

Fortem Proposes DroneHunter UAS as Ship-Defense System



WASHINGTON – Fortem

Technologies has developed a counter-UAS (unmanned aerial system) that could be used to protect ships as well as sites on land from localized drone threats.

Fortem displayed its DroneHunter UAS in Washington at the Defense. Protection. Security. 2019 exposition sponsored by the Association for Unmanned Vehicle Systems International along with the associated TrueView radar and the Fortem Skydome concept.

The DroneHunter is a fully autonomous, maneuverable UAV with six vertical rotors that allow it to hover. It uses artificial intelligence analytics and is equipped with GPS navigation day and night and in all weather.

It carries a small TrueView frequency modulation continuous-wave (FM-CW) lightweight radar that points in one direction but can scan as the drone maneuvers. A video system is used to image intruding drones. The drone also is equipped with two netguns that can be fired at an intruding drone and entangle that drone's rotors or propellers with lightweight nets. The nets can be

tethered to the DroneHunter so that it can retrieve the intruder if desired.

The DroneHunter is limited by its power to retrieval of drones below a certain weight, but its nets can disable much larger drones. The DroneHunter has an optional manual override or redirect capability.

The DroneHunter is an optional component of a Fortem SkyDome, an airspace protected by fixed-site or mobile TrueView FM-CW radars which detect intruding drones and vector the DroneHunter to intercept the intruder.

Adam Robertson, the chief technology officer for Fortem Technologies, told *Seapower* that the DroneHunter could serve as a ship-protection system in port or at sea. Because most shipboard radars are pulse radars, they have difficulty detecting UAVs that are close by between pulse and reception – creating a blind spot immediately around the ship – whereas the CW radars are always “on” and detect any anomaly that intersects their beams. Robertson said the SkyDome system would be ideal for security of a ship in or entering or exiting port, including against UAS or small-boat threats.