NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety Washington, D.C. 20594

Attachment 1 – Interview Summaries

OPERATIONS/HUMAN PERFORMANCE SUPPORT TO THE U.S. ACCREDITED REPRESENTATIVE

DCA10RA092

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A. ACCIDENT

Operator:	United Parcel Service (UPS) Flight 6
Location:	Dubai, United Arab Emerates
Date:	September 3, 2010
Airplane:	Boeing 747-400

B. SUMMARY

At about 8:00 pm local time (1600 UTC), United Parcel Service (UPS) Flight 6, a Boeing 747-400F (N571UP), crashed on approach to Dubai International Airport (DXB), Dubai, United Arab Emirates (UAE). The flight had departed from Dubai approximately 45-minutes earlier enroute to Cologne, Germany, but the flight crew declared an emergency and requested an immediate return to DXB. The airplane reportedly impacted inside an Emirati air base near a busy highway intersection, approximately 9 miles from Dubai's international airport. The two flight crew members were fatally injured, and it is unknown at this time whether any ground fatalities resulted. The airplane was being operated as a scheduled cargo flight from Dubai, UAE to Cologne, Germany.

C. OPERATIONS/HUMAN PERFORMANCE TECHNICAL ADVISORS

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Mister Eric West Air Safety Investigator Federal Aviation Administration (FAA) 800 Independence Ave. S.W. Washington, DC 20591

Captain Phillip Spiker Assistant Chief Pilot, B747-400 United Parcel Service 825 Lotus Avenue Louisville, Kentucky 40213-3101 Dr. Katherine Wilson Human Performance Investigator National Transportation Safety Board 490 L'Enfant Plaza East S.W. Washington, DC 20594

Captain Thomas Lange Senior Safety Pilot The Boeing Company P.O. Box 3707 MC 14-HA Seattle, Washington 98124-2207

Captain Martin Hinshaw Captain, 747-400 Independent Pilots Association 6200 Lockheed Anchorage, Alaska 99502

D. DXB INTERVIEW SUMMARIES

1.0 Interview: Richard Phillips, Air Traffic Control Officer, Bahrain

Date: September 7, 2010 Location: Telephone call Time: 1415 GST Present in Abu Dhabi were: David Lawrence, Katherine Wilson - NTSB, Eric West - FAA, Martin Hinshaw - IPA, Phillip Spiker - UPS, Thomas Lange – Boeing Present in Bahrain were: Venish Dulabh and Greg de Zoysa Represented by: NA He had been a controller in Bahrain since October 2008 and had been a controller in the US since 1982. On the day of the accident, he worked the afternoon shift from 1430 until 2230.

He said it was shortly after 1800 local time when he began talking to UPS 6. He was working traffic at that time; there was nothing unusual and it was standard. The Central Sector was busier than he was.

UPS checked on and there was nothing unusual. He issued UPS 6 his routing which was standard. Not long after, UPS 6 reported a fire warning on the flight deck. He said the initial call from UPS made him more concerned than the written transcript would show and he called in as many resources as he could into the room. He needed resources into the control room. The pilot's words and voice made him think that he needed resources and this was based on his 25 years of experience as a controller. He called for his supervisor first and for others to come back from their breaks. He issued UPS 6 the closest airport, Doha which was 90-100 miles away, and the pilot asked to return to Dubai. Because that is what the pilot asked for, he cleared him to Dubai and gave him a descent and an altitude and heading. He cleared UPS 6 for a right turn because he had less traffic that way and it was the arrival side in to Dubai.

He called Abu Dhabi to advise them of what was happening and to get initial input there and what they were going to need; he did the initial coordination. He asked his supervisor to set up a full time line to Abu Dhabi so he could coordinate support; he could not afford to get on and off the line.

He said there was nothing unusual about the turn. It was more than a standard rate turn but it was standard for an emergency; it was what he expected. Initially there was no significant descent rate. About 2 minutes later, then it accelerated to a pretty significant rate of descent. The pilot said he was on fire and it sounded like the pilots were trying to put their masks on; the pilot sounded like he was transmitting while trying to get his mask on or had just gotten it on and the pilot was gasping for breath. It sounded like a hooded or masked transmission. He had heard pilots talk with their masks on before so he was familiar with the sound.

The pilot said he was full of smoke, fire. At some point, the pilot asked for a lower altitude and Mr. Phillips tried to ask if they could control altitude but he did not get a response. He gave UPS 6 a discretion descent and they gave the response that they were descending to 10'000 feet.

Mr. Phillips said the initial call was a fire indication and said it sounded like an instrumentation issue. The second transmission was about the fire, and the third transmission was about the thickness of smoke.

About 42 minutes elapsed from the time UPS 6 checked on until he was told they lost radar contact. He was either talking with them or talking to them through other aircraft. A Sky Dubai pilot checked on to the frequency. It sound like the pilot assumed that Mr. Phillips could not hear UPS 6 or that we were losing 'comms'. UPS was at about 16000 feet. UPS 6 was in and out of range so the Sky Dubai pilot stepped up to the plate and acted as a relay. Mr. Phillips used that resource immediately. He thought there was one more transmission from UPS 6 where they said

they could hear him. UPS 6 was trying to check his altitude. Mr. Phillips realized that the UPS 6 crew could not see his altitude or see his frequencies. He tried to transfer UPS 6 to Abu Dhabi as it was their airspace. This lasted for a few minutes. It was maybe 8-10 minutes into the incident. Mr. Phillips heard UPS 6 crew say they could hear us but could not see. Sky Dubai started stepping in. After that, Mr. Phillips said the transmissions started getting thin.

There was never a time where things just stopped. Mr. Phillips stayed with it until the end. He was relieved of duty about 2242. He was the only one relaying information to Sky Dubai.

Sky Dubai was flying westbound and he knew that they would be out of range soon. He tried unsuccessfully to enlist another Sky Dubai flight to assist. He said UPS 6 was making transmissions that he could not hear and he did not want to block him out. He asked other controllers to hold their aircraft that were coming through on their frequency. Dubai One was in his airspace but on another frequency. He made an assumption that Dubai One would be a top notch pilot and he asked the Central controller to switch that airplane to my frequency to assist in relaying what he said when he said it to UPS 6. The Dubai One pilot acknowledged that and did that.

Asked how he knew that UPS 6 was trying to make transmissions, he said the last few transmissions were "getting clipped pretty bad". The quality of his reception had gone down significantly and from his experience he knew where he could talk to a pilot on his frequency. He said UPS 6 was at that point where he was going to be out of range.

Weather was not displayed on his screen. There was not significant weather to his knowledge. He had not received any weather reports all day. Traffic load at the time was moderate. He was not sure how many controllers were on duty. There were four sectors and approach open in Bahrain at that time, which he said was standard for that time of day. There was also a supervisor on duty.

He believed UPS 6 was in the initial right hand turn when they were trying to get their oxygen masks on. He said it was 4-5 minutes in to the event. Mr. Phillips was turning other aircraft out of his way. He said it was pretty quick; within 5 minutes of his initial transmission. He did not think there was a way to display an airplane as being an emergency on his screen unless the pilot squawks an emergency.

Asked what he thought could have improved the situation he was faced with, Mr. Phillips said he did not understand why someone at the "other end" did not step in and say "we have a radio we can dial up in here and we have first hand data". He could only deal with the circumstances he was faced with. He wanted them to call UPS on a handheld radio or something if it was available. He had to keep dealing with what he had available until someone picked up the ball. He would have wanted a radar feed to keep UPS 6 on his screen. They cannot see some aircraft coming in to their area. If he knew what the other controllers were up against, he could be a lot more help. This capability was available when he worked in the States.

He tried to switch the crew to 121.5. He did not try to contact them on that frequency but thought Dubai was. During the event, he kept doing what he knew that he could do. If someone had another idea, he assumed they would step up to the plate.

2.0 Interview: Corne Venter, Air Traffic Control Officer, Bahrain

Date: September 7, 2010 Location: Telephone call Time: 1445 GST Present in Abu Dhabi were: David Lawrence, Katherine Wilson - NTSB, Eric West - FAA, Martin Hinshaw - IPA, Phillip Spiker - UPS, Thomas Lange – Boeing Present in Bahrain were: Venish Dulabh and Greg de Zoysa Represented by: NA

- Had been an Air Traffic Controller since 1996
- Had been at the ANC facility since February 2010
- Originally from South Africa
- On duty the day of the accident was working the Central High Sector but was on break
- He stated that his workload was heavy the day of the accident
- He assisted the primary controller during the UPS 6 incident by working the land line between his facility and Bahrain Center
- He relayed information to the primary controller and was not on frequency
- He was involved with this incident for approximately 30 minutes
- He stated that frequency 121.5 was not used while he was present

3.0 Interview: Ahmed Bucheery, Air Traffic Control Officer, Bahrain

Date: September 7, 2010 Location: Telephone call Time: 1500 GST Present in Abu Dhabi were: David Lawrence, Katherine Wilson - NTSB, Eric West - FAA, Martin Hinshaw - IPA, Phillip Spiker - UPS, Thomas Lange – Boeing Present in Bahrain were: Venish Dulabh and Greg de Zoysa Represented by: NA

- Had been a controller since 1986.
- Had been at the ANC since 2005.
- Assisted with recording information, controlling and clearing aircraft from the sector. He also kept the log only and did not listen or communicate with UPS 6 during this incident.

4.0 Interview: Paddy Hirst, Dubai One Captain

Date: September 8, 2010 Location: Telephone call Time: 1415 GST Present in Abu Dhabi were: David Lawrence, Katherine Wilson - NTSB Represented by: NA Capt. Hirst was flying to Dubai. The flight was level at FL390 and they switched to the Bahrain frequency. Commotion was heard on the radio. They were issued a descent clearance and Bahrain control asked the crew to relay information to UPS 6. It happened suddenly and there was no time to ask about the nature of the event. It sounded urgent.

The Dubai One crew made 2-way contact with UPS 6. UPS 6 needed position reports; they were flying blind. It was a futile effort because UPS 6 was in a desperate situation. UPS 6 asked them to tell them their position, to turn left or right and how many degrees. Capt. Hirst told Bahrain this.

Bahrain said UPS 6 was at 7000', to descend, that they were 10 miles from Dubai, and they were cleared to land on runway 12L. Capt. Hirst relayed this to UPS 6. Capt. Hirst realized that UPS 6 was too high and too fast.

After overflying the airfield, Bahrain suggested UPS 6 land at Sarjah, but UPS 6 was so close; he was too fast, too high, too close.

Bahrain gave Capt. Hirst a readout – UPS 6 was at 1500', 1000', and climb immediately. There was no response from UPS 6.

When communicating with UPS 6, Capt. Hirst said it sounded like the pilot had his oxygen mask on. He only spoke to one of the UPS 6 pilots and thought it was probably the first officer.

Capt. Hirst did not recall Bahrain relaying a suggested altitude to UPS 6, but rather headings and the ILS frequency. He said it sounded desperate. It was no good giving UPS 6 that information. UPS 6 wanted to know to turn left or right and how many degrees, and their position related to Dubai.

Pilots were stepping on each other on the frequency. There was a 3^{rd} person on the frequency. 4-5 times a transmission was blocked because they were 'standing on each other'. It made it difficult.

The last clearance given to UPS was an altimeter readout and that they were getting too low.

Dubai One was monitoring 121.5, however, before their descent, Capt. Hirst went to the washroom and called his company requiring him to turn from 121.5, but then he went back. It was about that time that Bahrain gave them their descent clearance. Capt. Hirst did not hear anything on 121.5. He said the captain of Dubai One started the communications with UPS 6 but then gave it to me. The captain said he had 'box 1' and was flying the airplane, and Capt. Hirst had 'box2'. Capt. Hirst talked with UPS 6 for about 6 minutes and then radar contact was lost. He did not hear an ELT on 121.5 after radar contact was lost.

The last transmission from UPS 6 was asking "what should I do?" The pilot of UPS 6 was very distressed. Capt. Hirst did not get a response from UPS 6 about landing at Sarjah. UPS 6 only

asked for position, speed, and how many degrees to turn, and never read back any information that was relayed to them.

E. ANCHORAGE (ANC) INTERVIEWS

5.0 Interview: Donald Hoback, Captain – United Parcel Service

Location: UPS Training Center, Anchorage, AK

Time/Date: 1200 ADT, 13 September 2010

Present were: David Lawrence, Katherine Wilson – National Transportation Safety Board (NTSB); Doug Allington – Boeing; Steven Foss – Federal Aviation Administration (FAA); Edward Horne - United Parcel Service (UPS); Martin Hinshaw – Independent Pilot Association (IPA)

In the interview, Captain Hoback stated the following:

He was 45 years old. He was hired by UPS on November 29, 2005, as a flight qualified supervisor. His duties were to supervise line crewmembers training curriculum, systems manual and syllabus. He reported to Ed Faith. He held the same position on the B-757/767 at UPS prior to being assigned to the B747-400 fleet.

Out of college he joined the USAF and flew the A-10 for 10 years. He was hired by Delta in 1997. In the 8.5 years at Delta he nearly exclusively flew the B-767 and was a check airman on that aircraft. His total time was 6000 hours with pilot in command time of 3000 hours. He was typed on the B-747-400 in April 2007 and accumulated 500 hours of PIC (pilot in command) time. He became an APD (aircrew program designee) in September 2007. He was in the first class after the initial cadre. He was an APD in all seats but only for simulator. After a student left him, they would go to IOE (initial operating experience) with the flight standards group headed by Doug Menish. A standards line check airman releases the student to the line. Flight standards belong to flight operations and the assistant chief pilots were the ones who do the line checks. All assistant chief pilots were not line seniority pilots but were management or supervisors. He did not know whether or not assistant chief pilots had disciplinary authority but he could read the job title out of the FTPM (Flight Training Policy Manual).

He did training on the accident first officer. He did the actual type ride of the first officer. He did not have details on the type ride and he only remembers that it went extremely well. He did not recall anything else except the first officer did really well overall and he did not look at the training records. He did not recall the name of the instructor who conducted the LOFTs (line oriented flight training) for the accident first officer. He did so many crews that he did not remember the name of the next instructor.

Asked if he trained first officer to do captain's flows he said no, however in their case since the accident first officer and his training partner were both first officers they were trained but it was not part of the syllabus. He said captains have to know first officer flows but not the reverse. He said the first officers were not expected to know captain flows. He said IROs (International Relief Officer) sometimes occupied captain's seats. When asked if IROs were not trained on

captain flows he said flows only applied to things that happened on the ground and they did not have flows in flight. He said they only had pilot monitoring and pilot flying duties in flight and that everybody knew those duties.

Asked if UPS used expanded non-normal checklists, he stated for non-normals all they had was the QRH (quick reference handbook) and that was repeated in the AOM (aircraft operating manual).

He said the QRH was issued to an aircraft and not a tail number. He did not know if the QRH was MEL-able. He also stated there were multiple configurations of the 747s in the fleet and they only had one QRH and it could go in all the 747s.

Asked how the QRH was backed up, he stated it would be in the crew member's AOM and each crew member had to have an AOM in their flight kit.

Asked if UPS used checklist philosophy of challenge-response with running their non-normal checklist, he said only for certain items before they were shut down—fire handle, fuel control switch, IDG generator. When asked for clarification if challenge-response was required for the non-normal checklist he answered "no", the pilot running the checklist does not need a response from the pilot flying except for the big items.

Asked if there was a secondary response to the checklist, he said the pilot reading the checklist was almost saying the response to himself as opposed to the other crew member.

Asked if there was a non-normal item that illuminated and what the process was that the students were trained on to handle this emergency, he said the basics were to fly the airplane first and get the autopilot on to reduce the workload. Then communicate and navigate, it was an EICAS driven airplane so they were supposed to use the EICAS messages to dictate what checklist to go to. There were three levels of messages; warning, caution and advisory. That's the priority you would go to the checklist in.

When asked who designates pilot monitoring he said typically they rotate legs and whoever was flying the airplane at the time keeps flying unless the captain likes to do it differently. Even when a non-normal occurs, the pilot who was flying continued to fly.

When asked in his experience if there were any times when the captain would want to change roles he said it depended on how comfortable they were with the automation and the FMS (flight management system). He stated some captains would rather fly the airplane and let the F/O (first officer) do the FMS stuff because they (the captain?) felt like they're probably better at that.

Asked if the pilot monitoring was also responsible for ATC communications he said "correct" and it had been that way ever since he began training at UPS. He was asked if he saw any issues with pilot monitoring and running radios at the same time. He said he guessed that was a personal opinion and yes, having seen it done the other way before he came to UPS, he liked the other way better.

Asked what the difference was between two phrases and how they were trained: 1. Plan to Land at nearest suitable 2. Consider an immediate landing. Asked how he trained the students to differentiate between the two, he read from the AOM chapter 2, Intro page 5.

He said that landing at nearest suitable means you have a strong chance to be able to fly the airplane onto an approach and land the airplane. Landing immediately means that if you don't get it down somewhere within the next 5-10 minutes the plane's going to come apart, incapacitation or something of that nature. He said that all came within the 2007 Boeing change.

Asked about the "end of procedure" in the QRH, and what it meant when the crewmember read that, he said it meant that procedure was complete for that EICAS message, the checklist was done, and if you had another EICAS message you should get that done.

Asked about Smoke, Fire and Fumes checklist and if he had ever seen students have difficulties with this checklist, he said "yes" and that it wasn't the only difficulty, and the other difficulty being which checklist to go to, "kind of like what you saw today." Yes, he had seen difficulties in going back into checklists, and also which checklist to go to. That was why they trained to go to the smoke, fire, fumes checklist first, and then the smoke removal was within that checklist.

Asked how many times during a training scenario a student got the chance to go through the Smoke, Fire, Fumes and Smoke, Fire, Fumes Removal checklists, he said that he thought they saw it once during FBSs and once during simulator session 6. Asked if during this training for the checklist procedure, were the goggles and masks on, and he said yes, as per the syllabus.

He never had to wear the mask and goggles in flight for an emergency, but he had worn the mask and goggles 7 months ago during AQP testing.

Asked if there was any time a flight crew member was taught to exit their seat to combat a fire or smoke situation, he said he didn't think it was in the syllabus.

Asked what his official title was he replied he was a UPS flight qualified supervisor. Official duties and responsibilities were to supervise training of the line crew members. That included duties of curriculum development, and manuals, specifically systems manual. He said he reported to Ed Faith. He said he held no other positions with UPS except he was on the 757/767 in the same capacity.

Asked if during the type ride for the accident first officer if it included the Smoke, Fire, Fumes checklist, he said "no", the type ride was basically done off 121.441 appendix F. Discretion was his as to what emergency he wanted to give students. He said he averaged 7 to 12 checks per month, which included type ratings and proficiency checks. He also did systems orals.

Asked to describe the scenario that was typically to lead students to the Smoke, Fire, Fumes checklist, he said simulator session 6 would give a lower cargo fire departing Hong Kong to Seoul passing through flight level 250 which would cause them to turn around and go back to Hong Kong. That would be the only airport available to them. They would fly the approach with the mask and goggles on. At some point he would tell them they had smoke in the cockpit.

Asked which checklists he was looking for the students to use he said the appropriate cargo fire checklist and then they would be driven into the Smoke, Fire, Fumes checklist. He said it did not really specify in the syllabus how far to take that, but typically they would make them use all the checklists, including smoke removal. He said that he didn't teach those sims often that he did the check rides and he assumes that the syllabus was being followed.

Asked what he looked for in CRM (crew resource management) during check rides, he said they type both captains and first officers so when an F/O took a type ride, they expected him to show captain judgment because he was being typed in the airplane. He expected normal CRM and SOPs (standard operating procedures). Asked to define normal CRM, he said that both crewmembers should be involved in decision making.

For a type ride, he was required to provide a proficiency check form and a FAA 8710 form. When the check ride was complete, he issued a temporary certificate. He stated additional notes were not required during the check.

He stated that unlike AQP he did not grade only pass or fail.

He could not give any specifics regarding the accident first officer's CRM skills, but said his situational awareness was exceptional.

He was asked if UPS or himself had done any training with an incapacitated crew member, and he stated yes, with regard to getting an incapacitated crewmember off of an airplane. He was asked specifically about a crew member who would be slumping in the seat during an approach and he said no.

Asked if a student failed check ride were notes taken and he said he had to fill out a UPS form for additional training.

Asked if the grade sheet contained the actual emergency procedure details, he stated "no" it showed the checklist had been accomplished with no details. Asked what percentage of students messed up the smoke, fire, fumes procedure, he stated in his experience he had not observed that checklist being run often because he conducted mostly check rides. He said other instructors would be better able to answer that question.

Asked if there was a process in the training center to bring up procedures and suggestions, he said yes, through Doug Menish, the chief pilot, or the standards group run by Tony Copeland Parker, who was also in charge of standardization among the fleets. He said that if a procedure needed to be changed he would bring it up with Ed Faith, then Ed would bring it up to Doug Menish, he would bring it up in the flight standards meeting, and a decision would be made unless it affected other fleets, then it would have to go through Tony Copeland Parker.

Asked if he had ever seen anything in the QRH or any procedures brought to the flight standards meetings for revision or change, he stated the AOM and QRH was run by another flight qualified supervisor, and if he had an issue he would go to that supervisor and that supervisor would take

the issue to Doug Menish. Then asked again if he had ever seen an actual checklist item brought up for discussion or change, he said he brought one up himself and he assumed it was about to be changed. He was asked which item, and he said the hydraulic system number 4. He said it "was in process".

Asked if on the type rating ride he looked at CRM and flying skills, and he said it was maneuvers based.

As a follow-up he was asked about what "in-process" meant for revisions of the QRH. He said he didn't know the exact answer.

Asked why AQP was not started he said group trials were supposed to start last year and the FAA didn't have the funding for the personnel to come watch. AQP calibration starts next month, with hopefully AQP starting in 2011.

He said by percentage he had failed 9 or 10 guys in 2 years, mostly in the area of automation. Orals and systems knowledge were also included. Asked how many total students he said he averaged about 10 per month.

Asked if he had been involved in curriculum development in the areas of systems and checklists related to smoke, fire, fumes, he said checklists 'no", and systems manual was modeled word for word, period for period after Boeing FCOM and it reads verbatim. He said he worked on AQP curriculum and it was rotated every 3 years. He said that for 2010 AQP was supposed to cover the cargo fire system that was going to be introduced to the second period simulator. He said AQP was not introduced this year.

Asked if the QRH and the AOM could be interchanged he said yes but they preferred to steer the crews to the QRH.

Asked about which checklist was the most contentious he said the aircraft was simple and the checklists were straightforward except for the smoke and fire checklist.

Asked if any suggestions for changes of procedures had been approved he stated they were able to make changes to VNAV on the missed approach and use the auto pilot at 250 feet with an engine failure.

Ask if anything had been turned down, and he could not recall.

Interview concluded at 1300 ADT.

6.0 Interview: George Kirby Freeman III, First Officer (F/O) B-747-400 United Parcel Service (UPS)

Location: UPS Training Facility, Anchorage, Alaska Time/Date: 1310 ADT, 13 September 2010 Present were: David Lawrence, Katherine Wilson – NTSB; Steven Foss – FAA; Doug Allington - Boeing; Edward Horne - UPS; Martin Hinshaw - IPA

During the interview, F/O Freeman stated the following:

F/O Freeman stated that he had been with UPS for 13 years, beginning on June 29, 1998. He started as a flight engineer on the Boeing 747-100/200. He had approximately 12000 hours total time and had been on the 747-400 about one and half years. He had accumulated around 500 hours on the Boeing 747-400. Also he flew the Boeing 757 and 767 airplanes and stated that he "held MD-11 Captain for two years when demographics caught up with me on the age sixty five thing".

His previous background consisted of Marine and Navy flying and as a government contractor.

Asked if he flew with Captain Lampe and F/O Bell, he said that although he was on a different line, he intercepted them in Hong Kong for a Hong Kong – Anchorage sector on August 29, 2010. First Officer Freeman served as the assigned F/O on the flight and also as the flying pilot and was seated in the right seat for takeoff and landing. It was the first time that he had flown with these pilots on the B747-400. Captain Lampe, as assigned Captain sat in left seat for the takeoff and landing and served as the pilot monitoring. F/O Bell served as the IRO and occupied the left seat (as pilot monitoring) while Captain Lampe took a break. Each crewmember took a break of approximately 2:20 minutes. He said that he didn't notice anything out of the ordinary and that they worked well as a crew. There was the typical chatter, but they both seemed very professional and orientated toward the flight. There were no MEL items and nothing out of the ordinary for the flight. They both seemed happy about their situations. F/O Bell had just finished IOE and was excited about being on the airplane and both crewmembers seemed happy about the training. Captain Lampe gave a good CRM briefing before departure and was very thorough concerning the heavy weight takeoff. Captain Lampe talked about CRM and how he wanted things done. He was also careful to brief the two jumpseat passengers even though they had flown on the 747 before. F/O Bell was very good and "sharp with his procedures".

Asked if he had every experienced a fire warning or smoke in the cockpit, F/O Freeman replied, no. He went on to say, that the training they received was "pretty excellent" in all regards, and that they had specific training in those areas.

When asked if there was any pressure from the company to get the load out on time, he said that although the operation certainly encouraged it, he never encountered any pressure to compromise safety in any respect.

Asked if the crew preflights the main cargo deck, he replied, no, that they preflight some items on the left hand side forward of the L-1 door entrance; the fire axe, extinguisher, and wand. He stated that "it can be a little tough with the loaders going back and forth."

Asked about PBE's, he said that there were a couple on the wall adjacent to the lavatory.

When asked about fire extinguishers he stated that there was one on the lavatory wall and one on the left hand side in the cockpit adjacent to the jump seat.

Asked about testing oxygen mask and smoke goggles on preflight, he stated that they first test them for flow and through the status page for quantity and a minimum pressure drop to insure that the bottles were connected. They check the goggles for condition and cleanliness.

Asked about morale at UPS, he said that it was very good, and that the relationship between the company and the pilot group was also very good. However, in the last year, the furlough was affecting morale and it depended on whether a pilot took it personally or just did what they did. He said pilots were professional enough to compartmentalize the personal things in life. Pilots would try to help them out.

Regarding relations between the company and pilot group, he said some people were not as happy as he was. He thought the company was doing a "pretty darn good job" in terms of training and equipment and they complied with regulations. He could not find any fault with that in that respect.

A flight engineer would confirm the door lock, and basically walk down the main deck, check the door, around and back on the other side.

He said the training he received was more than he needed. It was geared for people not coming off of a glass cockpit. There were a lot of similarities to other Boeing products and they did a comprehensive job.

Interview concluded at 1350 ADT.

7.0 Interview: Dana Cooper, UPS Boeing 747-400 Line Pilot Instructor

Location: UPS Training Facility, Anchorage, Alaska Time/Date: 1400 ADT, 13 September 2010 Present were: David Lawrence, Katherine Wilson – NTSB; Steven Foss – FAA; Doug Allington – Boeing; Edward Horne - UPS; Martin Hinshaw – IPA Representative: David Anderson, IPA Lawyer

During the interview, Mrs. Cooper stated the following:

Her name was Dana Sidwa Cooper, and she was 35 years old. She was a UPS line pilot instructor and her date of hire was May 16, 2005. She originally had worked for Ryan International as a Captain on the Airbus A320 and 321. After high school, she went to Purdue University before getting hired at Ryan in 1998, where she spent 8 years on the Boeing 727 and Airbus aircraft.

She began her career at UPS on the 727 as a flight engineer, then flew the 757 and 767, and was one of the first line crewmembers to train on the 747. She said her total time was about 7000 hours, with 1500 hours of PIC, and no PIC in the 747. She said she did fly the line, about 2 trips since she returned from being out on medical leave since March 15, 2010. She said she could pick up trips out of open time, but it was harder since there pilots on furlough. She said there was no currency policy for instructors at UPS other than basic FARs.

She said she knew the Captain of UPS 6 in passing, but never flew with him. She said she trained the F/O in simulator sessions 2 through 6. She said he came to training prepared, took his time, and had a lot of energy to study and was an above average student. She said he was a consummate professional. She said he was trained on the 747 with another F/O. She had had captain and F/O pairings in the simulator before, and said the F/O – F/O pairing takes away from the training because a student learned by doing.

She said simulator session 6 covered main deck fire and cargo fires, and it lightly touched on smoke. She said the scenario would begin with a cargo fire, and would not require the students to don the O2 masks. It would then lead to a main deck fire, but it was rare that the students would get to don the smoke goggles since the scenario was on approach, and the main deck fire was intended to drive the crew to evacuate the aircraft.

When asked when students first had the opportunity to don the O2 masks, she said it occurred in simulator 1 with an introduction to the masks and goggles. She would also teach them about the audio panel. She said they would also don the masks during the decompression demonstration. She said simulator 9 had a scenario involving a window fire in the aircraft, and would require the students to don the O2 masks. She said donning the masks with glasses was difficult, and you would have to take off your glasses prior to donning the mask. Her opinion was that the one piece O2 face mask was better, and there was a big difference between it and the mask and goggle set.

She said that if there were any suggestions they would have about the training, they could take it to Ed Faith.

She said she debated joining the training department, but she liked to learn, and after having her baby, it was a plus to stay home.

She said she had never experienced an in flight fire, but had a wheel well fire in the 727 out of Pittsburgh once.

She said there were multiple instructors, and they were observed and signed off as instructors.

She said pilots only received fire and smoke training in simulator 6, and none were in recurrent. She said the smoke handle was trained in simulator 9, and found it ironic that she was teaching that module on the day of the accident.

Regarding prioritization of procedures, she said she trained to first identify who would fly the aircraft, and where you were going to go before you started doing a checklist.

She said at the first indication, you ran the cargo fire checklist first, then the smoke removal checklist. Regarding crew pairing in the sim, she said she took in more when she wasn't the pilot flying, but it depended upon the student. She said the SOP was for the pilot monitoring to be in charge of ATC communications. When asked if she had noticed any problems with the PM handling the radios, she said yes, they had to stop the checklist to handle the radios.

She defined CRM as using all outside resources, and first and foremost crews must communicate with each other.

She did not recall any difficulties from F/O Bell during simulator sessions 6 and 9, and considered his CRM skills "very, very good", and was "captain material". There was no remedial training for F/O Bell.

She said she flew the 757 for several years, and the masks and goggles were identical. She recalled using the masks in training.

She said she gave her students techniques on how to set up the radio panel.

She said most pilots have problems with the nose clip on the O2 mask, and most pilots also have problems with the goggles. She said she must remind students to open the nose clips, and it was hard to train because "we don't have smoke in the simulator". The goggles were like ski masks, and she recalled F/O Bell comment that the goggles were "crap".

She said if she had a suggestion for a change, she would "go to Don".

When asked if anything in training could be done better, she said that, even though they do conduct check rides between 2 am and 6am, they do conduct training during those hours.

Interview ended at 1505 ADT.

8.0 Interview: Paul LaPointe, Line Simulator Instructor - United Parcel Service

Interview date: September 13, 2010 Time: 1515 ADT Location: UPS Training Center, Anchorage, AK Present were: David Lawrence, Katherine Wilson – NTSB; Steven Foss – FAA; Doug Allington – Boeing; Edward Horne - UPS; Martin Hinshaw – IPA

In the interview, Mr. LaPointe stated the following:

His was 43 years old. He was hired with UPS on January 27, 1997, and resided in ANC.

His previous flying experience consisted of active duty with the USAF (US Air Force) and the USAF Reserves. UPS was his first 121 airline; he had accumulated about 5,000 hours total time, 2000 hours of which were PIC. His initial checkout at UPS was as an FE (flight engineer) on the B747-100/200. He also served as an F/O on the B747 for one and a half years and as an MD-11 F/O. He completed his B747-400 captain training and was released to the line on 2/28/2009. Since that time he had accumulated close to 150 hours of PIC time in the B747-400.

Mr. LaPointe's title at UPS was Line Simulator Instructor. He joined the training department in Anchorage in June of 2007, first on the B747-100/200, after completing his initial training in the spring of 2007. Instructors checked out but did not do anything besides a few takeoffs and

landings. He was full time in the training department until he went for his initial OE (operational experience) on the B747-400 in 2009. He spent most of his instructor time training in the B747-400 simulator facility in Anchorage and reported to Ed Faith. He recalled training F/O Bell in the UPS simulator during simulator sessions 7/8/9. He recalled that F/O Bell performed well and required no additional training. He recalled that F/O Bell had some items that he wished to critique, but could not recall if F/O Bell submitted his critique form at the end of the course.

F/O Bell was paired with another first officer. Mr. LaPointe had done training also with first officers paired with another captain. He felt that it was a little more difficult for first officers during their training when they have to occupy the left seat as a captain.

First officers were evaluated in the left seat as an IRO. The skills that were evaluated included taxi and rejected take off. He felt that the first officer was sitting in a seat looking at instruments that he or she was not familiar with, slight degradation in training.

He conducted simulator sessions 7 thru 9. Smoke, fire and fumes in simulator 9 were required to isolate the component and then remove the smoke via the appropriate checklist. He could not recall F/O Bell encountering any problems with this simulator 9, which was precursor to the rating ride. Mr. LaPointe used the trigger of advising a crew that smoke was entering the cockpit near the glare shield. The first step he expected to see was donning of the oxygen mask and goggles. The pilot flying called for the non-normal checklist. Usually his students don their masks but can't recall F/O Bell donning his mask. Common problem was with the harness falling down over one's head and not obtaining a good seal. Problem with the goggles was the unfamiliarity of the goggles and ensuring a good fit. He required his students to wear headsets during all simulator sessions. He said it was usually slightly difficult to don the oxygen mask with the headsets on. Mr. LaPointe wore a headset when he was instructing in the simulator. He had donned the mask on the airplane but could not recall if he had donned the mask and goggles on the actual aircraft.

Regarding the pilot monitoring (PM) and pilot flying (PF), he said the AOM had verbiage on PM and PF. Stated that the captain had the discretion to dictate the PM/PF. Was asked if he ever had a captain change the duties from PM to PF, does not recall that happening. Mr. LaPointe stated that the PM had task of setting the altitude in the MCP. The PM programs the FMS even in a non normal situation. Pilot flying focuses on flying the aircraft. He stated that it was possible that the PM could be programming the FMS, talking to ATC and reading the checklist at the same time. Based on his experience Mr. LaPointe would like to see transition to AQP, which they were about to start at UPS. Stated that we do not have AQP now and had no idea why. He felt that with AQP, UPS could focus on issues that actual occur on line operations. Mr. LaPointe was involved with the pending AQP curriculum. Worked on curriculum development for the 747-400 fleet and developing simulator profiles. Mr. LaPointe stated that they had intended on developing a cargo profile for 2010 AQP.

He said it was hard to answer whether crews remembered to pull the guard to clear the smoke goggles of smoke because there was no simulation of actual smoke in the simulator. He felt instructors were aware of the nose guard switch to clear the goggles but may not notice whether trainees use the switch. He joined the training center for a challenge. He was encouraged to start

teaching and enjoyed teaching on new aircraft. Positions were not offered to join the training center to avoid a furlough. Each year, he trained on average 6 to 8 crews over the course of the year. Use of the smoke handle was trained during the smoke removal checklist. He encouraged all pilots to follow the checklist. If the source of the smoke and fumes was not on the flight deck you do not pull the smoke removal handle. He gave feedback during the training as to the presence of smoke on the flight deck for training. Once the checklist was completed they did not return to smoke fire and fumes checklist once the smoke and fumes was removed via the smoke removal checklist.

In terms of CRM Mr. LaPointe looked for open communications, no wall between the pilots and who will be communicating with ATC. Not aware of any changes suggested in the training of flight crews since the accident. There was training accomplished in the use of fire extinguishers during ground school training. Mr. LaPointe stated that crews used the QRH for reference to emergency checklist rather than the AOM. Could never recall a situation to send a crewmember to check for a fire source on the main deck

He recalled that F/O Bell had a comment concerning one of the simulator sessions during a normal conversation. Felt that it was just a regular comment, pointed him towards putting his comments in the proper format. Stated that the PM sets altitude at all times, his opinion was that it was good because it keeps the PM engaged in the critical modes. He stated that the smoke and fumes checklist was executed properly and that just finding switches on the checklist takes longer due to unfamiliarity. Some switches on the checklist were not used that often during routine flights. He felt that the check list was run just fine by all crews. The feedback that he got on the oxygen mask and goggles was that UPS does not have a one piece unit.

The process of submitting changes to the QRH or other checklist was open. He had been encouraged to come directly to Ed Faith with any possible changes. He suggested that in a non-normal situation the captain should have the discretion to appoint who communicated with ATC. Mr. LaPointe stated that verbiage in the AOM was modified to include that. He felt that if they had a system to generate smoke in the simulator training it be greatly enhanced. The changes that he would like to see made to the syllabus was to reduce items like steep turns and stalls to be replaced by items that occur on ASAP (aviation safety action program) reports. He did not fly as often as he would like. He flew two or three pay periods per 12. He was encouraged to maintain line proficiency. He said he can only hold a reserve line, so typically he displaced crewmembers for proficiency flying. That accounted for the bulk of his flying. His role with the company when he was not training was to work with UPS's contract instructors. He worked on the flight simulator acceptance program and did a lot of the instructing of the initial cadre of instructors.

Interview concluded at 1620 ADT.

9.0 Interview: Joseph A. Duff, UPS Ground School Instructor

Interview date: September 13, 2010 Time: 1630 ADT Location: UPS Training Center, Anchorage, Alaska Present were: David Lawrence, Katherine Wilson – NTSB; Steven Foss – FAA; Doug Allington - Boeing; Edward Horne - UPS; Martin Hinshaw - IPA

In the interview, Mr. Duff stated the following:

Mr. Duff stated that he had been a "PSIP" or purchased services contract instructor for UPS since July, 2007 through November 2008 and resumed instructor duties for UPS in April of 2010.

He further stated that "PSIP's" worked for Boeing, but were contracted through a company known as "PDS" and that it was an entity that Boeing had him working under, was however not certain of what PDS stood for, but recalled it as PDS Technical services. He further recalled that there was an agent in Seattle, but the headquarters were located in Dallas, Texas.

Mr. Duff also stated that he was a 3rd party instructor working for "Boeing Training and Flight Services T&FS" and had been employed by them since April of 2007. He further stated that he had been a 747-400 instructor since April of 2007.

He received his 747-400 training in Seattle under the training organization then known as Alteon. His training did not include receiving a type rating on the 747-400.

He then stated that he had prior experience as a ground school instructor at American Airlines on the 777 aircraft. He further stated that he was "purely a ground school and fixed base instructor".

When asked how many classes he had taught at UPS in the April 2007 to July 2007 time frame he estimated it to be 10 to 15 classes, but "losses track" after awhile due to the number of classes taught.

He recalled training F/O Bell of the accident flight and further stated "you know the old saying, you only remember the really good ones or the really bad ones" and the ones in between just "sort of drift into memory", but that F/O Bell was "one of the good ones".

He also stated that as a former US Marine that F/O Bell was very "disciplined as Marines tend to be" and was always "very prepared" for his training and a very "intuitive" young man.

Mr. Duff further stated that F/O Bell required "factual" explanations for any questions and quickly grasped concepts.

Mr. Duff noted that while he had seen many pilots highlight "practically entire pages" of the AOM, F/O Bell tended to only highlight items of "substance", "that was type of individual he was". He further stated that the first officer tended to complete checklists based on purpose and was not one of those people that would "randomly do things", and did not "hope to get a result based on co-incidence" and tended toward "precise" task accomplishment.

Mr. Duff was asked if he had met with the first officer since training and recalled that he had, at a local Anchorage restaurant offering reasonably priced food that he had told F/O Bell about. The first officer was there during his line check, with several other UPS crewmembers. He

recalled F/O Bell as being "real happy", and this was the first time he had seen him on a casual basis and not in the work environment.

When asked if he ever followed up on the progress of his students, Mr. Duff stated that he does, and that he liked feedback from the full flight instructors as to what he might have taught in error procedurally, or if he had used a technique that was not authorized, or any other issues noted with his students.

Mr. Duff stated that the feedback he received on the first officers training was that "everything was fine", and that the first officer was doing "just excellent". He went on to state that that was what he expected. Mr. Duff also spoke with the person that had done the oral evaluation on the first officer and the feedback was that he had done "very well".

With regard to which training syllabus Mr. Duff taught, he stated that the UPS 747-400 syllabus was used.

Mr. Duff also stated that he had trained the initial cadre of UPS pilots on the 747-400 using the revision one syllabus, and that there had been "several revisions to it", due to it becoming "more mature" as experience was gained with the 747-400 by UPS. He went on to state "like any airline" they find certain things that they "adapt to" due to experience or "updates". When asked about these updates he stated that sometimes they come from the manufacturer when systems get updated.

Mr. Duff stated that the publications used during training included the following:

- A. QRH
- B. AOM
- C. Systems manual
- D. IOM
- E. FOM (flight operations manual)

In the performance of his training tasks he stated that he primarily used the AOM (for flows) and the systems manual, all of which were produced by UPS. He went on to state that students were not issued Boeing FCOMs (flight crew operating manual) as there would be "no need for it".

He provided smoke, fire or fumes training in the FBS #5 session syllabus which included fire systems. He also recalled that the FBS #8 syllabus included a window fire event, but that FBS #5 was the first time crews were introduced to fire events in training.

Mr. Duff stated that initially systems were covered individually and then became "interactive" in later FBS lessons. The basic teaching concept was Instruct, Demonstrate and Practice.

Mr. Duff responded that FBS lessons were conducted in the IPT in Anchorage.

When asked if the IPT had operable smoke goggles and masks, he stated that it did not. He went on to state that he did not know if the FFS was the first time that a crew used the smoke goggles or masks in training as he had "never been in the FFS".

He also stated that he had never flown a 747-400, but had flown in a 777. He went on to say that he also had never ridden jump seat on a 747-400, as it was "not a requirement here", however he stated that he had been on a UPS 747-400 on the ground for familiarization purposes. He believed they had occurred in April of 2007, and that it was the first time he had done so.

Mr. Duff had not heard of any difficulties with smoke, fire, or fumes procedures.

When asked about his contract with UPS, he stated "that I can leave anytime and I can be asked to leave at anytime".

When asked how many Boeing contract instructors there were at UPS, he stated that three were working in Anchorage and three were working in Denver utilizing United Airlines simulators.

Mr. Duff related that the United simulators were in a different configuration than the UPS 747-400 fleet. He stated that they were configured as passenger 747-400 simulators and not cargo aircraft simulators.

He also recalled that at United the FBS's were setup as simulators with no motion or visual capabilities, but contained actual aircraft hardware.

Mr. Duff stated that the United simulators were not converted to the UPS configuration for UPS's use, and stated further that there were "some differences" from the UPS cargo configuration.

Mr. Duff knew of no requirement for him to maintain "continuing familiarization" with UPS aircraft, and that they did not ask him to jump seat or observe line flying procedures.

Mr. Duff was asked about checklist familiarization and stated that it was covered in classroom and well as in the FBS.

Mr. Duff stated with regard to the smoke removal checklist that it was an annunciated checklist, while most others were driven by EICAS messages.

When Mr. Duff was asked about review of the smoke handle he stated that, it was usually covered during the cockpit familiarization, and that the IPT "doesn't really have an overhead panel". He further stated that he used a flight deck walk around presentation to show the smoke handle location. He also stated that he used slides and a VSIM presentation to show upper deck and cockpit features.

Mr. Duff stated with regard to smoke handle use that if its "in there" (Smoke removal checklist) "it's covered".

With regard to CRM training Mr. Duff stated that "it's pretty much an issue in everything you do". He gave references to AOM sections with relation to CRM issues.

Mr. Duff stated that he thought that the Captain would give the "aircraft to the first officer " and complete the NNC (non normal checklist) as Captains generally have more experience.

When asked, Mr. Duff responded that when teaching at United he had used both the FBS and FFS simulators without motion to accomplish ground school FBS lessons.

Mr. Duff stated that unlike the IPT the United FBS devices had actual aircraft panels and that the IPT only had a MCP, display select and EFIS panel. He continued to state that the IPT does not have the throttle quadrant or associated controls and that all other switches were "touch screen".

When asked about oxygen masks in the IPT, Mr. Duff said that there were no side panels, only the forward panels.

Mr. Duff said that while the FFS at United may have had the mask and goggles or integrated mask/goggle the FBS did not.

When asked about the differences in teaching fire procedures at the United simulators, Mr. Duff stated that the main differences were in the main cargo deck fire procedures and that he related his experiences as a 777 instructor to the training, i.e., the forward, aft and main lower cargo hold fire procedures were "pretty much" the same.

Mr. Duff was asked if he would prefer a FBS with an actual cockpit with switches and knobs or an IPT. He stated "you really couldn't say a direct yes or no to that", UPS had added an extra hour to their syllabus simulator profiles to compensate for not having the switches, but if he could have the switches "yes I would rather have them", however Boeing used Flat Panel trainers. He further stated that at American he used FFS for "everything", ground school and FBS and thought "you could cut your training tremendously" by using a FFS for everything and everything was operable.

When asked if he thought there would be a benefit to his job if he were able to ride the jump seat, Mr. Duff replied that it would, in the areas of ground operations and communications, but did not think it would help him as far as teaching FBS.

When Mr. Duff was asked about the course content he replied that it was 40% standup and 60% FBS or 2 hours standup and 3 hours FBS, and that the course footprint for ground school was (for his involvement) 8 days and did not concern himself beyond his involvement.

Mr. Duff reiterated that his only interaction in the total training process beyond his ground school courses was to check on the progress of his students.

At Boeing, he reported to Mr. Warren Hendrickson.

When asked to rank in order of preference what devices he would prefer to teach in IPT, FBS or FFS, Mr. Duff said FFS, FBS and IPT.

Mr. Duff stated that he got "some questions" from his former students after they left the training center regarding aircraft systems, but preferred to answer them only if he had access to his publications to avoid giving an incorrect answer.

Mr. Duff said he would "probably prefer" to have a FBS trainer versus the IPT, however he believed that the IPT served its purpose as a systems trainer for ground school.

Mr. Duff also thought that in his experience at United, that the students "picked things up faster" using the FBS than they did using the IPT, partly due to the fact that all controls were present.

Mr. Duff recalled that during his time at American Airlines he did "ride a longs" as a yearly requirement of being an instructor.

When asked about training changes Mr. Duff stated that UPS had taken two days out of the IPT training syllabus, reducing it from 10 days to 8, combining training items from the removed lessons into the remaining 8.

When Mr. Duff was asked if all QRH procedures were covered in the IPT sessions, he replied that they were not, but rather that procedures were selected that would have some effect on a flight i.e. those that would affect landing gear, flight controls or items that effect more than one system or require flight crew planning.

Mr. Duff believed that UPS had a "very strong" standardization program.

Mr. Duff was asked if the UPS training and documentation "tracked" with Boeing procedures and replied that it did but was "more specific" and had "more detail" than Boeing's procedures, and was "more precise" than Boeing's.

Mr. Duff said that he was trained initially using Boeing procedures for the 747-400 and maintained qualification under the Boeing part 142 certificate and under UPS's part 121 certificate, and maintained qualification on both certificates.

Mr. Duff recalled that some simulators had one piece smoke goggle/masks and some had mask/goggles separate during his training at Boeing.

10.0 Interview: Edward Martin Faith, Jr., B747 Flight Training Manager, UPS

Location: UPS Gateway Center, ANC Time/Date: 0745 AKDT, 14 September 2010 Present were: David Lawrence, Katherine Wilson – NTSB; Steven Foss – FAA; Doug Allington – Boeing; Edward Horne - UPS; Martin Hinshaw – IPA In the interview, Capt. Faith stated the following:

He was 48 years old. He was the B747 Flight Training Manager and was hired by UPS on 24 October 1994. He had about 13,000 hours total time, 7,000 of which was as PIC. He had about 450-500 hours in the B747-400 with 400 hours as PIC. He also had about 1000 hours in the B747 classic all as SIC. At UPS, he also had flown the A300, B727 and B747 classic.

He previously held other positions at UPS. He was a B727 simulator and line instructor and check airman, Rockford assistant chief pilot, employee relations manager for Human Resources (HR), technical interviewer for HR, A300 flight training manager, Airbus fleet chief pilot, systems operations manager, Airbus chief pilot again, system operations manager again, and was currently the B747 flight training manager. In this position, he also oversaw the MD-11 training at ANC. He held a simulator check airman letter for the B747, and had held line and check airman letters for the B727 and Airbus.

He reported to the flight training division manager in Louisville. As the B747 flight training manager, his duties were to ensure that all crews met the requirements of their duties from a safety and legality standpoint. He also ensured the programs provided the most adequate training for their flight crews.

He said UPS was in the process of going to AQP for B747 recurrent training. They were scheduled to do group calibration in October 2010, small group trials in November 2010, and to roll out the program in January 2011. They began this same process last year but he said the FAA could not get funding to oversee the AQP program last year.

UPS had an ASAP program which included all flight crew members from the line and managers. He was a part of the safety audit reports. He said they had monthly safety meetings where they reviewed ASAP data. They focused on high risk areas. UPS also had a FOQA (Flight Operational Quality Assurance) program. He got a monthly report of a review of the FOQA data which focused on deviations from standards and also high risk areas. He said there had not been any recent spikes of interest. He said one area that they recently saw was related to speed control and pilots being within \pm 5 knots on their airspeed. They saw this around the 1000 foot mark when pilots would kick off the autopilot. He had not seen a spike in the last 6 months.

Regarding the process to incorporate changes into a syllabus or training, he said when it was an individual item or specific to an area of flight, they would review it with the standards group. He said they also got quarterly feedback from line check airmen. He said they would discuss what they want to emphasize but this was not a change in a program. They would then pass this along to the check airmen to emphasize during the training program and PC checks.

He said the checking function was a management function at UPS.

Feedback from line pilots could come from IOE instructors or they could call Mr. Faith directly. There were also event reports that crewmembers could file, such as for an overspeed. The event reports were an electronic form that pilots could fill out. Event reports were emailed directly to Mr. Faith, even reports not within his fleet, so that he could look at trends. They also received

feedback informally when pilots would come in for PTs or PCs and they were going over a topic; pilots would say that they saw something on the line. Based on the feedback received, they might go back and talk to the instructor to make sure they were training a procedure and not a technique. If an instructor was going to talk about a technique, he must specify that it was a technique and not a procedure. They taught procedures in the training center.

UPS had a formal observation program. He said on an annual basis all APDs received an annual check from the FAA or the program manager. Also, APDs were required to observe company check airman once every 12 months. They also required a check airman or APD to observe an instructor once every 12 months. They will informally also set seat support during certain events to do observations that way. He said observations were mandatory once a year.

Mr. Faith confirmed that the UPS policy on training and checking was for line instructor pilots to perform IOE on trainees but they did not sign them off for a line check. A management pilot who was not seniority had to do that. He said there was a benefit to two sets of eyes to see an individual during training. Mr. Faith went through a 142 program for college and at the end of each training program he had a stage check. He said it was not only the line pilot that did the IOE. They also had management folks that did IOE. He thought that if more than one person saw an individual pilot, they got a better product at the end. He said the fact that it was a management person was a company policy. He said there was no tension between management and pilots specifically related to that policy. He had not received any formal feedback regarding that policy. He never heard that the pilots did not trust management. He said it was a different philosophy at UPS but it was the philosophy and he adhered to it.

The hiring process for pilots began with submitted résumés being entered into an electronic database. When UPS was hiring, they would pull résumés from the database based on parameters. They would only pull the résumés that met those parameters. For example, when hiring for the B747, UPS required 1000 hours of international heavy experience and only résumés that met this were pulled. If a résumé had an internal recommendation along with it, that résumé would be bumped to the top of the stack. They also did an ATP type test and had a panel interview. In the interview there was technical and HR personnel. Questions were asked from a technical standpoint and also to see if the pilot was a good fit for the company, such as what do they do outside work, community service, etc. He would look at the pilots' log books and see how to frame questions based on their experience. As a technical pilot, he would take them into a simulator and look at their basic instrument type skills - hold a heading, basic power management. He wanted to ensure that what their logbook said and what they were saying matched their skill set. Individuals would then go into a pool and were selected from that pool. All pilots were given a grade at the end and stacked in this pool based on the grading process. Management pilots must meet the same requirements as a line pilot. The screening process was the same. Until recent years, a majority of the management pilots came from the line side. Mr. Faith said he was a line pilot and came in to management

Mr. Faith said he missed the last Boeing Operators Conference about 2 years ago because he was just coming on to his current position. When he was on other fleets, he attended the Airbus Flight Safety Human Factors Conference every year. He also had a peripheral duty as the deice coordinator in ANC and he went twice a year to the deice meeting sponsored by SAE.

He said Boeing was currently involved in a total rework of the B747 QRH and was reviewing the QRH. He said other than that, their updates to a manual were the result of an EO that came out or communications that came from the manufacturer or the FAA. He said they would look at their process and if they did not think that a change was needed, they would have to write a justification. He thought the QRH review was because of a human factors issue to make it easier to use, such as indents, addressing changing to multiple checklists. He said he had not reviewed the QRH but he had a QRH representative, Eric Bretthauer, who worked for him and was reviewing their QRH.

He said the biggest challenge was balancing the time to train individuals and the amount they had to train them. They were always looking for ways to get information out to crewmembers, e.g., online. UPS utilized technology so that crews could go online and review information.

He said task management was an issue and they had to weigh one task against another and what a crew needed to see when they were there. He thought AQP would help with that.

He flew the line about once a month and did a 3-4 day trip. About 2-3 times per year he did a "round the world" trip to fly to an airport he had not seen or listen to different dialects so he could understand what the crewmembers might be dealing with when they come in the simulator.

He said there was a number of legs requirement for all management pilots. This was housed in the chief pilot's manual. If they did not fly the specific number of legs during a specific time frame – they had a 1 month breakdown and a 2 month breakdown – they would have to go out with a designated IOE instructor or check airman to observe them. Because UPS was a long haul operator, it was more important the number of days. He would give them 4 days a month to go out and fly. If they missed a particular month, he would give them 5 days the next month and would expect them to do additional flying. Once a quarter he would try to give them 7-10 day flight block so they could do a longer haul turn, like to Shanghai. He said their challenge was flying days because they had so much IOE going on in Louisville and that was where their shorter hauls were. He said they had to look at a longer block of days so they could do a longer 5-8 day trip.

He met the accident first officer twice while he was in training. He had flown with the accident captain numerous times on a previous fleet. He said the first officer was very professional and happy. He was excited about the new airplane. The captain was laid back, quiet, and very methodical when preparing for a flight. He flew with the captain on the Airbus out of Louisville.

Before the accident, he had not heard anything good or bad about the accident crew.

Mr. Faith said the Airbus had a full face mask and goggles.

He was not a part of the team that decided whether to get the full face mask option on the B747, but he believed at the time that UPS was offered full face option from Boeing. He had used a full face mask before and said it was more comfortable than the separate mask and goggles. He said there were advantages and disadvantages to both. The nice thing about the separate unit was if

only the oxygen mask was required. For example, if a crewmember went to the back of the aircraft, they could only use the oxygen mask and not have to use the goggles. On the flip side, he said the single unit was more comfortable and it was also easier to view things because the bubble was a little larger and there was not as much claustrophobic tunnel vision. He said in the simulator he would rather have the full face mask in a perfect world.

He said emergency equipment was discussed during the general subjects training. He thought pilots learned about its general use and location during IOE. They also had an "emergency evac" section. Once a year, pilots got hands on training for the fire extinguisher. He said they did not discharge a live fire extinguisher but they had to handle the unit and pull the pin and simulate the sweeping motion that was taught. They also would wear the smoke hood.

Mr. Faith never flew in a simulator that had smoke generator capabilities.

He said the smoke hood was located in the back of the cockpit on the left side next to the jumpseat. He also said 2 were located in the supernumerary area. The fire extinguisher was located in the storage area behind the captain seat in the corner. There was one portable oxygen bottles and one of the masks to walk around in that area as well. The fire extinguisher could not be reached from a seated position.

Mr. Faith oversaw about 350 B747 pilots.

He had been in his current position about 2 years. He began his training on the fleet in December 2007, completed training in February 2008 and relocated to ANC in summer 2008.

He said most of what they saw in ASAP data dealt with airport specific data. There were high risk airports out there, and for example pilots were uncomfortable with the descent rate into Mumbai which had a higher than normal descent rate.

Pilots were required to carry on board with them their Jeppesen charts for their route of flight, enroute charts, certain parts of the J-Aid, and laminated checklists so that they did not have to use their AOM, and the AOM.

When he flew with the accident captain, they never experienced an emergency situation. He said the accident captain served as the captain on the flights they flew together and was easily above average as a pilot.

Mr. Faith said CRM had gone through a few iterations at UPS. They currently trained threat and error management (TEM). They had CRM and TEM posters in the debrief rooms. He said TEM was emphasized during the debrief of any training event. Instructors would facilitate a debrief and allow the crew to talk through what they did rather than the instructor or check airman telling them. TEM focused on red, yellow and green and where the pilot's focus was when attention starts to narrow down. They would find ways for the F/O to speak up. F/Os were trained not to say that a captain was doing something wrong but to say that they were uncomfortable with something. Captains and F/Os were trained together in CRM. They used to

have a captain's leadership workshop on how to receive that feedback and not feel threatened by the input received.

Mr. Faith observed ground school. He said during September 2010, he would be actively teaching or giving check rides 10 of 20 days. He also tried to observe 10 events a quarter. The events included ground school, simulator training and general subjects. General subjects was not B747 specific.

There had been no official discussions since the accident about changes to training or procedures.

He thought that the training he received related to smoke, fire and fumes was thorough and prepared him for what he could do with the airplane to run checklists and get it on the ground. He said he pulled the smoke handle in training so he would have the motor knowledge of where it was at.

Mr. Faith said there was not a procedure of what to do if no oxygen was available when using the oxygen mask. He said if there was no kink in the line and no oxygen, he would get the bottle behind the jumpseat. The bottle provided about 15 minutes of oxygen and was a full face mask.

He said once a crew declared an emergency, the captain could deviate from standard procedure. Depending on the workload, the captain could delegate ATC communications to the pilot flying. He said the reason for the policy that the pilot monitoring would communicate with ATC was so that the pilot flying could focus on flying duties. They wanted the pilot monitoring to perform all non-flight related duties. This was standard across all fleets.

UPS sterile cockpit procedures applied below 18,000 feet and crews could only have essential communications.

He said pilots typically had difficulties in training with V1 cuts, manual go around when the autopilot was not on, initial 2 engine approaches, and non-precision approaches. There were no difficulties related to smoke, fire and fumes.

UPS crews were not required to perform a walkthrough of the cargo area prior to departure. If a crew did a walkthrough and found something amiss, they could bring it to the load supervisor's attention or if that did not satisfy them they could bring it to the gateway manager's attention. Problems might be orientation errors where something was upside down or a single item in a can that was not properly tied down. If the crewmember was still not satisfied, they could also call the dispatcher and ask to speak to a fleet subject matter expert to express their concern. There were no consequences to a pilot for calling an issue like this in. He said he could say that because he used to get those calls.

Hazmat training was received during the initial general subjects portion. They also had an annual recurrent dangerous goods home study that covered labeling, types of HAZMATs UPS carried, orientation errors, segmentation, and paperwork that they can expect to be presented. They had to take a 20-25 question open book test at the end of training each year.

Regarding CBT or home study offered related to smoke, fire and fumes, Mr. Faith said there was general annual recurrent training and smoke, fire and fumes was typically associated with a particular system. The systems ran on a 3 year cycle. So many systems had to be covered via stand up or face to face and so many systems could be covered with home study. Training smoke, fire and fumes in home study or CBT would be based on this cycle.

There was a formal process for alerting crews to safety issues on their flight. If the airplane had not departed, they would call the gateway directly. If the flight had departed, they would discuss as a group, including dispatch and maintenance, and determine what the issue was and what the communications with the crew would be.

To submit an event report, there were links provided on the main flight pages for flight crews. Safety information would be distributed through safety newsletters and safety bulletins. These could include general information. There were 7-8 different types of bulletins put out from a 'must read' bulletin down to a fleet international theater specific bulletin. Pilots should have those bulletins as a part of their personal Jepp kit. Regarding any newsletters or bulletins related to smoke, fire and fumes or hazardous materials, he said UPS just started testing a new ULD load device so that they could carry medical supplies.

He had never flown an airplane with an EVAS (emergency visual assurance system) and he did not know if it was an option on the B747. He said there was a flight representative involved in the purchasing decision of aircraft.

He said there were no direct pressures to get an airplane out on time, however, UPS was "time driven". If a flight was delayed, they might call the crew member to ask them what happened.

Mr. Faith believed that the relationship between management and the line pilots was good. He said there was always a normal amount of tension. He did not have any safety concerns related to the relationship between the company and the union.

He said the recent furloughs did create tension. When the furloughs began, there was an increase in the number of sick calls received and a decrease in willingness to take on flights and additional duties. UPS was trying to boost its reserve count. Part of the duties of management was to do management emergency flying; if a flight had to get out, he would cancel a management pilot's project days and have them go fly.

Mr. Faith clarified that after the Colgan accident, there was a CONDOR which provided additional oversight to non-traditional programs. Because AQP was considered to be a traditional program, the FAA did not have funding to oversee AQP on the B747 at UPS.

He said the FAA was required to observe the APDs once a year. He said the FAA visited ANC about once a month. Because of the furloughs and that UPS had been doing offsite training in Denver, the FAA was observing UPS more frequently. In order for UPS to use outside instructors, the agreement with the FAA indicated that they had to do quarterly observations of outside instructors to use them.

Pilots could submit an anonymous event report online. There was a hotline that pilots could call in to but the call would not be anonymous. He also thought the union had an avenue for pilots to report events. He knew there were concerns and thought he probably got more feedback informally from people he worked with than through the formal programs.

At UPS they had split duties at the management level between a standards technical pilot and a training pilot and they each carried equal weight. On the technical side, it was the fleet chief pilot, Doug Menish.

For changes to a procedure, Mr. Faith would call the lead technical pilot at Boeing to see if he had any information related to the change, whether another carrier had made that change, and whether Boeing had another way for them to do this. If not, he would sit down with the standards side of the house, which would be the chief pilot, and discuss the change. Then they would take it to the standards committee that met once a month. All fleet training managers and fleet chief pilots and program development reviewed the requested change. They would determine if it affected any other fleets. They also had a system called team track. If they think it would be beneficial to move forward with a change, it would be entered into the system and an email would be sent to anyone who had ownership of any flight manual on any fleet at UPS. They would have to review it and respond with no response required, update required or that they have a technical objection and what it was and that objection would get fed back to the standards system. At that point they would implement the change or if it was affecting the entire company it would have to go the division level. They would also ask Boeing whether they had a technical objection to the change. If the change affected multiple fleets, it would go to the division level. There would be a discussion back and forth before a change could be implemented. He said either he or one of his representatives would call Boeing directly.

He was not aware of any changes to the location of the emergency equipment on the airplane from its "as delivered design".

The B747 simulator at UPS was modeled after tail #570. UPS had to get approved to use United simulators for their training. They had to put together a document outlining any differences between the United simulator and their airplanes. The document was submitted to the FAA for approval. The same thing would happen for AQP.

He said he was familiar with my Boeing fleet and myboeing.com

He said the full face mask on the Airbus was a standard configuration on the airplane. He was not a part of the purchase process for the B747.

Mr. Faith stated that a change of the FBS footprint from 10 days to 8 days was just recently approved. The first class to have the new training was on August 16, 2010. The change was the result of a change in demographics of the pilots coming in who had glass cockpit familiarity and experience.

He said they could launch a fleet on AQP. They could have launched initial and AQP in 2011, but they elected to do recurrent the first year, then initial the next year. They wanted to transition programs so as not to change all programs at once.

Getting another B747 simulator would be driven by the number of airplanes UPS had which drives the number of crewmembers they had and drives the number of training events that they had.

Regarding why IOE was completed between ANC and Louisville and not international, he said the legs between ANC and Louisville were under 8 hours so they did not have augmented crew issues. He also said most accidents happened on takeoffs and landings so he thought more focus needed to be on arrivals and departures. He said they had pilots do 4-5 takeoffs and landings in the actual airplane before they started IOEs.

Mr. Faith clarified that they may not always have 2 sets of eyes on a pilot going through training because management pilots might be doing IOE and the checking. He would like to see 2 sets of eyes and he thought that would be a smart way to do that.

He knew about the 747 simulator at Boeing.

If an event occurred that would be incriminating to a pilot, they would usually submit a report through ASAP. A representative from UPS, IPA and FAA participated in the ASAP board to review the reports and determine if it meets the ASAP criteria. The event reporting system online was anonymous. Reports included bird strikes, bad catering and critical flight safety issues. When he got the reports, he would look to see if they pertained to his fleet or airports they operated in to. As a training manager or chief pilot, they would get the reports even if not related to their fleet.

He said FOQA information was not used as much on the B747 as it was in other programs that were AQP because they had specific training requirements that they had to meet. With AQP, if they saw issues, they could adapt their training. Currently, B747 PC training was "cookie cutter". Ground school instructors can feed the FOQA data back to the students and would enhance their slides to incorporate that data.

He thought about 70% of pilots commuted to ANC. He thought this affected flight operations. He said there were issues with pilots commuting into a trip but they had not done anything to address it yet beyond talk about it. He had not had a crewmember come to him and say they were not comfortable with a crewmember because he had just commuted in.

He did not see an increase in fatigue calls since the furloughs began.

He had visited the United training facility in Denver. He did not recall if the oxygen mask in the Denver simulators was a composite unit or two units.

Mr. Faith said UPS was certified to carry ULD. A document was provided to the crew as a part of the HAZMAT paperwork to notify them. It was listed as part of the NOTOC document.

He believed the QRH was MEL-able. They had 2 QRHs on board so one should be there. They liked to have two so the crew did not have to pass the QRH back and forth, and if one was missing the flight could still depart.

He flew the Airbus about 6 years ago. The difference between the Airbus and Boeing QRH related to the smoke, fire and fumes procedure was that Airbus had an ECAM and the checklist was electronic. As a crew did items, the checklist would change colors when an item was completed. He also thought there were font and indentation differences. He thought a bigger font was used in the Airbus checklist for emphasis issues. He did not know if the Boeing review of the QRH involved changing the font size.

There were unofficial discussions in the hallway regarding changes needed to training or procedures since the accident where people would say they thought something needed to be done. Until they got details of the accident, he though making changes could be counterproductive.

The distribution list for the event reporting system included fleet chief pilots, fleet training managers, safety, anyone involved in FOQA or ASAP, and the division and vice president of flight. He did not think corporate management was on that list.

He said that pilot commuting led to an increase in the number of sick calls.

He said because of the amount of training and shifting in seats going on, reserve counts were lower than UPS would like.

Mr. Faith clarified that there was no increase in sick calls since the furloughs began.

The QRH representative working with Mr. Faith was an APD, captain on the B747, simulator instructor and a check airman.

He had not received any reports from crewmembers regarding another crewmember being fatigued. He had on another fleet but not on the B747.

If he received one of these reports, he would ask the crew member making the report to call the professional standards group. If the crewmember was comfortable, he would ask the crewmember to talk with the other crewmember and ask him to call in sick. If the commuting crewmember would not call in sick and the other crewmember was not comfortable flying with him, Mr. Faith would call scheduling to try to get a reserve pilot assigned to the trip.

He said they did include some international legs during IOE.

He said a pilot may be released to the B747 line without flying an international flight in that aircraft as long as they were qualified for international flights on another aircraft.

11.0 Interview: William Steven Jennings, Captain UPS Anchorage Chief Pilot.

Location: UPS Gateway Center, ANC Time/Date: 1008 ADT, 15 September 2010 Present were: David Lawrence, Katherine Wilson – NTSB; Steven Foss – FAA; Doug Allington – Boeing; Edward Horne - UPS; Martin Hinshaw – IPA

In the interview, Mr. Jennings stated the following:

His date of hire at UPS was April 1996. He currently was an MD11 Captain. At UPS, he flew the DC8, 727 and MD11. He had about 15,000 hours total time of which 5000-8000 was PIC. He had 4000 hours of MD11 PIC and no time on the 747.

His role as the chief pilot was to primarily act as the manager for the crews based in ANC. He handled administrative tasks and other significant issues related to their employment. He said there were 550 pilots assigned to Anchorage of which about half were on the MD11 and the other half on the 747-400. He said he could provide the details of the breakdown later since that number was changing a lot.

He also said he had 5 assistant chief pilots (ACP) and 2 administrative assistants to help him. He also provided operational support to the gateway for 2 daily banks of departures, morning and afternoon. He also provided operational oversight for all the UPS gateways in Asia. That included all gateways east of Mumbai at the exception of Almaty, Kazakhstan. He spent most of his time working at the operation or in Asia.

Right after graduating college he joined the USAF and flew A-10's and F-15C's for 9 years active duty then went to work for UPS in 1996. He was stationed at Myrtle Beach and Elmendorf AFB. He resided in Anchorage.

If he had a pilot with a fleet specific question on the 747-400, he would then go to Doug Menish, 747 chief pilot, who was in Louisville, KY. He said that they would handle personnel issues and any other MD11 fleet specific question, but if it involved any subject matter expert on the 747-400 then he would go to Mr. Menish's group. He also said Anchorage was the only 747-400 crew base in the system, but he said the chief pilot was in Louisville, KY, and he stated that was a little "odd" in the organizational structure because it was a split fleet in Anchorage.

He was then asked if he believed in his opinion if it caused any problems and he replied that he thought it worked out pretty well and they debated prior to doing it if they should move the complete 400 group and/or just the MD11 group up to Anchorage, but in his opinion it worked out better, that the crewmember had a single source. The crewmembers knew them, they were there all the time and interfacing / dealing with them. When it came to subject matter it had worked well since Mr. Menish's group spent a lot of time on the road throughout the system and was always available. He also stated Mr. Menish came to Anchorage so he thinks it was working very well in his opinion

He knew Capt. Lampe and had very positive interactions with him over the last 2 years. He met F/O Bell but did not remember much about him. Both were commuters and he was not aware of

any of them having issues with their commuting. He never had any issues from their employment and from his perception, Capt. Lampe was an extraordinary employee and he was one of the best out there. He was a true gentleman and he enjoyed talking to him.

He said as chief pilots, the furlough was quite a challenge. To put it in perspective 4 years ago they started the base with 35 pilots, everyone was excited and there was a strong "esprit of corp." and morale was high and everything was moving in the right direction. Everyone had been impacted by the recession like the rest of the industry. The very difficult decision was made to furlough and human nature was not going to do well when you were going to lose your job and because of seniority the majority of the impacted were assigned to Anchorage and we got caught in middle of this and there had been a significant decline in morale. On the humorous side, he said he told his employees that the "beatings will continue until morale improves".

The initial reaction was very negative and lot of it was directed at him and his ACPs. Since then and throughout, they never changed their style of management and still continued to support the crewmember and bend backwards for them in trying to make their job as simple as possible. He taught that worked very well, because they had had constant contact with the furloughees and the soon to be furloughed, and wrote hundreds of recommendation letters. And they were doing everything they could to maintain that relationship with them locally, because they were going to come back and work for them again.

When asked what type of reaction he got after the furlough news, he said he recalled certain conversation with some people who were very upset, with finger pointing directed at him and blaming them for the situation. He tried to empathize with them as much as possible reminding them it was not him or his ACPs that made the decisions to furlough and it came from above.

He was then asked how did the people who were not getting furloughed react? He said it was a mixed reaction. Some were in the business so long they were used to furloughs and the others were more empathetic to the furloughed.

Asked if there was any increase of fatigue and sick calls, he said initially there was an increase and spike. A lot of it was because contractually the furloughees were concerned if they did not use their sick bank they would lose it when furloughed. When the company and the IPA came to an agreement that their sick time would be paid to them or kept in the bank, it encouraged them to not call it sick. Reducing the sick calls put them on the same level as the rest of the company.

When asked about other challenges, he said they were not really challenges but a concern. They had very junior captains in Anchorage with new hires off the street assigned to Anchorage to fly, in his perception, some of the most challenging part of the world and international area where for example language barriers were an issue.

He was very pleased on how the crews stepped up and performed and human resources did a very good job in hiring the best by targeting new hires with highly experienced backgrounds in international flying in the 747 and MD-11.

Captains were very professional, very excited, not complacent and in the books, and they really stepped up. He was impressed with their performance. His whole group was very pleased and impressed with the caliber of the crews. He also tried to fly one week a month and there was a policy for management to fly. In Anchorage, they flew more than other bases and the expectation was to go out there and fly.

When asked about the challenges with new captain and junior first officers, he said UPS had a captain development program. He stated there was a program for captain leadership in the past but he did not think it existed any more. His experiences with this program were very positive and that it was a team in Louisville that put it together. He thought there was a discussion to continue this program.

He stated there was a union professional standards committee and his group worked with IPA Wayne Jackson/Ian Stephen as the domicile rep. They had a very good relationship, and they worked all Anchorage issues, and the union had a trained pro-standard person they worked with.

He was the recipient of the event reports for the whole system and received about a half dozen a day. He got all of them but was only assigned 2 or 3 a week, with ones that dealt with Asia or Anchorage.

They covered the whole spectrum, from air turn back, emergency authority, FAA reportable events, ASAP events to "my sheets stink at the Hong Kong hotel". Many were hotel and catering issues.

He said his involvement with safety was through a monthly chief pilot meeting where safety issues were shared at that meeting. He was not a member of the specific safety group. The ASAP/AQP reports he got from those groups via email. He met with his ACPs about once every 2 months and they were called business-planning meetings (BPM).

None of those topics dealt with smoke or fire; most of those meetings were mostly about personnel issues and little about flying.

When asked if after a student flew with a line instructor, then got released to the line with a management pilot, do they make them aware if there were some issues and he said yes. He also did not do much of the training or checkrides as he used to.

He stated that there was an accident investigation team at UPS and Karen Lee was in charge of it. He was not part of the team but did attend the 2-week NTSB training. Initially he was going to be part of the go team, but they decided to let Louisville handle it and that Don Creamer in Anchorage was part of that go team for Anchorage.

He said that he rode the 747 jump seat between Louisville and Anchorage and it was informal and did not do any checkrides. He primarily used it for jump seating. He also stated that Doug Menish came to Anchorage twice a month on average.

He said the delegation of duties during an emergency to the PF and PM was driven by the FOM fleet wide. They tried to make it seamless across the board. There was the PIC and through the CRM using the TEM program they encouraged open discussion in the cockpit and participation of all crewmembers; but the captain was the final authority. The SOPs stated the pilot flying would fly the aircraft and the pilot monitoring would run the checklist and work the radios, and the IRO would assist. Having the IRO on board alleviated the workload. He heard there was an issue out there with that and some techniques were for the pilot flying to do the radios and he had seen a positive outcome with both. He said the problem was that the PM may lose situational awareness if he just worked the problem and not the radios.

He said the sterile cockpit was 18,000 feet or below. There was no requirement to conduct a walkthrough on the MD11 because there was no access but he thought there was on the 747 but he did not know for sure.

He said there was no discussion internally since the accident to change anything. He and the IPA tried to discourage speculation with respect to the accident. They did not need any conspiracy theories and worked with the task at hand to make sure they focused on today and tomorrow because they were still flying airplanes. He said they had grief counseling sessions if they needed it and told them to call in sick if they could not be prepared to fly.

When asked about concerns in regards with the management and labor issues at the company beside the furlough, he said he could talk for days about that. There was a lot of "us versus them" attitude, but 95% of management and union did a great job and there was 5% on both sides that hid behind a keyboard and got on websites and made waves. The relationship was more contentious since the furlough.

Leadership would change and time would change and it would improve again. He said all those issues had an impact on their safety. The furlough, the relationship between IPA and management and the accident always were a factor. They could talk until they were blue in the face to make sure they segmented that part of it when they got into an airplane and some were better than others at doing that.

He said the age 60 rule caused some issues with the old versus young. Manning was based on the age 60 so when that changed that affected staffing.

If a crew found an issue on a walkthrough, the captain would talk to the load supervisor or any other gateway personnel. Either it was fixed on the spot; if not he would call Louisville and if that did not resolve it then there was the event report, and if in Asia, Singapore would deal with it.

He had 5 ACP's assigned to him, one on special assignment working for Doug Menish, so 4 were working for him at that point. They only had one 747 ACP, Jim Psionnes, and Don Creamer was on loan to Doug Menish, but sometimes they would use him. Don Campbell, who was assigned to Mr. Menish as a check airman, sometimes could come and help out at operations.

The furlough was not causing more work on the fleet, but more in general, by fielding questions, dealing with leave of absences, recommendations and answering questions.

He also saw the ratio of commuters versus non-commuters change. Initially, a lot of people moved to Alaska, about 100, but those were the ones getting furloughed, so now they had more commuters. The commuting was a challenge; the flights between Anchorage and Louisville were always full. People were fighting for seats, and setting their alarms 10 days in advance to book jumpseats. With all those challenges to getting to work, he was impressed with everyone still showing up to work.

He said that he had 5 ACPs, two of them were 747 qualified and one of them was on loan to the 747 standards. They had the Anchorage chief pilot and 5 ACPs, tasked with managing the pilots but their job was not checking, although they would help out, but their main job was to handle personnel/pilots. They did not do IOE or training but they would help if needed. They had an MD11 chief pilot in Louisville, John Ransom, and he owns the whole fleet to include Anchorage and Louisville for training and standards. Also in Louisville, they had a 747-400 pilot, Doug Menish and they were considered SMEs regardless of where there was an issue, in Anchorage or wherever, and they had that oversight. He said it was a little blurry, but his role was personnel, but he would supplement with the 747 or MD11 for training if need be, but that was Mr. Menish's and Mr. Ransom's primary role.

The ACPs worked for him, but Mr. Menish did send two standards 400 people to ANC that worked for Mr. Menish, but sometimes helped out. He said it looked dysfunctional but it did work, but could use some refinement. Asked what for example, and he stated that by having one person that had the whole base, including training would be better and he made the suggestion and now it was a wait and see to see how big Anchorage got. UPS was a very conservative company when it came to making decisions like that, but he guessed it would happen.

F. LOUISVILLE (SDF) INTERVIEWS

12.0 Interview: Patricia Hicks Aircraft Dispatcher - United Parcel Service

Location: UPS Global Operations Center, Louisville, KY Time/Date: 1045 EDT, 15 September 2010 Present were: David Lawrence, Katherine Wilson – NTSB; Steven Foss – FAA; Edward Horne -UPS; Martin Hinshaw – IPA

In the interview Ms. Hicks stated the following:

She was 47 years old and was hired by UPS on March 4, 1999, as a Flight Control Dispatcher. She worked in that position since 2000. Prior to UPS, Ms. Hicks worked as an assistant dispatcher and performed special projects in support of flight control. She was trained as a dispatcher at Sheffield School of Aeronautics in Ft. Lauderdale, FL. She completed training in August, 1995. Prior to UPS, she started as a gate agent at ATA, worked as an administrative assistant and then left to go to Sheffield. She worked as an assistant domestic dispatcher at ATA and later trained as an international dispatcher. At the time of UPS 6, Ms. Hicks said there were 6 international dispatchers on her shift and another 6 or 7 domestic dispatchers, along with the lead. She planned 6 flight, 4 were the same as she always did and 2-3 there were not the same. This was normal for that desk. She stated that the South America desk was the heaviest desk; desks were region specific. The South America desk planned 12-16 flights on a shift and followed up to 6 to 8. She had not worked a Pacific desk on that shift and just finished desk 6. Ms. Hicks' shift times were 2300 to 0800. Those were bid position times. The second shift was from 1600 to 0100 and the third shift was from 2300 to 0800.

The Dubai desk was desk 35, which was typically Europe but could be any flight. She had not worked this desk on that shift. She had been on the desk on the midnight shift for several years. She did not feel it was a challenging desk. She said challenges were across the board for most flights. For her shift, Ms. Hicks arrived typically at 2230. She did not recall what she did during the day prior to her shift, and stated that her sleep pattern was normal. At the time she sat down, 6 flights were airborne and she had 6 flights to plan. When she planned UPS Flight 6, she always set the altitude at Demab at 12,000 feet. She said CFNU liked to see Demab at 12,000 feet, but was rejected twice during planning. She forced the altitude into the flight plan by using a check mark and it was finally accepted. The 12,000 feet was something that CFNU would like to see. Ms. Hicks had planned the flight several hours before it departed and was relieved of her shift before it departed. She had worked the flight at other times but did not recall any issues with the flight. The support she had from the company while on duty was one manager, one supervisor and one lead dispatcher; all qualified to work the desk. Some managers and supervisors were not internationally qualified.

Ms. Hicks was required to complete recurrent training by the FAA every 12 months. Training was conducted in Louisville, KY. There was an ASAP program for dispatchers. The program was available the past two to three years. Ms. Hicks stated that she had filed an ASAP report. Other reports that were available to her were event reports and irregularity reports. Event reports were done for non safety issues and to heighten awareness. Irregularity reports would be something that needed immediate attention. She stated that if something happened on the shift, the supervisor would fill out the report and she would then approve it. Event reports were sent to the manager of Flight Control. She was given feedback and confirmation of the event report.

She stated that she did talk to the flight crews but did not talk to UPS Flight 6. The most common communication with flight crews was for weather or problems with the flight. The number to call was on the flight plans. The LIDO flight plan system had been around for 7 to 8 years as software for flight planning.

She stated that UPS had given her several tools to improve and enhance her job.

She worked four days on and three days off. The first shift times were 0730 to 1630. At the time of hand off to the next dispatcher, Ms. Hicks would transfer abnormal weather, NOTAMS, MEL/CDL and any information that would help the dispatcher follow the flight. The dispatcher that followed her was the one that worked the actual flight. She did receive DRM training, which was part of her initial training. DRM was also reviewed during recurrent. UPS required that all

dispatchers complete annual route familiarization training. That consisted of a minimum of 4 hours of flight time; one domestic flight, one international flight and one ETOPS flight on the 767. It involved riding in the cockpit. Asked if she completed any joint training, she stated that was only done during initial training.

Asked if she could handle more flights at her desk, she said that she could. When asked about the things she considered for planning a flight, she said she looked at weather, delays, and unusual activity, CDL/MEL. Payload information was given to her from the gateway; it was usually a base payload. The payload for UPS 6 was 230,000lbs and the fuel load was 191,100lbs. Asked about how she determined additional fuel to be loaded if requested by the captain, Ms. Hicks responded that she and the captain discussed the reasons for the request; she reviewed the weights and weather and then decided how much to add.

She stated that she had unlimited jumpseat privileges but had never jumpseated to Dubai. During an emergency, she stated that crews could contact her through ACARS, or SATCOM for any issues. Ms. Hicks said that if a crew had any issues concerning a payload that the captain could contact her and she would in turn contact the gateway to resolve the issue.

13.0 Interview: Darin Stuart Johnson, Aircraft Dispatcher, UPS

Location: UPS Global Operations Center, Louisville, KY Time/Date: 1110 EST, 15 September 2010, Present were: David Lawrence, Katherine Wilson – NTSB; Steven Foss – FAA; Edward Horne -UPS; Martin Hinshaw – IPA

In the interview, Mr. Johnson stated the following:

His date of hire at UPS was May 11, 1998. He was an aircraft dispatcher. When first hired by UPS, he spent 2 years in crew scheduling before joining flight control. He had about 10 years experience as a dispatcher with UPS. He received his dispatcher license in 1994. He trained himself on his own while working for a 135 operator and was tested by an FAA examiner from Salt Lake City, Utah.

After graduating from college, Mr. Johnson moved to Vero Beach, FL, and received his flight ratings from FlightSafety. He received his single engine, multi engine, instrument and instructor ratings. He then moved to Las Vegas and was an aircraft dispatcher for Scenic Air. Part 135 did not require a license but he got his license anyway. He moved to Reno and worked in reservations, then as a crew scheduler and then as a dispatcher for Reno Air. He went to UPS after Reno Air.

He was domestic and international qualified as a dispatcher at UPS.

On the day of the accident, he had a duty start time of 0730. He came in and it was "normal routine"; he familiarized himself with everything. The outgoing dispatcher turned over the flights to him. It appeared to be a typical day in flight control.

He said he worked relief so he bounced around every different desk and different shift; he did not have a set schedule. He said he knew what shift he was working and usually what desk he was working, but his desk could be changed when he got to work. He had worked this particular desk before the day of the accident.

The day and night before the accident shift, he did family activities and got a good night's rest. He arrived for his shift about 0720. He did not recall the exact number of flights that were handed off to him but thought it was about 6. He got handed flights that were airborne and aircraft that had not departed such as UPS 6. He did not receive any other flights from anyone else. He worked up a few flights before UPS 6 departed. He thought it was about 4-5 flights. He said that was a typical load for that desk and everything was normal.

The outgoing dispatcher told him that she had trouble getting the UPS 6 flight filed but was able to work through it and got it through. He said UPS 6 was still at the gate when he got on shift and it did not depart on time. He saw a message about a collapsed container and per the airport rules it had to be re-inspected. He sent Eurocontrol a delay message. He received an acknowledgement so he knew the filing was good.

He received the message about the collapsed container from the contingency department, which was located in the GOC and work next to dispatch. Contingency had direct contact with the gateway and was given the information about the container by gateway personnel. Contingency would send a message to flight control, crew scheduling, maintenance control and themselves. There were no details about the container, it was just the message. He assumed the situation was rectified because the flight could not proceed and the captain would not accept the flight.

He did not talk to the accident captain or anyone else in Dubai.

He said UPS 6 did not have that late of a departure. It was about a 25 minute delay or so and that was nothing out of the norm. He said UPS 6 was not typically delayed but at the airline in general little things like that would pop up for any given reason.

He said he could conduct flight following several different ways, through flight explorer, monitoring through IFM alerts, and he would know a flight was delayed in Lido because they were encoded in red. He was predominantly using IFM to monitor UPS 6 because he would get weather alerts as well. He also used flight explorer especially once he received the phone call from Dubai gateway that UPS 6 was returning to the gateway because of a "fire in the cockpit". He zoomed in on the flight.

He did not know how the gateway knew this information. He received the message via a phone call from the gateway. The gateway could send a message alert but it was not required. A message alert was sent from Contingency to alert everybody that said "smoke in the cockpit". He realized he was getting mixed messages and said the gateway told him directly "fire in the cockpit". He did not know who he spoke to.

When he got the message, he walked up to the bridge and told the shift supervisor it was UPS 6 from Dubai to Cologne, fire in the cockpit and told her to pull the HAZMAT now. Then walked

to the lead dispatcher and told her the same message, and then attempted to obtain more information. There was no HAZMAT on board to his knowledge.

After that, he found their exact position as best he could and reviewed their flight plan knowing they were coming back, checked for an overweight landing, and checked the weather. He tried to contact the crew by sending an ACARS message that said if able to let him know what was going on. He also attempted to contact the crew via SATCOM. He did not get a response from the crew during any attempt. He sent the message "response required" where they would have to acknowledge receipt of the message but he did not receive a confirmation from them.

He then tried to monitor the flight. He noticed on flight explorer that they were coming back. He also tried to contact the tower and crash fire rescue to obtain any information. He finally got a hold of the tower and they told him that the airplane had a problem and was continuing to Incirlik, UAB. That did not make sense to Mr. Johnson and thought it might be due to a communication barrier. He said UAB was in Incirlik, Turkey.

His observations in flight explorer confirmed that UPS 6 was going to Incirlik. It showed UPS 6 flying back towards Dubai and then out towards Incirlik. He said it gave not one but two points. He continued to try and contact the flight crew to find out what the situation was. He said the flight path shown on flight explorer made him think UPS 6 was going to Incirlik. After that he received a direct call from Dubai tower saying UPS 6 had crashed.

He said on ACARS review, he noticed that UPS 6 had descended to 10000 feet. He said he kept with the flight until he received the phone call and got a confirmation phone call from TFMU.

He thought flight explorer had the capability to be recorded but did not know if it was.

After he was notified by Dubai tower, he had immediate shock. And almost immediately after that he received a call from Eurocontrol. He advised them 2 souls on board, no HAZMAT and the fuel on board. He then alerted his supervisor and the lead dispatcher of what had happened. They pulled the paperwork and prepared to lock it down; that was the procedure. He went back to his desk. When he had first heard that UPS 6 was returning to Dubai, he had instant messaged their lead dispatcher and asked her to monitor his desk if able. He had to focus on that one flight. She took over his flights and then handed them over to the dispatch trainer. After he handed his flights over, he was not actively dispatching or responsible for any other flights besides UPS 6.

He said there were no communications one on one with gateway or Eurocontrol. He was allowed to monitor the post briefing of Eurocontrol describing the events that took place. It was about a 2 minute tape of Eurocontrol briefing ATC's attempt to contact them and the problems that they had airborne. He was allowed to listen but was not part of the conversation about their communication problems. He was not aware of communication problems between ATC and the crew until after the flight had ended. He was unaware of any communication problems whatsoever.

After he monitored the Eurocontrol call, he printed out the flight release and the weather. He said it all happened so fast and he jotted down notes of what went on. He was just trying to find out

any information that he possibly could but said there really was not any for him to obtain. He said his notes were of everything that was happening to him, contacting the bridge, communications with Dubai tower and the gateway, and everything he had already mentioned.

Eurocontrol said that the crew could not change radio frequencies so Dubai tower had to relay any intentions or any communications to the aircraft through Bahrain. He said for some reason the crew was unable to change radio frequencies.

After the accident, he remained on duty but was not monitoring or responsible for any UPS flights.

He was not aware of a process he had to go through after the accident. He thought they did very well being their first time. UPS thought he should take at least 2 days off and in the end had over a week off. He also received a phone call at home that a mental health specialist was offered if needed.

In their recurrent classes, they would go over their emergency checklist. He said there was an icon on his screen and there were a couple of ways that he could get to it immediately from his desk. The checklist was generic for any emergency. They received recurrent training on an annual basis. He said UPS did more than what was required of the FAA and trained internationally and threw in extra classes.

He said UPS had a complete international course to become international qualified for dispatching. They were trained on all different theaters, and had classroom training, on the job training, and off the desk training. It was a lengthy course even after they had been signed off domestically. He thought the training lasted about 3 months but was different for everybody because some people picked it up quicker than others.

Regarding jumpseat requirements for dispatchers, Mr. Johnson said UPS went above the FAA requirements. UPS did not just require domestic, but also international dispatchers to rotate a domestic ride, an international ride and an ETOPS ride. He said the minimum would be to fulfill the FAA requirements and that would not be a problem on an ETOPS flight. They rotated the three rides every year. This year he did a domestic ride and next year an ETOPS ride. Dispatchers could pick the route but it was subject to management approval. They requested that dispatchers did not go to the same place every time. He had not done a jumpseat out of Dubai. The first and only ETOPS ride he did was from Sydney, Australia, and worked his way back.

He said dispatcher resource management (DRM) was covered in recurrent training. He said their dispatch office was fantastic that way. No one hesitated to stand up and say they had never seen something before and had anyone come across this, and everyone jumps in to help everyone.

There was no special training for the desk he was working and he said all sector desks and theaters were covered in the international training.

As a relief dispatcher, he said he had a set schedule 30 days out. The last 5-6 years that he worked relief, only one time did they change his shift outside 36 hours of duty. He went from a

day shift to an evening shift to a midnight shift on a particular desk. This happened about a week ago. He bid the relief line and desks and shifts were by preference. Scheduling would try their best to give them the shift they preferred.

He was on day 1 of five days when he started his shift the day of the accident. Regarding how many days he had on and off shift, he said he had no typical schedule. He had "nothing set that direction". He said they had scheduling rules and limits in their contract and it all fell within that.

He did not receive any calls from Bahrain or Abu Dhabi enroute facilities.

He said it was easier to walk to the bridge and command their attention immediately and know the message was conveyed.

The calls that he received from the gateway were recorded.

Asked what could have been done to assist the event, he said the phone numbers could be operational. He said the assistants during the next shift were confirming that every number was correct and operational.

He said "ops normal" messages did not pop up on his screen. The only way for him to obtain that information was through an ACARS review so he did not recall receiving an ops normal message.

He was not aware of the emergency until the gateway called him.

When he saw on flight explorer that the flight was heading to Incirlik, he believed the flight was back up to FL320. If he wanted to know the altitude, he would go in to the ACARS review.

He did not recall looking at the altitude on flight explorer but recalled that they descended to 10,000 feet.

He did not know from flight explorer how long it took the flight to descend from FL320 to 10,000 feet. He said flight explored attempted to say current position or climbing. Through flight explorer, the last altitude he recalled them being at was 10,000 feet.

Besides a SATCOM call or ACARS message, he could receive position deviation alerts through the IFM. That would pop up on the left hand side. Departing like UPS 6 did, it was not unusual to get a deviation alert because they might have taken off on a different SID (Standard Instrument Departure) or STAR (Standard Terminal Arrival) than what was on their release. He did not know if he would get an alert if a crew did a 180 degree turn along its same flight path back to the airport; he said that was something he would check with the Lido folks. As far as he knew, the data was transmitted through the ATC network.

Mr. Johnson said an "ops normal" message was a message telling the gateway that everything was fine and the flight was not expecting to return to the gateway for any reason; the departure was fine. It was transmitted by ACARS but did not know the addresses it was sent to. He thought

it was sent directly to their printer. He did not believe the crew did voice that way but may do it through the gateway frequency.

He said ACARS review was a list of the messages sent to and from ACARS, for example when the crews request weather, messages he sent to the crew, confirmation that holding the correct operational flight plan, and position reports. It also covered airborne ACARS messages such as position reports.

He had no knowledge of whether the flight crew squawked emergency.

He said prior to the emergency, it was standard workload; it was not too heavy and was not too light. It was just everyday standard workload for the desk.

14.0 Interview: Doug Menish, UPS Boeing 747 Fleet Captain

Location: UPS Global Operations Center, Louisville, KY Time/Date: 1335 EDT, 15 September 2010 Present were: David Lawrence, Katherine Wilson – NTSB; Steven Foss – FAA; Edward Horne -UPS; Martin Hinshaw – IPA

In the interview Captain Menish stated the following:

His name was Douglas Wayne Menish, and he was 57 years old. His date of hire with UPS was April 2, 1990, and his title was Boeing 747 Fleet Captain. He had held that position since January 2006. Previously, he served as the Boeing 727 Fleet Supervisor, the Next Day Air supervisor, the 747 (classic) Training Supervisor, a Labor Relations Supervisor, the International Chief Pilot, the MD-11 Fleet Supervisor, and a SOC Manager. He had over 10000 hours of flight time, and all but 200-200 was PIC. He had 1500 hours in the 747-400, 1000 hours in the 747 classic, and about 95 hours of PIC in the 747.

He flew "occasionally", and tried to fly 3-4 times each month. Most of his flying was training or checking events.

He started flying in 1967 and became a chief pilot for Air Oregon before flying for Air Horizon. He then went to DHL as the chief pilot and then director of operations before becoming director of airline operations.

He said he knew the captain on UPS6 and they had flown together on the 747 classic, and considered him an exceptional pilot who was good natured. The last time he had seen the captain was in passing several months ago. He said he did not know the F/O. He said neither pilot had any training issues.

He said the role of the fleet training captain was primarily a flight standards role, and they conduct IOE and then released the pilot to the line. He said their responsibility from a flight ops standpoint was, for example as chief pilot in ANC, to take care of the administration items for the pilots, also to ensure proficiency and technical standards of the pilots. He said the process

"seems strange, but it works" and the separation helped keep "ANC from becoming its own small airline".

He said he had 12 assistant chief pilots; 2 in ANC, and the rest in SDF. He said in the past, some ACP's would train and check a pilot, but that was only occasionally. He said there were no issues with line checks by management, and considered it a "checks and balance" approach. He said one challenge they faced was the attempted unionization of the management pilot group, and considered it a "problem" if successful. He said most of the tensions were furlough related.

He said he learned of the accident from Frank Hemko that UPS was returning to Dubai because of smoke in the cockpit. They then received a cell phone call from Chris Williams, the international chief pilot. SOC then sent an initial notification, and they waited about 30-45 minutes for confirmation before talking to Chris via Satcom.

He said he was not aware if an emergency command center had been established, but the details of such were found in the emergency response manual (ERM). He did not have a copy of the ERM. He said the company had performed table top emergency drills, but he did not participate, and there were no 747 drills. He handled the staffing of the go team for the 747, and sent Phil Spiker because he could get to Dubai quickest.

He said he did not receive any event reports or irregularity reports regarding smoke/fire/fumes on the 747. He said he attended monthly safety council meetings to discuss FOQA and ASAP data. He said the only thing that had "blipped" was long landings.

He said he received an email from Ed Faith if there was any pilot who had a training difficulty, or when extra training was required. During IOE, he would receive a call directly from the instructor, and he would discuss the issue and handle the concerns through "Steve". He said no training issues were filtered through the professional standards committee since that dealt with personality conflicts and issues.

He said his assistant chief pilots were selected during fleet start up and was based upon experience of the individual, and overall representative of the fleets. He said he received training every 6 months and observed training when he received a training event. He said he received a yearly PC.

He said they looked at starting up AQP, but decided to start with a 6/12 month training cycle first because to start AQP on a new start-up fleet was "too much to handle". He said they still used the data to support current training. They pressed to get AQP, but he said "there was not enough time".

Regarding the smoke goggles, he said there was not a lot of discussion about their use. He said had not been any discussion about the use of the EVAS system that he was aware of. He was familiar with EVAS "in only very general terms". When asked if EVAS would be useful, he said "if it works, and they have smoke in the cockpit, it could be useful".

He had never donned the smoke goggles with the O2 mask in real life, but had done so during

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the main deck evacuation fire drills during the BCF certification process. He said he had used the full face mask before in the past. It was a lot easier to work over the glasses for the times he would use it, but considered it a pain during times it wasn't needed, like during decompression.

He said you must prepare for the worst, but must have a balance to what was needed during routine ops and non normals.

He said he had not reviewed the training records of the UPS6 pilots. He said he traveled to ANC about 2 times each month. He said he reported to Chris Williams.

He said that there had been no changes since the accident since it was "too soon".

He said he had pulled the smoke handle only in the training process, and that it was a "last resort" item. Asked what he would do if he could not get O2, he said he would go to another source, and possibly the portable O2 bottle. He said the portable O2 bottle was not reachable from the pilot's seat. He said that UPS had not changed the emergency equipment locations on the 747's.

Regarding PM and PF duties, he said the PF continues to fly and the PM handles the checklist and radios. He said the logic behind that was to keep the non-normal procedures similar to the normals, and not to introduce anything new when a pilot used the non normal checklist. It was an attempt to keep things the same. He said the PM handled the radios, and "you have to be careful".

He said the sterile cockpit at UPS was at 10000 feet, and quiet cockpit was to 18000 feet. He said that a walk-thru the cargo area was not required, but some people did that. If a pilot brought a cargo issue to management's attention, there were no repercussions.

When asked about the CRM philosophy at UPS, he said he would have to look at the FOM, but it meant speak up and "one group hug before we go fly".

He said the company communicated with its pilots through safety bulletins, procedural changes in the AOM through bulletins, and a fleet newsletter.

He said event reporting at UPS was non-threatening.

He said there was an aircraft acquisition team in charge of fittings for the aircraft when they were ordered. The BCF cargo aircraft that came from Cargo Lux had full face O2 masks, but were removed and replaced with ones similar to the UPS 747 fleet.

He said policy changes were made through standardization meetings with all the fleets to keep things standard between the fleets. These were monthly meetings.

He said there were a lot of changes when the 74's first came, and they intentionally tried not to introduce changes unless they were safety related.

He said there were no major changes implemented after the Philadelphia accident that he was aware of. When asked if the PHL accident was used as a template on how to fit the 74, he said he was not aware of it.

When asked if an emergency checklist should be completed without interruption, he said it was better, "in a perfect world". He said "as soon as you stop the checklist, you introduce risk."

Regarding fire training, he said it was introduced in initial training, but was "very general". He said there was no expectation for a crew member to leave the cockpit to fight a fire in flight, and there was no written policy to get out of your seat. When asked if he would send an IRO to fight a fire, he said "probably not", unless it was a serious threat.

He said only the alternates listed in the Ops Specs were include in the "brick", but the FMS navigation database had more airports listed. He said an EFB "would be nice"

15.0 Interview: Peter Axel Laurentz, UPS Director of Flight Operations

Location: UPS Global Operations Center, Louisville, KY Time/Date: 1535 EDT, 15 September 2010 Present were: David Lawrence, Katherine Wilson – NTSB; Steven Foss – FAA; Edward Horne -UPS; Martin Hinshaw – IPA

During the interview, Captain Laurentz stated the following:

He was 49 years old, and his date of hire was October 15, 1990. His title was UPS Director of Flight Operations. His position description involved three segments of responsibility: regulatory compliance, certification of new programs, projects and manuals and oversight for safety.

He was hired as a line pilot, and had served as a flight training simulator check airman, assistant chief pilot, instructor flight standards 727, labor relations, simulator maintenance, flight district business manager, standards manager, system chief pilot, and flight training manager (director of training).

His previous flight experience was with the US Navy. His total flight time was 4500 hours, and he said that he "still flies the MD-11". He had about 250 hours in the MD-11, all PIC. He said he flew every couple of months.

When asked about maintaining currency, he said that it was not a problem that he could maintain currency in the simulator, but that proficiency "is something else", and that he liked to fly with a check airman and that he was very cautious not to have "a new procedure named after himself".

Asked if he knew the crew of UPS 6, he stated that he knew the accident captain only by sight and to say hello, but didn't know the first officer.

He learned about the accident by a phone call to his cell phone from flight control. His first action was to take notice of who was in the room to insure the appropriate people were present,

and the entire flight district staff (everyone that he needed to notify) was in the room. He then went to one of the staff members to confirm. Then they all went to a meeting room.

The activation process was defined in the emergency response manual, and the procedure was that Bob Lekites, the airline president, or in his absence his number two man Mitch Nichols, would determine whether an activation would be required. He said his responsibility was to the Air Group and to assist the vice president.

He said UPS had table top drills several times a year, and from that they modified their process which allowed Peter to stay with the core group in the GSC and managed the process from there. The plans for the drills were the safety department's responsibility. The fleet managers were not invited to be part of the initial emergency response team.

His immediate support staff consisted of two managers; "one in compliance" and the other in certification, and they each had four supervisors. He said that system operations fell the under the chief pilot because of the potential to blur the line of operational control as system operations was primarily a support function.

He said he received and reviewed ASAP data. He said FOQA and ASAP was analyzed by the safety department and put into manageable buckets. Asked about possible issues concerning data share, he stated that there were no issues.

His department had a weekly risk report that primarily focused on ASAP events and also received monthly FOQA reports. They held monthly safety council meetings with the purpose to identify risk in the operation and to develop a mitigating strategy. This was primarily his responsibility and they also held quarterly meetings with the FAA.

Asked if he had heard about concerns regarding either the smoke fire or fumes checklist or procedure, he replied that he was not aware of any concerns or issues.

He was not part of the aircraft acceptance team. He said he had no input on how the airplane was equipped.

He said he had been in the current position about two years. It was previously held by Karen Lee who was currently Director of Safety and that the changes were part of an overall career development.

He said that he basically held the responsibility for all of the activity of the dispatchers, but not the people themselves.

Asked if he oversaw the change process to manuals, he said "in a sense, yes" he was responsible for the certification part but not always in the change itself, but the quality of the content. He said that if they identified a risk, the person responsible would have the appropriate manual changed and that he would review the finished product. Asked more about the career development program, he explained that in general terms they were continuously trying to develop a team with the right resources that worked well collectively. Things that triggered change could be retirement, or the creation of a new position. He gave an example of Chris Williams, who was afforded a newly created position and that allowed movement. He said Karen Lee was in the position for about five years.

He said his role in the company was responsibility for certificate management. He said that meant "regulatory compliance as well as the safety aspect of it".

He said the Safety Department reported to Mitch Nichols, and he was responsible for safety as it related to the flight deck. The three district managers reported to Mitch Nichols.

Asked about his role as it related to the QRH, he said he was responsible for the quality but not the content. He said he never tried a full face mask in the cockpit.

He stated that during a non-normal event, the PF would do a memory item or items, call for check list, and the PM would perform the checklists. The pilot monitoring would normally be responsible for the radios. "If there is an emergency you might have to do something differently".

He said the pilot flying would only fly the airplane and listen to the pilot monitoring perform the check list and there were certain critical items that would have to be verified by the pilot flying, such as a fuel switch.

When asked if there was a main deck cargo fire, and how prudent it would be for a pilot monitoring to stop a checklist on an aircraft on fire to answer a radio, he said "not knowing the extent of the fire, assuming that there is not any greater emergency that exists" it was more prudent to do that, "to stop the checklist if it is appropriate unless there is a greater emergency" to get the radio call, than for the pilot flying to do that. He said "Aviate, navigate and communicate". He said if there was only one single pilot who was flying and communicating, the potential was that there was only one person who knows what the clearance was.

Asked if that procedure was vetted through risk analysis, he commented that as far he knew it had never been vetted. He said that the policy had been that way for as long as he had been with UPS. He said for three crewmembers there were different dynamics.

Asked, had anyone at UPS had taken a look at that procedure to see if that was the best way do things, or was that just the way that UPS had always been doing it that way, he replied that to his knowledge, no one had sat down and looked at it.

He said if the pilot deemed it more important that the pilot deviate from a procedure in an emergency, then they may if necessary.

He said he was the Flight Training Manager at the time of the DC-8 fire incident in 2006. Asked if there were changes made to UPS procedures as a result of that incident, he replied that he was

not aware of any issues as it related to smoke and fire, and if there were they would "go and tackle it."

He stated that FedEx briefed UPS on their cargo container fire suppression procedure and that UPS looked at full face oxygen masks.

Asked if he was aware if Fed-Ex was considering EVAS, he stated that he was not aware of it. He was not aware if EVAS was installed on some of their airplanes.

He said UPS had not considered EVAS for any of their fleets. He said they might look at any risk mitigating product.

He said crews were trained to prioritize, during their initial simulator training and ground school.

He said with regards to EVAS that after an event, "we don't want to get the cart before the horse", and they would wait until they had all the facts and got the right solution for the root cause.

16.0 Interview: Robert Floyd McClelland, Air Dangerous Goods Manager – UPS

Location: UPS Global Operations Center, Louisville, KY Time/Date: 0815 EDT, 16 September 2010 Present were: David Lawrence, Katherine Wilson – NTSB; Steven Foss – FAA; Edward Horne -UPS; Martin Hinshaw – IPA

During the interview, Mr. McClelland stated the following:

Mr. McClelland was hired by UPS in June 1990. Prior to his current position he held several other positions at UPS. He served as a package car driver, account executive, customer service telephone center manager, telecommunications manager, systems manager for corporate fund centers, sales for a subsidiary of UPS, training and international customer service manager, and dangerous goods compliance manager and Airline Dangerous Goods Manager.

He was asked about specific training for his position. He stated that he went through the same training as his employees. Mr. McClellan completed the training every 18 months, but for certification it was required every 24 months by the FAA. Training was the same as his employees. People involved in the training program were trainers that UPS certifies or recertifies. They were UPS instructors other department members or anyone that required specific training. The program resided in the Dangerous Goods Training Manual (DGTFM), as approved by the FAA.

Mr. McClelland's job title consisted of three different functions; one was a help desk function, which oversaw a help desk function for internal and external customers. He ensured that they respond to calls per UPS service level guidelines. The dangerous goods training program reported to him, to ensure the maintenance and upkeep of that program and approval by the FAA. Finally, the compliance of dangerous activity program reported to him. Mr. McClelland

also reviewed the handling of dangerous goods and processing throughout the organization and any discussion or liaison with the FAA.

UPS reported to the Southern region and the point of contact was John Barrett, Branch Manager for HAZMAT Security. He also did a lot of inter-action with other carriers; typically attended as an observer the IATA dangerous goods board meetings held twice a year. He also attended the ATA dangerous goods meetings, and other associations like COSTA and LEGAT.

He was asked if he handled event reports that were HAZMAT related, and he replied yes. The handling process evaluated what the concern was, and what corrective actions must be taken. He gave the understanding of the handling of gasoline by a flight crew as an example, which was carried on board a UPS aircraft. The process and tracking of HAZMAT consisted of a couple of different streams. One was a cargo funnel, an airfreight funnel and a small package funnel. The small package funnel was the bulk of UPS's business. The package was first sent by electronic information and ensured compliance with the dangerous good process. The data was placed into the HMMS and was then captured electronically and then a summary document was created, which described what was in the container. A NOTOC was then generated with a complete list of the dangerous goods and shipping papers. Shipping papers and shipping declarations and the NOTOC was produced through the load planning function. Two copies were given to the flight crew to sign and the documents were retained for 90 days.

At the airport of arrival that NOTOC was discarded and the process was started again. UPS shipped HAZMAT consisted of only one percent of its total volume. He was asked if UPS tracked computer components. Mr. McClellan stated only from a dangerous good perspective and only if they had shipping papers. He had no idea what quantities of computer components were shipped worldwide. He said that there were certain materials that were cargo aircraft only. The HMMS was used to place HAZMAT in certain positions on UPS aircraft. There were restrictions on magnetic materials, radioactive and class 9 quantity materials only, which do not require special placement.

Everything that was cargo aircraft only was required to be accessible to the flight crew. DOT (Department of Transportation) requirements determined when a flight crewmember needed to be able to access and handle the packages or separate them from other packages. Things that were flammable, such as large quantities of gasoline, perfumes in bulk quantities, and food flavorings. Mr. McClellan stated this would be accessible for flight crews in flight. Certain poisonous materials were not required to be accessible by the flight crews in flight. Certain poisonous materials were not required to be accessible in flight. Flight crews were told what was on the aircraft and where it was loaded and there was a chart that told crewmembers what to do with on-board HAZMAT during an emergency. It gave the crews the steps to follow the emergency response procedures. He stated that there were drill codes on the back of the NOTOC, basically there were actions for the crew to take to handle HAZMAT. Mr. McClellan said the biggest challenge that he saw was ensuring that packages complied with the regulations of ICAO. The regulations speak for themselves ICAO or 49. Information had to be captured during the process.

Mr. McClelland had been in his current position since January 2008, and associated with the department since 2004. Mr. Thomas Green was in the position prior to him. Mr. Greene still worked for the same boss as Mr. McClelland. Thomas Green moved to another existing position.

He said in his manual they would depict dangerous materials limitations that could not be loaded under the cockpit area of a 747-400; primarily radioactive materials and maybe magnetized material would also need to be somewhere else. Any radioactive materials that required special placement on the aircraft would be on the NOTOC, and the same if magnetized material required it.

Depending on the cargo quantities the DOT/PHSMA (Pipeline and Hazardous Materials Safety Administration) allowed material to be put in class C compartments (lower bellies) instead of being accessible to the flight crew. UPS did not take advantage of this, and would put the material on the main deck and make them accessible to the crew.

The dangerous goods training was for employees that load containers for flight, those who accepted the dangerous goods, their COMAT shipper program and the load planner people. Dispatchers would be included with the load planners.

He did not see event reports that pressured the crew to accept dangerous goods. The closest example he had was a crew that did not want to accept gasoline on the aircraft because they did not think it was legal. It was legal to accept gasoline if it was packaged correctly, which it was.

Mr. McClelland said an incident involving an aircraft or a package tendered for air transportation had to be reported to the FAA. All those reports came to his office and he was responsible to report them to the FAA. Sometimes we would also do inspections with the FAA to look at those packages. Almost all HAZMAT problems were from packages that were not listed as HAZMAT.

Lithium batteries, depending on the regulation, had different classifications, 49 CFR were less restrictive than ICAO. It was based on the size of the battery, according to the amount of lithium or the power of the battery. Depending on that content, the government agencies decided what was accepted or not. Smaller batteries were usually accepted by the regulations of DOT, and it was to protect them from short circuits. On the ICAO side there was a packaging, drop test and label requirements. If batteries were shipped in the laptop for example, they would not have to be labeled since they were protected within a unit.

All dangerous goods must be loaded in accordance with orientation labels.

All reports of batteries catching fires were reported to the FAA as of last summer and UPS had reported a few. If the event happens on the aircraft then there was an immediate report required.

We had an issue with a battery incident. A package had smoldered in Honolulu and we thought it happened on a UPS flight so we reported it to the FAA. We had other battery issues but we believed they did not occur on the aircraft. They worked very hard to involve the FAA and DOT on these issues. Chris Bonanti at the FAA received all these reports.

The shipping restrictions for lithium batteries were very complicated, depending on the size of the batteries, they affected the limit that could be in the package. The limit could be 5 to 30 kg depending on the battery classification.

Mr. McClelland was aware of the recurrent HAZMAT training that goes on with the flight crew. Bobs department had inputs into that training. There were a lot of different inputs that go into the training and it was not just his department set of eyes. He did not know what needed to go into the flight crew training and what was reviewed or required by the FAA.

He was primarily responsible for the airline side of HAZMAT. UPS reported about a couple of hundred 5800.1 reports. Very few were air related, and probably just a handful, less than 10. Most were located in the sort center. It was unusual to find one on an aircraft.

UPS was ICAO and 49CFR compliant and would accept packages under either regulation. The shipper determined under what regulation to ship. Since 2008, UPS allowed IATA, but if the package went overseas then it had to be under ICAO.

The flight department sent them the material to look at. Because things would change at a rapid rate, they were able to update them. They saw components of the flight crew training module within the last 3-4 months. He did not observe flight crew training himself and did not think anyone from his department did either.

He said ICAO and IATA were the same. They tried to harmonize rules so to make it easier to transport. Under ICAO, lithium batteries were more restrictive but for oxygen cylinder, CFR49 was more restrictive.

There was language in 49 CFR that said cargo must be made accessible in-flight so the flight crew can handle and separated it from other cargo.

He said Karen Lee or Pete Laurentz could do a better job answering the questions on the amount of training, the specific training in combating fires and HAZMAT issues. There were books on the aircraft for emergency response code.

17.0 Interview: Karen D. Lee, Director of Airline Safety – UPS

Location: UPS Global Operations Center, Louisville, KY Time/Date: 1050 EDT, 16 September 2010 Present were: David Lawrence, Katherine Wilson – NTSB; Steven Foss – FAA; Edward Horne -UPS; Martin Hinshaw – IPA

During the interview, Captain Lee stated the following:

Her date of hire at UPS was 11/16/1987. She was part of the original group hired to start the airline. Her current title was Director of Airline Safety and she had been in this position since February 2, 2009.

Before she took over her current position, Chris Williams held it. She said he left the position because of a personnel assignment.

Other positions she held at UPS included ACP on 727, fleet chief pilot of 727, flight training manager on 747 classic, flight standards division manager, 3 years in crew resources running crew planning and scheduling and training planning and scheduling, 1 year as special assignment teaching corporate leadership, and 3 years as Director of Operations.

She was current and qualified on the 747-400, but might not be proficient. She was not an APD or check airman on the 400. She could fly as often and as much as she put it on her schedule. Her goal was to have 3 landings every 90 days. Only one time since flying the 747-400 did she have to go to the simulator because she was past the 90 days. She said she flew about every 2 months and would usually fly to ANC and back. When on the ground in ANC she would go in to the simulator. She also did a Shanghai trip a couple of months ago. She tried to do one international trip a year to see what was going on out there. She always flew with a check airman.

The FAR part 119 positions were required to fly 6 segments every month. If flying international, they also did 1 international trip per quarter. The requirements were specified in the system chief pilot's manual. She said her schedule did not allow her to be compliant and the manual specified what to do if she could not be compliant. It covered all management pilots, not just 119 positions.

She reported to the president of the airline.

She took her current position because she was asked to come here and so she accepted the role in safety. She had 17 direct reports and some indirect people due to the transition. She said UPS was transitioning from a traditional safety function to SMS; it was a small change but a huge change. Personnel from her department just went through the MITRE 5-day course. They had a separate development team working on it since last year. She said it took her a year to really understand it and now they had their vision. On July 1, 2010, they put the airline safety program implementation project team together. They understood that the expertise needed at the beginning of the project might not be the same expertise needed at the end of the project and people may rotate in and out of the team. She said the process was going great but they were on a hiatus on the government side right now.

UPS had a FOQA program longer than an ASAP program. They had ASAP about 6 years and FOQA about 8 years. She said they had a wonderful set of gatekeepers who were technical and competent. They were creative with the data. She said Will Holmes was the IPA coordinator, and she worked with Ray White. She said Mike Langford worked on the analysis of the data, and he had a degree in engineering. She said they got support from the fleet reps so between him and the FOQA guys, they go over the data.

She did not know how often the FOQA team met but it was based on needed and lately they were meeting often. She said they formally got together with the union a couple of times a year

and did quarterly reviews with the CMO. UPS had a FOQA and ASAP program for pilots and dispatchers.

There was an ASAP supervisor who served as coordinator. IPA provided 3 members and UPS provided another 2 members. They had been with the ASAP program since the start. She said the union and the company were working on some changes to the program right now because the program was not as efficient as it could be. She said 2 of 3 ERC members have names and that it should not be that way; the FAA had problem with that.

She said there was no FOQA or ASAP data pulled specific to the 400 and smoke, fire or fumes that had been brought to her attention.

She said the training for a hazmat fire was to get the airplane on the ground. They did not encourage that either member get out of their seat. They did not prohibit it but told pilots to get it on the ground. She said they emphasized to get it on the ground and the crew would need to weigh it heavily about whether to go down to the cargo area.

Pilots received training on smoke, fire and fumes in initial training. They got an opportunity to go through checklists in detail. In recurrent training, she said there was some scenario on smoke or fire each year.

She said safety interfaced with the flight operations staff. When they had quarterly AQP reviews, they started presenting data in risk based format. They all got together and went through those quarterly reviews.

She said the safety culture at UPS was extremely strong. From the corporate office to the front line, the message was "Expectation 0" which meant zero safety defects. She said it was a lofty goal and they had made considerable strides. They had a comprehensive health and safety program run by front line employees, and robust safety committees. She said the culture was safety first. "Expectation 0" was more of a corporate level term.

"AirUPSers.com" was the crewmembers' website where they put technical and safety information, and the ASAP e-news. ASAP e-news came out when the ASAP group deemed it necessary. She thought the last one came out a week or two before the interview.

She said ASAP e-news was targeted on one topic. They also put out twice per year a comprehensive ASAP feedback document. She said safety was completely woven in.

She said they were transitioning from CRM to TEM.

There were a series of events in the MD-11 dealing with landings. In this case they did not do a standalone safety presentation, but brought all MD-11 pilots in for a specific training event.

She said the biggest safety concern on the B747-400 was proficiency. It was a long haul airplane and did not get a lot of landings.

She thought UPS had a decent start at a fatigue program. They managed it from the chief pilot. She could not quote the policy off the top of her head, but said if a person called in fatigued, they would replace the crewmember, and the fatigue committee would review the event. The committee determined whether the sick bank should be docked or not. This was also done through crew event reports.

She was not part of the B747-400 acquisition team.

She never used full face oxygen mask. She had jumpseated on an Airbus but never opened container.

She said the separate smoke goggles and mask could be awkward at times. Comparing the mask in the 400 to the classic, she liked the aeros mask. She had donned the oxygen mask in flight when the other pilot went to the restroom. She never had to use the goggles in flight but put them on during every preflight.

Crews were not required to do a walkthrough of the main deck cargo.

Regarding to changes to training or procedures since the accident, she said they talked about when they were going to make changes and that they were anxious to get information. She said they knew changes were coming but they did not have enough information.

The emergency response plan was in the emergency response manual. There was a hard copy in the response room and also online. They had an emergency response room at the GOC.

She did not know the accident crew.

She was notified of the accident by flight control. She pulled over to the side of the road and called Bob Lekites. They discussed it and activated the go team rather than waiting for headquarters to get together. She said Frank Hemko was in charge of the go team. The go team fell under her.

Members of the go team attended annual training. Mr. Hemko conducted the training this year. It was a day-long session. They had FedEx brief them on the Narita accident. The initial training for go team members was informal; Mr. Hemko would review the necessary information with them. She said Mr. Hemko and a few others had attended the two week NTSB accident investigation course but she had not gone to it.

One gap that was recognized regarding this investigation was preparing the real nature of relationship between the NTSB and GCAA. She said they were going to have to modify their responses for Annex 13 protocol.

She said they did annual big drills and some smaller ones.

At the initial stages of the investigation, they came together to deal with the emergency. They quarantine people to work the investigation and all others would go back to work as normal.

At the time of the Philadelphia accident, she was the Director of Operations. She was a part of the initial response and was a part of the group that fell out and went back to work. She said there were some recommendations from the company that came out of the investigation but she did not know what had been done. She knew that there were NTSB recommendations that were implemented, for example one related to providing access to crew of hazmat. She said there were changes to the NOTOC system and they now had one very clear communication document that went to the captain and the dispatcher can access readily.

The recommendation also was for the Cargo Airline Association to work with the ARFF (airport rescue and fire fighting) teams on providing specific information about the layout of their cargo aircraft. They worked with IPA to conduct a number of training sessions with various ARFF groups at some of their larger operations. They continued to do this. They worked with ARFF and the FAA on developing a video that would be distributed domestically and then internationally to their ARFF people.

She clarified that the recommendation was to provide ready access of HAZMAT information to dispatchers so that they could provide that to the ARFF group at the airport. They had to exercise this a few times when an emergency was declared and dispatchers would pull the HAZMAT information and provided it to the ARFF team at the airport where the emergency was declared.

The safety department had not increased their monitoring of the 747-400 fleet due to furloughs; they looked to the operators to do that. She said if the safety department saw anything from ASAP or FOQA, they would have an interaction there.

In addition to FOQA and ASAP programs, they had the crew event reporting system, and the aviation quality database (AQD) which was their centralized safety repository, and through AQD they had been able to provide safety event reporting for aircraft maintenance in line operations. It was not in heavy maintenance yet. It had been deployed to all of their line maintenance operators and to ramp operations in Louisville and Rockford. In October 2010, she said they would have web access to the system for all gateways, both domestic and international.

They did not have an anonymous safety reporting system but reports could be submitted confidentially. All systems were non-punitive.

She thought there were about 30-50 ASAP reports submitted each month across all fleets.

There was no feedback to the submitter that the report was accepted by the reporting system. They utilized administrative staff to help. Depending on the issue, it would be assigned out and a responsible person would look at the issue, would take care of it and provide feedback to the crew when they submit their report. She said Tony Ford was working with the chief pilot's office because they were not as satisfied with the responses they were receiving as they would like to be. They were trying to streamline the process. They would start working on the quality of the response. The process would be for them to bring the response to the safety office before it went to the submitter. Currently, they just did a spot check. If report concerned hazmat, it would go to dangerous goods department.

She said TEM was a step beyond CRM. CRM had to do with managing workload in the cockpit. TEM took it one step further and taught them to recognize a problem, trap it and fix it. She said TEM was not effective unless they had good CRM. She said CRM would still be trained there were specific CRM items for instructors to mark on the grade sheet.

Regarding how often the director of airline safety changed, she said before Chris Williams, the two who held the position before were in the position for 5-6 years. She said Mr. Williams made a "quick trip through here" because at the time he was put into the position, it was a traditional type safety role where they were reacting to safety concerns. She said the senior executive team thought they needed to change and create a chief compliance officer. She said they were 3 separate airlines and wanted to make one airline. She said they brought the "119 group" together to run as a team.

She said from the FOQA data, they had seen unstabilized approaches for some time, and had 11 occurrences of taking off w/o flaps set. She said they had to fix it twice before we got it fixed. She also said they saw landings outside touchdown zone. She said could not monitor on 75 but on all other fleets.

In ASAP, they had seen increases in altitude deviations, along with the takeoffs without flaps set were first identified thru ASAP.

She said they originally had a great working relationship for 13 years with IPA. She said the last 6 months had not been healthy, and she described it as "combative". She said she had not seen any rise in FOQA or ASAP reports in the last 6 months.

She said she was worried about "seepage" into the cockpit of outside issues, though she did not see any evidence of it. She said the flight team on management side was side was vigilant of that.

She said safety was involved in looking at the safety mask when the purchased and aircraft.

She said there were concerns about security of information with FOQA and ASAP, and distribution to flight crews needed to remain secure.

She said the new union leadership was more militant.

Her total time was 9000 hours, and she had been in management a long time. She was with TWA and Seaboard previously.

She said she was concerned that the labor issues could create distractions and conflict that could carry to the cockpit.

She said she wished they had a LOSA program, "but we aren't there yet".

She received SAFOS directly from the FAA and the CMO office.

Occupational health did blood borne pathogens training to their go team.

In normal operations, the PF flew and the PM talked to ATC and input into FMS. When the autopilot was off, PM manipulated the mode control panel. When autopilot was on, the PF did it. The PM also handled the altitude knob. In non-normal events, there were no differences in PF/PM duties. The PM did the checklist and handled ATC. She said the captain had the discretion to change that if the PM was having a hard time managing the checklist and ATC was distracting.

She said, in her opinion, it was not prudent to have the PM stop a checklist to do ATC communications

She said first she would start with flight staff and discuss her concern with them. She would expect them to change whatever needed to be changed.

She said she had not done anything to improve it.

She said information from FOQA and ASAP was sent to the pilots via Air upsers.com, ASAP Enews, a FOQA newsletter, safety bulletins, crew briefing pages, flight departure pages if fleet specific or based upon immediate needs.

She was asked about bulletins regarding smoke, fire, and fumes, and she said she would have to look that up.

18.0 Interview: John Dwight Niermeier, B747 Assistant Chief Pilot – UPS

Location: UPS Global Operations Center, Louisville, KY Time/Date: 1300 EDT, 16 September 2010 Present were: David Lawrence, Katherine Wilson – NTSB; Steven Foss – FAA; Edward Horne -UPS; Martin Hinshaw – IPA

During the interview, Capt. Niermeier stated the following:

He was 54 years old, and his date of hire at UPS was October 31, 1989. He was the 747 Assistant Chief Pilot, and was based in Louisville. His total flight time was 7000 hours, 6000 of which was PIC. He had approximately 1000 hours in the B-747-400, 900 of which was PIC.

He stated that he began as a Navy pilot, and was in the Navy Training Command for one year, then flew A-6s. He left the Navy in 1985, after 7 years and accumulated about 1500 hours in the service. After the Navy, he went to work for Boeing as a B-747 classic ground school instructor and flight engineer. He then became involved in the development of the 747-400. After which, he became a B737 flight instructor.

He started with UPS in 1989 as a flight engineer on the classic 747, then was a check engineer, a training center instructor giving IOE, flew as captain for a short while on the classic 747s before going to the DC-8, went to the training center where he was a captain and check airman for 3 yrs and then was promoted to DC-8 Assistant Chief Pilot. He held that last position for eight years until he moved over to his current position. He was in the B-747-400 initial cadre and had held the current position around 3 or 4 years.

Asked why he was based out of Louisville when the airplane base was in ANC, he said "we do as much of our work out of here as we would up in Anchorage". He said it did not make sense financially and he could do IOE out of Louisville just as easily. He further explained that he was responsible for the scheduling of the other B747 check airmen and chief pilots, until recently, and he needed to work with other scheduling folks.

Asked if he knew the accident captain, he stated that when he "saw the picture, it rang a bell." He did not know if he flew with him or not.

He first met the first officer when he began doing IOE with him. He believed it was about four legs, about a month previous.

Asked if he reviewed the F/O's training records he said no and the only thing he saw was the comments the line check airmen fill out and destroy at the end of training. The only comments that he saw reflected that he did a nice job, and progressed nicely.

Asked, how he did, he said that F/O Bell performed excellent, had some glass experience from the Airbus, was quick to learn, and flew the airplane very nicely. Even though he had not yet had his landing trainer, he said he did fine. F/O Bell flew his international line training with Mike Williams to Shanghai. He could not recall anything else about the F/O and they had not experienced any emergencies.

He said F/O Bell shared some personal stories about his family and his home in Florida. He also recalled that F/O Bell was a US Marine, but could not recall whether he was a pilot in the Marines or not.

He recalled that the IOE started in Anchorage, as he flew in from Shanghai with his other instructor. Also, he remember that F/O Bell had hurt his left index finger and that delayed his "bounces" (landing trainer). He had cut his finger while cutting his hedge and had to wear a protector for awhile.

Compared with other first officers, Capt. Niermeier said F/O Bell was "above average", with very little re-covering of a topic needed.

Capt. Niermeier said he always made pilots put on the oxygen mask during training, mainly so that they would learn how to stow it. He did not make him them put on the goggles other than the normal preflight.

Asked if he had observed other pilots having difficulties donning masks he said "no". He said he had never seen anyone "have to hurry" to put on an oxygen mask in flight so he did not know if they had difficulties when wearing a headset. He said they were usually at altitude when they donned a mask and did not have a headset on. With glasses, they commonly would take the glasses off, put the oxygen mask on, and then put the glasses back on. In the simulator, they would don the oxygen mask quickly and eyeglasses might end up askew or a headset would be knocked off the ear. He had never seen anyone put on the smoke goggles in an emergency.

He did not show his students how to clear the smoke goggles. To clear the goggles, he said they had to pull the lever on top of the oxygen mask to allow extra flow.

If a pilot did not have oxygen flowing from his oxygen mask, he said "there is a walk- around bottle right behind him", as well as the first observer's mask. Also one should check the mask door to make sure that it was open. He said that the walk around bottle was inspected by the first officer as part of the cockpit preflight.

Asked about PM and PF duties during a non-normal event, he said that the PF had to stay focused on flying while the PM would read the non-normal procedure and would get a response from the PF while the PF understands and concurs with the next step.

He stated that the PM duties were to read the checklist, monitor the radios, aircraft systems and backup the PF. Asked if the PM was responsible for the altitude changes, in either case, with or without the autopilot, he said "yes". It would be the PF's job with the autopilot on for the mode changes and the PM's job to manage the mode changes with the autopilot off.

Asked if there was any confusion with two pilots on the mode control panel, he replied "occasionally".

He said the PM handled the radios during a non-normal. When asked what should happen if he was reading a checklist and received a radio call during a non-normal event, he answered that he should ignore the radio call unless it was related to the non-normal. Asked if he saw the students stop the checklists to answer the radio during a non-normal or ignore it, he replied that he had seen both. And he had seen the crew deviate from the procedures where the PF would take over the radios.

Asked that in the event of a main deck fire, if one should stop the checklist to answer a radio call, he said that they might, if the radio call was related to the non-normal. He said the F/O must prioritize tasks. He disagreed with the statement that it was SOP to answer the radio first.

Asked to characterize the workload of the pilot flying when the autopilot was on and the airplane was controllable, he replied "very easy".

He stated that the walk-around bottle was not accessible from the pilot seats, but the first observer's might be.

Asked if he heard any complaints about flying with the accident crewmembers he answered "no".

During a checkride, in terms of CRM, he checked to see that they did not alienate the other crewmember, were willing to take ideas from the other crewmember and depending on seat position, that the captain did not let the other crewmember overshadow the captain. He also checked that the captain let everyone know that he was in charge, but that he wanted input from the team.

He said that UPS was very safety conscious. He said that he felt that sometimes they even "go a little overboard'. Asked how, he said, certain ways they interpreted rules. They would take the hard line and take the side of safety. He said he had heard the phrase "expectation 0" and it meant that they expected 0 accidents and 0 incidents. He had seen posters and flyers that said this.

Asked about general tensions between the line pilots and management pilots he stated that it was more likely because "those two guys just didn't get along".

Asked if there was an impact on pilot morale due to the furloughs, he said "Yes", but that it did not dominate cockpit conversation, but stayed on the ground.

Asked when on the implementation team if there was a discussion to go with the quick don mask or the full face mask, he said that he believed that they stayed with the quick don because it was easy to scratch the lens on the full face. He said he had used a full face mask and it was fine and easy to stow.

He stated that he did not talk to his students about the smoke handle. He thought it was covered in CBT. He had pulled the handle during the acceptance test. He said that the B747-8 would be certified without the smoke handle. He said if the fire was somewhere else other than the cockpit and the handle was pulled, that it would draw up smoke from the main deck.

He thought about 50% of the flights were augmented crews. He thought he had to put an oxygen mask on because a pilot vacated his seat at least every other flight.

Prepared by:

Captain David Lawrence, NTSB Dr. Katherine Wilson, NTSB