

MULTI-LAYERED PROTECTION

Iain Moran explains why security needs to remain *a key priority for the air travel industry*

t has been a turbulent few weeks for the air travel industry. The rapid spread of COVID-19 has caused demand for flights to collapse suddenly, leading to the widespread cancellation of flights on certain routes, and airlines being forced to run empty planes on others, or risk losing their slots. This is expected to have a devastating impact on the industry over the coming months, with the financial hit from Coronavirus currently predicted to reach £87-billion this year, according to the International Air Transport Association.

The recent collapse of British airline Flybe is the first to have been directly attributed to the pandemic, and its closure has left many of the UK's regional airports 'deserted', putting them and their employees at risk too. Halting the spread of the virus is currently a key global

concern, and the UK Government consequently put the country into lockdown response to the outbreak.

However, there is a real danger that with both the Government and the air travel industry so preoccupied with the uncertainty surrounding COVID-19, that our airports may be more vulnerable to the ever-present terror threat.

With 14 serious terror attacks on airports over the past 20 years alone, it's vital that airport managers do not take their foot off the pedal when it comes to security in and around their buildings. All airports, regardless of the number of passengers travelling through them, should have a range of security measures in place in order to avoid putting both the general public and staff unnecessarily at risk.

Airports generally have two main zones that require security systems to be put in place: the airside and

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landside sections of the facility. Airside areas are typically zones within the airport that employees can access, as well as passengers who possess a ticket for travel. For employees at an airport, these areas can be reached using an airside pass. Passes are commonly distributed by the airport authorities and tend to be in the form of an electronic key fob that can allow employees to move between restricted zones.

SECURITY CHECKS

The British Airport Authority requires recipients of these passes to be vetted before they can work in the airport and be allocated a pass. This often takes the form of simple address and identity checks, with airport managers being required to ask for a candidate's employment history and criminal background before they can be given a fob.

For members of the public, airside zones can be entered if they have a valid boarding card for travel. These zones are generally labelled as sterile areas of an airport as everyone in these locations has already been security checked and passed through passport control – a requirement needed for any individual to have access to flights, the main terminal and the aircraft itself.

The other area of an airport is known as the landside zone. These are the areas in and around the airport building that are open to the general public. Such areas tend to include the car park and drop-off area, main check-in zone, arrival halls and pedestrian facilities that people can navigate without the need for a valid ticket for travel. While every airport is different, landside areas tend to be accessed by the highest number of people as a ticket to travel or airside pass is not a requirement. Therefore, these areas are typically highly populated with passengers, airport staff and officials, friends and family of passengers, taxi drivers and other members of the general public.

Historically, airside areas were of the highest security concern. To keep passengers protected on planes, robust checks were often prioritised at the official security checks within airports. This included passenger bag checks and enhanced pat-downs to keep the airside and aircraft areas secure. This has been a priority ever since the devastating 9/11 terror attack, after which security checks to enter airside areas across all airports globally increased dramatically

An extensive list of security requirements were introduced, such as passengers being required to take off their shoes when passing through security, removing electronic equipment from hand luggage and a ban on liquids over 100ml being taken on board an aircraft unless purchased after security. However, in recent years, landside areas have become an increasing concern. In 2007, Glasgow Airport fell victim to a terror attack that aimed to kill hundreds of innocent holidaymakers. A jeep laden with propane gas cylinders was driven into the doors of the departure area on one the busiest days of the year. And in 2018, a man drove a stolen car through the automatic glass doors near the main entrance to Terminal 1 of Lyon's Saint-Exupery airport. He then drove through the building, injuring a worker and smashing through another set of doors before emerging onto the runway, where he was chased down by police vehicles and a helicopter. While, thankfully, there were no fatalities as a result

of either incident, they have served to highlight the importance of protecting landside areas of airports, including the main entrances. As they are busy public spaces often filled with crowds of people, they are

natural targets for vehicle ramming attacks, as well as other terror-related activity.

Therefore, airports must offer a multi-layered approach to protecting these areas. By utilising a range of physical measures, human interaction and deterrence methods, airport managers can keep their visitors as safe as possible at every point throughout their journey. Implementing the following options contributes to a well-rounded security strategy to keep passengers, employees and the general public safe in and around the entrance of an airport.

Having officers stationed in specific areas of a terminal's entrance can be an effective way to perform passenger questioning. This requires airports to invest in officers' training and behaviour analysis identification so any individuals who appear suspicious can be dealt with upon the first stage of entering the facility. Brussels Airport is an excellent example of how officers can be stationed across the terminal entrance. The airport has implemented booth-like structures that enable officers to monitor passengers who enter the initial terminal area and can allow any passengers to be streamlined to

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the side - away from the main hustle of visitors - if they require questioning.

Similarly, this ability to streamline passengers benefits the health and safety requirements that airports must abide by. Reducing the chances of congestion and crowds developing within the terminal, managers can use these booths to filter the number of people entering the check in zones, enabling passenger flow to function better.

Airports that welcome high numbers of visitors are an attractive target for hostile vehicle attacks – a newer style of attack that uses vehicles to cause as much destruction as possible. Such attacks have become increasingly prominent in recent years, as they require little skill to perpetrate, are difficult to predict and have the potential to cause significant casualties. With even heavy goods vehicles easy to get hold of, they are one of the most dangerous weapons readily available in countries that have strict gun laws. It's therefore vital that airport managers ensure their infrastructure is robust enough to deal with any threat of a penetrative vehicle attack.

Installing impact-tested bollards around the terminal perimeter can greatly help to minimise, or even eradicate this risk. But as airports are operational 24 hours a day, installing barriers that require deep foundations can cause unwanted disruption to both staff and passengers.

One way around this is to install security measures in multiple phases, ensuring that the disturbance is minimal, and airports can maintain an efficient service to travellers. Alternatively, there are now new types of barriers and bollards available that do not require any foundation preparation prior to installation. These solutions can be fixed to steel plates off-site and then simply lowered into place. This saves valuable time, minimises disruption and provides a more environmentally friendly option compared with traditional bollards. With some products, up to 36

shallow foundation bollards (covering around 50 meters of perimeter protection) can be deployed within an overnight installation.

This quick installation and immediate protection were advantages felt by the airport managers at Los Angeles Airport. Having welcomed 84-million passengers throughout 2017, it required an immediate perimeter protection system to safeguard its growing passenger and staff intake. As such, more than 1,000 impact tested, shallow-mounted bollards and road blockers were deployed.

IT'S VITAL THAT AIRPORTS DO NOT TAKE THEIR FOOT OFF THE PEDAL WHEN IT COMES TO SECURITY

In 1969, Stanford University psychologist, Philip Zimbardo, first tested what is now known as the broken windows theory. His wellknown experiment demonstrated how visible signs of crime and anti-social behaviour in a neighbourhood, such as a broken window, seem to encourage further, more serious crime and disorder. While the study showed that wellmaintained, well-monitored environments showed that criminal behaviour will not be tolerated and meant there were less issues. Therefore, in the case of airport security, highly visible security measures, such as patrolling security officials, can remind prospective attackers that there is a team ready to deal with any threat and act as an effective deterrent.

This is a method used by Adelaide Airport, which has recently employed an extra 135 officers to patrol its airport terminal. Following the increased threat of terror activity in Australia in 2018, the airport equipped these officers with rifles and, in some instances, had bomb-detection dogs patrolling alongside these security professionals. This has not only upped the airport's commitment to protecting its passengers, but also demonstrates the facility's preparedness to prevent and respond to any incident.

By enabling officers to patrol around the airport's landside areas, an extra level of security assessment is achieved. Supporting the officers who are stationed at the entrance, patrolling officers provide an extra form of back-up as they can access the risks of visitors once they have passed through the entrance into the main check-in and arrival halls.

With the UK's threat level having been set as 'substantial' since November 2019, busy public areas will continue to be an attractive option for terror-related activity. Airports are no exception, and airport managers should constantly be accessing their security plan to ensure that passenger safety is their highest priority •

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Impact-tested bollards can help eradicate the risk of vehicle-based terrorist attacks

