

The FAA, Atlanta [US]



Vital information on 3,200 flights a day

Atlanta's Large Terminal Radar Approach Control Center (LTRACON) manages flights for more than 30 airports in the state of Georgia. Atlanta Hartsfield International Airport alone has 78 million passengers a year.

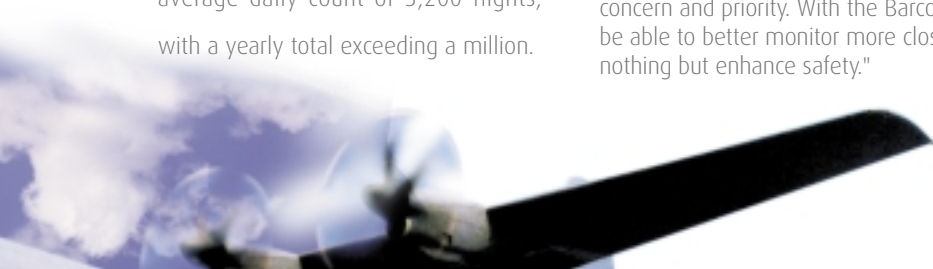
The Atlanta LTRACON controllers see an average daily count of 3,200 flights, with a yearly total exceeding a million.

LTRACON's first all-digital facility

Jim Vallone, Federal Aviation Administration (FAA) representative, oversees site selection for new facilities, and he makes sure FAA controllers have the most technologically-advanced equipment to assist them with their job, and still keep purchases within a given budget.

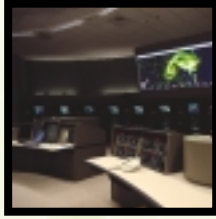
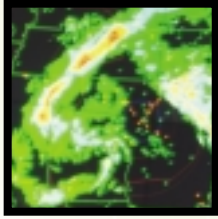
"The main benefit of the new facility is that it allows us to be so much more efficient at what we do. We will be able to be much more reactive to situations that our customers need, the flying public, and in the Atlanta area primarily the major airlines, Delta and AirTran," said Vallone.

"We are open 24 hours a day, 7 days a week, 365 days a year. Safety is our utmost concern and priority. With the Barco walls and some of the other technology, we will be able to better monitor more closely weather and traffic, which will no doubt do nothing but enhance safety."



BARCO

Visibly yours



Flying high

The new LTRACON facility uses 4 Barco Traffic Monitoring Displays, 25 state-of-the-art radar scopes, with over 240 personnel from Hartsfield helping air traffic run smoothly.

Three 4-channel systems are located throughout the room, and one 8-channel system is in the center of the room. The main 8-channel wall will be used for arrivals into Hartsfield only.



The facility

FAA right from the start reconsidered rear-projection technology. "We realized the front projection would cause glare on the radar scopes. Through the formal bid process we chose Barco to provide our rear-screen projection systems. We felt Barco could offer a total solution, not to mention technologically-advanced products, at reasonable cost. We also liked the fact they were locally based," said Jim Vallone, FAA Union Representative.

"The real trick was identifying where our superstructure was located and installing these screens without damaging our completed control room." Rather than have the standard 4' space behind the system (2' is the actual width of the projection system and 2' of space is needed for access), Barco and M&R Consultants designed a layout in which the existing structure would house the rear-projection screens.



Fixing the glitch

Barco basically had to fit a square piece of equipment into a round room. The engineering team created the new structure and attached it to the existing steel framework that was 25' off the floor. This allowed access to the back of the screen through a main hallway. "It was quite a feat, and was a tough job to pull off, but amazingly enough Barco installers were able to pull off the restructure without a hitch," said Vallone. The rear-projection has turned out to be a big plus for the FAA.

Enhanced performance & efficiency

"The Barco walls are something new in an FAA LTRACON facility. We are using these for traffic management and supervisory functions and coordination. A supervisor can walk from one side of the room to the other and accomplish coordination if there is an urgent situation, such as bad weather in the

area," said Vallone. The supervisor can simply ask controllers to plug in their headsets and pull a conference call together and simply point to the screen to explain what he's talking about. Everyone is looking at the same picture on a very large screen."

Increased safety & reliability

John Myles, FAA Air Traffic Supervisor, will oversee operations on all four walls, whether it is departures, arrivals, or satellite offices. The major differences he sees in the old facility and the new one is size and technology. "As a controller, I will now have a higher resolution picture, and more information." He can now see the traffic flow coming into Hartsfield on a larger screen and determine if he needs to make adjustments in departures or make changes to traffic flow, without leaving his station. For example, if there is a weather system approaching, he can

redirect traffic and set up a new flow by communicating with his staff across the room without ever leaving his post. The Barco walls eliminate controllers and supervisors from leaving their primary work station and allows everyone to communicate on the same page.

Traffic management visualization

The Barco walls will also be used to show other programs that will help the air traffic controllers with making tough decisions and directly help air traffic run smoothly, e.g. the Enhanced Traffic Management System, a proprietary product of the FAA, that tracks global air traffic.

Another product the FAA will show on the Barco wall is the Terminal Doppler Weather Radar. This application shows thunderstorms, gust fronts, microbursts, and wind shear activity near the airport. This is critical when an aircraft is closer to the ground.



The Passive Final Approach Sequencing Tool is a National Free Flight Initiative program supported by the FAA's administrator's office. It will help with long term projection to balance the use of the runways and reduce delays. All of Barco's walls permanently have a live video feed of the Weather Channel.

Barco's solution

The FAA purchased Barco's OverView-mP50 for its new control room facility. Three 4-channel systems are located throughout the room, and one 8-channel system is in the center of the room. The main 8-channel wall will be used for arrivals into Hartsfield only.

The first 4-channel system will be used for departures, mainly out of Hartsfield, the second 4-channel system will be used to monitor satellite airports, and the third 4-channel wall will be used to monitor air traffic in and out of Macon and Columbus. Transition is expected to take place in the Spring of 2002.

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Barco Control Rooms is an ISO 9001 registered company.
The information and data given are typical for the equipment described. However any individual item is subject to change without any notice.
The latest version of this product sheet can be found on www.barcocontrolrooms.com
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