NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

January 31, 2020

Attachment 2 – Miami Personnel Interview

Summaries and Transcript

OPERATIONAL FACTORS/HUMAN PERFORMANCE

DCA19MA143

Contents

Dustin Quiel – Manager of SMS

Interviewee: Dustin Quiel
Date: May 6, 2019
Location: Location: Naval Air Station Jacksonville, Hanger 117 Room 207, Jacksonville, FL
Time: 0812 EDT

Present: Shawn Etcher, Katherine Wilson, Warren Abrams – NTSB; David Thompson Federal Aviation Administration (FAA); Steve Joffrion – Miami Air; Paul McDonagh – IBT; Rich Lee – Boeing;

Mr. Quiel was represented by Gary L., Halbert – Attorney for Holland & Knight

During the interview Mr. Quiel stated the following:

He was 42 years old and was the Manager of SMS[1] at Miami Air. He was in charge of the safety program. He had been in his current position for 8 years. Prior to Miami Air, he had been employed by 2 previous airlines and was in charge of their technical procedures. He currently reports to the Senior Director of Safety and Security.

He started in aviation after college and he needed a job. He was interviewed by the chief pilot at a previous airline he had been employed by. After that airline he went to work at World Atlantic, he was the 5th person hired, as he was to get the manuals approved with the FAA. His current boss, at Miami Air, called him about February 2011 about the job.

SMS was at its infancy phase in the U.S. and with the FAA; they were part of the pilot program. They were either the 5th or 6th airline to implement SMS. When Part 5 came out they had 3 years to implement the requirements and they accomplished it a year prior to the rule being applicable.

He really enjoyed the work he did with SMS. He ran the audit internal evaluation program and did audits with all the departments. They managed the incident reporting, in which every employee has a username to file incident reports. He took the lead for all safety action groups. If they had hazards, they identified them and implemented actions that were needed. They met quarterly as well as at the end of the year he did a yearly report. They went over all of the data that they received and then set goals based on that data. He also interacted with the gate keeper of FOQA[2]. All FOQA data was deidentified and the gatekeeper monitored the data. An example would be flap overspeed; if he identifies it, they make sure the airplane had an inspection. They also had an ASAP[3] program that they worked with. The publication department also worked under them, if a procedure was changed, they required a subject matter expert to do a risk assessment and check regulations for compliance with the possible change. If it was a pilot procedure that affected flight attendants, they talked to the subject matter experts in that respective area.

[1] Safety Management System
[2] Flight Operations Quality Assurance
[3] Aviation Safety Action Program

They kept busy. There was no typical day; they had a good staff and normally he took care of the "daily emergencies" and the rest of the staff worked on the audits. They had an 0800 meeting with all the directors where they went over the fleet. Whatever incident that was opened they worked on it, almost every day was different.

Crews could talk with the union's safety chairperson, if they wanted to keep it to a pilot. They also had an online reporting program the pilots had ASAP as well. In their software they were asked if they wanted to submit it anonymously. The software removed identified information. There was also a box in the crew room and hangar to submit reports.

ASAP was not utilized "that much;" they probably generated 40 ASAP reports in a year, but it fluctuates. They had yearly training on SMS, but he was not sure why pilots did not use ASAP that much. They encouraged its use.

He had been a big proponent of ASAP and about 5 years ago they had a 4-hour block during new hire training with pilots and flight attendants and he went over the safety program with them. They only had ASAP for the pilots at the moment. He went over it again during recurrent training. The 4-hour block was for new hires. They did not deal with the corrective action when a pilot filed the report; the union looked at it with the ERC.

He interacted with the FAA whenever a letter was issued to Miami Air, it ended up on his desk. and he replied with the corrective action. Sometimes the FAA would come and talk to them about their suggested change. He did not interact with the FAA a lot. Some of the new projects were implementing a new solution for Lithium battery.

He knew the FAA had a job to do and if they had to do an audit they may come and see them. He had interacted with the POI[4] a couple of times enough via phone, visit or email. The POI was located in Miramar.

He was not sure how often the ERC[5] met. In the past if the gatekeeper saw something in the data, he may put out something about it, but he would bring it up

He found out about the accident when he got a phone call from the director of safety sometime late on Friday night. The director told him initially they had gone off the end of the runway, a couple of hours later they activated the emergency response. The incident response team was composed of checklist with a tiered call list which included 3 tiers with personnel and phone numbers, that comes from the dispatch department, who were there 24 hours a day. When they got activated they went to the office and got duties assigned to them which included getting the manifest and locking up the records.

The boxes for personnel, to file incident forms located in the crew lounge and hanger were checked once a week. He was not certain how many reports came in anonymously.

The staff in the department was made up of 5 personnel and he felt it was adequate.

[4] Principal Operations Inspector
[5] Event Review Committee

He could not recall any weather factors other than deviations for weather.

The online reporting program had a form for fatigue. Whenever they get one it triggered a meeting with the union, scheduling, and chief pilot or vice president of operations and they discuss what was related to that item. Unless the pilot puts a fatigue report in the system, he would not know about it. He was not sure if it was a requirement for crews to fill out the form.

He felt they had a good safety culture at the Miami Air since he had been there. SMS was a new idea in the US. Operators must be open to getting reports and they could not punish the employee. If they did punish, it would end the program. They treat everything carefully and they keep it confidential. They encourage pilots to let them know of issues on the line so they can fix it.

They got the facts before they made changes. If the submitter put in their personal information, they deidentified it and brought it to the meeting. Every Wednesday after the morning meeting they went over every open safety report. They went over it with management, so they had timely closure and nothing falls "through the cracks." They responded to the crewmembers with what they did to correct the concern. If he was to rate the safety culture on a scale of 1 to 10 with 10 being the best, he would rate them as an 8 or 9.

Some of the improvements he had seen recently was getting reports or concerns in a timely basis. He was not sure if pilots were comfortable with reporting safety concerns.

The safety department reported directly to the CEO[6]. If they needed finances to correct an issue or they needed him to "crack the whip" they went to the CEO. They normally got it. He felt comfortable with speaking up about safety concerns and an example was how they got a staff of 5. They needed a dedicated person to audit the departments to conduct adequate audits. They got 2 auditors, one dedicated for maintenance and one for operations.

He was not sure how long they had been flying into NIP[7] but since he started with Miami Air, they had been working with DoD[8]. If they were going to fly into a new airport there was a form to fill out, which included runway length, and other items to make sure they could fly in and out of that airport safely. Then about 24 hours before the flight that was to go there, they did another risk assessment and considered weather, if it was a special airport, the captains experience, as well as other factors. They assigned a point system and if it reached a certain threshold, they had to involve operations to verify; if its higher yet they may have to involve the CEO.

They did work with external programs, and those programs come and audit them. The FAA audited them "all the time," sometimes TSA[9], sometimes customers, also the DoD audited them every 2 years.

[6] Chief Executive Officer
[7] Jacksonville Naval Air Station, Jacksonville, Florida – the accident airport
[8] Department of Defense
[9] Transportation Safety Administration

They had been discussing expanding ASAP and the flight attendants had agreed. They were working with the FAA to get that program up and going. There had been no discussions on the maintenance side. Incident reporting was open to every employee of the company.

He was aware of flights into NIP via the FOQA program. The data from last year revealed that NIP was one of the top airports in their matrix, which comprised of 4 different matrices and he was not certain what the data told him because he had left that data in his office.

He was not sure how fast changes in the manual happened as the subject matter expert was responsible.

The daily meeting was occurring even though the accident had happened.

They were working on the flight attendant ASAP. The dispatchers and mechanics were not unionized; however, he was not sure why they did not have ASAP.

Every 20 days the QAR[10] data was downloaded, and they looked at the data. The gatekeeper forwarded a copy of trends to all the pilots and the POI.

Has only once rescheduled the quarterly meeting in the last 2 to 3 years because the CEO could not be there.

EFBs[11] were great because they could provide aircraft information on the aircraft. Due to the nature of their operations they could control the information of the manuals.

The EFB's had Wi-Fi and 3G. Crews would be able to fill out forms for the online reporting system. The iPads were aircraft specific.

He estimated they operated about 5000 flights per year. A couple of years ago they refused a flight to Jackson Hole, Wyoming.

They download the QAR every 20 days because of the MOU[12].

The last DoD audit was August 2018, and he could not recall having any findings.

He clarified that the AOM[13] was on the iPad and he thought the crew was given a paper copy.
He never did a ride along on the jumpseat. They were trying to get the operations auditor to do ride alongs. The reason they did not was because the audits were done via the FAA SAS.

Operations and maintenance audits were done on a monthly basis and the items that were to be done yearly were spread out over the 12-months.

[10] Quality Assurance Review
[11] Electronic Flight Bag
[12] Memorandum of Understanding
[13] Aircraft Operations Manual

Dispatch has mission mode which had tiers and they could press a button and send out a message, when there was an emergency. He felt they were more restrictive than other operators, but he only saw their small part.

When considering a new airport he was not sure of all the items on the risk assessment form. He was not sure if crews were made aware if a runway groove or non-grooved. He said he was very proud of what they do, if they get a finding, they felt it was "free consulting" and they like it because it reduced the bias.

DCTs[14] were done monthly and they did it on their own.

He only saw one employee group, so he was not sure of morale.

He felt we asked everything.

If he could do anything, he would put ASAP on everything.

Interview concluded at 0922 EDT

Armando Martinez – Director of Safety and Security

Interviewee: Armando E. Martinez, Director of Safety and Security, Miami Air International
Date/Time: May 6, 2019, 0955
Location: Naval Air Station Jacksonville, Hanger 117, Jacksonville, FL
Present: Shawn Etcher, Katherine Wilson, Warren Abrams – NTSB, David Thompson – FAA, Rich Lee – Boeing, Paul McDonagh – IBT, Steven Joffrion – Miami Air

Representative: Gary Halbert, Holland & Knight

During the interview, Mr. Martinez stated the following:

He was 72 years old. He had been in his current position for 6 or 7 years. His date of hire at Miami Air was August 1, 2008.

He had been in the safety department for about 6 months learning the job when he became the director of safety. His title did not change but technical publications was put under him as they developed SMS, and then security was added.

He started his aviation career flying in 1967 out of Opa-Locka Airport and got all of his licenses there. He could not get a job as a pilot because a lot of pilots were coming out of Vietnam, so he bought a DC-3[15] and started a small cargo operation flying Part 91 flights initially to the Bahamas;

[14] Data Collection Tool
[15] The Boeing Company DC3-G102, DC3-G102A, DC3-G103A, DC3-G202A, DC3A-SCG, DC3A-SC3G, DC3A-S1CG, DC3A-S1C3G, DC3A-S4C4G, DC3C-SC3G, DC3C-S1C3G, DC3C-R-1830-90C, DC3D-R-1830-90C. Source FAA Order 8900.1, Volume 5, Chapter 2, Section 19 Figure 5-88 dated July 15, 2019.

he did that for 17 years. The operation became too expensive, so he ended that business in 1987. He flew B-707s[16] with Florida West before Pan Am offered him a flight engineer position. At the same time, Pan Am Express offered him a position in the right seat with the opportunity to make captain in a year so he took that job. He became the union chair and gained experience in management. Pan Am went under and sold off Pan Am Express to TWA[17]; he flew there for a couple of years. He flew ATR42s[18] in the northeast in inclement weather but those were "falling out of the sky" so he went back to Florida West until they went bankrupt. He went to Falcon Air in their initial class and got a type rating, became an instructor and check airman. He wanted to fly the biggest plane possible to he went to Atlas Air flying B747s for 1.5 years when the owner of Falcon Air said they were looking for a chief pilot. After chief pilot, he was the director of operations. During Falcon Air's bankruptcy process, he served as the chief financial officer. When Falcon Air was purchased, he got a call from Miami Air that they were looking for a director of safety.

He held type ratings in the DC-3, C-46[19], DC-6[20], ATR, B-727[21] and B-747[22]. He had about 17,000 hours total time which did not include his time as a sim instructor. He was unsure of how much time he had as PIC. He had no time in the B-737.

His duties included overseeing the SMS program. He reported to the accountable executive who was the CEO. He led the SMS program which was started at Miami Air in 2008 as a part of the pilot program. There were 5 carriers that came out of the pilot program and Miami Air was the only charter company. There was a NPRM[23] for Part 5 so he worked close with the FAA to help put that together. He had safety training with the FAA in 2002 and was a little bit ahead of the game and had met many folks who were a part of the development of SMS.

He felt that there were 350 employees in the safety department because the whole organization was a part of it. Until about 2011, he was in the safety department by himself until he brought in manager of SMS. About 1.5-2 years ago, he could not let departments audit themselves, so he brought in an operations and a maintenance auditor; he convinced the accountable executive to fill these positions. He also recently got a computer programmer working under him; the safety department had initiated many programs and needed someone with that expertise.

[16] The Boeing Company 707-100 Long Body, 707-100B Long Body, 707-100B Short Body, 707-200, 707-300, 707-300B, 707-300C, 707-400, 720 Series, 720B Series Source FAA Order 8900.1, Volume 5, Chapter 2, Section 19 Figure 5-88 dated July 15, 2019.
[17] Trans World Airlines
[18] ATR-GIE Avions de Transport Régional ATR42-200, ATR42-300, ATR42-320, ATR42-500, ATR72-101, ATR72-201, ATR72-102, ATR72-202, ATR72-211, ATR72-212, ATR72-212A. Source FAA Order 8900.1, Volume 5, Chapter 2, Section 19 Figure 5-88 dated July 15, 2019.
[19] Curtiss-Wright Corporation, USA Commando CW-20. Source FAA Order 8900.1, Volume 5, Chapter 2, Section 19 Figure 5-88 dated July 15, 2019.
[20] The Boeing Company DC-6, DC-7, DC-7B, DC-7C. Source FAA Order 8900.1, Volume 5, Chapter 2, Section 19 Figure 5-88 dated July 15, 2019.
[21] The Boeing Company B-727, B727-100, B727-200. Source FAA Order 8900.1, Volume 5, Chapter 2, Section 19 Figure 5-88 dated July 15, 2019.
[22] The Boeing Company 747, 747-100, 747-200, 747-300, 747-SP. Source FAA Order 8900.1, Volume 5, Chapter 2, Section 19 Figure 5-88 dated July 15, 2019.
[23] Notice of Proposed Rule Making

He was proud of the systems they used, particularly the online manuals program, which allowed them to ensure they were in compliance with regulations by linking parts in the manuals with applicable regulations. They also used Fusion which took data from radar, weather, and FOQA, for example, and created training scenarios. He considered Miami Air to be like a laboratory, and the company worked with him and supported these initiatives. He was budget conscious and worked with companies to help develop these programs that Miami Air could use for free but then those companies could market and sell. He was supported because he was appreciative and did not take advantage of the situation, and they saw results in their RSI programs such as improvement in unstabilized approaches.

Over 60 airlines had asked Miami Air to help them with their SMS. They did go to meetings and were able to cover for each other when one person was gone because everyone knew what others were doing.

He guided interns to help them succeed within the company, for example, paying for someone to get their dispatcher certificate. They would not fire someone to give an intern a full-time position, but interns would be placed in these open positions because they were learning in the safety department, knew SMS, were versed in the manuals, etc. The safety department was involved in about 50% of the new hires into the company. It was a small company.

He had previously worked with manager of SMS at Falcon Air; they had worked together for almost 18 years.

He interacted with the FAA a lot. He worked on a lot of projects for Miami Air that involved the FAA. For example, he worked with the FAA upper management and principals for 1.5-2 years on a solution to lithium battery fires. The solution did not use water to extinguish the fires, so it was not toxic. The solution had many iterations and testing to ensure it was effective. It was a two-step system using glass beads that would melt from the heat of the fire extinguishing the flames and then an absorbent material to contain the toxic fumes. The final solution required special approval from the FAA, but it was ultimately approved after doing a risk assessment and showing the FAA data that it worked. It is not a part of their emergency equipment on some of Miami Air's aircraft. The system was developed as a smaller bag for use in the cockpit and a larger box for the cabin.

If Miami Air saw a problem, they would try to work and solve it; the beauty of it was that the company supported it.

The flight safety department was responsible for accident investigations. Dispatch was first notified of the accident who then called him; they were notified within 10 minutes of the accident. He lived close to the office, so he was at the office about 10 minutes after receiving the call. He got in his car and called the accountable executive who had already been informed. He wanted to come into the office calm and try to gather as much information as possible, secure documents, get the passenger manifest, pull the emergency response manual and follow the steps. There was a list of people to contact including DoD; they called it their "tier 1".

There were multiple ways that Miami Air personnel could report safety concerns. The hotline, which had been in place since before he was hired; ethics hotline; people would see him in the hall

to report a concern and he would enter the information into the hotline. The safety department needed to gain employees' trust which was the hardest thing to do. They previously used WBAT UTRS[24] which they modified to work with SMS. They presented this to NACA[25], and then other carriers started using this system too. About 2.5 years ago, he realized they needed improvements to the system and worked with a company to develop a new system, ProSafeT. He was concerned about losing the previous 8 years of safety data and the programmers were able to use a mapping function to carry over the data from WBAT to ProSafeT. About 2 months ago, they released a phone app for ProSafeT. If possible, he encouraged personnel witnessing something unsafe to take a video to document it and then complete a report afterwards.

He also worked with ASIAS[26] to create ASSIMO. He needed something for Miami Air's pilots to access the data from flights that was more user friendly and he need system to put critical NOTAMS at the top. Pilots were required to read all NOTAMs[27] prior to a flight, but it was too much information and some critical information could be buried. Other information that could be at the top was information regarding an alternate; he felt it was critical to have that information readily available but when diverting a crew may be short on time due to proximity to airport or a low fuel status and could also be dealing with weather in the vicinity.

The most stressful part of his day was driving to work. Work was fantastic and he organized his day based on what he thought was the highest priority. He might look at what flights there were doing and whether there was a risk that was missed or overlooked. They might be asked how quickly an airplane can be brought somewhere for a charter flight; he would focus on those and less on the regular contract that were already set up.

When developing their SMS program, he recognized that how they did business was not written down anywhere. So, for example, the sales department now has a written flow of what happens from when a phone call comes in with a request for a charter until the completion of the flight and its paperwork. The document includes responsibilities and procedures.

They had a RAMP[28] program to give a rating to a new airport they were flying to. They would look at the crew and other factors to assign a rating. If the rating was 85 points or higher, it required the Vice President of Operations to approve it. All of these assessments were documented.

An airport that they routinely fly to would be assessed every 6 months. All airports that they were contracted to fly to would be assessed 24 hours before the flight. They were done by dispatch, the FOQA manager or director of dispatch.

If he had a safety concern, he would go directly to the accountable executive and had done so many times. With SMS, he went straight to the accountable executive. There had been 3 people who held the accountable executive position since he started at Miami Air and he had gone to all of them.

[24] Web-Based Analytical Technology-Universal Technical Resource Services, Inc.
[25] National Air Carriers Association
[26] Aviation Safety Information Analysis and Sharing
[27] Notice to Airmen
[28] Risk Assessment Management Plan

He had little interaction with FOQA which was managed by a gatekeeper from the union. Pilots were sensitive about the data, particularly data related to their flying skills. He would tell the manager of SMS what he wanted to see, and the manager of SMS would work to get that for him. He also received quarterly FOQA reports which were also dispersed to the pilot group. These reports were also sent to the FAA.

He recalled that NIP was flagged by the FOQA data as a hotspot, but he did not know the details.

He recalled FOQA data being shared about hard landings at an airport in Concord and they were able to determine that these landings were happening because the runway was narrower, and pilots believed that they were at a higher altitude than they actually were. They made Concord a special airport and required a captain-only landing.

They also changed the stabilized approach criteria from 500 feet to 1000 feet because of FOQA data. At first, they had more go-arounds because of it but once crews got used to configuring earlier, they had fewer unstabilized approaches.

In the previous 2 weeks, he has started attending the 0730 daily maintenance meeting in the hanger where it was discussed what they would be doing for the day. He started recording the meetings and personnel started paying attention more.

He knew what safety concerns existed in the company because the reporting systems were reliable and feedback from company check airmen. They were starting LOSA[29] this week. With permission from the accountable executive, he will be able to do observations on the line from the cockpit. He also encouraged pilots to write on the back of their trip envelope any issues that occurred during a trip including problems offloading bags; anything that added stress to the job. That information would be loaded into ProSafeT to track which airports they were having problems at. The reports would go to the safety department and other applicable departments.

Pilots would file an ASAP report through ProSafeT. The manager of SMS could pull the number of reports they received each year. He [Mr. Martinez] did not get involved in ASAP reporting. He wanted pilots to report them directly. If he was invited to meetings, he would attend. He thought they were getting less ASAP reports because pilots would just submit reports through the normal reporting system. He told the manager of SMS that they needed to respond to any report that came in to show employees that they cared and to build trust.

When a report came in, they would analyze it and look at how to mitigate it. If they needed to change processes and procedures, they would go to the manuals, technical publications for operations and maintenance. All procedures had been tagged with a barcode and all were tied to a regulation. If a change was made in one manual, they would need to also see what other related manuals and/or training needed to be changed. They were developing a new system with ProSafeT called IETM (interactive electronic technical manual) to help track which manuals were related and needed to modify also.

[29] Line Oriented Safety Audit

They shared safety concerns with pilots in recurrent training. If it needed to be shared more quickly, they had a read and sign system to send out documents to pilots electronically.

The biggest concern at the airline was the same as other airlines, not getting quality pilots.

The Colgan accident was not good for the industry. He made a suggestion to raise the age of pilot mandatory retirement to 70 years, when he went to InfoShare.

They had a good pilot pool at Miami Air. He loved charter flying because he hated the thought of going to the same airports for the rest of his life.

Miami Air had more turnover with first officers than captains. The current hiring class had 5 FOs. He also put one of his auditors in the new hire class to get experience.

He was currently training the manager of SMS to take over his position when he retires so the manager of SMS was taking on the day to day activities.

The manager of SMS, taught SMS for 4 hours during initial training and 30 minutes during recurrent training.

He did not think receiving a B-737 type rating would help his job.

A check airman was in charge of the ASAP program.

The union had access to FOQA data.

The FAA did not want copies of some safety information because it would be subject to FOIA[30]. So he would show them data on the computer.

He shared an example of a time when they misloaded passengers from two college football teams. Rather than letting passengers select where they wanted to sit, the flight attendants loaded one team in the back and the other in the front. The airplane was off balance and when power was applied, the airplane "sat on its tail". After reviewing what happened, they realized there was no written procedures for this, and changes were made.

LOSA was being developed so there was no system yet for frequency of doing LOSA events. The safety department wanted to participate and do observations in the cockpit.

He was not aware if the company had a process for pilots to consider risks before the flight such as experience of crewmembers, weather and maintenance events and how that in combination might impact the flight.

There had not been any concerns that he was aware of about arrestor cables at any of the airports they went to.

[30] Freedom of Information Act

He had nothing else to add to the interview.

Interview concluded at 1208 EDT

Nelson Martinez – Flight mechanic

Interviewee: Nelson Martinez
Date: May 7, 2019
Location: Miami Air Room 307
Time: 0801 EDT

Present: Shawn Etcher, Katherine Wilson, Warren Abrams – NTSB; David Thompson Federal Aviation Administration (FAA); Steve Joffrion – Miami Air; Paul McDonagh – IBT; Rich Lee – Boeing

Mr. Martinez was represented by Gary L. Halbert – Attorney for Holland & Knight

During the interview Mr. Martinez stated the following:

He was 56 years old and was a technical representative for Miami Air. He further described his position which meant he represented the company on the flight or when the aircraft was in MRO (maintenance, repair and overhaul). He also represented the company on any maintenance functions. He started at Miami Air in March 2015.

He was a certificated A&P[31] and he also had an FCC[32] license. His specialty was in Avionics.

He was in the cockpit during the final phase of the flight. The policies and procedures allow them to sit in the back after climbing through 10,000 feet on departure, and then return to the cockpit prior to descending below 10,000 feet on arrival.

He started in aviation during his 11th year in high school, there was a program for aviation vocational studies at Robert Morgan school. He completed his general aviation studies then in his 12th year in high school transferred to George C. Baker and completed his airframe studies. He then went to work for Barfield working fulltime and completed his A&P studies in 1982. He then went to work for various companies around the airport, one was Arrow Air in maintenance, then Cleveland Pneumatics as an inspector, then PBA (Providence Boston Airways) working on C-402, EMB-110[33], DC-3 airplanes for a couple years, then Page AvJet where he worked on various aircraft for a few years. He then went to work for Northwest Airlines in Atlanta for 15 years where he did DC9 overhauls. In 1991 or 1992 he took his FCC test and then went into the avionics field while at Northwest Airlines. In 2003, he went to work for another company as a tech on the line in Miami, then to AAR working in the hangar doing avionics installations and modifications for a short time. He then left aviation and went into information technology and received his associates

[31] Airframe and Powerplant
[32] Federal Communication Commission
[33] Embraer S.A. EMB-110P1, EMP-110P2. Source FAA Order 8900.1, Volume 5, Chapter 2, Section 19 Figure 5-88 dated July 15, 2019.

degree in networking, then a bachelor's degree. Then got back into aviation and went to work at Avianca as a field engineer working with the research and development team as more of a liaison, which he worked in mostly the support arena doing avionics. He then came to Miami Air in 2015.

He reported to maintenance control; he did not do anything to the airplane without first calling maintenance control, who were available 24 hours a day 7 days a week.

There were 16 or 18 mechanics that did this job at Miami Air, he had no opinion on if that was adequate staffing.

The report time on the day of the accident was at 0730. The crew met in the hotel lobby and they left the hotel about that same time. They went to NIP not sure what time they arrived on the base, but he thought it was around 0800 and the airplane was already on the ground. They met the incoming crew and was given a report from that captain that the No. 1 engine thrust reverser was inoperative. He contacted maintenance control and let them know what was happening with the airplane and received some guidance from them regarding troubleshooting. He then went through the process with the flight isolation and maintenance manual references. He determined that the thrust reverser was inoperative. Maintenance control determined it was best to defer that thrust reverser. He then proceeded to defer it per the MEL[34]. The procedures involved a series of maintenance actions. He documented everything in the logbook, then they loaded the aircraft with cargo, he fueled the airplane, boarded the passengers, and then departed the ramp. As they taxied out, they noticed the right pneumatic pressure was at 0. They tried a few things to determine if it was an indication issue or a stuck valve; however, he could not get the pneumatic pressure back. The APU shutdown per the procedures on taxi out, then the left pneumatic pressure went to 0. The determination was made by the captain to taxi the airplane back. He called maintenance control again to troubleshoot the indications they received. The first thing he wanted, and went, to check was the crossbleed valve. He noticed the right pack was not working but the left pack was. He went into the E and E compartment and found no power on the temperature controller. He called maintenance controller with his findings, went through the FIM[35] and could not determine what the problem was and deferred the right pack. The pneumatic pressure was troubleshot through the FIM and determined it could be an PRSOV valve. He deferred the valve, under the instruction of maintenance control, on both engines. That deferral required him to open the engine cowls to lock out the valve on both engines. Now the airplane had 3 deferrals. Everything was documented in the logbook and the captain was briefed on what was done; after that they departed NIP. The MEL for the packs required the flight to fly under 17,000 feet. There were no incidents during the flight, and they left the APU[36] on the entire flight, and it landed in Gitmo[37]. They took on fuel, loaded the airplane and passengers and departed Gitmo. As the flight was nearing NIP there were reports of bad weather. He recalled that they were set up for runway 28 when he returned to the cockpit. He also heard ATC[38] reporting there was moderate to heavy precipitation on runway 28. At some point it was asked if runway 10 was available and what the weather was like. ATC reported that runway

[34] Minimum Equipment List
[35] Flight Inspection Manual
[36] Auxiliary Power Unit
[37] Guantanamo Bay Naval Base, Cuba also known at GTMO
[38] Air Traffic Control

10 was favorable. The captain looked at the performance numbers for the airplane and determined to land on runway 10. He recalled seeing the runway lights and the rain was extremely heavy on final, but he thought it was a normal landing but off the centerline to the right a little. When the airplane touched down the right main came down, then the left main, then the nose gear. After landing, the captain used reverse thrust and the brakes. He recalled hearing the captain say something about the brakes but was not sure what he had said. The airplane started veering off to the right a little, the captain cycled the reverser to possibly bring them back on track towards the centerline of the runway. At some point he remembered hearing the captain say they were not going to stop by the end of the runway. He recalled seeing the red lights at the end of the runway and that it was dark. He then remembered that there was a loud noise, he braced, then he thought they went up in the air and then back down on the ground, and the airplane came to a complete stop. There were "bells and whistles" going off; it was "complete chaos" but there was no screaming and it was very organized. The captain ordered him to exit the cockpit; he tried to get the jumpseat out. He realized his hand was injured, so he opened the door and jumped over the jumpseat since he could not stow it for some reason. The flight attendants were going over their evacuation procedures. The captain and first officer came out of the cockpit. The front two doors on the airplane were opened and they then realized they were in water. The slides were attached to the bars and both slides were deployed. He thought there was an issue with the 1L door slide, it deployed but it was crooked, the 1R deployed fine. There was a lot of confusion, but the flight attendants did a good job ordering everyone to get their life vests on and they ordered the over wing exits opened. He assisted in bringing down the life raft which they used at the 1R door. He thought the aft rafts were used at the over wing exits but was not certain. The emergency lights were illuminated, so there was plenty of lighting. They evacuated the passengers as fast as they could using the life rafts, primarily at the right wing if he recalled correctly. He stated that the first responders were at their aircraft right way or within minutes of opening the doors. They evacuated everyone and they were the last off the airplane. He recalled some folks concerned about their pets. The captain jumped into the water to attempt and rescue the pets, but he was unable. He did recall that something happened to the raft at the 1R door where they tried to deploy it after putting it through the door and it did not deploy; something also occurred that caused the slide to deflate. They lost the slide and raft at the 1R door. A boat approached and asked if everyone was off the airplane. They had been the last to get off the airplane; they then got on the boat and went to the dock.

When asked if he knew why the APU had shutoff, he stated that the crew shut down the APU as part of the checklist.

When asked if he knew what happened that cause the thrust reverser to become inoperative, he stated that the incoming crew did not specify when the thrust reverser became inoperative but that was the only issue with the airplane.

When asked why the captain decided to return to the ramp, he stated that was just standard protocol when additional alerts were received during the taxi.

When asked if there was pressure to get the flight out, he stated that they were running late and there was no pressure on him to get the airplane out. He did not recall the length of the delay. He also thought the crew was waiting for their paperwork.

The takeoff from NIP for the flight to Guantanamo was normal.

When asked since he had been employed at Miami Air how many times had he sat in the jumpseat for landing, he stated in the 4 years he has probably see a couple of thousand landings.

When asked who flew the approach into Gitmo, he stated that it was flown by the captain as well as the departure per the regulation.

When asked if there were any issues between the crew, he stated the crew had no issues with each other that he could tell, and everything was done by the book in a professional manner; there was causal conversation, but they mostly focused on the work at hand.

The captain used the right thrust reverser in Gitmo as well as the brakes; they worked normally as far as he knew. He recalled that the crew had armed the autobrakes.

Prior to departing Gitmo on the accident flight, he refueled the airplane and loaded the airplane; they were behind schedule, but they tried to expedite.

On arrival into NIP when he returned to the cockpit, the crew was going through the prearrival items, looking at the charts and they were in communication with controllers; he felt there was nothing unusual. He did have a headset on to listen to radio No. 1 when he sat in the jumpseat. He recalled that the weather radar was on and he did see some weather cells on the screen; there were some red areas displayed on the weather radar and he recalled they were about 80 miles away from them when he first observed them. There was no indication from the crew that the weather was of concern. The captain had requested to ATC what runway 10 looked like. There was a series of conversations, most of those conversations with ATC involved the captain. He recalled that the conversation indicated there was moderate to heavy rain on 28 and that 10 looked favorable. The captain setup the FMC[39] for runway 10. The first officer was primarily doing the communications with ATC during that time. He saw the captain working on the EFB looking at the landing performance; there was no conversation about the performance that he could recall.

The crew was to conduct a "VNAV"[40] approach. He could see the lights on the runway, and he recalled that it was raining heavy; however, he could see the lights at the end of the runway on final approach. He was not sure how far they were on final when he saw the runway lights but, they were in heavy rain at the time. He recalled that the captain had turned on his wipers a way out from the runway, well before final approach; the wipers were on the highest setting. There were thunderstorms around in the area, he recalled seeing the thunderstorms "well before final approach." He thought both wipers were on but was not sure; he knew for certain the captain's were on. He did not see anything out of the ordinary when coming in.

[39] Flight Management Computer
[40] Vertical Navigation

There had been no audible indications or illuminated lights in the cockpit, everything looked perfectly normal and there were no indications. He could not recall hearing the 100 above audible. The airplane was off centerline "a bit to the right." He recalled the captain saying, "I got this," disconnected the autopilot and brought it back to centerline, but not sure how far out that occurred. He did not recall hearing audible call outs or hearing anything audible. He could see the runway end lights and the red lights at the end as well as the centerline lights. It was hard to tell if the airplane lights illuminated the runway due to the rain. He was not really focused on the approach lights but rather the runway lights.

The crew did go through the final checklist. He did not see what they set for the autobrakes but heard them do it. He did not notice the speed brake handle after they landed or if they had set it to auto deploy. After landing, the captain deployed the right thrust reverser then the nose landing gear touched down, the brakes were applied, and the captain had said something about the full effect of the brakes not being there.

The rain made the conditions unusual, but they had landed in conditions like that before and there was no reason to be concerned about the landing. As far as he knew everything was operational. The airplane did not initially yaw but at a certain point on the runway it veered to the right and the captain stowed the right thrust reverser and once back on track he deployed it again; he thought that occurred a few seconds after they had landed.

He could not recall lightning on the runway itself after they landed.

When asked if there had been any lights in the cockpit that illuminated, he stated that the only light was the reverser light on the overhead; he did not recall any other lights that would cause concern.

He did not recall seeing the green auto arm light for the speed brake illuminate. That light would tell the crew that the spoilers were in the armed position and that would have been a green light on the dash. He simply did not recall if he saw it or not.

The heaviest rain that he could recall was on final approach as they were nearing the runway. He was not sure of the distance but did recall seeing the rain and the runway lights. He did not experience any turbulence.

He thought the weather was a "little heavier than normal" although he was not a pilot, but he had sat in the jumpseat a lot over the last 4 years. He thought they had to sit on the jumpseat because of the DoD contract and it was in their general maintenance manual.

During the evacuation he had no problems opening the cockpit door, he just could not get his seat up and that was why he had to jump over his seat to get out.

He did not recall seeing anything displaced in the galley, like the ovens. He exited from the 1R door. He did not assist in walking through the airplane; he did not pay attention to see if the captain had walked through the cabin.

Had it been a normal landing, there was another crew waiting for the airplane and they were to ferry the airplane back from NIP to MIA. There was no conversation that he was aware of about the crew's duty day being extended.

He had been on a flight that diverted to an alternate airport in the past. There was no concern in doing that and he never felt any pushback to get the flight out.

He could report anything that was of concern to him using the online system. He had never personally done that because he never had any safety concerns. He thought they could also report it anonymously and he thought it was called "Pro Safe." If he did have a safety concern, he felt comfortable reporting it.

During the evacuation, he thought one passenger was allowed to come back into the cabin, but he was not sure when that occurred; he thought that the passenger had left something on board and wanted to retrieve it. When not in the cockpit, he sat in the crew rest seats during flight. He did not recall any issues with the hotel the night prior. He slept well. The crew "seemed normal, just a normal day." He had flown with the captain before and he seemed normal. He had no discussions with the crew about sleep issues at the hotel; he had no issues at the hotel. The first officer was quiet, although he thought it was his second flight but was not sure. The captain did give the first officer "pointers," and "instructions." He did not feel like the first officer had distracted the captain from any other duties.

His expectations while in the jumpseat was that he was an observer and if he "sees something, say something"; he felt comfortable speaking up. He had spoken up in the past.

When asked about the deferrals on the airplane, he stated that there were 4 DMIs[41] one of which was in relation to ETOPS[42] which was non-technical. He classified it as "unusual" to have that many DMIs.

When asked if he had been listening to ATC, he stated he had and was wearing the headset through landing. He recalled hearing the captain ask for a weather report but could not recall for which runway. The weather report was given before final. He did not recall hearing a conversation involving the runway conditions.

The captain, first officer, and 4 flight attendants were the last ones off the airplane.

When asked why he had left Northwest Airlines, he stated that he had been with Northwest Airlines for 15 years; they had been in contract negotiations and the mechanics were locked out and never had a chance to go back to work.

He did hear ATC tell the crew about the arresting gear but could not recall the exact verbiage. There was no discussion by the crew about it.

It was dark and he could not tell they were in the grass after the red lights; he had no idea where they were, and he did not know they were in the water for a while.

The 1L slide inflated and then turned. When asked about the slide that deflated, he stated that the 1R door slide inflated normally and deflated when one of the rafts were attempted to inflate out

[41] Deferred Maintenance Items
[42] Extended-range Twin-engine Operational Performance Standards

that door; the raft was in the overhead bin. He was not sure if the aft rafts were inflated after they were pushed through the over wing exits.

When asked about any sensation he experienced in relation to airspeed, he stated he did not sense any sensation of going faster or normal speed. It was not his role to monitor the airspeed.

When asked what DMI stood for he stated it was deferred maintenance items.

There was no conversation when he was in the cockpit of holding and waiting for the weather, nor any conversation about 1 thrust reverser inoperative, or the heavy rain.

They could clearly see the runway lights and they were right of the runway lights. He recalled the captain disconnecting the autopilot, saying "I got this", and manually correcting the airplane back to the runway extended centerline.

The first officer was "pretty focused" at the task, and he did not recall anything being said by the first officer on the approach. He also did not recall the FO saying anything after landing and he only recalled something from the captain about the brakes and that the brakes "were not working" but was not sure of the exact phrase he used.

He was not sure why the jumpseat would not stow, maybe because of his hand injury, and he could not recall if the captain or first officer could stow it. He clarified that it was the bottom part of the seat that he could not get to stow.

He did receive CRM training; there was nothing specifically he was required to look at while sitting in the jumpseat and they were considered observers. If he saw something, he was to advise the captain, like a light or indication. It would be minor stuff that might have been missed during a preflight check like forgetting to put the strobe light on.

They all carried personal computers or tablet which was what he had. Inside the aircraft, they had a thumb drive with their guidance, and it was specific to that aircraft.

He signed off all of the DMIs. Everything that he did was under the direction of maintenance control and the information that was given to him.

He could not recall any conversation on final approach that would have been transmissions similar to a PAR[43] approach, but he was not familiar with a PAR approach.

He always listened to the No. 1 radio when he was sitting the cockpit because that was the one the captain was on; he may listen to a public announcement but normally only the No. 1 radio.

When asked who followed him out of the cockpit, he stated he could not recall who came out after him nor could he recall what cut his finger.

When asked if he had training in evacuations, he stated he had initial training; he felt that he was prepared.

[43] Precision Approach Radar

When asked if he had ever had an emergency in flight, he stated the last emergency flight was coming back from South America and the flight had diverted to Mexico City because of a passenger having convulsions; he had never had any aircraft emergencies.

When he evacuated, he grabbed his tote bag, but they had no access to their crew bags. He grabbed his tote because of his personal effects and his flashlights.

Never had a time where he had to alert the crew in flight for something that was amiss.

He did not hear a GPWS[44] audible alert.

When asked what the master caution did, he stated that it alerted crews to a problem on the aircraft. If he had seen it, he would call it out to the crew.

When asked if he had any injuries from the accident, he stated that he had broken the bone on his ring finger.

While on approach he felt "completely comfortable." He was not a pilot and it was not for him decide on the weather conditions and by all accounts there was nothing "abnormal."

He thought they had an "outstanding program" and over 25 years without incident and they got adequate training, access to what they needed; he was completely confident.

When asked if he could think of anything that would make what he did better, he stated that the FAA did not have provisions in the FARs[45] to specifically address flight mechanics. They were just considered mechanics, but their job was a much different scope than the average mechanic, as they did not work in a hangar or on the line. He would like to have provisions in the regulations to address their duties and responsibilities.

Interview concluded at 0954

David Ochsner – Chief Pilot

Interviewee: David Alan Ochsner, Chief Pilot, Miami Air International
Date/Time: May 7, 2019, 1001 EDT
Location: Miami Air International, Miami, FL

Present: Shawn Etcher, Katherine Wilson, Warren Abrams – NTSB, David Thompson – FAA, Rich Lee – Boeing, Paul McDonagh – IBT, Steven Joffrion – Miami Air

Representative: Gary Halbert, Attorney with Holland & Knight

During the interview, Mr. Ochsner stated the following:

He was 67 years old and had been the chief pilot at Miami Air for about 2 years. He started is training on September 2, 1997, and his official date of hire was November 1, 1997.

[44] Ground Proximity Warning System
[45] Federal Aviation Regulations

His duties and responsibilities included all pilot hiring, oversight of all pilots with the exception of some management pilots and monitoring of training to make sure all was going well. He also worked with financing, scheduling and human resources, and dealt with everything to do with pilots including sick calls and absence. In his position he reported to the Vice President of Operations.

He had about 15,000 hours total time, of which about 7,000 hours were on the B-737, all of which was as Pilot in Command (PIC).

He retired from the US Air Force as a Lt. Colonel and was active duty from 1974 until 1996. He trained in T37s and T38s and got his wings in 1975. He flew B-52s for 14 years and served as a copilot, aircraft commander, instructor at Castle AFB, the B-52 schoolhouse for Gs and Hs at the time. He moved to Wright Patterson AFB in 1988 and worked 4 years with B1 and B2 squadrons. He transferred to University of Miami to work in their USAF ROTC program for 3.5 years before retiring in 1996. He worked outside of aviation for about a year before he got back to flying and was hired by Miami Air in 1997. He flew as a FO then a captain on the B-727 for 1.5 years in each seat, then became a captain on the B-737 in Fall 2000. He did his B-737 training at Boeing. He officially retired when he turned 65. He then worked as a sim instructor as a contractor before coming back as a full-time employee in the chief pilot position.

He still flew ferry flights but not flights with passengers. He wanted to keep flying and had to per his position.

There were approximately 70 pilots at Miami Air, 31 or 32 of which were captains and the rest were FOs, including the 4 FOs in training. They could hire directly to the left seat, but they did not do that.

The pilot pool was not what it used to be. Many pilots were low time pilots and lately they were receiving referrals from other pilots at the company. Some pilots that applied had a lot of jet time; some had no jet time.

He wanted to get a feel for those who had minimum time, check their license, medicals, etc. If he wanted to hire the pilot, he would have them come back to do fingerprinting, drug testing, pull PRIA[46] reports, etc. Human resources handled the details, but he set up the schedule.

Pilots were hired full time and pay was based on the position and years of service. All pilots had a 70-hour per month guarantee and were given a base pay each month which could increase when flying with per diem and overtime pay. All pilots were paid from day 1 of training.

The accident captain had been with the company since 2008 and upgraded to captain in 2015. He had flown with the captain many times; the accident captain was a good, “excellent pilot.” The accident captain started teaching initial ground school; he was a good ground and sim instructor and check airman. The accident captain was very knowledgeable, very detailed. He [Mr. Ochsner] had never heard any concerns about the accident captain.

[46] Pilot Records Improvement Act

The accident FO had no jet experience when hired by Miami Air, but had an ATP and "quite a bit of time." The accident FO worked and studied hard; he did pretty well in training, but his initial sim partner was dragging him down and the company let that other first officer go. He did a couple of extra simulator rides and did ok on his checkride.

He talked to the captain who flew with the accident FO on his previous OE[47] trip and from what he [Mr. Ochsner] could recall being told was that the accident FO was doing a good job. It was hard to tell, however, because the accident FO had just a few hours on the airplane.

Who a new pilot flew with was sometimes just a matter of the schedule because they did not have a lot of check airmen. They tried to pair a new hire with the correct person and wanted a new pilot to fly with multiple check airmen during OE.

He had not personally flown with or observed the FO in the simulator.

The first 6 days of indoc focused on processing with human resources, getting uniforms, system logins. Pilots were also given the manual ahead of training to be familiar with aircraft limitations and memory items to include the Boeing FCTM[48]. After that, ground school lasted 3.5 weeks and they reviewed topics such as normal procedures, manuals, Boeing OPT[49] and Jeppesen to learn the flows. At the end there was an open book exam then a closed book, written exam.

After ground school they had 2 fixed-base simulator sessions, which were sessions in the full flight simulator but with the motion off, where they reviewed the switches. They then prepped for the FAA oral with a pre-oral. They had 8 additional simulator sessions in the full-flight simulator, a couple with the motion off. If the pilot was ready, there would be a pre-type rating practice then the FAA type rating. The type rating would be completed in the left seat; two FOs would be paired for the ride and would do a seat swap. After the type rating was a LOFT[50] and additional ground and simulator training on topics such as CAT II and III approaches, ETOPS, PAR approaches, RVSM[51], and long-range navigation. Finally, the pilot would complete OE which required a minimum of 25 hours be flown, but that was very unlikely. Some pilots finished OE in under 50 hours, and some had as many as 100 hours. Because Miami Air did not have a lot of flights it could take a while for pilots to complete OE, possibly 1-3 months.

They had to let a pilot go from training maybe every other class; the class sizes were about 4 pilots and occurred about every 3 months. Miami Air did all of their own instruction. It usually took about 3 years to upgrade to captain.

Asked how Miami Air puts safety first, he said everything they did had to be a safe operation. They preached that; it had to be a part of the culture.

[47] Operational Experience
[48] Flight Crew Training Manual
[49] Onboard Performance Tool
[50] Line Oriented Flight Training
[51] Reduced Vertical Separation Minimums

Recurrent training was yearly and was staggered for pilots based on their date of hire. It consisted of 2 days of online courses, 2 days in the simulator and a checkride or proficiency check. Every 6 months they did an OPC[52] LOFT for an evaluated item in the simulator.

All pilots could fly to all airports, however, some airports had restrictions; for example, Kathmandu was a check airman only airport. Otherwise it would be on a case by case basis that a pilot may not be allowed to fly to an airport. They also had high minimum captains for the first 100 hours.

When operating into a new airport, they completed a risk assessment using; the RAMP program. Once a week, any airport they operated to that had not been evaluated in the last year or any new airports they were going to operate to were evaluated. He would generate the form for each airport, looking at the Boeing OPT, Jeppesen and airport chart. He made sure there were no changes to current airports and evaluated the new airports. Items to consider were runway length, mountainous terrain, military only operations, ones they had never been to previously and lack of a precision approach.

He had flown into NIP many times over 21 years. He would not do anything different because of the arresting cables at the airport; touchdown was generally beyond them anyway and they could takeoff over them. They could be an issue for smaller airplanes.

He had not heard any complaints from pilots about flying to NIP.

Pilots with a safety concern could talk to him, a check airman, standards or a union representative. If it was a personality problem with another pilot, he tried to resolve that before going to human resources. Pilots could also submit reports via email, ASAP, SMS, or an incident report. Pilots would not typically use ProSafeT if it was a personality issue. They previously used WBAT but now used ProSafeT. Pilots could also report a safety concern anonymously through the hotline or ProSafeT.

He never experienced a need to report a safety concern. He would speak to someone rather than file a report because if a pilot was not safe, it was better to talk to someone.

He did not see ASAP reports but did see incident reports like an aborted takeoff. There was a safety action group that would review incident reports and he would participate if it was related to operations; he would not participate if it was a maintenance event.

He learned about the accident about 2300 when he received a call from the director of safety and security. He then came to the office. They had discussions to find out what happened, trying to determine the weather conditions, runway conditions and performance data. There were thunderstorms in the area, but they did not know the runway conditions or the winds. They could look at the METARs[53] but they were valid before and after the time of the accident.

[52] Operator Proficiency Check
[53] Meteorological Aerodrome Reports

They used “read” files to share safety information or discussed it in recurrent training. If it needed to be shared immediately, they used “read” files. The file would be sent to pilots via email and they would have to sign off as read; pilots used to have to manually sign off on a file but now it was electronically signed when they opened the document.

Concerns from pilots typically had to do with flying overnight. They were not a scheduled operation and the pilots’ schedules changed. If a pilot was fatigued, she or he could stop the airplane and there would be no repercussions. It had happened before; “if you're tired, you're tired.” The company might review the event, but it was a rare occurrence.

FOQA reports were transmitted to all pilots.

NIP had a PAR but no ILS[54]. PARs were not flown much anymore and were only as good as the controllers giving it.

His job was demanding and took a lot of his time. When it came to certain things, like extending a flight duty period, he (or the VP of Operations) could get calls 24 hours a day when he was the duty officer because they were a small company. Scheduling initially took care of extending a pilot’s duty day and he would not know about it until the crew agreed to it. Some pilots would not extend their day; there were no repercussions. A captain could refuse an aircraft and there were no issues because everyone had different comfort levels. Sometimes the company would reach out to the pilot to better understand the reasoning.

Pilots might call him to say they did not understand a maintenance issue and he would go to the manual for them and look it up. They usually called when they were looking for help.

The pilot shortage had an effect on the experience level, because the rules required a pilot to have 1,500 hours and an ATP written before they could hire them.

For a small carrier, it can be hard, but they still hired the best people. They did not have many pilots leave and he thought many stayed because of his style as a chief pilot. Once in a while they had to let a line pilot go; it was not usually because of their piloting skills but rather a personal problem.

They did not have a “refusal to fly with” list.

He had an open-door policy and pilots never hesitated to come to him. If it was a personality problem, the pilots would go to the union representative first.

He got along with the VP of Operations.

He did not think NIP had an ATIS. Pilots would talk to approach control. All airplanes had a sat phone so pilots could also call dispatch. They did not use ACARS[55] yet but planned to. Pilots could

[54] Instrument Landing System
[55] Aircraft Communications Addressing and Reporting System

look at the forecasted weather and check the weather before leaving the previous airport. A pilot could call dispatch via radio if in VHF[56] range.

He was not sure what the Boeing OPT looked at so was not sure about ungrooved runways, "what it says is what it is.".

He never felt that he was not stopping on a runway after landing in the B-737. He never landed a B-737 on a wet runway and hydroplaned.

The landing data they used was predicated on one reverser inoperative and it would give you some directional problems, but he never heard pilots complain about controllability.

Regarding "read" files, he would copy the text of the file and put it in the body of the email for pilots to read and then would ask that they acknowledge receipt of the email by opening the file electronically.

His office was across from dispatch and scheduling was nearby; pilots were usually in that area, so it was easy for crews to access dispatchers in person.

On the route the accident flight was scheduled for, when departing NIP for Guantanamo, the crew would have the flight plan for all three legs. Crews would get updated weather at each stop via fax or email to the ground handler who would bring a printed copy to the airplane.

A pilot would call scheduling if sick and then he would receive an email that that pilot was grounded.

He felt the pilot group was adequately staffed at Miami Air.

OPT was loaded on iPads which were aircraft specific. Pilots received training on OPT in initial and recurrent training; it was a big part of initial training whether Jeppesen or performance. Pilots would run the calculations as soon as they got the weather. If there was a change after departure, the pilot could make a change in flight. If on short final and something changed, the pilot would not be able to make a change to the performance calculation.

Pilots always wanted to remain clear of weather. When down low it could be much harder to see with the radar. He did not recall specific guidance to pilots like do not fly to an airport when thunderstorms were within 5 miles.

Pilots were PAR qualified.

When hiring a pilot, in addition to obtaining PRIA records, they would ask the pilot about his flying carrier and also would do a background check.

There were 7 full-time line check airman.

[56] Very High Frequency

Some of the new hires can have challenges getting their required hours within the regulatory requirements. Most of the time the answer is no, sometimes need to get an extension

Professional standards were with the union. He had a good relationship with them, and they interacted all the time.

Asked what would happen if a pilot called in fatigued, he said they did not have another crew so the pilot would stay with the airplane, get rest and then do the next leg.

They had 5 permanent airplanes and also dry leased 2 airplanes in the winter for about 6 months. All of the airplanes were configured the same. If there were differences, there was a bulletin. There were some minor modifications to the 5 airplanes they owned based on when the airplanes were acquired.

OPC was a checking event. EASA[57] required 2 checking events a year for each pilot including FOs. It was like a LOFT but a checking LOFT. He was qualified to teach ground school but not OPT. In initial training, students did an OPT problem each day.

There was no assistant chief pilot, per se, but they did have a contractor who worked part time and would ferry airplanes.

He was not sure why the mechanic had to sit in the cockpit, but it was their procedure; he assumed the mechanic could help the crew if necessary.

Miami Air had terminated an FO who needed additional time in OE but that did not happen often.

If there was something specific in the NOTAMs, the dispatcher would put it on the release as a note.

If they had a flight out of Miami, they could get catering and fueling at the facility; they did not have a dedicated gate at the airport.

He felt they went above and beyond in training and trained CAT II and III approaches after the type rating checkride was over.

If they determined that a pilot was not ready for a type ride, that pilot would get another simulator session.

Miami Air check airmen gave checkrides but the FAA was there, including during the oral.

They had 1 APD[58]; it was the accident captain.

[57] European Aviation Safety Agency
[58] Aircrew Program Designee

He would have to look at why NIP was considered a hot spot. When an airport was a hot spot, pilots were made aware of that information. If a pilot had not recently flown into an airport that was a hot spot, dispatch would be aware of the data and would brief that with the pilots.

Guidance on landing on a wet runway with 1 thrust reverser inoperative was covered in initial and recurrent training. He would expect that it should be briefed prior to landing if the runway was wet and 1 thrust reverser was inoperative for landing.

Interview concluded at 1139 EDT

Rich Draina – Director of Training

Interviewee: Rich Draina, Director of Training, Miami Air
Date: May 7, 2019
Location: Miami Air Conference Room
Time: 1300 EDT

Present: Shawn Etcher, Katherine Wilson, Warren Abrams – NTSB; David Thompson Federal Aviation Administration (FAA); Steve Joffrion – Miami Air; Paul McDonagh – IBT; Rich Lee – Boeing;

Rich Draina was represented by James Rodriguez – Attorney for Holland & Knight

During the interview, Mr. Draina stated the following:

He was 66 years old and was hired by Miami Air in October 1999. He was hired as the Director of Aircrew Training as well as a pilot at that time flying the B-727 then the B-737. He no longer flew. Prior to Miami Air he flew in the Marine Corps for 7 years flying the C-130. In 1981 he went to Orion Air Freight, where he flew the G-159[59], DC-9[60] and B-727 doing night cargo. He then went to work for a DC-8[61] cargo carrier out of Ypsilanti as the Director of Operations. He then worked at Gulf Stream Airlines, a Part 135 carrier flying B-1900[62] and Shorts, when he got there in 1994 but transformed them into a Part 121 carrier by the time, he left in 1999.

He stated his job at Miami Air was to maintain the mandates of FARs as applied to Crew Training and maintain the spirit and intent of the info from the FAA. He also coordinated with the chief of standards and others, and coordinated paperwork, manuals and simulators.

[59] Gulfstream Aerospace Corporations G-159. Source FAA Order 8900.1, Volume 5, Chapter 2, Section 19 Figure 5-88 dated July 15, 2019.
[60] The Boeing Company DC-9-11, DC-9-12, DC-9-13, DC-9-14, DC-9-15, DC-9-15F, DC-9-21, DC-9-31, DC-9-32, DC-9-32F, DC-9-33F, DC-9-34, DC-9-34F, DC-9-41, DC-9-51, DC-9-81, DC-9-82, DC-9-83, DC-9-87, MD-88, MD-90-30, 717-200. Source FAA Order 8900.1, Volume 5, Chapter 2, Section 19 Figure 5-88 dated July 15, 2019.
[61] The Boeing Company DC-8-11, DC-8-12, DC-8-21, DC-8-31, DC-8-32, DC-8-33, DC-8-41, DC-8-42, DC-8-43, DC-8-51, DC-8-52, DC-8-53, DC-8F-54, DC-8-61, DC-8-61F, DC-8-62, DC-8-62F, DC-8-63, DC-8-63F, DC-8-71, DC-8-71F, DC-8-72, DC-8-72F, DC-8-73, DC-8-73F. Source FAA Order 8900.1, Volume 5, Chapter 2, Section 19 Figure 5-88 dated July 15, 2019.
[62] Textron Aviation Inc. 1900, 1900C, 1900D. Source FAA Order 8900.1, Volume 5, Chapter 2, Section 19 Figure 5-88 dated July 15, 2019.

When asked if they had an AQP[63] program, he replied they did not but was working on it. He was the primary point of contact for the AQP program but had one other staff member (SME) helping him. He also had "go to" people to help with the AQP documentation.

All simulator training was conducted at the Pan Am Flight Academy and all the simulators they used were Level D. They used Boeing simulators on occasions but not very often. The configuration of the simulators were very similar to the configuration of the airplanes with regards to the Avionics.

The head of safety had programs that they followed. SMS was an integral part of initial training and was also taught in recurrent training.

As the Director of Training he was responsible for SMS and FOQA for the pilots. FOQA data was then de-identified and sent out to all the pilots by the safety department.

They had 4 check airman that taught in the simulator and they were also line check airman that flew the line.

Training was reviewed annually. The chief of flight standards reviewed the scenarios and would also take input from others.

When asked if they had simulator training sessions where components were inoperative for training purposes for the entire training period, he indicated they did not. He further explained that in all training modules, components fail, and it was up to the students to figure out how to deal with the failure.

When asked about consolidation training in the simulator, he indicated that if a student was close to finishing but would not make the 100 hours of flight time in 120 days, they would be given a line check to extend them to 150 days. If they were still not consolidated at the end of 150 days, then they would be given a simulator checkride.

CRM training was trained in the classroom covering topics such as situation awareness, communication and decision making. When asked about how they taught CRM in the simulator, he described Threat and Error Management (TEM) and Time and No Time decision making. When asked how they taught the no time decision making, pilots would be given an emergency and expected to respond; he gave the example of an engine out.

He tried to observe in the classroom 3-5 times a year and in the simulator once a quarter during an initial period; he might watch a recurrent or LOFT.

Unstable approaches could lead to crashes and it was addressed in the simulator "here and now". The best way to train an unstable approach was to let the pilots mess it up and then they would learn by their mistakes. If their speed was over 20 knots fast or sink rate was over 1500 feet per minute, they would stop the simulator.

[63] Advanced Qualification Program

He stated the line check airman do not report to the Director of Training but rather to the Chief of Flight Standards.

When asked who updates the manuals, he stated the info comes in and was then given to tech writers and they send out the info to the FAA for approval and then to the crews.
He said that almost all approaches in the sim had a crosswind component to them. The max crosswind on the 737 was 33 knots.

When questioned about training modules with standing water or contamination on the runway, he indicated he did not think the simulators had the capability to simulate that. They computed for contaminated runways during preflight and it was part of FO training as far as the paperwork was concerned.

When asked if he knew the accident pilots, he said he knew the captain but did not know the first officer. He further explained that he had been on sick leave during the first officer's training and that was the reason he did not know him. He stated there were no issues with the first officer's training and that he had certified it when he got back to the office after sick leave. He did not observe the first officer personally during training. For the first officer training-wise, he met the class in January 8th and on March 5th and came back and validated that all training had been completed properly. But didn't observe him personally.

When asked if an instructor had an issue how do they make him aware of that, he stated, they would come in and see him. If the issue was bad enough, they would switch them out, meaning the pilots in question. He stated they had done that in the past but had not done so in over a year. The pilots got daily oral evaluations. When asked to describe a system or a procedure the instructors would then know if they were keeping up. If they were not up to the task at hand, they were admonished in hopes of doing better next time. As the Director of Training he can take people out of training but usually not before consulting with the Chief Pilot. If it was a discipline problem, it would go to the chief pilot.

When discussing the benefits of an AQP program for the airline, he indicated it was just a different way of accomplishing the same task in the FARs. The training footprint would probably grow by two days in the simulator. The AQP mandates made the pilots stay in the books more frequently. The course material was on a two-year cycle meaning the pilots did not repeat the same task in the simulator every time. There were qualification standards for each task that were listed in the job task listing and job task analysis. There was a new grading scale that would be implemented on a 1 to 5 scale where 1 was the lowest score and 5 was the highest.

He stated FOQA findings were incorporated in the LOFTs in the simulator based on trigger events found in the data.

He was responsible for the coordination of the Cabin Crew training. Cabin and flight crews received joint CRM training. Mechanics were invited to the training but were not required to be there. The CRM suggested the pilots, flight attendants and mechanics work better together if they trained together.

When asked how they trained crews to be ready to fly into a new airport, he replied that they set up the simulator to mimic the country's airport prior to flying into it. The training could include a steep descent, or something particular to that airport. Feedback from crews had been very positive and they felt ready to fly into the new destination when it came time to fly there.

Antiskid problems could occur on wet, ungrooved runways. The simulator cannot set up grooved runways and non-grooved runways. However, there was a briefing item to discuss the grooved runway surfaces, hydroplaning and landing on a contaminated runway, maybe 2 – 3 minutes, if that. OPT guidance would have been discussed as well. This briefing would not be in the simulator.

All pilots were trained for a checkride under Part 61 licensing. The first officer trained from both seats but was hired as a future captain, so he took his type rating ride from the left seat. The first officer spent most of his training in the left seat even though he was a first officer. When all training was completed, the first officer will take a pre-type rating checkride and was expected to do all of the maneuvers that would be required of him on the type rating ride. He did the pretype rating checkride from the left seat. If there were issues, that first officer would get another simulator ride.

The FAA came in and observed the training operation very frequently but mostly they observed the ground school rather than the simulator. If he knew the FAA was coming in to observe, he would call the line check airman as a courtesy to let them know they were coming in to observe.

As for manual changes, they were quarterly if able. If info needed to be put out immediately, it was put into a numbered Temporary Revision. Then when the normal revision cycle came up, the information was inserted in the manuals and the temporary revision was removed.

As for Emergency Evacuation training, that was conducted in initial training and during CRM training. The CRM training was conducted together with the pilots and cabin crews, and they might do some drills together. When asked how they got feedback from trainees, he replied through the Ground School Instructors and Flight Training Instructors, and there was also a form that they asked pilots to complete and return.

He was asked if the first officer needed any additional time completing the simulator syllabus, he replied that he "didn't know" since he did not sign off his training. His training was signed off and certified by a line captain who was the acting Director of Training while he was out on sick leave.

In a typical LOFT scenario, the paperwork was given in the briefing room and the crew was given the Dispatch and Paperwork package. They would run it like a regular flight – OPT, weight and balance, V-speeds. They had time to discuss it and then went into the simulator to load the FMCs and prepare the plane for a normal flight. There were failures implemented along the way from point A to point B to the point they may land at point C instead of B. The crew was expected to address the issues and use CRM and good judgement in dealing with the issues. Then the pilots would switch seats and do another takeoff with an emergency and divert. They tried to pair a captain and first officer together for training, or they might provide seat support for a captain's LOFT.

When asked if there was training in simulator for onboard radar, he answered they learned how to use it in ground school, and they were expected to use it flying the plane. The radar also had to be manipulated as part of a scenario in LOFT and during OE.

Every year they looked at the FOQA data and made changes in their training. For the current year they had incorporated unstable approaches and flap speed exceedances into the training syllabus.

When asked about Special Airport training, he said that there were pictorials in the crew lounge for the crews to look at and they were expected to view them before a flight into a destination that was classified as a Special Airport. The dispatch paperwork would say if there was a pictorial. They could also view the Special Airports on the LMS[64]; they could review it inflight on the iPad. He was not sure if NIP had any pictorials to look at.

He reported to the VP of Operations.

When asked if there was a training module for fatigue, he stated there was a module on fatigue in the LMS and fatigue was taught in ground school.

He had an assistant, in addition to the check airman, who scheduled simulators and helped with recurrent training and passed paperwork to him.

Asked how FOQA data was used in training, he said the CEO might say there was an area to look at in training and the chief of standards would look at it in detail and then build a training scenario.

He determined that training was working or not bypass/fail rates.

To ensure standardization of the pilot group, at least once a year all the line check airmen were called in to discuss the issues as well as what they were seeing in industry in order to standardize the training for the pilot group.

The flight training department did not have any part in the accident investigation besides getting training records on lockdown.

When asked how he was notified about the accident, he stated he was called by Pan Am. He further stated he had missed 2 company calls. After he was notified, he went to the office and locked down all the training records. He then got his team together.

A Qualification LOFT and a Recurrent LOFT change yearly, which were the only two LOFTs.
When a pilot entered training, they were given a QRH[65] and Airplane Manual Vol.1 in paper and the rest of the manuals were distributed electronically, including the FCTM. The Unstable Approach Criteria was straight out of Boeing OPS Vol 1. Miami Air had made no changes to the Unstable Approach criteria below 200 feet as some operators had done.

[64] Learning Management System
[65] Quick Reference Handbook

Prior to teaching, an instructor would observe a class. They would ask if the instructor was comfortable and if so, the instructor would then be observed teaching a class under the observation of a check airman.

They have a qualification LOFT and recurrent LOFT. The recurrent LOFT was reviewed and changed every year.

Instructor comments on a pilot were kept forever.

He stated that it was no secret that experience levels were down among new hires and it took more diligence on the part of the instructors to make sure pilots were meeting the standards. He was then asked what they look for when they hire a ground school instructor, he stated that they must be interested in doing the job. Then they looked at their background and if they were able to speak the "Queen's English" they were brought in for an interview. If they were still a candidate, they would get them to build a lesson plan on any subject and then present it. Line check airman were different in that they would like to see 1,000 flight hours on the airplane and at least a year with the company.

He was asked a follow up question about two first officers paired together, and one was not progressing and maybe delaying the other first officer, he stated that he would become involved up to terminating the pilot if necessary. If he was to terminate a pilot, it would be a group decision with the Chief Pilot and others involved in that decision. There had been zero pilots dismissed in the past year for performance issues in the simulator.

When a pilot is ready to upgrade to captain, there was a review board that met to determine if the candidate was really ready to assume command of the B-737. Leadership and hours flown played a role in this decision and not just seniority.

There were two go-around scenarios trained – go-around at minimums and go -round under 50 feet because of a truck on the runway.

The qualification and recurrent LOFT were one scenario each and within each scenario there might be multiple takeoffs and landings.

Interview concluded at 1453 EDT

Ely Henry – Director of Flight Control

Interviewee: Ely Henry – Director of Flight Control
Date: May 7, 2019
Location: Miami Air HQ Room 307
Time: 1514 EDT

Present: Shawn Etcher, Katherine Wilson, Warren Abrams – NTSB; David Thompson Federal Aviation Administration (FAA); Steve Joffrion – Miami Air; Paul McDonagh – IBT; Rich Lee – Boeing;

Ms. Henry was represented by James Rodriguez – Attorney for Holland & Knight

During the interview Ms. Henry stated the following:

She was the director of dispatch; and was responsible of ensuring that dispatchers comply with FARs and compliance. She was hired at Miami Air in September 1991.

Started at Eastern Airlines as passenger operations and was subsequently hired in dispatch where she was employed until Eastern Airlines ceased operations. She then was hired at Miami Air in dispatch.

There were 8 dispatchers that reported to her; 2 dispatchers were on duty at a time. They worked a 5-day work week. The morning shift work 5 on 2 off, evening and night shifts were 5 on 3 off. They rotated their days off.

The average day was 6 or 8 legs either domestic or international flights. Dispatchers were all trained to work international flights.

A typical day for her was started checking on the operations, review MELs, working on issues that need to be discussed, help with anything, log on and check emails and checking ATC messages that were coming in. She considered herself another set of eyes for dispatchers, doing test flight plans and whatever was needed.

They had a director of system operations whose days off were different than hers, they also had a manager on the day and night shifts. All mangers and dispatchers were current and licensed, including her.

She was working the day of the accident. The weather was a normal Florida day, weather was being looked at, there were thunderstorms in the area. They were looking at MELs on the accident airplane and they had to determine if there were any performance adjustments or penalties. The dispatcher was talking with the maintenance controller about the deferrals.

If there was a maintenance issue, they had to make a decision if the airplane was a go- or no-go item. Dispatch had the authority to cancel a flight; they were never questioned.

They can monitor the flights that were airborne on the screen that was in the dispatch area. All dispatchers looked at the same screen.

If a thrust reverser was not working, they needed to check the data. She did not check it herself, but the dispatcher did and said it was ok. At the time of the accident they had 1 dispatcher and 1 coordinator which was a non-dispatch type.

Miami Air subscribed to Jeppesen for flight planning, weather and NOTAMs, they used WSI for weather display and flight following. The dispatcher would normally start their day by looking at

payload, tail number, deferred items, weather, NOTAMs, ATC advisories, and generate the flight plan accordingly. Once the flight plan was generated, and if no reroutes or adjustments were needed, it was transferred to the flight release. The flight release was what crews got along with the flight plan and weather; they got the whole package.

The dispatcher had a checklist to complete a flight release which included weather, NOTAMS, aircraft performance, ATC issues, etc. She felt WSI was accurate.

The flight papers were sent to the station and the PIC. The weather package included weather graphics as well. If there was a return to the gate they normally obtained and provided new weather and amended the release. If it was a quick turnback, amendments may not be needed.

For airports where the runway was either grooved or non-grooved, it should have been in the information, so it should be looked at. They looked at the NOTAMs; specifically, if there was an arresting gear the dispatcher would note it to the crew, but the crew would also probably notice it because they read the NOTAMS too. If there was something that was important in the crew briefing, they would give what they felt was important for operations for the day. They had a remarks section. The PIC had to call in every day on the trip for the dispatch release briefing.

She knew the PIC and classified him as very professional, he would ask the right questions and would demand answers when he needed them.

Dispatch did go through DRM[66] training in initial and recurrent training.

She was involved in the hiring of dispatchers. When hiring a dispatcher, at a minimum she required a year of experience and someone with an aviation background. She felt they had a moderate turnover rate for dispatchers.

She reported to the Vice President of Operations. She could not recall when she became the director of dispatcher, but it was more than 5 years before the accident. When she was hired at Miami Air, she was a flight follower. The managers also worked 8-hour shifts. There was a time during the midnight shift when a manager was not present.

She thought they had on average of 6-8 flights per day.

In some cases of DoD airports they had to do somethings different, but she could not recall if there was anything different into NIP. She could not recall how many flights were operating the day of the accident.

She felt 2 dispatchers was adequate staffing and during the day she could help. The manager on duty was actually dispatching at the same time they were being a manager. If a dispatcher was overloaded, they could ask for assistance. She felt the dispatchers were comfortable with doing that. If a dispatcher off loads a flight, due to being overloaded, they may take it back if they can but they might not be able to take it if it was at the end of their shift. However, anytime a dispatcher took a flight from another there would be a briefing.

[66] Dispatch Resource Management

Asked if they could call back a flight once it had departed, she said if detrimental for safety of flight they would contact the crew and communicate with them which could include and have them return or at least ask them what their intention was; the PIC would have the final authority.

They could contact a flight if in VHF radio range, go through ARINC[67], ATC or if the plane had a satellite phone. Dispatchers were required to ride along for 5 hours on both initial and recurrent training. She also did ride alongs.

When dispatch finds out of an accident, they would contact the duty officer and depending on what the decision was they may issue an emergency alert. She found out about the accident, came to work, and started gathering up papers for the flight. The papers were then given to the safety department.

Once a pilot had his paperwork, he would call his dispatcher to get his briefing; the pilot would also call the out and in times. The crew could call in anytime they needed to.

The weather package would be sent to the ground personnel and the PIC, which would include weather updated NOTAM information and advisories.

Crew scheduling would be involved if a crew had to be extended.

They normally attempted to get the flight plan to the pilots about 2 hours prior to departure. The paper release that the captain signs, would be left at the station and the crew would take the other copy. The release signified that the dispatcher and the captain agreed to the conditions on the flight release.

She was not involved with the deferrals on the accident aircraft, but she heard the dispatcher and maintenance controller discussing it. The dispatcher would know if a system would affect the airplane to fly in weather. They did not have ACARS so they would communicate via ARINC, satellite phone, and ATC.

The ground handler printed out the flight paperwork.

The duty officer was there to ask questions about the operations or make a decision about the operations as they were part of management. She had talked to a duty officer before. There were multiple duty officers.

She was trained on the operation of the OPT and it was included in recurrent training. She administered competency checks to dispatchers, which was a quiz of sorts to make sure the dispatcher was familiar with policy, procedures, FARs, how to apply penalties, performance adjustments, and what it would take to get an airplane off the ground. OPT was included in that check.

[67] Aeronautical Radio, Incorporated

The crew, every day on the trip, would call in and the dispatcher would give them a fit to fly call. It was initialed and time stamped.

She has looked at the accident flight dispatch release but had not reviewed it in detail. After reviewing the release she would have agreed with the dispatcher's decision to fly and she agreed with the captain's decision to operate the flight.

The recurrent training was completed in two parts with classroom instruction and hands on training, which was what she did. She felt that the hands-on training was to make sure the dispatcher understood the process and what they were doing. During the classroom part of training, a dispatcher would go through various subjects. The competency part, which she would administrator, took about 4 hours.

She thought ACARS could be quicker and more direct with the crew.

When asked how she accomplished the 5 hours of recurrent jumpseat training, she stated that if they need to, they would fly commercially to an airport, connect with the crew, and take a flight.

They have no recorded lines except for the satellite phones.

She never spoke with the crew prior to the accident flight, and briefly saw the paperwork. She looked at the copy of one of the MELs, the weather, and WSI. Each dispatcher was responsible for the flight they were dispatching. It was their standard procedure for the dispatcher to discuss with her if there were any issues. They dispatch to an airport not a runway. It was always the captain's prerogative to not take an aircraft.

When preparing a flight, she stated it could take an hour or hour and a half to prepare the paperwork in order to dispatch a flight.

Normally dispatchers did not conduct joint training with crewmembers.

When they dispatched a flight and there was a risk assessment required to be done, it was flagged; examples would be runway conditions, duty day, or winds. The flight to Gitmo was flagged but not to NIP. She was not sure why the Gitmo flight was flagged.

When asked about the how the workload was divided among the dispatchers, she stated that the dispatcher workload was decided between the two dispatchers on duty and it was divided equally

She stated that they had dispatchers that had been at Miami between 17, 18, and 20 years.

The OPT was a Jeppesen product and administrated by someone at technical publications. The dispatcher was going to look at the airport and they would look at all the runways that were adequate for landing and takeoff considering the winds, MELs; they would run scenarios for wet and dry runways, and then make a determination if there were restrictions or not. They were running the scenarios to determine a worst-case scenario, but they inputted everything to get good information.

The dispatchers were full time employees.

Regarding how to plan when arresting gear was up, they used whatever landing distance was available so if there was a displaced threshold that would be required. Whoever was on duty would follow the flight until it lands or the end of their shift. They would contact the crew if the weather was changing to give them a heads up. She was not sure if that was done for the accident flight. She thought the dispatcher gave the captain updated weather but did not know about any other weather information.

Interview concluded at 1625 EDT.

Bill Lewis – FOQA representative[68]

Interviewee: William "Bill" Charles Lewis, FOQA Manager, Miami Air International
Date/Time: May 8, 2019, 0805
Location: Miami Air International Headquarters, Miami, FL
Present: Shawn Etcher, Katherine Wilson, Warren Abrams – NTSB, David Thompson – FAA, Rich Lee – Boeing, Paul McDonagh – IBT, Steven Joffrion – Miami Air

Representative: Gary Halbert, Holland & Knight

During the interview, Mr. Lewis stated the following:

He was the 63 years old. In addition to being the FOQA manager, he was also a captain. He had been the FOQA manager since its inception in 2006. He had been a captain for 18.5 years. His date of hire was November 9, 1998. He had about 13,000 hours total time, about 6,000 of which was in the B-737, all PIC time.

As the FOQA manager, he would take the information that maintenance would download from the QAR, process it through Flightscape and analyze it to determine what events occurred and if they were valid. If there were irregularities, he would make a list of the events and send it to the union safety representative who would determine if any individual pilots needed to be contacted. He did not know what happened with the data after that.

He would also compile FOQA reports for management and safety to disseminate to the pilot group.

As a captain, he had overall command of the aircraft for flight safety and security.

He estimated about 20% of his time was spent on FOQA and the rest of the time he was flying the line. He had previously been a check airman on the B-727 but was not on the B-737 because he worked on FOQA.

He started his career as a fire fighter/paramedic then joined the US Army at 30 years old and flew Cobra helicopters before moving to fixed wing aircraft doing military intelligence. He left the

[68] See Appendix A for clarification voluntarily provided by Captain Lewis.

Army in 1998 and sold cars until he was hired at Miami Air. He flew right seat in B-727s until they retired the aircraft and he moved to the left seat on the B-737.

For his FOQA position, he reported to the director of safety and security who was also the FOQA administrator. He also reported to management who would decide what information he would send out.

He worked alone on the FOQA data.

Information was recorded on the QAR and downloaded every 20 days. It would be put into a computer file and he would have 7 days to pull it and run it through a program that would list the flights and events. After 7 days, the information would be deidentified except for the events. From the list of flights generated, he would see how many events popped up. Some were valid and some were not. He had to determine which ones were valid, make a report and send it to the union safety representative to compile his statistics. The union rep would determine who the crew was and whether the crew needed to be contacted.

There were 70 or so events that would get flagged such as unstable approaches for speed, configuration by 1000 feet, rate of descent; low or high speed; excessive bank angles at low altitude; flap overspeed. There was no way to know if a crew used a checklist or not.

He could look at the data by city pairs.

Over the past 5 years, NIP was one of 5 highest incident airports. It was no higher than the other 4 high incident airports. Typical events flagged at NIP were high rate of descent, low energy usually caused by ATC, and flap overspeed.

He did not really analyze the FOQA data; that was done by the safety department, specifically the manager of system safety.

He would send quarterly FOQA reports. If there was an event that everyone needed to know about sooner, he could do a special report.

The safety department would look at other factors like weather that might have impacted the data.

Upper management, safety and standards received the FOQA reports; the safety department would share the information with pilots, typically by email. He was not sure if pilots were required to read the reports.

He had pilots call him to say they had an issue at a particular airport and asked him to pull a report. Management or safety might also come and ask if he was seeing anything like flap overspeeds in the data. He could only give them the information that FOQA could tell him, not ATC data which was generally what caused most of them.

He was not involved in the risk assessment of airports directly but might provide data.

He was the safety officer back in 2005 or 2006 but left for personal reasons. Miami Air started ASAP at that time and he handed off to the safety program and he kept FOQA.

He only provided quarterly reports to standards for them to use to modify training.

The only problem he knew about with NIP was that they wanted pilots to go fast and then slow down.

He did not know the accident FO. He had flown with the accident captain when he [the accident captain] was a FO; this was back in 2006. He had no problems with the captain and never heard any concerns about him.

He had not been asked to pull any data since the accident, but he could run an animation if the data from the airplane was released.

If he had a safety concern, he would talk to the director of safety and security or director of standards. The response was always positive. He had filed a safety report. The system would respond to say the report was received. He could find out from the director of safety and security that it was handled. He was comfortable reporting safety concerns and he had no reason to believe that others did not feel the same. Miami Air prioritized safety, then passenger convenience and comfort, then on time performance.

He would tell the FO to plan ahead and configure early so they were not high and fast. He was not sure if other felt prepared.

It used to be called LOFT but was now called OPC. They tried to put pilots in situations to show events that could happen. He was not sure if it was based on FOQA data, but standardization got the data to see what issues they were having.

When forming the FOQA program, they did not want to go over 30 days without reviewing the data so they elected to pull the data every 20 days and then he would have 7 days to review it. That way it was done before 30 days elapsed. For the most part, he thought looking at the data every 20 days was acceptable. He gave the example of a flap overspeed which usually were minor, but a major one would need to be looked at by maintenance and they would not want to wait 20 days; major flap overspeeds were usually reported though in the logbook to make them aware. Depending on the severity, they could download the data immediately, then he could review the data and give them the exact information. He did not know the percentage of flap overspeeds written up versus not.

If an airplane was not at base and it was time to download the data, they would FedEx a QAR to a location and the flight mechanic would swap it out and send the QAR ready for download back to base. They did not have the ability to download the QAR online.

A go-around would be flagged in the data. It was based on the thrust lever going to the go-around setting. He could look at other data to confirm that a go-around was actually performed like flap change or altitude change, but the trigger in the data was go-around power.

He heard from other carriers that pilots at Miami Air were really well trained and other carriers looked at how we did things and took that into account when developing their training programs.

He thought Miami Air used the FOQA data appropriately and emphasized it in training.

As an ATP, that pilot was also expected to be a trainer; that was part of the job as an ATP to train other pilots. He did his best to pass on information. Everyone had to go by the standards, but he tried to impart on FOs the techniques he used to meet those standards.

It would depend on the experience level of the FO if information that he shared about tips for airports was surprising to them. For example, Miami brought you in high and then expected you to dive and get dirty quickly for sequencing for final. They could do a simulator scenario where you were brought in high and fast, but it was not the same as in real world. He would hope that the FO could get on flights going into high density airports to prepare them.

For most part, FOs coming out of OE were well prepared and ready to fly with non-check airman. They knew callouts, etc. but at the same time, the captain should be able to handle that.

He only sent FOQA reports to standards and safety departments.

They had long and short call standby pilots. Long call was when`` a pilot was on standby and the company would give 10-hour notice of a flight. On short call, a pilot would be given notice of 10 hours of rest and then could be called to report with a 2-hour notice.

They could look at as many events as they wanted. He just had to put in the parameter for each event and then determine if it was accurate.

Miami Air's policy on flap extension was to do it on the taxi out, not at the gate.

Information a pilot had on winds for arrival could be an hour old, so pilots needed to plan on that and call ATC to ask what the winds are. They taught FOs to put in Vref+5. If the winds were gusting, a pilot had to be mentally prepared to add the appropriate correction to mitigate the wind. Pilots were expected to do that on the fly. A pilot could only plan with the information he or she had but had to be prepared to adjust as additional information was received. When close into the airport, the pilot cannot be calculating on paper.

When performing a crosswind landing, the pilot had to "give a little" to the upwind side, planning a little bit into the wind. They would land in a crab and bring the nose around once on the ground.

If he was flying to a runway that was smaller than normal, he would do some preplanning in OPT while enroute. The pilot would plug in the last METAR and see what information it had. It would not be finalized to the current ATIS, so if no ATIS the pilot could ask ATC who will give what they can. The pilot would plug that information in and see what they had.

If there was a displaced threshold, that could be put into OPT; it had to be done and could not be assumed that you were ok.

He had flown the accident airplane many times. It was the first B-737 the company got. He knew it had intermittent thrust issues. He had flown it before, and it went to maintenance. He would have to look at the records to refresh his memory on what was written up. He recalled minor cabin issues written up by the mechanic and he wrote up the thrust reverser.

A flap 10 overspeed will trigger anything over 10 degrees of flaps and 210 knots. He would look at the data and if he saw the flaps at 10.2 or 10.3, he would look at the flap handle position. If the handle was in the 10 position, that was a maintenance issue. If it was a couple of tenths over, it technically was not an overspeed. The data only looked at the position of the left flap.

He was aware of issues on the 400s with early gear retraction. There was a lag on the VSI that would show a positive rate, then a negative rate, and then a positive rate; this led pilots to retract the gear early on the first positive rate.

He would look at the FOQA data to see if it was a valid event. If it was an airframe issue, that would go to maintenance and also the union rep to determine if the crew needed to be contacted.

He only looked at the data to make a decision as to whether it was an event or not.

Some airports were special airports or captain only airports and that would show on the flight release. Some airports have become a captain only airport based on feedback from passengers and FOQA data. Guantanamo was a captain only airport.

A RAMP runway analysis was done to determine the risk for each airport, depending on experience of the crew, etc. and what level of approval it required. Some airports required VP of operations or CEO approval.

Pertinent information about NIP should be shared by the captain to a new FO. He did not know if NIP was different than other airports other than that it was located by a river.

Carrying extra fuel was up to the captain. The biggest problem was any aircraft limitations. He had never been told that he could not take additional fuel. He did not recall a scenario where he would rather stop and get fuel than carry extra fuel and fly nonstop.

He could not recall any pushback from the company about any safety issue.

It was less likely that a pilot would get into a position of being too high and too fast in a simulator during a checkride. If that were the case in the simulator, the crew would call ATC or go-around.

If he called for flaps, he would expect them to be extended while taxiing; that was how he was trained.

A pilot could go-around after touching down on the runway if the thrust reversers had not been deployed. Following a tail strike 14-15 years ago, the company told pilots to consider going around if they had a bounced landing.

Go-arounds were only trained in the simulator and pilots were taught that they could expect to touch the runway when performing a go-around at a low altitude.

He had received a GPWS windshear caution on approach and that required a go-around. He had also received an erroneous glide slope warning. If a flight is not stable, the pilot should go-around. If a pilot got a “don’t sink” or “sink rate” he thought most pilots would arrest the descent and continue the approach. He did not recall ever receiving a GPWS alert going in to NIP. After a go-around, a pilot should file an incident report; he did. And a pilot might as well check the ASAP box. The company would only call about a go-around if there was a customer who call inquiring about the event. He was comfortable going around; it was part of the procedure to brief and be prepared for it.

It took him about 7 days to download, process and review the FOQA data. The data could be downloaded in about 20-60 minutes then he went flight by flight over a couple of days. After that he would generate the report. The report was also sent to the FAA.

The reports included information such as number of flights, number of events, list of events, comparison by total flight to percent of flights with an event. He would also include a paragraph or two about how they were doing, events that occurred more during the last quarter, where they were improving, and a graphical view of the events using a bar chart. He would identify problem areas. He had an excel spreadsheet that showed the year in review by quarter. They also fed their data to ASIAS to compare with other airlines and other narrow body airlines; the ASIAS reports were about 6 months behind. Miami Air was pretty much on par with the other carriers.

For a flight to be flagged as unstable, only one of the unstabilized approach criteria needed to be met. The data would not catch an airplane that was flying off centerline. It would flag when GPWS alerts activate; it only takes activation of GPWS once to flag it as an event.

He had never received any pushback on anything related to safety and operations.

Anything out of the ordinary should be reported to the company. He could not say for positive that it must be reported. It depended on the situation whether a flight should go-around – he gave the example that if the airplane was on fire, a crew should not go-around. If power was applied after touchdown, the pilot should go-around. After landing, if the thrust reversers are unlocked, a pilot should not go-around due to the turbine lag.

There was a program to get engine data, but no other data on the structure. There was takeoff and cruise data on the engines.

To get a GPWS “sink rate” alert, he thought the flight must be descending in excess of 1000 feet per minute; he was not sure what the altitude had to be.

He would brief all the missed approach steps – thrust, altitude, heading, etc. It was trained that the FO would give the same briefing. Crews were to brief the maneuver and procedure.

If a flight was to exceed 1000 feet per minute on the descent momentarily and it can easily be arrested, you could continue the approach. He believed it was written in the manual.

He wanted to reiterate that an ATP was a trainer; an ATP was more than just a pilot.

Interview ended at 0925.

Geoffrey Bonenfant – Dispatcher

Interviewee: Geoffrey Bonenfant, Manager-Dispatch, Miami Air
Date: May 8, 2019
Location: Miami Air Conference Room
Time: 0940 EDT

Present: Shawn Etcher, Katherine Wilson, Warren Abrams – NTSB; David Thompson Federal Aviation Administration (FAA); Steve Joffrion – Miami Air; Paul McDonagh – Pilot, Miami Air and Union Representative; Rich Lee – Boeing;

Mr. Bonenfant was represented by Gary Halbert – Attorney for Holland & Knight

During the interview, Mr. Bonenfant stated the following:

He was 48 years old and had been with Miami Air for over 18 years. He was now the Manager of Dispatch and had been in that position for 2-3 years. Prior to that, he was a Lead Dispatcher for 3 to 4 years. He indicated there were 5 to 6 dispatchers and he thought that was a good number based on the number of flights they handled.

He had a Dispatcher's license as well as a Private Pilot license.

He indicated that he last attended dispatcher recurrent in July of 2018 and it was taught by the Director of Standards. He [Mr. Bonenfant] did not teach training.

He stated that the Director of Dispatch was his immediate supervisor and he had excellent rapport, working with her.

As for sending the flight plan to the crews, he stated that he usually sent the flight plan 2 to 3 hours prior to departure. The 2-hour prior was for domestic and the 3-hour was usually for international flights. He would send a flight plan 3 hours prior to departure for a domestic flight if there were unusual circumstances.

When asked if he had ever cancelled a flight, he indicated that he had. The last time he cancelled a flight was two to three weeks ago for weather but did not cancel flights for reroutes.

He indicated that he did not feel pressure to get flights out on time. He further stated that there were normally 2 dispatchers on duty at any given time. His title was manager but 99% of the time he was dispatching flights; he would also do on the job training.

On May 3, he got to work at 0645 local time and that his shift was from 0700 until 1500 local. He did not prepare the flight plan for the flight down to Guantanamo Bay, Cuba, as it was already prepared when he got to work. He did the flight following on the flight from Navy JAX, (NIP), to Guantanamo (GTMO) though. The airplane was already enroute to NIP, about 30-40 minutes out when he arrived.

When the aircraft that was involved in the accident arrived in NIP, the inbound crew wrote up an inoperative thrust reverser. He then ran the performance numbers and called the captain on the phone to discuss. He called the captain on the phone number that was in the system.

There had been some weather forming west of his planned route into GTMO but nothing of concern. The forecast called for thunderstorms for his arrival back into NIP in the evening though. He did nothing different as the intended route of flight was going to miss all of the weather for the flight to GTMO. He did not add any additional fuel because the weather forecast did not require it. The alternate for the flight from GTMO to NIP was Orlando, Florida (MCO).

When asked how he communicated with an aircraft that was airborne, he could have used SATCOM[69], or ARINC to get a hold of the crew. When asked if they had ACARS on the plane for communication, he stated they did not. The communication with the crew was always verbal and never digital.

He indicated that he was not on duty for the flight down to GTMO as his shift was over at 1500 local, which was just about the time the plane was departing NIP for GTMO.

When asked for more explanation on how he would get in touch with the crew once airborne, he stated if he used the SAT Phone, he would dial the number for the aircraft; the aircraft received a SELCAL[70] chime indicating he was calling them. Dispatchers had a list of planes with SATCOM. The crew opened the SATCOM channel and they talked. He could also contact the crew via New York or San Francisco ARINC and get a HF[71] phone patch to the crew. After the call was completed, he received an email from ARINC on what was discussed.

It was his opinion that everything was normal for the flight down to GTMO and that he had no concerns for the return flight between GTMO and NIP. He even talked to the captain who was scheduled to fly the plane between NIP and Navy Norfolk, (NGU) once the plane landed in NIP. The captain said he was not comfortable flying back to Norfolk so Mr. Bonenfant said he would talk to the chief pilot. After that conversation, they cancelled the flight and hired Sun Country to fly that leg.

[69] Satellite Communication
[70] Selective Calling radio system
[71] High Frequency

Prior to leaving work at 1500 local, he had a changeover briefing with the dispatcher who was replacing him. They discussed the paperwork that had been completed to include the flight plan, the weather packet that was included with the flight plan, the thunderstorms in the forecast for the flight return to NIP, and "stuff like that." He also indicated they spoke about MELs and weather on the return leg. Further discussion centered around the plane not going to NGU now due to weather and a possible duty time issue. There was no discussion about a possible extension of the duty day.

A discussion about the aircraft's altitude limitations due to the MELs restriction also had taken place. The airplane was originally limited to 25,000 feet due to an air conditioning issue, but the altitude was further reduced to 17,000 feet with the addition of a second MEL dealing with the bleed system. The flight was going to be limited to 16,000 feet on the return leg back to NIP.
When assigned a flight he indicated that he started gathering data for a flight which included looking at the weather along the intended route of flight, determining the best route and altitude to fly, and then he looked at the performance data. This process could take as long as two hours to compile.

Some briefing items he would tell the captain about when he/she calls in included the weather, SIGMETS, airport conditions, and performance numbers.

Once the plane was enroute, he indicated that he looked at the weather along the route of flight, the alternate weather, and checked the information from the ATC Command Center.

When asked if PIREPS[72] were ever given to him, he stated they were not. However, if two flights were scheduled close together, he might ask the first plane to call him and give him a weather report. Then he would pass that information along to the other crew.

Pilots were required to check in with the dispatcher and they could do it in the hotel, in the van on the way to the hotel, or any convenient time for them. Once they got on the airplane, the dispatchers usually don't have any contact with the crew.

After landing, he said the crew was supposed to call the dispatcher and give him the times and the fuel on board. The status of the airplane should have been included as well. If the plane and crew were continuing, a hard copy of the flight plan and the weather packet will be given to the crew at that time.

He indicated that the weather packet contained the current weather for the origination and destination, the alternate weather, and weather charts. That information was also emailed to the station representative.

He stated that working two to three flights at a time was about average. Also he stated that he spoke with the captain and not the first officer. When asked how the captain sounded the day of the accident, he said he sounded normal and was upbeat.

[72] Pilot Reports

He stated that Sun Country Airline was hired to fly the passengers to Norfolk, NGU, once the flight had landed in NIP. He speculated that was because of the MELs on the airplane, flying the plane at 17,000 feet in convective weather and a possible duty day limit; it seemed like a "bad idea."

His yearly recurrent covered items like ETOPS, OPT calculations and performance, minimum fuel requirements, and FAR's just to name a few topics.

He stated that if he ever saw a NOTAM for an arresting cable, he would bring it to the attention of the crew. He indicated that he had mentioned it to crews in the past, but the arresting cable was not a factor in their operation.

He further recalled that when he sees an arresting cable NOTAM that had a displaced threshold, he always ran an OPT calculation to make sure the flight was legal to land. If he had a question about the arresting cable, he would sometimes call the base for an explanation but did not do so for this landing.

When he was asked about how much time he spent managing versus dispatching planes, he indicated he spent most of his time dispatching and very little time managing. He would help new people who came on board.

When asked how he knew when the plane left the gate, he stated that he used the certain websites to see movement of the flight and if the captain's cell phone was off, that also meant the flight had left the gate.

He stated the weather was overlaid on their route using WSI. He stated that he normally worked 2-3 flights at a time and that was an average workload. He estimated that the average stage length was about 2 ½ hours. There was usually a mix of long and short leg flight segments and a mix of domestic and international flights. He stated the dispatch process was the same for international flights and domestic flights.

As part of dispatcher recurrent training, they were required to have 5 hours of observation either in the simulator or on the cockpit jumpseat. He liked the simulator better because he got more out of it. When asked why he liked the simulator better he said he liked it better because he was a pilot and he could see more things that happen.

When discussing the NIP to NGU leg with the pilot, (before it was canceled,) he told the captain that the weather was improving, and it would not have made a difference even though some of the tops were above 17,000 feet. He did not know about the duty time issue.

When looking up NOTAMS he looked closely for runway and taxiway closures, airport construction or if the windsock light was out. He would advise the crew if needed. If he saw a new frequency, he would advise the crew of that.

When asked if crews were receptive to getting NOTAMS he stated they were and sometimes they caught what he had missed, and they would contact him.

He was asked what his managerial duties were, he replied that when a new person came in or someone moved on, that was when he put on his manager hat.

He had no problems with the weather systems they used. He was asked which weather displays he liked the best, he responded that he liked to pull his weather from NavTech because it was easy to read with big displays. He also used WSI, Jeppesen, eWinds, and ODES. Everything he pulled he gave to the crew.

He stated that he ensured the station had all the paperwork and weather charts he had sent to them. If he called the station and they had not received the paperwork, he would resend the flight plan and attach the weather packet to it. This was done by email to ensure the crews got it. He could not recall if or when the weather graphics were missing from a package.

He indicated they used the Jeppesen program for dispatch because the accuracy was very good and was easy to learn.

When asked about not having ACARS, he said he did not know what ACARS was so he did not know if he wanted it or not.

When he was asked if he called the accident crew on SATCOM or not, he said the plane did not have SATCOM available.

When asked about limitations and MEL corrections, he said he always put the corrections into the OPT and applied the penalty. In this case he lowered the altitude to 17,000 feet from 25,000 feet per the MEL, and not an icing condition.

He said they tanker fuel a lot, but that NIP was not one of the stations they tanker fuel into.
He said he liked to have at least 30-45 minutes reserve on top of the required fuel when going into a major airport where delays were common but did not do it for the accident flight. He further stated that GTMO was a station they tankered fuel into, but NIP was not. The captain could also add additional fuel.

When preparing the initial package, he indicated that he had done that before leaving work for the day. He remembered telling the captain that the payload was less than what was on the original flight plan. He did not need to add any additional fuel but remembered an arrival fuel load of around 5000 kg for arrival.

When contacting the crew by ARINC and going through either New York or San Francisco radio, that process could take 5-10 minutes just to reach the crew.

The initial weather was sent by the dispatcher working the midnight shift. He ran the paperwork and sent the crew updated weather. He agreed with the captain about operating the flight.
He would do OPT takeoff and landing calculations.

They received systems and OPT training during recurrent.

Pilots would call out and off times via SATCOM, usually after the flight passed 10,000 feet. Additional fuel would be annotated under required fuel; it also had total fuel.

He said position reports were not required but that they got them when flying in Europe. When getting a position report, he compared the fuel with the planned fuel. He further stated that a paper copy of the flight plan was required to be in the pilot's possession.

Even though they used the Jeppesen Flight Planning System, they still filed all of their own flight plans.

If the airplane was expected to continue from NIP to Norfolk, he was not sure if he could have received a no ice clearance flying at 17,000 feet because of all the moisture in the air.
When he was asked about getting an ASAP program for the dispatchers, he replied that he did not even know what an ASAP program was.

He indicated that he was involved in the initial airport assessment or RAMP where he would obtain values for the flight but not for every departure. RAMP sheets must be used, and they added their own numbers, mostly just for weather, after the sheet came from the other departments. The sheets were kept in a binder in dispatch. He further stated that a RAMP sheet was filled out for GTMO but not for NIP.

When asked if something changes during flight, was the RAMP sheet updated, he replied, he had never had to do that. When using RAMP, weather was clipped to the sheet and if necessary, he would have updated it. If the weather changed, he would notify the crew. He did not think MELs factored into a risk assessment.

He did not think that 3 MELs was a lot. He did not think MELs were dramatically affecting the flight.

When there was a pilot new hire or upgrade to captain, they brought them to all of the departments and dispatch was one of the stops they made going through and meeting the other employees.

PIREPS could be a significant benefit, they were encouraged but not required. It would be helpful because they provide real time information.

He never had an incident where he could not get in touch with the pilots.

He liked to flight plan the alternate for the flight a couple hundred miles away from known weather. He typically gave weather a wide berth and would change routes based on weather.

Interview ended at 1053.

John Passwater – Vice President of Flight Operations

Interviewee: John Mark Passwater

Date: May 8, 2019
Location: Miami Air HQ Room 307
Time: 1454 EDT

Present: Shawn Etcher, Katherine Wilson, Warren Abrams – NTSB; David Thompson Federal Aviation Administration (FAA); Steve Joffrion – Miami Air; Paul McDonagh – IBT; Rich Lee – Boeing;

Mr. Passwater was represented by James Rodriquez – Attorney for Holland & Knight
During the interview Mr. Passwater stated the following:

He was 67 years old. He was the Vice President of Flight Operations at Miami Air, which meant under FAR 119 he was the Director of Operations. As Vice President he oversaw all of the operational functions with the company and had operational control of the flight operation, which involved several areas that reported to him such as the chief pilot, chief flight attendant, Director of Training, crew scheduling, system control, and the Dispatch team. It was a lot of responsibility.

There was no single standard day and each day varied with what he was doing and what the company was doing. On a "normal" day he arrived between 0700 and 0715 looks at the operational board, see what flights that day were and how the previous day had finished. Were they on time, did they have issues, etc. The day shift dispatchers had just come on board and the midnight dispatcher would touch base with him. After that he would check his email again, as he normally checked it at 0530 from his home. They had an 0800 maintenance meeting which was really more than that; it was a daily operational overview. Generally it was on maintenance and mechanical issues, but they talked about a lot of things about the business and general planning information. After that he would sit with the Vice President of maintenance and the CEO and they would have a private meeting about the company to discuss airworthiness and operations. Then he would go to his office to start paperwork, which there was "a lot." They would have several meetings throughout the week. They would have the ops weekly planning meeting on Thursdays looking through the weekend and following week. They would have their monthly CASS[73] meeting to look at the maintenance program. He would then leave around 1700 or so in the evening.

He was not sure of the statistics of their on-time performance. Every month and week would be different, summer was different than winter.

He started in aviation at a young age and graduated from the Air Force Academy in 1974. He received pilot duties and completed his career as squadron commander with a unit that flew 727 and 707 out of Andrews AFB and came to Miami Air in 1996 after retirement. He had done various jobs in the company, he managed operations managing scheduling, inflight, then vice-president of cargo. After 9/11 the cargo operation stopped. He then became the director of safety, after 3 or 4 years became a chief pilot for about 10 years, and about 4 years prior to the accident he became the vice-president of operations.

[73] Continuing Analysis and Surveillance System

He was current and qualified in the B-727 when he came on at Miami Air. He flew the B-727 for about 8 years as a captain, then transitioned into the B-737 and was a line check airman, which he still was, although he did line checks now very rarely.

He felt the communication at Miami Air was excellent, he felt they were a "right sized company" which was what drew him to the company. He liked the way they did business. They were big enough to be around a while but small enough that everyone knew each other. He likened it to an All-Star team to coach. He had 6 direct reports in his job; it was a talented, experienced team.

When he did hiring for Miami Air, several years prior, he went through a couple of cycles in the hiring process. There were times when they would have lots of pilots and then others where there were not enough. He stated that 4 years ago it was still generally 3,000 plus hours pilots coming out of the regionals or 135 operators. He had seen recent changes with pilot experiences, and he had noted that the total flight time had come down and so had the experience. They had adapted to that with longer OE and had more line check airmen to allow less experienced pilots to fly with the line check airmen.

He had met the accident first officer but had not flown with him.

He knew the accident captain; he was one of their best. He classified him as very thorough and that he had started as a ground instructor when he was an FO, they tried to take sharp first officers and let them be ground instructors and identified them as future check airman. He did an excellent job as a ground instructor, upgraded to captain, had no real issues and was very professional. Accordingly he became a simulator instructor, then a line check airman. He was the only APD that they had at Miami Air and they had been grooming him to replace the retiring chief of standards. He thought that he had flown with the accident captain when he [the accident captain] had been a first officer.

They had several processes of reporting concerns, the most formalized would be ProSafeT which had an app on the phone or employees could file it on the computer; they also had a safety hotline, and a flight safety representative. There was no fear of retribution. Because the size of the company most employees felt comfortable bringing things to him. They have a just cause philosophy at Miami Air. They have an open-door philosophy.

Any report other than ASAP, that was an operations-oriented report came to him. ASAP was set up when he was the director of safety. He thought it was an outstanding way of reporting issues. They did not have a huge volume, but it was a vehicle.

The chief of flight standards would put out "safety grams" and put out newsletters.

He would communicate with a flight that was airborne if there was a pending schedule change and now was an aircraft on a ferry flight, he may call the ferry flight to divert them. He did not call the accident crew on the day of the event.

He received a telephone call from the dispatcher shortly after the accident, he was one of the first people called and advised him that there was a report that they had an aircraft in the water and

passengers on the wing. When he got to the office, he was trying to ascertain what was going on at the time. The CEO and a few others convened in his office in order to stay connected but private enough to take care of things. They got out the emergency response plan and started going through the checklist. They used the checklist for hurricane evacuations and other events, that were non accident related, but never before for an accident. He felt they needed to review the checklist in light of the events to see if it needed to be improved. The checklist normally dealt with fatalities. He felt it was better to have more steps than needed, but they were thinking of improving upon it. He thought it worked well in this case.

He reported to the CEO/President.

He was not sure of his total time as he had not tallied it up, but he would estimate around 13,000 total hours of experience and he estimated a few thousand hours in the B-737, most of which was as PIC.

He was aware of the mechanical issue they were tracking with the accident airplane. They were looking at obtaining subservice from Sun Country airlines. The accident airplane was to return to MIA after it landed in NIP, there was to be a crew change to ferry the flight.

Dispatch maintained a log of communication with an airplane. If he had to reach out to call the crew, he would go to dispatch and find out what phase of flight they were in.

He had not reviewed the training of the accident first officer.

He maintained his currency in the B-737.

He had pilots come to him to report safety concerns. They had flight safety meetings which were chaired by the manager of flight standards, they would invite the POI, who came down and took advantage of it. If there was something that needed to be amended or changed on a checklist item or something in the training program, he felt it was the best single vehicle to do that.
They had aircraft depart the paved surface taxiing before but nothing to this nature.

He felt he was very visible to flight crews as his office was next to flight control. They were unique as companies go in that most of the time, they flew commercial airlines out of MIA to go meet the airplane. Crews normally went through flight control. More importantly, he felt, was that managers still fly; it was not as much as he would have liked but it kept him in touch.

He felt he had adequate time with his team to accomplish what was needed. His direct reports were those managers like a chief pilot that reported to him.

Their flight standards meeting was the vehicle for them to track trends. An example was when they saw an uptick in firm landings, and they attributed that to an airport they were flying into with a short landing runway.

Depending on what the uptick was, through their FOQA gate keepers they saw the deidentified information to see if it was a particular city or particular event. They saw an uptick as an example at an airport that kept them 'high and hot" and they were able to adjust accordingly.

He was with specialized designated unit in the Air Force.

The airplane had been in for a heavy check and they were doing their FANS (Future Area Navigation) upgrade. They boroscoped the engines and found the margins were down to near unacceptable levels, which had to do with the lessor contract. They felt they were due for restoration.

The after-action team will consist of standards personnel and various check airman, look at checklist, and their policies. Those changes would likely be done over a couple of meetings. They also worked with the CMO[74]. The lawyers never got involved with these meeting.

He did not feel the captain with all of his instructor duties was overtaxed. They would take a simulator instructor off flying the line for a month and then go back to flying the line and maybe line checks; he would not be doing all of his duties at the same time.

He had done the accident airplane's test flight after the engine installation, and there were no issues with the thrust reverser. They had an IDG[75] issue but that was all he could recall. He was not certain when the reverser was DMI'ed. All he could recall was after the test flight they had 3 or 4 maintenance write ups. After that had been fixed, they ferried it to Ft. Myers, brought the plane back to MIA to fix an issue with the bleed trip that repeatedly occurred on the ferry flight, and then returned the airplane to service and had flown several flights before the accident.

They generally did not have a lot of DMIs on their fleet. He felt 2 or 3 was above the normal. They did not have a lot of items that came up at the same time. He recalled looking at the MEL and they evaluated that with the dispatchers that it could safely fly.

Prior to departing for a flight, he as the captain would do, the weight and balance form but both pilots should review it. It was not unusual for a FO to do it. They did not have a policy of who had to do it other than both pilots having concurrence.

When using the OPT for their performance, they always assumed one inoperative thrust reverser. Enroute landing calculations were required if there was a change, and they looked at the most conservative runway. They assumed a wet runway in the dispatch paperwork. What he was led to believe about what the accident crew knew enroute would not have required a recalculation. However, they would have calculated with one thrust reverser inoperative. A crew would know about a displaced threshold from the airport data in OPT. They could land over arrestor cables.

Regarding the FAA guidance for runway contamination recalculation with a 15% landing distance, they took a more conservative approach and figured with one reverser inoperative.

[74] Certificate Management Office
[75] Integrated Drive Generator

An example of Miami Air using real-life experiences in the training was that they had a dual filter bypass. They had two aircraft at Ft. Hood in Killeen, TX. They refueled with an hour and there was contamination in the fuel. They had a fuel filter bypass situation about an hour after departure, to the best of his recollection he thought they ran the checklist and may have diverted. The OPC incorporated the fuel by-pass problem into it. They looked at events from the previous year and built their training. He was not certain on details of the landing conditions in the OPC but thought it was a short and slippery conditions on the runway. All crews were exposed to this scenario in training.

He recalled that they changed the unstabilized criteria from the FOQA trends and they felt that was part of the solution. Miami Air used to not include go-around procedures in the approach briefing, but due to simulator checks it was determined that it was a weakness. They now had to brief the missed approach procedure on every approach and landing. They had seen a positive trend on missed approaches, and they were more comfortable.

Miami Air was a part 121 Supplemental carrier and they had domestic and flag authority.

He would normally call a crew on the sat phone from dispatch.

He did interact with the POI via telephone calls, emails, and in person. The POI would visit the office on average about once a week; the relationship was excellent. The responses from the FAA they had gotten were much better; there was some changes in the management level above the POI that slowed down the process for a few years. They had started using the SAS portal which had been a good means in presenting changes and documentation to the CMT so they could review the changes and communicate it back to them on line. To get a letter from the office was a bureaucratic process due to the required reviews.

The most recent termination of a pilot from Miami Air was during training and had occurred in the past few months. They had terminated line pilots, but it was very rare. It was not something they did a lot, he estimated it was less than 20%.

He was not sure if the thrust reverser policy was written down in the manuals but thought it would be in the AOM.

The runway surface was ungrooved for performance calculations.

He did not need to sign off the risk assessment due to all of the DMIs to override the assessment to allow the flight from NIP to Guantanamo to depart.

They were starting LOSA because they wanted to improve the quality, as well as to primarily focus on the ground handling aspects. He felt it was not a traditional LOSA like other air carriers. They wanted to keep a handle on the policies. It would be done on every flight; the crews had a trip envelope where they kept all of the paperwork. It had each station they would be flying to and those envelopes would be transitioning where the crew can mark up the station with what the concern was, like ramp handling. It was a requirement for the crew to fill out the station

information even if there were no issues; they had a box that the crew had to checkmark that it was "all good." The safety department and director of system operations would review those as well.

In regard to the relationship with Miami Air and Sun Country, they were competitors and part of NACA; they were a team with the Air Mobility Command and they were able to combine their fleets so it would help obtain contracts with the DoD. As a team, they shared revenue but there was no ownership connecting the two companies.

Considering the condition at NIP at the time of the accident, he did not normally brief grooved or ungrooved and he saw it as being a fix in the future. It was not until the accident that it would have been something he would have briefed.

He might discuss the alternate airport as part of their predeparture briefing especially since the alternate was behind the weather and he would have pointed it out to his OE candidate. He believed the alternate for the accident flight was Orlando, which was behind the weather; that was what they trained their dispatchers to do in regard to choosing an alternate.

He was looking at the AOM appendix on page B2, the last item on that page was labeled "rev sub R (reversers) select one inoperative with both working, and no inoperative with one or none operational."

He offered some thoughts about what could be done differently. He thought everything that he had seen and read, although not official, the contributing factors were a result of two environmental factors, one being standing water, and a possible tailwind on landing. He felt that both of those factors were hidden, and the crew was not aware of those significant environmental factors. He was not sure what could be done about measuring standing water on the runway. He suggested developing a standing water detector on the runway. He felt the FICON[76] was still not perfect. There would be little visibility if there was standing water and it changed very quickly.

The environmental factor that could be addressed would be the tailwind. They have a GPWS system that provided a lot of information; he felt it would be a fairly simple adaptation of that system to detect tailwinds. At the time of the accident, the wind information was a small text box on the corner of the PFD[77]; he thought if they had a GPWS annunciate that it was a tailwind that would have been helpful to the crew.

Interview concluded at 1631 EDT

Alaric Brown – Dispatcher

Interviewee: Alaric Anthony Hamilton Brown
Date: May 8, 2019
Location: Miami Air HQ Room 307
Time: 1258 EDT

[76] Field Conditions
[77] Primary Flight Display

Present: Shawn Etcher, Katherine Wilson, Warren Abrams – NTSB; David Thompson Federal Aviation Administration (FAA); Steve Joffrion – Miami Air; Paul McDonagh – IBT; Rich Lee – Boeing;

Mr. Brown was represented by Gary L. Halbert – Attorney for Holland & Knight

During the interview, Mr. Brown stated the following:

He was 62 years old and was the manager of flight dispatch. He was in that position for about 3 to 4 years. Prior to that he was a senior flight dispatcher, which he held that position for about 10 years. He was hired at Miami Air as a ground ops coordinator, which he held for about 2 years. He had a dispatcher license but since he had never done dispatching before, he was trained and evaluated before he was allowed to dispatch at Miami Air.

He wanted to be a dentist but worked at the airport in Jamaica doing load sheets for 13 years, then went to British Airways for 9 years, then for 6 months he managed a plant and garden store before getting back into aviation. He then got a call from Worldwide to assist the manager in Philadelphia for 6 months, then an opportunity was available, and he applied at Miami Air. He obtained his dispatcher certificate at least 13 years before he had an opportunity to use it.

He got the certificate to help further his career in aviation; however, at British Airways it was not required but he received SCOT training, which included weather and fuel planning. He did not have a pilot certificate.

He did not feel obtaining the certificate was easy, but he had no issues with it. Back then there was a lot of attention to weather. He received his training at the Pan AM Flight Academy in Great Neck, New York, for his dispatch certificate.

The day of the accident, he arrived around 1425, looked at the flight board to see where they were going with airplanes, which was his usual start. He saw that the accident flight had a delay. He saw the flight in the Pacific was dispatched and there was a flight from Punta Cana enroute. He knew the crew was going to call and request the gate at either Kansas City or Cincinnati. He called ground ops to get the gate information. He was briefed by the outgoing dispatcher. He was informed that the accident airplane was restricted to 17,000 feet or lower because of an inoperative pack. He did not recall the thrust reverser being mentioned but he saw it on the sheet. The main thing he recalled was the flight level restriction; there was another item limiting the airplane to below FL250. He was scheduled to get off duty at 2300 local time.

He tracked the flight on the WSI system; it had weather depiction that showed moisture aloft and there were convective SIGMET[78] alerts. There were only convective SIGMETs over the water and not near the planned flight path. He saw the NOTAM with a tempo but that was before the estimated time of arrival because the flight was delayed. The only concern he had was that the route out of Gitmo was on airways that would accommodate the altitude restriction.

[78] Significant Meteorological Information

When asked how he was notified of the accident, he stated that the maintenance controller received a call at 2153 from the facility the monitors an ELT that it was sounding for the accident airplane. He looked at the screen and the airplane was not being shown on it, which indicated it landed. He was told to tell the captain when he called in to turn it off. The maintenance controller then received a call from the flight mechanic on board that the airplane had ran off the runway was in the water. The maintenance controller told him and acted very calm; he knew he had work to do.

The first thing he did was to initiate the SMS system and went right to Tier 3 that the airplane had run off the runway and was in the water. He called the vice-president of ops and the CEO and told them to come in. He then went to scheduling to get names of those to call to come into the office; he did that because he did not want to only rely on the electronic system.

The indication they received were that passengers were standing on the wing and being rescued. He was then told that there were 50 passengers that had been rescued and were in the hangar. He was communicating with NIP tower and he told them that there was 135 passenger and 7 crew. The safety department called the tower and had no indication of any causalities.

Initially everyone came into the dispatch office. At first his supervisor arrived, he handed all of the paperwork to her for the accident flight and then everyone went into the vice president of operation's office. His supervisor asked him to write down what happened.

He monitored the flight the entire time and he noticed there was a lot of direct vectors to the airplane and he compared it to WSI information; it looked the same. ATC deviations would have shown up.

He never contacted the crew before they left Guantanamo or while enroute; it was just a "normal" flight.

He had never been around when an airplane had an accident.

The flight was probably delayed by more than 2 hours, but he was not certain.

His last recurrent training was in January of 2019.He thought the training was by himself but could have been with another dispatcher; he was not certain, since the training was based on availability. He did his jumpseat observation on the airplane which he liked better.

When on the airplane he was told that if he sees anything to bring it to the attention of the flight crew.

There was an OPT software that he used to determine the performance numbers. They were already calculated for the accident flight, but he still did the numbers and it was ok for a wet landing. He was not certain if there were provisions for grooved versus non-grooved runway surfaces.

They were required to flight follow in the event that they saw any convective activities and bearing in mind that their capture of the radar had a delay of about 15 minutes. Convective SIGMETs, he stated, had a duration of availability that they could advise the crew of ahead of time.

Punta Cana was airborne and the flight to Gitmo and the pacific flight were not airborne. He was the only dispatcher on duty.

If he needed to contact the crew when airborne he would go through New York radio; he knew that attempts were made to contact them on the sat phone by the VP of Operations. There were attempts to contact the crew, but they could not get in touch with them via the sat phone.

WSI did not show the flight pushing back. He used other commercial indicators like FlightAware to show the airplane taxiing. His initial call if the airplane was taxiing out and he needed to contact the flight urgently, would be to have the station representative contact the tower.

The airplane was going to ferry to Miami for maintenance, but it was not a maintenance ferry. He had planned the routing from NIP to MIA aware of the facts of the limitation and planned it to fly over Tampa and Ft. Myers which were clear of weather. When planning it, there was moisture aloft over the east coast. After he filed it ATC changed it to East coast because the moisture had moved off.

The crew to ferry the flight was to be the crew that did the first leg into NIP. He checked the crew schedule and he checked the flight being operated and it had the list of crew and deadheading crew. Crew scheduling was to send out an email if there was a crew schedule issue; he could not recall any such notice.

It was a normal workload during his shift. A heavy workload would be a lot of changes with crew and destination; it was not stressful, just time absorbing.

Prepping the weather before starting a flight plan would take him about 90 minutes to 2 hours and to do a flight plan would be an additional 20 minutes if it was for just one leg. If the crew was doing all the legs, he would keep that crew and flight plan for all of their flights.

The limitation was a concern because the moisture aloft was east of the route and he anticipated going further west. If there was no limitation it would have been a concern and he would still have to vector his way around the weather.

The 4 DMIs required that the airplane was on the most restrictive route. Normally they had non-essential items but the DMI's listed did not look unusual or concerning. If it did not look abnormal, they were not told to remove non-essential items from the list. Because he was planning ahead, he could project potential movements with the weather; he could set the WSI program to show what was expected many hours ahead, to coincide with the timing of the flight to see if it would be an issue with the flight. Since he was aware of it, he could plan accordingly like adding fuel. He would let the captain be aware of that during his verbal briefing.

When looking at NOTAMs during the planning stage they looked at runway conditions to make sure they were not closed or a short runway that would affect them, even if it was not an ETOPS flight they looked at airport rescue.

He had seen NOTAMs for arrestor cable being out; he could not recall if those NOTAMs were there the night of the event.

When asked if he receives PIREPs from pilots, he stated that it was not normal to receive them, but he had one or two pilots call to express they had encountered turbulence. PIREPs helped him with planning flights, what he would see as moderate turbulence, he would ask the crew what they experienced, if it was what he was seeing he would pass it along to the crew. He would share that PIREP information with other dispatchers as he was not there to determine if it was relevant. He had never filed a PIREP.

He wrote a statement for his supervisor the night of the event, which was about what he did after he had been notified, including who he contacted and spoke to.

It was the vice president of operation who came into dispatch to contact the crew on the sat phone, while the flight was enroute from NIP to Gitmo. The reason was to test the system and talk to the crew.

He reported to the Director of Dispatch.

As manager of dispatch there were times when he was asked to do evaluations on other dispatchers, mainly those on the night shift. There were some other data information that was entrusted for him to do. He conducted the evaluations as needed. He mainly dispatched flights. The recurrent evaluation was noted in the dispatcher's records. He clarified that he would do the competency checks for the night shift dispatchers after they completed their recurrent training.

The training he received was that when doing evaluations try and make the dispatcher go away with something they did not know.

He had only spoken with the representative on the ground in NIP. The captain on arrival to Gitmo had called in his arrival times and that the flight plan had the incorrect flight time, he then called again saying he was closing the door and leaving shortly. The weather sent was received by the captain and the only thing they discussed was about the enroute weather for the flight from Gitmo to NIP.

When he talked to the crew enroute, the flight was off the coast of Florida.

Since he looked at the next flight leg, he looked at the moisture aloft on the flight from Gitmo to NIP.

During recurrent training they were taught to identify the different categories of the MEL and to familiarize themselves with the MEL. They also could talk with the maintenance controller and have it explained to them.

He did not receive the quarterly FOQA reports. He had never been asked to help pull data for FOQA and he did not know how to pull the archives.

He clarified 135 passengers and 7 crew. He did not get a code for lap children. He only knew there was 142 souls on board, and he subtracted the 7 crew, that was how he knew there were 135 passengers.

He did not know an exact number of flights he has worked out of Gitmo. He was not aware of a time when there was a mechanical issue in Gitmo that the plane could not depart. They looked at the schedule to make sure the crew could fly even if they would have to leave later.

He did review the weather packet for the accident flight and the METAR for NIP. There was no concern and no report of contamination on the runway. He did agree with the captain's decision to operate the flight.

He had called Miami Air's FAA POI on the night of the accident.

Ground school was 2 days in length, then a competency check, then the 5 hours of jumpseat/simulator observation.

During ground school they went through topics including the flight operations manual, ETOPS, security requirements, aircraft performance, weather, NOTAMs, restrictions on the MEL, landing restrictions for ceiling and visibility, and weather requirements for ETOPS. They also discussed alternate weather, OPT, 3585, CAT II III, and systems.

He had direct contact with captains prior to departure; the narrative they normally start with was the flight time, fuel burn, fuel required, then the weather for the origin, enroute, destination, and alternate, and then MEL items and restrictions observed.

Scheduling and travel usually handled the accommodations for the passengers and crew if a flight was canceled.

DMI items that they looked at would not include cosmetic type items.

DRM was stressed and practiced. They had to have an open dialogue with the flight crew. Every recurrent training, there was interaction with the ground operation. They did not conduct any training with the flight crew.

When the captain had called in while enroute and asked for the latest weather report, he looked at the METAR that was issued at 2353Z and he recalled the visibility of 10 SM, the temperature/dewpoint spread was 5 degrees and CB's[79] to the south and southwest of the airport. The call was made about 0015Z; the captain had called in on a VHF frequency. The captain was quite comfortable with the weather. There was no precipitation in the METAR at the time. Nothing seemed out of the normal with the captain's personality.

Interview concluded at 1425 EDT

[79] Cumulonimbus

Dispatcher on duty: [redacted]

Friday May 03, 2019

PM MX CTRL RCVD. CALL ABOUT A/C N732MA ELT IS OFL.

MX CONTROLLER INFORMED ME THAT HE RCVD. A CALL FROM THE MECHANIC ON BOARD THAT THE A/C N732MA RAN OFF THE RUNWAY AND INTO THE WATER.

I INITIATED A TIER 3 CALL OUT THAN N732MA RAN OFF THE RUNWAY AT NIP ~~AND RAN~~ IT'S IN THE WATER

I FURTHER CALLED VIA TELEPHONE JOHN PASSWATER, KURT KAMNAS, ARMANDO SCOTT, TACC (COMMAND CENTER) HERB ZIMMERMAN, MARK BERTAULT, ELY HENRY I LEFT A MESSAGE WITH IYO FROM HUMAN RESOURCE. I ALSO SPOKE TO MARK AND KIM AT NIP OUR REPRESENTATIVE. AT THE REQUEST OF TACC I SENT A MESSAGE TO TACC STATING WHAT HAD HAPPENED.

I ALSO SPOKE TO A MR DAVID BUSH WHO SAID HE WAS COORDINATING WITH THE TOWER, I ASKED FOR THE TOWER NBR AT NIP WHICH I PASSED ON TO [redacted]

[redacted]

Elizabeth Romani –Dispatcher

Interviewee: Elizabeth Romani – Aircraft Dispatcher
Date: May 9, 2019
Location: Miami Air HQ Room 307
Time: 0800 EDT

Present: Shawn Etcher, Katherine Wilson, Warren Abrams – NTSB; David Thompson Federal Aviation Administration (FAA); Steve Joffrion – Miami Air; Paul McDonagh – IBT; Rich Lee – Boeing;

Ms. Romani was represented by James Rodriguez – Attorney for Holland & Knight

During the interview, Ms. Romani stated the following:

She was first hired by Miami Air in January 2013. She left to attend ATC school in Oklahoma City but returned to Miami Air in October 2018. She was originally hired as an intern under the director of safety and security. She had her dispatcher's license. She reported to the director of dispatch, with whom she had a good working relationship.

She was not required to work overtime and had never done so. Her usual shift was 2230-0700 and she kept a routine to be rested while working the overnight shift.

The number of flights they worked during a shift depended on how many flights there were to dispatch. Their day-to-day operations changed so it was hard to give a number. She estimated that she would flight follow 2 flights and dispatch 2-3 flights; she usually had at least 2 flights to dispatch each shift.

She had to cancel a flight for weather before, the last time being she thought in December 2018. If she canceled a flight, she felt she had management support.

She was not at work when the accident occurred but had worked the night before and came on duty the night of the accident after it occurred. She could not take operational control when she arrived because the director of safety and security was at her desk; other upper management personnel were on their way in.

She was not called in to work because of the accident, it was her regular shift. Once she was able to log in, she assisted fielding phone calls and helped the director of safety and security to retrieve the manifest. The dispatch office was not that big, so it was crowded with everything happening in there.

The night before the accident she dispatched 4 total legs. When dispatching the flight from Guantanamo to NIP, there was a TEMPO for thunderstorms. The airplane route was planned for Norfolk to NIP to Guantanamo to NIP to Norfolk. This route ran weekly. When she left at 0700 the morning of the accident, the airplane was enroute from Norfolk to NIP.

Regarding the mood in the dispatch office after the accident, when she came in everyone was trying to get the facts together; it was not chaotic. Because the director of safety and security was the first to the office from upper management, people needing information would go to him first.

She thought she received her dispatcher's license in April of 2015 or 2016. When she was hired as an intern, she expressed interest in being a dispatcher. The director of safety and security introduced her to the director of dispatch. She was told about a ground operations position, which she took. They liked what they saw, and she was hired as an assistant under the director of dispatch and then they sent her to school for her license; it was a 1.5-month intensive course in New York seven days a week. Being a dispatcher was everything she expected.

She received recurrent training annually, most recently in October 2018. After leaving the company for ATC school, she had to do requalification training when she returned which was about a week-long hybrid between initial and recurrent training.

To satisfy the 5-hour observation requirement, she did her observations in the simulator for the most recent recurrent training and the previous year rode in the cockpit.

When a flight plan is prepared, the captain will call in for a briefing. She thought she got along with captains; she just tried to keep it professional. The standard briefing she would give pilots included the flight time, burn, alternate, minimums required, if additional fuel was added because of weather or another reason, any significant NOTAMS, and overall weather.

When looking at NOTAMS, she would look for runway closures, displaced threshold, airport closures, quiet hours, etc.

She was not sure of any job openings in dispatch coming up; she would probably be working the night shift for a while.

She never had a flight that encountered severe turbulence.

It had been a while since she had an air turnback.

She did not preplan the shift before.

Before the end of her shift, she had sent the paperwork to the station and copied the captain. She advised the incoming dispatcher that she had not briefed the captain yet and he would be calling in; she advised the incoming dispatcher about anything weather-wise related to the flight like the TEMPO for the return flight to NIP.

She looked at the MELs and saw the TEMPO for the thunderstorm, but it was still a legal flight.

When dispatching a flight, she looked at the DMI sheet, and if there were items, she would look them up in the MEL book; she would look for penalties, possible alternates, times of arrival, NOTAMS, run the actual flight plans, run data in OPT, do the flight release and then flight follow it.

The DMIs were for Wi-Fi inoperative and something about the sat phone, but there were no penalties.

She worked two nights with another overnight dispatcher, and he was working the night before the accident as well. The dispatchers would divide the workload but talked about which flights they each wanted to dispatch. There was nothing different about dispatching to NIP.

The arresting cables were always in the NOTAMS for NIP. She had asked about them one time and was told they could land on them. She was not sure if the arresting cables resulted in a displaced threshold.

She had canceled a flight before; it was for a lot of snow and the flight could not depart. If she had to cancel a flight, she would call the duty officer to discuss it.

When doing her 5 hours of observations, she liked riding in the cockpit because she got to see what they did with the dispatch paperwork and it was a fun ride.

The length of time to complete the dispatch paperwork depended on the number of legs, weather, alternates, etc.; she had never thought about it like that.

She would dispatch flights to a certain time and would dispatch all the legs the captain was operating during that window; it was typically until 3 hours after her shift ended.

She used the Jeppesen Jet Planner, pulled weather from jetplan.com, FARs from the NAVBLUE program, weather from aviationweather.gov, WSI, MEL manuals, and the checklist for dispatching. She thought all of the systems were pretty useful.

OPT was pretty easy to use and was part of their initial and recurrent training. Recurrent training was 2 days in the classroom, but she did not remember the specific topics covered.

She usually did recurrent training with the director of standards for 2 days in the classroom and then a competency check in the office with the director of dispatch. For the check, she would be given a scenario and told to show how she would dispatch it then she would be asked questions of why she did or did not do something; it usually took about a day.

She thought training was good.

Asked to explain how she did flight following, she would arrive for her shift and get the turnover from the PM dispatcher; he would tell her who was airborne and what the weather was like. She always had the stations pulled up on WSI and would check to make sure nothing had changed; if it did, she would call the captain to advise him. Most aircraft had a sat phone but if not, she would do a phone patch through ARINC. They did not have ACARS. She could not say if ACARS would be helpful because she had never used it.

She would not know that a flight left the gate. The crew would call if there was a delay or she could call to let the captain know they were past their departure time and find out where they were. The crew would also call if they were turning back for a mechanical issue when taxiing out.

She was not aware of any additional issues on the accident airplane when it was flying from Norfolk to NIP besides the Wi-Fi and sat phone. She did not know if a crew would alert her in flight if they had an issue. The only related phone call she had received was from crews asking to talk to maintenance control; she was not entirely sure if a crew could call maintenance control directly.

Dispatch did not send performance data to the crew. If there was a performance issue, she would tell the crew they can takeoff or land with this amount. The crew ran the same OPT in the airplane as well. Dispatch just made sure they could takeoff and land. She did not know how the crew used the data when they ran it themselves.

To call a crew using ARINC, she would call San Francisco or New York radio and tell them she needed a phone patch with the aircraft which was flying from here to here and the approximate location of the flight. When they reached the crew, her sat phone would ring. It usually took 5-10 minutes to get the call back. She was never unable to get ahold of a crew this way.

Asked how she would alert a crew that was 10 minutes out from landing of the weather, she said she had never encountered that situation and if the crew was on the approach, they were busy and she had probably already discussed the weather with them. The crew would be busy, and she would let them "do their thing". If the flight went missed or had to hold, they would call her.

She clarified that preplanning meant looking at flights for the next shift.

She recalled that the requalification training she received included weather, aircraft systems, domestic vs international operations, ETOPS, minimums, fuel, and OPT which included hands on practice. They would receive an OPT scenario with MEL items and usually a short field runway. She also received a FliteDeck Pro scenario and had to determine if a flight could takeoff or land based on weather using that system.

If a flight needed to stop for fuel or had to adjust passengers, she would communicate that to the crew.

They could use the full length of the runway with the arresting gear.

She worked the flight from NIP to Guantanamo and looked at the DMI for the sat phone and Wi-Fi. She was not entirely sure how often the DMI sheet was updated but she got a new one whenever there was an item written up.

"For the most part," the Jeppesen Jet Planner was user friendly. The only issue she had was that it sometimes would not cooperate; she would create a request form and the system would get hung up.

A crew would usually call to say they were entering the hold. A crew would also usually call when diverting; she would usually see it on the screen and then get the call from the crew.

She would circle a NOTAM on the paperwork that she sent to the crew so it would stick out when the crew saw it. There was a remarks section in the flight release, and she had used it; she usually put the additional fuel for weather, if they were tankering and fueling through a particular station. If it was an international flight, she would put the PPR[80] number and DIP number or anything that ATC could ask them for enroute.

She could not recall if she had seen an airplane with as many DMIs as the accident airplane. She would just need to make sure she pulled the MEL and apply any penalties.

If maintenance control added an item or two, she would go to the manual's website, pull up the MEL manual, search for the item, read it, and if there was a penalty make note of it for when she planned the flight. She would not include the MEL page in the dispatch paperwork because the crew could pull it up on the iPad in the airplane.

She did not have any real problems with the Jeppesen Jet Planner, just that it got hung up. If she did have a problem with the system that needed to be resolved, she could call ops support at Jeppesen, but she never had to do that.

Interview ended at 0905.

Jean Mamert – Director of System Operation

Interviewee: Jean Mamert – Director of System Operations Miami Air
Date: May 9, 2019
Location: Miami Air HQ Room 307
Time: 0931 EDT

Present: Shawn Etcher, Katherine Wilson, Warren Abrams – NTSB; David Thompson Federal Aviation Administration (FAA); Steve Joffrion – Miami Air; Paul McDonagh – IBT; Rich Lee – Boeing;

Mr. Mamert was represented by James Rodriguez - Attorney for Holland & Knight

During the interview, Mr. Mamert stated the following:

He was 64 years old. He was director of system control. He was hired April 1, 1992, with Miami Air. He had his current position for 12 years. Prior to that, he spent 5 years in aircraft routing and was hired as a dispatcher in 1992.

His first work in aviation was for the airport authority in Paris doing weight and balance as a ramp supervisor. He moved to Florida in 1980. He worked odd jobs for 10 years. He took a dispatcher

[80] Prior Permission Required

class and passed his certificate as a dispatcher in spring of 1991 and was hired a year later at Miami Air. He only had a dispatcher certificate.

His supervisor was the Vice President of operations and he stated their working relationship was "good." If he had a concern, he could bring it to the vice president's attention who would "absolutely" listen to his safety concerns.

He was responsible for the daily operation of the airline to make sure everything worked smoothly. He worked with all departments. He normally worked Thursday through Monday. When he started his day, he would first look at the schedule for the next 2 weeks, especially at the first 4-5 days, that would let him determine if they needed to reposition airplanes, say due to snow or ice in the winter. He managed and ran RAMP and started the process on that to see if they could go into certain airports. He also looked at crew comments. He also looked at delays. If a crew asked for a response to their comments, he also would do that.

He loved his job. He normally started work at 0600 and left at 1700.

The flight schedule did change a lot, but things he looked at when looking two weeks out was if they needed permits for countries and other items. He did not do the permits, others did.

He heard about the accident from the director of dispatch, he was informed that they had an airplane that had run off the runway. He asked if he needed to come in but was told he did not need to. He normally worked on weekends, so he was there on the day after the accident to keep the operation going.

The staffing on the weekend of the accident was more than normal in the dispatch area.

He also considered weather when he would be looking two weeks out; he further stated that there could be ice storms if the flight was planned in the winter.

The customer's name was provided in the reports. When he looked out two weeks, he would know who the passengers were going to be. He worked with all of the departments to make sure everything was ready for the flight. He was not responsible for catering.

Fuel companies were different at various airports.

They did dispatch CRM and he went through it during recurrent. His last recurrent was in August of 2018. He had completed his most recent recurrent with the director of dispatch. Part of recurrent included 5 hours observing the operation. He did that in the simulator this past recurrent, but he liked doing the observations in the airplane better.

He rarely dispatched an aircraft and he classified it as having been "a really long time" since he had; however, he was still current.

He was working on the day of the accident. He was aware of the problems with the packs on the accident airplane and he started looking at what option they had if the airplane was grounded.

He was still working when the flight was delayed leaving NIP. He just needed to make sure the crew was still good, and that scheduling was still tracking the time. He would not be involved if the crew duty day needed to be extended.

He knew the accident captain. He was not sure what he was like as a captain, he only knew him in the office. He never heard any complaints or concerns about the captain. He had never done an observation flight with the accident captain.

Going into a new airport they had a worksheet that they would complete. The worksheet looked at different areas such as dispatch, security and operations. The operations part would have gone to the vice-president of operations or chief pilot. Security looked at the security part at the airport, and dispatch looked at the operation part; he normally did the dispatch part because dispatchers were busy. They did an approval or disapproval of the airport. He had disapproved an airport; an example of what would cause him to disapprove it would be too short of a runway.

He had done the RAMP sheet. He ran a report every week for airports that were RAMP above 40 points; there were usually about 40 airports. He would fill out the worksheet with the flight number, date, airport in question with the initial tallied number, he then sent it to scheduling and they added their factors which added in scheduling's risk assessment numbers. Then the worksheet would go to dispatch to assess in real time, considering weather and performance. They only did that to the airports that were flagged; some of the factors were runway length, width, ATC, etc. It was all assessed and added to the factors. He would then add the time of day as it would be a factor, and the time was broken down in 6-hour increments beginning at midnight (0000-0600 was 10 points, 0600-1200 was 5 points, 1200-1800 was 0 points, and 1800-2400 was 5 points). A total risk number of 40 was what would flag the airport; NIP was not flagged. NIP could not have been flagged as it had a risk number of 20 and it would not be able to reach 40 even after all the other departments added their risk numbers to it. He was not sure what criteria was met to reach an assessment number of 20.

He looked at what it took to help the operation run. He did not have an assistant and thought he could handle his duties alone.

He was current as a dispatcher and he was considered a backup in case, but it had been a long time.

He had not flown into NIP on any of his observation flights.

He felt the airplane just seemed more "real" when doing the observations. Even though the simulators are "good," the airplane was more "real."

He did not have anyone that reported directly to him.

He felt that dispatch was adequately staffed.

He could cancel a flight but normally when he had done that it was for weather. The accident airplane's maintenance issues had not given him any concern. If the airplane ended up being grounded, he had looked at what he would need to do with the rest of the schedule; he felt that was his main job on weekends.

The duty officer would take over when he was not on duty, which would be every night and the days he was not scheduled to work.

He did brief the duty officer before he left, and he had received calls on the weekend from the duty officer, in order for the duty officer to stay briefed and he would alert them if there was some weather. The weather in Florida was a "known" factor; there was no front that would have created a squall or solid line of thunderstorms.

They did not look at grooved runways, nor did they look at the arrestor cable information.

The operator did have a reporting system to keep track of delays and cancellations and they discussed those delays and cancellations from the previous week. He felt there was not that many cancellations or delays. There was never any pushback from management on cancellations or delays.

He would brief whoever would take over for him after he retired, he felt there were some employees that would do his job well.

If a crew wrote up something about the ramp condition, safety would have looked at that closely. He was sure other flights had landed at NIP when it was raining, they had storms in the summer.

He had never heard of complaints about airplanes hydroplaning.

There was nothing of concern on the day of the event and he would have agreed with the captain's decision to conduct the flight.

He would not be the only person to assess an airport, he would have assessed some information through the OPT. If the flight was months away, he would look at average temperatures for the time of year in order to input that information into the OPT, through a software program they used.

When asked about the comments on the envelope that crews made, he stated that most were about servicing such as a ground power unit not working, lavatory service not conducted, not enough air stairs, etc. He felt those comments could be about anything.

He was not involved with anything concerning ASAP or reviewing safety reports.

There was an email that would have been sent by dispatch for delays and then the dispatcher would update the time on the estimated time of departure in the system. There would have been only one email since the first flight would be delayed, then the second flight would also be delayed.

He did have access of the preceding 3 months of flight plans and they were stored in a storage room.

Interview concluded at 1013 EDT.

APPENDIX A

SUPPLEMENT TO CAPTAIN LEWIS' INTERVIEW

The following information was provided to the Operational Factors and Human Performance Group Chairmen by Captain Lewis as an additional clarification to his interview:

From: William Lewis
Sent: Monday, May 13, 2019 11:12 AM
To: Steve Joffrion
Subject: Supplementary Info to NTSB

Dear Steve,

I would like to supplement my testimony given in an interview on May 8, 2019, to the NTSB Operations and Human Performance Group.

I was asked when on landing an aircrew would normally no longer attempt a go around or recommit to takeoff. I answered that such a point was no later than after thrust reverser(s) had been selected.

I would like to further add that this answer is according to company policy. It falls under the airline's "commit to land" policy, which states that the pilot flying will commit to land the aircraft once thrust reversers have been selected for the initial time on landing. The source document for that policy is the Miami Air Airplane Operations Manual Volume 1, Normal Procedures Section, page NP20.80, "Commitment to Stop Point on Landing," which reads, "A go around will not be attempted after the thrust reversers are deployed on landing."

I believe the investigators have been given access to the AOM, but, if not, we can send them an excerpt of this section.

Please forward this e-mail to Captain Etcher and Dr. Wilson.

Sincerely,
William C. Lewis
Captain
FOQA Manager
Miami Air International

APPENDIX B

Captain Joffrion Interview Transcript

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

* * * * * * * * * * * * * *
Investigation of: *
*
BOEING 737-800 OVERRUN *
JACKSONVILLE, FLORIDA * Accident No.: DCA19FA143
MAY 3, 2019 *
*
* * * * * * * * * * * * * *

Interview of: STEVEN JOFFRION
Chief of Flight Standards, Miami Air

Tuesday,
July 16, 2019

APPEARANCES:

SHAWN ETCHER, Aviation Accident Investigator
Chairman, Operational Factors Group
National Transportation Safety Board

KATHERINE WILSON, Ph.D., Senior Human Performance
Investigator
National Transportation Safety Board

WARREN ABRAMS, Air Safety Investigator
National Transportation Safety Board

TODD GENTRY, Air Safety Investigator
Federal Aviation Administration

DAVID THOMPSON
Federal Aviation Administration

ARMANDO MARTINEZ
Miami Air

RICH LEE, Safety Pilot
Boeing

DARRIN NELSON, Executive Board Member
International Brotherhood of Teamsters (IBT) Local 1224

GARY L. HALBERT, Attorney
Holland & Knight
(On behalf of Mr. Joffrion)

I N D E X

I N T E R V I E W

(1:01 p.m.)

MR. ETCHER: All right. Well, good afternoon. My name is Shawn Etcher. I'm the investigator with the NTSB. I'm the chairman of the ops group for the Miami Air event that occurred up in Jacksonville back in May. Our role here is to learn what we can about the accident so we can assist the investigation and hopefully prevent this from reoccurring.

As part of our process -- I think you've been well-versed on it, but as part of our process, we invite parties to participate in the investigation to provide us with technical expertise. That includes those of us from the NTSB, FAA, Boeing, Miami Air, and the Teamsters, in this case. We'll go around the room here. We'll introduce everybody so then you know everybody's role, and we'll get it started. If you're ready.

MR. JOFFRION: Ready.

MR. ETCHER: All righty. Kat.

DR. WILSON: Katherine Wilson, human performance with the NTSB.

MR. JOFFRION: Pleasure to meet you.

MR. GENTRY: I'm Todd Gentry with AVP-100 in FAA, accident investigation.

MR. NELSON: Darrin Nelson, Teamsters representative on the committee.

MR. ABRAMS: I'm Warren Abrams, an air safety investigator

with the NTSB.

MR. THOMPSON: Dave Thompson, FAA. I'm the representative on the ops team.

MR. LEE: Rich Lee, Boeing. I'm a safety pilot.

MR. MARTINEZ: I'm Armando Martinez representing Miami Air.

MR. ETCHER: That's everybody on the group, and on the phone here in just a minute, we'll have that individual introduce himself as well.

But as part of our regulations you are welcome to have one representative during this interview. And we just want to make sure that Gary Halbert is the individual that you choose to be your representative?

MR. JOFFRION: Yes, that's true.

MR. ETCHER: He's on the phone.

Gary, would you like to say a few words?

MR. HALBERT: Sure. This is Gary L. Halbert. I'm an attorney with the law firm Holland & Knight. And I'm representing Miami Air and, in this instance, its employee, Steve Joffrion, in the interview.

MR. ETCHER: All righty. All right, thank you much.

As part of our process, we're going to record this interview, and I'm also going to be taking notes at the same time. But we're going to take the recordings and we're going to have them transcribed so we can make sure we capture everything you say correctly, and that way it doesn't leave any room for

interpretation. The audio itself will not be part of the public docket, but the transcripts will.

So do you have any questions about that?

MR. JOFFRION: No questions.

MR. ETCHER: All righty. As part of the rules, if you have -- during this interview, if you don't understand a question, ask for clarification. Because if you -- if I don't understand an answer, I'm going to ask for clarification as well.

MR. JOFFRION: Fair enough.

MR. ETCHER: If you need a drink or a restroom break or anything like that, just say so. And also remember, if you don't know an answer "I don't know" or something just like that works just fine.

All righty? Now that we've got all the formalities out of the way, are you ready?

MR. JOFFRION: I'm ready.

MR. ETCHER: All righty.

INTERVIEW OF STEVEN JOFFRION

BY MR. ETCHER:

Q. We'll start with the tough questions first. Can you give us your full name and spell the last name for us?

A. Okay. Steven Cole Joffrion. Last name spelled J-O-F-F-R-I-O-N.

Q. And how young are you?

A. I just turned 70.

Q. All righty. And what is your job title here?
A. Chief of flight standards.
Q. And what does that entitle -- what does that entail, I should say?
A. Well, do you want the long version or the short version?
Q. I want the version that you're comfortable giving us, but I would prefer a lot of detail.
A. All right. I report to the chief pilot. I coordinate all training activities with the director of training, who you've already met, which is Rich Draina. I'm responsible for the check airmen and how they conduct themselves, both on check rides as well as in how they train our personnel. I report to the FAA a quarterly check airman activity report, which annotates all of the check rides that we've administered both in the simulator as well as line checks. Also we include in that LOFTs, line-oriented flight training. I am responsible for writing a lot of the manuals. That includes the flight operations manual, the AOM Volume 1, AOM Volume 2 flight training manual.

I'm responsible for writing the lesson plans for initial as well as recurrent pilots. I teach pilots initial all the way through their simulator check ride, and then Phase 2. Phase 2 includes -- after they finish their type rating, it includes Cat 2, Cat 3, RNP, PAR, ASR and PRM. I write standardization newsletters that bring pilots up to speed on issues that are new or we've discovered weaknesses that they need to discuss. I also

teach dispatchers both initial as well as recurrent. I maintain upwards of 100 PowerPoints that the pilots use for both initial as well as recurrent training, and dispatchers as well.

I'm in charge of fuel conservation. I submit a quarterly report. It gathers information from performance reports that pilots fill out when they're at cruise. And this creates a fuel bias for each and every airplane that we have, and that information is forwarded to Jeppesen so we can properly create accurate flight plans, as well as the information is loaded into the FMC so we can have accurate predictions from the FMC as far as fuel burn.

And I also do special projects. One that comes to mind is I was the project officer -- well, I was the only person, that brought Cat 2, Cat 3 and autolands to Miami Air. I've also done NRFO, which we call non-routine flight operations. We did not have a check section per se, and so we have now created a checklist whereby, when we take an airplane up for a maintenance ferry or whatever, we now have a checklist that we follow. It's also in the FOM.

I was responsible for bringing RNP AR approaches -- I was a project officer -- to Miami Air. That was a 2½-year project that I was on. I created a program for EET, extended envelope training, which has not been implemented just yet. I also was a project officer on CPDLC, which we are in the process of retrofitting our airplanes. But that's about it.

Q. So that's on Monday. What'd you do you on -- (laughter)

So you have a lot of items that you deal with on a regular basis. Walk us through a typical -- I don't want to say a typical day, because I realize probably in your job that's not the case. But walk us through what you would consider a normal day.

A. A normal day. Oftentimes, if I see that the simulator is being used, I'll drop in and I'll either monitor the briefing or I'll monitor the actual training. Generally speaking, the briefing starts 2 hours before. I'll maybe monitor the briefing, or maybe I'll show up when the simulator starts and, like -- much like we did today, the simulator runs from 7 to 9, then takes a break. Maybe I'll show up for 2 hours there or maybe I'll show up at 9 o'clock and go till 11 o'clock and monitor.

Many times, I'll touch base with the chief pilot and touch base with the vice president of flight operations, discuss things that need to be changed as far as the manual is concerned. For example, I was -- as a result of the incident that happened back in May, I was the person who wrote the bulletin for the AOM Volume 1, giving guidance to the crews in regard to arresting gear. Then I was responsible for, just recently, writing a bulletin in regard to SAFO 19003, which I'm sure you're familiar with, about landing in -- doing a prelanding computation when there's heavy rain or moderate rain, and how the crew is going to respond to that.

And then, of course, I wrote the bulletin in regard to grooved runways, where we didn't have any guidance as far as

grooved runways and now we have in place as part of the approach briefing grooved runway information. If the runway is not grooved, for example, the captain will make the landing. If it's wet, the 40 flaps will be selected if it's wet. And a lot of things like that. So I'll -- I spend a lot of time writing.

So then the next thing I'll probably do is I'll gather information that may have come from an instructor or whatever, and they'll bring to my attention something that might have been on a PowerPoint presentation that may be an error or some changes. I'll work on that.

Then I'll maybe sometimes dig into advisory circulars that I know that are -- that need to be looked at. And, for example, the long-range navigation checklist. This year I made changes to it, because we used to do an accuracy check before we were committed to going long-range nav, so I removed the accuracy check.

We used to plot. Then I determined by reading the 8900 that it was no longer necessary to plot, so we didn't do virtual plotting. Well, that has to be incorporated, obviously, in the PowerPoint presentation. It has to be incorporated into the long-range navigation checklist and the ETOPS checklist along with it. Things such as that. So it -- there's many, many sources that drive me to make sure that everything's as current as we possibly can make it.

Then I'll probably touch base with the head of Tech Pubs, who is Dean Larson. And I'll normally spend time with him and find

out what the status is of revisions or changes, have they gone to the FAA for approval or where exactly are they. I will monitor the status of the classrooms. Occasionally the classrooms, some of the audiovisual support, whatever, is not up to snuff, or we need to change something or whatever. And so I will be involved with probably the director of training to make sure that we have adequate facilities to facilitate training and have the highest quality of training.

That's about it.

Q. Okay. I think you were just talking just a second ago about some of the duties you do, and you develop topics that you see, I think you said, were potential weaknesses or that people see. Can you give us kind of an example where some -- of a recent topic that you've see as a weakness? Kind of give us an example of that.

A. Not necessarily a weakness. I'll give you an example. We had a situation where two airplanes of ours refueled at a military installation and, as it turned out, there was contaminated fuel. And in one case, the aircraft took off and they had a single fuel filter bypass light that came on. In the other case, the airplane had two filter bypass lights that came on. Now this is something that doesn't happen to just everybody. So I said, hmm. And our crew handled it properly, with the dual filter bypass light coming on, they landed immediately.

But it was a scenario that we had not trained for, so I said,

hmm, let's bring to the attention of the crews the experience level that these people have. And so I created a LOFT, where a crew takes off -- and this was not this year, but last year -- a crew took off from Anchorage, Alaska and was going to Misawa, Japan on an ETOPS flight, one of the two legs of that I build for recurrent LOFT. And sure enough, midway, about in western Alaska, they experience a dual filter bypass light on the fuel. And they had to land on a short field, and we're always thinking about this, short field in western Alaska. It was 6400 feet long and it was snow-covered with a crosswind.

So that's one of the things that -- not necessarily a weakness, but something, an experience that maybe was not addressed in -- there are so many scenarios that you can't cover them all in initial training.

This year, for example -- another example. We're having another long-range navigation flight. And I like to talk about long-range navigation because you can have pilots that don't fly that much, maybe 30 hours a month, particularly the co-pilots. And they don't get a chance to do long-range navigation, where a lot of people in this class, in this room, have had a lot of experience on long-range navigation. Well, if I can get greater experience just by going through the simulator, then I think I'm doing my job of helping them bolster their experience level.

So anyway, this year's LOFT, they take off, and they were going from Keflavik and they're going to Portsmouth, a common LOFT

flight that we have. They were taking off on a slippery runway with a 25-knot crosswind. They take off and they experience oil gulping. And I'm sure Rich is familiar with oil gulping, where the oil quantity drops down drastically. And it has happened to our flight, a Miami Air flight. And we have certain procedures that are in our book that tell them how to deal with that. So experience -- increase their experience.

Now I mentioned about weakness. Now give you an example of a weakness that we were observing. We had a standardization meeting, and the FAA was invited. And we had a gentleman by the name of -- we called him Fred, the Fed. It was Fred Richards. And we were discussing in this standardization meeting which I was chairing a while back, we said, you know what? We're not seeing the quality of missed approaches, even 200 missed approaches, in the simulator. And Fred was in the back of the room and he said, well, what are you going to do about it?

And we discussed it, and we said, you know what? Let's try this. And there were a lot of suggestions. And we said, how about if we discuss the actual maneuver while we're doing the approach briefing? So every time today, in place, our procedure is you're up there at altitude and you're talking about the approach and the inbound course or whatever, the crews will always discuss the maneuver, which is TOGA, go around, thrust, flap 15, positive rate, gear up, 400 feet, engage in a roll mode, and then reengage autothrottles. And we have seen a marked improvement in

people in the simulator doing a much better job. We're not repeating that maneuver where we -- before we were. So that was a weakness that was identified, we responded to it, and we changed the procedure and we've had a good response.

Q. Okay. All righty. I know you said you spend time, you know, go over and sit in on a simulator ride or something like that. How often do you do that?

A. It all depends. Our training is largely dependent on the flying that we do. If I'm in a meeting or whatever and I can't get over there or if it's early, early in the morning, maybe I'm not going to be there. But I'll do it probably, oh, three, four times a month certainly.

Q. Okay. I know since -- you touched on already, you talked about how an FAA person came in and sat in with you guys and discussed, and they said, you know, what are you going to do about it? How often do you in your job interact with the FAA? See them, talk with them?

A. Not that often. Normally the interaction that we have is between the VP of operations and our chief pilot with the FAA. But let me say this. Now that Tom Berg, who's now acting assistant -- I think that's his title. He comes over -- he seems to come over here more often, and I see him in the simulator more often than when we only had Stan. Typically, Stan would stay in the FSDO office and we wouldn't see him that often. And I didn't have any great need to discuss with him a lot of things because

when I present a change to the manual or a bulletin or a temporary revision, whatever, the process is that it's reviewed by all of the people that -- the principals at Miami Air, myself, the chief pilot, the VP of operation, then it gets sent to Stan. Stan reviews it, then he approves it or he kicks it back and says I want to see these changes.

So he comes in periodically to speak with us, to talk with -- primarily with John about changes to manuals and things like that. Tom Berg occasionally, because he is the person who oversees the type ratings, occasionally I will see him. And he will occasionally sit in on the ground school too. And, for example, when I was teaching extended envelope training, he was there to certify our training that we were doing. And the upset prevention recovery training, likewise; he was there to approve it. So he sits in on our classes occasionally or sits in on -- both of them sit in on our simulator training.

So that's pretty much when I see them. I don't go up there because it's very difficult to get into the building. It's better that they come here. So --

Q. Do they typically come here on a scheduled basis?

A. No. No.

Q. They just pop in or do they pick up the phone and call you?

A. They pop in. They'll pop in, and occasionally they'll talk to John ahead of time and say, hey, you know, we're going to be down there to sign something or whatever, to discuss with you

maybe some charter that they wanted to propose, and he wants to talk to John about the charter, for example. You know, you're familiar with emergency charters and how they conduct -- well, sometimes he wants to talk face to face with them.

Q. Okay. Since we got you started off on this little bit of questioning from one of your answers, I'll go back a little bit here, if you will. How long have you been in your current role?

A. Since 1991. So 28 years.

Q. And did you fly the line during that time as well?

A. Oh, yes. Oh, yes.

Q. On a regular basis?

A. Um-hum.

Q. Okay. All righty.

A. Of course, obviously once I turned 65, the only flying I've really been doing is simulators, maintained the takeoff and landing currency, but also occasionally maybe a maintenance ferry comes up or something like that. Or they run out of crews and they say, hey, we need you to move this airplane. Normally at lousy hours in the morning, but that -- I'll do that. Not very often now, but --

Q. So you still get to fly a little bit.

A. Oh, yeah.

Q. Okay. All right. Do you feel that -- and I'm just asking for your thought on this -- is you're not on a day-to-day basis flying passengers and everything, does that have any effect on how

well you can make the changes, see the concerns, see potential changes that need to be made? Does that hinder you?
A. Slightly. I would have to say yes, somewhat. I think that maybe I was a little more in tune with what was going out on the line before. But I make it a point to -- particularly when I'm teaching recurrent, I do that a lot, or initial, but mostly recurrent, or I administer recurrent LOFTs or PCs, and when I do, I interact with the crews and I say, okay, tell me what's going on out there. Tell me what are the problems, what are the issues that I need to know about. But direct hands-on, I don't have that much hands-on experience. I should say current experience with the crews out there.
Q. Okay. You ask for your crews to give you some input, obviously. Is that welcomed or is that with a little bit of apprehension on the crews basis?
A. No. I think I have a good rapport. I really do. I think they, for whatever reason -- maybe they respect me, I don't know. But they know that I'm sincere, that I want to help. For example, I had a pilot not that long ago approach me and say, Steve, we got to change the normal checklist. And I said, why is that? He said, look, if we're pushing back from the gate in, for example, Amsterdam, they're doing the Tui operation. And in Amsterdam and in more places in the world, they want your transponder on so they can track the ASDE-X and they know where you are.
And I said, that's a great idea. So we changed the

checklist, where it's not part of the before taxi checklist, which is when we -- just before we start the taxi; it's the before pushback checklist. So I thanked them very much for the input, and we responded fairly quickly, and they were gratified by that. Wow, couldn't believe that you actually made that change, you actually listened to my recommendation. I said, well, okay. Well, keep the cards and letters coming in because we want to hear from you. So that kind of rapport establishes itself and it leads to more inputs and a good rapport. So --

Q. Okay. All righty. I know you said you oversee the check airmen. And do you oversee the instructors as well?

A. Absolutely.

Q. How many check airmen do you currently have, and whether it's sim, line, or maybe they're both?

A. Okay, so I'd have to count them out now, but -- okay. So we got Dave, myself; we got Gabe; we have Eddie, so we have -- and then we have the fifth, who's going to be -- and we have -- we have about five simulator check airmen and all of those are qualified as line check airmen as well. So we have five -- I think we have five; we're adding one. So I want to say five and five, five simulator check airmen who can also do line checks and then five exclusively that are line check airmen.

I'd have to get the seniority list to know that, because we are adding one right now. We're adding Paul McDonough (ph.), who's not currently qualified, but he's in the process. He's in

the pipeline. And also, we have a gentleman by the name of Bob Lane, who's coming in to become both a simulator instructor then eventually a simulator check airman. So we're -- but they're in the pipeline. They haven't been checked out just yet by the FAA.
Q. Okay. Do you feel that that's a comfortable amount of airmen, check airmen, or is it -- are they running a little thin?
A. I think it's comfortable. Now you have to remember that we have a wide variety of -- each month changes the number of flying hours. We are busiest during the winter months, and we're maybe a little bit short as far as pilots are concerned. During the summer months, which is not our busy time, but maybe we have an abundance of pilots at that time. But for the most part, I would say that we're adequately staffed. There was a time when we said we need to get more line check airmen to make sure that the OEs get through in a timely fashion and they maintain continuity. But now I would have to say that we have an adequate number of check airmen, line check airmen. And we definitely have enough simulator check airmen. Yes. Or instructors.
Q. You mentioned OE, IOE. Everybody calls it something unique. How many hours on -- is it typical for a new hire to come on board to get through OE, to be released to the line?
A. That's a tough question. That all depends on their experience level. And I'm trying to average this out. You can have people who come from flying Comanches or Geronimos or whatever, and a glass cockpit and a flight director and a jet

aircraft flying at 35,000 feet at 500 miles an hour is a new experience. They've never been above 10,000 feet. Then we have other people who come here and they've flown the 737 and they're type rated. And they'll take -- those people, the last people, will take maybe 35, 40 hours. But we allocate up to 100 hours of OE for those less experienced people. So it runs the gamut. So I don't know quite how to answer you. I suppose I could average it out. I don't know, 60 hours, maybe? Something like that.

Q. Well let me ask it maybe a little -- a different question then, and maybe that'll help me understand it better. You allocate up to 100 hours --

A. Correct.

Q. -- to do OE. How often does that 100 hours get extended?

A. Rarely.

Q. Rarely?

A. Very rarely.

Q. Okay. And what's -- it has, obviously, been extended. Got any ideas why?

A. A person has some family issues, for example. Non-availability of check airmen possibly. Things such as that. But it doesn't happen very often.

Q. Okay. All righty. We'll kind of start easing in here to the crew of the event flight. Did you know them?

A. Yes.

Q. How did you know them?

A. Well, let me say this. Let me back up for a second. Let's start about the co-pilot.
Q. Okay.
A. Okay. I knew him because I taught him what is called Phase 2 of initial training. Phase 1 gets them through -- just to make sure everybody -- because I know everybody has different training here. Phase 1 gets them through the type rating. Phase 2 introduces the Cat 2, Cat 3, RNP, PRM, PAR, ASR, the stuff that's not required on the type rating. So I teach a ground school, which is an all-day school, on those items. Then I teach a ground school the next day on ETOPS, RVSM, long-range navigation, strategic lateral offset procedure, all that stuff. That's a whole day. Okay, so 2 full days of ground school.

Then we go for a 4-hour period in the simulator and do Cat 2, Cat 3, PRM, ASR, PAR and RNP. And that's both a training and also a checking event. So I've spent 2 full days in ground school and, well, 2 hours of briefing, and then 4 hours in the simulator with the first officer you're speaking of.
Q. Okay. Well, since we're talking about him, how -- do you recall anything about his training?
A. Nothing out of the ordinary. You have to remember that I'm introducing a subject for the first time to a great many of these people, and I'm doing most of the talking like I'm doing right now. I'm doing most -- sorry about that. But I'm doing most of the talking. And they will have questions and I will answer

questions, and I don't remember anything distinctive about him, either in the ground school or in the simulator. We pretty much set everything up. For example, in the simulator, they fly the approach, and it's not a big deal, you're doing a PAR or an ASR. It's just something they've never done before. And they follow the training. Then those events that have to be evaluated -- the Cat 2, the Cat 3, the PAR/ASR -- then they have to do that without me teaching them, and they were successful.

So was there anything unique or out of the ordinary, either extraordinarily strong or weak? The answer would be no. There was nothing exceptional that I can remember. So those are the three events that I dealt with him.

Now going to the captain, I was involved with him -- I can't remember exactly how far this goes back, how many check rides I've given him or how many LOFTs I've given. But I did -- I was involved with his checkout as a captain upgrade. I teach the captain upgrade. And it is a full-blown ground school and it is a full-blown simulator, eight periods in the simulator, then a check ride. And then we do a LOFT afterwards where it's an ETOPS LOFT, go from Los Angeles to Honolulu, lose an engine, got to divert and a bunch of other things.

And I was very taken by the fact that he was extremely motivated and very enthusiastic about his approach. He realized the responsibility that he was taking on flying a $50 million airplane with 170 lives that he's responsible for, and he very,

very -- was very much dedicated to the training. And that was greatly appreciated on my part. Not that most people aren't highly motivated, but he was even more highly motivated than most. So that was appreciated from my standpoint as an instructor, so he -- and he went flawlessly through the check ride. That was a piece of cake. And then, of course, a LOFT is a training event afterwards. And then he went to the line and -- I think this was in 2015, so I wouldn't have been able to give him OE out on the line, but he passed it.

And after that, after he got some experience as a captain, he said, I want to be an instructor. And we had him come in and he interviewed for that. And we made a decision that he was very enthusiastic, he had experience as a captain, and we said, okay, we're going to make you a, we're going to make you a ground school instructor. Did a fine job there. Then the next stepping stone would be to become a sim instructor and then a check airman. And he did a fine job. He exhibited the same degree of enthusiasm. He loves teaching. You can tell. You have to be around the teaching world a little bit to understand the people who truly enjoy it, versus people who do it just for -- I don't know.

UNIDENTIFIED SPEAKER: Paycheck.

MR. JOFFRION: Yeah, the paycheck or the ego, I suppose. But very enthusiastic and enjoyable to fly with. I have flown with him. Since I was no longer a line pilot, but I have flown with him where he was doing OE or was being a checkout on a captain.

And very knowledgeable. He knows his procedures very well.

BY MR. ETCHER:

Q. Okay. You said he come to you and said he'd like to be an instructor, and you guys kind of interviewed him and went on like that. What's the normal protocol for somebody to become a check airman?

A. What we typically do, we make it known that a position is open. And normally speaking, we start with a ground school instructor. And there's a lot of people who say that, I want to be a ground school instructor, I want to be a flight instructor; I want to be a simulator instructor. And we say no, you have to learn how to be a ground school instructor. And that eliminates some people right there. Well, he was enthusiastic and said, whatever you want me to do, that's what I'll do.

So we make it known that a position is available. And then we interview them, and we say -- we ask questions about what is your flying experience? What is your training experience? Have you ever been a check airman before? Have you ever instructed in any capacity before? And we ask them to make a presentation. We say, you can pick the subject. I don't care if it's about oil gulping or you want to talk about how a generator works or how a tornado forms or whatever, and you make a presentation. Some of them will actually come up with PowerPoints. But I'm situated in the audience, typically with the chief pilot, the VP of operations, the director of training, and they make a

presentation. And we say we want to hear a 5-minute or 10-minute presentation.

And based on that, based on maybe their training skills that we can observe or whatever, based on what their check ride experience has been, whether they've done a good job on check rides and such, we make a determination based on that. And we pick the best candidate. Or we don't pick anybody if they don't qualify.

Q. All righty. When was your last job opening for that kind of a position?

A. That would have been Bob Lane. Bob Lane. So Bob Lane is through the process. He has gone through -- what we do is a -- now we made him a simulator instructor. We bypassed the ground schools because we have enough ground school instructors right now. But we're looking at maybe having a person leave. His name's Brad Youngberg (ph.). He's probably going to be leaving at -- maybe before the end of the year, so we're going to need another simulator instructor. And eventually make him into a simulator check airman.

So Bob came in, he interviewed. And he went through -- and this is our process. The prospective simulator instructor goes through an entire cycle of an initial class. And he is observing the qualified, trained, certified instructor teach. Now we swap out roles for the next class that comes in. Now that -- in this case, Bob Lane would be teaching under the auspices of a

certified, qualified instructor. And then at the end of that, then we'll sign off that individual, or we'll say that didn't work out and they go back to the line or they go back to their retirement or wherever they go to. That's our process.

Q. Okay. All righty. Since you oversee your check airmen, and I know you said you had a gamut of qualifications with pilots that come in and things like that. If a check airman has a concern about a pilot, and I don't know if they've had that or not, but if they do, what is the process? Do they talk to you? Do they talk to somebody else?

A. We have a meeting. We typically -- is it a disciplinary problem? Is it a problem getting along with other crew members? Is it a problem with proficiency in flying the airplane? Ultimately we'll get together the individual -- you have to understand that I could be in the simulator and this person comes in, and maybe they're going to be talking or speaking with the chief pilot, or maybe go talk to the director of training. But if we are available at that time, clearly we want to sit in. We want to talk to this individual and say, where's the problem with a person that you happened to be flying with? And we discuss it and we come up with a course of action, how to best deal with it. But again, is -- what kind is it? Is it a flying skill or is it an attitude or is it -- there's a lot of -- there's a myriad of problems that can arise.

Q. Okay. So have you ever had them come to you with a candidate

or somebody they're teaching with piloting skill challenges?
A. Yes.
Q. Did that happen? Give me an idea of how -- when was the last time that happened?
A. Infrequently. Infrequently.
Q. Okay. And they come in, they say he's got a problem, you know, here's the problem. They lay it out for you, I would assume.
A. Um-hum.
Q. What kind of course of actions do you guys typically take?
(Interruption.)
MR. JOFFRION: So to pick up on your question, we had an individual that was identified as in need of energy management. And energy management, particularly on an airplane that sometimes can get away from you, where you don't have the ability to slow the airplane down quickly, like a 737, especially with winglets, you've got the speed brake available to you, but not a whole lot more. You pull the throttles back and you're too high, you're too fast, whatever. And this individual seemed to be consistently ending up too high too fast, and awkward situations.
So we talked to the individual that brought it to our attention and we said, is this a problem? Then we addressed it. So I -- this is one that I personally was aware of that I went out and flew with this individual. And we discussed --
Oh, what a sweetheart.

UNIDENTIFIED SPEAKER: I'm sorry. It's the time of the afternoon, so --

MR. JOFFRION: I had a -- I went and flew with this individual. We sat down. We did briefings. And we implemented the procedures that we talked about, and there was a marked improvement on that person's ability to manage energy, particularly when you get to 10,000 feet and down where you're not in VNAV situation. So that's -- that was my personal experience. So --

BY MR. ETCHER:

Q. Okay. All right. We talked about your -- you knew the event first officer because you did his Phase 2 instruction. Is that a one-on-one instruction? Is there the first officer and another crew member? Is it four or five individuals? Help me understand what the dynamics of that training --

A. It will be -- well, first of all, the 2 days that I spoke to of the ground school, you can have for whoever is going through that class. So obviously we have enough seats in the classroom for me to instruct and have that group instruction. In the simulator we have one instructor and two pilots. So the two initial pilots, typically one's in the left seat for 2 hours and one's in the right seat for 2 hours, then they swap out.

So that is a -- no. Unlike what we were doing today, no, there's one instructor and there's two pilots and nobody else is observing.

Q. And I wanted to more clarify. It's two new hire pilots going through it. It's not --
A. Yes.
Q. -- a line captain and a --
A. Oh, no, no.
Q. -- special -- okay.
A. No. Now in a rare instance -- let's say we have an odd number of initials that are going through. Let's say we had three that make it to the Phase 2, okay? Well, obviously two of them will be teamed up, and the third will be teamed up with a supplemental or a supporting pilot that we'll pull off the line or maybe even a check airman, whoever is available, to support that individual during that 4 hours of training.
Q. Okay. All right. Perfect. Let's switch gears just a little bit. Let's talk about guidance here. You write some of the memos, the manuals, you tweak those a little bit. I think you even said that since the event you've developed -- forgive me. I don't mean to put words in your mouth, but you developed guidance for arresting cables.
A. Um-hum.
Q. What prompted you to develop that guidance?
A. I realized that the -- as participating as part of this group here, I realized that some of the answers that were forthcoming from the people being interviewed were uncertain on what our policy was. And even though I had written a standardization

newsletter previously and it's supposed to be read by both the dispatchers as well as the pilots, but it had been a while. But it wasn't written in a flight operations manual and it wasn't written in an AOM Volume 1 or a section of flight crew training manual. I said, well, clearly this is a need.

And so as a result of that, to clarify and to get in writing -- and I said, okay, it's eventually going to work its way into a revision, but temporarily, we're going to get the bulletin out right now as quickly as possible, as soon as it's approved by the FAA, which they did rapidly. Now the information is available, and we have a read file system whereby crews are required to read that information. So that's why we disseminated the information on the arresting cable bulletin, which you've read and you're familiar with. And that came out fairly quickly after the incident, so -- and after the interviews we had.

Q. Now you said because of the interviews and everything, that there was a little misunderstanding, confusion, however you want to call it, on if you could or couldn't. Did you have guidance to that beforehand, before the event? Was there actual -- anything written in any of your manuals? Any guidance that said, yes, we can take off and land over arresting cables?

A. Okay. So the answer to your question is that we have what is called standardization newsletters. If you go to the manual's website, you're going to see across the top the various tabs. And I periodically write these standardization newsletters. Again,

they go to all the pilots and all the dispatchers. This is my response to events or a lack of knowledge or whatever.

For example, the last standardization newsletter that I wrote was in regard to the titling of RNAV approaches. You're probably familiar with it. They used to call them RNAV approaches. Now they're calling it RNP approaches. So people who could be easily confused and look at it and say, well, wait a minute now; we're doing an RNP approach or am I doing an RNAV approach? Well, I wrote on that.

We have half of our airplanes, for example, that are short field performance. And crews were not all that comfortable -- what exactly is the difference between a short field performance Boeing 737 and a non-short field performance? So I went into the spoiler deflection, about the idle on a -- not on reverse, but on touchdown, it went from 5 seconds to 2 seconds. A number of things like that.

So when I see there is a knowledge gap, I will write these standardization newsletters. But to answer your question, was the arresting gear information available in one of our formalized manuals? The answer is no.

Q. Okay. But you knew there was information out there, right?

A. Um-hum.

Q How did you know that?

A. I researched it. I just -- I remember one day I was going into -- I want to say Navy Norfolk. And they were making an

announcement that the cable was up or the cable was down. I'm trying to remember exactly. And I said, well, what is the rule on that one? Because it's not something that is easily found in just any aviation journal or something. You have to really research it. And I said, wow, this is kind of a hole that needs to be plugged. And I felt as though that was somewhat my job, to make sure that the crews knew about that. So after I put it in the standardization newsletter, I felt as though I had taken care of it. But really, it needed to be formalized in like an FOM or an AOM, which we did, but that was later on.

Q. And I know, you know, crews read those standardization newsletters. But there's only so much mental space --

A. Sure.

Q. -- I have. So I could read something 6 months ago and forget that I read it until something comes up and then I can't find it. How can crews, if they're in flight, if they come up with, oh, can I land over an arresting cable, land on it or take off over it, how could -- is there any ability for them to pull that up in flight to get them --

A. Oh, yes.

Q. -- the information they need?

A. Oh, yes. You can interrogate the subject and, on your iPad, you can find the information. So --

Q. Is your iPad connected to the Wi-Fi, then, or is it only if it's loaded into your manual system?

A. No, we have -- in our iPads, we have what is called a content locker. And the content locker loads all the manuals from the FOM, the flight crew training manual, the AOM Volume 1, AOM Volume 2, you name it, it's loaded right there and it's available for the crews to interrogate. And you have a search capability to find information. So you can go through any manual and type in arresting gear, and if it's there, it will find it. And obviously there's going to be several, obviously, choices or selections. You're going to have to go through it. But you'd be able to go to the content locker, which is where we housed our manuals.

Q. Okay. Well, since we're right now on that copy, since you've done so much research on it, help me understand if, in Miami Air policy protocol, there's an arresting cable up, yes, you can land and take off over it. Is there any penalty associated with that? Is there anything abnormal, other -- that you have to be aware of as a crew member?

A. If you read the article that was written by Boeing, they say they don't recommend that you taxi over it at a high speed. But as far as takeoff or landing, there's a recommendation that they prefer that you not take off over it. But the procedure essentially -- that was a recommendation. We have looked at it, and we have had experience of taking off and landing over arresting cables since 1991, and the only real problem associated with them in my experience is that sometimes you can hit with the nose gear, the cable, and if it's not taut, then it can bounce up

and hit the undercarriage or the underside of the airplane and do, potentially, some damage. We don't have, like on the DC-9, the slush deflector that you can have on the nose gear.

And again, we have been doing this for 28 years with no problem whatsoever. So we said, rather than forfeit the -- particularly on takeoff, the distance between the end of the runway and where the cable is, typically 1500 feet down the runway -- and we've had no experience with it and it's only a recommendation by Boeing, that we said, hey, we're going to use the full length. So that is our policy. Except for taxiing over it, our policy is as I stated.

Q. Okay. Okay. Thanks for that clarification.

A. Okay.

Q. I'll go back just a second -- and then I'll let everybody else have a turn, because I know you're going to get tired of listening to me asking you questions.

A. Not at all. Not at all. I'm having a good time.

Q. Then you might need a new life. I don't -- that's kind of weird. But anyway --

A. People tell me that all the time.

Q. You said the pilots, they get all this information in a read file so they're required to read it. Is there any way Miami Air knows that the pilot opened that file up, he either scrolled down through it and signed it or, you know, that they -- he actually opened it up? Or is it just in there and it's on their honor they

have to read that?
A. Once they open it up, it's presumed that they read it. There is no way that we hold a gun to their head and say, okay, I'm going to sit down with you and you're going to have to observe this under the observation of a check airman or whatever. You open it up, it's presumed that you read it. So that's as far as we take it.
Q. There's no signatures at the bottom or it doesn't flag --
A. No. It opens up and it puts a little green checkmark adjacent to it. There's no signature.
Q. Okay. Perfect.
MR. ETCHER: Like I said, I'll let everybody else have a chance --
MR. JOFFRION: Sure.
MR. ETCHER: -- and then I'll get to come back.
MR. JOFFRION: Okay, come back.
MR. ETCHER: Kat?
DR. WILSON: Thanks.
BY DR. WILSON:
Q. I missed it if we talked about it. How did you get to where you are today? Brief history of your aviation background.
A. Oh. Okay. My father got me into aviation. He was a pilot for United Airlines for 38 years. When I was 18, I started flying. When I went to college, got an aeronautical engineering degree from San Jose State. After that, I went into the Air

Force, flew F-4s in Vietnam. Came back here to Seymour Johnson Air Force Base in North Carolina. We flew F-4s. Air superiority was our mission.

In 1978, I left the Air Force, and in 1979, I was hired by Eastern Airlines. Started off on the 727 as a flight engineer, and then I slowly worked my way up to first officer. Then there was a strike, 1989. And I flew during the strike along with a number of people here at Miami Air. And I flew as a captain till 1991. Eastern Airlines shut down in January of 1991. And I became a director of operations for Aerial Transit, a DC-6 cargo operator in Corrosion Corner at Miami Air -- at Miami International Airport.

And Ross Fischer, who was making Miami Air a reality back in 1991, approached me and he said, how would you come -- how would you like to come work for us? And we want you to write the manuals and be chief of flight standards, and we want you to teach on the 727, the flight -- because I was qualified as a flight engineer and as a co-pilot, as a captain. And we also want you to give check rides in all three seat positions. And that's what I've been doing ever since.

Q. All right. When a pilot is in OE, how often are you getting feedback from the check airmen that are flying?

A. Constantly. We have a policy whereby -- we have a group of OE instructors and they know that this OE is out on the line. It may -- the OE may fly with a check airman for a sequence, maybe 3,

4, 5 legs, something like that. They'll come back to Miami, and now they start a new sequence. Probably going to be assigned to a different OE instructor. So we email it out to everybody who's a potential line check airman who is potentially going to be flying with this individual, and identify strengths, weaknesses, trends, whatever. Okay? In addition to that, of course, the OE has a training folder, which we call an OE training folder, and the progress of that individual -- good, bad, indifferent -- is annotated on the progress report. So the new OE instructor who's picking up this student for the first time is now going to look at a progress report from the previous OE instructor and identify -- if for whatever reason, they didn't look at the email that was already transmitted.

Q. Okay. I'm drawing a blank. Was this the first trip for this FO in OE?

A. No. He had 16 hours previously. Yeah.

Q. What were some of the strengths and weaknesses that were identified; do you recall?

A. I do not know. I do not know.

Q. Are those documented somewhere?

A. Yes.

Q. Do we have those?

A. Do I have access to them?

Q. Do we have those?

A. I don't think so.

Q. Okay. We'll put in a request for that.
A. Okay. All right. Got it.
You're writing this down, right, the request? Okay. Got it.
Q. We've got it on the recording.
A. Are you going to write -- I don't have anything to write it down with.
Q. No, that's okay. We can make a formal request.
A. Okay.
Q. It was just the first I heard about it, or I figured I missed it somewhere.
A. Yeah. No, I have not seen that progress report. No.
Q. Okay. How do you maintain standardization across your check airmen and instructors?
A. We have standardization meetings quarterly. And a lot of times, we have somebody who's on vacation, wherever they happen to be, but -- and they can't attend. So if they can't attend or we don't get a teleconference, they don't know what's going on, except the fact that I take notes and I create a standardization meeting newsletter, if you will, and I send it out to everybody.
But also before the meeting, I also solicit inputs and saying, okay, everybody, we're going to have this standardization meeting on such-and-such a day at such-and-such a time, and you're welcome to attend. If you can't attend, please send me your inputs, what you want me to do. I will be your proxy and I will -- but you have to explain to me what you think needs to be done

in the way of changes, in the way of whatever.

And that quite frankly just prompted us to change our syllabus. We have now -- we've gone from having two fixed bases, now we're going to have four fixed bases. Because we see within the foreseeable future we're probably going to be dealing with less experienced pilots. And even though we haven't had a high failure rate or whatever, but we think it was time. And that came about as a result of the standardization meeting. We discussed, we said, we need to ramp up just a little bit on our training. Not so much in the simulator, but the procedures, checklist responses, flows and things like that, before they actually go into the full-motion simulator. So we've instituted that change, and that came, like I said, from a standardization meeting that we had.

Q. And then how do you ensure that in the simulator or in LOFT scenarios or on the line, that your check airmen are training the same way so that every trainee that comes through is getting the same training?

A. Well, that's a tough thing, because you can't sit on the jump seat for every check airman that's going out. All we're hoping for is that, when they come back through -- when they come back through, they have to take a check ride. They have to go through what we call an OPC, and I don't know if you're familiar with the OPC. The OPC is nothing more than a LOFT, but EASA, the Europeans, say that everybody has to have two check rides a year

in order to fly over in Europe. So we said, hmm, how are we going to handle that one? All right. So let's call our LOFT, which satisfies the FAA requirement, let's make that a -- not only a LOFT, a training event, but also a checking event to satisfy them. And we have to do this twice a year as opposed to -- normally a first officer gets a PC one year and gets a LOFT the next year. No, no, no, we double up on that one. Everybody -- captain, co-pilot, whatever -- is going to get an OPC and a PC once per year. So that's two events.

So we're observing that captain who is a check airman out on the line as a -- now it's true they're not teaching, but we're seeing that they are complying with our standardizations. If there's deviation from that, we would identify that. So we look at them -- and, of course, on a line check, every captain has to get a line check once a year. So a captain is being looked at three times a year. Co-pilot is being looked at two times a year.

And we're also evaluating, if you will, because we have a recurrent ground school. In the recurrent ground school, there's a give and take. It's not just all information being provided by the instructor. There's a, okay, all right, let's see how we're doing as far as immediate action items, as far as limitations are concerned, how -- whatever. So it's a solicitation by the instructor, and I don't care if you're a check airman or you're a brand-new first officer and the low man on the totem pole, you're going to be evaluated in a very real sense during ground school.

So if they're non-standard, hopefully we would identify it if they were.

Q. Okay. Either in initial and/or recurrent, is there any training on human factors?

A. Oh, yes. There is a -- though I don't teach it so much. When we bring the recurrent in, and also on initial, we have CRM. And CRM is generally taught by an individual we have here -- he's a flight attendant instructor, and his name is George Gonzalez, and he teaches the CRM. And there's a PowerPoint on it, and it's both addressed in the recurrent class and also in the initial class as well.

Q. And the CRM topic is specific to human factors, or CRM is your human factors topic?

A. It's CRM.

Q. After a pilot goes through training -- so let me back up. Instructors are required to take notes, keep notes? Or is it just a pass/fail --

A. You mean for the debrief? For the debrief?

Q. Yeah. So from, like, the simulator rides, do they take actual notes?

A. Absolutely. Absolutely. Particularly when you're dealing with initial students. I mean, if you have a person who's taking a check ride, much like what you saw today, Eddie, or you saw Darrin, they gave pretty much a flawless performance. I mean, still, an instructor's going to write down information on

deviations or non-standardization. Clearly, on an initial student, there is a lot of information that's being written down because that has to be transcribed onto the progress report, so --
Q. So that will go on to a progress report.
A. Correct.
Q. And then how long is that kept for?
A. I do not know. Don't know.
Q. How were you informed about the accident?
A. I was called by -- was it a dispatcher? I don't recall who called me, but it was the night of the accident. And they said get ready to go tomorrow morning first flight out. Was it a dispatcher? You know, I can't remember who called me, but it was -- I got a call at home at night.
Q. Okay. Were you a part of any -- did you do anything else? Did you come here? Did you --
A. No. No, I was not called in. They just said prepare to get on an airplane and go to Navy Jacksonville and be there for several days. Just be prepared.
Q. All right. I think Shawn got most of my other questions. I think he --
A. Okay.
Q. Are you Steve with a -- Steven with a V or a PH?
A. With a V. With a V.
Q. Steven with a V. Okay.
A. On the passport, it's S-T-E-V-E-N, so --

MR. ETCHER: You doing good? You need a break?
MR. JOFFRION: Not at all. Not unless Gary tells me to take a break.
MR. ETCHER: He's being quiet, so we'll keep going --
MR. JOFFRION: Is he asleep?
MR. HALBERT: Normally this would be a good time to take one.
MR. JOFFRION: Okay. That sounds like a recommendation to me.
MR. ETCHER: Okay. How about a 5-minute break?
MR. JOFFRION: 5-minute break. Okay, (indiscernible) your clocks.
(Off the record.)
(On the record.)
MR. ETCHER: All righty. Warren, do you have any questions, sir?
MR. ABRAMS: I do. For the recording, I'm Warren Abrams.
BY MR. ABRAMS:
Q. And Steve, I'm just going to kind of hit some points that -- from your answers earlier, and so just kind of pick and choose as we go along here. You said you were responsible for bringing on the Cat 2 and Cat 3.
A. Yes.
Q. How long ago was that?
A. Wow. I'm guessing 2010, maybe.
Q. Okay, so --

A. Maybe even before that; 2008.
Q. So from -- everything before that, preceding 10 years, was a Cat 1 landing only. That was --
A. Correct.
Q. -- the lowest minimum you could go to.
A. Although I tried to get us to Cat 2/Cat 3, but I was met with resistance by the president of the company. He said it was going to cost too much money. And then one day he had to divert because he couldn't get in for Cat 2. And then he called me up on the telephone, he said, Steve, get to work on Cat 2/Cat 3. But I do not know the exact date, so --
Q. Okay. That's fine. That answers my question. I mean, it's been about 10 years, so we'll --
A. Or more.
Q. Yeah, okay. In Miami Air, can you manually land out of a Cat 2 approach or do you have to autoland out of it?
A. You can manually land. A single autopilot, you can manually land. We have that approval to do that, yes.
Q. Okay. Good. We were talking about a typical day, and you said you go into the -- you might go into the sim, depending on what's happening and things like that. How does -- or does the instructor get any feedback from your observation in the sim?
A. Oh, absolutely. Now -- I'm sorry?
Q. Do you do it -- I mean, when does he get this feedback? Is it just after his sim session, the students have left the room, or

how do you communicate your feedback to the instructor?
A. It depends on the length of the debriefing. If an instructor has just finished 4 hours with the students and they're immediately going to go into a debriefing, the student is probably very tired at that point. Because there was a 2-hour briefing, 4 hours in the simulator, now they're going to have to do another debriefing, and that could be very time-consuming. Now if I jump in there and I say, okay, I want to do my debriefing with you, that can prolong that and it's not appropriate.

So if it's something minor and I'm saying, hey, you're doing a great job; however, you know, we changed this procedure, whatever, and I can do it in a relatively short period of time, then I will take the break between leaving the simulator and when the debriefing begins, I can do it. Otherwise I'll pick and choose a time, and I'll say, tell you what, I'm going to email you, and we'll converse and I'll tell you what I found and I think that we need to change or to -- ways of improving. But there is a definite feedback. Absolutely. That's the whole purpose why I'm there.

Q. Excellent. Good. Thank you. We were talking about international procedures and a plotting chart. Do you do a post position plot?
A. No. What we do is -- you're familiar with on the plots, you're required to plot both at the waypoint passage and then 10 minutes after, right?

Q. Right.
Q. Well, you take a look at the new procedures, which are even -- the FAA recommends still the plotting; however, not too much plotting is done today. They say there's a virtual plotting that you can do, and we've opted to do that. It's at 10 minutes after you verify the position by taking a look at your navigation display. You're going to take a look at your cross-track error. And there's a five-step process that follows exactly what the 8900 talks about. So that's what we've opted to do. And so we've eliminated the plotting charts.
Q. Eliminated them altogether?
A. Yes.
Q. So you just look at your position on the iPad map and -- or on your primary flight display?
A. Primary flight -- well, not on the primary -- on the navigation display.
Q. ND. Yes.
A. Yeah. Okay?
Q. Right, okay. Sorry. You created a LOFT with a dual fuel filter bypass that required a divert to western Alaska.
A. Correct.
Q. Shemya?
A. No, no. I have to look that up. But it's not all the way to Shemya. It's -- what is the name of it? It was not this year, but last year.

Q. Okay. That's okay.
A. I can look it up for you. But it's in western Alaska. It's not in the Aleutian chain down there.
Q. Oil gulping --
A. It's P-A-B-E in the -- could you look up the four-letter identifier for P-A-B-E? Bethel. Bethel. That's what it is. Bethel.
Q. Um-hum. Big VOR (ph.) there.
A. Okay. Exactly. Exactly. You've been there and you've done that?
Q. Oil gulping. Boeing came out with a checklist on oil gulping. And did you incorporate it into your books?
A. Is it incorporated into our books?
Q. Your QRH?
A. No.
Q. So if a crew takes off and they lose 7/8ths of their oil, what guidance does the crew have? Since you said you've had an event in the past.
A. Well, it's not -- we copy the Boeing QRH exactly. All we do is we put our name at the top of it. How would a crew deal with that? It's one of those peculiarities where hopefully that they can recall from the experience that they had in the LOFT, but I don't think that the QRH talks about oil gulping.
Q. I'm not trying to trip you up.
A. No, no, no. I think --

Q. Other companies call it low oil quantity, is the title of the checklist other than oil gulping. So I was using your words, but it's the same thing.

A. However, we're talking about the oil -- the low oil quantity doesn't occur until you get down to 3 liters or less. So if you had an oil gulping condition -- let's say you dispatched with, say, 12 liters, which is the minimum. And it was oil gulping, which didn't take you down to the 3 where you get a lower display because a secondary parameter kicked in. That would be oil gulping, but it would not be low oil quantity.

Oh, wait a minute now. Stand by just a second.

Q. I think we're saying the same thing.

A. Okay. There --

Q. It's all right. My point is, it's not in the QRH that --

A. Right. Right. Right. Exactly. That is correct. That is correct.

Q. I don't want to get into semantics with it and all this other stuff.

A. Right.

Q. I need some clarification on simulator LCAs and regular line check airmen, but more specifically APD. Do you have any APDs, aircrew program designees?

A. Yes.

Q. You do. How many of those do you have? I mean, Miami Air have.

A. One.
Q. And who is that?
A. Guess.
Q. We have to be certain.
A. Gabe.
Q. Gabe Constantino?
A. Correct.
Q. And he was the captain on our incident flight?
A. That is correct.
Q. How -- when pilots go through the type rating, who signs their type rating certificate? Is it -- because I didn't -- I don't believe an LPA can do it. So does the FAA --
A. Yes.
Q. -- administer the rating ride?
A. Yes.
Q. Or Gabe now can do it?
A. Gabe can do it. But in the past, the FAA has opted to say, look, I have Tom Berg, who is a certified examiner for the FAA, who can administer type rating rides. And up to this point, he has chosen -- because he's the APM under the APD program. He has chosen to be there as the check airman administers the simulator evaluation. But the paperwork is being completed by Tom Berg, who is our APM.
Q. Okay.
A. Okay. I don't think that Gabe has done any actual signing of

any paperwork, although officially he is an APD.
Q. Are you trending toward more APDs or is it pretty -- is it working out okay with the FAA coming in and doing the check rides all the time or signing the check rides?
A. Our experience has been yes and no to your answer. There have been times when a student is prepared, ready to take a check ride, we call the FAA and they say, sorry, don't have anybody available to you. Well, that creates a problem, obviously, because the student loses the sense of continuity because, oh, we won't be able to support that check ride for another week or so. So that means we have to keep the student pumped up and we have to administer another simulator check ride.

Other times, now that we've had Tom in the office up there, he seems more available. His schedule is more flexible and we haven't run into that situation. But in the past, it has been a problem, and that's what somewhat pushed us in the direction of the APD. But we -- I have been trying myself to be an APD for, I know, over 10 years. And for whatever reason, the FAA made the determination that we were too small an airline or whatever and we were denied our request for the APDs. But they relented, and now they've made Gabe the APD.
Q. Okay. You had indicated earlier that you're responsible for checklists and things like that.
A. Yes.
Q. Writing of checklists.

A. Yes.
Q. And am I correct that you basically follow the Boeing checklist or --
A. Not true.
Q. Not true.
A. You have to understand our history. We flew the 727 for quite a few years, and along came 2000. 2000, we said it's time to replace the 727. So we picked up -- we said, what would be a good airplane? The 737-800. Perfect. Matches our routes and whatever.

Now we had a sister airline called XL. At XL, we would do an airplane/crew exchange. They would fly -- they would come over here with their airplanes during the summer months -- or correction -- during the winter months, and they would bring, typically, their crews over here too. And then in the summer months, we would go over to Europe, take our airplanes and fly over there. So our initial cadre of airplanes, our initial pilots, and I think -- maybe Darrin wasn't involved in that one. But we went over there in order to gain experience on the 737. We sent a -- I think it was three check airmen that went over there, and they flew with them. And then we adopted their checklist and then we incorporated some of our 727 checklist into that.

So it was something that we were -- sorry -- we were comfortable with because that cadre had now flown with XL, and now they come here and now we're introducing the 737 to Miami Air.

Q. Okay. You said they were a sister operation?
A. I would say sister. We -- it matched, because they needed additional lift and pilots during the summer months. And we said, well, we're not doing that much flying, so tell you what, makes sense for us to take our airplanes over there and our crews, help you out when you have a need for more flying.
Q. Was there any ownership between the two companies?
A. No. No.
Q. Two separate standalone companies?
A. Yes.
Q. All right. Pilot experience levels. Low time pilots. I realize you're not involved in the hiring, but the experience level, how would you say the experience level compared to what it was, say, 5 years ago?
A. Way down. Way down. There is a pilot shortage, as all of us are familiar with. The big airlines are gobbling up the people with experience, and we are now becoming the airline where somebody comes to us and they have 1500 hours, barely 1500 hours, or 2,000, whatever. And the high time experience jet high-performance aircraft, we just don't get those people that much. Occasionally somebody will come in who, because of a family situation, says, you know what? I have to leave my other airline that I was flying and I have to come here and take care of my father or something extraordinary like that.
But for the most part, the level has dropped down as far as

the experience level. So what have we done? We understand that we have to be more nurturing. We have to make fewer assumptions. Things like critical Mach or whatever that we would say, oh, everybody in the room knows what that is or what a Mach number is. We have to reduce the level -- bring it down to a lower level and then try and work from there. And that's why we've added those two fixed bases, to try and help people to get through the program.

And we -- where before we have had -- as I told you previously, we had eight simulator periods, full motion simulator periods, a pre-rate and then a rate. Well, it's not too uncommon to have an additional period added on because the person's not ready to take their type rating ride. So we've been adjusting or adapting because of that.

Q. Clarify for me for just a second. What is the normal number of simulator rides as you -- before the rating ride?

A. We take eight --

Q. Eight. That's fine.

A. -- and the pre-rate. Okay. And then the rate.

Q. And Dr. Wilson was talking about training records, and I just happen to have First Officer Claudio LaFrank's training records that you provided us with. Thank you very much. And he had 11 simulator events and 50 hours of simulator time. It says 40 hours on his training record, but if you do the math on the training records, it's actually 50 because there was an error in the

addition. So anyway, is that considered abnormally high?
A. Not, like I said, if you're talking -- now let's make sure. We're talking about the precheck ride; is that right?
Q. Yes.
A. Okay. So you're telling me he had two extra periods. Where normally -- well, that would be more -- no, you say 50? Fifty --
UNIDENTIFIED SPEAKER: No, I think -- I believe he's talking about OE, isn't he? Or is it simulator?
MR. JOFFRION: No, no. He's talking about simulator.
MR. ABRAMS: Level D simulator.
BY MR. ABRAMS:
Q. On day 9 in the simulator, he got an 8-hour session. On the tenth day, he got a 7-hour session. Then on the eleventh day -- I presume this is his pre-rate -- he got a 3-hour session.
A. Okay, so after the eighth period, it was determined that he was not ready to take a pre-rate. So they allocated -- they probably had already booked -- this is why it's kind of a little confusing. The simulators are booked well in advance. And many times, there is a presumption that there's going to be one period that's going to be for two students, and then the following period is going to be for the other two students.
Now those -- perhaps those other two students, we only have one student or two students that are going through, we've already paid for the 8 hours. So we're going to say, okay, we're going to use that entire 8-hour period. Obviously, there'll be breaks

during the time, but that has already been paid for as opposed to -- well, you would expect to see only a 4-hour period, right? But we already paid for it, so we said, okay, let's use it.

Now probably he wasn't training for the entire 8 hours or whatever. But it's clear from what you're telling me that after eight periods, the person was not ready for his check ride, so there were additional periods that were added.

Q. Correct. On February 19th, I'm assuming he was not recommended. That was his eighth day. And 2 days later, on the 21st, that's when you're showing the 8-hour sim; the 22nd, February 22nd, 7 hours; and February -- can't tell if that's a 23 or a 25, but it was a 3-hour event.

A. Okay.

Q. But anyway, like I say, the total hours in writing is 40 hours on the record, but if you do the addition it's 50 hours.

A. It would definitely be 50 hours. So that last 3 hours that you had was probably the pre-rate. So you had -- the pre-rate technically is a training period, but what you're describing to me is really two extra periods that he was given to make sure that he was ready for the pre-rate. Because obviously, if you don't get recommended on the pre-rate, you don't go to the type rate.

Q. Yeah. So you say it's only 2 extra days, but 15 hours of sim time documented. I understand though you've already paid for that much and he probably wasn't in the sim that 8 hours. But I mean, I'm just reading what's on the paper here, that it's documented he

was -- it's documented he was in there for 8 hours.
A. Well, I'm not saying he wasn't in there. But I'm saying that maybe he wasn't doing the flying the entire time. Maybe there was a support person there who was maybe shooting -- I don't know. I'm speculating, but he was probably -- and this is the way we normally do it. That person may have been shooting the approach while he is observing, and that still is a training period. For example, if I'm having problems doing steep turns and I say, Shawn, could you do the steep turn for me, and maybe I can garner some insight or some information. I'm still being trained, but I'm not actually manipulating the controls. But I was in the simulator and I was training.
Q. Okay. Flight crew training report has a lot of S's. That says satisfactory, checkmarks mean below normal progress, and U for unsatisfactory.
A. Correct.
Q. What does an S with a circle around it mean? I don't see anything in the legend for --
A. Yes, it's in the legend. It says that they have satisfactorily completed that maneuver and it doesn't have to repeat it again. For example, let's say you expose me to a V1 cut, and I -- for my stage of learning and development and where I am, it was okay and it was progressing at a reasonable level, not to the point that it's satisfactory and it would pass a check ride, but at least I was in the ballpark and I was progressing at

a normal rate; you would give me an S. Now the next time I do it and I do it flawlessly or at least satisfactorily that I would have passed that maneuver on a check ride, that would be a circle with an S.

Q. Okay. And a checkmark with a circle is?

A. Yeah, the checkmark is below standard, not normal progress. And of course, we're dealing with the students who start with period one, and they're progressing. You wouldn't expect the same level of progress period one that you would expect to see -- or proficiency that you'd expect in period six or seven.

Q. Steve, you've been in your current position 28 years. Now, you've seen a lot of change. Some things haven't change. For you, what would you like to see different?

A. I'm king of the day?

Q. King for the day.

A. Okay. During my career, I've seen problems that were addressed by the NTSB and the FAA, and I'm gratified for that. First one that comes to mind -- and I'm going to get to your answer in just a second, but I think it's important to talk about this -- was deicing. When I flew for Eastern Airlines in 1979, we had one deicing fluid. It was a type 1, and we had no holdover tables, nothing. We had no idea how long that would protect us. We didn't have anything other than -- it was a gauge that it was good for 20 minutes, no matter what the icing conditions: freezing rain, freezing drizzle, whatever.

Now comes along Air Florida. Now comes Aero Air. And they said, hey, we got a problem. And by golly, they fixed it. They came in, they came up with the holdover tables, they came up with the type 2, type 4 deicing fluid, and they fixed the problem. We were trained on it. Now I feel much more comfortable.

Then along comes wind shear. Here comes Delta Airlines going into -- Delta 11 going into Dallas, right? We didn't know anything about wind shear back then. There was Pan Am going out of New Orleans. We didn't know anything about wind shear. The guy flew into the ground at V2. Now they say we got a problem. Let's create this wind shear training aid. Now there's training. Now there's recurrent. Now that we were understanding, there's prevention. Now we have the escape maneuvers.

Landing on a slippery runway is another hole that needs to be plugged. I want to see someday, just like we have RVR if we're landing. We got touchdown, we got midpoint, we got rollout. We got real-time information on visibility. I want real-time information on touchdown, midpoint, rollout as far as the contaminant, the depth of the contaminant. Because today, it's a by gosh and by golly, and that's something that needs to be addressed.

Yes, TALPA's great, but TALPA is not real time. And you have a tower operator who's saying, well, we have rain showers on the field, or something like that. Well, that doesn't say anything where the tower is 2 miles away from the landing runway where the

guy's touching down. They're having to deal with, well, I don't have perfect information. And that's something that, I think, 10 years from now or 15 years from now, they're going to look back and they go, wow, they didn't have any information back then. Kind of like looking back on the type 1 fluid that they had back in 1979. And they go, that's all you had, was type 1 fluid?

So that's what I'd like to see. I know that was a long-winded answer, but I can't help myself.

MR. ABRAMS: That's about all the questions I have right now.

MR. JOFFRION: I need to shut up.

MR. ETCHER: All right. David?

MR. THOMPSON: I got a few questions.

MR. JOFFRION: Sure.

BY MR. THOMPSON:

Q. The captain recently went through APD training and evaluation process. Was he actually designated an APD?

A. Yes.

Q. Okay. When did this occur?

A. I'd have to look back on the records. I do not know.

Q. Okay. What is the process for becoming an APD? About how long does it take? You know, what did he have to go through?

A. He has to -- well, first of all, there has to be a need, and the company has to petition the FAA on this one. And once they do that, then they are briefed on the -- obviously they understand that as a -- much like their check airmen, they belong to the FAA.

They don't belong to the company when they're administering this.

Then we go through the paperwork. And as you well know, there's a long, involved process on how to complete the temporary certificates and the 8910 and such. So that briefing takes place generally at the FAA office, or they can come down here and accomplish that. And then the FAA will observe the APD administer a type rating oral from front to end, and then they will observe them administer a type rating simulator check ride. And then based on that, if it's satisfactory, then they're designated as APD.

Q. Okay. Do they fly during this time?

A. Can. Sure. There's no restriction on it, no.

Q. Okay. So the incident captain is a ground school instructor, sim instructor, sim check airman, line check airman --

A. Correct.

Q. -- and now an APD.

A. Correct.

Q. That's a lot.

A. Not really. All of us -- well, but you think about it, what is their job? It's not like they're -- they're not doing this every day. We have, you know, days off. And you go to work, and he could be called today to be a -- like right now, he's in ground school. Okay, so he teaches ground school, and he's going to take the entire class through the ground school. And okay, he gets the weekend off or whatever, and has maybe a couple more days off, and

say hey, we want you to give a check ride in the simulator. Oh, this is just a recurrent PC. Great. Okay. Then he has a day off or two, and then maybe he goes fly the line. Maybe he goes, flies a couple days, and maybe gives a line check out there or something like that.

So it's not as arduous as you might think. I mean, we have days off. And the responsibility of being a ground school instructor and a sim instructor, they really go hand in hand. They match. And that's part of the reason why I think we have such a good training department, is that we have people who do both, and they understand. It's not like we have this -- like at Eastern Airlines, we had what we called 950s and 930s, that people out on the line never spoke with the people in the training department. No, we have people who do the same thing and they understand the limitations of the simulator. They understand the students that are coming in. They're watching this whole process, and they touch on each facet of the training. So they have a working understanding, and it works great.

Q. Okay, cool. Ever consider conflict of interest? You know, guy bringing them through ground school, check ride, and now APD, and now he's going to give them a line check. You know, on an OE or anything like that. Has that ever been, you know, a deal? Personality, you know, or familiarity breeds contempt. You know what I'm talking about?

A. That generally doesn't happen. Because what happens -- let's

talk about a captain that -- we're talking about a captain getting signed off, is --

Q. Or a first officer.

A. Well, first --

Q. Or like a guy that's brought this kid through training and now he's giving him an OE.

A. I see what you're saying. But remember this, that it is impossible, virtually impossible, for a person -- it's true. You could teach the same student as an instructor in ground school, you could take them through training. But we make a policy where, if you train them, you're not going to check them. Now you go out onto the line. And like I said, okay, this student is an initial student, goes for 30, 40, 50 hours. It's inconceivable that that student is going to fly with the same check airman. Our schedule just does not permit it. It just doesn't happen that way. And again, the person who administers the training is in -- like I said, in ground school and through the simulator, is not going to be the person who gives the type rating ride. Or give the check ride.

Q. Okay. How are recency and currency issues dealt with for your instructors? Because, just for instance, the captain had only flown 5 hours in the previous 30 days, and we didn't even look beyond that. You know, so concerns with that or --

A. Not really. Obviously, if need be, we do the three takeoffs and landings in the simulator to maintain our currency. Again,

you're dealing with -- these check airmen are fairly experienced captains, so they don't probably need as many hours flying the line in a real airplane. But you're exactly right. You lose proficiency, and we do recognize, but all of our check airmen recognize that when you have a situation where you've been training and training and training, it's time to get out of the schoolhouse and it's time to go out on the line. They initiate that. They really -- they say, you know what, I'm a little burned out with students right now; it's time to go out on the line and get some real flying time. So --

Q. Okay, last question. When a line check is given an OE, are there specific required briefing instructional items for every leg of an OE? Or is there a guide that he goes through and, you know, checks off?

A. Absolutely. We have what's called a 148 form. I'd be happy to show it to you. And it talks about everything from takeoffs to landings to operating the HF radio, long-range navigation. You name it, every maneuver has to be signed off and initialed by that particular OE instructor. Is that what you're getting at? Now when they finish and when they finally sign them off, we have a line check form. It's called a 110 form. And they are evaluating -- much like any captain who's getting the yearly line check, we have this 110 form that has to be satisfactory in all events in order for the check ride to be satisfactory. And that's for on completion of an OE, and that's also completion of a yearly line

check for a captain.

MR. THOMPSON: And that's all I got.

MR. JOFFRION: Okay. Thank you.

MR. ETCHER: Thanks, David.

Todd, do you got any questions, sir?

MR. GENTRY: I just got a couple.

BY MR. GENTRY:

Q. You mentioned quarterly standardization meetings?

A. Yes.

Q. Is there a requirement that people read your notes or attend those?

A. Like I said, a lot of times the people cannot attend for whatever reason. But we have a teleconference if they can dial in. Are they required to read the notes? I make the notes available. I send it to everybody. Do they have to read the email; is that what you mean?

Q. I'm just asking what you --

A. It's much like what we're talking about on the read file. So I make it available to them. I email everybody who's a check airman or a ground school instructor or a flight instructor. They have the synopsis or a summary of the meeting and -- it's sent to them. Whether they read it or not, I don't know.

Q. Okay. Good. Thank you. Does Miami Air have an emergency action cell or any kind of a plan if an accident happens --

A. Absolutely. Absolutely.

Q. -- who gets called on a recall roster, where they meet, and what they do?
A. Yes, they do. It's an emergency manual, emergency plan manual. I can't remember the name of it, but yes, we do.
Q. And you were called and just told to get to Jacksonville the next morning?
A. Correct. Well, no, they said stand by; we're going to -- we're talking to scheduling right now. We're going to put you on a -- the first flight out of Miami, so pack and get ready to go. But that plan was implemented, and all the -- this gentleman would be better at answering that question, but absolutely. Everybody at Miami Air knows that there's an emergency, if you call it, action plan that has been tested. And we do exercises on it periodically to make sure that it's current, it's up to date, the names, the telephone numbers and such.
Q. Okay. Excellent. Thank you. Just one real quick question. You alluded to instructors and check airmen, of course, line check airmen. Is there a dedicated instructor upgrade course?
A. Absolutely. Absolutely. I teach that, and it is a --
Q. Okay. That was going to be my next question. Who teaches it?
A. Absolutely. I have -- I'd be happy to show you the PowerPoint that I have created. It goes into the facets of -- because remember, they're coming in initially as an instructor. Then they're going to be working into the check airman role. But

we cover the gamut of both of them.

We talk about John Wooden, for example, the greatest coach of all time. And I'm sure you're familiar with him. He was an instructor, coach at UCLA. And we talk about his teaching styles and how he was so successful, where he won eight national championships in basketball over a 10-year period. Went two undefeated seasons. And we use his -- I've read two of his books, and I've implemented that into the instruction course. So --

Q. Excellent. Do you have -- this is a follow-up. Do you have any recurrent requirements for that?

A. What we do is, every year, we have -- we teach the new OPC, as I had spoken about before. The OPC is the new LOFT, right? Every year, even though it's not a requirement, we come up with a new recurrent LOFT, which incorporates either the mistakes or the weaknesses or whatever. As I told you about, this last one that I created went from Keflavik and the oil gulping, and it goes to Portsmouth, and the other one takes off from Boston and loses both FMCs and does a Cat 2 SA approach going into Cleveland, all because we saw that there were some weaknesses, whatever.

When we teach how to implement and how to become familiar as an instructor with this, in January, as this new OPC is coming out, this new LOFT is coming out, we also talk about the check airman refresher course on teaching and styles of teaching and what are the requirements, for example, on a LOFT. You can have such-and-such individual sitting in the left seat supporting --

you know what I'm talking about, in the LOFT or the 120-35. So yes, absolutely. We do recurrent check airman training all the time. Every year.

MR. GENTRY: That's all I got. Thank you.

MR. ETCHER: Thanks. Armando, any questions?

MR. MARTINEZ: Not really. I think Steve has done a very good job answering the questions. If you have any questions for me on the emergency response plan --

MR. JOFFRION: Emergency response plan. That's what it's called.

MR. MARTINEZ: -- I'll be more than happy to respond to that. But I'm not being questioned, so --

MR. ETCHER: Your lucky day, right?

All right. Rich?

MR. LEE: Sure.

BY MR. LEE:

Q. I have a question about OPT. You teach a dispatch course, and I'm assuming you probably teach the crew members on OPT.

A. Yes.

Q. Is there -- the dispatch portion, is it different than what the crews would use en route?

A. No. They must go through the dispatch planning for the takeoff, dispatch planning for the landing, and they have to do en route calculations. And we set up a scenario whereby we say, okay, the crew -- for whatever reason, their OPT is out-of-date or

it's not working, whatever. You need to calculate, based on a CDL, based on an asymmetrical trailing edge flap, based on a slippery runway, you need to calculate the landing distance that's required for them, and now you're going to have to transmit it to them. So they have to understand every facet of the OPT. And that they get in recurrent, and that they get in initial as well.

Q. "They" meaning the dispatchers?

A. Yes. Absolutely.

Q. Is it a desktop, or is it on an iPad that they use?

A. iPad.

Q. iPad.

A. iPad. That's what they use in the dispatcher's office, is an iPad.

Q. And when they -- when they're determining to be able to dispatch, do they use just the dispatch function to determine that they're arriving, or do they check the en route as well for a particular segment?

A. Generally speaking, no, they would not do the en route portion. That is something that's mandated now for the pilots. They will always accomplish -- regardless whether the change in weather has occurred or not, they're going to do the initial dispatch landing next station, and they're going to do an en route as soon as they get the information. Does the dispatcher do that? No. They are capable of doing it if it need be called for. But it's not required.

Q. So when a dispatcher determines the dispatch and they provide that information to the crew, do they use the function to download it from the -- or do they just say, you're good to go? Or what do they give to the crew to let them know this is the weather we use, this is -- you can land it this way, and these are the constraints? What are the constraints for the landing? Is it wet? Is it max manual braking? Is it autobrakes too? What does the dispatcher give the crew?

A. Okay. Let's take the whole process. The dispatcher knows that the dispatch is going to be going out in a couple hours, somewhere in there. Looks at the weather. Based on wet, based on whatever the MELs happen to be. Now in addition to that calculation, the crew shows up. They get the same information, probably a little more updated. And both the captain and the co-pilot do dispatch calculation for landing next station. So that's separate and apart. If the dispatcher were to determine, oops, we have a problem, we can't take off, we can't go nonstop, we don't have a capability to carry the payload, whatever, now that's going to be transmitted to the crew. But the crew separately, independently, captain and co-pilot will make separate calculations in addition to what the dispatcher's doing. So it's not transmitted to them unless there's a problem.

And the other part about it is the dispatcher is doing a calculation based on max zero -- I beg your pardon -- max payload of 18,000. And that's being done well before the flight

dispatches. Now here comes real time. Now the crew gets the actual weights, gets the actual fuel, whatever. And invariably, that's going to be a lower number than what the dispatcher initially calculated. But that's -- these are the numbers that the crew is going to be using on the OPT and what they're going to use on the weight and balance.

Q. So the crew, before departure does a dispatch --

A. Absolutely.

Q. -- on OPT.

A. Unlike a lot of airlines where they say, okay, the dispatchers run the calculations, send us the numbers, okay, we write them down. No, no. It's a double -- triple check. Dispatcher does it, captain does it, co-pilot does it. Then in addition, as a result of recent changes in the bulletin, in addition, when the crew is in range, typically 200 miles out to pick up the ATIS, whatever, they get the airport information, they will do a new calculation. And this will not be a dispatch calculation; it will be an en route landing calculation. And you saw that tab on OPT. Okay.

Q. Sure. And is there a difference between those two as far as what constraints are taken?

A. Oh, absolutely. If you take a look at the FARs, the -- if you're landing on a dry runway, you know, you have to land within 60% of available runway with a 40% safety factor, then an added 15 for wet. Well, this, based on the SAFO that we've elected to use,

is the en route calculation says, okay, we're not going to just select from dry or wet. We now have the options to go to a slippery runway, good, medium, poor, or slush or standing water. And then it does the calculation, and then we put in the administrator for the OPT an additional 15% on top of that. Plus we have one thrust reverser not working. So if we dispatch with two of them working, we tell the OPT, you have one thrust reverser not working. If we dispatch with one thrust reverser not working, the OPT calculation is based on zero thrust reversers working.

Q. And that's the new policy?

A. No, it's always been that policy. The only thing that has changed is we're going to do an en route calculation all the time, where before we did it if the weather conditions have changed significantly for the worse. So if I'm landing in -- planning on landing in Orlando with a 12,000-foot runway and now I have to divert to Daytona, clearly a shorter runway, before the incident, I was before obligated to do an en route calculation. Or if I'm landing in Orlando and I was flying on a wet runway and it has slush on it, clearly I'm going to have to do another calculation. Now we do an en route calculation regardless. Even if conditions have not changed, even if I'm landing at Edwards Air Force Base, I'm going to do an en route landing calculation.

Q. Okay. Thanks.

A. Sure.

MR. LEE: That's all I have.

MR. NELSON: I had plenty of questions. I have nothing more to add.

MR. ETCHER: Okay. All right. You doing all right?

MR. JOFFRION: I'm good.

MR. ETCHER: You good for one more round?

MR. JOFFRION: I'm good for another 2 hours.

MR. ETCHER: We'll try and hurry then. Now you've had -- you've enlightened us, as we figured you would, quite well. And I actually don't have too many questions. So I'm sure it won't take long, and we'll let everybody else, in case we have follow-ups, but it shouldn't take us long.

BY MR. ETCHER:

Q. Let's talk a little bit about procedures again, because we were just kind of in that area, but more on the lines of what is a crew requirement for go-arounds, let's say. What is Miami Air's stance on when does a crew, when are they required to do a go-around, when are they recommended? Tell me what your guys' standards are.

A. You as a pilot understand that there's so many variables that you can't completely nail it down. If you identify an unsafe situation -- you're too high, you're too fast, you're too far to the left, you're too far to the right -- you can't quantify that. They have quantified it, of course, as far as a stabilized approach. Obviously you have to be on speed, landing checklist complete, fully configured -- all these by 1,000 feet. After we

spool up, you have to be in trim. Whatever. A descent rate no greater than 1,000 feet per minute, but you can exceed that momentarily as long as you correct it immediately.

Those are the hard, fast rules that we apply. I know that, you know, some airlines deviate from that. United uses don't exceed 1200 feet per minute or whatever. But we have applied -- we have found that, particularly if you're landing in a funny flap pattern, okay, a funny flap landing -- you're coming in for a no-flap landing, okay? You can easily, you can easily exceed 1,000 feet per minute on the approach below 1,000 feet and you can never land, which is kind of ridiculous. So it seems to me that's why we made the correction from saying you may not exceed 1,000 feet per minute to you can momentarily exceed it as long as you correct it immediately and all the other parameters are being satisfied.

So to answer your question, you identify something that's unsafe, which is a gray area, you're going to go around. You can't mandate that and say, well -- you can't put that down in writing, right? So to answer your question, the only hard, fast rules that I can think of right now is a unstabilized approach, which is written in our manuals.

Q. So to help my mind understand unstabilized -- I know what the rules are. But if a crew got a GPWS to go off below 1,000 feet or multiple terrain alerts or whatever, you know, some kind of a message within the airplane, is that -- would you expect your crews to go around or no?

A. Depends on the experience level. Depends on the degree of deviation. Our crews have no problem with going around. If it's necessary to go around, we go around. It's something that we -- particularly in training, they rarely land, when you think about it. So they're -- I feel as though they are comfortable with the idea of going around. It's a judgement call, and it depends on the severity of the situation. So momentary deviation, most pilots -- and it depends. Did this happen at 100 feet? Did it happen at 900 feet?

So difficult to answer your question, but I feel that they're comfortable with the idea of going around if it calls for it, the situation calls for it.

Q. Okay. That's a good answer. Is there a point during the landing phase where you guys pretty much say, don't go around? Like wheels on the ground or spoilers deployed, below -- you know, is there a point when it's, for lack of a better term, expressly stated no, do not go around; keep on the ground?

A. Absolutely. A couple years ago, the FAA mandated and said, okay, as a policy your company -- anybody, any company -- is going to have to come up with a commit point, and that commit point is when the thrust reversers come in. So at that point you are committed to land and you're not going around. And it's written in our book in the AOM, if you want to see it. AOM Volume --

Q. I know your flying is -- Miami Air's flying, I should say, is different than normal 121 carriers. And it's kind of a curiosity

for me how you accomplish your line checks and things like that with crews -- you know, they don't necessarily come back to base to pick up a check airman to go fly around with them. So how do you guys accomplish that, or is that another level of challenge for you as -- in your current position?

A. Unlike most airlines, where, say, okay, we're based out of Miami. Well, we'll just pick up a flight going out of Miami and we'll give a line check. It doesn't work that way. The crews don't even start here in Miami. It's a rarity they start in Miami or Fort Lauderdale. We commercial them to wherever they're going to start and pick up the flight that they're going to be on. We do the same thing with the line check airmen, we commercial them out. Hey, this person needs a line check; he's coming at the end of his due date, whatever. Okay, well, better get him right now. Well, he's in St. Louis. All right, fly him to St. Louis. That's what we have to do, that's what we do. We do a lot of commercialing at this airline. A lot.

Q. Does that -- have you had -- it's going to be hard -- so if the question doesn't make sense, please ask for clarification. Have you ever had check airmen complain it's kind of like you're adding more legs to their duty?

A. No. No. And generally what happens is -- because they're as an observer, it's not like they're going to pick up the flight and go fly. So they go out to pick up the flight and they layover, and now they're giving the line check, and then they come home.

So there's nothing arduous or nothing difficult or demanding of their time. It's quite easy.

Q. Okay. Sounds like your check airmen can be, in a busy season, a little busy. Or, you know, all your pilots, but check airmen can be busy too. Do they have a mandatory number of days off in a week or a month or a year? Or how do you guys give them enough time off?

A. Based on their -- they're still under the contract. So the contract assures them of duty rest and days off.

Q. Okay. Pass rates. Nobody ever likes to broach that subject because sometimes it's not a happy subject. Any airline like yours, or any airline that's been in business as long as you guys have, I'm sure have had some not successful check rides and some successful check rides. In the past couple of years, what's been your unsatisfactory check ride rate? Or do you -- I assume you guys keep track of that.

A. Oh, yes. It's part of the check airman activity report that I fill out quarterly. I would say that, over the course of a year, we may fail, oh, 3 or 4 check rides, and maybe we give 40 a quarter. So, I don't know, maybe 1 check ride a quarter out of 40 would be an approximate average.

Now you'll notice I didn't talk about the initial check rides, because we're very careful about that one. We don't put anybody up for a type rating ride with the FAA unless they do a very good job or more than just passable job on their pre-rate.

Because obviously, if you have certain failure rates -- and obviously it gives an image to the FAA that we don't know what we're doing on our training. So if a person doesn't measure up to the standards, they never get to the type rating ride.

So we have very diligent crew members. They understand that the check ride, when they come back for the recurrent, we're dead serious about it. They're going to have to do these maneuvers and they're going to have to do them well. And they study. And they -- the oral, they're very well prepared for the oral too. And of course, we tell them about it in recurrent ground school which precedes the check ride. And we go through practice orals. We go through practice immediate action items, limitations, whatever, to make sure that they're spooled up.

Then we talk about the maneuvers. Okay, you're going to be doing that single-engine approach through a mist. Hey, you're going to be doing steep turns and things that you may have forgotten because you haven't been, hopefully, doing steep turns out on the line. You're going to be doing it here. So we're going to, we're going to prep them. We're going to prepare them for the maneuvers because they haven't been practicing those.

Q. Okay. Now the 1 a quarter, 1 every 40, whatever unsuccessful, is that just in the simulator?

A. Yes. It is very rare, very rare to get a line check failure. As you well know, you have to do something pretty extraordinary in order to fail a line check. And think about this, you're --

Shawn, you're taking a line check. You're going to be very conservative. You're going to start putting the gear down early, you're going to put your flaps down maybe a little bit early. You're not going to maybe do a tight turn-in on a visual approach or something like that. You're going to play it safe, right? Well, these pilots are not stupid. They're going to follow procedures and they're going to start down early and manage their energy so that they don't get themselves in a box. So line check failures are, I think in any airline, are a rarity. They do happen. They do happen. And I've given a failure or two. But it doesn't happen very often.

Q. Okay. You kind of bring up the topic of pilots are going to be a little bit conservative on a line check. Do you still feel your line checks give you a good snapshot in your mind of what your crews are like out there? I mean, because you and I both understand -- I think everybody in this room -- that when you're under a check ride, you're going to be very mindful of everything. And it's a good indication, but do you feel like it gives you an adequate --

A. I do. Because a person who's been a check airman -- and most of our check airmen, particularly line check airmen, have been doing it for a long time. And if a person has a peculiarity that deviates from standards, whatever, even though they're trying to play it -- play the game and try and follow procedures, they will slip up. They will do -- not something that's necessarily

dangerous or impacts safety, but they've forgotten to do something, or any number of little things that they've been deviating and then reinforcing that deviation for a period of time. And they're not mindful of the fact that, even though they're trying to play it right down the line and right according to standardizations, they will slip up.

And again, these are not necessarily major things, but these are the things that the line check airmen will identify and say, oh, by the way, you forgot to check the squibs on the fire detection system when you did your preflight. Oh, my goodness, I haven't been doing that for a while; it must have slipped -- and if you try and fake it, and you've been doing it some other way, and you try and go back to what you know is the correct way to do it, you're normally going to get tripped up, you normally can identify that one. And check airmen are pretty wise, and we know where the weak areas are even beforehand. So we're particularly conscious of that.

So to answer your question, I think our check airmen are more than adequate, and I think that they serve the purpose and they do make it a safer operation by administering these line checks. And they identify -- and they always debrief. They always say, hey, that may have been a great job by Darrin today, for example; however, we do have a couple areas that you can improve upon.

And I have always taught that the dumbest thing that an instructor can do is say, hey, that was a great job, okay, sign

the paperwork, you're on your way. If I don't find something to improve you as a pilot, I have failed you. And that's the philosophy that all our check airmen apply. Hey, there's always something that you can do better. There's no such thing as a perfect flight. So let's identify those areas, and those people can improve on their performance in the future.

Q. Okay. I believe earlier -- I think it was maybe Warren was asking a question about something, a mark on one of the evaluations, and I just wanted to make sure I understood it correctly. A checkmark with a circle around that checkmark --

A. The circle -- I think somebody may have inadvertently put that in there. There's a U, there is a checkmark without a circle, there's an S without a circle, then there's an S with a circle. U is unsatisfactory, just awful. Checkmark no circle is below standard performance at that level -- or, correction, at that point in their training. An S was satisfactory progress, would not pass necessarily -- that maneuver would not necessarily pass the check ride, but okay, adequate for that particular time frame that the -- maybe they were just introduced first time to a single-engine hand-flown ILS approach. Well, it was okay. You're not going to pass a check ride based on that performance. Now circle S, now that person is within parameters and would be recommended for a check ride on that maneuver. Okay? Does that make sense?

Q. It does. Thanks for clarification. Just wanted to make sure

I -- and I did misunderstand, so thank you.

Back to our guidance again, just a little bit. Since you're involved with training and your check airmen and -- you know, I look at the situation that the accident flight was. You had some MEL issues. You had some weather around. Me, as an instructor, it makes me think, boy, what an awesome opportunity to teach somebody how to use weather radar, decision making, things like that. What guidance is out there for crews on weather radar usage and how to use it adequately, correctly, and things like that?

A. This comes from personal experience. There's nothing that you're going to find necessarily in our books. This is something that is on the 148 form that I spoke to previously, and this is the check-off or the checklist, if you will, that an OE instructor has at his disposal to complete all these items that have to be completed with an S on them and signed off before the person is actually considered a fully qualified crew member.

So you're not going to find -- and we have various types of radars, too, which are -- you know, some are Bendix, some are whatever. And that technique is covered in the 148 form, as I just mentioned. Is there guidance on how to operate it? No.

Q. Okay. And you bring up an interesting item with the different radars that you guys have. You know, most carriers do use different radars and they find that sometimes that creates a little bit of a challenge for crews to make sure they have the right settings. Does your 148 form, does that address --

A. No.
Q. -- correct settings or anything, or is it just --
A. No. This is taking an experienced captain who's a check airman, obviously, and an OE instructor, and saying, okay, you've done this many, many times before, okay, let's teach the basics and let's teach the nuances of this radar. And so we just leave it up to their experience to teach it. And it's not that difficult, but -- as you well know. But that's how -- that's what we teach from. There is no formatted lesson plan that they teach from. But it is covered, obviously, because you can't complete your training unless the 148 has -- all the items have been completed satisfactorily.
Q. Okay. All right. Makes sense. Non-grooved runways. You guys do some military charters, so I'm sure you're faced with those once in a while. Is there any requirements for pilots to know on a non-grooved runway? You know, performance calculations, anything along that lines that your check airmen try to instill forward to all your crews?
A. There is now. Are you --
Q. Let's say back in early May. Was there --
A. This was a phenomenon that most of the world -- well, certainly myself, didn't know much about. I didn't, and now I've researched it, and now I say, hey, this is -- according to my king for the day speech that I gave a little while ago, this is something that we need to address, the whole world needs to

address. But it was not something that we were aware of as far as this trap. We did not have a difference as far as our approach briefing and how we dealt with it. As you well know, the OPT has no way of making a calculation whether grooved or non-grooved. There's no place in there where you can select one over the other. So the answer is, before the accident, no, we didn't teach it; we didn't even know about it.

Q. That's pretty clear. I appreciate that honesty.

The last question I have, and then I'll let everybody else have a turn. You mentioned you have a -- your current POI. Forgive me, I've forgotten --

A. Stan Crum.

Q. He's your current POI?

A. Yes.

Q. Okay. But you also mentioned the guy that signs off the check --

A. Tom Berg.

Q. Tom Berg.

A. Tom Berg. Yes.

Q. How long has he done that?

A. Wow. How long has Tom been here? That's a difficult question to answer, because he was with the FAA, and then he left and he was going to go be an instructor for Airbus up in Orlando. That didn't work out. Then he came back before his paperwork was processed, and now he's back with the FAA. So I don't know. Year

and a half, 2 years, something like that.
Q. Okay. And Stan Crum, your current POI --
A. Correct.
Q. -- how long has he been your current --
A. Wow.
Q. Wow usually sums it up pretty well. That's either "wow" it's really short or "wow" it's been longer than I would --
A. Ten years? Ten years, maybe.
Q. Okay.
UNIDENTIFIED SPEAKER: Well, I think he was here before, and then he came back.
MR. JOFFRION: I haven't kept track of him.
MR. ETCHER: I just thought maybe --
MR. JOFFRION: It's a wow. The answer is wow.
MR. ETCHER: A wow. And that's -- we'll take that. I appreciate it.
All right. Kat?
DR. WILSON: Nothing.
MR. ETCHER: All right. Mr. Warren?
BY MR. ABRAMS:
Q. All right. Probationary period.
A. Yes, sir.
Q. New hires get hired at the company, and can I assume or -- tell me about their probationary period.
A. They are on probation for 1 year.

Q. So is there any flight plan limitation with that or is it a hard 1-year period?
A. Hard 1-year period.
Q. Okay. I want to talk about training for just a second. But I want to be very clear, extremely clear, I'm talking outside of ASAP.
A. Okay.
Q. Don't want to approach ASAP at all. So we're not going there. Outside of ASAP, was there any additional training after the incident for our captain, outside of ASAP?
A. Wow -- what I can tell you is this. That on, I want to say the 29th -- was it the 29th of -- I'd have to look it up, but I think it was the 29th of May, I administered training to both the captain and the first officer. And it was --
Q. I want to be specific. Outside of ASAP. I'm sorry to interrupt you.
A. Yes, I think this was -- oh, jeez.
Q. I don't want to go down that track if it's ASAP.
A. I don't know if -- I can't --
Q. I'll withdraw the question.
A. Okay. I don't know whether it fell under this -- we thought it would be a good idea before we returned them -- even though there was no restriction on them whatsoever placed by the FAA for them to not fly or teach or whatever, we thought it would be appropriate to give a training period, which I administered, to

both of them. And we did takeoffs. We did landings. It was kind of a LOFT scenario. But it was something that we initiated. So that's all I know.

Q. Good. Thank you.

MR. ABRAMS: That's all the questions I have.

MR. JOFFRION: Sure.

MR. ETCHER: David? Any more? Todd? Armando?

MR. MARTINEZ: Just to clarify, Mr. Crum was -- has been with us for about 10 years, but there was a gap there when he left, and about 2 years ago, he returned. So he was gone for about a year or so. And so about 2 years ago, he did return.

MR. ETCHER: Okay. All right. Well, thanks for that clarification. I appreciate it. Do you have any questions?

MR. MARTINEZ: No.

MR. ETCHER: Okay. Rich?

MR. LEE: Nothing.

MR. ETCHER: Sir?

MR. NELSON: Not a question, but a clarification. You were talking about days off. And the line check airmen, the regular check airmen, they have the same number of guaranteed days off every month. We give them 12 guaranteed days off. We have a few restrictions in our contract as far as duty and rest that are addition to even the 117 rules. So, for the most part, we are very well rested whenever we have to go to fly.

MR. ETCHER: Okay. Thank you for that clarification.

MR. JOFFRION: Thanks, Darrin.

MR. ETCHER: Do you have any questions?

MR. NELSON: No.

MR. ETCHER: All right. Well, you know my favorite last question I -- well, was if you're king for the day, but you already took that one. But -- no, I know we've kept you here for 2 hours plus --

MR. JOFFRION: I love it.

MR. ETCHER: -- and we can go for 2 more if you really want.

MR. JOFFRION: I'd love to.

MR. ETCHER: But I'm running out of questions anyway. But is there anything we didn't ask that you wish we would have, to help us understand things here that you guys go through?

MR. ETCHER: No. I think when I answered the question that Warren asked or the exchange that we had, that I would really like to see the aviation community get together and help prevent this from happening again. And I think an important part would be provide the pilot with good, useful, real-time information on a dynamic situation like what we saw. So that's all I have to say.

MR. ETCHER: All right.

Gary, I always love it when lawyers are quiet, but I just want to make sure that you didn't have anything you needed to add?

MR. HALBERT: When we go off the tape, I want to verify what deliverables or tasks that we picked up.

MR. ETCHER: Yep.

MR. HALBERT: I remember the task for the first officer progress report.

MR. ETCHER: Yep, we'll turn off the tape here in just a second, then.

MR. HALBERT: Okay.

MR. ETCHER: All right. Well, last rounds. Speak now. All righty.

Well, we appreciate it, and as far as we're concerned, this will conclude this interview.

MR. JOFFRION: Great.

MR. ETCHER: All right. Thank you much.

(Whereupon, at 3:15 p.m., the interview was concluded.)

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:	BOEING 737-800 OVERRUN JACKSONVILLE, FLORIDA MAY 3, 2019 Interview of Steven Joffrion
ACCIDENT NO.:	DCA19FA143
PLACE:	
DATE:	July 16, 2019

was held according to the record, and that this is the original, complete, true and accurate transcript which has been transcribed to the best of my skill and ability.

Eil
Transcriber