



CAPABILITY STATEMENT

ANS COMPOSITE

Adaptive Neuro-Shield™ — adaptive electromagnetic & radiation-survivability IP portfolio

Sole proprietorship (Rachael V. Hager dba ANS Composite) · Franklin County (Wirtz), Virginia

SMALL BUSINESS

NON-TRADITIONAL DEFENSE CONTRACTOR

SBA-CERTIFIED WOSB

IP LICENSING + ADVISORY

COMPANY OVERVIEW

New era. New rules. New EM architecture.

1

ADAPTIVE DEFENSE MATERIALS

A patent-pending, four-filing electromagnetic & radiation-survivability IP portfolio — licensed, not sold.

2

PLUG-IN ADDITIVE LAYER

A modular add-on — coating, structural skin, or printable ink — that integrates with **no host-platform redesign**.

3

DIRECT DEFENSE ALIGNMENT

Space Force interceptors & satellites, missile and hypersonic hardening, and Golden Dome builds.

4

PRIVATELY FUNDED · READY TO MATURE

Wholly founder-owned, **developed at private expense**. Positioned for rapid maturation through government-partnered prototyping.

THE PORTFOLIO — FOUR FILINGS, ONE ARCHITECTURE

FILING 01 · THE BASE LAYER

Adaptive Self-Healing Shield

Frequency-adaptive broadband shielding, 30 MHz–100 GHz, that self-heals battle damage in the field — no depot return.

FILING 02 · THE HARDENING

Multi-Domain EM Defense

EMP, high-power-microwave and directed-energy hardening that keeps kill-web nodes — satellites, C2, comms — alive under attack.

FILING 03 · THE STRUCTURAL FRAME

HETD Structural Skin

Shielding built into the load-bearing structure — blast, ballistic and hypervelocity impact plus co-incident EM pulses, in one member.

FILING 04 · THE MANUFACTURING KEY

ARI Printable Ink

The whole defense as a single-pass 3D-printable ink. Print the protection in; never paint it on.

★ Filings 02 and 03 together address nuclear-event survivability — one blocks the electromagnetic pulse, the other hardens the structure against the radiation, **configurable toward MIL-STD-188-125-class HEMP protection**. The standard is the measure: a specification to be met and verified, not a claim about surviving a blast. Formulations, recipes, ratios and process parameters are not published — the proprietary *how* stays under mutual NDA.

APPLICATIONS & USE CASES

MISSILES, GROUND & TACTICAL

DEF

- 1 Missiles & precision munitions
- 2 Command & control ground stations
- 3 Enclosed compartments & engine bays
- 4 Battle-damage survivability patches
- 5 Soldier-worn tactical systems
- 6 Man-portable comms & GPS/PNT enclosures

AEROSPACE, SATELLITES & AVIATION

DEF / COM

- 7 Satellites, orbiting systems & kill-web nodes
- 8 Fixed-wing avionics bays
- 9 Drones & autonomous systems — air, ground, sea
- 10 Helicopter blades & high-vibration components
- 11 Wiring harnesses & coaxial conduits

INFRASTRUCTURE, ENERGY & COMMERCIAL

DEF / COM

- 12 AI & cloud data centers, edge computing
- 13 Electric-vehicle battery enclosures
- 14 Power-grid substations & transformers
- 15 Shipboard electronics, submarine & undersea platforms
- 16 Sensitive medical-device housings

★ **The logistics math.** One printed material replaces a specialized stack — $\approx 1.2\text{--}1.3\text{ g/cm}^3$ (waterborne-polyurethane build; copper 8.9 g/cm^3) — **under half the mass of the formed metal enclosure structure it replaces** (design target) — self-healing in the field, no depot return. On an uncrewed system, every gram removed is endurance, range, or payload.

HOW TO WORK WITH ANS COMPOSITE

PRIORITY

GOVERNMENT-DIRECT

- **1 · Scope the qualification under an Other Transaction.** ANS defines the work against your field of use, prices it as a rough order of magnitude, and delivers on milestones tied to verifiable tasks — program management, subject-matter expertise and engineering, with accredited-laboratory testing inside the same agreement. A priced deliverable, not a subsidy. **Authority:** 10 U.S.C. § 4022 — § 4022(d)(1)(A) is satisfied by a non-traditional defense contractor participating to a significant extent.
- **2 · Then license it, direct.** With evidence in hand, the department takes a **non-exclusive, field-of-use** license, production follow-on under § 4022(f). No prime intermediary required. **Authority:** 10 U.S.C. § 3793(2) — a license *under* patents and applications for patents. The DFARS boilerplate (subpart 227.70, format 252.227-7012) is Reserved for DoD under Class Deviation 2026-O0036; the statute stands and the license is negotiated directly. Where a solicitation requires the awardee to build and deliver hardware, ANS is the licensor on the team, not the prime.

ALSO AVAILABLE TO PRIMES AND INTEGRATORS — a time-boxed **field-of-use evaluation option** under mutual NDA, converting to a commercialization license, with ANS paid for the integration engineering while it runs. Mentor-Protégé available.

Each license covers a single field of use — no program waits behind another program's schedule, and no application waits on one manufacturer's capacity. Available for evaluation and co-development across all service branches.

VALIDATION & MILESTONES

- **Intellectual-property portfolio** — four U.S. filings made in 2026, 100% founder-owned (micro-entity), developed at private expense.
- **OASW(SO/LIC) Accelerator Event** — invited participant and **Gate 1 award recipient**, 24 July 2026 (Office of the Assistant Secretary of War for Special Operations & Low-Intensity Conflict).
- **Maturity** — component dynamics proven at TRL 4–6; integrated architecture at TRL 2–3 comprehensive. The components are established art; the architecture that integrates them is what is patent-pending.

COMPANY DATA & CODES

UEI	RK38AE8R1EP6	CAGE	1ZST9	EIN	41-5250686
NAICS	541715	SAM.GOV	Active · 04/2027	STATUS	Small Bus · NDC
WOSB	SBA-cert 07/2026	EVA	SUP364082	IP	4 U.S. filings