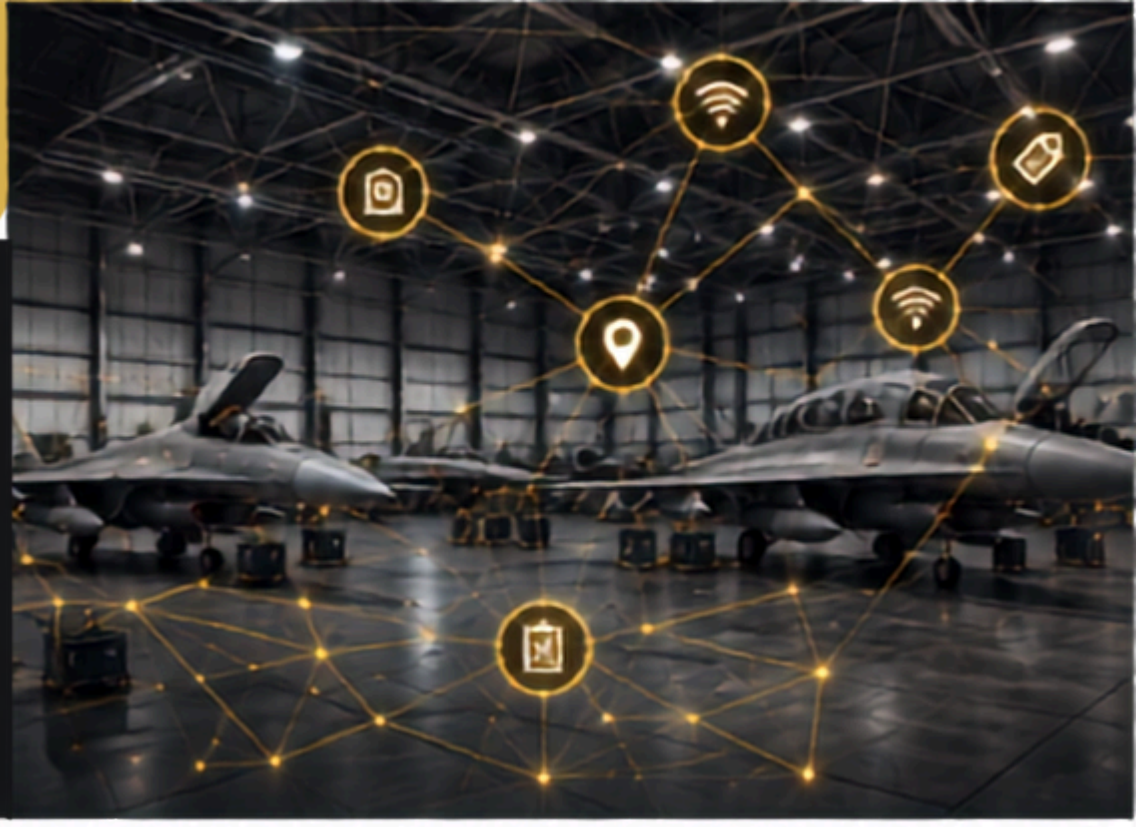
FLINT
Empowering Through Experience

CASE STUDY

BATS - RFID Asset-Tracking Infrastructure for the Royal Saudi Air Force

Eight hangars. Thousands of mission-critical parts. No tolerance for a component that can't be found.



CLIENT
Royal Saudi Air Force (delivered via AEC)

SECTOR
Defense & Aerospace
Industrial wireless & IoT infrastructure for RFID asset tracking

SERVICE
Industrial wireless & IoT infrastructure for RFID asset tracking

THE PROBLEM ON THE GROUND

Across eight aircraft hangars, the Royal Saudi Air Force tracked spare parts and mission-critical assets by hand. Every manual count was crew time spent searching instead of servicing - and in a readiness environment, a part that can't be located quickly as a sortie that waits.

The Air Force needed real-time visibility of every tagged asset. RFID could deliver it, but only on top of a secure and reliable wireless backbone strong enough to run uninterrupted inside a high-security defense facility - and hardened enough to keep that facility secure.

WHAT FLINT BUILT

Engaged through AEC, Flint designed and deployed the defense-grade wireless and switching foundation purpose-built to carry RFID at scale:

8	9 m	Cisco	Hardened
hangars covered	AP mounting height	switching fabric	defense-grade config.

- Industrial Wi-Fi access points mounted at 9 meters for unbroken floor-to-ceiling coverage across all eight hangars
- A secure Cisco switching fabric with structured cabling engineered for the hangar environment
- Network hardening and locked-down configurations built to defense security standards - no external exposure
- Validated RFID reader connectivity and the operational workflows to run it day to day

HOW IT WAS DELIVERED

Flint surveyed each hangar first - RF modeling and physical site assessment to fix mounting heights, access point spacing, and cable routes before a single bracket went up. The build followed: high-mount APs, structured cabling and switching, configured against defense-compliant network policy. Then integration — RFID readers tested for capture accuracy and interoperability, and the full system validated for operational use before handover.

OUTCOME

The Air Force gained live visibility of every tagged asset across eight hangars. Parts that once took crews minutes — or longer — to locate now register in real time, and the counting errors disappeared with the manual counts. Maintenance turnaround tightened, mission preparation moved faster, and the backbone Flint built is already sized for the IoT and automation the facility will layer on next.

AI DRIVEN MANAGED SERVICES

Inside a defense-grade environment, the same wireless backbone becomes an intelligence source: Flint correlates asset-and-network telemetry to flag coverage degradation early and keep RFID operations mission-ready under strict security constraints.

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