

Taking FLIGHT

by
Michael
Candelaria

INCREASED INTERNATIONAL ATTENTION ON AIRPORT SECURITY IS PUSHING LOCAL INNOVATIONS FARTHER AND FASTER.



Local companies work behind the scenes to bolster security at Central Florida airports.

»» Travel through almost any airport and you're likely to encounter enough new technology to make your head spin. Particularly as it relates to security.

In recent years, while everyone must still walk through the ubiquitous metal detector, passengers also face advanced X-ray systems, biometrics, bottle liquid scanners, cast scopes, image projection and even explosives trace detection. While an obvious nuisance, it's all good, as the saying goes (although no one really wants to

remove their shoes), since the intent is to safeguard lives in a time of true terrorism threat.

Yet, lost amid this techno blitz are other innovations — many developed right here in Central Florida — that largely go unnoticed. And, in an industry where "detect" joins *deter*, *delay* and *detain* as the most critical words,



Tavares-based G&T Conveyor Co. specializes in manufacturing and installing airport baggage handling systems.

that obscurity is exactly what makes them so successful.

"There's lots of stuff happening behind the scenes that passengers aren't aware of," comments Robert Reynolds, president of Altamonte Springs-based Solis Energy, a privately held provider of outdoor power generation, connectivity and emergency/secondary back-up solutions for low-voltage applications.

Consider Solis' collaboration with another Metro Orlando company, Sanford's SiteSecure, at Orlando Executive Airport.

Heightened security measures were required to prevent the entry of unauthorized vehicles and aircraft onto airport property. Monitoring night time airfield activity continues to be a priority for all general aviation airports across the country. Orlando Executive Airport, however, realizing the importance of general aviation security, enlisted the help of high technology to aid an existing 24-hour manpower presence at the airport. Adding to the challenge, electronic gates along the perimeter of the airport often lost power, which disabled the keypad and gate.

SiteSecure, a systems integrator, was brought in to provide the security solutions.

To identify unauthorized personnel on the airfield, SiteSecure recommended the use of infrared cameras to ensure consistent, reliable, identification-level video during night hours. The

problem was getting power to the best location for the surveillance equipment.

The closest power source was a quarter-mile away, too far to provide clear detail for accurate suspect identification. Trenching new fiber to all of the camera sites wasn't economically feasible. In addition, SiteSecure needed to address the problem of lost power and gate functionality. Since those gates used electronic keypads and magnetized locking mechanisms, any interruption in power would cause the keypad and mechanism to freeze up, leaving the gate in a locked position until power was restored.

SiteSecure turned to Solis Energy to deliver solar power to the tarmac cameras. With power available, the equipment could be positioned exactly where it was most effective, right next to the taxiways. Solis' Solar Power Plant (SPP) 12220 was installed to drive the infrared cameras and wireless video encoder system. The power-supply system uses a solar power plant, which incorporates a deep-cycle battery array that provides uninterrupted power to the cameras and transmission equipment for up to seven days of cloudy skies. Because of the equipment's strategic location, airport security were able to view clear, detailed video of airport traffic and better monitor unauthorized aircraft landing on the airfield.

At the back gates, to alleviate the concern over unreliable power, Site Secure installed an Uninterruptible

Power Supply (UPS 12030) from Solis to ensure continuous power. As a result, if power outages, dips or spikes occurred throughout the airport, the UPS could power the gate and keypad, keeping them functional until full grid power was restored.

Problems solved.

Solar power, cites Andy Bowman, vice president of SiteSecure, is making new friends among airport officials across the globe. "If they really want a return on their investment, wireless [solar] is the only option for remote locations," says Bowman, adding that funding through the federal Transportation Security Administration has spurred recent new business at domestic airports and abroad.

While SiteSecure and Solis Energy are helping to broaden the boundaries of surveillance, G&T Conveyor Co. has a different focal point: speed. As the industry's largest American-owned, privately-held, turnkey manufacturer in the United States, the Tavares-based company has an established reputation for engineering, manufacturing and installing both durable and cost-effective airport baggage handling systems. Since 1987, G&T has delivered more than 400 turnkey airport projects worldwide.

Now, G&T is faster. In January, it introduced a new Vertical Sorter/Merge (VSM), a product that transports all sizes of conveyable luggage then diverts or merges as required for proper sorting within a baggage-security or baggage-handling system. The VSM surpasses previous technologies by increasing sort-speed performance by 30 percent and load capacity by 90 percent, as compared to competitive products.

The product is being installed at one of the 25 largest international airports in the nation, as part of a comprehensive baggage security screening project. The system supplied by G&T promises to make travel safer — and easier — for customers by increasing screened baggage throughput.

Thanks to advancements made by these Metro Orlando companies, airport security will never be the same. 