployed. The low power consumption of SkyWave satellite M2M terminals means that customers do not have to invest in large batteries for the communication infrastructure on an environmental buoy. The large message payload capacity ensures that more data from more sensors can be collected and sent more frequently.

5 OFFICE IN THE VESSEL

Maritime companies are slowly pushing more office functions to their vessels. This means that vessels need to have the ability to communicate and send business information to shore while away from port.

For vessels not big enough to be equipped with broadband terminals, satellite M2M terminals are a cost-effective and reliable way to send free or canned text messages as well as business transactions like data from electronic forms for workflow or workforce automation activities.

To learn about how workforce automation can benefit your organization, read our White Paper on Mobile Workforce Management

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Satellite M2M terminals provide critical communication links for people, vessels and equipment operating in the maritime sector. To find out more about how SkyWave satellite M2M terminals can be your communication link for your maritime applications, visit us at skywave.com.

IDP-690

Looking for a flexible and reliable satellite M2M terminal that accommodates your data needs without high monthly bills? Consider the IDP-690 from SkyWave. This terminal uses the two-way IsatData Pro satellite service for remotely tracking and communicating with assets anywhere in the world. This terminal is ideal for tracking vessels and buoys and communicating with sea personnel. It is designed for maritime applications with its low elevation angle antenna, environmental enclosure and IEC60945 certification.

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