

DENVER INTERNATIONAL AIRPORT BAGGAGE HANDLING SYSTEM



OWNER

CONTINENTAL AIRLINES
UNITED AIR LINES

OWNER'S REPRESENTATIVE

ED VALENTE, UAL

BNP PROJECT MANAGER

DAVID MECARTNEY

LOCATION

DENVER, COLORADO, USA

CONTRACT PERIOD

1994 - 1995

PROJECT AMOUNT

US \$380 MILLION

REFERENCE

GENE BARR
MANAGER
UNITED AIRLINES
1200 EAST ALGONQUIN ROAD
UAL-WHQFP
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SCOPE OF SERVICES

CONCEPTUAL DESIGN
DESIGN DEVELOPMENT
CONSTRUCTION MONITORING

RELEVANCE

AUTOMATED BAGGAGE HANDLING
SYSTEM UTILIZING 10-DIGIT IATA
BAG TAGS

In early 1994 BNP was retained by both Continental Airlines and United Airlines to assist with the acceptance testing of the Destination Coded Vehicle (DCV) system at Denver International Airport.

Upon our arrival in January, it was evident that the baggage system progress was not sufficient to maintain the scheduled opening date of early 1994. BNP developed testing scripts, manpower requirements, and measuring criteria to evaluate the performance of the baggage system. It quickly became apparent that the baggage system would not be able to serve the entire airport as originally intended in the short term future, and the City began to explore alternative schemes for opening the airport.

As testing progressed and the system continued to fail to meet its performance criteria, BNP developed an alternative operating scenario for United Airlines. This program is outlined below:

- Decrease the overall line processing of the system from 65 cars per minute consistent with achievable goals previously demonstrated.
- Remove terminating and transfer bags from the system to reduce and simplify the computer control system demands.
- Remove empty car management logic from the system to reduce the complexity of the computer control system.
- Sever the Concourses A and C systems from the United Airlines system and leave the Concourse A, (Continental) and Concourse B systems, independent.
- Integrate the Concourse C system into the Concourse B system to increase the processing capability of the Concourse B system and provide an additional degree of redundancy.

These recommendations were adopted by United Airlines and the City, and a major reconfiguration project was initiated, gearing for an opening date of February 1995. Parallel to this, the City elected to construct garage-based manual systems for each of the concourses. The Continental Airlines system was placed on hold and was intended to be completed after Concourse B had finished.

The completed system operated on time in line with the scheduled opening date of the Airport. The remaining tasks of the contractor were to integrate the inbound and transfer functions back into the primary Concourse B system. The latter of these two systems failed to meet contracted performance goals due to additional software and mechanical design deficiencies.