

case study



A powerful combination of technology, services and energy expertise helps Pittsburgh International Airport evolve and thrive in a fast-changing environment.

Through a partnership with Honeywell that spans more than 40 years, the nationally renowned airport is maintaining safe and energy-efficient facilities while successfully accommodating nearly 10 million travelers each year.

Honeywell

Pittsburgh International Airport Spreads Its Wings

Situated on 10,000 acres, Pittsburgh International Airport (PIT) services 200 non-stop flights daily to 50 destinations. With new routes being added each year and the surrounding airfield growing, PIT is a major economic engine for Pennsylvania.

In the 1980s, the Allegheny County Airport Authority needed to expand and update its facilities and equipment to accommodate the growing number of domestic and international flights. Construction on a new terminal at PIT began in 1990, adding 7.7 million square feet of air-side space, more than 100 gates and a shopping mall. Based on a more than 40-year relationship, PIT tapped Honeywell for heating, ventilation and air conditioning (HVAC), and fire alarm systems.

When the terminal opened in 1992, Honeywell helped control more than 17,000 HVAC and 9,000 fire alarm points. Throughout the following years, Honeywell provided several rounds of building and control expansions to accommodate airport growth and to update equipment.

Under an ongoing service agreement, two full-time Honeywell technicians help maintain the airport's equipment and oversee field work. Honeywell also provides system training as needed.

Systems Integration

Following September 11, PIT sought to improve safety and comfort by monitoring and controlling all building systems – including HVAC, lighting, fire and life safety – from its Emergency Operations Center. In 2002, PIT implemented Honeywell Enterprise Buildings Integrator™ (EBI), which boosts efficiency and reduces operating costs by

integrating building systems. Operators can view and control these systems from any workstation. EBI also fits PIT's specification to ease operations and reduce training time.

Besides HVAC and fire, PIT has integrated a defibrillator onto EBI. EBI now automatically notifies EOC operators if a defibrillator unit is moved to treat a medical emergency. An alarm pinpoints the incident location so personnel can quickly respond.

Using EBI, PIT also has linked its fire system into off-site buildings, including hangars and maintenance garages. PIT also is considering incorporating closed circuit television (CCTV) system data onto EBI, along with the Flight Information Display System (FIDS), which details arrival and departure times.

Energy Conservation

Additionally, PIT wanted better control of its energy use, so it established an energy management team consisting of airport management, facilities personnel and Honeywell consultants. The team meets monthly to assess conservation opportunities and better leverage EBI.

For example, Honeywell optimized airport rooftop units to minimize electrical consumption. PIT stops escalators and moving walkways at night and also places occupancy sensors in terminal areas. PIT also is exploring terminal submetering to better understand and regulate energy use.

As PIT looks to expand its capabilities beyond the airport and tie in building systems at the nearby Allegheny County Airport, Honeywell will support its needs every step of the way.

Snapshot

Pittsburgh International Airport

Overview

- Covers 10,000 acres in southwestern Pennsylvania.
- Accommodates nearly 10 million travelers each year and 200 non-stop flights daily to 50 destinations.

Situation

When the Allegheny County Airport Authority expanded and updated the PIT facilities to accommodate the growing number of domestic and international flights, it also sought to upgrade building controls and equipment to improve safety, security and efficiency.

Solution

Building on its more than 40-year relationship, PIT tapped Honeywell for HVAC and fire alarm systems for its new 7.7 million square foot terminal, which opened in 1992. Since then, Honeywell has continued to provide technology, services and expertise, including:

- Honeywell Enterprise Buildings Integrator, a controls platform that ties building systems together to boost efficiency and decrease operating costs.
- Two onsite, full-time Honeywell technicians who provide training, supervise fieldwork and help maintain airport equipment.
- Energy-efficiency expertise through participation in an energy management team – formed to assess and identify energy conservation opportunities throughout the airport.

Honeywell Building Solutions

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