Targeting a Safer World®

Aviation Safety and Security
**WORLD’S MOST EFFECTIVE AND AFFORDABLE WIDE-AREA SITUATIONAL AWARENESS**

Accipiter provides 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.

Accipiter’s Surveillance-to-Intelligence™ (S2I) solutions act as a force multiplier for security and safety personnel by providing them with the tactical and strategic intelligence they require to identify suspicious or hazardous behaviour and direct an appropriate response.

**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. Accipiter’s Surveillance-to-Intelligence™ (S2I) solutions are designed to detect and track small uncooperative targets such as birds and drones in the airspace, airside ground targets, and pleasure-craft in waterside marine exclusion zones. The result is enhanced safety and security through unprecedented all domain awareness for your entire aerodrome. Applications include bird and drone strike mitigation, perimeter and airside security, and waterside security.

**WORLDWIDE PRESENCE & 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, ensuring excellence in matching system selection & specifications to customer requirements, installation, training, documentation and local maintenance and technical support.

Our in-house team of experts in advanced radar engineering, information technology and software development, partnered with in-house domain expertise in ornithology, aviation safety and homeland security deliver the most capable and affordable, situational awareness systems on the market today.
AN ESSENTIAL PART OF ANY AIRPORT’S SAFETY MANAGEMENT SYSTEM (SMS).

Understanding the movement and behaviour of birds and small aircraft such as drones in the airspace, animals and persons on the airfield, and airside vehicles, is critical to risk mitigation and airport safety management systems. Accipiter provides a number of Accipiter® airport radar systems that are specially designed to deliver affordable 2D & 3D Total Coverage® situational awareness through a comprehensive suite of software applications (S2I tools) for live monitoring, automatic alerting, target activity analysis, and standardized reporting.

Our target data rich, M3® Target Information System fills a critical gap in airport safety management systems (SMS), by providing a quantitative data source from monitoring 24/7/365 including at night, in the fog, and off airport; and which complements much sparser visual/camera observations and bird strike reports. Automated reporting metrics and leading key performance indicators (KPIs) can cost-effectively support your Safety Risk Management, Safety Promotion and Safety Assurance components of your SMS Program.

OPERATIONAL ADVANTAGES

**Bird-strike mitigation through:**
- 3D, high resolution Total Coverage® radar tracking of birds & aircraft
- Integrated ADS-B aircraft tracking
- Intelligent, automated, radar-activated deterrents

**Perimeter and aerodrome security through:**
- Ground surveillance radar for tracking of vehicles, persons, animals and on-the-ground aircraft
- Drone/UAS detection & tracking
- Integrated CCTV target verification
- Automated alerting and notification

**Benefits:**
- User applications for real time monitoring & alerting, historical event review, playback and analysis
- Unprecedented situational awareness and understanding
- Support for Wildlife Hazard Assessments
- Integration with Safety Management Systems (SMS)
- Integration with enterprise level GIS and management/airport information systems
- Fully compliant with the United States Federal Aviation Administration’s Advisory Circular 150/5220-25 and validated by the United States Department of Defense’s Environmental Security Technology Certification Program
ACCIPITER’S RADAR INTELLIGENCE NETWORK™ PLATFORM TECHNOLOGY

Accipiter offers several carefully engineered systems to address your particular aviation safety and security problems, 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.

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 systems provider, by giving you unprecedented situational understanding and decision support.

Our RIN allows any number of sensors to seamlessly connect over any TCP/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 radar sensor(s) can be selected for your problem.

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 strategic and tactical decision making.

The TIS not only organizes, stores indefinitely, fuses, 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 integrates with a Device Activation Processor (DAP) that can be radar-activated to fire deterrent devices and trigger camera geo-coordinate queuing in response to identified target scenarios. And real-time replication technology (RTRT) mirrors the TIS to other locations for partner information sharing, data redundancy and evidence protection.

SURVEILLANCE-TO-INTELLIGENCE™ (S2I) TOOLS

Accipiter provides a suite of S2I tools that are easy to use and give users with different roles or missions the situational understanding they need to be more effective at performing their duties. Tactical tools such as the Accipiter® Radar Common Operating Picture (COP) and ThreatViewer™ give watch standers and dispatchers a real-time map-view of target tracks from all sensors with built-in, 24-hour rapid replay along with alerts in response to detected threats of interest. Our tablet-based Mobile Response COP gives responders in vehicles a user-centric display, allowing them to more easily put their own eyes on live targets of interest so they can take action.

Our strategic S2I tools interactively or on-the-fly rapidly mine the TIS’s historical target data to give analysts understanding of target activity patterns; and managers specialized reporting with metrics and key performance indicators (KPIs) that allow them to better manage and allocate resources to mitigate risk. The Accipiter® Track Histories Viewer delivers spatial patterns of tracks around your aerodrome every hour; while the Accipiter® Target Analyzer Software (TAS) allows the analyst to generate a variety of temporal and spatial target activity distributions including heat maps, all filtered by time, date, size, speed, heading and altitude.

The TIS also integrates with your third-party C2, dashboard and enterprise geographical information systems; and also enables development of specific analysis and display tools by customers themselves. Any number of users can simultaneously operate their favorite S2I tools.

A variety of Accipiter® systems built on our RIN platform technology.

Accipiter® S2I Tools