DEVELOPING EXPORT POTENTIAL FROM THE JORN FOUNDATIONS

THE company is looking to leverage its experience into other markets.

"I think the key fundamental for us is how we can build on more than 40 years of conducting leading edge High Frequency (HF) research and development and specific to that, the work we're doing with Defence," Tom Tizard, BAE Systems ISR Campaign Lead said to ADM. " In line with Defence and Foreign Policy's ambition to become a top ten global defence exporter, we've been exporting HF systems technologies for more than a decade."

The HF export business has grown into a \$120 million program. Building on this strong base, it continues to fulfil customer requirements in both Australia and globally. From receive and transmit technologies to modular open systems architecture command and control and signal processing software solutions, the potential for further technology development is only limited by imagination.

"We're seeing customer requirements embrace more flexible, supportable and deployable aspects, so how we look at the same sorts of unique and innovative technologies but in more effective form factors and being able to deploy them to potentially remote locations," Tizard said. "And then secondly, also, how technology could provide more multi-mission capabilities, and thus far more scalable and cost effective. That really comes through from the technology innovations the company's driving in collaboration with key industrial partners. This is providing some really exciting stimulus to our export business and the work we do outside of Australia."

Tizard is keen to highlight the collaboration with partners in Defence, CASG, industry and academia that underpins the world leading approach in what has become a sovereign capability.

"I think the good thing is the combination of strong domestic and export businesses is fundamental to driving that robust and long-term sustainable industry capability, which provides Australia with the ability to maintain its strategic advantage in the domain."

The ground-breaking nature of the work is also important to attracting and retaining a skilled workforce that has the opportunity to constantly work on new and innovative programs.

HF systems as a whole have been around for a long time; they've been through their ups and downs by way of operational popularity, especially given the rise in technologies such as SATCOMS and other forms of sur-

veillance. A recent renaissance and a focus on how technology advances can increase that capability, especially in a reliable, resilient and cost-effective way has seen the technology become more popular again.

"HF is a very dependable technology and so whether in the OTHR domain for another surveillance sensor as part of a wider battle space, a picture or indeed a reliable back-up communication system perhaps to SATCOMS in a satellite denied environment," Tizard said.

"The technology and the market has grown in line with the evolving customer requirements and the threats as well. As the threat environment has evolved, so too have customers' needs as a result, not just the Australian Defence Force, but other export customers have also sought to increase their own sovereign capabilities in areas like HF in order to respond to mission requirements. I think the future is really quite interesting in that respect, as technology drives innovation and as we get to embed that and prove it in projects like JORN, then the popularity of HF should continue to grow.

"Our ambitions in the export domain to date have been very much focused on the over-the-horizon radar segment with at least a decade of work in that domain. The future for us is moving into adjacent markets like to

the HF communications domain.

"For that, our view there is that there could be a market potential in excess of \$10 billion globally. So working in collaboration with the Commonwealth and also Australian industry, we're looking to see how we could potentially leverage that investment in core HF technology to further build that sovereign capability base and related economic benefit in order to maintain a global strategic advantage. Very exciting times ahead in that respect," Tizard concluded.



LEFT: The global market for HF technology is growing massively.