## Written Testimony Submitted by Zane Rowe Senior Vice President, Network Strategies; Continental Airlines Before the Senate Commerce Committee Thursday September 27. 2007 "Congestion and Delays: The Impact on Travelers and Possible Solutions"

## OVERVIEW

Good Morning. My name is Zane Rowe and I am the Senior Vice President of Network Strategy for Continental Airlines. I am responsible for planning and scheduling the airline worldwide and needless to say when it comes to scheduling Newark Liberty International Airport, the nation's most delayed airport for most of the last 15 years, my job is quite challenging. Continental is the world's fifth largest airline operating 3,100 daily flights to 144 domestic destinations and 138 international destinations via hubs at New York/Newark, Cleveland, Houston and Guam.

When we received word that this committee wanted to "examine the growing occurrence of congestion and delays in the nation's air transportation system" we knew that Continental needed to be present. Scheduling an airline with a hub in Newark is a challenge. The experience that our employees and passengers endure every day in Newark, not just during the summer of 2007, is one of the reasons that we firmly believe that business as usual – as to air traffic control (ATC) funding and structure – cannot continue.

Today we have an aging air traffic control system incapable of keeping up with the rising demand of air travel in this nation and especially in the New Jersey/New York region. As long as the weather is good and/or FAA's Air Traffic Control decides that it can allow reasonable spacing between aircraft while in the jet-highways or on final approach (e.g. currently 3 miles depending on aircraft type), the system can handle the traffic (in fact, in the last 10 days leading up to Tuesday of this week, Continental's system ran over 90% on-time with Newark's on-time performance reaching as high as 93%). But any change in that baseline formula for enroute (known as miles in trail) or spacing on final approach and the system moves toward gridlock instantly – sunshine or rain.

Contributing to the delays is the fact that the air traffic control system may not always deliver aircraft from the jet-highways in the skies to the runways in the most efficient manner. FAA regulations specify minimum spacing between aircraft. The amount of spacing depends on weather and aircraft size. When there is more spacing between airplanes than is required for the circumstances, efficiency is lost and the impact is immediate. The landing slots that are lost cannot be recovered and delays result. For example, if three miles is required between aircraft, the landing rate would be about 40 aircraft per hour. If the spacing slips to four miles, the landing rate decreases to about 30 aircraft per hour, or a 25% reduction. Increased spacing on final approach reduces the arrival rate at the airport, typically results in FAA implementing some type of traffic management initiative, (either a ground stop or ground delay program), and causes arrival delays to back up across the country. FAA took action earlier this year to address the problem of excess spacing on final approach; however it is not yet clear if the policy changes have accomplished this objective.

Our service at Newark and elsewhere in the Northeast depends on the safe, efficient and consistent delivery of aircraft to the runways. While we continue to work diligently on the delays and cancellations within our control, it is difficult to plan when aircraft are not delivered to the airport runways in a consistent and efficient manner. Certainly some delays and cancellations are Continental's responsibility such as maintenance, crew scheduling, holds for baggage and late arriving customers to mention a few and we continue to try to address these issues every day.

To address the delays that are the result of the aging ATC system we must not look to artificial solutions that acknowledge failure such as slots, caps, or congestion pricing. We must think out of the box like this Committee did when it passed their FAA Reauthorization bill last May. This bill included a \$25 fee for modernization of our ATC system – this is exactly the kind of forward thinking we need if we are to solve the delay problem for our nation's air travelers.

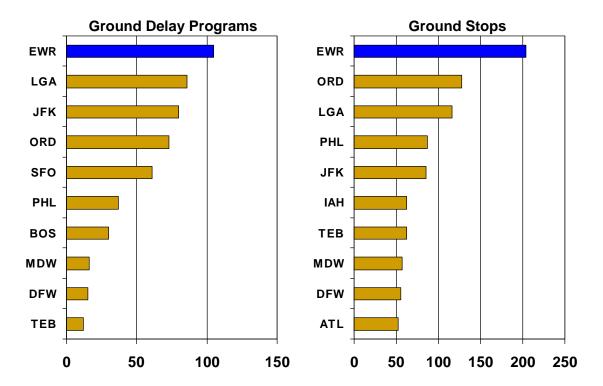
As this Committee has recognized, in the long run -- we have to modernize the ATC system and become satellite based (instead of land based radar). Satellite based systems will significantly increase the capacity of our air traffic system by more accurately pinpointing aircraft and allowing better use of airspace (jet-highways) and less separation (both enroute and on approach to landing).

As this Committee has also recognized, a satellite based system is highly capital intensive and must be funded through a stable financing scheme which allows capital financing and which is funded fairly by the users. Fortunately this Committee not only recognizes the importance of building and financing the NEXGEN ATC system on a cost-based formula, it has offered a positive and creative option for doing so which, if passed, will provide real and effective solutions to our current problems. Both the structure and the funding mechanism are crucial given the significant amounts of funding necessary and the need to drive rational behavior by the users. The current system of forcing some users to pay for the use of the system, pay for the future system and subsidize other users drives irrational behavior by those who are getting subsidized. It is important to make these decisions now -- "Business as Usual" is no longer an option.

GROUND DELAY PROGRAMS, GROUND STOPS, CONGESTION PRICING AND SLOTS – SHOULD THEY BE PART OF THE SHORT TERM SOLUTION?

As the nation's media has well covered these last few months, this summer was a miserable experience for many of our passengers. In the summer of 2007, our passengers learned that if it was sunny in their city of origin and sunny in the city of their destination and even sunny between the two cities, the FAA could still use one of its "tools" and impose a departure delay due to "volume delays". These departure delays, known as "ground delay programs" wreak havoc on airline schedules and performance because when FAA issues a ground delay program for an airport like Newark, all Newark bound airplanes from around the country are given new expected departure times. Sometimes these departure delays are short (15-20 minutes) and sometimes they can be quite lengthy (two hours or more), depending on the nature and duration of the disruption.

A second tool that FAA uses to control the flow of air traffic is ground stops. Ground stops result in the FAA imposing a stop or cessation of additional departures heading towards the affected airport. Unfortunately for Continental and passengers using Liberty International, Newark experienced more ground delay programs and ground stops for the period January to June 2007 than any other U.S. airport (chart below). While helping to manage unplanned service disruptions, these FAA programs do not provide long term fixes to the congestion issue. In the long term, we need to fund a satellite based system so we can move away from utilizing these short term "tools" to "manage" the delays



Top U.S. Airports for FAA Impose Ground Delay Programs and Ground Stops

Some argue that the only way to have a "quick fix" for the broken ATC system in the short run is to "slot" or "cap" certain airports. This decision would be premature, we believe, as the other tools currently at hand have not yet been given an opportunity to be implemented or proven beneficial. Before we limit the provision of aviation to the marketplace and restrict economic growth arbitrarily, we must ensure that all other avenues have been explored – and they have not. These quick fixes must be a last resort. Additionally, in order to be effective, these procedures would have to be applied to all operations in the NJ/NY region, similar and competitive airports like JFK and Newark Liberty, as well as be broad enough to cover not only U.S. commercial operations but other users of the system as well.

The general view of those who propose slots is that commercial airlines are "over-scheduled" and that this "over-scheduling" can be fixed by limiting commercial airline flights at congested airports. Let's look at the issue of "overscheduling" for a minute. In New York, there is LaGuardia which is already slotted by the FAA presumably at a level the government thinks is acceptable. Yet, according to government statistics it continues to be one of the most delayed airports in the country. New Jersey is home to Newark Liberty International Airport, the nation's most delayed airport for much of the last 15 years. In an effort to combat delays at Newark, Continental "de-peaked" its operation (eliminating the normal ebb and flow of hub traffic so that there is a steadier level of arrivals and departures throughout the day) in 1996. Continental has also deliberately kept the total number of airport operations not only below what the FAA has historically handled but also below levels 10 years earlier. In fact, there are fewer total flights at Newark today than there were in 1997 - yet Newark is consistently the most delayed airport in the country. Continental has undertaken these activities despite the fact that there was plenty of passenger demand for increased service. In fact, we undertook these activities simply to minimize Newark delays all the while JFK and other New York City area airports such as White Plains have experienced increases in scheduled flights.

Those who would suggest that the way to "fix" the ATC problems is to limit the number of commercial passengers who can fly to New Jersey/New York City by limiting or slotting the commercial airports, are simply suggesting that we penalize small communities, aviation employees and jeopardize the economics of the region. Slots are not a viable long term solution because they stunt the potential for economic growth of the region surrounding the airport to be slotted. Slots may prevent further flights from being scheduled but they do not promote jobs and they do not encourage anyone – in or out of government – to find a solution to the root case of the delays. Slots are simply an admission of failure by all parties involved that other solutions to delays/congestion do not exist. And, if you look at LaGuardia as an example, slots do not solve the delay problem.

Additionally, imposing slots on the New Jersey/New York City region is inherently more risky for U.S. consumers and cities because it can significantly harm U.S.

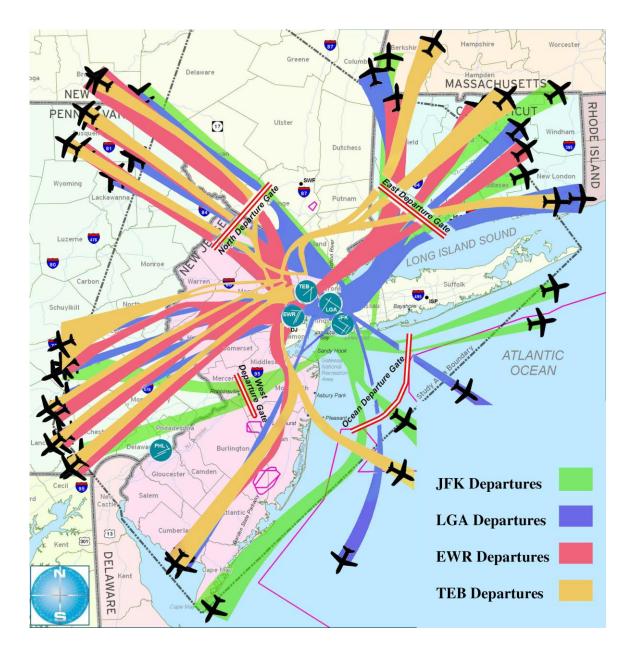
carrier competitiveness vs foreign carriers. Historically the U.S. has exempted foreign carrier operations from being slotted, thus requiring a U.S. carrier to cut its schedule to compensate. This would mean that domestic carriers would be forced to cut back flights to small feeder cities (e.g. rural communities) which is bad news for rural communities that depend upon air service links for their economic livelihood. A cut back in domestic operations could also have negative impacts on an airline's other existing routes as fewer connecting passengers would be moving through the system. This cycle where we cut back small cities, hurting our feed to international destinations, which could result in foreign carriers to cut back domestic flights even further, could conceivably be endless. All the while foreign carriers get free access to U.S. airports when U.S. carriers and consumers lose out.

Those in search of a "quick fix" to congestion and delays have also proposed congestion pricing as a possible "solution". Congestion pricing is an idea that charges a fee per departure or arrival in exchange for access to an airport during a specific congested hour during the day. In theory the congestion fee is set at such a level an airline is financially discouraged to operate a flight, or to change the operating time to a less congested period. The fee would increase during peak times -- the very times passengers demand air travel -- and the fees would be lower during off peak hours. Congestion pricing has been used in other industries effectively but those other industries have used pricing to smooth demand. If you look at the three primary NJ/NY airports, however, you will see that demand cannot be smoothed. Operations are at a steady flow all day. And as I have already mentioned. Continental has already de-peaked its schedule at Newark Liberty. So, what would congestion pricing accomplish? Of course, the answer is that congestion pricing will do nothing more than reduce service to small communities, reduce job growth and raise fares for commercial passengers. One of the major causes of the problem – the growth in private jets would not even be affected as these flights are generally not "scheduled".

Ironically, the increased "revenue" from these so called market-based options would quickly become an incentive NOT to fix congestion!

Slots and congestion pricing are not quick fixes - they are "knee jerk" reactions to larger ATC problems. Even "caps" to limit growth should be used only as a last resort. The New Jersey/New York City area has diverse and complex traffic. On average, the region's TRACON handled just under 4,000 daily departures from a total of 15 airports including commercial passenger and cargo flights, charter airlines, air taxis, general aviation and military flights. ATC controllers handle different aircraft with different speeds and separations. Commercial operations account for only a portion of this total activity and any "fix" of the region must encompass all airports and commercial and private jet users alike.

The below illustration attempts to show how all these operations in the New York City area overlap and tend to create flight delay/congestion challenges.



According to FAA's Airport Capacity Benchmark Report, JFK is nearing its capacity limit. As previously noted, Newark is below the number of operations it has historically handled and LaGuardia is already slotted. It should be clear that we cannot "fix" one airport without addressing the entire New Jersey/New York City region and all types of aircrafts. Any attempt to do so will be unsuccessful because delays are not a New Jersey or New York City problem, they are a regional problem, encompassing the airports of Newark Liberty; New York

LaGuardia (LGA); New York JFK; White Plains, NY; Newburgh, NY; Teterboro, NJ; Morristown, NJ; Farmingdale, NY; Bridgeport, CT; Islip, NY and Caldwell, NJ.

## IF NOT SLOTS AND CONGESTION PRICING – THEN WHAT?

The good news is that some relief is possible even in the short term.

After 10 long years, Airspace Redesign, if not stopped by Congress, will result in some improvement as early as next year. It has been 20 years since the airspace in the New Jersey/New York region was redesigned. In that time major auto highways around the northeast region (and the country!) have all undergone major renovations – in many cases with the addition of new lanes - to accommodate the local growth of businesses and communities. The New Jersey Turnpike, which runs along side Newark Liberty has had several additional lanes added over the last few years. Yet the jet-highways in the skies have remained unchanged despite the significant growth in demand for commercial and corporate jet air service to NJ/NY. Complicating the congestion issue even further, as the use of corporate jets has risen significantly in the last ten years, these not-so-marginal users of the system are holding up full planes of 100 to 300 people or more (737s, 757s or larger 777s) as air traffic controllers are forced to work smaller corporate jets with their one or two or three executives into an airport like Teterboro (TEB).

Continental is taking a number of steps to provide relief to our operation at Newark Liberty by spending millions of dollars on items ranging from advanced flight operations software to hiring additional employees dedicated to Newark flight operations to introducing a brand new aircraft into the Continental fleet which promises to provide additional capacity without additional ATC burden. A quick review of our actions follows:

- Continental will introduce a new, state-of-the-art turbo prop aircraft at Newark, the Q400, which can operate on Newark's shorter, crosswind runway in more weather conditions thus reducing aircraft requirements on Newark's longer runways and relieving pressure on those departure points also used by JFK. The Q400 is also larger than Continental's regional jets which it will be replacing at Newark
- Continental continues to increase flight block times (the amount of time scheduled for a flight including taxi times and flight time) to achieve DOT on-time performance requirements/regulations. For example, a flight from Washington National to Newark is "blocked in" at an average time of 1:20 when the flight itself takes 36 minutes
- Continental has added passenger capacity at Newark by operating larger aircraft while keeping the number of operations relatively steady over the last few years
- Continental pioneered the use of offshore radar routes which enable the airline to fly out over the ocean east of New Jersey, for aircraft going to the west or south, to avoid excessive taxi delays during periods of congestion

and severe weather. Since the airlines have limited access to the military airspace off the East Coast, these routes actually fly considerably offshore to the east of the military airspace, thus ensuring access to the routes when needed

- Continental has invested in SkySolver technology which is used to develop pre-cancellation scenarios. Pre-cancelling flights helps the airport and airline to rebound quicker once the severe weather event has passed
- Continental developed a slot substitution program that allows us to manipulate or prioritize company landing slots when FAA imposes ground delay programs
- Continental has doubled the number of Air Traffic Systems Specialists at our operations center in Houston
- Continental has hired additional management and operational employees at Newark Liberty to focus solely on Newark air traffic control issues
- Continental now keeps pilots and flight attendants on the same schedules to avoid multiple downline connecting crew delays
- Continental has increased our crew scheduling buffer (decreasing productivity and increasing layovers) for late night flights departing Newark to reduce crew rest delays the next morning
- For ten years, Continental has been an active supporter of the NY/NJ/PHL Airspace Redesign project submitting independent comments, attending public meetings, etc.
- Continental is actively supporting DOT's task force formed to address the congestion/delay issue in the Northeast
- Continental is also participating in the Port Authority of NY/NJ's task force to address congestion/delays in NJ/NY
- Continental meets regularly with FAA (at all levels) to address performance issues

Attached please find more details on the many initiatives which could provide some relief to delays in the New Jersey/New York region.

## CONCLUSION

Delays are the pivotal problem of this nation's ATC operation and they will continue to be so in the future unless we make the hard decisions today for the traveler of tomorrow. The idea of fair treatment among all users is key to balancing use and cost of the system and ensuring the vast majority of flying consumers still have a chance of getting to their destination safely and on time. And, for those who maintain they are marginal users and decline to pay their fair share based on the belief that they are marginal, we should allow for access to the ATC system on a stand-by basis.

Clearly we need to explore and move quickly on the many operational tools available to us at each individual airport and in the region as a whole and we must explore our abilities to prioritize the use of the system to benefit the greatest number of users. We simply cannot decide that failure is our only option. And, we simply must not decide that "business as usual" is the path of least resistance politically or otherwise-- because that will simply result in gridlock becoming institutionalized.

Again, my thanks to the Commerce Committee for allowing Continental an opportunity to speak on this important topic today. We appreciate your leadership in these matters and look forward to working with you to create a better, more efficient and stable-funded ATC system for tomorrow.