A global centre in cyber and defence

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By JAMES DUNN

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Richard Price is chief executive of Defence SA and the SA Space Industry Centre.

When most people hear the words "Adelaide" and "defence" in the same sentence, they probably think of the big naval shipbuilding programs that produce submarines and surface warships; or perhaps, more unkindly, of this year's defensive porosity that brought the Adelaide Crows the club's first AFL "wooden spoon".

But there are two other dedicated defence-industry precincts besides the naval shipyard at Osborne — the national defence research, manufacturing and

sustainment hub around the RAAF Base at Edinburgh, and Technology Park Adelaide.

Both are backed by the capabilities of the Lot Fourteen ideas and innovation neighbourhood in Adelaide's CBD, and the Tonsley Innovation District.

With the critical mass of defence industry that Adelaide has developed, there is a roll call of some of the biggest global names in defence, including BAE Systems, Boeing, General Dynamics, Lockheed Martin, L3Harris, Northrop Grumman, Raytheon and Saab Systems.

But underneath this is a myriad of small to medium-sized enterprises (SMEs) that have upskilled into the defence world. And with the growth of the defence industry, the cyber industry has burgeoned too, as defence supply chains require cyber-resilience.

Defence SA, South Australia's lead government agency for all defence matters, recognises that the two go hand-in-hand: chief executive Richard Price says, "South Australia is emerging as a global centre in the cyber and defence industries, which are some of our fastest-growing industries".

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Philippe Odouard, chief executive of the ASX-listed ballistic protection and security products manufacturer XTEK, says Adelaide's "critical mass" in hi-tech, defence-related industries was a major reason why the company chose the city for its manufacturing facility, which uses its proprietary XTclave composite materials curing and consolidation technology to make thermoset and thermoplastic composite materials.

Opened in February, the Adelaide plant makes structural composite products that go into personal armour and helmets, lightweight tactical and human load carriage equipment, robotic mechanical systems and unmanned craft.

Last month, XTEK delivered its first export order, a shipment of body-armour plates to the Finnish Defence Force (FDF). The company is also leveraging its Adelaide location to enter the burgeoning Australian space sector, working on composite materials suitable for nanosatellites, for the space industry.

Philippe Odouard, chief executive of ASX-listed ballistic protection and security products manufacturer XTEK

Like any investment decision, choosing a manufacturing site is "a convergence of a number of factors", Odouard says.

"We had a choice between the Canberra area, which is where our head office is, and Adelaide, where we have our R&D centre. We had very generous subsidy offers from NSW. But at the end of the day, a lot of the expertise we needed was already in Adelaide."

In particular, says Odouard, the skills in the city's subcontractor sector stood out to XTEK.

"A lot of the firms that were subcontracting to the car industry went up-market to service the defence industry, they really upskilled, which is great for us, because we're working in an area that is quite new," he says.

"The presence in terms of composites manufacturing in Adelaide is actually very small, but we've found very highly skilled people, we can get bespoke things done, and a real receptiveness in terms of being more innovative and working on things that are probably more value-added, in smaller quantities.

"We need high skills rather than the capacity to do large quantities, so definitely, that upskilling is a benefit to us."

Melbourne-based cybersecurity company VeroGuard Systems chose Adelaide for its advanced manufacturing facility.

Daniel Elbaum, chairman and co-CEO of Melbourne-based cybersecurity company VeroGuard Systems, chose Adelaide for his firm's advanced manufacturing facility, which will make hardware security modules for digital identity and secure payments, making possible the ultra-secure authentication, encryption and communications at both ends of every online transaction.

Elbaum says VeroGuard announced its hi-tech, purpose-built manufacturing plant, at Edinburgh, in November 2017, began building it in 2018, and has made its first production "cards" there this year.

With several siting alternatives on the table, VeroGuard chose Adelaide — and the crucial reason was the base of manufacturing workers, Elbaum says.

"We want to create a culture of quality and perfection and the number of former automotive industry workers here in Adelaide is a massive advantage," he says.

"The South Australian automotive manufacturing industry was known for its high-quality, lean methodologies and virtually zero error-rates, and you can't buy that expertise when you're looking to start up a whole new business.

"Auto workers' ability to run supply chains and just-in-time processes is highly valuable to us, particularly as we scale up. They are a perfect fit for VeroGuard.

"The whole advanced manufacturing and technology ecosystem and pool of skills are well aligned to our needs and priorities as a core centre for delivering on our strategy.

"Advanced manufacturing for us is extremely well developed in South Australia and there were a lot of highly skilled people, as well as very passionate people around delivering what we needed, in this location."

Both government and industry in SA have been highly supportive of new industry, Elbaum says.

"Our experience has been outstanding," he explains.

"The key individuals we met across business, government and research were passionate about the success of South Australia on the global stage, and taking a leadership position in the new economy, as evidenced by the proactive and integrated approach by the state in initiatives such as Smart Cities, autonomous vehicle industry and defence programs.

"We've also encountered a vibrant business community with entrepreneurial flair, reinforced as we engage with class-leading local companies such as Morton Blacketer, YourDC and CashFlowManager."

Although just 15 employees work at VeroGuard at present, the company says it will require almost 600 people at its Edinburgh facility as it ramps up towards full production.

Elbaum says the physical location is also a big plus.

"In Edinburgh, we are right in the centre of the defence programs, and as a developer of security products it's really critical that we have an ecosystem around us that reflects us."

https://www.theaustralian.com.au/special-reports/future-adelaide/south-australia-is-emerging-as-a-global-centre-in-cyber-and-defence/news-story/382e05ed4c6717e2ad02a1771ed0dcd7