

Aircuity case study

Tallahassee-Leon County Public Safety Complex

A Reliable Solution for a Facility Providing Critical Services 24/7

THE TALLAHASSEE-LEON COUNTY PUBLIC SAFETY Complex is a 100,000sqft unique, multi-purpose facility that was developed in partnership between the City of Tallahassee and Leon County Government in Florida to serve the 281,000 county residents. It was built to house many critical



operations and public safety units including the City of Tallahassee Regional Transportation Management Center, Consolidated Dispatch Agency for Leon County and the City of Tallahassee which fields 125,000 911 calls annually, Tallahassee Fire Department Administration Offices, Leon County Emergency Medical Services, and the Leon County Emergency Operations Center for activation during area emergencies. In addition to the main building, it also includes a Logistics Building for Emergency Medical Services and the City of Tallahassee Fire Station.

The complex is unique in that it combines all critical agencies into one location and was designed to be a convergence of innovative system designs. The building includes three Trane 250

ton chillers and two geothermal condensing wells. The mechanical design of the facility deals separately with latent and sensible heat loads. The latent load is dealt with at the air handler and the sensible load is extracted by a series of chilled beams. With the humid Florida climate, CRA Architects and H2Engineering, Inc. knew that they needed a reliable way to control the chilled beams and prevent a build-up of condensation and mold. In the Consolidated Dispatch Agency alone, there are approximately 31 employees each with 6 monitors on their desk. Interior humidity levels rising above dewpoint could result in condensation forming on the chilled beams and costly damage to the equipment below. As a mission critical function,



the Consolidated Dispatch Agency is at the heart of critical operations. The Aircuity platform monitors the dewpoint within the space and the sensor reading regulates the chilled beam supply water temperature at two degrees above dew-point at all times.

A RELIABLE SOLUTION

Aircuity channel partner Nelson & Company brought Aircuity's solution to the project and it was chosen as the ideal way to monitor the dew-point level throughout the building. Engineers felt confident that Aircuity would continually provide accurate and reliable readings for the life of the building based on the platform's

“Since Aircuity has been installed the system has worked flawlessly. It is doing its job to ensure a comfortable environment for occupants and working with the chilled beams to protect against mold and condensation.”

Carl L. Morgan, AIA
Construction/Operations Manager
Leon County, Division of Facilities Management

architecture and bi-annual sensor exchanges through Assurance Services. In addition to dew-point, the Aircuity system also continually monitors the CO2 level through the space. Aircuity's flexible system design allows the Tallahassee-Leon County Public Safety Complex the option of adding other monitored parameters at a later date, which they are exploring.

SHOWCASE OF EFFECTIVE BUILDING OPERATIONS AND EMERGENCY RESPONSE

The building was officially occupied during the summer of 2013 with the chilled beams performing exactly as expected, effectively maintaining comfortable temperatures in spite of the

heavy electronic equipment load inside and the hot, humid Florida weather outside. Now that this high performing team has been brought together in one location they are able to respond faster, with the right personnel and equipment, thanks to an equally high performing facility.

ABOUT LEON COUNTY

For more information on the Tallahassee-Leon County Public Safety Complex contact:

Alison Faris

City Communications Department

(850) 891-8533 ph

Alison.Faris@Talgov.com

Jon D. Brown

County Community and Media Relations

(850) 606-5300 ph

cmr@LeonCountyFL.gov

ABOUT AIRCUITY

Aircuity is the smart airside efficiency company providing building owners with sustained energy savings through its intelligent measurement solutions. By combining real-time sensing and continuous analysis of indoor environments, the company has helped commercial, institutional and lab building owners lower operating costs, improve safety and become more energy efficient. Founded in 2000 and headquartered in Newton, MA, Aircuity's solutions have benefitted organizations such as the University of Pennsylvania, Eli Lilly, Masdar City, the Bank of America Tower and the University of California-Irvine. For additional information on the company and its solutions, please visit: <http://www.aircuity.com>.

