LOUIS ARMSTRONG INTERNATIONAL AIRPORT

New Orleans, Louisiana

New Inbound and Outbound BHS in New Terminal

City of New Orleans | 2019

Leo A Daly Architects, in coordination with Crescent City Aviation Team, obtained BNP's services to design and develop a new Outbound baggage system, which includes a new in-line CBIS, and an Inbound baggage system as part of the process of designing and constructing an all-new 972,000 square feet North Terminal with 35 new gates and program. The design team identified multiple alternatives for review and consideration by the airport, TSA and other project stakeholders during the integrated local design team review meetings.

As part of the Design, a flight schedule analysis was performed and refined to identify the corresponding baggage screening throughput requirements for the Airport. The design incorporates a new outbound and inbound BHS system installed in the North Terminal that consists of six ticket counter and three curb side subsystems, a new In-line screening system with four EDS, two main sortation lines, one manual encoding station, seven make-up devices and six claim devices. Concourse A, which will house gates for international flights, one main sortation line and two make-up devices were added for the outbound portion of the BHS. One claim device, that will serve arriving flights from international markets, is in Concourse A in the Federal Inspection Services area.

The design team identified and compared multiple alternatives for consideration using a design criteria that enabled the development of alternative designs to be evaluated on all aspects of implementation (e.g., space usage, redundancy, etc.), financial affordability, architectural and engineering (A&E) feasibility, and availability for future expansion. The alternatives selected were presented for review by the major stakeholders of the airport including the terminal airlines, operations, maintenance, ramp, architect and owner's representatives.

The preferred alternatives were further refined throughout the design stages for TSA submission and approval. BNP's designs incorporate the latest TSA Planning Guidelines & Design Standards making the MSY baggage handling system design fully compliant to TSA's current protocol for 100% inline certified EDS checked baggage screening. CBIS was designed as a centralized system with a total of four screening machines and twenty baggage inspection tables which will contribute to a reduction in staffing levels of TSA personnel.

A common use outbound system was designed where any bag can be inserted anywhere in the system, and sort to any destination. This provides the airport planning department flexibility since any airline can be easily relocated anywhere in the ticketing lobby. As part of the new system, a centralized bag room that serves all the domestic flights was implemented where all the make-up and load belts for claim devices are in one area which contributes to a decrease in the length of the sortation lines and cart transit times.

BNP ASSOCIATES, INC.

BNP PROJECT TEAM

Dave Mecartney, Principal
Calvin Trudeau, Project Director
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BHS CONSTRUCTION AMOUNT

US $45 Million

REFERENCE

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SCOPE OF SERVICES

Analysis Study
Conceptual Design
Design Development
Ergonomic Improvements
Bid Documentation
Construction Administration
Testing & Commissioning