

Department of Jobs, Tourism, Science and Innovation



CASE STUDY



Textron Systems' Aerosonde UAV being tested by the US Army. Photo credit: Mark Schauer, via DVIDS (www.dvidshub.net)



Western Australian fuel injection

Orbital UAV has added another major US defence Prime to its customer portfolio, confirming its position as a world-leader in the rapidly evolving Unmanned Aerial Vehicle (UAV) market.

The tactical UAV market is forecast to be worth US\$15.7 billion over the next 10 years* and Western Australian company Orbital UAV's patented heavy fuel technology, engine design expertise and aerospace manufacturing capability ensures it will be a key player in this sector.

With more than 30 years' experience in engine design, the company's patented fuel injection system enables advanced spark ignition using heavy fuel, which is a requirement for military applications.

Orbital already delivers its industry leading propulsion solutions and technologies to some of the world's largest suppliers of tactical UAVs, including defence prime contractor Insitu, a Boeing subsidiary. They have also been engaged by Northrop Grumman to pursue heavy fuel, hybrid opportunities, and their customer base continues to grow.

In March 2021 Orbital UAV signed a 12-month engine development and long term supply agreement with Lycoming Engines – a subsidiary of U.S. defence prime Textron Inc. – to supply engines to Textron Systems, a world-leader in tactical UAVs and one of the largest suppliers of tactical UAVs to the U.S. defence forces.

"Orbital UAV's patented heavy fuel technology, engine design expertise and aerospace manufacturing capability ensure we deliver a comprehensive value proposition to our customers – providing significant benefits from our critical engine technologies through to full rate engine production across multiple unmanned aerial vehicles."

Todd Alder, CEO and Managing Director of Orbital UAV



Orbital UAV is a world-leader in the design and manufacture of integrated engine systems for tactical military drones including the Aerosonde HQ. **Photo credit:** Luke Allen, via DVIDS (www.dvidshub.net)

The new agreement includes an engine development program which will integrate an Orbital UAV-designed core engine, including proprietary fuel and engine control systems, into Textron Systems' Aerosonde UAV program - which is an industry leading platform for expeditionary land or sea-based operations and includes the vertical take-off and landing capable Aerosonde HQ.

The agreement represents a major expansion of Orbital UAV's business relationships and upon successful completion of the 12-month engine development program, it transitions to a supply contract for up to 10 years, ensuring ongoing and future revenue opportunities. The Textron-Lycoming engine will be the third engine production line to be commissioned at Orbital UAV's Perth headquarters. In support of this production expansion, the company is continuing to develop and build its industry leading R&D, Engineering and Production teams, growing its unique sovereign industry capability as an advanced aerospace manufacturer.

Orbital UAV's proven operational experience and innovative systems means they are uniquely placed to continue to meet the long-term needs and reliability requirements of this rapidly evolving market, increase their market share and deliver on strategic growth objectives.