



Major International Airports Achieve Airspace Control and Continuity with D-Fend Solutions' EnforceAir Counter-Drone Technology



Drones Disrupt Airports

The drone scare at the Gatwick airport in the UK – which shut down the runway in 2018 for more than 33 hours and cost over £50m – was a wakeup call for airports around the world. It became obvious that drones can endanger planes and their passengers during takeoff and landing, and that ignoring the potential drone threat could lead to a catastrophic business outcome.

One country had the foresight and vision to begin working with D-Fend Solutions after that incident. The country's civil aviation regulator and leadership wanted to proactively avoid costly shutdowns caused by drone incidents, which they knew from Gatwick could involve canceled flights, refunds compensation and complicated rescheduling efforts.

Airport personnel were aware that jammer-based solutions were not the answer, because just as they disrupt drone communications, they can also potentially hamper other crucial communications systems in the area, which is problematic and potentially dangerous for airports.

D-Fend Solutions Takes Over

D-Fend Solutions was approached by the country's civil aviation regulator. That was the start of an intensive process that included a large, onsite demonstration, frequent meetings between the companies' top leadership, a focus on counter-drone technical specifications and much more.

D-Fend demonstrated that unlike traditional anti-drone solutions on the market, its flagship product, based on **the world's leading drone radio frequency (RF) takeover technology**, can achieve safe landings and safe outcomes without the drawbacks of jammer-based approaches.

EnforceAir, D-Fend Solutions' counter-small, unmanned aerial system (C-sUAS) solution, in either autonomous or manual mode, detects, locates and identifies rogue drones in the airspace and then neutralizes the threat.

Flight schedules proceed as planned, backed by an autonomous system that asserts control over rogue drones and lands them safely in a designated zone. The solution coexists with airport wireless communications, preserving continuity and avoiding flight delays.

EnforceAir possesses the unique ability to extract a unique identifier (similar to a tail number) per drone, sourced from the drone's communication. Authorized drones can then be tagged as "authorized" to fly in certain areas of the airport. This "friend or foe" capability is absent from radars, jammers and other traditional detection systems.

Safety and continuity are facilitated by EnforceAir, which prevents the drone pilot from regaining control over the drone, fully and smoothly eliminating the threat. The "Discover Pilot Position and Identification" stage of EnforceAir's drone incident lifecycle helps identify the ground operator.

EnforceAir also provides airport authorities with preventive notifications while extracting crucial data –such as the drone take-off position and pilot remote control location, so authorities can alert specific at-risk flights and emergency personnel.



Location

A country with one of the busiest airport systems globally.



Airports

Two large, active, international airports and six smaller ones.



Evaluation Process

Thorough process that included a large, onsite demo.



Solution

EnforceAir, the world's leading drone radio frequency (RF) takeover technology. The system was originally deployed for detection and then later mitigation.

The Benefits

EnforceAir was gradually rolled out throughout the country, starting with detection. The airports benefitted from being able to quickly identify drones in the airspace and to take appropriate follow-up actions. The airports later took the natural next step of utilizing EnforceAir's mitigation capabilities.

D-Fend Solutions' flagship solution is currently safeguarding the country's two largest and busiest international airports in the country, with six EnforceAir systems deployed at each airport. Six smaller airports in the country, a mix of public and private aviation hubs, have since deployed EnforceAir.

One of the most important benefits has been the preservation of continuity. EnforceAir does not interfere with any of the airports' communications systems or approaching planes. These airports continue to use their own authorized drones for perimeter surveillance and aircraft inspection, with no disruption.

D-Fend Solutions plans to continue expanding in this country, as well as some neighboring countries.

NOTE: D-Fend Solutions has airport deployments around the world. This case study is a composite focused on multiple airports in a particular country.

Benefits:

- Drones are detected immediately
- Passengers and flight staff remain protected
- Communications function normally
- Flights run on schedule

About D-Fend Solutions

D-Fend Solutions is the leading counter-drone takeover technology provider. We focus on the real threats from potentially dangerous drones, so that varied organizations around the world can maintain full control of drone incidents in complex environments and be prepared for future threats. EnforceAir, our flagship offering, automatically executes radio frequency cyber takeovers of rogue drones for safe landings and safe outcomes. Authorized drones that underpin modern society can proceed uninterrupted. D-Fend Solutions facilitates continuity by ensuring the smooth flow of communications, commerce, transportation and everyday life.



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