

DESTROY THE KILL CHAIN.

HELICON DEFENSE

At the human, not the hardware.

Real-time RF targeting from any UAV.

A NuvoNexus, LLC company

PROBLEM

- Operators win until found.
- Counter-UAS detects drones, not the people flying them.
- RF battlespace is dense, noisy, non-standard.
- Detection ≠ targeting.
- Result: counter-UAS response delayed at the tactical edge.

SOLUTION

- UAV-integrated RF detection and emitter targeting layer.
- Real-time bearing + signal-strength guidance to source.
- Direct MAVLink / ArduPilot integration over UART.
- DSP separates signals in cluttered, contested environments.
- Standard UAVs AND fiber-optic-tethered hosts for RF-denied environments.

SYSTEM



RF DF payload — compact, UAV-integrated package, ~200g / <6W

VALIDATION

- Fielded on quadrotor platforms in active operational use.
- US UAV-stack integration: TRL 6, 6-month path to TRL 7 with sponsor.
- Detects 5–6 GHz drone-control + jammer emitters.
- Pilot sees live direction cue plus signal strength.
- Passive sensor — no emissions to triangulate against.
- SWaP-friendly: ~200g payload, <6W draw.

TRANSITION

- Near-term (2026): Seeking USMC / Army test partnership for UAV-integrated and vehicle-organic RF targeting eval, co-funded at sponsor facility.
- Structural (FY27): SBIR Phase II / TACFI sponsor for full integration into US UAV stacks.
- Path to lower bands (1.5, 2.4 GHz).
- SAM.gov registration in process; CAGE pending.

VEHICLE-ORGANIC



Fiber-optic-tethered host on ground vehicle. Persistent airborne RF DF, organic to maneuvering ground unit. Jam-immune comms link.

PROGRAM-READY ATTRIBUTES

~200g
MASS

<6W
POWER

UART
BUS

MAVLink
PROTO

BATTLEFIELD-PROVEN RF LOCALIZATION · US-COORDINATED ACCESS VIA NUVONEXUS, LLC · DOD ACQUISITION-ALIGNED

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