Birth of a Virtual Airline:
The ATP Experience

BY ROGER CURTISS

"VA fly-ins remind me of migrating geese. They are fascinating to look at as they pass by but I wouldn't get anything out of joining them. I want to do something challenging and engaging, yet reliant on a team". Thus began an email message I received from Joe Caban in April, 2006 asking if I was interested in exploring a new virtual airline concept he envisioned. Joe said that he had been looking for a VA to join but felt that all the choices offered no more than a fancy way to log hours. Pilots use an airline's callsign and fly their livery; but for the most part elect to fly random flights that have no correlation to others being flown by pilots of the same VA. The only time they share a sense of purpose and organization is during fly-in events. Joe imagined getting a group of pilots together to fly integrated routes with the challenge of maintaining a schedule and accomplishing gate turns in 35 minutes or less.

His goal was to attempt to replicate the pressures of flying these airline schedules using live dispatch –and he called it The ATP Experience (ATPX).

How it works

The idea was to provide a steady flow of traffic to/from Atlanta Hartsfield-Jackson International airport (KATL) for a few hours rather than the compressed departure/arrival "flocks" of a traditional fly-in. Joe's theory was that sustained traffic would promote increased controller involvement; the corollary of the usual "If you man it they will come" mantra of online ATC. He even proposed using increased controller presence (controller man-hours) at particular locations as a determiner of airline "profitability". He also felt that this increased ATC presence would in turn draw additional airplane traffic further heightening the difficulty of maintaining the airline flight schedule.

One of Joe's proposals was to measure ATPX's success by controller hours. He felt that if the airline's presence coincided with increases in controller man hours and significant aircraft movements then that would constitute a profitable scenario.

He had observed a recent fly-in wherein 13 aircraft departed KCLT for KATL. They all arrived within a 26 minute period and then there was no traffic. This was an average of 1 landing every 2 minutes;

but if those aircraft were scheduled to arrive over the course of an hour the acceptance rate would be 1 every 4.6 minutes – not a significant difference but easily perceived by a controller as increased traffic over a longer period of time- which is what most VATSIM users are consistently seeking. With airports able to handle 20-30 arrivals per hour (depending on spacing) there was obviously room for considerable growth and a single airline with a coordinated flight schedule would be able to help fill this void.

Joe envisioned loosely emulating the route structure of airTran Airways whose flight operations are centered in Atlanta. Initial service would be with 11 airplanes to 8 destinations within 90 minutes flying time using 5 gates at KATL and no more than 2 at each of the arrival airports. Eventually, if the operation was large enough to maintain a KATL arrival rate of 10-12 an hour it could be expanded to include additional destinations and possibly a second hub. The flights would be monitored by a live, real-time dispatcher who would record pertinent flight times and information radioed by the flight crews and provide flight assistance by transmitting arrival weather information, resolving possible gate conflicts, and ultimately; issuing Aircraft Dispatch Orders (ADOs) containing payload, fuel, and route information for each departing flight.

First trial run
A test flight on April 28th attracted 7 pilots and the airTran 'Citrus' callsign was prevalent at KATL. As one plane arrived, its gate was occupied by another aircraft that was requesting clearance to depart. Less than 5 minutes later another Citrus flight was on final for 9R followed moments later by an aircraft landing 8L. The 9R arrival had to hold in the ramp area until a departure cleared his intended gate. As that departure initiated takeoff, another aircraft was pushing back and a few minutes later, the two earlier arrivals were requesting dispatch clearance for their next flights. This frenetic activity was repeated twice more within the 4-5 hour event time as airTran aircraft shuttled back and forth to and from Atlanta.

The VATSIM statistics for that date showed a total of 127 flights at KATL (52 inbounds, 72 departures, and 3 local) for an average of 10.5 flights/hr. ATPX accounted for 16 of those flights in a 4 hour period (4 flights/hr) which was almost half of all the traffic- so clearly, the concept showed promise.

 The goal was to officially commence flight operations on July 1 but there was much work to be done to make that date. The live flights were initially to be a weekly event, however, in order to maintain pilot interest and build name recognition, it was decided that additional flight schedules would be prepared for pilots to fly on their own in between event dates.

Long term, Joe felt that if this idea "took flight" it would undoubtedly spur others to copy the operation model; which would only further enhance the experience.

Assembling the pieces
I was intrigued by the idea and offered to assist. As we continued to discuss the possibilities, Joe offered me a management position with ATPX. A preliminary structure was created with Joe as Chief Executive Officer, myself as Chief Operating Officer and Liam Mallon from the UK as Marketing and Human Resources Officer. It was decided that a key to our success would be the necessity of establishing a core cadre of dedicated pilots who understood the ATPX philosophy and were willing to commit to it. That meant

that we had to be clear about that philosophy and what our goals were at the time pilots signed on. Clearly, one of the centerpieces to ATPX would be a website so that we could effectively deliver that message. Joe began working with a web designer to create a home for the VA. A very basic structure was set up but then contact was lost with the designer and the plans we had for more advanced functions had to be temporarily suspended.

As all of this was occurring, there was an active effort to recruit pilots by posting in various forums and initiating private chats with pilots online who were using the airTran TRS callsign. The advertisements were effective and inquiries from interested pilots began flowing in.
.
Using airTran as the model, the fleet would be limited to the Boeing 717-200 and 737-700. There was no question that the PMDG 737 would be ideal but we were unable to find an acceptable 717 flight model so Joe decided to build his own flight model and panel… a considerable feat.

The experience of the first event night showed the importance of having schedules drawn up in advance and the need to prepare for the possibility of more pilots than expected showing up to fly. The plan was to create flight schedules to five cities from ATL with the expectation that each pilot would fly 3 or 4 legs each night. Flights would be timed to arrive 10- 15 minutes apart at KATL to create banks of arrivals and subsequent departures. It was also clear that the requirements to prepare schedules, continue to develop the website, recruit and instruct pilots, and manage all aspects of flight operations were too much for the three of us to handle effectively. We needed to bring in additional management personnel in order to disperse the workload.

A new management structure was created with the additions of a Chief Pilot position and a Senior Vice President-Operations to handle pilot matters. Eventually, we also added a Director of Crew Scheduling to prepare the flight schedules for both event and non-event flights and a Lead Dispatcher to oversee that aspect of the airline.

Flight operations
The first full event night was held in June with Joe handling the dispatch duties. Pilots were told to report online in KATL at 2100z to receive their flight assignments. Each participating pilot loaded the aircraft with the required amount of fuel, prepared the flight plan and contacted Joe for a dispatch release. After takeoff, pilots called in to report their Out time (gate departure) Off time (takeoff) and fuel on board numbers.

Once an aircraft was approximately 80 miles from the destination an In Range call to dispatch provided the remaining fuel amount. The dispatcher in turn related the latest reported weather from the destination airport as well as the arrival gate number and flight number and route of the next planned leg for the aircraft. After landing and once parked at the gate the pilot again contacted dispatch to report the On time (landing), In time (parked at the gate) and fuel remaining.

All of the information reported was recorded by the dispatcher to be maintained in pilot logbooks. It was decided that unlike many virtual airlines, flight hours would not be a major factor in rank advancement. The ATPX model was instead geared to develop a metric by which to grade the pilot's performance on each flight.

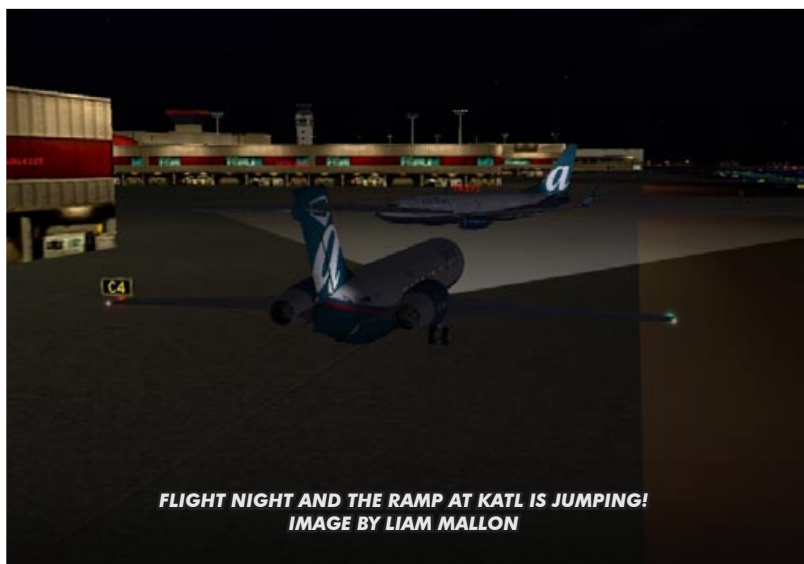737 LANDING WITH ONE ENGINE OUT. IMAGE BY ZEKE WALKER

AS ONE 717 TAXIS IN ANOTHER DEPARTS KMSY. IMAGE BY LIAM MALLON
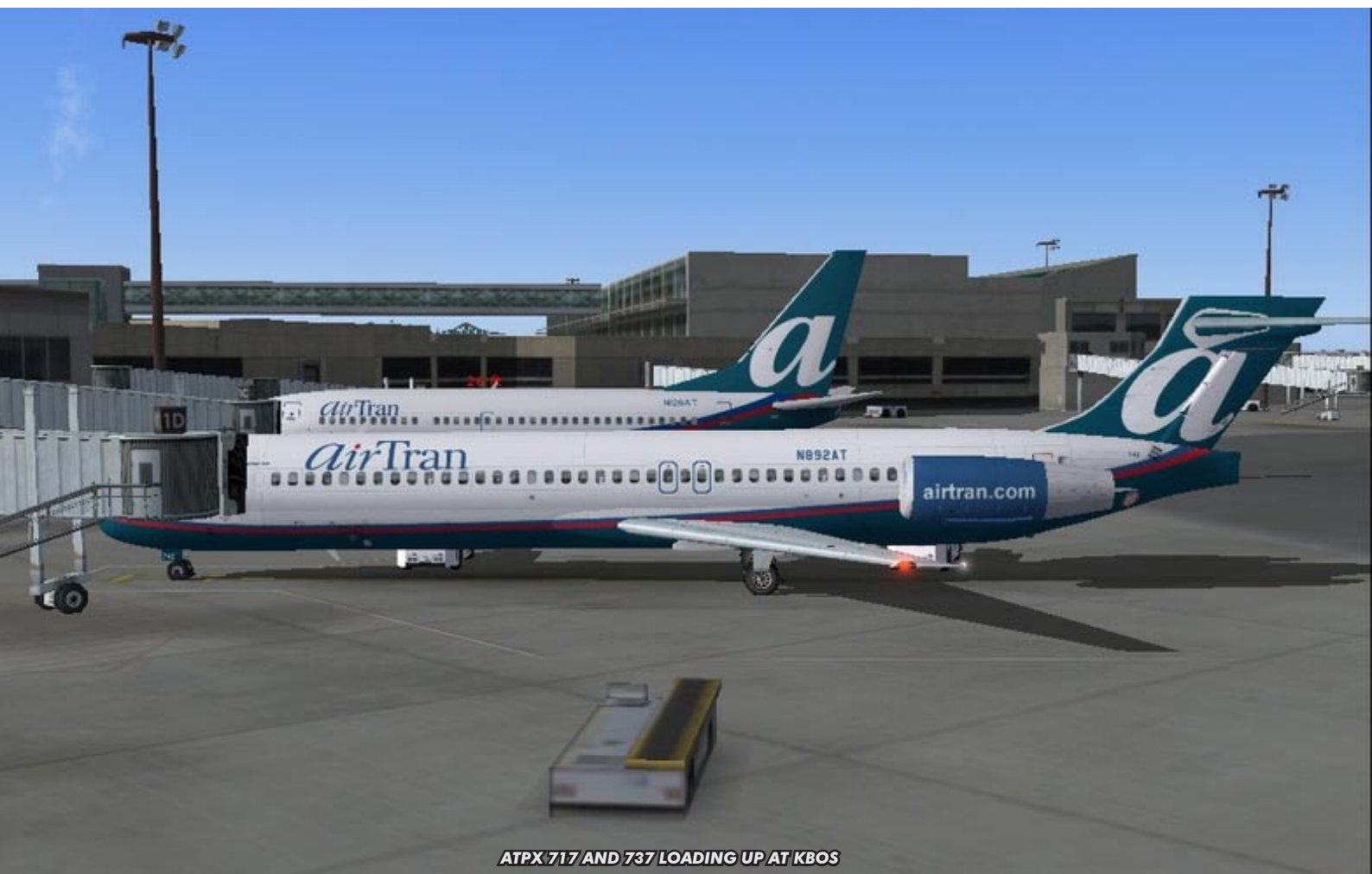
ATPX 717 AND 737 LOADING UP AT KBOS

ATPX 737-700 AT ALTITUDE. IMAGE BY DAVE PAIGE

FLIGHT NIGHT AND THE RAMP AT KATL IS JUMPING!
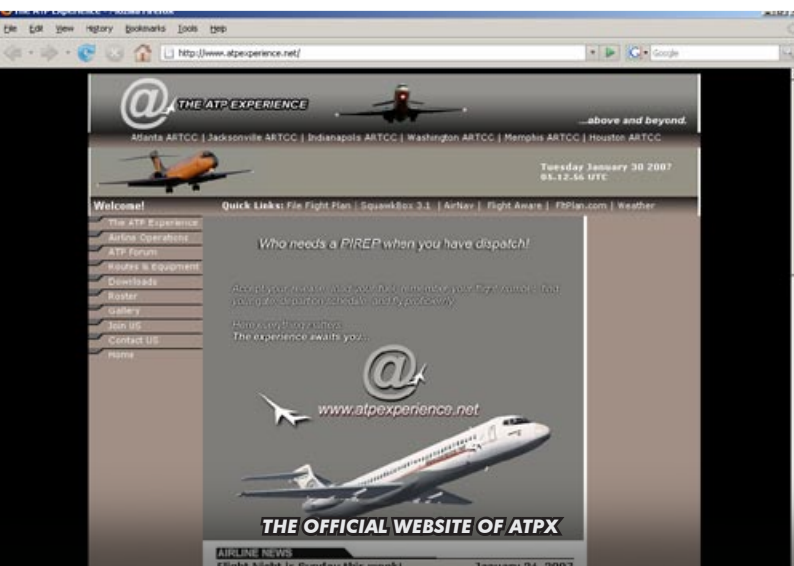IMAGE BY LIAM MALLON

ROC-BWI MID-FLIGHT

THE 'A' LOGO MIGHT AS WELL STAND FOR AHH! IMAGE BY LIAM MALLON

TWO ATPX BIRDS LOADING UP FOR THE NEXT FLIGHT OUT OF KBOS. IMAGE BY LIAM MALLON

THE OFFICIAL WEBSITE OF ATPX

ATPX

The information would be used to establish a basis for determining the average flight duration and fuel use for each city pair as well as on-time performance. Theoretically, each flight would begin with a score of 100. Points would be subtracted based on poor flying technique, failure to adhere to scheduled times, and fuel inefficiency. The perfect flight would result in a perfect score and any variances in the stated categories from the established norm would result in progressively lower scores. These flight scores would be a factor in determining rank advancement along with total number of legs flown.

A lot of work...

An impediment surfaced when Joe received a letter from the legal counsel of airTran Airways claiming copyright infringement by the use of proprietary images and information on the ATP Experience web site. Joe and I crafted a carefully worded reply to the allegations; explaining that we were aviation hobbyists and not actually a competing airline and promising to remove any airTran logos from the site. This was sufficient to satisfy the attorney.

A great boon to the fortunes of ATPX occurred when we were contacted by Peter Grey, an Embry-Riddle University student who expressed a desire to join the effort as a lead dispatcher. Peter set out to organize the dispatch function and was amenable to taking on any task he was asked to perform; training new dispatchers, designing the Air Dispatch Orders (ADO) and on his own initiative he created an operations manual.

The ADO allowed the concept to become much more efficient. Prepared by the dispatcher; it provides the captain with all of the needed information for a flight- aircraft weight to include passenger/cargo load and fuel, route of flight, reported and forecast weather and any additional pertinent information such as minimum permissible fuel level. The captain reviews and approves the ADO, loads the aircraft accordingly (coordinating any changes with the dispatcher beforehand as both must sign off on the ADO) and then requests a flight release prior to pushback. Once released, the captain is required to abide by the ADO unless his emergency authority as pilot-in-command dictates otherwise, and to keep dispatch apprised of any changes.

The ADO and other communications are handled through a Teamspeak server. This allows for multiple dispatchers- one dispensing ADOs and releases; and the other working flight operations. It also provides a Sterile Cockpit channel to which pilots can switch so as to be undisturbed after release and in flight below 10,000'. That way they can concentrate on ATC communications and aircraft operation without being distracted by company chatter.

...pays off

The full impact of ATPX came close to being experienced during the December 30, 2006 flight event. The planned routes to be flown from ATL were to Memphis (MEM), Dayton (DAY), and Indianapolis (IND). The first available flights departed at 2200z to reach ATL during the initial wave of outbound flights. Peter Gray issued a weather briefing summary on the ATPX forum a few hours before the event and it predicted that rain and very low visibility could be expected.

The foul weather gods did not disappoint. All of the initial ATL arrivals were diverted by dispatch to Charlotte, N. Carolina (CLT) as KATL reported visibilities of less than ¼ sm which precluded legal commercial operations. ATL departures were also delayed providing the dispatcher with some free time to work out spots to park airplanes

in addition to the two gates ATPX maintains at KCLT. I was issued my flight release to Memphis approximately 40 minutes late when the weather improved barely enough to permit a takeoff. The aircraft was carrying a full load of passengers and with the dispatch-calculated fuel load would arrive at MEM only 18 pounds under maximum allowable landing weight. I did not want to leave any passengers stranded so I accepted the dispatch order and immediately prepared the aircraft in order to beat a hasty retreat.

As I taxied to runway 8R I could not see more than 2 intersecting taxiways ahead of me and after takeoff was immediately in solid overcast.

One aircraft reported close to the minimum fuel level during his In-Range call and the pilot decided to try to make an ILS approach into Atlanta. He executed a missed approach and was immediately ordered by dispatch to divert to CLT.

With little improvement in the weather, pilots sat while dispatch waited for each new weather report. I made my In-Range call with a fuel weight of 10,800 pounds. This meant I needed to shed 2600 pounds of fuel before landing in order to be legal. I contacted dispatch when I was approximately 30 miles from Memphis and notified him that I would be further delayed by a need to hold in order to burn fuel. I made three circuits and then flew the approach and landing. I parked at the single gate used by ATPX at KMEM and prepared for a quick turnaround for my return flight to KATL in an effort to make up some of the lost time. As I called for my flight release a few minutes later, dispatch asked me to expedite as another aircraft had landed at KMEM and needed the gate. Sure enough, as soon as I pushed back, started engines and commenced taxi, a 717 slid in from my left to occupy the gate.

It has been rewarding to be an integral part of taking Joe Caban's dream and making it into a real virtual airline (oxymoron?) that offers something unusual. I have seen firsthand the complexity and constant attention to detail that is required in order to create a VA and I have the deepest respect for those who give of their time to do so. However, all the effort is well justified such as when recently I was contacted by an ATL_CTR controller who said that he appreciated the additional traffic that ATPX has generated.

ATPX continues to grow and evolve as more pilots and dispatchers take part. There are quite a few goals and projects remaining to be accomplished; and include:

- **increasing the pilot base to allow for multiple event flights each week**
- **addition of an ACARS system to the cockpits to further automate the reception of ADOs and transmitting of flight data**
- **refining the pilot performance metric to grade flying performance and maintain a minimum flight standard**
- **instruction and testing of pilots to permit CAT II or CAT III operations**
- **availability of full operations and aircraft manuals**

While continued expansion and refinement of ATPX is ongoing, Joe maintains his commitment to the original concept of replicating the pressures of flying to a schedule and interacting with other pilots to achieve that goal.

To join the team or learn more information visit **www.atpexperience.net** ✈