Targeting a Safer World®

ACCIPITER®
ACCIPITERRADAR.COM

Surveillance Solutions for
Counter-Unmanned Aircraft Systems
(C-UAS)

WORLD'S MOST EFFECTIVE AND AFFORDABLE WIDE-AREA SITUATIONAL AWARENESS

Accipiter's mission is to provide the world's most effective and affordable wide-area situational awareness solutions for applications that impact the safety and well-being of the public, individuals and the environment.

The Accipiter® SECURES™ family of C-UAS solutions acts as a force multiplier for security personnel responsible for ensuring that small drones (also referred to as remotely piloted aircraft systems (RPAS) and unmanned aircraft systems (UAS)) do not threaten the integrity, safety and security of their operations. SECURES™ helps facilities understand their operational risk with respect to clueless, careless and criminal drones in their vicinity, provides them with real-time awareness and alerting of threats of concern, supports response assets and personnel in interdiction and prosecution, and assists them with training, stakeholder collaboration, information sharing and interoperability.

Prisons and Correctional Institutes

GLOBAL PROVIDER OF HIGH PERFORMANCE RADAR SOLUTIONS

Accipiter Radar is a global provider of high-performance radar surveillance solutions built upon its patented Radar Intelligence Network™ (RIN) platform technology and sold under the Accipiter® brand. Accipiter's Surveillance-to-Intelligence™ (S2I) solutions are designed to automatically detect, track and provide alerts involving small uncooperative targets such as drones, birds and general aviation aircraft in the airspace, people and vehicles on the ground, and pleasure-craft in marine environments. The result is enhanced safety and security through unprecedented all domain awareness and understanding.

Applications include Counter-UAS (C-UAS), Beyond Visual Line of Sight (BVLOS) commercial drone delivery and inspection, bird strike mitigation, perimeter security, border security, law enforcement, waterside safety and security, and environmental protection.

WORLDWIDE PRESENCE AND SUPPORT

Accipiter Radar Technologies Inc. is headquartered in Ontario, Canada and Accipiter Radar Corporation is headquartered in New York State, USA. Our extensive network of qualified strategic partners enables us to deliver high quality systems and services globally, ensures excellence in matching system selection and specifications to customer requirement, and provides for installation, training, documentation, local maintenance, and technical support.

Our in-house team of experts in advanced radar and RF engineering, information technology and software development, partnered with in-house domain expertise in ornithology, aviation safety, homeland security and public safety deliver the most capable and affordable, situational awareness systems on the market today.

ACCIPITER'S RADAR INTELLIGENCE NETWORK™ PLATFORM TECHNOLOGY

Accipiter offers several carefully engineered SECURES™ C-UAS surveillance systems to address your particular counter-drone mission and they are all built on our patented and game-changing Radar Intelligence Network™ (RIN) platform technology. The RIN architecture ensures your system can easily adapt and grow with your changing threats and needs and can leverage components you have already purchased.

Our novel approach to wide-area, real-time detection, tracking, post processing, and display coupled with on-the-fly and interactive analytics applied to historical target data sets us apart from any other radar or sensor system provider, by giving you unprecedented situational understanding and decision support.

Our SECURES™ C-UAS architecture allows any number of sensors to seamlessly connect over any IP network to our patented M³® Target Information System which forms the heart of all our delivered systems. And because the RIN was engineered to be radar agnostic, the right-sized 2D/3D radar sensor(s) can be selected for your C-UAS mission. Co-operative drone sensing using RemoteID and Aeroscope are also supported, as are RF direction finding sensors such as Dedrone. Accipiter also provides an integrated ADS-B sub-system for cooperative aircraft tracking and seamless integration with public data sources such as a NOAA weather feed.

M³® TARGET INFORMATION SYSTEM

Accipiter's multi-sensor, multi-mission, multi-user M³® Target Information System (TIS) provides the ultimate in multi-sensor target data processing, query and retrieval, enabling rapid and efficient understanding that leads to better strategic and tactical decision making.

The TIS not only organizes, stores indefinitely, fuses, analyzes, manages and distributes the rich sensor target data in earth coordinates; but it also drives an ecosystem of user apps we call Surveillance-to-Intelligence™ (S2I) tools to deliver tactical and strategic information to users. Furthermore, the TIS provides sophisticated radar/sensor slew-to-cue capabilities which control PTZ cameras to follow targets of interest, capture camera snapshots and video, and allow targets to be identified.

SURVEILLANCE-TO-INTELLIGENCE™ (S2I) TOOLS

Accipiter provides a suite of S2I tools that are easy to use, securely from anywhere, right from your favorite browser.
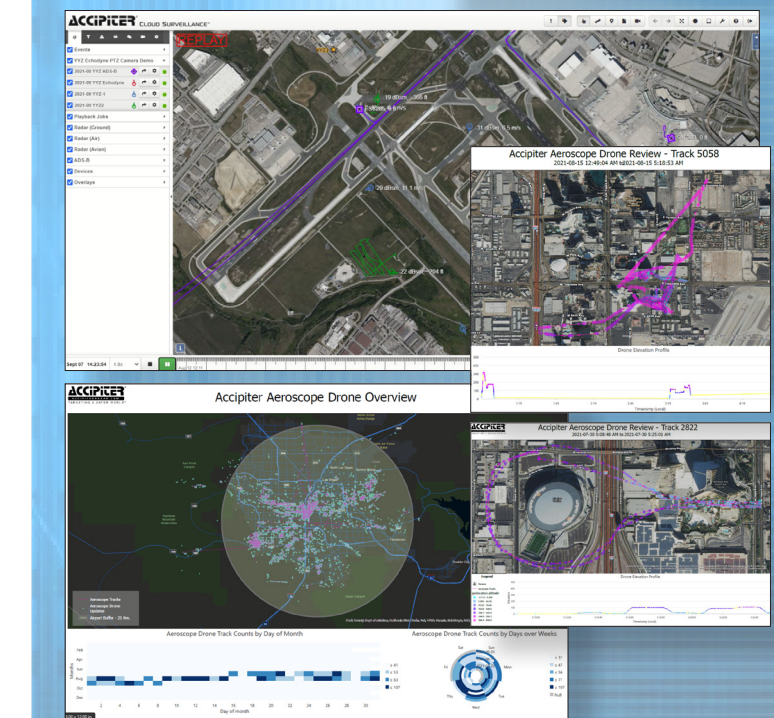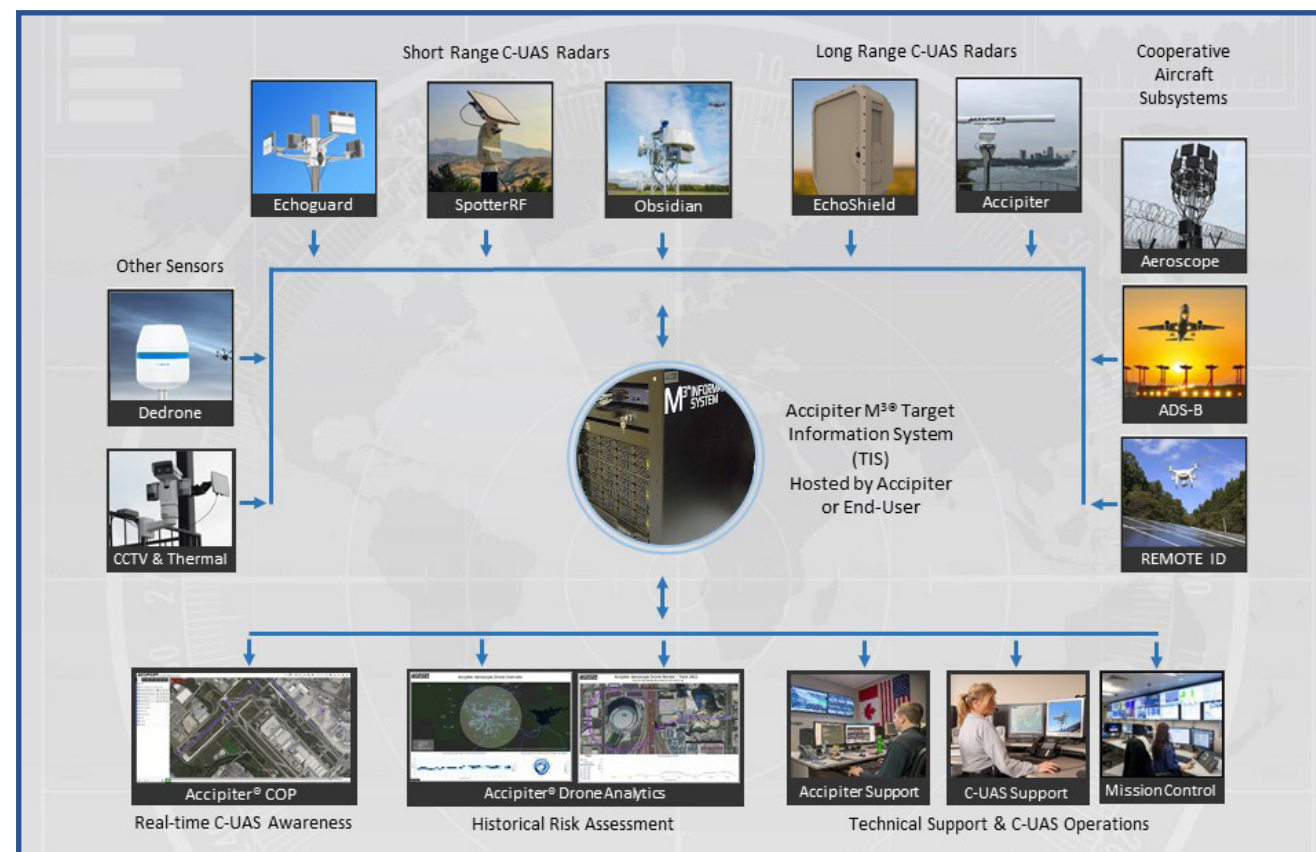
Tactical tools such as the Accipiter® Common Operating Picture (COP) provide security officials with real-time situational awareness including automated detection and alerting of drones in your critical airspace, based on your threat definitions. This allows officials to rapidly assess the situation and execute appropriate mitigation procedures.

Our tablet-based Mobile Response COP gives responders in vehicles, vessels or aircraft a user-centric display, allowing them to more easily put their own eyes on live drones of interest so they can close in and interdict. The COP, in different configurations and operating at different locations, also provides awareness to your stakeholders and partners facilitating communication and team play.

Our strategic S2I tools interactively or on-the-fly rapidly mine the TIS's historical target data to give analysts understanding of drone activity patterns. These tools are designed to provide business intelligence (e.g. when and where are drone threats most prevalent), artificial intelligence (for use in the classification and filtering of weather and birds from drones, and in improved drone threat alerting), and to support incident analysis, training, and regular risk assessment of the airspace.

The TIS also integrates with your security management system, and enterprise GIS and business intelligence systems and supports customer tool development, any number of users and sensors, and insulates your decision support tools and standard operating procedures from sensor life cycle changes.

The Accipiter® SECURES™ C-UAS Solutions Architecture

Short Range C-UAS Radars — Long Range C-UAS Radars — Cooperative Aircraft Subsystems

Echoguard · SpotterRF · Obsidian · EchoShield · Accipiter · Aeroscope · ADS-B · REMOTE ID

Other Sensors — Dedrone · CCTV & Thermal

Accipiter M³® Target Information System (TIS) Hosted by Accipiter or End-User

Accipiter® COP — Real-time C-UAS Awareness
Accipiter® Drone Analytics — Historical Risk Assessment
Accipiter Support · C-UAS Support · Mission Control — Technical Support & C-UAS Operations

Accipiter® S2I Tools

C-UAS
Solutions

AN ACCIPITER® SECURES™ SYSTEM IS AN ESSENTIAL PART OF ANY C-UAS SOLUTION

Whether you need to protect from drone intrusions in the airspace around your critical infrastructure, prisons and correctional institutes, military and civil airports, government buildings, large event venues and international borders, there is an Accipiter® SECURES™ C-UAS System that is right-sized for you. The SECURES™ family of C-UAS products and services is specially designed to help you deploy and grow your solution. SECURES™ supports risk assessments, incident investigations, analyses and training as well as real-time situational awareness, threat alerting and risk mitigation for drone threats involving reconnaissance and espionage, contraband delivery, cyber and physical attacks, smuggling, and intentional or accidental strikes with aircraft.

The patented Accipiter® SECURES™ C-UAS solutions incorporate RF receiving sub-systems including the FAA-mandated RemoteID, DJI Aeroscope and ADS-B to detect and track cooperative drones and aircraft, a radar sub-system to detect and track small, non-cooperative drones which may be trying to evade detection, and slew-to-cued PTZ daytime/thermal cameras to get your eyes on targets of interest intruding into your airspace. Our M³® Target Information System (TIS) which forms the heart of every SECURES™ system provides sensor integration, target data integration and fusion, post-processing including AI and threat alerting, and target data management and distribution. The TIS also drives an eco-system of Surveillance-to-Intelligence™ (S2I) tools, including integration with third-party command and control (C2) systems, which provide decision support to security professionals and their partners, as well as to all facility stakeholders.

OPERATIONAL ADVANTAGES

Supports Counter-UAS Operations through:

- The M³® TIS provides secure, flexible/expandable, physical/virtual sensor networks with advanced processing and decision support
- State-of-the-art, long-range and short-range 2D and 3D radar sensors plug and play as a result of built-in sensor agnosticity
- Aeroscope and RemoteID receivers for drones, and an ADS-B receiver for aircraft are available and plug and play into SECURES™
- Other RF sensors and data sources supportable by SECURES™
- Intelligent, automated, radar-activated, PTZ cameras plug and play with slew-to-cue to follow and identify drones
- Advanced digital signal and data processing to automatically detect and track drones and reject clutter and interference
- Real-time displays with smart, user-definable threat alerting capabilities you can tailor to your particular requirements
- Sophisticated, historical data analytics and displays to help you understand drone activity patterns in the vicinity of your facility
- SECURES™ can be integrated with your counter measure system

Benefits:

- Various Accipiter® S2I tools deliver customizable decision support to watch standers, responders, and analysts anywhere securely via their browsers with unmatched situational awareness and understanding, including real time monitoring and threat alerting, historical event/incident review and reporting, and risk analysis
- Easily provide information sharing and interoperability with your partners and stakeholders
- Right-size the number and types of sensors that best and most cost-effectively support your mission (not locked into proprietary solution); and grow your system without starting over
- Integrate real-time and historical data with your enterprise business intelligence, GIS and information systems
- Easily adapt your solution to a changing threat, facility, and/or technology environment
- SECURES™ C-UAS systems can be delivered as a RaaS (Radar as a Service) subscription service

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