AdvanceGuard®

Real-time alerts protect Ostrava's perimeter

Case Study - Ostrava Airport, Czech Republic

Ostrava Airport has installed AdvanceGuard to secure their perimeter. With real-time intruder detection and tracking, security patrols are able to intercept intruders quickly and minimise disruption to the airport.

Safety is everything.

NAVTECH RADAR

The Challenge

Enhancing Airport Safety

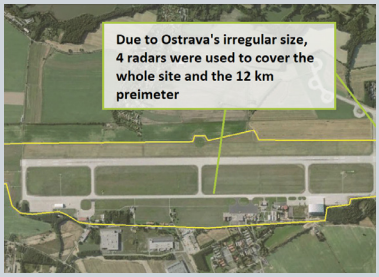
Ostrava Airport

With EU rules stipulating improved perimeter security measures, many European airports faced implementing effective, affordable solutions within a very short time-frame.

Ostrava airport, like many European airports, had seen increased pressure to update its security and site protection systems. With a growing threat of terrorism EU legislation EC300/2008 was passed dictating all major airports needed to have sufficient perimeter and airfield security to guard against terror threats.

Ostrava Airport based in Monsov typically handles 300,000 passengers a year. The airport site is 5.5 km by 1 km and has a 12 km perimeter. Previous security and asset protection methods involved a combination of roving patrols and CCTV images. These methods were deemed outdated and ineffective at providing advanced levels of security and more modern, comprehensive solutions were desired.

Ostrava was concerned with perimeter breach detection as intruders posed a threat to safety and caused disruptions. Previously, they relied on CCTV to identify security breaches, but this was usually slow and inefficient. Instead, they wanted to detect incidents more quickly and efficiently to minimise risk of disruption.



Video analytics were deemed too expensive and ineffective as many cameras would have been needed to cover the irregular shape of the airport. Single radar systems were infeasible due to 'blind spots' caused by infrastructure and airfield assets.

Before AdvanceGuard was installed, detecting and responding to intrusions was difficult and time consuming. Now, the security team is able to track and follow an intruder's exact location and movement. This has meant security patrols can intercept faster and more easily, which has reduced the risk of costly airport disruptions.

The Solution

Real-time Threat Analysis

Equipment used for 12 km of open area

Following a remote demonstration of one of AdvanceGuard's existing installations, the Ostrava team understood how the systems' capabilities could improve their overall security system. Subsequently, a site survey was completed outlining how AdvanceGuard's capabilities would benefit Ostrava Airport.

Unlike alternative radar solutions which rely on a single radar, AdvanceGuard's scalable solution provided effective coverage of the entire site, despite the non-uniform shape of the airport. One large radar would have provided a number of 'blind spots' where there would have been no detection due to ground slopes, non-linear fence lines and infrastructure. By using four compact radars, Navtech's solution provided the highest degree of coverage.

Ostrava airport wanted the best site coverage and wide-area detection with the lowest possible cost. They chose AdvanceGuard because it allowed an unparalleled value per square metre with an extremely low false alarm rate.

Ostrava was a relatively easy site to cover for a radar-based security system such as AdvanceGuard. The site survey appointed the best AdvanceGuard radar model installation and location to address the airport's unique challenges, such as long grass, signage and perimeter fences. Previous security measures were unable to detect targets at long distances, and CCTV images could only pinpoint intruders once they were already inside the perimeter, posing a major threat to safety and resulting in disruptions. Each AdvanceGuard sensor detects a walking person as far as 1 km from its position, giving the on-site staff plenty of advance warning and time to respond to potential threats more effectively, both inside and outside of the fence.

Real-time
Threat analysis

Instant detection

AdvanceGuard monitors inside and outside the perimeter, detecting and alerting the operator about any intrusions.

Low false
Alarm rate

High accuracy

AdvanceGuard has an unrivalled low false alarm rate for optimum operator trust.

Flexible
and Scalable

Complete coverage

Effective coverage of the entire site can be achieved despite challenging conditions, by creating a network of multiple radar sensors.

AdvanceGuard®

Summary

AdvanceGuard was installed at Ostrava Airport and now provides the airport with advanced warning of intruders. The radars were integrated with thermal cameras allowing for easy identification of threats quickly and precisely.

Each radar sensor scans 360° and is capable of detecting vehicles, humans and animals in all weather conditions. AdvanceGuard increases security effectiveness by automatically alerting operators to potential threats.

This is done by highlighting targets on its user-friendly interface and controlling cameras to follow for easy verification. The software can be configured for each site's unique requirements. AdvanceGuard can detect and track an unlimited number of targets simultaneously whilst automatically recording the history of movement.

Advantages of using radar surveillance over alternative methods include all weather and light operation and very low false alarm rates, resulting in high levels of operator trust. AdvanceGuard offers wide-area surveillance, inside and outside the perimeter.

Visit our website to find out more about AdvanceGuard, the radar-based security solution when high performance in all conditions is essential.

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