

CASE-T

COUNTER AERIAL SYSTEMS EVALUATION TOOL

UNMANNED AERIAL SYSTEMS POSE THREAT TO SENSITIVE FACILITIES



REAL-WORLD TESTING

Tailored flight test plans for achieving customer objectives.

Coordinated approvals with FAA and other organizations.

Certified UAS pilots with extensive experience in restricted airspaces.

POST-FLIGHT TEST ANALYTICS

Custom Measures of Performance and Measures of Evaluation.

Custom software for 2D/3D images, videos, and dynamic emulations.

Decision support for improving system performance based on test analytics.

MODELING & SIMULATION

Geotemporal models clearly communicate UAS detection and mitigation times.

Radio Frequency Propagation models use MATLAB or other tools to develop radar/RF coverage maps.

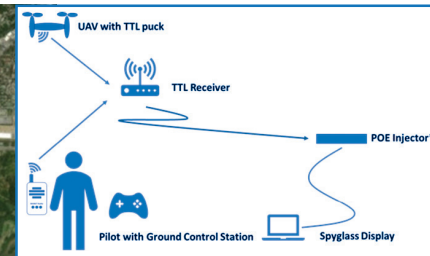
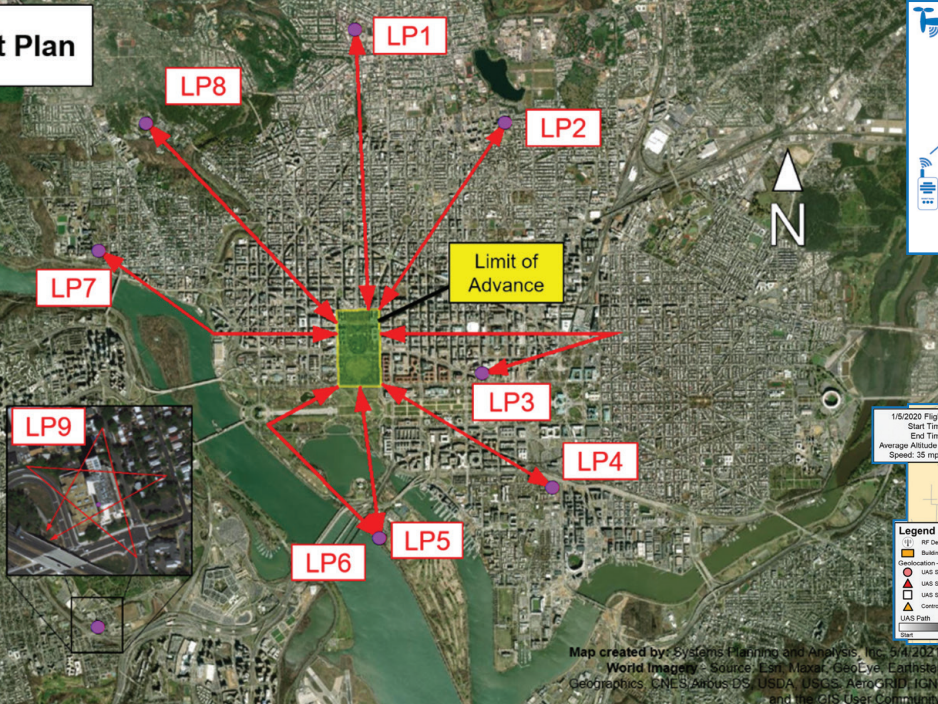
GCAM™ software runs stochastic Operational simulations.

Launch Point/Flight Plan

- Legend**
- Launch point
 - ↔ Route
 - Limit of Advance

| Route Name | Distance Round Trip (In miles) |
|------------|--------------------------------|
| LP1 | 4.1 |
| LP2 | 3.3 |
| LP3 | 5.4 |
| LP4 | 2.9 |
| LP5 | 2.2 |
| LP6 | 3.5 |
| LP7 | 3.3 |
| LP8 | 4.0 |
| LP9 | 0.6 |

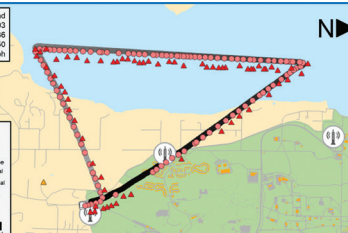
AGL Max = 400ft



Real-world flight tests evaluate C-UAS system performance.

1/6/2020 Flight 1 - Quad
Start Time: 11:21:03
End Time: 11:31:36
Average Altitude (MSL): 450
Speed: 25 mph - 45 mph

- Legend**
- RF Receiver
 - Building
 - Geolocation - Signal Type
 - UAS Signal - Internal
 - UAS Signal - External
 - UAS Signal - Home
 - Controller Handset
 - UAS Path



Rigorous analysis far exceeds observational insights.



CASE-T IS A POWERFUL TOOLSET OFFERING FULL PROGRAM OFFICE SUPPORT

Threat & Assessments

Develop intel-informed postulated UAS threat capabilities and scenarios. Identify required capabilities through mission planning.

Research & Development

Monitor and evaluate C-UAS technologies. Attend C-UAS R&D events as a trusted agent.

Acquisition & Systems Engineering

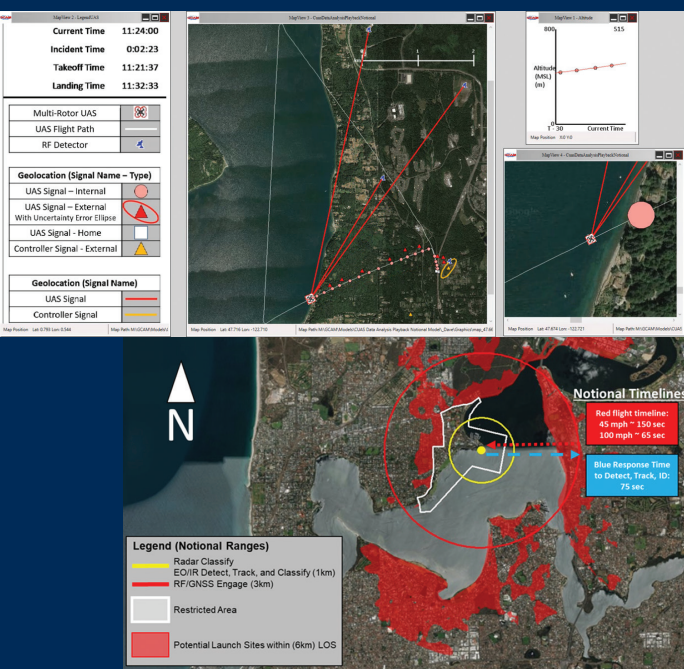
Draft C-UAS program plans and requirements instructions. Lead IPTs for C-UAS policy, T&E, safety, and Blue UAS programs.

Policy

Analyze DoD policy, federal law, and agency regulations. Develop CONOPS to ensure effective and compliant C-UAS mitigations.

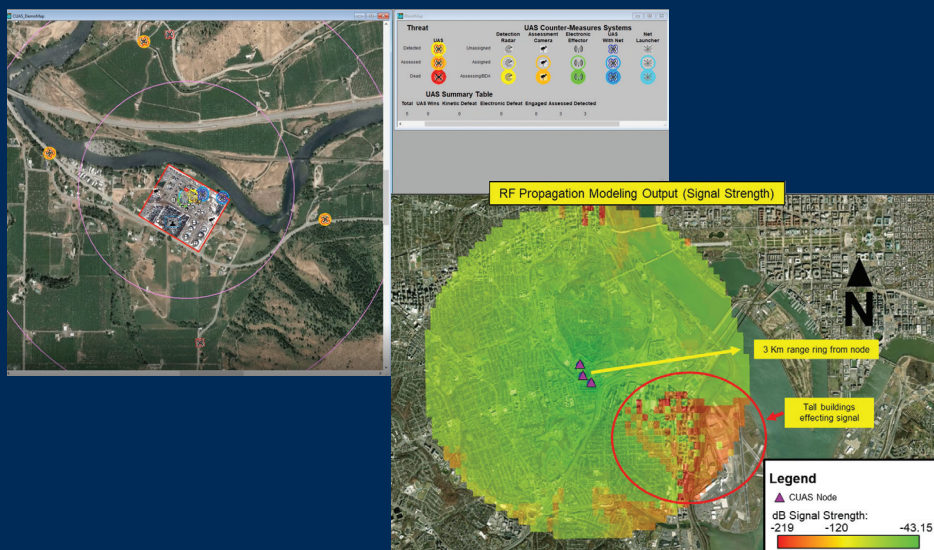
Deployment

Quantify safety impacts from countermeasure deployment. Provide onsite support for System Operational Verification Testing.



MODELING REAL-WORLD TESTING TESTING ANALYTICS

CASE-T enables clients to more quickly understand risks associated with both UAS threats and their counter measures.



CASE-T Sponsors: SSP, DARPA, DHS S&T, and Other Government Agencies

Wargames and models to assess the absolute and relative impact of C-UAS performance against detection, identification, tracking, and mitigation metrics.

Dynamic simulations of actual UAS incursions and future threat scenarios.

Coordination and analysis of live testing event to assess C-UAS solutions.

Live testing experience includes autonomous underwater, surface, and ground vehicles.

DECISION SUPPORT FOR NATIONAL SECURITY

Systems Planning & Analysis, a leading global provider of advisory services supporting national security objectives, provides deep domain expertise, problem-solving capabilities, and a results-driven approach to program lifecycles, reaching a wide spectrum of market areas.

With over 50 years of experience, SPA successfully manages large, integrated professional service projects in engineering, analytics, modeling and simulation, and financial and scientific services for clients worldwide.



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