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ADDENDUM 2 TO THE

OPERATIONS / HUMAN PERFORMANCE

GROUP CHAIRMEN'S FACTUAL REPORT

DCA09MA021

Interviews with Two Continental Airlines Pilots Who Performed a Rejected Takeoff on October 16, 2006

Interview Summary

Interview: **Stephen Sedlock, B-757/767 Captain, Continental Airlines**
Time and Date: **1000 EDT, August 4, 2009**
Location: **Telephone Interview**
Present: **Bramble, Tew, Pizzonia, Carbaugh, Robeson**

During the interview, Capt. Sedlock provided the following information.

He was a B-757/767 captain at the time of the interview, but a B-737 captain in October 2006. He did not hold any management positions at Continental Airlines. His date of hire at Continental Airlines was in March 1998.

When asked to estimate his flight experience as of October 2006, Capt. Sedlock said he had about 250 hours as PIC on the B-737, about 1,800 hours as B-737 SIC, and about 10,000 hours total time. He had been a B-737 SIC from 2002 to 2004, then served as a B-777 SIC for two years, then upgraded to captain on the B-737.

Asked what other transport category airplanes he had flown, he said he had been a first officer (FO) on the B-757 for two years, a first officer on the MD-80 for about a year and a half, and a second officer on the B-727 for about 6 months.

On October 16, 2006 he was involved in a rejected takeoff incident at Houston International Airport (IAH). He described the incident as follows. The day started in Manchester, New Hampshire. They flew a leg to Newark (EWR) and one to IAH, so they had already flown 2 legs that day. They pushed back from the gate at IAH. It was a stormy day. There were thunderstorms rolling in and out of the area. It took 3 hours from pushback to make it to the runway. As they were taxiing out, the sky would get dark, storms would roll in, and ATC would stop traffic. Then it would clear up and flights would resume. Then another storm would roll in. It was a very arduous taxi. Eventually they were cleared into position for takeoff. The weather was VFR and there were no storms in the immediate area. The winds were somewhat gusty. Capt. Sedlock could not recall the exact winds. When they began their takeoff roll, everything seemed perfectly normal. It was the FO's takeoff and she was at controls. Capt. Sedlock recalled that when they reached an airspeed of 85 to 90 kts, before the 100-knot callout, the FO said something like, "Help me, help me." She seemed pretty excited and anxious. He could not see what it was exactly; it seemed pretty quick and spur-of-the-moment. Capt. Sedlock decided to reject the takeoff. He actually performed the rejected takeoff (RTO). The airplane stayed on the centerline and he had no problem. They exited the runway and ran the RTO checklist. Capt. Sedlock asked the FO what had happened. She said it felt like she was losing control of the airplane, like it was drifting to the left and she did not have any more rudder to control it. After they completed the RTO checklist and examined the brake heating chart, they opted to taxi back to the runway and attempt to take off again. They decided it was probably a wind gust associated with the storms. There had been no windshear indication from their forward looking system in the airplane, nor

had there been a windshear alert from the tower or by anyone, so they had decided that the most prudent thing to do was to wait 30 minutes, make sure there was no recurrence of thunderstorms, and then take off. They took off and flew to San Antonio for half an hour and experienced no problems.

Capt. Sedlock was asked if he had ever experienced a similar event, before or since the incident. He stated that the B-737 did not feel quite as controllable as the B-757, as far as the forward movement of the aircraft on the takeoff roll, but on no other occasion had he rejected a takeoff because of controllability issues.

The incident occurred on the third day of a three-day trip. It happened in the middle of the day. Capt. Sedlock had been paired with the same FO for the previous couple of days.

Asked to describe the proficiency of the FO relative to other FOs of similar experience, Capt. Sedlock said the FO was a new hire. He was flying with a lot of new hires at the time. He thought she had come from Continental Express. She was as proficient as most of the FOs from that kind of crop that they had been hiring, those that were new to company from Express or another commuter airline. In no way did he think she was incompetent or lacked professionalism or required additional vigilance on his part.

Asked if there were there any write-ups on the airplane on the day of the incident, before the incident occurred, Capt. Sedlock said he did not recall. When they took off, his concern was whether this was a controllability issue with the aircraft or an external factor and he was sure that he decided it was a wind gust because he felt confident enough to take off after the reject. Asked how he came to that decision, he stated that the aircraft appeared to handle normally during taxi and during the beginning of the takeoff roll. It was also controllable during the RTO. He assumed that if the problem was mechanical that it would have been evident at other points as well.

Capt. Sedlock said the incident occurred on either runway 15 left or runway 15 right. The runway surface was dry. It was a grooved runway with no standing water. The weather was VFR with no precipitation.

Capt. Sedlock said that although he could not remember the winds reported at the time of the incident, he recalled that they were “not a concern.” There was no windshear being reported at the time and they were “nowhere near the crosswind limitations of the aircraft.” He did not recall if gusts were being reported or not. There was nothing that would have caused them to adjust their speeds or get a new Accuload. Asked how he and the first officer obtained wind information before the incident, Capt. Sedlock said they would have gotten it from the ATIS and from the tower’s wind report issued with their takeoff clearance. Asked if there were there any reports of windshear at the airport before the incident, Capt. Sedlock said there were no windshear reports while they were monitoring the tower frequency. Asked whether he saw or heard any other airplanes having difficulty landing or taking off, he said no.

Capt. Sedlock could not recall whether they had used de-rated thrust for takeoff.

Asked to describe the crosswind correction used by the FO during the takeoff roll, Capt. Sedlock said he could not recall the FO doing anything wrong. Asked whether the FO used full rudder he said the FO told him it felt like she had full rudder in.

Asked how the winds they experienced during the takeoff roll compared to the reported winds immediately after the incident, Capt. Sedlock said there was no big change after the incident. When they rejected the takeoff, the airplane that was going to depart right after them asked if they had rejected due to windshear and the tower asked them about it. Capt. Sedlock's report was that it was a strong possibility, but they were not sure. The waiting airplane elected to take off anyway, which he thought was kind of odd. That airplane did not report any windshear when they took off.

Capt. Sedlock made the decision to perform the RTO. Asked what factors prompted his decision, he said it was based on the FO's callout, "Help me, help me." That had come as a surprise. He did not know the basis of her concern and he had to make a decision in a very short time frame. He was concerned about the continuing safety of the takeoff. With the safety of the takeoff in doubt and the airplane being in the low-speed regime, he decided to reject. He communicated the RTO decision by saying, "Reject, reject, I have the aircraft." He executed the RTO by disconnecting the autothrottle, bringing the throttles back, deploying the thrust reversers, slowing to a taxi speed, and exiting the runway. Asked whether he used autobrakes, Capt. Sedlock said he could not recall at what speed they were enabled, and he could not recall if he had used them. They rejected below 100 kts. Had the autobrakes reacted, he would have overridden them at some point while taxiing off the runway. Asked how difficult it was to safely execute the RTO while maintaining the centerline, he said he had no difficulty. Asked whether he felt any gusts during the RTO, he said, no. When he took over the controls, he did not feel anything as it would pertain to controllability of the aircraft.

Asked to describe the highest crosswind component he had experienced during a takeoff in a B-737, Capt. Sedlock said that was a tough question to answer. He had experiences some "pretty strong ones", but he was not sure about the crosswind component – maybe 20-25 knots, but that was speculation. He felt a crosswind component that high was fairly difficult, but certainly not impossible. It required a heightened degree of vigilance.

Asked about Continental Airlines B-737 maximum crosswind guideline for a dry runway, Capt. Sedlock said he could not recall it, as he was not currently flying that airplane. Asked about the meaning of a crosswind "guideline", he said the airplane had a demonstrated ability to safely take off in a crosswind that high. Asked whether this guideline applied to the steady state wind, to gusts, or to both, he said both. If either parameter exceeded the guideline, he would be concerned about it. He personally considered the guideline to be a hard limitation. If the gusts exceeded the demonstrated crosswind, he would wait for the wind to settle and delay the takeoff, especially with thunderstorms around. It was a personal bottom line for him. Asked if he could

describe how the crosswind guideline value differed from the maximum demonstrated crosswind, he said he could not recall.

Asked whether he had noticed any difference among B-737 variants in their handling during crosswind takeoffs, Capt. Sedlock said yes, he thought the B-737-500 handled a little bit less precisely than the -700 or –800 variants. Asked to elaborate on what he meant by less precise, he said the –700, -800, and -900 had a tighter feel. They were more responsive to rudder control inputs on the ground. They had a quicker response to the inputs. That was just a subjective pilot feeling of the airplane.

Capt. Sedlock was asked if he would feel comfortable requesting a different runway at a big airport because of a high crosswind component and he said, “Yes, of course.” Asked whether he would feel as comfortable doing so at Denver International Airport (DEN) as he would at other airports, he said yes. He did not currently fly into DEN much, but he had on the B-737.

Asked how difficult he would expect the takeoff to be if he was assigned runway 34R at DEN in VFR conditions with a dry runway and winds were reported from 270 at 27 knots, he said he would expect it to be somewhat difficult. Asked whether this wind information would prompt him to request a change of runway, he said he would be speculating, but that it would be a consideration. He would take a look at whether there would be other options. Asked whether he would request runway 25 if the direction of the traffic flow was currently north-south, he said that runway 25 would be the safer runway and that if that would result in a delay, so be it. Asked if he would request runway 25 if the winds were reported from 290 at 24 gusting to 32 knots, he said most likely, because Denver was a high altitude airport. He was sure there was a special engine out departure. That would play a little into the decision. If there was another option, he would feel more comfortable taking it. Asked how he would react if the reported wind was from 280 at 24 gusting to 36 knots, he said that would obviously bring it to a decision, or a discussion with the first officer. They would have to check the crosswind component and discuss their options. If there was a runway more in line with the wind, he would consider taking that option. Because Denver was a high altitude airport with terrain around, he recalled that the runways had nonstandard engine-out procedures, such as fly straight ahead and clean up at 800 AGL. He said that would prompt him to take the easy way out and take a runway aligned with the wind. Asked how much crosswind component would be sufficient to prompt him to change from the assigned runway, he said if it approached about 20 knots or so.

Asked if he had ever requested a different runway for takeoff because of a high crosswind, he said he did not recall ever being in a situation like that. He had asked for another runway because of tailwind component, but he could not recall being in a situation where having another runway available would have been better for crosswind. Asked if he had ever felt penalized by ATC for requesting a runway change that bucked the flow of traffic, he said yes. He remembered coming into EWR on the MD-80 on one occasion when ATC had arrivals landing on 22L. Visibility was below approach minimums for runway 22L. They needed 4R. ATC told them that unless they landed on runway 22L they would be delayed. In the end it did not matter, because ATC ended up switching the runways around. He could not say specifically with respect to takeoffs. On one

occasion he needed a longer runway ATC said there would be a significant delay, but the shorter runway was not an option because of performance considerations.

Asked what kind of training Continental Airlines had provided him with respect to crosswind takeoffs, Capt. Sedlock said every year when he went to recurrent training they had a session that dealt with crosswind takeoffs and landings, with winds up to the maximum demonstrated crosswind value. Asked to describe the quality of the training he had received with respect to crosswind takeoffs, he said that on a scale of 1-10, he would give it a 7. Asked what could be done to improve the training, he said they could present more varying types of crosswind takeoffs and landings, perhaps at different airports, or maybe an unexpected exceedance of the maximum demonstrated crosswind component. They could provide more numerous crosswind takeoffs and landings. Asked whether he felt these changes should be made, or whether they were just hypothetically improvements, Capt. Sedlock said that when an airline had an incident like what had happened in Denver, he thought maybe they could have that same kind of situation play out for the pilots in training, perhaps demonstrating what could happen in that situation. It was difficult for him to answer, however, because he was not involved in the training department. He felt that he had been adequately prepared for crosswind takeoffs and landings, but there was always room for improvement.

Asked how much crosswind he typically encountered in the simulator during CQ/MV training, Capt. Sedlock said he remembered having the gust being up to 40 knots, and the component was close that. Asked whether he encountered winds that high in the simulator every year, he said that within the last 3 years he recalled doing very high crosswinds in the 777. It was about 3 years ago in the MV/LOE portion of training. They had done crosswind training in every training event since. Asked about the amount of crosswind he typically faced during recurrent training he said it was close to the demonstrated value. He could not give a specific number.

Asked how the feel of a high crosswind takeoff in the simulator compared to the feel of the real thing, he said it was very similar. Asked whether he could feel wind gusts during the ground portion of the takeoff roll in the simulator, he said that was a tough question to answer. He was only in there once a year. He did not think he could feel them as well as he felt them in the actual aircraft.

Asked how ATC responded to the rejected takeoff, Capt. Sedlock said they responded by asking if he required assistance. He declined. Their next question was about his intentions. He said he speculated that they asked about the reason for the RTO. The reason was because the airplane behind him had asked about it. Capt. Sedlock said wind shear, wind gusts, he did not remember exactly. He said windshear was a possibility. But in taxiing back, he and the FO decided it was most likely a wind gust or side load. Asked if he could remember seeing the airplane move toward the side of the runway, he said no. There was nothing more significant than a normal takeoff roll. Asked whether the FO told him the airplane had veered toward or away from the wind, Capt. Sedlock said that in his recollection the wind was off the right side of the airplane, causing the aircraft to move to the left side of the runway.

Asked how Continental Airlines responded to his report of the incident, Capt. Sedlock said the company did not respond in any formal way. He spoke to Geoff Bender, the EWR assistant chief pilot for the 737, the next day and asked him if he had read the report Capt. Sedlock had written. He said yes, he had familiarized himself with it, and it appeared to be in order. That was extent of any company communication. Asked whether he had felt any negative pressure from the company for rejecting the takeoff, he said, "No, not at all." Asked whether he felt the company had adequately addressed his safety report, he said he could not answer that. He never got any feedback, but the fact that he was discussing it during this interview suggested that it was fairly adequate.

Capt. Sedlock was not acquainted with the flight crew involved in the December 2008 accident at DEN.

He did not have any previous accidents, incident or violations.

Asked whether any other flight crews decided to delay their takeoff or perform a rejected takeoff immediately after the incident at IAH, Capt. Sedlock said he did not know.

Asked to confirm that he did not feel a wind gust during the incident, Capt. Sedlock said he did not feel a gust, but that did not mean there was not one. He was not sure what the winds were, but it was not hard to come to the conclusion that there had been a side load on the aircraft.

Asked whether Continental Airlines had taught him a specific technique for making a crosswind takeoff, he said it was hard to see whether it was a procedure or a technique, but it was addressed in Normal Procedures, Chapter 4, which instructed pilots to apply pressure on the nose wheel, add aileron into the upwind portion, and for gusts with suspected windshear add speed to Vr. Asked whether he thought these techniques were taught pretty well, he said he thought so. Asked to clarify the direction of aileron correction, he said one should turn the control wheel into the wind. Left crosswind required a left aileron correction.

Asked whether he recalled if the FO had put any inputs into the controls, he said yes, she had performed the proper inputs to the controls, the proper crosswind control inputs.

Mr. Sedlock was asked if he could recall whether he or the first officer were tired at the time of the incident. He said he could say it was a longer taxi than normal and it was warm. There was a lot going on with the weather. He did not recall how long they had been on duty. He did not recall the FO saying she was tired. They had not discussed that during their pre-brief as a threat to the operation. Both felt pretty good.

Asked whether he felt during the incident as if the FO did not have control of the airplane, he said he just remembered her words as an urgent call, "Help me, help me," nothing specific. Asked to describe what the airplane was doing at the time, he said it was on the centerline; perhaps there was a slight drift. The cause was not because of a perceived lack of control. He was following up lightly and ready to jump on, but he did not feel the pressures like she did.

Asked whether he had his hands on the controls, he said no. Asked whether, when he took over, the airplane felt like it was out of control, he said that when he took over, he that he had full control as he brought it to a stop. Asked whether he felt the safer thing to do was perform a RTO, he said yes.

Mr. Sedlock was asked whether it was normal for him to follow the rudder pedals and yoke with his hands and feet when the FO was doing the takeoff, he said his technique was to put his feet lightly on the pedals so that in the event of an RTO or an unusual action, his feet would be right there in case he needed them. He did not normally have his hands on the yoke. Asked whether he could tell by his feet if the FO was making a full rudder correction, he said he could not tell if it was at the stop, but he could tell that she had rudder in.

Asked to describe the effectiveness of using the tiller to keep the airplane on the runway during a takeoff, he said he would say it was ineffective. That had been taught during training.

Asked whether there was anything else he had not specifically been asked about that he felt might be relevant to the investigation of the accident involving Continental Airlines flight 1404, he said no.

This concluded the interview.

Interview Summary

Interview:	**Jean Brouillette Lauro, B-737 First Officer, Continental Airlines**
Time and Date:	**1110 EDT, August 4, 2009**
Location:	**Telephone Interview**
Present:	**Bramble, Tew, Pizzonia, Carbaugh, Robeson**

During the interview, Ms. Lauro provided the following information.

Her date of hire was in October 2005. In October 2006, she was a B-737 first officer. She estimated that in October 2006 her total flight experience was 6,000 hours and her B-737 flight experience was 600 to 700 hours, all of it SIC time. The only other transport category airplane she had flown was the Saab 340, on which she had served as a first officer and captain.

Ms. Lauro was involved in a rejected takeoff at Houston International Airport (IAH) on October 16, 2006. When asked to describe the incident, she stated that it had been three years, but she would recount it as best she could. She and the captain were taking off at IAH on runway 15R. Thunderstorms were either approaching the airport or had just passed. The winds were changing and they were pretty strong. They taxied into position. It was her takeoff. They stopped the airplane and the captain transferred the flight controls to her. She powered up the engines to 40 percent, then 70 percent before they set takeoff power. They planned to make a normal takeoff. She did not remember the wind direction at the time, but she put the aileron into the wind and corrected with opposite rudder. As they were approaching 100 knots, she found that she could

not maintain the centerline. She told the captain because he had his hands on the throttles and he brought the throttles to idle and rejected the takeoff. At that point, they told the tower they had rejected the takeoff and they taxied off the runway without incident. Because they were not traveling at high speed, they ran the appropriate checklist and decided that everything was fine with the airplane. Then, they got back in line for takeoff. There was quite a line of airplanes. Ms. Lauro said she imagined that the captain had called maintenance to talk with them about the incident. After that, they departed without incident.

Asked if there was anything else she could say about the event on runway, Ms. Lauro said she believed the plane had veered left of the runway centerline, but she could not remember the direction of the winds. She recalled that they had not received any windshear alerts or anything like that. Asked whether she had experienced a similar event either before or since the incident, she said no. Asked what it felt like as the airplane veered to the left, she said she was making right rudder inputs and it was not compensating at all. She felt she had no control of the centerline. Asked how much rudder she was using at the time, she said she did not know for certain, but had seemed like a lot. She was using a lot of right rudder to correct back and it was not having the effect that she wanted. She did not recall feeling any wind gusts or buffeting of the airframe. She did not recall feeling any change in the traction of the tires on the runway surface. She was pretty sure it was a dry runway. Asked how far the nose wheel deviated from the runway centerline during the incident, she said probably 10 feet or so before she realized she could not get it back. She was not sure how far it deviated before the captain took control. She thought it was pretty substantial.

Ms. Lauro was asked at what stage of the trip the incident occurred and she said that she did not know. She thought it was probably a multi-day trip, and it was probably the second or third day of the trip. Asked how familiar she was with the captain, she said it was their first trip together. They had not flown together since. Asked whether there were any write-ups on the airplane on the day of the incident, before the incident occurred, she said no.

The incident occurred mid-afternoon. The runway surface was dry. Asked to describe the weather, Ms. Lauro said the winds were gusty, but other than that there were no thunderstorms in the immediate area. She could not remember if the line of storms had just passed over or if it was coming. She could not recall the winds that were being reported at the time of the incident. Asked how they had received wind information before the incident, Ms. Lauro said they had received an updated ATIS and the tower was also giving wind readouts as airplanes were taking the runway. Asked if she could recall anything unusual about wind information that was being provided, she said, no. It was a “pretty hefty crosswind”, but nothing that would have prevented them from taking off.

Asked if there were any reports of windshear at the airport before the incident, Ms. Lauro said she did not remember. Asked if she saw or heard any other airplanes having difficulty landing or taking off at the time she said no, but they were on the 15 runways, so the airplanes she could see were only taking off. She did not know about the landing traffic.

Ms. Lauro was asked to describe what crosswind corrections she made during the takeoff roll. She stated that she had the aileron into the wind and she was trying to maintain the runway centerline with the rudder pedals. Asked if she pre-set the aileron at the beginning of the takeoff roll or added it as the airplane began to accelerate, she said that she did it at the beginning of the takeoff roll and began to roll it out as she accelerated and the rudder became more effective. Asked whether she used full rudder, Ms. Lauro said she did not believe so. Asked whether the winds she encounter during the takeoff roll seemed different than the reported winds, Ms. Lauro said she did not think so.

The captain made the decision to reject the takeoff after she said she could not maintain the centerline. Asked what factors prompted weighed most heavily in the captain's RTO decision, she said he probably made the decision because of the tone of her voice and because he could see that they were not on the centerline and that she was unable to correct back. Asked to describe the runway width, she said that without looking it up, she thought the width was 150 feet. Asked whether the nose wheel's maximum deviation from the runway centerline was less than half the distance from the centerline to the runway edge she said yes, but with her inexperience she felt she would rather give it up sooner rather than later if she could not control it.

Asked how the captain communicated the RTO decision to her, she said she thought he said "I have the aircraft" and pulled the throttles back. She could not recall if he said they were aborting, but they both knew what was going on. After the captain pulled throttles back, he corrected back toward the runway centerline. She thought he might have let the airplane decelerate on its own because the runway was pretty long. She did not remember anything jarring about the reject.

Asked whether it seemed difficult for the captain to perform the rejected takeoff, she said no, that they had briefed it beforehand. Asked whether the captain seemed to have any difficulty controlling the airplane, she said it did not seem like he experienced any difficulty as the airplane decelerated.

Asked to confirm that she had not experienced any similar event before or since the incident, Ms. Lauro said that was true. Asked whether she had experienced any similar deviations from the centerline during takeoff, either before or since the incident, that did not result in a rejected takeoff, she said no.

Ms. Lauro stated that the highest crosswind component she had experienced in a B-737 was probably in the "mid-20s". Asked to characterize the difficulty of a takeoff with a 20 knot crosswind component she said it was "challenging but not impossible."

She stated that the maximum dry crosswind guideline for the B-737 at Continental Airlines was 35 knots. Asked to elaborate on the meaning of the company guideline, she said she did not get the feeling that it was a hard limit, but personally she would not want to go above that. Asked whether the guideline applied to steady state wind or gusts, she said she thought it would apply to both. It would depend on how much the gust was. Asked how the guideline number compared to the maximum demonstrated crosswind, she said she did not know. Asked whether she had

noticed any difference in how the B-737-500 compared to the NG models with respect to their handling during crosswind takeoffs, she said that she had not flown a -500 in a while, but it seemed to her that the B-737-500 was a little more “squirrelly” on the ground. She thought they were a little more difficult to control than the NGs, which were a little bit more “solid” in the wind. Asked whether it would be fair to characterize the NG models as more “directionally stable” she said yes.

Asked whether she would feel comfortable requesting a different runway for takeoff if the runway assigned to her by air traffic control (ATC) had a high crosswind component, she said she would talk to the captain about it first, but she would have no problem asking ATC for a different runway. Asked whether she had flown into DEN before she said she had not flown into DEN recently, but she had in the past. Asked if she would feel as comfortable requesting a different runway at DEN as she would at other large airports, she said yes, it would be no problem.

Ms. Lauro was asked to imagine that she was assigned runway 34R for takeoff at DEN in VFR weather conditions with a dry runway surface and reported winds from 270 at 27 knots. She was asked how difficult she would expect such a takeoff to be. She said she would expect it to be “Fairly challenging.” Asked whether the reported winds would be sufficient to prompt her to request a change of runway, she said “Maybe not at 27 knots, but if there were gusts involved, definitely.” Asked what she would do if the reported winds were 290 at 24 gusting to 32 knots, she said she would ask if they could use an east-west runway, after discussing it with the captain first. Asked what she would do with reported winds from 280 at 24 gusting to 36 knots, she said it would be an easier decision with the gust. Ms. Lauro was asked how much crosswind component would be just enough to prompt her to request a runway change. She stated that it would be enough once you got up into the 30-knot range with a gust.

Asked if she had ever requested a different runway for takeoff because she felt the crosswind was too high, she said yes, she had done that during an arrival at Newark. The winds were coming out of the west and they were in the high 30s. They were assigned runway 22 and they asked for a change to runway 29. They incurred a little bit of a delay, but ATC had no problem giving it to them. She was flying a B-737 at the time of this particular event.

Asked what kind of training has CAL had provided with respect to crosswind takeoffs, Ms. Lauro said they did them every year in the simulator, both crosswind takeoffs and landings. The maneuvers were accomplished as part of a training profile. They were given a brief in the simulator and then they practiced it in the simulator. She did not recall anything else. They had also received a couple of training bulletins since the Denver accident about tiller usage. The training was pretty standard, in a sense. Asked whether they received crosswind training in both LOE and CQ/MV training, Ms. Lauro said yes. Asked to describe the quality of Continental Airlines training with respect to crosswind takeoffs, she said she thought it was “good”. Asked whether she felt that the training was as good before the December 2008 accident at DEN, she said it was probably the same at the training center because people did not have much information about the accident. Crosswind takeoffs received about the same level of coverage.

She last attended recurrent training a month before the interview. Ms. Lauro said that during CQ/MV training in the simulator, pilots were presented with a crosswind of 17 to 20 knots. Asked to characterize the difficulty of taking off in that wind, she said, "It's not too difficult, it's manageable." Asked what crosswind was presented in LOE, she said about 15 knots. She could not recall receiving any special emphasis training on crosswinds.

Asked how the feel of a high crosswind takeoff in the simulator compared to the real thing, Ms. Lauro said she felt it was harder in the simulator. She thought the rudders in the simulator were a little more "touchy," that the response was quicker than in the actual airplane. Asked to compare the feel of the wind, she said that in the simulator you could not feel the wind shaking the plane like you could in the actual airplane. You just had to know it was there and you knew, based on performance, whether inputs were required as the airplane accelerated. Asked whether she could feel wind gusts in the simulator as it accelerated in the takeoff roll, she said yes. Asked whether this sensation was realistic, she said yes, she would say so.

Asked how ATC responded to the October 2006 rejected takeoff incident at IAH, she said they wanted to know the reason for the rejected takeoff and whether they needed to taxi back to the gate.

Asked how Continental Airlines responded to the incident, she said she did not know. She did not receive any contacts until this interview.

Ms. Lauro was not personally acquainted with the crew involved in the December 2008 accident at DEN.

Asked whether she had ever had any accidents, incidents, or violations herself, she said no.

Ms. Lauro said that after the rejected takeoff, she discussed what had happened with the captain, but she did not remember exactly what was said. Asked whether she had the impression that he had sensed the airplane was difficult to control or whether he was just going on what she had told him, she said she thought he was just going by what she had said. It had just happened so fast. They just chalked it up to a freak wind. He talked to maintenance and decided there was nothing wrong with the airplane.

Asked whether she had pushed the rudder all the way to the stops during the incident, she said no. Asked what made her feel she could not maintain centerline, she said she kept putting more and more rudder in and it was having no effect. She was pretty new in the airplane and her discomfort level was higher and she thought it was better to stop it earlier rather than later. Asked what exactly she said to the captain when she realized she was having difficulty controlling the airplane, she said she told him, "I can't maintain the centerline." Asked whether she felt that now that she had more experience that a similar situation would turn out differently, she said she did not know. She felt at the time that the rudder she was putting in was not doing anything. She would probably react the same if it happened again.

Asked whether she could recall if she had gotten a good night's sleep the night before the incident and whether she thought fatigue was a factor, she said that she thought knowing her seniority level at the time that it was probably a long day, but she was not ridiculously fatigued. She did not remember being tired.

After they rejected the takeoff and taxied back to the approach end of the runway for departure, Ms. Lauro made the next takeoff. She did not experience any problems during the takeoff. It was standard.

Asked her crosswind takeoff control technique had been imparted to her through training or company manuals, she said she had known since she began flying the B-737 that she could not have more than 6 degrees of wheel in or the spoilers would come up, so initially she tended to put in less aileron than later as she got more experience. She would use more or less as needed during the takeoff roll. Asked whether her technique with respect to the use of wheel was something she had learned in training, she said it was something she got on the line. Asked whether Continental Airlines had a crosswind correction technique that she was trained to use, she said just what she read in the manual. Asked whether she had received any training specifically on this in the simulator, she said she was sure she had, but she did not remember specifically. Asked whether she had received instruction on this in initial training she said she could not recall specifically, but that every time she went in for recurrent training they did crosswind takeoffs and landings. Asked whether she remembered being taught or had just read it in the manuals, she said initially she was cranking in a lot of control wheel during the takeoff and another pilot said to put in only a little bit, only as much as she needed.

Asked who she worked for before Continental Airlines, Ms. Lauro said Mesaba. Asked whether they had crosswind training, she said yes. Asked what technique was taught there she said aileron into the wind, correct with rudder, and take the aileron out as you accelerate.

Asked whether there was anything else she could tell the interviewers that she had not already been specifically asked about that she felt might be relevant to the investigation of the accident involving Continental Airlines flight 1404, she said no.

This concluded the interview.