

Lithuania acquires Wingman and Watchdog C-UAS systems

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The Lithuanian Ministry of National Defence (MoD) has purchased an undisclosed number of counter-unmanned aircraft systems (C-UAS) to support operations both at home and abroad, defence sources told *Jane's*.

Following a two-year programme, the MoD selected several systems from Danish C-UAS specialist MyDefence Communications to support dismounted and vehicle operations as well as the protection of main and forward operating bases.



MyDefence Communications has designed the Wingman-105 C-UAS system with an internal battery for size, weight, and power savings in the dismounted role. (MyDefence Communications)

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Selections include the Wingman-105 Small Handheld/Wearable Drone Detector and Watchdog 200 Networked RF Sensor. Deliveries of both C-UAS products are expected to be completed by September 2020, industry sources added.

The latest variant in the Wingman series, the 105 model, has been designed as a standalone UAS detection system for special operations forces, according to MyDefence Communications.

The company's CEO, Dan Hermansen, said the Wingman-105 is an upgrade of the Wingman-100 and designed for a wider range of "operating temperatures to match the harsh mission environments all over the globe". He also confirmed Lithuania would be the first customer for the Wingman-105.

The Wingman-105 comprises a smaller form factor and lower all-up weight over the legacy 100 model, enabled in part through the design of an internal battery supply that can be charged by an AC/DC net adaptor, a company official told *Jane's*.

Designed to provide personnel with an alert of UAS activity during an evaluation period, the Wingman-105 demonstrated its capability to detect UASs at ranges in excess of 1 km depending on environmental conditions, defence sources explained.

The Wingman-105 includes 60° directional 2.4 GHz and 5.8 GHz ISM band antennas and can be networked to command-and-control (C2) devices including the US Department of Defense's Android Tactical Assault Kit (ATAK).

The system can also be upgraded with the AA100 External Active Antenna (AA100) omnidirectional antenna for 360° coverage, depending on end-user requirements.

Hermansen revealed to *Jane's* that the company is also designing a new accessory for the Wingman-series of products. The body-worn vibrator system can be worn around the neck or wrist and has been developed to create "non-audible alerts", he added.

Speaking to *Jane's* about the Lithuanian procurement, Alius Mykolaitis, project manager at NT Service UAB, MyDefence Communications' Lithuanian distributor, confirmed that successful detections of UASs had been completed in both urban and rural environments during the evaluation period.

Furthermore, the Watchdog 200 provides a direction-finding (DF) capability for fixed installations through monitoring of 2,400–2,500 MHz and 5,150–5,990 MHz frequencies. Weighing 700 g, the Watchdog 200 has been designed to protect main and forward operating bases from commercial UAS threats.

Threats can be loaded onto two-dimensional C2 maps with operators benefiting from the direction and range of the UAS. However, Mykolaitis noted that the system is unable to confirm the operating altitude of the UAS.

"We conducted trials in several countries for more than a year for several institutions and were very happy with the performance of Wingman and Watchdog series detectors," he said. "We tested in several conditions with end users impressed with the small size and efficiency of MyDefence Communications' solutions, especially when detecting commercial [UASs]."

Comment

C-UAS capabilities remain an urgent operational need for armed forces around the world as they seek to protect main operating bases at home as well as expeditionary forces deployed abroad. However, the market lacks a one-size-fits-all solution, thereby forcing customers including the Lithuanian MoD to select a variety of flexible, modular, and scalable capability sets that can be re-rolled to support as many operational requirements as possible.