

case study



Glasgow Airport

At Glasgow Airport, false fire alarms were once an all too frequent occurrence. Unnecessary evacuation of the terminal was causing major inconvenience to passengers and costing the airport dearly. Moreover, the fire detection and alarm system was in need of almost daily maintenance.

All this changed completely with the installation of a state-of-the-art Gent by Honeywell system. Rogue alarms were immediately cut by some 70%, one effect of which was to reduce loss of revenue by an estimated £8million/year.*

Honeywell

Fire Detection and Alarm System

The success of Glasgow Airport's fire system is partly attributable to close collaboration between Honeywell Building Solutions (HBS) and BAA. This enabled a proper understanding of the customer's needs and the difficulties they were facing.

Most of Glasgow Airport's Gent by Honeywell fire detection and alarm system came into operation in May 1998. Brought in under budget and ahead of schedule, its phased installation took just six weeks to complete. Back then the system incorporated seven, 8-loop analogue addressable fire panels plus 1,650 manual call points and detectors, most of the latter being combined optical/heat sensors. The loop wiring from the previous system was retained, as were its bell circuits. Central monitoring was provided by three Gent Supervisors linked to a secure network, which utilised existing fibre-optic cable.

Since 1998 a further three panels have been added, extending the system to the terminal's East Pier, administration building and car parks. To comply with BAA's latest standards, the number of detectors has also been increased – to around 1,600. In addition, aspirated smoke detection has been provided in the Baggage Hall. Replacement of some of the loop wiring is among other upgrade work carried out.

The huge reduction in false alarms has much to do with the fact that the HBS solution is a true analogue system. Consequently, it is a lot better at distinguishing between a genuine fire and

a spurious alarm, caused for instance by dust in a detector. To further reduce false alarms, heat detectors have been fitted in areas where the presence of steam might trigger an optical (smoke) sensor. Where areas such as these are only open during the day, combined sensors have been retained but the optical part is automatically disabled during operational periods.

The unreliability of the old fire system extended to its central monitoring facilities. As well as being prone to breakdown, these were also obsolete, which made maintenance more difficult. Moreover, when a failure occurred all four of the connected monitoring stations were lost.

There are no such reliability problems with the three Gent graphics-based Supervisors – and they operate autonomously. Thus, in the unlikely event that one should go down the others are not affected. The Supervisors are located at the main entrance, the airport fire

station and the engineering Help Desk. Using the utility program 'pcAnywhere', which allows remote control of the PCs on which the Gent Supervisors run, access to the system is also available from the control room.

Under a support contract with the airport, HBS performs quarterly inspections of the system and annual testing of devices, including an audibility check. Training has been provided for on-site engineers and key operators, much of it conducted onsite.

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Honeywell Building Solutions

EMEA HQ

Honeywell House

Arlington Business Park

Bracknell

Berkshire RG12 1EB

Tel: +44 (0)870 600 1659

www.honeywell.com

www.honeywellbuildingsolutions.co.uk

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