



# CHARLOTTE DOUGLAS INTERNATIONAL AIRPORT

Charlotte, North Carolina

## Baggage System Replacement and T-Point and ABR Support Facilities

Baggage System Replacement: 2010 – 2015  
T-Point and ABR Support: 2015 – 2018

### BAGGAGE SYSTEM REPLACEMENT AND INLINE CHECKED BAG SCREENING SYSTEM

BNP Associates, Inc. was retained by the Airport to provide the design and construction administration services for the inbound, outbound, and inline checked baggage inspection systems (CBIS). The design consists of two screening matrices of four (west matrix) and five (east matrix) CTX 9800 EDS machines fed by the existing ticket counters, curbside, and FIS recheck mainlines. Reinsert functionality from the CBRA in each matrix allows unknown bags to recirculate through the CBIS and Level 1 screening. The clear bag mainlines feed four slope plate make-up devices. Crossover subsystems have been provided to provide both redundancy and load balancing between the screening matrixes and the associated ticket counter or sortation mainlines. A new BHS control room supports the main PLC and host computer facilities for the baggage handling system. It also supports any computers required by Terminal users to provide the 10-digit interface with the baggage system. The new graphics-based monitoring system displays all major elements of the entire system in real time. Statistical reports are also generated in this location and allow for the management of the baggage system.

The domestic arrivals baggage system of the project consists of providing two additional incline plate claim units with associated feed and load conveyors.

### CONCOURSE E T-POINT AND ABR SUPPORT FACILITIES

BNP was retained by the Airport to provide design and construction administration services for the new transfer baggage system. The design consists of five transfer input lines feeding a redundant sortation system consisting of two mainlines that sort baggage to three flat plate baggage make-up devices. The overall layout of the sort system includes crossover capability for redundancy considerations.

A dedicated baggage system control room supports the baggage transfer system's upper- and lower-level controls, which includes the required 10-digit interface with American Airlines' departure control system for the sortation of transfer baggage. The new fault monitoring system is graphics-based and displays all major elements of the system in real time.



ASSOCIATES, INC.

### BNP PROJECT TEAM

Nick Triantafilidis,  
Project Director  
Tony Lensing,  
Sr. Project Manager  
Magda Basiak, Sr. Designer

### TOTAL CONSTRUCTION AMOUNT

BHS Replacement: \$46 Million  
T-Point: \$22 Million

### BHS CONSTRUCTION AMOUNT

BHS Replacement: \$30 Million  
T-Point: \$4.7 Million

### REFERENCE

Dennis Iskra  
Sr. Airport Architect  
Charlotte Douglas Int'l Airport  
Phone: (904) 521-2154  
Email:

[Dennis.Iskra@cltairport.com](mailto:Dennis.Iskra@cltairport.com)

### SCOPE OF SERVICES

Conceptual Design  
Design Development  
Contract Documents  
Bidding and Procurement  
Construction Monitoring