

SRI Demonstrates Navtech/Dallmeier Integration at US International Airport

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Security Radar Integrators, Inc.

SRI has teamed with Dallmeier to install and demonstrate our Airfield Radar System (ARS) integrated with Dallmeier Panomera® S8 Ultraline cameras at a US International airport.

In 2018, Navtech Radar Ltd. announced their integration with Dallmeier's Multifocal Sensor System Panomera® cameras. As Navtech's US airports partner, SRI was excited about the prospect of bringing this new capability to airports.

The added benefits of this new integration include continuous recording of the entire area of interest, automatic virtual zoom to follow objects tracked by the radar, and virtual real time zoom by multiple operators.

Background

Since 2014, SRI's Airfield Radar System has shown the usefulness of integrating Navtech long range radar sensors with dual color/thermal PTZ cameras. The radar does a great job of detecting objects of interest over 2000m in range, and Navtech's AdvanceGuard security platform provides a smooth auto follow with FLIR PT series or other PTZ cameras. The result is automated surveillance and complete situational awareness.

Meanwhile, since 2011, Dallmeier has been using its Multifocal Sensor System technology which combines multiple camera sensors of varying focal lengths to provide a single panoramic view of wide areas. With up to 380 MPe resolution from the combined Panomera® Runway Surveillance System, multiple users or applications like AdvanceGuard can 'zoom' to different locations in the image, all while the entire image is being recorded.

Results

With an SRI Airfield Radar System at one location and 2x Dallmeier Panomera® Runway Surveillance Cameras, the integrated system provided 360 degrees of ARS radar and PTZ coverage augmented by 178 degrees of Panomera coverage of the Aircraft Operations Area (AOA). The "visual" range of the sensors used was 2000 meters, although the Panomera® Cameras recorded activity at much longer ranges. In fact, during our demonstration period an incident occurred well outside of our 2000m test range, and the recorded Panomera® images clearly showed the incident in enough detail to assess and take corrective action.

In the AOA covered by the Panomera® cameras, AdvanceGuard followed activity with the FLIR PT camera and virtual zoom images from the Panomera® cameras. Multiple views of real time activity increased awareness, and the entire Panomera® area was recorded at 30 frames per second (real time) at ultra high resolution for forensic analysis.

Outside the AOA, the 360-degree coverage provided by ARS radar and PTZ camera provided perimeter security and monitored nonAOA activity.

During the weeks long demonstration, the ARS / Panomera® system exceeded all performance requirements and proved to be user friendly and reliable. We look forward to working with Dallmeier on this and future surveillance projects.