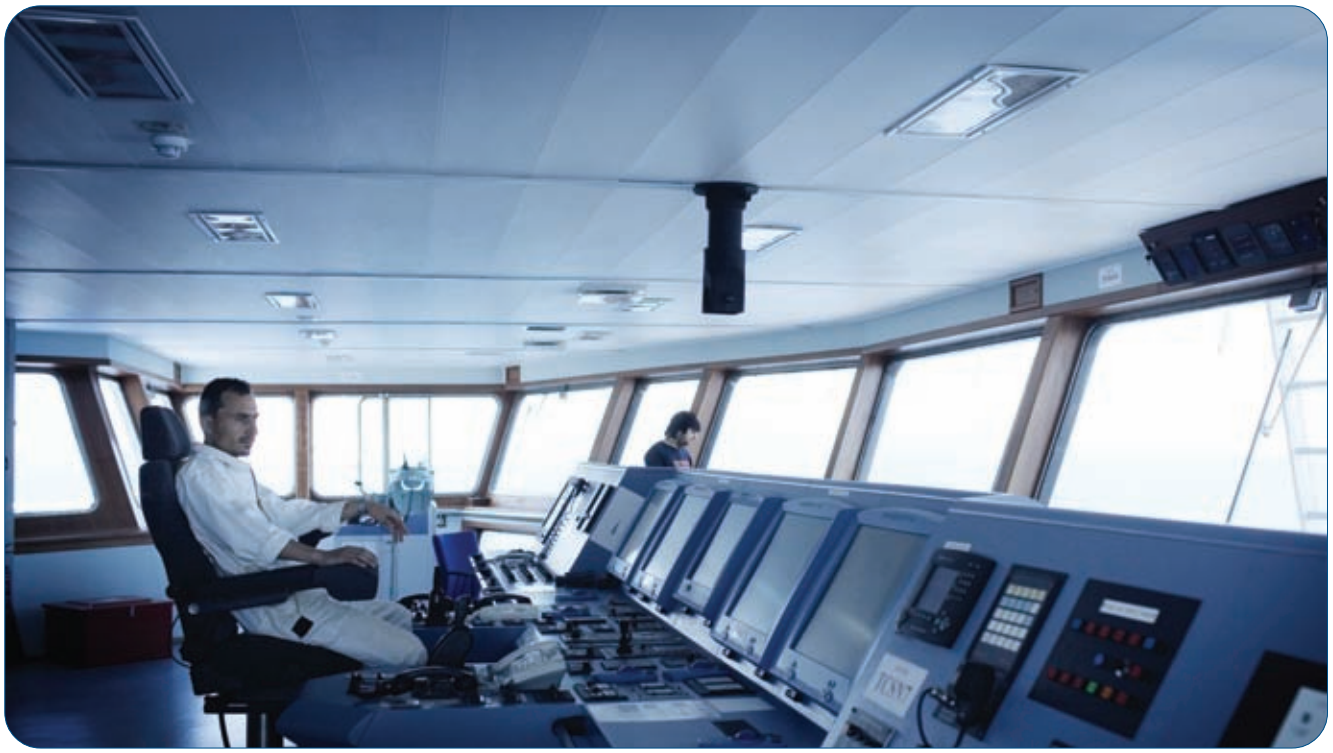

Photo courtesy of Cobham SATCOM

Shipping's digital shift makes connectivity business critical

Shipowners no longer view satellite communications as standalone equipment used solely for ship to shore communication. Today, satellite connectivity is a ship-wide utility supporting vessel uptime and operational decision-making, as outlined by Cheng-Yu Tang, General Manager China at Cobham SATCOM.

Information sharing is becoming an indispensable aspect of the commercial shipping business landscape. As the link between ship and shore becomes integral to overall vessel operations and increasingly critical to commercial success, shipowners across Asia are viewing satcoms infrastructure in a new light.

Satcoms was traditionally treated as a standalone solution, deployed to address a particular issue. Often the 'issue' was the welfare of crews spending weeks at a time on long ocean crossings with limited opportunity to stay in touch with their families, friends and the outside world in general. Consequently, the antenna system and associated below-deck hardware were regarded by owners as an additional expense and a resource for distracting crew members from their duties, necessary to prevent crew from jumping ship to rival companies offering better onboard connectivity.

It is only in relatively recent times that this mindset has changed, but it is fair to point out that the change has been dramatic, with Asian owners in the vanguard. As owners and fleet operators have woken up to the broader benefits of embracing digital technology and IoT applications, satcoms equipment has come to be seen less as hardware and more as the hub for data-centric vessel operations.

Internet of Things (IoT)

A growing number of Chinese, Japanese and Korean vessel owners, in particular, have taken advantage of innovations in the Internet of Things (IoT), including exploitation of sensors for onboard equipment that allow data to be captured continuously on a range of processes. Implemented within a shared technology ecosystem complemented by cloud and advanced analytical tools, these data streams can be mined to improve equipment efficiency and predict mechanical failures or breakdowns before they happen.

As digital technologies embed themselves in the collection, exchange and analysis of information, for use in management, transactions, technical and operative applications, the potential for information sharing to reduce costs and delivery times and improve resource efficiency will continue to grow.

And, with ship to shore connectivity now critical to smooth vessel operation, route planning and on-time cargo delivery,

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any outage in the links to the ship is no longer simply inconvenient; it has consequences for business continuity. Optimising the performance of the data-centric vessel relies on crew and shore-based colleagues working collaboratively, to maintain operations and troubleshoot when machinery systems underperform of fail. Furthermore, OEMs are taking a more pro-active role in the upkeep of onboard systems as they shift their own business-models towards continuous service. Offering such remote support is reliant on 24/7 connectivity.

Build quality and reliability underpins the performance of Cobham SATCOM's portfolio of antenna systems, but it is fair to say that we have experienced this shift in the greater emphasis customers place on continuous reliability, ease of maintenance and the guaranteed link performance described in SLAs with the airtime service provider.

Future-proofing antennas

As the provider of a key building block to enable the maritime shift to digitalisation, Cobham SATCOM has also made a point of future-proofing its antennas, working with its satellite partners to ensure that - where possible - equipment installed today can be field upgraded to adapt to any changes to frequency or other requirements.

Even so, it is important not to overstate the shift towards digitalisation seen in the maritime sector, where the quality of implementation is heavily reliant on collaboration between different stakeholders and effective integration of data-driven systems. Fleet operators are not alone in experiencing a shortage in the highly-qualified staff capable of understanding how data exchanges can be best implemented.

Photo courtesy of Cobham SATCOM

Photo courtesy of Cobham SATCOM

Just as the reality of 'just-in-time' container shipping is that more than half of vessels arrive 12 hours late, leaving ports to handle the congestion and shippers to count costly waiting time, information flow bottlenecks persist in the maritime supply chain that expose suboptimal stakeholder interaction. According to Lloyds List, up to 200 interactions involving documentation may punctuate the supply chain, and the shipper/consignee may be dealing with 20-30 entities to arrange a shipment. With phones, emails and even faxes still involved, joining the dots is by no means easy.

It is with this bigger picture in mind that one of Cobham SATCOM's partners in China, Highlander, has shifted focus in its strategy to transition our industry towards smarter shipping. Having previously focused on a role as systems integrator for the supply and installation of navigation, vessel management and antenna systems, Highlander is increasingly supporting shipowners as a provider of total connectivity solutions, fleetwide.

A recent agreement between the local airtime provider APStar Mobile Co (a joint venture between APStar in Hong Kong and CTTIC in Beijing) and Intelsat further underlines the mounting appetite for data among the maritime customers in the region. APStar Mobile Co will introduce its IntelsatOne Flex for Maritime offering with a one-meter antenna solution focusing on Chinese vessels to enhance its suite of applications and covering both business operations and crew services.

As data is collected in larger volumes from more sources, however, it needs to be managed and analysed in a systematic, timely manner. If hardware and software components can enable optimised information sharing, effective implementation will require vessel owners to develop and introduce new organisational processes and workflows. Only with a dependable ship-shore link will shipping companies be able to fully extract the insights hidden in this data, employ them to eliminate inefficiencies in fleet operation and improve the bottom line. ■

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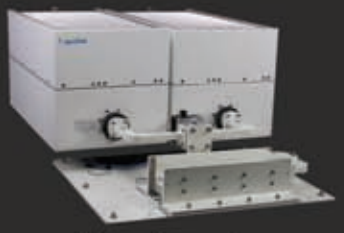

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