

PROPworks CAT Has Arrived

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The Miami-Dade Aviation Department recently completed a major project implementing the CAT (Carrier Activity Tracking) module in PROPworks. This resulted in the integration of two of MIA's most important IT systems. Involved in this project were numerous employees from the Information Systems/Telecom, Finance, and Airside Divisions along with consultants from Airt. The AOIS system (Airport Operations Information System) has been in use at MIA since March of 2004 and acts as a central repository for all the information related to each flight that operates at MIA. This includes arrival and departure times, gates, baggage belts, locations where the aircraft parked, and much more. This information is shared with a number of internal and external systems such as the Flight Information Display System (FIDS) which displays flight information throughout the terminal and on the Internet. The PROPworks system has been in use at MIA since 2003 and handles the creation of all the MDAD invoices. PROPworks has been invoicing all of the activity reported by the airlines since it was installed, but relied on a feed from a separate application to charge customers who do not report their activity at the end of each month as well as the various fees that the airlines do not report such as aircraft parking.

Significant software upgrades were needed in order to integrate these two systems. Also, multiple interfaces were developed so that the two systems could communicate with each other. An additional application for handling cash and

credit card transactions known as the PROPworks Cashier was developed to integrate the cash management processes into the same system. Additional data feeds were put in place to help augment the task of recording all of the flight information. The system utilizes a scheduling component to automatically create flights for the airlines that submit schedules to the Airside Advance Planning team. An interface was written to the Sabre system which feeds information for American Airlines flights into AOIS. A feed from the PASSUR system records information from the aircraft's transponders and provides notification of unscheduled flights entering MIA's airspace as well as providing information related to the aircraft that would have had to be entered manually.

MIA has seen a number of benefits since this project went live in September 2009.

- A significant number of reports were written not only to display the flight or billing information, but also to audit the process of converting flight information into charges. This allows all involved parties to be confident that every flight has been properly accounted for.
- Reconciliation reports were written that allow the Finance Division to easily compare the activity recorded by the Airside Division with the activity submitted by the airlines each month. This has simplified the auditing process and makes it possible to identify errors with less research than before.

- With all of the aircraft information recorded in a single location, it is now possible to create airport statistics on a daily basis such as those found in the MIA Today newsletter distributed each morning. Previously, these statistics could not be compiled until the middle of the following month.

- This PROPworks Cashier system can run on laptop computers and works with portable printers with integrated credit card readers. This allows Airside agents to collect money from pilots out on the airfield rather than bringing the pilot into the office in order to process the transaction.

- The elimination of financial information from the operational system provides a greater separation of duties between the different divisions: Airside is responsible for recording the aircraft activity, Finance is responsible for creating and sending invoices, and IT is responsible for ensuring that the flight activity is converted into invoices based upon the published rates and fees.

The integration of these systems was a complicated task that required a significant commitment from all parties involved, but the results were well worth the effort. Integrating both of these systems has created what is truly an integrated airport management system where all of the flight data is recorded in one place and that same information is used for airline billing. Keeping track of the roughly 16,000 planes that land at MIA each month is a difficult task and the software tools developed as part of this project give the staff at MIA the ability to quickly and efficiently manage the aircraft operations from landing through take-off. With the multiple data feeds put into place and the variety of reconciliation reports that were written, it should now be possible to bill based solely on the information collected by MIA employees. The successful implementation of this project has put MIA on track to be the first major US airport to eliminate airline billing based on self-reported statistics and bill based on operational data.

