Anritsu Introduces AeroShield™ RF Drone Detection and Tracking Solution For C-UAS System Integrators

— Comprehensive Solution Leverages Three Decades of RF Experience to Develop Flexible API and Demonstration Package for Drone Mitigation —

Morgan Hill, CA – June 1, 2020 – Anritsu Company introduces AeroShield™ MX280002A, a hardware and software solution for passive RF detection and tracking of drone activity. Consisting of a flexible Application Programming Interface (API) and demonstration program, AeroShield fills a critical need for C-UAS system integrators by providing a comprehensive RF solution for drone mitigation.

The AeroShield tracking process uses Time Difference of Arrival (TDOA) for accurate drone positioning. When compared with Angle-of-Arrival (AOA), TDOA has proven to be a superior method for tracking drones where continuous geo-location is required. Siting requirements for TDOA require no calibration, allowing for flexibility in choosing sites. Additionally, the reduced power, simpler antenna requirement, smaller size, and lower complexity of TDOA systems allow for discreet siting in urban areas and mobile applications.

Tracking speed and reliability are optimized by continuously adjusting the receivers' signal-to-noise (SNR) ratio during the drone's incursion. Typical drone detection and tracking range with three Anritsu Remote Spectrum Monitors (RSMs) is 500 meters, but is easily scalable to cover wider areas with additional receivers. Alarms and reports are automatically generated for the user.

The drone detection and tracking process is fully automated and active 24/7. The application continuously scans 2.4 GHz and 5.8 GHz ISM bands for drone activity. Additional custom bands can be added by the user. Proprietary algorithms have also been implemented to minimize false positives; a constant problem faced by C-UAS providers.

AeroShield leverages 30+ years of RF receiver and software development at Anritsu. Each receiver is rigorously tested over temperature extremes, EMI immunity, and emissions, so it can detect and track drones in a variety of RF environments. Extensive testing has been conducted using rotary and fixed wing drone models.

(more)

Every element needed by the system integrator to incorporate receivers and software is available in the API. All functions and algorithms for RF detection and tracking of the drone video signal, including example source code, training materials, and simulators, are available. A fully-functional demonstration application package is also part of the AeroShield solution.

At least three Anritsu RSMs are required to use the detection/tracking system. The drone detection and tracking application downloads I/Q data captures from each RSM and performs continuous TDOA measurements to accurately geo-locate drone positions.

When combined with optical and radar sensors, AeroShield is an ideal RF sensor solution for systems integrators' overall C-UAS systems now widely deployed at federal government/defense locations. It is also well suited for utility companies, correctional facilities, stadiums/arenas, border patrol, public safety, airports, and critical infrastructure.

About Anritsu

Anritsu Company is the United States subsidiary of Anritsu Corporation, a global provider of innovative communications test and measurement solutions for 120 years. Anritsu's "2020 VISION" philosophy engages customers as true partners to help develop wireless, optical, microwave/RF, and digital solutions for R&D, manufacturing, installation, and maintenance applications, as well as multidimensional service assurance solutions for network monitoring and optimization. Anritsu also provides precision microwave/RF components, optical devices, and high-speed electrical devices for communication products and systems. The company develops advanced solutions for 5G, M2M, IoT, as well as other emerging and legacy wireline and wireless communication markets. With offices throughout the world, Anritsu has approximately 4,000 employees in over 90 countries.

To learn more visit www.anritsu.com and follow Anritsu on Facebook, LinkedIn, Twitter, and YouTube.

Anritsu Contact:
Stacy Escobar
stacy.escobar@anritsu.com
408.201.1966

Agency Contact:
Patrick Brightman
3E Public Relations
pbrightman@3epr.com
973.263.5475