PROJECT SUMMARY

MDA Surveillance, Alerting and Intelligence Safety and Security PEMSA System

Client: Port of Windsor and Transport Canada
Location: Port of Windsor, Ontario, Canada
System: Accipiter® Salus™ Surveillance System, Integrated with Radar/AIS Surveillance feeds from Accipiter® Great Lakes - Environmental Intelligence Network (G-REIN)

Project Start: 08/2019; **Project Finish:** 03/2021
Support Commencement:
Support Services:

Market: Port Security, Safe Shipping, Border Security

Type of Contract: Supply, Installation, Commission and Support

Client Contact:
Available upon request

The Challenge

Transport Canada's (TC) Enhance Maritime Situational Awareness (EMSA) Program aims to provide Indigenous, coastal and inland maritime communities with a better understanding of the marine shipping environment, information regarding the movement of vessels as well as providing enhanced access to maritime situational awareness to assist them in mitigating risk. The Program to Enhance Maritime Situational Awareness (PEMSA) provides funding to eligible recipients for activities that develop and integrate additional data sources into EMSA's GIS Solution which will deliver situational awareness to these stakeholders under Canada's Ocean Protection Plan. The Windsor Port Authority partnered with Accipiter and submitted a PEMSA grant application (PEMSA-WPA project) to Transport Canada to bring real-time and analytical radar/camera data (through the use of Accipiter products and services) to the EMSA GIS Solution for use in the vicinity of the Port of Windsor, and the application was approved for funding.

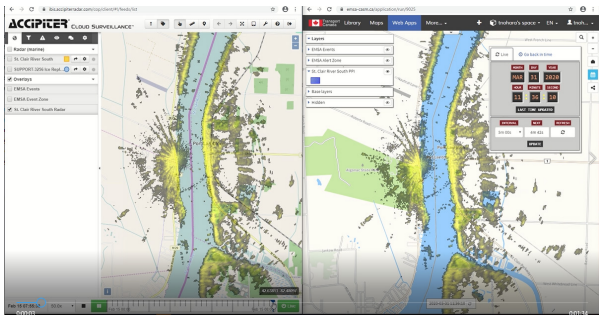
The purpose of the PEMSA-WPA project was to supply Radar-as-a-Service (RAAS), including cameras to the Windsor Port Authority, and assist them in developing operational concepts for use by Canadian harbor masters and indigenous communities to assist Transport Canada in delivering on its Ocean's Protection Plan (OPP) mandate.

The Solution

Accipiter delivered its out-of-the-box, integrated SALUS™ system utilizing COTS products including Axis Cameras, Accipiter® radar sensor feeds from our G-REIN network and Accipiter® AIS cooperative vessel tracking feeds. The Axis Q8741-LE bi-spectral cameras were installed at two disparate locations (Lafarge Holcim Dock and Brighton Beach Power Generating Station) either side of the port and a SALUS™ Sensor Connectivity Gateway with specialized video recording/throttling features and secure cellular gateway to our data centre overcome the lack of available communication options. The combination of Accipiter® radar track feeds and AIS provided tracking of both cooperative and uncooperative vessels on the Detroit River, Lake St. Clair and the St. Clair River, with alert zones configured either side of the port. The alert zones enabled automated camera slew-to-cue and video integration with radar tracks so they could be reviewed in real-time or subsequently by the harbourmaster, using the Accipiter® COP. Traffic activity dashboards were provided as well. Accipiter also delivered / installed its Mobile COP in the harbourmaster's truck, providing on the road capability and response. Special radar generated alerting layers and radar-developed ice layers were integrated into the EMSA GIS solution and provided to the Walpole Band Council to address their specific safety concerns.

Axis Q8741-LE Bi-spectral PTZ Camera Instllation at Lafarge Holcim Dock

Axis Q8741-LE Bi-spectral PTZ Camera Installation at Brighton Beach Power Generating Station



Accipiter-generated Radar Ice Imagery in Accipiter® COP and TC's EMSA GIS Solution Simultaneously, to share with Walpole Band Council

Our G-REIN Network generates real-time and historical target that provides intelligence to the operators, such as speed, size, heading, and in the case of AIS, vessel identification. This data is used for post-incident investigation and trend / behavioral understanding through Accipiter® analytical Surveillance-to-Intelligence® (S2I) tools, enabling better response and proactive mitigation measures to be deployed. The harbourmaster used these capabilities to assist Canadian and American law enforcement in securing the border and enforcement safety rules, to investigate accidents and enforce the Marine Act, and assist in search and rescue operations.

(continued on reverse)

PROJECT SUMMARY

ACCIPITERRADAR.COM

Additional Services

Accipiter continues to work with Transport Canada and the Windsor Port Authority to support the PEMSA-WPA project by delivering remote support services and providing on-site support routine maintenance, remote system health monitoring, seasonal sensor tuning, and customer support services.

Accipiter® RIN Platform Technology

Accipiter's RIN Platform Technology provides significant and ground breaking capabilities that enable enhanced decision support, information sharing, interoperability and wide area site integration and access. Customers with geographically wide-areas of responsibility require a network of distributed remote sites and sensors that can support unlimited expandability and customization, as well as plug-and-play sensor sharing to leverage partner assets and interoperability. This is critical in border regions between Canada and the United States where sensors on both sides of the border owned by different parties and countries need to play together. Accipiter's RIN Platform Technology, on which all its products and services are built, delivers this capability.

About Accipiter

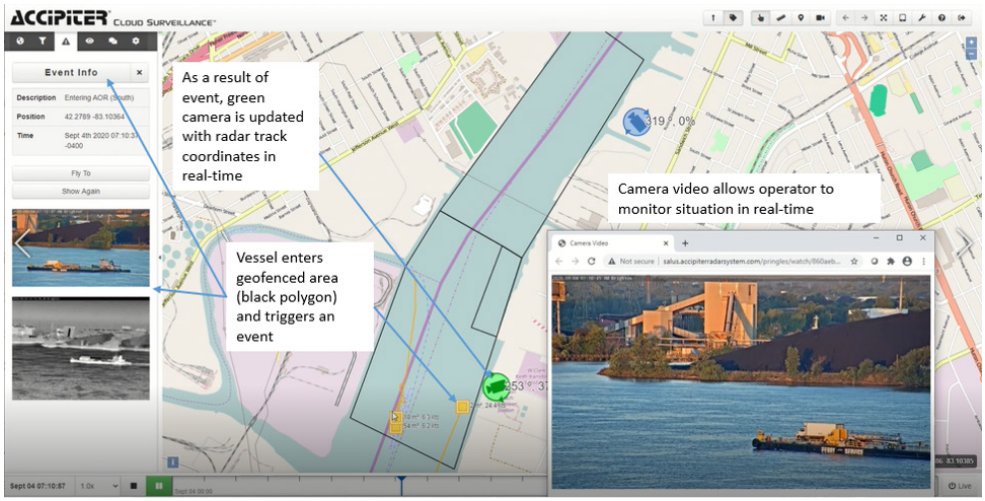
Accipiter Radar is a North American company that develops, sells, and operates high-performance Radar Intelligence Networks™ that monitor the behavior of uncooperative targets such as small vessels, low flying aircraft, drones / UAS, people, vehicles and birds, as well as distributed phenomenon such as weather, waves and ice. Accipiter is a world leader in extracting actionable intelligence from multiple surveillance sources. Its suite of Surveillance-to-Intelligence™ (S2I) analytical user apps provides both tactical (real-time) and strategic (historical) situational awareness for 21st century safety and security applications.

Accipiter provides protection and security for governments, military, security agencies and commercial operators around the world including airports, military airbases, ports, waterways, critical infrastructure, remote mining facilities, LNG plants. Accipiter is a leader in radar surveillance for Beyond Visual Line of Sight (BVLOS) for commercial drone operations.

Products Designed and Built to Exceed Expectations

Accipiter's family of products are designed for persistent detection and tracking of cooperative and uncooperative targets on the water, in the air and on the ground. 2D and 3D radar systems for fixed installation locations or for rapid ission deployment, connect with Accipiter's M³® Target Information System and Surveillance-to-Intelligence™ tools to enable live tactical situational awareness and strategic analytical decision making through 24/7/365 all domain awareness.

Whether you are protecting your homeland through border enforcement, providing coastal surveillance or using surveillance to protect your critical infrastructure perimeter; increasing aviation safety through bird and drone activity monitoring or safety management; or protecting wildlife through wildlife hazard management studies, habitat management and active bird deterrent systems, Accipiter has a proven system for you.



Accipiter® Common Operating Picture at Port of Windsor

USA

40 Centre Drive, Suite #300
Quaker Centre Business Park
Orchard Park, NY 14127
Phone: 716-508-4432
Fax: 888-393-6421

Website: www.accipiterradar.com

CANADA

576 Highway 20 West
P.O. Box 939
Fonthill, ON L0S 1E0
Phone: 905-228-6888
Fax: 905-892-2249

Email: sales@accipiterradar.com

PATENTS & TRADEMARKS