Boeing, ExoAnalytic team to offer Australian-operated, ready-to-go Space Domain Awareness system

• JP9360 proven solution builds local capability

April 8, 2022

Boeing Australia and ExoAnalytic have joined forces to offer the Australian Government a fully operational Space Domain Awareness capability which is ready to deploy immediately, and to be operated by a local Australian team.

The ExoAnalytic-Boeing solution for JP9360 Tranche 2 will provide RAAF operators with the ability to simultaneously and exclusively task multiple ground-based telescopes across ExoAnalytic's global sensor network of 350 telescopes. These telescopes will be controlled and operated from an Australian Command Centre delivering highly flexible Space Domain Awareness to support RAAF space command operations.

"The Command Centre will be operated by Boeing Defence Australia personnel who will directly support the Australian Defence Force in real time by monitoring critical space assets, providing command and control and data analytics," said Dale McDowall, Boeing's director of Global Business Development - Australia and New Zealand.

"Boeing is sub-contracting to ExoAnalytic for the program and will be supported by ExoAnalytic's U.S. Command Centre to provide 24/7 monitoring."

ExoAnalytic's telescope network is the world's largest Space Domain Awareness sensor network which monitors, understands and predicts the position and behaviors of man-made space objects in orbit around the Earth.

"These services help our customers to operate more safely and sustainably by identifying and providing alerts for objects behaving anomalously or creating potential threats such as collision risks," said Dr Douglas Hendrix, CEO of ExoAnalytic Solutions.

"Even the smallest item of space debris can decommission a satellite. The capability of ExoAnalytic's global telescope network to see very small and very dim objects is well beyond most ground and space systems."

The monitoring system is critical to ensuring optimal reliability of defence weapon, navigation and communications systems which rely on satellite communications. ExoAnalytic currently provides the U.S. government, including the U.S. Joint Task Force Space Defense, with services comparable to those required under JP9360 on a daily basis.

"Our JP9360 offering will provide a low risk, robust, and sovereign ability to detect, track, identify and characterise space-based events to support Australia's freedom of action in space," said McDowall.

"The ExoAnalytic network is also rapidly extendable – with new sensors able to be added cheaply and quickly."

In a boost for sovereign space capability, ExoAnalytic will bring its Ground Based Optical Space Domain Awareness system to Australia and also provide opportunity for Australian industry to channel innovation into the global Space Domain Awareness market.

"ExoAnalytic has been investing in building telescope sites in Australia for some years and has established a network of more than 70 ground-based telescopes across 10 sites, bringing smart work into regional communities," said Dr Hendrix.

"ExoAnalytic will also transition maintenance, operation, and management of the Australian network to Australian industry with Victoria-based iTeleQuest managing the telescope sites and the Indigenous Defence and Infrastructure Consortium managing maintenance and service."