FORTEM™
TECHNOLOGIES

Securing Prisons from Drone Threats
With SkyDome Airspace Awareness, Safety and Security Platform

Drones Deliver Contraband Over Prison Security

Drones are one of the biggest threats to correctional institution security. They are being used to deliver drugs, phones, shivs and firearms to prisoners in the United States and around the world. The internet is saturated with documented incidents and video catching drones in the act. Correctional facilities have spent millions of dollars on physical security, but are not equipped to handle threats that fly over fence lines.

Unlike other correctional facility threats that must navigate through the layers of ground security, inexpensive drones (costing less than $1000) easily bypass security. They can be sent by non-technical drone pilots from miles away at speeds of 20-60mph (9-27m/s), and for a few thousand dollars can carry payloads up to 35lbs (15.9kg), making them the preferred contraband delivery mechanism. A criminal can configure one of these drones to deliver a payload with precision into a prison yard totally undetected by RF listening and jamming systems.

Why Fortem SkyDome® Is The Preferred Platform

SkyDome is engineered from the ground up to see everything in a protected airspace. Unlike RF-based technologies, it doesn't just see drones that are emitting RF, but also sees RF-silent drones that have been purposely programmed to run silent, not emitting any signals. Using Fortem TrueView® radar, SkyDome provides precise real-time locations of where rogue drones are located inside or outside a protected airspace, making it the perfect platform for cueing other sensors such as optical and thermal cameras. SkyDome cues these sensors up to 8 times a second giving security personnel total situational awareness with a live streaming view of what is going on in their airspace. SkyDome is a distributable platform that can cover any terrain and environment.

All correctional facilities have security systems in place that accommodate their unique situation, environment and escalation of force protocols and processes. The Fortem platform is designed to complement and integrate with these systems with minimal effort and zero negative impact. This creates comprehensive security coverage above and beyond what is already in place.

SkyDome is an AI-enabled platform with a ThreatAware™ engine that determines the threat level of every drone in the protected airspace simultaneously. It allows for set up of virtual fences, with a robust rules engine that gives correctional facility personnel adequate time to react to a threat or launch an integrated response such as the

Key Components of the SkyDome Platform

SkyDome has several key components. In addition to having a flexible API and robust SDK for integration with existing correctional facility systems, DeepIntegration™ with TrueView radar and DroneHunter makes the SkyDome platform successful in installations all over the world.

TrueView Radar

TrueView radar technology detects and calculates the location and trajectory of hundreds of airborne objects quickly and accurately, even when they are RF-silent. Radars are distributable and can provide single infrastructures to entire metro areas with complete airspace coverage. TrueView radars provide optimal coverage in topology-challenged areas, unlike traditional long range radar. TrueView includes detection, tracking and classification with AI-at-the-edge computing.

TrueView subsystems are strongly interdependent with DeepIntegration. Working together in a strategic architecture, they make the TrueView family of radar the world leader in SWAP-C electronically scanned phased array radar. It is the gold standard in radar technology and delivers best-in-class real-world range, resolution, accuracy and clutter rejection.

DroneHunter

Custom built for speed and agility, and effective day or night, DroneHunter is the ultimate in drone interceptor technology, with over 7,500 missions and 3,500 real-world captures on multiple drone platforms.

DroneHunter DeepIntegration with an onboard TrueView radar makes autonomous detect, pursuit and capture of fixed-wing and vertical drones a reality. Built with safety at its core, DroneHunter captures and safely tows away dangerous or malicious drones for forensic analysis. Multiple DroneHunters can be coordinated by SkyDome when there are multiple threats present. The DroneHunter is stored in a DroneHangar that keeps the DroneHunter charged and at the optimal temperature, ready for autonomous flight.

Summary

Criminals and terrorists are using drones as high-performance weapons capable of defeating multimillion-dollar physical security systems.

With the emergence of these drone threats, a C-UAS solution that deeply integrates with your existing security is needed. SkyDome is deployed at world class venues, military bases, airports and infrastructures around the world and provides an effective and reliable solution for security professionals.

Fortem Technologies has proven to be a partner with flexible options that complement your existing physical security and will collaborate with you to resolve your unique airspace security challenges. Learn more about Fortem Technologies by visiting fortemtech.com or contacting sales@fortemtech.com.