D-FEND
SOLUTIONS

Sector Solution Overview:
Maritime Security & Safety

Pictures are illustrative only

MARITIME CHALLENGES

Defending against drones can seem like a formidable task when at sea, especially when vessels are sailing in and out of ports and operating vulnerably close to shore. Challenges include the preservation of communications and sensors that may operate on similar frequency bands to rogue or unauthorised drones, while maintaining continuity and peace of mind for the crew during periods when vessels have limited manoeuvrability.

Operating from ports and in close proximity to the shore restricts naval vessels from using conventional kinetic, jamming and laser systems. At sea, radio frequency jammer-based solutions could disrupt the rig or the ship's internal and external communications and not provide continual control over the threat. These types of solutions may also allow the drone to return to the operator.

SMOOTH SAILING WITH D-FEND SOLUTIONS

Maritime operations, particularly in littoral operating spaces, require a trusted and proven counter-drone solution to protect naval and merchant vessels, their valuable cargo, crew and passengers, ports, harbour, and critical navigation routes.

EnforceAir, D-Fend Solutions' core offering, automatically and passively detects, locates and identifies rogue drones, including the pilot location, then neutralises the threat by allowing you to take full control over the drone and land it safely in a predefined zone on the shoreline, vessel or on the water. The system employs non-jamming, non-kinetic technology, preventing any collateral damage, interference or disturbance, while maintaining critical safety and operational capability requirements.

During blue water scenarios, EnforceAir integrates smoothly as an important component of a naval layered air defence system. EnforceAir is at Technology-Readiness Level 9 (TRL9) in its maritime configuration, which means it has been proven through successful mission operations.

The system can be fitted to the smallest of naval and merchant vessels and is scalable for larger platforms, or those with complicated upper-deck superstructures. EnforceAir's compactness optimises opportunities for elevated positioning, or for using previously neglected upper-deck locations. The hardware does not require cooling, is ruggedised for open water conditions and operates on a low-power footprint.

RF CYBER DETECTION AND MITIGATION

EnforceAir is a RF cyber detection and takeover mitigation solution that features proven and future-proof technology that detects unauthorised or rogue drones, identifies them and then automatically takes control over the drone and lands them in a safe, designated area. Authorised drones are monitored but remain fully operational and unaffected.

AGILE & INTUITIVE

Maritime personnel face a wide variety of scenarios and drone threats from those wanting to get a cool picture to pirates, from warfighting to activists. EnforceAir provides the ultimate in operational agility and flexibility. Its core elements can be easily configured, offering high performance, counter-UAS capabilities with seamless operational flexibility (SOF).

EnforceAir's C-UAS capabilities come in a compact footprint. Its intuitive graphical user interface and rugged tablet are easy to use for all types of operational users, and do not require technical expertise.

Radome

Stationary

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