

AUTONOMY ENGINEERING PLATFORM · BY TEMPEST DRONEWORX™

Corvus MRDR™

Prove it before you fly it.

Corvus MRDR™ is the robotics development and validation platform Tempest Droneworx™ built for itself — now available to universities, researchers, and commercial robotics teams. Develop, test, and validate **your own** autonomous systems in scalable simulation and mixed simulated/physical environments.

An engineering environment — not an autonomy framework.

- ✓ Develop & validate autonomy in one environment
- ✓ Realistic, repeatable simulation over real geography
- ✓ Mixed simulated/physical operations, full telemetry

EVERYTHING YOU NEED TO ENGINEER AUTONOMY

■ Mixed simulated & physical

Run simulated and real robots in one mission. Swap one simulated vehicle for a real one, then the whole fleet — de-risking every step from bench to field.

■ Production firmware

Corvus CROS™ executes real PX4 and ArduPilot firmware while simulating vehicle behavior — you test exactly what you'll fly.

■ Hardware-in-the-loop

Run actual radios and real network conditions — genuine RF interference, range, latency, and link loss, not idealized sockets.

■ Heterogeneous fleets

Platform-agnostic by design: different airframes, sensors, and autopilots cooperating in a single mission, regardless of vehicle type.

■ Real-world coordinates

Simulate over real terrain, infrastructure, and airspace using actual geographic coordinates, so validation reflects where you'll operate.

■ Telemetry record & replay

Every mission — simulated, physical, or mixed — is archived for analysis, debugging, operator review, and after-action reporting.

THE CORVUS PLATFORM

Corvus CROS™

CORE ROBOTICS
OBJECT SIMULATOR

Simulates individual unmanned systems while executing production autopilot firmware — interact with them exactly as you would physical vehicles.

Corvus RAVN™

ROBOTICS
AGGREGATION &
VISUALIZATION NODE

Fuses Corvus CROS™, physical robots, ADS-B, Remote ID, and radar into one real-time 3D operating picture over real terrain.

RAVN™ Clients

WINDOWS · ANDROID ·
ATAK

Every stakeholder watches the same operation from their own viewpoint — simulated runs, live field tests, and archived replays, even remote sites.

Admin Panel

FIRMWARE ·
ENVIRONMENT · FLEET

Switch each Corvus CROS™ between PX4, ArduPilot, and more; shape the environment; and tune every drone's parameters from one place.

Scalable configurations

Every Corvus MRDR™ system begins with a foundation platform — **MRDR-1** (one Corvus RAVN™ server, four Corvus CROS™ simulators, and RAVN™ client software), or the **MRDR-187** enterprise foundation with more simulators in a single box — then grows with **MRDR-2** expansion units as your program scales.

NOW AVAILABLE - PRE-ORDER

Ships October 2026

Reserve your Corvus MRDR™ system today. Talk to us about the right configuration for your lab, fleet, and research goals.