

# USE CASE



## SNOWBIRD ENVIRONMENTAL CONTROL UNITS

**Capability Focus: Deliver reliable, high-capacity environmental control to THAAD Mobile Command Centers to sustain operator performance and protect mission-critical electronics in extreme climates**

The **Snowbird Environmental Control Unit (ECU)** provides THAAD Mobile Command Center (MCC) crews with mission-critical cooling and heating capability that mitigates heat stress, safeguards sensitive electronics, and sustains operational readiness in austere environments. Designed for rugged military deployment, the ECU delivers consistent climate control despite extreme ambient temperatures, dust, vibration, and continuous-duty mission requirements.

**LOCATION: Forward-deployed air and missile defense sites / Expeditionary tactical operations environments**

**APPLICATION:** The Lockheed Martin THAAD Mobile Command Center operates in extreme desert, coastal, and cold-weather environments where solar loading, high ambient temperatures, confined shelter spaces, and dense electronic heat loads create significant thermal stress. Elevated interior temperatures can degrade operator cognitive performance, reduce situational awareness, and increase the risk of thermal shutdown for mission-critical systems. **Snowbird's ECU integrates directly with the THAAD MCC environmental interface to deliver conditioned air to operator workstations and electronics bays, maintaining stable, safe operating temperatures during continuous 24/7 missile defense operations.**

**RESULTS:** Utilizing the Snowbird THAAD ECU maintains operator cabin temperatures within safe performance thresholds in ambient conditions exceeding 120°F and reduces heat stress and fatigue during extended mission shifts. The THAAD ECU protects sensitive radar, communications, and battle management electronics from thermal overload and supports sustained 24/7 mission readiness. These units are rugged, shock- and vibration-tolerant for performance suitable for expeditionary deployment. **By delivering reliable environmental control at the point of operation, Snowbird ECUs directly enhance operator survivability, preserve cognitive performance, and increase mission effectiveness for THAAD air and missile defense operations.**

**[WWW.SNOWBIRDTECH.COM/ECU](http://WWW.SNOWBIRDTECH.COM/ECU)**



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