



Where NEXT Takes Flight



NUAIR DEFENSE

EXECUTIVE SUMMARY

UAS & Counter-UAS Readiness & Acceleration:

NUAIR Defense provides an end-to-end framework to accelerate both the acquisition and fielding of critical capabilities that safeguard our homeland and deter near-peer adversaries. Grounded in rigorous evaluation, validation, and verification processes, our approach streamlines development timelines and pushes innovative technologies into operational theaters with minimal risk.

We offer specialized product maturation pipelines—merging accelerated prototyping, feedback loops, and data analytics—along with mission control infrastructure and digital twin / integrated Live, Virtual and Constructive (LVC) environments for robust training & experimentation, real-time surveillance, and dynamic threat response. By embedding counter-UAS measures, safeguarding Protection Level critical assets, and ensuring stringent safety and regulatory compliance, we deliver comprehensive sustainment services that help our partners stay ahead of evolving threats and strengthen the defense industrial base.

VALUE ADD

- **Accelerated Fielding & Scalable Production:** Support DoD modernization with rapid prototyping, c-UAS testing, real world, multi terrain and scenario-based flight testing, and technology demonstrations.
- **Knowledge Preservation & Sustainment:** Reduce development timelines and operational risks with comprehensive safety protocols, advanced instrumentation, and real-time data analytics.
- **Operational Tempo & Expert Oversight:** Provide specialized training, real-time support, and agile logistics, enabling rapid response to evolving threats and sustained readiness under pressure.
- **Advanced Training & Threat Reduction:** Integrate live scenarios with virtual and constructive assets to reduce operational risks, expedite technology adoption, and enhance warfighter capabilities.
- **Support for Rapid Acquisition:** Get the most effective tools into the hands that need them with full confidence in performance and outcomes.



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CORE SERVICES

UNPARALLELED RANGE OF OPERATIONS

- 450 Square Miles of BVLOS Flight Authorization
- Controlled & Uncontrolled Airspace
- Full Confidence in Low Altitude Operations
- Accelerated Validation Capabilities



EVALUATION, VALIDATION & VERIFICATION

- Aircraft & Equipage
- Airborne Sensors
- Docking Stations
- Ground-Based Sensors
- Technology Integration
- Performance Benchmarking Data
- C-UAS & Advanced Threat Simulation
- GPS-Denied & EMI Conditions



PRODUCT MATURATION & MARKET READINESS

- Prototype Refinement
- Design Modifications & Issue Resolution
- Readiness Assessment
- Durability & Reliability Checks
- Mission-Capable Design Validation
- Field-Ready Infrastructure



MISSION CONTROL & OPERATIONAL ENABLEMENT

- Real-Time Command & Control Centers
- Multi-Aircraft Coordination
- Mobile Operations Center (MOC)
- Remote Operations & Rapid Deployment
- Site Survey & Setup
- Range Use Coordination
- Continual Mission Support
- Flight & Full Spectrum Monitoring



SURVEILLANCE AS A SERVICE

- Digital twin of airspace from 0-10,000 ft AGL
- Cooperative & Non-Cooperative Aircraft Identification
- Controlled & Uncontrolled Airspace
- Uncrewed Traffic Management (UTM)
- Airspace Prioritization
- Operation Center Development



CONSULTATIVE SERVICES & TRAINING

- Operator Readiness & Mission Planning
- Waiver & Regulatory Support
- Safety Management Systems
- c-UAS Tactics & Protocols
- Specialized Certifications (NIST & ASTM)
- Government Contracting
- Dual-Use Technology
- FAA Part 107 Certification
- SBIR/STTR & Other DoD Contract Pathways
- Rapid Concept-to-Deployment



COUNTER-UAS & ACTIVE DEFENSE

- c-UAS & Advanced Threats Detection
- Integrated Radar & Sensor Fusion
- System Performance Benchmarks
- Real-Time Threat Intelligence



CATALOGING & SUSTAINMENT SERVICES

- Live Inventory of Components & Software
- Proactive Version Control
- Continuous Configuration Updates & Performance Feedback
- Data-Driven Design Enhancement Reports
- Predictive Maintenance Insights
- Technical Documentation & User Manuals



DIGITAL TWIN ENVIRONMENT LEARNING

- High-Fidelity Simulations
- Real-Time Data Integration
- Enhanced Training & Risk-Reduced Rehearsals
- Digitized Urban & Critical Infrastructure
- Multi-Modal Buildout
- AAM Master Planning



SAFETY & REGULATORY SUPPORT

- Regulatory Intelligence & Guidance
- ASTM, FAA, DoD, & NIST Standards
- Real-Time Policy Updates
- Rigorous Safety Protocol Alignment
- Advanced UAS Operations & Approvals
- Near Term Approval Process (NTAP)

VISION & MISSION



OUR VISION

We believe those who safeguard freedom and peace deserve an unshakable advantage in every domain—air, land, maritime, and space. By uniting human ingenuity with uncrewed and autonomous systems, we envision a future where our Nation is always one step ahead, ensuring a safer world for all.



OUR MISSION

We expedite the fielding of vital defense capabilities through rigorous testing, integration, and specialized training. By matching threats to solutions, reinforcing homeland security, and helping rebuild the defense industrial base, we ensure our forces remain ready to deter aggression and prevail in contested environments.



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