

Alternatives to Satellite-Only Communications

In the early 1980's, Inmarsat communications were introduced to the marine industry, providing basic communications services to ships. Consequently, Inmarsat equipment is found on a large percentage of deep-sea vessels, and is frequently assumed to be the sole method of communications. However, at least one additional well-established communications network is being used as an alternate means of communicating. Additionally, ship owners and operators are seeing significant cost reductions through blending of communications technologies.

The perhaps best example of this is the Globe Wireless Maritime Data Network. Globe Wireless has established a worldwide digital radio network, providing complete global coverage. This digital radio network is used for transmitting smaller, high priority messages to ships in near real time. This service has substantially more functionality and is offered at a fraction of the cost of Inmarsat-C.

Combining cost effective, immediate delivery of smaller urgent messages, with the capability of batching lower priority messages and data files for economical transmission, results in dramatic savings to the ship owner.

Captain Norman Ford, Marine Superintendent for Denholm Ship Management Ltd., stated that he had noticed a dramatic reduction in satellite cost, as much as a 50% overall savings. "Using Globe Wireless has made a remarkable impact on the monthly charges, as well as the general way of communication. We're finding a quicker response to messages because of the near real-time nature of HF, we're getting information back to the ships faster and supplying information to our clients faster, which obviously means a higher level of satisfaction on both ends," stated Ford. "So, not only have our costs come down dramatically, we also communicate more for less money."

These types of savings are clearly illustrated when examining the normal communication patterns of a typical fleet of ten vessels. Ships generate a number of types of messages which must all be considered when analyzing the total communications costs:

- Urgent, small messages. Vessels commonly use telex (Inmarsat C,

for example) for the delivery of urgent, small messages.

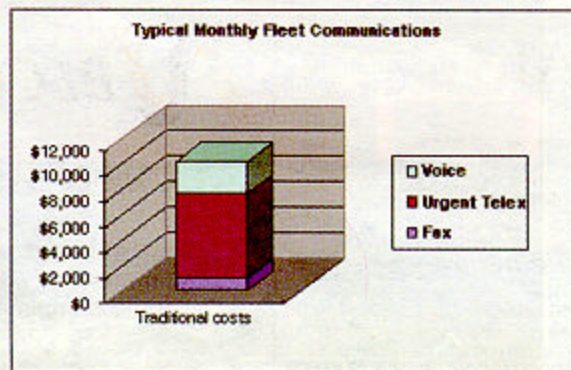
- Fax communications. Fax delivery communications continue to represent a percentage of vessel communications.
- Voice communications. Direct telephone conversation is very costly, and still quite common.

Satellite-only email systems have allowed the owner to gain some cost savings over these traditional communications. Savings are achieved by converting a percentage of voice calls, faxes and non-urgent telexes to email messages.

Ship owners and managers quickly realized that while savings is achieved using satellite-only systems, two interesting side effects occurred.

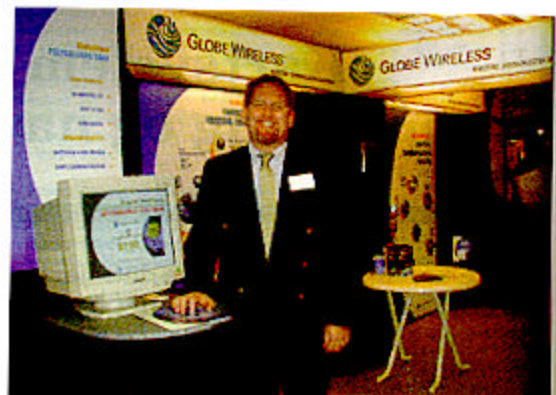
- The cost of urgent message, via Inmarsat-C or other types of telex was reduced, but not significantly.
- Because a satellite system requires the vessel to dial to check for incoming mail from shore, up to 40% of calls had no data sent and

The graph below illustrates typical traditional traffic patterns of a merchant vessel at sea.



received. Typical vessels equipped with satellite-only email systems made three to four email connections calls per 24 hours.

Since the Globe Wireless network operates in near-real time, it offers a viable alternative to traditional Inmarsat C/Telex at a fraction of the price. Secondly, the Globe Wireless Digital network is used to 'page' the vessel when traffic is waiting on sho-



Present at Nor-Shipping 2001 was among other representatives from Globe Wireless Mr. Michael P. McNally Vice President sales & Customer care.

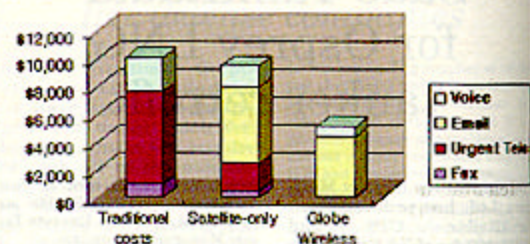
re for free, meaning that the vessel does not need to place any calls to check for waiting mail.

The results of this are striking.

Globe Wireless customers have seen a dramatic reduction in cost over both traditional Inmarsat communications and also satellite-only email systems.

With some 3,000 vessels using Globe's products and about 100 new ships consistently being added every month, customers turn to the Globe Wireless system because they hear about and see results. It is the best of new technologies, with traditional Inmarsat message delivery, which are offering ship owners and managers the most dramatic savings. ↓

Fleet Communications with Satellite Alternative Systems



Monthly Fleet Communications Reduced using Satellite-Only Email

