



Jetclaim unit at Terminal One features state-of-the-art baggage technology in the baggage claim area at John F. Kennedy International Airport. BAE maintenance crew operates and provides maintenance for the entire baggage handling system.

## O&M Continues to Grow

# BAE to Maintain System for Delta Air Lines at Cincinnati

BAE has been given the go-ahead from Delta Air Lines to provide full operations and maintenance support for a Webb conveyor system and Crisplant tilt-tray sorter system at Terminal 3 at Cincinnati/Northern Kentucky International Airport. BAE won the project after bidding against Webb, Rapistan, Lone Star, BNP, and Western Industrial. Webb, one of BAE's principal competitors

in North America, has maintained the baggage handling system since its installation four years ago.

"This is a key maintenance contract we had been targeting," said Mitch Chokas, BAE's account executive. "Delta selected us to be the maintenance provider after reviewing the way we do maintenance at Denver.

(Please see Maintenance on page 3)

## From Airports to Hotels

# BAE Equipment Installed at Las Vegas

The baggage claim area in the main terminal at Las Vegas McCarran International Airport now has a total of 10 BAE Jetclaim units in full operation. BAE recently installed four new Jetclaim units in the main terminal. The units, which began operating on Aug. 1, are in addition to the six existing Jetclaim units which have been in operation since 1985.

## Conveyors for Southwest

BAE has just completed the installation of a ticket counter and two curbside conveyors for Southwest Airlines at McCarran International Airport's main terminal in Las Vegas. The two independent curbside conveyors run from curbside to an out-bound baggage makeup unit located in the bag room. Southwest Airlines will move into the terminal and begin using the system by the end of August.

## Moving Bags at the Bellagio

When the new Bellagio Hotel opens in Las Vegas this fall, guests' bags may get to the room before they do, thanks in part to BAE's new conveyor system installed during the construction of the hotel.

(Please see SFO Project on page 4)

# Computer System for Shop Floor to Boost Manufacturing Process

Signaling the next wave of BAE's dramatic overhaul of internal processes, the first new computers destined for the shop floor have arrived, and the company is ever closer to a fully integrated engineering and manufacturing network environment.

Although the digital era arrived in the shop years ago with the installation of CNC machine tools, computerized punches, and Unidata terminals on the shop floor, there was no integration with engineering.

The new system marks a major departure for a company that has for a generation viewed paper--from drawings to "shippers"--as the primary tool for communication with the manufacturing and installation arms of the company. In the future, that communication will be through electronic forms and files.

Scheduled for a two-step implementation, stage one knits together the assembly and sub-assembly data created in Pro/Engineer, the system level data created in MicroStation, and three manufacturing processes. It will be implemented using three new workstations and a file server dedicated to the Pro/Engineer manufacturing module for sheet metal, turning, and milling.

These modules convert 3D design

data from Pro/Engineer and Microstation into files that are readable by CNC machine tools. The Pro/Engineer workstations, the MicroStation workstations, the new shop computers, and the CNC equipment will all be integrated into the Local Area Network (LAN).

In addition to the three manufac-



turing workstations, there will be two Document Center stations and a manufacturing engineering workstation.

The Document Center stations will allow shop personnel to view and print Pro/Engineer files on demand. A redlining capability for electronic markup of files will give shop personnel direct access to Mechanical Engineering for immediate on-line feedback and changes to engineering data.

The manufacturing engineering workstation will provide on-line, step-by-step assembly processes and methods for the assemblies and sub-assemblies.

"The people in the shop will begin to see very detailed assembly drawings by October," Greg Mayfield, vice president of operations said, calling the upcoming changes "radical and long overdue."

BAE Manufacturing Engineer Tim Winicker, along with shop representatives Jim Nystrom and Danny Elizardo have completed their initial training in the Pro/Engineer software modules they will be using as part of the stage one integration.

Since April, a mechanical engineering team has been redesigning, converting existing designs, and optimizing conveyor products, assemblies and sub-assemblies using Pro/Engineer. That effort is more than half completed. When 3D models and design data for all 26 BAE conveyor products have been added to the Pro/Engineer library, stage one can be fully implemented.

The second stage of the shop floor computer revolution, coming later this year, incorporates production planning and accounting through Enterprise Resource Planning (ERP) into a single integrated system. The BaaN system will replace the current Unidata, and add powerful new features and capabilities to the manufacturing process.

Ultimately, all of these capabilities will also be integrated to include field installation personnel.

The Conveyor is published every other month by the Corporate Communications Department of BAE Automated Systems, Inc., 2525 Carter Drive, Carrollton, TX 75006.

Denise Witt

Editor

John H. Carrell, Jr.

Graphics

Entire contents copyright © 1998, BAE Automated Systems, Inc. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, printed, electronic, mechanical, recording, or otherwise, without the express written consent of BAE Automated Systems, Inc.



## New Projects

# Maintenance Crew at Cincinnati, Equipment Installed at Love Field

(Continued from page 1)

They were pleased with our performance there and decided we had the knowledge and experience needed to maintain their system at Cincinnati."

Dave Jones, manager of operations and maintenance, is expected to oversee the transfer of the maintenance program from Webb.

"The reason why we got this job is because of our previous success and open communication with the customer," Jones said.

"The project will definitely open the door for us as a future showcase for BAE's operations and maintenance capabilities."

BAE is in the process of hiring employees at Cincinnati and will eventually employ 38 maintenance personnel to operate and maintain the inbound/outbound system there. Pete Kwapnewski is site manager.

The system includes a high speed conveyor linking the ticket counter and baggage claim areas with Concourses A and B. Bags are transferred to a tilt-tray sorter, where they are sorted to piers located along Concourse B, Delta's main concourse.

BAE at Love Field

BAE has been selected to provide baggage handling systems for two airlines who will begin operations at Love Field in Dallas in the near future.

American Airlines and Legend Airlines both selected BAE to design and install conventional conveyor systems at the airport, which had, up until recently, been used predominantly by Southwest Airlines.

Last fall, Love Field was opened to other airlines as Congress clarified that any jet aircraft with 56 seats or fewer could operate from Love Field. Legend, American, and other airlines are now planning to begin service at the Dallas airport.

BAE was awarded a contract with American Airlines on Aug. 16 to install a ticket counter that runs through a truss and declines into the bag room to a run-out conveyor. Work is already underway on the Love Field project and is scheduled to be complete by the end of August.

Legend Airlines also gave BAE the go-ahead to install a Jetplate unit for inbound bags and a runout convey-

(Please see American on page 4)

## BAE Watch

# BAE Makes Industry News

BAE has been making the news lately...and it is all good!

Following are some of the latest industry trade magazines to include articles about BAE baggage handling systems:

The July issue of Passenger Terminal World magazine features an interview with BAE's John Gude, director of marketing and business development. Photos include the new, futuristic-looking Jetclaim units at John F. Kennedy International Airport's Terminal One (TOGA) and the Telecar system at London Heathrow.

The June/July issue of Airport World features BAE in two of its articles: one entitled "Heathrow's high-speed Telecars" and the

other under the heading "Beating ICAO passenger processing times. In the latter, BAE comes out ahead of its competitors in listing a DCV speed of 10.7 meters per second, twice as fast as the leading competitor's DCV system.

The June issue of Airports International features BAE on the front cover with the heading "BAE is getting serious." The article inside promotes BAE in the beginning paragraph, stating "Suddenly, BAE Automated Systems seems everywhere." The article goes on to relate that "BAE appears robust and eager to play a major role in the future development of airport baggage handling systems."



In preparation for the implementation of ERP, members of the IS department installed a new Data General Aviiion file server with three Intel Pentium Pro 200 processors and a 61 GB Clariion disk array. The smaller fail-over server is a Data General Aviiion with dual Intel Pentium Pro 200 processors. Pictured from left: Chuck Sharp, director of IS, Orin Owen, Iain Jarvis, and Keith Wallace.

## Bellagio to Open

# SFO Project Moves Forward

(Continued from page 1)

The conveyor, which handles both inbound and outbound bags, runs from curbside to the basement of the hotel. When a guest arrives, the curbside porter accepts the bag and puts it on the conveyor, where the bag travels to the hotel basement.

Porters in the basement level are assigned to the bag and carry it to the room while the guest checks in. The process is reversed when a guest checks out. Tickets are assigned to each guest for baggage claim.

The conveyor was added by BAE during the construction of the \$1.3 billion resort, which houses 3,000 rooms and is fronted by a 12-acre lake. A fine art gallery, international restaurants, and name-brand shops also fill the hotel/casino.

### San Francisco International

Software development is scheduled to begin Sept. 1 for the BAE baggage handling system currently

being installed at San Francisco International Airport.

"In the next few weeks, we will select a fault graphic software package that will integrate with our system," said Bob Pollard, project manager.

Meanwhile, mechanical installation is near completion in Boarding Areas A and G, with electrical installation soon to follow. Sway brace and conveyor belt installations are the major remaining tasks in Boarding Areas A and G, with the addition of a catwalk in Boarding Area G.

"We are just starting mechanical installation in the south shoulder at this time," Pollard said.

Engineering plans are also underway for mechanical and electrical installations at the north shoulder and the main terminal.

The San Francisco project, which is the second largest project in the company's history, is scheduled for completion in September 1999.

## New Projects

# American, Air Canada, Northwest Select BAE

(Continued from page 3)

or for outbound bags. The system is should be operational by Jan.15.

### American at DFW

American Airlines also signed a contract with BAE on Aug. 8 to install a Jetplate baggage claim device in the customs area of Terminal 2E at DFW International Airport. The installation is scheduled to be complete by Nov. 9.

### Air Canada

BAE has been awarded a contract with Air Canada to provide modifications to the baggage handling system at Terminal 2 at Toronto International Airport. BAE will add a manual encode station, a new laser scanner array, and modify an existing laser scanner array. The modifications are expected to be complete by the end of August.

### Northwest at Minneapolis/St. Paul

Northwest Airlines will soon have the ability to read 10-digit bag tags at Minneapolis/St. Paul International Airport, with the help of BAE. BAE is in the process of upgrading the scanning system to read 10-digit bag tags and will also replace the existing computer system with a new Windows NT workstation. The airline plans to upgrade its scanners to integrate with the new computer system.

### GC at Houston

General contractor, Construction Ltd., awarded BAE a contract on June 29 to install two Jetclaim units at the George Bush International Airport (formerly Intercontinental Airport) in Houston.