

Whitepaper

# ENHANCED AIRPORT SECURITY SOLUTIONS

When failure is not an option.





**Security is the be-all and end-all for major airports worldwide: from check-in to take-off, for safe flights and landings, protecting passengers, employees and flight crews has the highest priority. Fully integrated solutions from WEYTEC can be relied upon to help guarantee security all over the airport.**

Airport security is ubiquitous and consists of a multitude of components. Alarm systems, CCTV and video surveillance, perimeter security, access control and endless routines of checks and verifications all serve to monitor the movement of luggage and cargo, airplanes, personnel and passengers. The requirement is to be aware of, scrutinize and keep track of all the details. And this is where WEYTEC Solutions come into play: virtually any and all security systems and diverse information sources are integrated into a single platform, and operators control their entire environment intuitively with a single multifunctional keyboard. With visualisation solutions such as a video wall, everyone can maintain the overview and respond immediately and effectively to alarms. The overall result is optimized workflows, enhanced security and ergonomic high-performance workplaces.

### **Baggage Handling**

Baggage handling is a key component of airport security, whereby the baggage sorters not only sort but also transport luggage through the X-ray machines. A prestigious airport in the Asia Pacific region is now successfully using a WEYTEC visualisation solution in the baggage handling area. Multiple video sources can be displayed simultaneously on the state-of-the-art video wall. In the event of an emergency, the situation overview is immediately projected onto the large screen, so that all operators see the same scenario and can respond immediately.

### **Security Operations**

An abundance of security-related information converge in the security operations control room, where safety measures are taken to create a “zero tolerance” environment which ensures the safety of the public, passengers and employees. Here, WEYTEC solutions optimize and simplify workflows by channelizing all the important information sources, like high-resolution surveillance camera outputs, and making them available at any connected desk – whether in situation rooms or supervisor offices located throughout the airport – and projecting the images onto one of several video walls. This is achieved using the WEYTEC distributionPLATFORM a unique KVM-over-IP switching fabric technology.

### **Aircraft Maintenance**

Another department which is key to airport security is aircraft maintenance, responsible for the servicing and repair of aircraft before take-off and after landing, as well as live support for problems in the cockpit. In an emergency situation, the pilots and crew are guided by trained mechanics as they problem-solve mid-flight. Aircraft maintenance and live support are complex tasks which require efficient control units to ensure smooth operations. The WEYTEC solution for SR Technics at Zurich Airport, including sophisticated video wall technology, PC remotisation, an intuitive user interface concept based upon multifunctional keyboards, and integrated voice and radio connections all streamline workflows and automatically raise security standards.

### **Ground Movement Control**

Ground Movement Control organizes and optimizes traffic flows on the ground, and prepares information to support pilots before and after take-off and landing. Terminal One at the JFK Airport in New York has deployed a WEYTEC solution to remotely control all Ground Movement Control systems and sources directly from their control room. Standard PCs have been replaced with space-saving, high-performance WEYTEC ultraFLEX



miniPCs which are stored in a central, protected, air conditioned server room. The WEYTEC ultraFLEX miniPCs are easily accessed and effortlessly controlled from operator positions in the Ground Movement Control Ramp Tower. Data, systems and processes remain secure yet available in real-time.

### **Weather Forecasting**

Accurate weather forecasts are essential for security at airports. Civil, military and private aviation all need meteorological services which monitor weather conditions and generate forecasts and operational warnings. Meteorologists today have significantly more data available to them than 10 years ago. Visualisation solutions from WEYTEC help them to manage these immense amounts of data in a flexible and efficient manner. The Swiss Aviation Weather Services in Zurich have implemented a visualisation solution designed for 24/7 operations. Meteorologists can access a profusion of information sources, project the data onto state-of-the-art video walls, and intuitively manage it all using intelligent WEYTEC multifunctional keyboards.

### **Air Traffic Control**

Air traffic control is responsible to ensure maximum security within its airspace. Fulfilling this duty requires the harnessing of the very best technology on the market. Whether ATC systems prevent incidents or account for them when they do occur – it is critical to be able to analyse events quickly and thoroughly. Together with SkySoft, WEYTEC has developed a state-of-the-art “black box” solution for the ATC industry. The Sky-Rec BlackBox records and replays multimedia incident variables down to the smallest details including voice commands, keystrokes, mouse movements, screen images, radar and closed-circuit TV recordings. Deutsche Flugsicherung is one of the largest customers of the WEYTEC-SkySoft solution.

### **Networking Multiple Airports**

The WEYTEC distributionPLATFORM is also being used to network multiple airports together, so that one airport can provide support services for another in case of an emergency. Specifically, personnel located at a primary airport can cover a secondary location which may be understaffed or not staffed 24/7. Key data sources in the smaller airport (computers, cameras, wind and temperature instruments, etc.) are fully accessible from the main airport. Even video walls can be replicated so that screen content in one city is projected onto screens in another city. For example, when an alarm goes off during the night at an unstaffed airport, it can be dealt with by a remote expert.

### **Optimized workflows enhance safety**

Intelligent WEYTEC solutions deliver leading-edge technology which is not only efficient but also user-friendly and intuitive to operate. Employees from all over airports utilize WEYTEC technology to optimize workflows, identify security breaches and react immediately. Location independence (free-seating within multi-site constellations), networking and communication are integral components of the WEYTEC philosophy, so that operators can see and manage all the necessary information simultaneously. WEYTEC solutions simplify complex processes to enhance workflows and guarantee comprehensive airport security.

