

Defence SA

Another step in South Australia moving towards the Defence State

Edinburgh Defence Precinct

The precinct is a key national defence research and intelligence surveillance and reconnaissance hub. It is primarily home to the Air Warfare Centre, and No 92 Wing's AP-3C Orion and P-8A Poseidon aircraft which conduct surveillance operations throughout Australia's airspace.

The precinct major sites consist of:

- RAAF Edinburgh (RAAF-E)
- Defence Science and Technology (DST)
- Edinburgh Parks
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Taingiwilta — launched at the Defence Science and Technology Group site at the Edinburgh Defence Precinct in Edinburgh, South Australia — is reportedly capable of processing data up to a million times faster than a standard computer.

The technology is expected to support the design, development and analysis of next-generation weapons and national security systems.

This is tipped to include the Royal Australian Navy's future nuclear-powered submarines, quantum technologies, and artificial intelligence systems as part of the AUKUS technology-sharing agreement.

Taingiwilta, which means "powerful" in the language of the Kaurna people, is housed in a purpose-built secure facility called "Mukarntu", meaning "computer".

"This high-performance computing facility provides a secure and sovereign capability to do just that."

Minister Marles added the technology would also support stronger collaboration with international partners.

"Defence acknowledges the assistance provided by representatives of the US Department of Defense's High Performance Computing Modernisation Program who willingly shared their 30 years of knowledge and experience to support Australia's work to establish this world-class capability," he said.

Taingiwilta is the latest of a number of new Defence technologies unveiled over the past week and follows the Chief of Army Symposium in Adelaide.

Defence unveils supercomputing capability

12 August 2022

Acting Prime Minister and Minister for Defence, the Hon Richard Marles MP, has formally launched an advanced supercomputing capability at the Defence Science and Technology Group site at the Edinburgh Defence Precinct in Edinburgh, South Australia.

The first of its kind in Australia, the state-of-the-art high performance computing capability is up to a million times faster than a standard computer and will enable Defence scientists to analyse large data sets and rapidly perform complex calculations to tackle some of Defence's most challenging scientific and engineering problems.

Defence's supercomputing capability will play a vital role in the design, development and analysis of modern weapon systems and national security systems, and will be critical in supporting key AUKUS priorities including nuclear powered submarines, quantum technologies and artificial intelligence.

It is expected that the high performance computing capability will drive the development of disruptive solutions, and the department is actively recruiting to increase the workforce supporting the capability.

The new computing infrastructure is known as 'Taingiwilta', which means 'powerful' in the language of the Kaurna people, and is housed in a purpose-built secure facility called 'Mukarntu', meaning 'computer'.

Quotes attributable to Richard Marles:

"For much of the work done by our Defence scientists, data is critical.

"But even more important than the data itself, is the ability to rapidly and reliably analyse and process that data.

"This high performance computing facility provides a secure and sovereign capability to do just that.

"The high performance computing capability not only provides Australia with a sovereign capability that allows us to pursue activities in our national interest, but it also gives us a strong foundation for even closer collaboration with partner nations.

"Defence acknowledges the assistance provided by representatives of the US Department of Defense's High Performance Computing Modernization Program who willingly shared their 30 years of knowledge and experience to support Australia's work to establish this world-class capability."



The Hon Richard Marles MP
Deputy Prime Minister | Minister for Defence