Ops Crew Training Brief - Atmospheric Filtration Drone Swarm

This training brief is a rapid onboarding guide for operations crew members participating in live or simulated deployment of Atmospheric Filtration Drone Swarms. It includes core competencies, safety procedures, communications, and real-world readiness drills.

Mission Objective

Deploy and manage drone swarms that remove airborne pollutants using adaptive smart filtration systems.

Ensure continuous uptime, environmental responsiveness, and proper return-to-base (RTB) behavior.

Crew Roles

Flight Lead Oversees flight paths, telemetry, and mission logic

Field Tech Battery/filter swap, diagnostics, visual checks

DAO Ops Admin DAO access, overrides, logging, telemetry validation

Safety Officer On-site risks, shutdowns, protocol enforcement

Pre-Mission Checklist

- Verify drone readiness (battery >90%, filter mounted)

- Sync to DAO swarm group

- Confirm weather forecast within operating thresholds

- Check emergency kit, first aid, and protective gear

In-Field Protocols

- Remain 3m+ away from active drones

- No overhead interaction unless powered off

- Use tablet with FieldOS for live drone logs and alerts

- Do not deploy during lightning events or >30km/h wind

Post-Mission Duties

- Log all filter loads and swap cycles

- Recharge all batteries and scan-in serials

- Inspect frame, sensors, and hulls for damage

- Report anomalies to DAO console

Training Exercises (Recommended)

1. RTB Trigger Drill Simulate loss of power and test auto-return

2. Filter Swap Race Time battery and filter replacement

3. Comms Blackout Operate with local-only fallback mode

4. Emergency Beacon Deployment Recover from signal loss