



APM Express

The Newsletter from APM Consulting, LLC

WWW.APMCONSULTING-LLC.COM
(720) 232-0513

VOLUME 3, ISSUE 2

NEWSLETTER DATE: FALL 2006

Welcome to the Fall 2006 edition of the ***APM Express***, the newsletter from APM Consulting. In this edition we have reports from a number of airport APM O&M sites along with more APM personnel changes. Additionally, we will look into what might well be a changing of the guard in the APM industry.

APM Personnel Changes

After more than 17 years with the Doppelmayr Corporation, Alex Klimmer has left the people mover industry. Alex was a key contributor to Doppelmayr's successful people mover business and I am sure his presence will be missed. Alex will continue to serve as a member of the ASCE, APM Standards Committee. On a personal level I have had the good fortune to work with Alex for the past several years and wish him the greatest success in his new endeavors.

Victor Howe has re-emerged in the APM business as the customer representative at Washington Dulles International Airport. Victor will be responsible for overseeing the operations and maintenance of the new Mitsubishi Crystal Mover being installed at Dulles Airport.

Sokhorn Chhim is the new customer representative and contract administrator for the APM at Denver International Airport. Sokhorn replaces Doug Baird who left DIA to become Johnson Controls site manager at Houston Intercontinental Airport. Sokhorn also goes by the name of Khan.

Chicago O'Hare International Airport

The average system availability for the first six months of operation for the APM was 99.94%.

Increased ridership and the opening of additional parking at O'Hare have caused the APM to be operated for extended hours. APM service is up more than 10% over the same period in 2005. Vehicle miles for the first 6 months of operation were 660,857 as compared to 596,149 vehicle miles for the same period a year earlier.

By the end of 2006 several of the APM trains will register 1,000,000 miles.

Information contributed by Christine Baker

Detroit International Airport

The 90 day average system availability for the Express Tram at the McNamara Terminal/Northwest World Gateway was 99.68%.

Information contributed by Dennis A. Farmer

DFW International Airport

Bombardier Transportation is currently in the process of replacing the system's Radiax cable due to a latent defect. Fortunately this has had little effect on the service availability.

The system availability for the first six months of 2006 was 99.70%.

Information contributed by Marvin Faulkenburry

Dulles International Airport

Construction started on a new airside - underground APM system in October 2002 to replace much of the Airport's Mobile Lounge shuttle service. The lounges have been efficiently moving passengers for over 40 years. In March 2003, the Metropolitan Washington Airports Authority, which manages Washington Dulles International Airport, contracted with Sumitomo Corporation of America (SCOA) to provide the system. The Airports Authority's Office of Engineering and its construction management company, Parsons Management Consultants, manage this project.

Mitsubishi Heavy Industries (MHI) a sub-contractor with SCOA to manufacture the vehicles, will deliver the new Crystal Mover style vehicles to transport passengers between the existing Main Terminal and Midfield Concourses. Each train will have up to four cars with the capacity to carry seventy-two passengers per car and will transport passengers to the most distant concourses in less than two minutes. The system first phase consisting of four stations and twenty - nine rubber tire cars is schedule to be completed in 2009. This phase will operate in a pinched loop.

The Main Terminal station will have four distinct levels: Departures, Arrivals, Security Mezzanine, and the Train platform. The Security Mezzanine will provide critical floor space for more efficient passenger security screening and to alleviate congestion on the Main terminal ticketing level.

Plans for the final APM phase envision a continuation of the dual guide way system servicing a total ten platform stations in a loop operation to support two new concourses with a new terminal and additional, fifth runway.

Information contributed by Victor Howe

Houston Intercontinental Airport

On August 16, 2006, the Inter-Terminal Train at George Bush Intercontinental Airport reached 25 years of successful operation. The average system availability for the first six months of 2006 was 99.90%.

Johnson Controls has been the O&M Contractor for 20 of the past 25 years. George Bush Intercontinental Airport will soon sign a new five year agreement with Johnson Controls Inc. to continue the O&M through the year 2012.

A severe structural failure on the CX-100 APM system has caused the system to be operated in an alternate mode since mid-June of 2006. Representatives from Bombardier Transportation were on site to inspect the failure. Two sections of the running surface adjacent to a guideway switch have apparently sheared loose from the base concrete structure. Repairs to the running surface are scheduled to begin in the next 30 to 60 days.

Information contributed by Frank Gates and Doug Baird

Orlando International Airport

The Authority is currently negotiating with Bombardier for 6 replacement vehicles for some of their older fleet. They hope to have a contract to bring to the Board Meeting in October 2006.

The average system availability for the first six months of 2006 was 99.87%

The Authority is considering adding CCTV cameras to the vehicles. No pricing proposals have yet to be received for this project.

Orlando is just beginning the design process for replacing the 1980 vintage shuttle cabinets for the Airside 1 and AS3 shuttles. They are also starting the design process for replacement of the concrete running surface on the AS1 and AS3 shuttles. This project is in a very preliminary stage. The challenge will be keeping one shuttle operating at 100% for 4 to 6 months while the other system is resurfaced.

Information contributed by Mike Shumack

San Francisco International Airport

Continued problems with the systems Leaky coaxial cable, has caused Bombardier/Andrews Corporation to make the decision to replace all of the system's cable. As of August 1st, approximately 60 percent of the cable had been replaced. The project is scheduled for completion at the end of September 2006.

The average system availability for the first six months of 2006 was 99.61%.

Construction will soon begin on the Terminal One AirTrain Bridge. This pedestrian bridge will give easy access to the Terminal.

This year SFO will conduct a feasibility study to extend their Blue Line from the rental car center to the Long Term Parking garage. If the results of the study are positive, the project could happen in the 2011 timeframe.

SFO is reviewing plans to construct a hotel adjacent to the Garage A. This would require the addition of another AirTrain station.

Information contributed by Derek Phipps

Sea-Tac International Airport

The average system availability for the first six months of 2006 was 99.94%.

Seattle has removed all of the floor carpeting in their vehicles and replaced it with Nora rubber floor material. The noise level is slightly higher than the carpeted floors; however, Seattle officials feel this is outweighed by the ease of maintenance and appearance.

Information contributed by Jeff DeMarre

Tampa International Airport

Tampa average system availability is as follows:

	shuttle	monorail
Jan, 2006	99.79	99.30
Feb, 2006	99.68	99.50
Mar, 2006	99.84	99.50
2nd FY06 Qtr	99.77	99.43
Apr, 2006	99.42	99.60
May, 2006	99.70	99.60
Jun, 2006	99.62	99.70
3rd FY06 Qtr	99.58	99.63

Information Contributed by Gary Houts

Toronto Pearson International Airport

The new Doppelmayr Cable Liner made its grand opening on July 6, 2006. The dual lane shuttle has performed very well with no major incidents. To date average system availability has exceeded 99.91%.

Information contributed by Iouri Moutine

President's Commentary

Changing of the Guard?

For nearly the past 30 years I have had the good fortune of working in the APM industry in one capacity or another. For the majority of those years Bombardier/Adtranz/Westinghouse sat alone as king of the hill when it came to supplying Airport APM systems. Whether it was a small shuttle system or a more complicated pinched-loop operation, chances were if an airport bought an APM, it bought it from what is today Bombardier.

A few other companies made small inroads into the airport market, but none were able to sustain the success that was achieved by Bombardier and its predecessor companies. Since the 1970s the company has achieved a great deal of success in the APM business and installed an impressive number of airport APM systems. For many years it seemed that Bombardier basically had the airport APM business to themselves. Recently, however, new players have emerged in the airport APM market and appear to be giving Bombardier a true run for their money.

Austria's Doppelmayr Corporation has emerged as a serious competitor in the airport APM market. Building on the success of their Las Vegas Cable Liner installation at the Mandalay Bay Hotel, Doppelmayr has successfully installed airport APM systems at England's Birmingham Airport and Toronto Pearson International Airport. Additionally, Doppelmayr is currently installing another airport APM at Mexico International Airport. While their technology is limited to shuttle systems at this time, Doppelmayr has proven they are a serious player in the airport APM business.

Another company that has burst onto the US airport market is Mitsubishi Heavy Industries. Working with their consortium partners, Mitsubishi's Crystal Mover has been selected over Bombardier systems for installation at Washington Dulles International Airport, Miami International Airport, and Atlanta International Airport's CONRAC facility. Additionally, a Mitsubishi consortium was selected to replace Changi Airport's existing

Bombardier system. Unlike Doppelmayr, Mitsubishi's technology is not bound to simple shuttle systems.

While Bombardier remains a formidable competitor, as can clearly be seen, they no longer hold the absolute dominant position they once had when it comes to supplying airport APM systems. In fact, if one looks at the recent US market for large APM projects, the edge probably goes to Mitsubishi and its consortium partners.

While it remains to be seen if we are truly seeing a changing of the guard atop the hill of airport APM suppliers, one thing is certain. There is no longer only one dominant supplier and there will be a great deal of competition for future airport APM systems.

Sincerely,

John Champ
President
APM Consulting, LLC