

# WAVES



## Women in Shipping

# Balancing maritime connectivity



**Mike Mitsock,**  
*Vice President of  
Marketing at KVH*

## Crew and operations: the challenge of managing data requirements on board

One of the barriers to women working at sea has long been the isolation from friends and family. As Rita Yan points out in her interview, earlier, those at sea have traditionally been reliant on letters, postcards and the occasional phone call when in port. It is only recently that the technology has existed to email, skype or use social media channels to communicate with loved ones.

However this technology quite literally comes at a price. Data capacity costs and access to data can be limited. How can an operator balance the needs of the crew with the ever increasing operational demands of its vessels? Mike Mitsock, Vice President of Marketing at KVH, believes that technology itself can provide the answer.

The shipping industry is still facing challenging times, with nearly all sectors of the market struggling to make money as operating costs escalate and capacity outstrips demand in many areas, explains Mitsock. "In addition, myriad constantly changing international and regional

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regulations must be navigated, including issues like fuel emissions and ballast water management, all contributing to increased operating costs.

"Equally challenging is the need for crew retention, with operators vying to recruit from a diminishing pool of able and experienced seafarers as the younger generation seems reluctant to choose shipping as a career.

“Operators faced with balancing these factors in a highly competitive market must look to optimise their operational efficiency, whilst still retaining quality staff and delivering top results for their customers.”

Mitscock believes that one way to do this is by examining the benefits and cost savings that can be achieved through smart use of satellite broadband connectivity and data-driven decision making.

“The use of sensors and transmitters on board to monitor and report on equipment performance is becoming more widespread and sophisticated, leading to large amounts of data which when analysed can help in making important efficiency decisions.

“These decisions can be used as early warning signs indicating, for instance, the need for replacement parts or fixing faulty systems before the problem becomes



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too serious, thus saving time and money on flying out parts or technicians to fix these issues.

“At the same time, satellite technology can also be used to keep crew entertained and in contact with family during rest periods on board: a vital consideration for operators wishing to be employers of choice and to lower attrition rates.”

But how does an operator balance the costs of operational data transfer, such as receiving data from the vessel into the office or delivering content like updated weather reports and ECDIS charts to the ship, with the costs of downloading licensed entertainment for the crew?

It can be difficult, says Mitsok. “The amount of data which potentially needs to be transferred to and from a vessel is ever increasing as technology moves forward, and so we must use technology itself to find the solution to those demands.”

One answer is multicasting, a technology which delivers very large amounts of content to many subscribing ships at once. Content is transmitted to the vessel using unused bandwidth, in the background, at a lower priority than standard internet and voice traffic. Any content watched on the vessel is then played back from a media server on board, without using the satellite connection at all.

At present this technology is unique to KVH.. “We can deliver daily print news digests from more than 60 countries in a range of languages, as well as video news shows, sports clips, blockbuster movies, entire seasons of the latest TV series, and hours of music,” explains Mitsok. “Yet we can also deliver the operations data that a vessel requires – in navigation, weather forecasting and crew training.”

Transparency in bandwidth management is another feature that ensures the operational data vs recreational data balance, explains Mitsok. “Ship operators and managers need to make sure they can monitor each vessel’s data-usage status, allocate usage to individual users or tasks on board, separate crew and operational data usage, and set email and SMS text alerts to help reduce the possibility of unexpected bills.

“Any enabling technology can bring huge benefits, when managed properly. The needs of the crew can be balanced with the needs of the vessel, it’s simply a case of using technology to its fullest.”