

ONR Funds Raytheon for Coordinated Advanced RF Effects

By Richard Scott

The US Office of Naval Research (ONR) has funded Raytheon to develop novel technology capabilities to enable advanced distributed and coordinated airborne electronic attack (EA) techniques to defeat advanced threats.

Known as Controlled Advanced Distributed Radio Frequency Effects (CADRE), the Future Naval Capabilities (FNC) effort is intended to mature functionality that could ultimately be integrated into the US Navy's AN/ALQ-249(V) Next Generation Jammer (NGJ) program. The NGJ acquisition effort is introducing a new suite of EA pods for integration with the Navy's EA-18G Growler carrier-borne airborne electronic attack aircraft.

According to information contained in the Pentagon's FY 2025 budget request, the scope of the FNC includes development of firmware enhancements to enable coordinated techniques in the host platform; hardware-in-the-loop experimentation to evaluate effectiveness of single platform enhancements; and the development of a multi-platform coordination capability.

Last month, Raytheon's Intelligence & Space business (McKinney, Texas) was awarded a US\$40.6 million contract by ONR under which it will pursue CADRE development through three sequential phases. The objective is to progressively develop the CADRE capability from Technology Readiness Level (TRL) 3 to TRL 6, so making it suitable for integration into the NGJ program.

The first CADRE increment, covering system design and risk

reduction, will cover an 18-month base period expected to complete in November 2025; Option 1 covers a 19-month program of detailed design, integration and verification; while Option 2 extends the effort into a 22-month ground test and flight demonstration phase. "These phases aim to achieve measurable progress milestones toward the long-term FNC objective of multi-aircraft flight demonstration," the Navy contract announcement said.