

# Tracking incidents for continuous improvement

## | Miami International Airport | USA

Operated by the Miami-Dade Aviation Department, Miami International Airport (MIA) is the third-busiest airport in the U.S. for international passengers and the top U.S. for international freight. Located on 3,230 acres of land near downtown Miami, the airport is the leading economic

engine for Miami-Dade County and the state of Florida, generating business revenue of \$31.9 billion annually and accounting for approximately 60% of all international visitors to the state.





## The challenge

The nerve center at MIA is its Airport Operations Center (AOC) which operates around the clock, monitoring activity, responding to safety and security incidents, disseminating information and responding to requests from stakeholders throughout the airport.

An essential daily task for the AOC team is incident logging, with approximately 70 detailed logs being created each day, and that number set to increase as a result of internal process changes within the department.

Rupen Philloura is the director of terminal operations & AOC at Miami International Airport and explained, “The MLS logging system was a 25-year-old custom built application. It was familiar for our operators to use, but it was unwieldy, unreliable and inefficient. With logging being such a critical and growing aspect of our day-to-day operations, we needed to upgrade to a state-of-the-art unified platform.”

The platform chosen by the airport was the award-winning enterprise incident management system, HxGN dC3 Orchestrator, from Hexagon, a company whose solutions are trusted by airports around the world. Miami itself was already working with the company, using its NiceVision video management software (VMS) and analytics solutions across its highly distributed video surveillance system.

## The solution

Today, the AOC has six HxGN dC3 Orchestrator-powered stations from which operators monitor the airport’s Honeywell/EBI fire alarm and Matrix access control systems, as well as its extensive surveillance camera network in real time.

Philloura described the process, saying, “When an alert is raised, the operator must follow a strict set of procedures for that specific event; this might simply be resetting an alarm remotely, or the dispatch of maintenance personnel. Incidents and subsequent actions need to be accurately documented for regulatory compliance purposes, but also to help us to learn and improve how we deal with incidents and events.”

The need to manually enter all details has been replaced by the dynamic form functionality within HxGN dC3 Orchestrator. It automatically populates and logs specific information relating to an incident, saving operators valuable time, and ensuring every log is of a consistently high standard.

“Together with the input of the operator we are assured that the logs we generate and store are comprehensive end-to-end accounts, that can be quickly and reliably searched, retrieved and reviewed,” added Philloura.

### Fast facts

**Vertical market**  
Airports

**Products**  
HxGN dC3 Orchestrator

## The result

The improved logging has also had a noticeable impact on business continuity and operational efficiency. It also provides an additional layer of protection to the airport from a regulatory standpoint. With the AOC operating a three-shift pattern, it is vitally important that changeovers can be completed swiftly and nothing is overlooked.

Philloura observed: “When the next shift logs on to HxGN dC3 Orchestrator they have instant situational awareness; there is no lag in productivity. They can see what has happened and what requires their immediate attention. During their shift they no longer need to repeatedly log into multiple systems to access information. It is all there on the screen at their station.”

HxGN dC3 Orchestrator has also reduced the response time to incidents such as door alarms, as well as access requests from tenants and airport employees, by automating the interaction with the Matrix system. With the old MLS system, both needed to be handled manually. The success of HxGN dC3 Orchestrator within the AOC has led the airport to begin exploiting its strength as a powerful platform, with higher levels of task automation, ad-hoc forms and reporting, as well as integration with airport-specific and non-specific subsystems (made easier by the API-driven HxGN dC3 Orchestrator), such as its access control system and surveillance cameras. It is also evaluating its ability to support the facilities management team by ensuring mandatory maintenance of its extensive network of elevators and moving walkways.

Mike Bryant is computer services senior manager for the Miami-Dade Aviation Department and he has been impressed not only by the reliability that the web-based HxGN dC3 Orchestrator is providing, (demonstrated by a drop in support calls from the AOC since the implementation), but also its future potential.

“With HxGN dC3 Orchestrator we have a platform that we can evolve to positively impact the operations,



maintenance, compliance, safety and security throughout our airport,” Bryant said.

“It has opened up possibilities to integrate systems, solve problems and make improvements, without needing to make further investments in standalone solutions.”

“Every airport needs a robust, reliable and easy-to-use logging solution, and for MIA it is one of the greatest strengths of HxGN dC3 Orchestrator,” concluded Philloura.



**It gives us complete situational awareness regarding when and how an event transpired, who responded, how, and the result. This insight improves our decision-making and feeds a continual cycle of improvement.”**

**Rupen Philloura**

Director of Terminal Operations & AOC  
Miami International Airport





Hexagon is the global leader in precision technologies at any scale. Our digital twins, robotics and AI solutions are transforming the industries that shape our reality.

Hexagon's Safety, Infrastructure & Geospatial division improves the resilience and sustainability of the world's critical services and infrastructure. Our solutions turn complex data about people, places and assets into meaningful information and capabilities for better, faster decision-making in public safety, defense, transportation, government and physical security.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 24,500 employees in 50 countries and net sales of approximately 5.4bn EUR. Learn more at [hexagon.com](https://www.hexagon.com) and follow us [@HexagonAB](https://twitter.com/HexagonAB).