Feature Story

Boeing and Insitu Pacific partner on new Australian Army R&D project

Developing autonomous teaming software to help protect Australian warfighters.

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Boeing Australia and <u>Insitu Pacific</u> are developing uncrewed aircraft systems (UAS) teaming technology to help the Australian Army become Future Ready.

Funded by the Army's Robotic & Autonomous Systems Implementation & Coordination Office (RICO), the artificially intelligent (AI) software was tested on two Insitu Pacific UAS last month, showcasing the potential of this disruptive innovation.

The UAS maps a defined terrain area, gathering data to evaluate slope, vegetation coverage, obstacles and possible threat locations. Utilising Machine Learning and other computational techniques, the software can develop a safe and traversable path and share that route with ground teams.

"This work clearly demonstrates the benefits of a flexible uncrewed (UxV) software architecture to expanding the mission capabilities of systems being delivered to Army under projects like LAND-129," Andrew Duggan, managing director of Insitu Pacific said.

"Partnered with sensing capability developed for commercial survey markets and the machine learning capability being developed our Phantom Works Global colleagues, we're taking real steps towards enabling significantly greater autonomy for air and ground vehicles."

Director of Boeing's Phantom Works Global Emily Hughes said the technical solution would support a connected, mobile and joint land force.

"The machine-learning capabilities we're developing in partnership with Insitu Pacific will bring significant advantages to military environments by allowing information to be quickly processed without human input and with minimal strain on existing communication links," she said.

"We're continually exploring new solutions to integrate autonomous systems from seabed to space and are providing our defence customers with a capability advantage that protects soldiers on the front line."