ADVANCING TECHNOLOGY . ADVANCING HUMANITY

## SYSTEMS ENGINEERING

## **VERIFICATION & VALIDATION**

## **KEY CAPABILITIES**

**Verification & Validation Management** • V&V Program Definition and Planning • Requirement Verification Traceability Management • Test Plan and Procedure Development • Test Scheduling and Coordination

**Verification & Validation Program Execution •**Hardware and Software Component Tests • Article and Site Acceptance Tests • On-Console Test Procedure Execution • Test Documentation and Reporting • Anomaly and Discrepancy Evaluation

**Verification & Validation Support Technology** • Simulator and Emulator Development • Testbed Integration and Management • Test Automation Framework Implementation

Effective verification and validation is critical to the successful realization of the system lifecycle and the achievement of agency, program, and mission objectives. Kurtek provides a comprehensive portfolio of verification and validation services that combines robust formal methodologies and processes, detailed planning and execution, a test-as-you-fly approach, and effective application of domain expertise to deliver fully validated, qualified, and operationally ready systems within and across program and agency boundaries.

Kurtek offers comprehensive test planning and execution expertise across multiple levels of system complexity, from individual components

to fully integrated systems, and performs discrete hardware and software element testing as well as end-

to-end on-console test execution. Our engineers are experienced with developing and operating simulators, emulators, and integrated testbeds and test sets to enable automated and interactive testing.

Working with Kurtek gives you access to a proven combination of experience and expertise from across the global space industry. Our engineers have contributed to the design of numerous flagship space and ground systems, and their comprehensive knowledge, mission experience, and specialized skillsets enable us to deliver an effective solution for your unique needs.

## REPRESENTATIVE PROGRAMS

- Developed and executed a cross-agency system verification and validation plan for NOAA and its partner agencies to support the transition of a joint multi-mission satellite ground system to operations.
- Designed and implemented a high-performance test automation framework for NASA, generating and performing more than 35,000 discrete test cases to verify ground system and mission service interfaces for more than 50 individual user missions.

To learn more about our capabilities, email us at info@kurtek.io or call our team at 703-943-7236.