

NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety Washington, D.C. 20594

February 2, 2015

Attachment 1 – Interview Summaries

OPERATIONAL FACTORS

DCA13MA081

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A. INTERVIEW SUMMARIES

1.0 Interviewee: Antwore Thomas, Bagram AFB Air Traffic Controller

Date: May 4, 2013

Location: Bagram AFB ATC offices

Time: 1200 Local

Present were: David Lawrence, National Transportation Safety Board (NTSB); Eric West – Federal Aviation Administration (FAA); Jose Rodriguez – National Air Cargo; Lt. Colonel Mark Barker – Observer.

Mr. Thomas was represented by Mr. Leslie N. Ellis – Bagram AFB Traffic Manager.

During the interview, Mr. Thomas stated the following:

His name was Antwone E. Thomas, and he was an Air Traffic Controller. He had been a controller since 2000. He was certified for ground control, local control, flight data, and watch supervisor. He had been at Bagram since October 2010, left for about 1 year and 3 months in January of 2012 and returned in October 2012.

He was working ground control on the day of the accident. He went on duty at 1330, and was relieved 1.5 to 2 hours after the accident. He remembered that the flight had requested fuel, started engines, and got their clearance to DXB. It was a radar departure to FL280. He did not remember the fuel amount. When they come in, sometimes the come in mainly to get cargo, and sometimes they just take on fuel. He had worked the National Cargo guys 2 or 3 days each week.

He said he got to know the voices of the pilots, and they have the same routine and spiel every time. He did not notice anything different from the pilots on that day. Nothing was unusual, and everything seemed typical.

In the tower, he was all the way to the right side of the tower. He was the ground controller the entire time, and could see the airplane. Right after he rotated, the nose was pointed way up after mid-field. They tried to climb, and it pretty much stalled at the end of the runway. He said he rotated just after Charlie intersection. He did not see the airplane tail hit the ground or drag along the ground.

He said it was normal for the 747 to climb steeply out, and they climb quickly, but after watching them every day, he knew this was more steeply than normal. He saw the big fireball, then flight data called down on the crash phone, and he was on the crash net for fire and rescue.

He said the ATM was the first to respond, and then the fire department responded. They closed operations for the accident. They did a FOD sweep after the accident. They normally do FOD sweeps for 747's, C-5's, and the Antonovs. The sweepers were entering the runway after the airplane was on departure roll since they were already in position, and they exited at Charlie.

The sweepers would not always tell them if they saw something, but would if it were big or was a bird.

He did not see anything fall off the airplane, and did not see any smoke. The weather was pretty windy. He did not remember the previous arrival. They started at the Foxtrot ramp, and took the full length of the runway for departure. The runway sweep took about 4-5 minutes.

It was typical for the 747 to rotate at Charlie, and sometimes earlier if they were light.

There were no birds, and the bird activity would pick up that time of year. The activity would last until the evening, then die down. There was low activity that day.

Interview concluded at 1225 Local.

2.0 Interviewee: James Desmonte Wilmore

Date: May 4, 2013

Location: Bagram AFB ATC offices

Time: 1225 Local

Present were: David Lawrence, National Transportation Safety Board (NTSB); Eric West – Federal Aviation Administration (FAA); Jose Rodriguez – National Air Cargo; Lt. Colonel Mark Barker – Observer.

Mr. Wilmore was represented by Mr. Leslie N. Ellis – Bagram AFB Traffic Manager.

During the interview, Mr. Wilmore stated the following:

His name was James Desmonte Wilmore, and he had been an air traffic controller for 29 years. He had been at Bagram AFB since January 22, 2011. He was certified for all positions.

He was working the day of the accident as the local controller. His duties included clearing aircraft to takeoff or land, scan the airspace and runways since they were a class D airspace. He worked local control 4-5 days each week.

He did not remember if he worked the accident flight on its inbound leg. He had worked National Air Cargo crews frequently, but had never met the crews.

They called him when they were holding short of the runway, and he was coordinating their release following a C130 landing. He gave them a departure, and saw them rotate between Lima and Charlie. At first everything appeared normal, but then by the arresting gear, he saw that they were way too steep. He said he didn't want to talk to the crew since he saw it was obvious they were struggling with the airplane. He said the increased pitch occurred about 2-3 seconds after rotation. The crew never called back to him on the radio.

He did not see the tail strike the runway on rotation, and said it was a miracle the tail didn't drag with the way it pitched up.

He then told approach to hold everyone out after the crash. He turned around and said something to the supervisor, then called Les, who told him to secure the tape. At that time, all the phones started ringing.

There was nothing that seemed out of the ordinary with the flight before the accident. The weather was good with a little gusty crosswind.

The prior flight to takeoff was a C130 about 30 seconds to a minute prior. They did not do a sweep behind the C130 since it was not required. The sweepers would tell him if they saw something on the runway.

He did not see any smoke or fire come from the airplane, and did not see anything fall from it. He did not hear any unusual sound coming from the airplane from the opening in the roof of the tower. He had never had any problems with National.

His position in the tower was to the front left side. He never heard the crew call back on the radio. After the crash he held the flights out and called the ATM, who was already on his way out. He called downstairs to secure the tape.

Interview concluded at 1250 Local.

3.0 Interviewee: Gaylen Chatman, Bagram AFB Air Traffic Controller

Date: May 4, 2013

Location: Bagram AFB ATC offices

Time: 1255 Local

Present were: David Lawrence, National Transportation Safety Board (NTSB); Eric West – Federal Aviation Administration (FAA); Jose Rodriguez – National Air Cargo; Lt. Colonel Mark Barker – Observer.

Mr. Chatman was represented by his counsel Mr. Leslie N. Ellis – Bagram AFB Traffic Manager.

During the interview, Mr. Chatman stated the following:

His name was Gaylen Lequan Chatman, and he was an Air Traffic Controller. He had been a controller for 6 years, and had been in Bagram AFB for 10 months. He was certified to work flight data, local, ground and watch supervisor.

He was the watch supervisor on the day of the accident, which included overseeing the flight operations for the day, assist the local controller with coordination of approach airplanes, and helping catch things that they may have missed. He said the day of the accident was not particularly busy. He was the watch supervisor about 3 times each month.

He was on watch sup the entire day, including when the flight originally landed. He said he was a wide body aircraft, so they coordinated to suspend the operations after departure for the runway sweep. At about Charlie, the airplane rotated, and after that it was almost vertical. He said while it was happening, it got quiet on the radio. The airplane started to glide toward the end of the runway, then the right wing tipped down. He didn't know why he looked up at that time, but did.

He did not see smoke or fire from the airplane, and there was no sound that he heard. After the accident, he told flight data to man the crash phone, then confirmed that the runway ops were suspended. He then notified approach that runway ops were suspended. He checked with the flight data person to make sure they got the accurate information. He said he had never seen an accident on the field. They do not necessarily drill for runway emergencies, but they do train for them.

He said the weather had wind advisories, but other than that it was VFR, and there were no reports of windshear or bird activities. He did not recall what the previous arrival to the runway was.

He had worked with National Air Cargo before, but didn't recognize their voices. He said that he did not hear anything unusual from the pilots. There were no transmissions from the flight after they were cleared for takeoff.

He said the sweepers told them they found some debris near the runway. They characterized the debris as "metal." He said there was a wide body sweep about 3 arrivals previous to this departure, probably 20 minutes before the departure. There was nothing radioed up to them about the sweep.

He sat in the tower behind everyone else in the tower, centered in the tower. He had not seen any videos of the accident other than what was on Yahoo. They did not have any videos from the tower.

He said the pitch and climb almost looked like a F16 departure, and after they stopped climbing, they tipped over. He did not hear any power changes during the departure.

Interview concluded at 1315 Local.

4.0 Interviewee: Dallon Andrew Gines, Bagram AFB Air Traffic Controller

Date: May 4, 2013

Location: Bagram AFB ATC offices

Time: 1320 Local

Present were: David Lawrence, National Transportation Safety Board (NTSB); Eric West – Federal Aviation Administration (FAA); Jose Rodriguez – National Air Cargo; Lt. Colonel Mark Barker – Observer.

Mr. Gines was represented by Mr. Leslie N. Ellis – Bagram AFB Traffic Manager.

During the interview, Mr. Gines stated the following:

His name was Dallon Andrew Gines, and he had been an air traffic controller since 2008. He had been at Bagram since December of last year. He was certified for local, ground control, and flight data.

He was working the day of the accident at the flight data position. His duties were to cut the ATIS, man the crash phone, and assist other positions with coordination. He was physically located in the dead center of the tower, and he witnessed the accident.

He at first didn't notice anything unusual until after it started rotating, and it kept getting steeper, then began to float still before falling back. He thought he may have heard the engines spool up like he was trying to spool up. He said he thought he saw the plane try to nose over but it didn't work. The plane then started to tilt left, then stall, then rolled to the right and crashed.

He rang the crash phone and said the 747 crashed just north of the field and advised the fire team. He was monitoring the ground control frequency, and when they were taxiing out, he didn't hear anything unusual in the transmissions.

There were wind advisories that day with a cross wind, but nothing special, and he believed that when he rang the crash phone the winds were about 350 at 9 knots. There was no bird activity that day.

He did not remember the previous departure airplane prior to the accident. The rotation occurred around the Charlie taxiway. It seemed normal at first then kept pitching up. He said he wasn't sure if they were airborne when the pitch attitude got higher or not. He said it just seemed normal at first, and then thought "wow, he's going really steep." He did not see the tail drag, nor did he see any smoke or debris come from the airplane.

He thought he heard the sound of the engines go up when they were pitched up. He said of the three ATC positions up front, they all had a good view of the runway and accident flight. He did not remember the departure or arrival prior to the accident flight, and said "you have to make a pretty big hole" for the 747 with the runway sweep, coordinating the arrivals and departures.

He said there were no video or audio recordings of the accident from the tower.

The sweepers were in contact with the tower, and either he or airfield 2 told them of some small bird remains on the side of the runway near Charlie. He heard that over the speaker in the tower.

He said the ops were suspended on the runway for the runway sweep. There were no operations after the accident. He did not hear anything over the local position from the airplane since he was monitoring ground control.

Interview concluded at 1340 Local.

5.0 Interviewee: Ralph Brown, Jr., National Air Cargo Operations Specialist

Date: May 4, 2013

Location: Bagram National Air Cargo offices

Time: 1600 Local

Present were: David Lawrence, National Transportation Safety Board (NTSB); Eric West – Federal Aviation Administration (FAA); Jose Rodriguez – National Air Cargo; Lt. Colonel Mark Barker – Observer.

Mr. Brown was represented by his counsel Mr. Dane Jacques, Lawyer via phone.

During the interview, Mr. Brown stated the following:

His name was Ralph James Brown, Jr., and he was 63 years old. He was an Operations Specialist for National Air Cargo, and had been with National Air Cargo (NAC) for 2 years and 8 months. Prior to NAC he worked 14 years for a school district in Washington as a warehouse supervisor, and couple of cargo forwarding companies, and an air freight company. He did air transportation for the air force for 20 years.

His duties as operations specialist included overseeing the operations and scheduling. He communicated with the customers to ensure their needs. He assigned crews for cargo pickups, labeling and storage. He also assigned DG guys for hazmat cargo. He supervised the off land and on load of all shipments. He also helped take care of his staff, which included about 14-15 guys. They were available 24 hours, and were on duty anytime the airplane was around. It took about 3 hours to work each airplane, and he assigned specific folks to work a shift for an airplane. For the B747, he would typically assign about 9 folks to work the flight.

He said he worked the accident flight's loading in Bastion, and they had 9 peoplede working it. The flight was scheduled in a 3am, and it was scheduled to arrive on time, but they had a Taliban missile attach, and they had to hold the flight, and it finally landed at about 5am. They needed assistance from the military to load the airplane since several of the units were too large for their equipment, and since the military was delayed, they couldn't provide the assistance until about 2 hours later. So they loaded their airplane with the material their lift could handle and waited for the military. They got everything loaded on except the MRAPs, and that was about 0630. The military showed up with their 60K Atlas around 0830.

The MRAPs were center loaded behind a few pallets in the front. There were two loaded in the front, and they were 12 ton MRAPs, and then they waited for the military to help load the three 18 ton MRAPs. The military came out and loaded the 3 Cougars, and then they loaded another pallet in the rear. They then pulled away and loaded a turret in the belly. The load master made the call on the belly load. The load master was shown the weights, then he went upstairs and put it in the computer, and then he came back down and gave them the locations. After the load is complete, he walked the load on the main deck with the load master.

All 5 MRAPs were in a line, and the last MRAP was just beyond the aft cargo door. The MRAPs were all palletized. Base support provides them guidance on what to pallet. The MRAPs were double palleted with PGF pallets. There are two metal pallets with a sheet of ply

wood in between. The technique to do this came from their load planners who suggested the technique. National Air Cargo employees were the ones building the pallets. He said they had to palletize the vehicles since they couldn't drive them onto the 747.

He said the military called them and they came to pick up or drive the MRAPs to their yard. The military is typically not a part of the pallet building or loading of the MRAPs. Dubai gives the information to them on what the load will be, and provides suggestions on how to build the pallet for the load. He said he does not have an SOP for any particular load, and there is no specific manual that they follow when building the pallets. He said he did not know the load capacity of a pallet. He said they were given the suggestion that the floor would not hold up with greater than two pallets.

He said they used to load the 12 ton MRAPs on a single pallet, but it was too hard on the floor, and they went to a double pallet and it rolled over the floor better. He said DHL has also been using the double pallet construction. Part of his job was to know how much weight they had and where to place the vehicle on the shoring. There is no standard at what the built pallet should look like. His ultimate sign off comes from the load master, who looks at the load and determines if the loading is acceptable.

MRAPs are secured to the pallets with chains. There is a track along the side of the pallet, and they used O-rings to secure the chains to the pallet. On the 12 ton, they used 14 chains, and it was based on the amount of weight needed per chain, times 3. The chains are the only way they are securing the vehicle to the pallet. They use straps to secure the MRAP to the airplane.

For the 12 ton vehicles, they used 14 chains. They used the tie down points on each vehicle, and they attach them to the top pallet. The pallets are attached to each other with straps, and 3 lengthwise and 2 widthwise, 5 straps total. Between the pallets is a thin sheet of wood to keep them from rubbing together, and there's no structural reason to use the wood. On the small MRAP, they used 22 straps to secure the MRAP to the airplane, and 24 straps of the large MRAP. He was not aware or familiar with the guidelines the load masters used. He said "we pretty much give him what he wants." The load master was a certified position.

The straps were rated for 5 thousand pounds.

He said the only problem they had in the loading was the first 12 ton, and it got stuck in the door. They tried to pivot it and it got stuck in the door. The moved it around with straps before getting it to move. He said the other 4 averaged about 20 minutes to load, which was normal. The pallets were pretty close to each other, about 3-4 inches. They secured the pallets to the floor with straps, and did not use any other mechanical means to secure the pallets, like bear claws. He said the floor locks would not work on these pallets, only small pallets. The centerline load did not use the side locks or the regular locks since they were too small. He said they did not leave any locks up on the floor. In the back, they put a T2 pallet, which was two pallets married to each other, and they were secured by the bear claw locks in the floor. It was a light load, made up of scaffolding.

He said the load master reviewed the load; he was the one who determined the sequence of the load. After the load, he would tell him if they need additional restraints. This load master told him he wanted 24 wraps on the small MRAPs and 26 on the big ones, and also told him the direction he wanted the straps. All the load masters were the ones who dictated what they wanted, and he complied.

He said when the load is complete; he and the load master do a walk through to determine if the load master was happy with the loading. He was not aware of the center of gravity because that was the load master's job, and he would calculate it and give it to the captain. The weights were sent into Dubai for a specific load, so the load master had a pretty good idea of what type of load he would have.

He did not go through any specific training. He said he learned different techniques from the different load masters. He said no body from the company came out to oversee their loading.

He said the direction of the straps was determined by the load master's input. He did not know what guidance the load master had to determine the direction of the straps. He said his oversight was from the load master. He said a new load master would have another load master with him, but that wasn't very often, and he rarely saw a load master getting a "check ride". He thought the load master's had a duty rest requirement. He said for his people's work load, they tried to not use too many so that they would have fresh people. There was one other supervisor who rotates in to provide him support.

The straps and chains were inspected by the ULD department, and they would make sure they had a sufficient supply of inventory. He said the devices were pretty much brand new, and they just started an inspection program on the straps to make sure they had a tag on them.

He said for civilian loading oversight compared to the military, the military was bound by more regulation. The ULD department at National was the department that inspected the chains and straps. The ULD guy was actually there on the day of the accident to inspect the chains.

He said the ULD did not pull anything out of their inventory, and only added a few items. He had never witnessed a time when the ULD guy came and pulled something out of inventory because of a problem with the devices. He said ULD was in Dubai.

He said he had never seen any pilots come down and inspect a load prior to departure. The load master works for the chief load master, and that would be the one to oversee the load masters. He was in Dubai, and he did not remember seeing him. He was the one who came up with the Load evals.

He had never had a plane return to rearrange a load. He did not remember getting feedback from another station that had a problem with a load he had sent out. He said through loads don't really need to be reviewed since they had already walked their loads. In the military, they had joint inspections.

For weighing, they use a military scale and write the weight down on the vehicle and then on a tag. They use chargeable weights and actual weights, and the difference may be the pallet weight versus the actual weight of the load.

For this particular flight, the weights were on the vehicles and he transferred them onto a piece of paper and gave it to the load master, and he went upstairs to calculate the weight. The load master had noted that Dubai had told him they were to have 95 tons of cargo, and the weights they came up with for actual weight of the cargo was 90 tons. What had happened was that the 5 PGF pallet weights hadn't been tallied in. So the difference was the weight of those pallets.

The incoming fire they took required a 2 hour delay while the flight crew held. The attacks were not near the cargo yard.

He did not remember this particular load master. He said they had a good working relationship on this flight, and he seemed knowledgeable. He also saw the mechanic, and sometimes the mechanics would assist then with the loading by driving the loads.

He said the only manuals they had at their station were the DG manuals. They did not have computers at their station to read any manuals.

Interview concluded at 1750 Local.

6.0 Interviewee: Charles Dsouza, National Air Cargo Operations Specialist

Date: May 4, 2013

Location: Bagram National Air Cargo offices

Time: 1815 Local

Present were: David Lawrence, National Transportation Safety Board (NTSB); Eric West – Federal Aviation Administration (FAA); Jose Rodriguez – National Air Cargo; Lt. Colonel Mark Barker – Observer.

Mr. Brown was represented by his counsel Mr. Dane Jacques, Lawyer via phone.

During the interview, Mr. Dsouza stated the following:

His name was Charles Dsouza, and he was 32 years old. His title was Base Support, and he helped with the palletizing and the loading. He had been with NAC for 8 months, and previously he worked for DHL.

In the accident flight, he was pushing loads into the airplane. The load had 5 MRAPs, 3 Cougars and 2 smaller MRAPs. The Cougars were 18 tons, and this was the first time they had ever loaded something that large. They used PGF pallets, two together with a sheet of plywood between them. They tied the pallets together with straps, 3 long and wide ways. They were the same straps used on the tie down to the airplane.

He said the pallet could handle the weight of an 18 ton Cougar. He said there's no written guidance on how to build a pallet. They just did it, not by manual, but by working as a team.

They attached the Cougar to the pallet. 2 chains were attached to the bottom, 2 backwards and forwards, and the same on the other side. The axle chains were the only ones attached to the top pallet. They did not use straps to hold the MRAP to the pallet.

For the Cougar, they used 24 straps to attach the Cougar to the main deck of the airplane. They used 24 straps based on advice from the load master. The Cougars weighed 36,000 pounds. The Cougar is the largest vehicle they had loaded, and they only added 2 extra straps compared to the 12 ton MRAP, and the load master told them this would hold the Cougar. He said that each strap had a 5000 pounds load capacity.

When they loaded the MRAPS, they loaded the 12 ton MRAP first, and then the three Cougars and then the last 12 ton MRAP, and all vehicles were center loaded in a line. He said that NAC loaded the 12 ton MRAPs with their own loader, and had to use the military's K-loader for the Cougars since they were too heavy for their loader. The last MRAP was about at the main cargo loading door. There were no floor locks used on the MRAPs since the pallets were center loaded. He also said that the load master would determine if there were any locks used on the plane. The locks were raised on the last pallet toward the tail based on the load master's request.

He said there were no real issues loading the plane. He said there was a little problem loading the first MRAP, but they had no problems loading the Cougars.

He never received training to build and load pallets. No one complained about this load. The load master checks his work, and Ralph was his supervisor who also checked his work. He said if there were any problems with the straps and chains, the load master would correct them, or Ralph would correct him.

He never built pallets such as these at DHL. For the load in Bastion, the load master went to sign the documents. He did not see the load master go to check the load, but also saw two pilots come down and look.

He said he would need a team to load an MRAP, at least about 6 guys.

Interview concluded at 1900 Local.

7.0 Interviewee: Barry McKelvy, AF2 driver

Date: May 5, 2013

Location: Bagram AFB ATC offices

Time: 1000 Local

Present were: David Lawrence, National Transportation Safety Board (NTSB); Lt. Colonel

Mark Barker - Observer.

Mr. McKelvy stated the following:

He was the driver of AF2 on the day of the accident, conducting the FOD sweep after the departure of the National 747. He said he was positioned on taxiway G as the accident airplane took the runway at G. After the airplane started rolling down the runway, he started following him down the runway. He stopped around taxiway C and saw debris. He believes he arrived at C before any of the sweepers.

He said it was not normal to see debris during his FOD sweeps of the runway. He said FOD sweeps were taken after takeoffs and landings of the heavy jets.

8.0 Interviewees: Ralph Brown and Charles Dsouza - National Air Cargo (NAC) (reinterview)

Date: May 5, 2013

Location: Bagram National Air Cargo offices

Time: 1630 Local

Present were: David Lawrence, National Transportation Safety Board (NTSB); Eric West – Federal Aviation Administration (FAA); Jose Rodriguez – National Air Cargo; Lt. Colonel Mark Barker – Observer.

Mr. Brown and Mr. Dsouza were represented by his counsel Mr. Dane Jacques, Lawyer.

During the interview, Mr. Brown stated the following:

When asked if he was provided special instructions on how to build a pallet and load an 18 ton Cougar, Mr. Brown stated that he received instructions and pictures from DXB load planning. He said the power lift NAC had was for up to only 14 tons, so they had to use a 60K Atlas loader.

The 12 ton MRAP was loaded on a single pallet. The double pallet they built for Cougar was two single pallets with a sheet of plywood in between. This was to prevent friction between the two metal pallets. For the Bastion load, they were able to drive two of the Cougars onto the pallets, but they had to use a fork lift to lift the third on onto the pallet. They chained them down with 8 chains attached to the top pallet and 6 chains attached to the bottom pallet.

They had to put the palleted MRAPs onto flat-bed trucks and drive them to the airplane. They then forklifted from the truck to the military K-loader. The only problem he had was he had to undo one chain for one vehicle because it moved when it was on the forklift. He couldn't remember which one it was. They chained the pallets to the lift when they were moving the palleted MRAPs. When the lift got up to the airplane, they unchained it from the pallet and slid it on the airplane. The brakes were set on each vehicle when it was on the pallet. All the MRAPs were loaded in a line, and the last MRAP was the light 12 ton MRAP. There was a pallet of scaffolding in the T2 position.

When they were using the military lift, the military provided a driver and a spotter.

They had a ULD guy based at Camp Bastion who was a specialist who kept track of the inventory. Neither was familiar with the National Airlines Cargo Ops Manual.

They occasionally took pictures of special loads, and they did take pictures of the 18 ton Cougars.

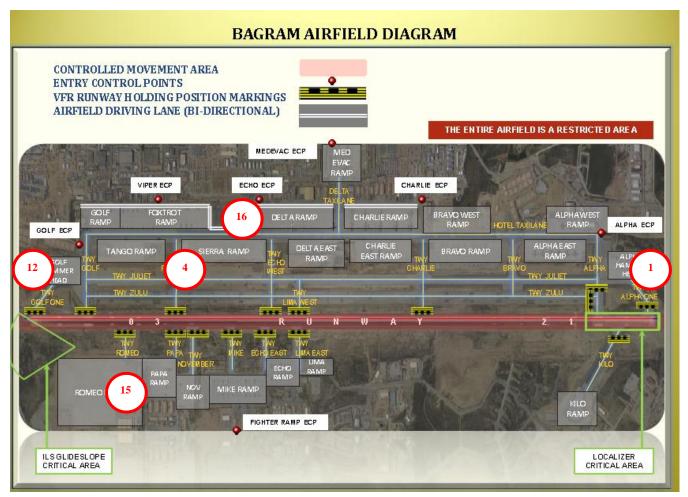
For the shoring of the Cougars, they put one under the front axle and rear axle, and in the center. They then let air out of the tires to allow the vehicle to rest on the shoring. At that point, it really wouldn't matter if the brakes were on or not.

75% of their loads were traditionally palletized, and 25% were "rolling stock". He said they only occasionally had MRAPs.

Interview concluded at 1715 Local.

9.0 Sweeper Interviews

9.1 Sweeper locations



9.2 Interviewees: David Buckingham, Duggan Johnson, Lars Helgeson, Jose Rivera, Doug Johnson

Date: May 5, 2013

Location: Bagram Russia Tower offices

Time: 1100 Local

Present were: David Lawrence, National Transportation Safety Board (NTSB); Eric West – Federal Aviation Administration (FAA); Jose Rodriguez – National Air Cargo; Lt. Colonel Mark Barker – Observer.

The group stated the following:

The sweepers were part of Airfield Management. They conducted runway sweeps following the takeoffs of C5's, B747's and Antonov's. The manning for the sweepers on the day of the accident was:

Sweeper 4 (located on F): Voltaire Asuncion Sweeper 12 (located on G): Belton Robinson Sweeper 15 (located on N): Gabriel Johnson Sweeper 16 (ECP area): Mike Waldrip

Pickup 1(Sweeper 11): Dave Buckingham and Doug Johnson

They carry two radios, one to monitor vehicle ground control with ATC, and the other for company communications. The airport management vehicle was the first on the runway.

Dave Buckingham and Doug Johnson were in the truck on the perimeter road when the crash occurred. They had just past the centerline of the runway when they noticed the airplane coming toward them. David said the nose of the airplane kept going higher and higher, then it slowed down. He thought something was wrong, and the wing stalled, and it fell left wing first. He said it looked like it was handing like a kite, then rolled to the right before flattening out. He said the gear was down, and there was nothing coming out from behind the airplane.

Doug said he saw about the same thing, that the airplane had a high pitch, much different than usual. It had a higher angle of attack, and kept going up. He personally couldn't see if the gear was down or not, but he remembered seeing two dark stripes. He said the engines were "screaming", and the airplane seemed to struggle before dropping off to the left.

After the impact, they raced to the airfield to account for all their personnel. Ten minutes after the accident, the sweep truck exited C went back to the F ramp.

They dumped the load after the accident, and typically dump a couple of times a day. They said it was not unusual to see FOD behind a heavy departure.

When asked if they saw any unusual movement of the elevators or horizontal stabilizer, and they said no. They did not notice the position of the flaps. They also did not notice what departure occurred prior to the National flight.

Belton said that he looked in the rearview mirror as he then traveled down to C and exited the runway there. He said he did not pick anything up with his sweeper. He was sweeping down runway 21 after entering at G.

Voltaire entered at F on the VFR line ahead of AF2, and stopped at C before exiting the runway. He did not pick anything up on the runway with his sweeper. The Antonov came in about 20 minutes after the National flight first landed. There were no other heavy departures prior to the National departure.

10.0 Interviewees: Ruel Banal (Operations Specialist), Luis Gregorio (Assistant Station Manager), Paulo Milan (Base Support)

Date: May 6, 2013

Location: Bagram Russia Tower offices

Time: 1600 Local

Present were: David Lawrence, National Transportation Safety Board (NTSB); Eric West – Federal Aviation Administration (FAA); Jose Rodriguez – National Air Cargo; Lt. Colonel Mark Barker – Observer.

The interviewees stated the following:

Mr. Banal was an Operations Specialist in the Afghan Section. He gave a hand when the staff was short-handed, helped build pallets, and performs administrative duties. He said the airplane was already on the ground when they drove up to the airport to meet it. He went up to the airplane and the ground crew was already talking to the load master. He said "transient alert" was already fueling the airplane when they got to it.

Mr. Gregorio was the Assistant Station Manager in Bagram. When he went up to the airplane, he saw the mechanic on the left side during the refueling. He said he went up to the main deck and saw the loadmaster. He asked the load master if he had any problems, and the load master told him about the delay in Bastion for IDF. He left, and then came back. He never saw the pilots or anyone else on the flight other than the load master. He knew that they had a heavy load when he looked it up in the computer. He said it was unusual to have 18 ton Cougars on the plane. The max they had carried before was a 14 ton vehicle. For loads like a 17 ton vehicle, they would work with the Dubai load planners to advise them on how to build pallets. He did not notice that they were refueling, and the crew did not give him any instructions. There was no paperwork exchanged.

He said they helped the New Zealand vehicles for shipments and learned about double pallets from them. They don't fly MRAPs very often. The pilots never came out of the cockpit and they did not see any of them. He was not familiar with the cargo operations manual.

Mr. Milan said he saw the airplane on the ramp after lunch, and Louis told him to go to the flight line and check. He spoke to the load master and asked him if they needed anything, and he said

no. The main entry door was the only one open. He also was not familiar with the cargo operations manual.

Mr. Gregoria said that a Mike Hilton from DXB did some classes on how to palletize a "Striker", which was about 12-13 tons. They had SOPs on how to build a pallet from DXB. He said the ULD people in Bagram were here to look at those. They have lots of straps and chains, and the ULD person checks them. He said if the loadmaster tells them, they will add straps.

The fuel was pumped from a truck.

11.0 Interviewee: Ken Steele, Bagram Airport Sweeper

Date: May 7, 2013

Location: Bagram Russia Tower offices

Time: 0725 Local

Present were: David Lawrence, National Transportation Safety Board (NTSB); Alex

Keleman – Federal Aviation Administration (FAA)

Mr. Steele stated the following:

He was a sweeper that lived over at the Warrior housing project. He was walking out of his quarters at about 1515-1530 when he saw the National 747 going up, and he said they usually are dramatic so everyone watches them. He noticed it was climbing at a severe angle, and he said he saw white coming out the back of the airplane.

The gear was still down, and he could see the plane climb, and then stop in the air. He did not see it rotate, and only began to see it after it was already at a severe grade.

The smoke coming out was a stream with small puffs that were graduated, and it was white, silhouetted against the sky. He said it was not coming out of any of the engine, and was not coming off the wings like a vortex. He did not hear any unusual sounds. He said the smoke trailed out just before it stopped climbing.

He said the nose gear was down the whole time. He did not see any parts come from the airplane. He added that he was 32 years old and had perfect vision.

Interview concluded at 0800 Local.

12.0 Interviewee: Jonas Eddins, Fluor Mechanic

Date: May 7, 2013

Location: Russia Tower, Bagram AFB

Time: 1620 Local

Present were: David Lawrence, National Transportation Safety Board (NTSB); Eric West – Federal Aviation Administration (FAA); Jose Rodriguez – National Air Cargo; Lt. Colonel Mark Barker – Observer.

Mr. Eddins was represented by Mr. Chris Batt.

Mr. Eddins stated the following:

He was a Senior Mechanic with Fluor, and he was located at the Fluor Red office at the time of the impact. He was in the office when he first heard the airplane taking off. He said his impression was that "it didn't sound in the road." They were impacted, and the roof became engulfed in flames, and they couldn't get out. The "Sarg" couldn't open the door, so he tried and neither could open the door.

He said the back half of the roof burned away and they both tried to hit the door to open it. The container was glowing, and he saw daylight before the back half the container burned through. They got out and ran to the bunkers. Then some British guy came up and picked them up in a truck and drove them away. At first, he thought it was indirect fire, and then saw that it was plane wreckage when he got out.

The sound from the airplane was similar to a C5, but the sound started breaking up and had some pauses, and "it just didn't sound normal." He said he heard the sound of the engines, and then it went "dead silent" before the impact.

13.0 Interviewee: Allen Robert White

Date: May 8, 2013

Location: Bagram National Air Cargo offices

Time: 0610 Local

Present were: David Lawrence, National Transportation Safety Board (NTSB); Eric West

- Federal Aviation Administration (FAA); Jose Rodriguez - National Air Cargo

Mr. White was represented by his counsel Mr. Dane Jacques via phone.

During the interview, Mr. White stated the following:

His name was Allen Robert White, and he was 45 years old. His title was Vice President of Ground Ops Middle East, based at Dubai World Central. His date of hire with National Air Cargo was in December 204, and prior to that he was with DHL. He was the forward location supervisor for the region. He basically had decision making authority as a team leader, budget and control, and development.

As far as their relationship with National Airlines, they used the airline in terms of fleet utilization, and they coordinate the loads they have with the assets of the airline. He said they also do this with other customer airlines.

They had a Director of Safety, Frank Esposi, and the airline had their own Carlos. He said they conference regularly.

He said there was no special communication regarding the heavy loads like the Cougar, the NAC did not do a risk assessment on the larger MRAP, just an evaluation.

When asked if they should be looking at whether or not they should be carrying Cougars, he said they had discussions about the pallets and the need to double pallet.

He said there were photos sent by the evaluation team, and they looked at the need to build up the pallets and tie downs.

He said there was no specific SOP for the Cougar. He said there was no demonstration done to teach the loading of one of these types of MRAPs.

He said the number of injuries is minimal, and for small things like sprained ankles. They have an ethics hotline for employees to submit voluntary safety reports. They are anonymous to supervisors but not to the ethics team that reviews them. There are 4 load planners in DXB, and 2 were "approved" by National Airline. He said load planners were certified by ICAO standards.

He said the ULD Department coordinated strap and chain inventory. There was no specific training for this position. There was no QA for the straps, and they haven't needed to replace any strap inventory. There was no training for the ULD inspector to tell when a strap was no longer safe. He said the airline provided the guidelines for the type of strap or chains required. They use IATA standards.

There was an annual employee performance evaluation. Loaders could not over-rule a load master. He could not see a situation where a loader would, however, if the loader saw a problem with the load, he would be expected to discuss it with the load master.

Interview concluded at 0700 Local.

14.0 Interviewee: Reid Sutherland, National Airlines B747-400 Check Airman

Date: June 7, 2013

Location: Kalitta Training Facility; Ypsilanti, MI

Time: 0950 EDT

Present were: David Lawrence, National Transportation Safety Board (NTSB); Norm Bissonnette – Federal Aviation Administration (FAA); Jose Rodriguez – National Air

Lines; Mark Barker – Department of Defense (DOD Observer)

Representative – Morgan Campbell, Lawyer (via phone)

During the interview, Captain Sutherland stated the following:

His name was Reid Lawrence Sutherland, and he was 39 years old. His title was B747-400 Captain, check airman, and PC (proficiency check) check airman for National Airlines. His responsibilities included being an FAA designee for captain observations and conducting line checks. He said he was dual seat qualified on the B747-400. He estimated his total time at 9,800-10,200 hours, and about 3,200 hours as PIC. He had about 3,800 hours on the B747-400,

with 3,000 hours in the classic B747. He had about 500 hours as PIC on the B747-400. The balance of his PIC was on the classic version of the B747.

His background began on B727-200 aircraft for Custom Air Transport in the mid 1990's, followed as an FO for Tower Air and Atlas. He was also an FO and relief pilot in charge on the B747 for Cathay Pacific for 6.5 years. He did various contract work, including as captain on the B747 for Tradewinds, and was a "hajj" captain on the B747 for Max Air, flying seasonal pilgrimages. He also flew for Tag Air in Angola as a captain and check airman on the classic B747. He then began flying for National Airlines in June 2011.

He said he was familiar with both pilots on the accident flight and had not reviewed both pilot records prior to the interview. He provided training for the Captain, doing a portion of his initial simulator training on the B747-400, which was transition training, and his last proficiency check. He said the Captain was a well prepared student, and he was impressed with the Captain's dedication. He said the Captain was "excellent" in his training, and "was a pleasure to be an instructor for." He said the Captain was "pretty sharp."

He said the first simulator sessions involved an introduction into later training events, and included several maneuvers and approaches. It also included upset recovery training. There were several modes to choose from when conducting upset recovery training in the simulator. It included nose high and nose low events and wing-over events. The maneuvers were briefed prior to entering the simulator for about 10-15 minutes during the 2 hour pre-brief session prior to entering the simulator. They also included discussions in the simulator. He would notify the student of the training event prior to the student's demonstration of the maneuvers.

For the nose high maneuver, NAL trained the pilot to first disconnect the auto-thrust and auto-pilot, and apply full power. The pilot would then bring the nose down using up to full elevator, and stabilizer trim could be used as required. If use of the elevator was not enough, the pilot could use bank up to 60 degrees to bring the nose down. Recovery was to wings level with the nose on the horizon. He said engines mounted under the wings had an effect on the pitch, forcing the nose to go up with full power, and that was discussed with the student, and reducing thrust could help bring the nose back down. The initial recovery from the nose high attitude involved pitch and power at the same time, and as necessary use of trim. The engine thrust could prolong the recovery. None of the National pilots ever had a problem with upset recovery in his experience. Bank was recommended if the input using pitch was not effective. Rudder was not taught for recovery from upset recovery maneuvers. It was talked about, but the recovery techniques that were taught would be sufficient to return the airplane to normal flight.

He said the Captain performance of the upset recovery maneuvers in the simulator was good. He said that typically he would have the student demonstrate several of the upset maneuvers. There were a total of about 5 upset events in the simulator, and 2-3 of those were nose high attitudes. There was also a module in the United simulator that they used that would place the airplane upside down. He said that the Captain performance was nothing out of the ordinary.

He said he provided a portion of the FO's initial B747-400 simulator training, about 1-3 events. He also provided the FO with his most recent proficiency check. He believed all of these events

occurred at the Kalitta training facility. He said the FO's simulator performance was good for a pilot new to the airplane, coming off the DC-8, and he was "very well prepared." He could not recall the FO's performance of the upset recovery maneuvers. He said there were no difficulties with the FO's proficiency check.

He said he never flew with the accident Captain, but did fly one leg of OE (operational experience) with the FO around December 28, 2012. It was an empty re-positioning flight from Germany to Belgium. The FO was the pilot flying. The Captain and FO's OE were delayed because National had brought on 3 new airplanes to the certificate, and training on the line was backed up. Both required a consolidation PC to get extensions for completing the IOE. The consolidation PC was the same as a regular PC. Each was given a warm-up PC prior to the actual PC. Upset recovery was not performed in the actual PC, but was trained in the warm-up PC. When asked if a nose-high maneuver was trained in the warm-up PC, he said it was at the instructor's discretion. The warm-up PC had a syllabus that they followed. Generally he would introduce an upset recovery during a holding pattern to simulate a wake turbulence encounter, and had the pilot recover.

He was asked if there was pilot training on checking the cargo load on the main deck during OE, and he said there was no specific guidance on how to check the cargo, but as a technique it was discussed. At National, there is no procedure for an inflight main deck inspection. He had seen that at previous companies he worked for, but not at National. There was nothing specific on the pilot checklist regarding checking the cargo load on the main deck.

He said National had "professional load masters." There was a lot of interaction between the load masters and the pilots. It would begin as they first approached the airplane, when the load may or may not have been completed by that time. The first document they would receive from the load master was the load plan, a computerized sheet. They also had their own verification data to enter into the performance area of the CDU. Once the load plan was verified, they would enter the zero fuel weight, and the software would compute the calculated takeoff weight based on the totalizer fuel and, and they would then compare those numbers to those in the documents. They would look for errors and discrepancies. If there was a 1-2 ton discrepancy, they would question it to resolve the issue, and would usually be from something like an APU fuel burn. When asked how much error would constitute a discrepancy, he said it was "a gross error check" but there was no specific guidance or number associated with the error, and it was up to the captain's discretion. The only weight they entered into the CDU was the zero fuel weight. The airplane computer would then generate the Vspeeds for take-off in the FMS. They would enter the CG MAC% from the computerized load sheet, and it would compute the stabilizer trim setting. They would then compare that information to the load sheet, and the station would get a copy and the crew kept the other hard copy. They would compare the accuracy of the CG and stabilizer trim, and they used the aircraft stab trim information.

He said the load masters would stay in the upper deck after the paperwork was completed. The load master verified that the loading was complete, and during flight would then sit in the back on the upper deck unless the pilots had a question for them, but otherwise there was no further interaction with the load master during flight. He said "no one is allowed on the main deck during flight," including the load master. During flight there was no personnel allowed on the

main deck. As captain and check airman, he said he had never seen a load master go down to the main deck to check the cargo load during flight. He said as far as he knew, the load masters had never gone down and never notified him that they were going down to the main deck.

He said pilots would train during initial training with the load masters for a half day with the head load master. The pilots had a CBT (computer based training) module on cargo loading and safety that had a video imbedded in the module. He said the pilots would walk around to view the cargo prior to flight, and "we are responsible for bringing up discrepancies" or poorly loaded cargo or poorly constructed pallet, and the video in training showed examples. They would then bring that up with the load master. When asked if there was any pilot training on how to identify a "poorly constructed" pallet, he said he thought there was a module on it in ground school.

He had never experienced a cargo load shift, and had never had an MRAP shift its load in flight. He said that he would have remembered that since that type of load shift "would've scared the heck out of me." He had flown the MRAPs before, and "maybe 1 or 2 of the bigger ones" but wasn't totally familiar with the specific types. He said the video talked about damages to tie downs and nets, and certain requirements, but could not recall it talked specifically about MRAPs or specific military vehicles. He had flown with 3 or 4 MRAPs loaded on the main deck, along with some other containers. The larger vehicles were too large, and they could only fit a few into the main deck. He said "the term MRAP was new to me," he had heard the term Striker, but had never heard the term Cougar. He heard them referred to in general terms as military vehicles.

On the load sheet, as part of their checks, they checked the load zones for the cargo against the maximum allowable load for each of those positions. There was a pictorial on the old form showing the zones each load was located in, and the load master would circle the zone position that carried any type of dangerous goods. There were guidelines on how to strap down cargo in the loading manual, but pilots are not evaluated on that information.

He said the pilots would walk the main deck cargo floor with him on OEs and familiarize them with the main deck and zone locations. He said there was no procedure for the load master to inspect the cargo load in flight.

As a check airman, he had never failed anyone on a check ride while working at National, but has elsewhere. He estimated he had failed about 5-10%, but added that other pilots at the other international airlines were not as good as the ones at National. National had a good mix of pilots with different experience levels. He said "there is no one here I'd be afraid to put my children on a flight with." He said he had flown with about 70% of the pilots at National. There were 28 crews at National Airlines. The main challenge he saw from the pilots in training were from those "new to the glass" that were used to flying manual controls.

He had been trained on upset recovery before when he was a Cathay, both for nose up and nose down. They did not use any simulator presets like they had in the Kalitta simulator. The highest nose up attitude was about 60 degrees. On the line, he had never seen a pitch above 20 degrees.

For the FOs OE leg, it occurred after the FO had already had about 15 hours of OE. Normally, the company tried to get OE completed on time, which usually took about a month to complete. OE minimum was for 25 hours of OE, but most pilots got more than 25 hours of OE.

The load masters were National Airlines employees. The captain was responsible for everything on the load sheet, and looked to ensure that load zones were not exceeded and the data was correct prior to the load verification procedure of entering the data into the computer. He said they would also make sure each pallet was within the zone limit for where it was located, and the computer the load master had should not allow that to happen. He remembered seeing a video about what a bad strap, net, etc. would look like. He had never refused a load, but he had heard rumors of other pilots requiring pallets getting fixed prior to flight or a pallet getting kicked off due to the fuel load.

He did not have any DC-8 time. Most pilots were aware of the cargo, and he had heard about pilots on the DC8 having weigh issues on that airplane, particularly due to the length of the airplane, but he couldn't generalize about the DC8 guys coming over to the B747-400.

He said in other airlines he flew for, they had identical procedures for getting the load sheets and verifying the loads. At Cathay, they had a checklist item for the pilots to check the cargo load prior to departure. He said the crews were aware of the loads, even though there was no checklist item to check the loads. He said the felt confident of his ability to review floating pallets on the main deck, and said he trained to recognize problems with the loads after the presentations they had in training. He had not heard anything from the pilots having concerns with the loads at National. He said at the other airlines he did not know of any procedures to verify the cargo load in flight.

He said again that there was no procedure in the pilot's manuals to allow anyone to inspect the cargo during flight, and that restriction was written in their manuals.

He said the load master would sometimes arrive at the airplane several hours before the pilots, and would sometimes get help from another load master with the loading.

He said on through stops, the pilots would ask about the loads for the next station. The load master usually was on the phone finding out about the upcoming loads and he flight crew would discuss that with the load master. The load maser on short hops had a lot of paperwork planning for the next load. On landing, after receiving the new paperwork, the load master would discuss the loads with the flight crew. Usually during stops with cargo, the crews would typically go down to look at the cargo.

During flights, the load master would typically occupy the front aircraft right seats in the upper cabin. The load masters typically did not use the bunks to rest, and usually always stayed in the lounge seats to rest. The load masters typically had long days, and they would definitely sleep during the flights.

National had an ASAP program for the pilots and an irregularity reporting system, and it was an online reporting system.

He had worked with the load master on the accident flight before. He said that load master was "easy to work with and very conscientious" and was good about communicating with the crew. He had never had a problem with a cargo load with the accident load master. In general, he did not feel that the load masters were "pushed" by their schedule.

He said he was interested in learning about the accident from the preliminary report, and what really happened. He was more methodical and "by the book" following the accident. He had never seen a pallet that was loaded that "frightened" him, and had "pretty good confidence" in the loads he had carried.

Interview concluded at 1121 EDT.

15.0 Interview: Captain Patrick Nathan Bensimon, National Airlines

Date: July 31, 2013

Location: National Airlines Offices; Orlando, Florida

Time: 0800 EDT

Present were: David Lawrence - NTSB; Normand Bissonnette - FAA; Mark Barker -

DOD (Observer) Sam Goodwill - Boeing

Representative: Dane Jacquez; McKenna, Long, & Aldridge, LLP

During the interview, Capt. Bensimon stated the following:

That his full name is Patrick Nathan Bensimon, 51 years old, and was employed by National Airlines (NAL) as Initial Cadre Captain/Check Airman, line and simulator, B747-400, at the time of the accident with a date of hire of January 3, 2011. He stated that he came to NAL for the challenge of putting the aircraft, (B747-400) on the certificate. Furthermore, he stated that his previous employment consisted of Atlas Air Simulator Instructor and check airman on the B747-400; Tradewinds and Focus Air captain, captain and check airman on the B747-200, Polar Air Cargo First Officer (FO) B747-400/200, Centurion Air Cargo FO on the DC-10, Southern Air FO on the B747-200, Ryan International FO on the DC-10, Laker Airways FO on the DC-10, and Commuter Gulfstream International captain and FO on the BE-1900. His total pilot time was 9,200-9,300 hours of which 4,000 was Pilot-in-Command (PIC), 650 PIC B747-400, 1,000-1,100 PIC B747-200 and 2,900 total time B747-200. His type ratings were B747-200/400, B737, BE-1900. He stated that he had no type rating on the DC-10, and they "keep you from upgrade...hold the carrot." He said he had never been fired, terminated, or resigned from employment.

Capt. Bensimon stated that he attended B747-400 indoctrination and ground school in Ypsilanti, MI and B747-400 Flight training at United Training Center in Denver, CO utilizing Pan Am instructors because of Initial Cadre status. He described the training there versus NAL as "it was OK, just like any contract training, takes some time to know your procedures fully, but since we went through the whole certification, helped in the manuals and everything else everything went fine." Additionally, he stated that the FAA was around during proving runs, table tops. His

CKAM duties schedule was every other month in the simulator, with the other month on the line unless there was a check to do. He described his workload as normal for a CKAM, line checks, recurrent, etc. He stated that since the proving runs he had not seen the FAA on enroutes or any other time on the line, just in the simulator.

He stated that crews did a walk around on the main deck. They were trained on a "Pelesys" course, online training in the walk around procedure. Power point on nets, tie downs, etc., a general view of things. He stated that the crew (PIC or designee) was supposed to do a walk around the main deck with the loadmaster checking HAZMAT locations, etc.

He stated that NAL had a safety reporting system, WBAT, ASAP, and safety forms on the aircraft for online and non-online reporting. He stated that he received emails from the Director of Safety regarding trends, etc.

He described a typical flight schedule for a pilot as 20 days on, 10 days off. Once on the 20 day duty period, the flying is ad hoc in theater flying per the nature of the operation. Long duty days were common, but he had not called in fatigued per the company's fatigue policy. He never felt fatigued enough to call in tired.

He stated that the morale is best as could be expected, "life goes on...you think about it..everyone deals with it in his own way. American doesn't shut down because of an accident."

He stated that he knew both accident pilots, having flown with Jaime 9-10 days prior. They flew a North Atlantic check from Ramstein to McGuire. He stated that Jaime "was a super excited guy...always asking questions, a happy guy...good flying skills for his low pilot time in general."

He stated that he socialized with Jaime and talked about "the normal things you do with a crew on layover." The FO was going to celebrate his first wedding anniversary next month. He stated that he did not fly as a crew with the accident Captain. He did simulator support for him on his captain check ride, and had dinner with him as well. He felt that the Captain was very good and that he thought that he would make a good CKAM.

He stated that he knew the accident load master Mike Sheets but did not have much to say about him. He stated that he doesn't have much interaction with the loadmaster other than receiving the load data from him, inputting the data into the aircraft's computers, and main deck walk around. LM's were paired with the aircraft not the crew. "Our interaction is minimal."

He stated that when the doors are closed, the loadmaster's work was done. They usually slept in the seats and not the bunks. He stated that he had seen a loadmaster go down to the main deck in flight, but unsure of the reason. They would inform the pilots when they did. "I don't know the loadmaster procedures." There was an AFM limitation, but "we can do it when a non-normal situation." The time that he saw a loadmaster go down, he took a portable oxygen bottle with him.

He stated that when he started flying the 747 they were not flying MATV's. He stated that he experienced no problems with these flights, nor did he receive any special training. He has not

flown any flights involving 18 ton vehicles. "The loadmaster's have their job...there is very little interaction"

He did not recall ever flying with center loads.

He stated that if a loadmaster brought an abnormal issue to his attention then he would have him show him the problem.

He had not flown any single aisle cargo, only wide-body loads.

He stated that while performing CKAM duties, he had failed approximately 5 guys, less than 10%. He stated that he had filed an IRR for a TCAS RA, but no ASAP reports.

He stated that he would not know if he would hire any pilot without an ATP.

He stated that he has no training in loadmaster duties, mechanics, Flight attendants, etc. and that he has to trust others. "I have my job to do and they have theirs." He said "I have to trust others, that is the way I have been trained throughout my career." He stated that he could not judge whether or not the loadmaster's were over worked or fatigued. He said they have longer days.

He stated that he would not change anything whatsoever within NAL, except perhaps pair the LM's with the crew so they would have the same crew rest/duty time, and consider them part of the crew.

He stated that he felt inadequate, less in control as a Captain due to his lack of knowledge of the load process. He stated no CRM or training with the loadmaster was conducted. He stated that it was difficult to simulate an inflight load shift during a simulator session. He stated that he had never been shown, given, or otherwise any broken strap, restraint, et al by anyone.

He stated that he conducted upset recovery training in the simulator, and repeated the recovery procedures. He stated that it is very unnatural for a pilot to recover by reducing power, and "they get confused with this procedure and the stall recovery procedure." He said "I have to repeat the maneuver several times," and "rare is it that they get it right the first time"

The interview concluded at 0915.

16.0 Interview: Jay Webb, National Airlines B747-400 First Officer

Interview: Jahaziah (Jay) Webb IV, National Airlines First Officer

Date: July 31, 2013

Location: National Airlines Offices; Orlando, Florida

Time: 0930 EDT

Present were: David Lawrence - NTSB; Normand Bissonnette - FAA; Mark Barker -

DOD (Observer); Sam Goodwill - Boeing;

Representative: Dane Jacquez; McKenna, Long, & Aldridge, LLP

During the interview, Mr. Webb stated the following:

His name was Jahaziah (Jay) S. Webb and he was 56 years old. He was a First Officer with National Airlines on the B-747-400 and has been with the company since Sep 2009. He had ~18,000 hours total time with about 95 hours on the 747/400 in a little over a year on aircraft. Had long-term medical issue that limited hours in that year.

He had an extensive aviation background that includes time with Air Sunshine, USAJet, Spirit Airlines, Skybus, Kittyhawk, Midway and Kalitta Air. He had experience in the DC-3, DC-8, DC-9, and A-320 before upgrading to the 747/400. He said he had never been fired, terminated or asked to leave by previous employers. Jay received his 747/400 training at the United Airlines Training Center in Denver, Co. and characterized the training as "good". He also stated that he received upset recovery at both initial, and re-current training with NAL.

Jay stated that NAL did have a safety reporting process (ASAP) and basic OP-31. Most reporting would be done on-line. He had not heard of WBAT (web based access tool). When asked about scheduling at National Airlines, Jay said that crews are normally scheduled for 20 day blocks and that they usually dead-head (Commercial) to Dubai and enter crew rest for subsequent missions. Company provides standard rest periods. He stated that missions scheduled over 8 hours (flight time) would be augmented and that a maximum duty day was 30 hours. Crews get a 24 hour break before starting duty at new location. There were no issues noted with pilot fatigue at the company. He stated that NAL did have a Fatigue Program available on-line but that it was not used much and that he had never used it. He stated that if he was too tired to continue he would call the OCC and notify them.

Jay was asked if he knew or had flown with any of the crewmembers from the accident aircraft. He stated that he had worked with the loadmaster (Mike) in the past. He knew of no problems associated with Mike or "bad" loads. He had flown with the Captain recently on a MNPS check and before in the DC-8. He remembered him as being very knowledgeable and having great CRM procedures. Said he'd put his family on the airplane with him "anytime." He talked about fishing with the captain and mentioned that Brad was recently married. He stated that Brad was "really sharp" on the DC-8. When asked about walking the main deck cargo before departure Jay stated that the FO doesn't typically do that. The Captain typically "looks around" the main deck. Jay stated that when he did look at the cargo he would look for straps, chains, tears etc. NAL did provide computer based training on general loading (straps, chains) but nothing specific for loading MATV's or other center-line loads. Jay iterated that all cargo related items are handled by the loadmaster and that he would pass on any anomalies to the loadmaster. He had not flown MATV's before. He had not received any special training for moving loads such as the MATV. Mr. Webb mentioned a cargo-shift incident with a previous employer (KittyHawk DC-9) where a piece of drilling equipment broke loose on take-off and traveled aft through the pressure bulk-head. The incident happened 91'-92' timeframe and was investigated by DFW FSDO. Mr. Webb recalled no morale issues with the company pilots. He stated NAL has "good training" and has own in-house instructors. He was unaware of recent employee terminations or otherwise high turn-over rate. Jay stated that since the accident NAL has released information to pilots re-emphasizing the importance of proper cargo restraint and to be vigilant for strap tiedown issues to includes "cuts and tears." National did do CRM training but not with

loadmasters. Stated that this was the first time he'd worked with loadmasters. Loadmasters "secure the freight and do the weight & balance." The crews relied on the loadmasters 100% to make sure the load was done and secured properly. Weight and balance was computerized. He never experienced any problems with weight and balance.

He had not seen oversight done on loadmasters before. He stated he had about 1000 hours on DC-8. He talked about single aisle vs. wide body cargo aircraft. It was different flying a much larger aircraft and you had to get used to flying the glass. There were no big differences on the cargo side. He should be an upgraded in future ("just a matter of time"). He mentioned no changes that he would make to company if "king for a day." He stated that maybe 7-8 captains came over to the 74/400 from the DC-8. Jay knew of no company procedures for reporting load abnormalities other than using an ASAP report. The airline has always been safe and he had never seen any problems with the loads. Mr. Webb stated that he thought all captains get up and walk-around the cargo before take-off. The captain designated who does the walk around and can designate someone else to do a cargo walk around. He had seen a loadmaster go check the cargo in flight once or twice. He remembered that they must have a walk-around bottle to go downstairs. Thought there were 3 walk-around bottles upstairs. He stated that loadmasters do not use the crew-rest facilities but will sleep in the seats.

Interview concluded 1020 EDT.

17.0 Interview: Alfredo (Gumby) Gumbs, National Airlines Chief Loadmaster

Date: July 31, 2013

Location: National Airlines Offices; Orlando, Florida

Time: 1310 EDT

Present were: David Lawrence - NTSB; Normand Bissonnette - FAA; Mark Barker -

DOD (Observer); Jose Rodriguez - National Airlines; Sam Goodwill - Boeing

Representative: Dane Jacquez; McKenna, Long, & Aldridge, LLP

During the interview, Mr. Gumbs stated the following:

His name was Alfredo Gumps, Jr., and he was 46 years old. He was the Chief Loadmaster for National Airlines, and his date of hire was October 2010. National Air Cargo Group was the holding group, and National Airlines and National Air Cargo were separate companies under the holding company. He had been the Chief Loadmaster since the day he was hired, and was a full time employee. He did not have any FAA certificates or licenses.

His background included time in the US Air Force on C141's conventional warfare for 5 years, and C130's unconventional warfare. In 1993, he joined Arrow Air as a Chief loadmaster, followed by American International Airlines as a check loadmaster. He then went to Kitty Hawk, then Atlas Air and Airborne Express as a load master. He then helped start up Kalitta Air until 2005 when he helped start up Focus Air as manager of cargo operations and manager of safety and manager of marketing. It closed down and he went to Amerijet, and then came to National in 2010.

His roles and responsibilities included managing the loadmaster group, and also implement the training and policies for the cargo operations. It also included audits of the vendors and training of the vendors, and implementing required US or foreign regulations. He had never been fired or asked to resign from any employment.

When asked what a loadmaster was, he said it was an individual responsible for doing the weight and balance of the airplane during the pre-planning stages of the flight in accordance with manufacturer limitations. They also inspected cargo and pallets adhered to what was airworthy. They also ensured strap and pallet limits were not exceeded and loaded suitable to the aircraft. They also ensure the items are secured properly with the provided restraints or supplemental restraints. They fill out the weight and balance documents, and inspect hazmat material, and properly loaded. They notify the captain of the hazmat or dangerous goods locations. They also serve as ground security coordinators. They also screen jumpseaters for forbidden items. Finally, they coordinate ground operations. The guidance they use is the cargo operations manual, the aircraft weight and balance manual, hazmat manual and IATA hazmat regulations.

The loadmaster is not a certified position in the civilian world, but it is in the military similar to a pilot. Other places in the world he thought may have certification. They are not issued a certificate in the US. National had about 13 loadmasters, and they had 3 check loadmasters, which included him. Their responsibilities were the same as a loadmaster, but also instructor loadmasters and vendors in the proper use of ULD's and cargo operations. They conduct vendor audits, and assist their departments with data collection. To be a check loadmaster, they look at experience levels, with preferably 5 years on the 747 and at least 10 years as a loadmaster. They provide them with an instructor introductory CBT Pelesys course, and also conduct a type of IOE. Time permitting, the try and send them to the Boeing loadmaster course. He said he was responsible for overseeing and evaluating the check loadmasters, and they were responsible for the loadmasters.

Training included basic aerodynamics, then administrative functions and work with other departments, then ULDs and where they are compatible to load on their aircraft. They then learn about what is airworthy and not. They conduct 3 days of dangerous goods training. Shoring training was part of an 8 hour course on ground handling, and is one part of the 8 hour session. He said the length of time is based upon what experience they have. They also learn about restraints and particular aircraft loading systems and doors. They learn about emergency equipment, hypoxia, and other items. Initial class was 10 days, but they've removed the DC8's and 757's, so it was reduced to 8 days long. He said he wrote the training course, and it came from various other companies, and they cut and paste from a lot of other manuals. He said the FAA has sat in on their class before, and they'd seen the manuals. When they brought the 747 on, they went through an extensive review. About a year and a half ago they had a SAT audit take a look at all their past events, and it took 6 months to complete, and the FAA identified several areas of concerns, and they revised their manuals.

Ground school training was part of the cargo ops manual, and it was an accepted manual by the FAA, not approved. He said he has worked with the POI before and others at the FSDO. The audits would be in DXB on the maintenance side and cargo side, and include the POI and PMI.

The last time the POI came to review the operation was last year, about October. The PMI had an inspector go audit the maintenance about a month ago.

When asked if the POI was responsible for overseeing the loadmasters or the PMI, he said "we straddle a line," since part of their work was with the loading system, which was on the maintenance side, and they sat on the POI side since they work with operations. He said the old POI was Dale Mitchell, and the PMI was Dale Gramble. He had not met the new POI or PMI.

He knew Mike Sheets from Kalitta Air when he was a ramp agent in Michigan. He would build pallets and load pallets. There was no loadmaster program when he first started here. He flew with Mike and signed him off on the DC8. Hiring was done by HR and himself and another check loadmaster. They reviewed resumes and conducted interviews, and then screened applicants for the final process.

NAL loadmasters and NAC load planners do not train together, but they may have a load planner sit in on a loadmaster course. There are 2-3 load planners in DXB who have been signed off to load an airplane unsupervised, so they would have them occasionally sit in on the loadmaster course. He said they trained vendors, like NAC, with airplane training for their specific airplanes, but did not know about any other airplanes.

They had an evaluation form for the loadmasters they used during initial check ride or during recurrent. The form was in the process of being implemented in their manuals. completing initial, the loadmaster would fly with a check loadmaster and other loadmasters. That type of IOE would last various amounts of time, based upon their past experience. He said he was the one who developed the loadmaster evaluation form. The standard they applied was for the loadmaster to be familiar with the manual. They had the initial check ride after training, and they are now doing annual check rides for the loadmasters. They also had remedial training if they discover a loadmaster had an issue based on reports from crews or ground handlers. If they saw a trend, they would conduct a "no-notice" check ride. They had loadmaster reports that the loadmaster would fill out for each flight, and had a comments section they could fill out. There were also safety reports online on their intra-net the loadmasters could fill out that go to their safety department. He wasn't sure if those reports were de-identified. He said he had an "open door" policy to encourage loadmasters to advise him of any issues. When he received one of those reports, they would address it at the station level. He said the loadmasters felt comfortable with communicating issue with him, and he had never had a report about a load shift. He said they had reports regarding "Strikers" getting stuck in the door, and they handled that with different shoring.

The cargo ops manual had a section on shoring that gave guidelines on shoring, but it was up to the loadmaster to determine the amount of shoring based on his experience. He said there was no additional guidance provided to the loadmasters on how to shore or load MATVs, either the 12 ton or 18 ton units. Their operation was for the loadmasters to use their judgment on proper shoring. Up to the point of the accident, they had loaded a number of center loaded floating pallets with rolling stock. He said that while the large vehicles were "different", it wasn't different on how your strapped them down to the airplane.

When asked if the accident flight was the first time they had loaded an 18 ton MATV, he said he did not know if it was or not. He said he expected them to follow the procedures outlined in the manual. Regarding doubled pallets, he said that was not addressed in the cargo ops manual on how they should be built, but when they had a situation like that, they would be securing the vehicle to the aircraft, not the pallet to the aircraft. The idea to double pallet the floating pallets came from loading helium tanks that would get jammed in the door. The idea came from him and Gary Keys when they were in Dubai. They put wood between the two pallets, and it was able to handle 16 tons.

The guidance the loadmasters used to tie down floating pallets including using 75% of the strap allowance. There were no special instructions on strapping the 18 ton Cougars other than the straps had to have a 20 inch separation. There were no diagrams or photos provided to the loadmasters on what an 18 ton Cougar should look like when tied down. He did not know what NAC had sent their loaders in Bastion and wasn't familiar with the photos or diagrams.

To his knowledge, there was nothing in their cargo ops manual restricting them from using the seat tracks on the floor to secure the vehicles. He said that now that they had reviewed the Boeing manual, there are restrictions to which seat tracks could be used and the specific loading for those tracks. He said they looked at the Telair manual and Boeing manual, and had extracted charts from both and inserted them into their cargo ops manual. Regarding restraining to the seat tracks, they had deferred to the Boeing manual. He said he had considered using plugs in the seat tracks to block those that could not be used, and it's with the "tiger team" now for consideration. He said prior to the accident, in his 17 years as a loadmaster, about 95% of the straps he saw to secure floating pallets were to the seat tracks and not to the rails.

When asked if there was a conscious decision by the company to approve the loading of the 18 ton Cougars, he said that was up to NAC, and as the operator "you call, we haul." They gave them the freight, and he did not know about the bidding process. He said in the past NAC would notify them of the 18 ton load limits, and they would look at the linear load limits to see where they could place the load on the airplane, and they did not provide pictorial guidance. He said "hindsight being 20/20" they now have a "special load team" where they would have to send them technical data on attach points and restraint limits. This team was comprised of Gary Keys, Mike Hinton and himself. They were looking at contracting with a DER engineer to assist with the tie down plan. This team was created post accident. They had since put a moratorium on floating pallets until the new manual was "accepted" and they had the engineer with the ability to provide special load instructions, and after they sent the information to the POI for approval.

He said the only report of a loading problem was from a Striker wouldn't fit in the door. They had loads that had been rejected by loadmasters for a variety of reasons. The loadmaster had the final say, and it was "his show." They would communicate with NAC for the reasons for the rejection, and work with them on how to rectify the situation.

He said the 9g net was installed on the airplane, and there was verbiage in the weight and balance manual regarding rigid cargo restrictions. Anything above 96 inches that was rigid would have to have frangible material forward of the load. There was confusion prior to the

accident about what was considered frangible and what was crushable. Since the accident, they had reemphasized the frangible requirements, and he had communicated that to NAC. The loadmasters had also been copied on those emails, and the new cargo ops manual had additional information on this issue.

He said he had never had a loadmaster call off for fatigue, but they had called him for having a long day. He said they had come a long way from the old days where loadmasters had been abused, and it was no longer like the old days. They had assist programs for the loadmasters where ground crews would help load/unload so loadmasters could get off duty earlier. National did not have any self-imposed duty time limits for the loadmasters, but if they ever claimed fatigue, they would be off duty. He said they did not have crew bunks for the loadmasters, but they were welcome to use the crew bunks on the airplanes.

In flight, there was a loadmaster checklist that would have them go down prior to 16,000 to go check on the load. It was also a procedure on descent. That was for all types of cargo. He would also tell loadmasters to look out the window for possible fuel leaks.

The procedure to go to the main deck also included informing the flight crew prior to going down. During flight, most loadmasters would try and "stay ahead" by reviewing the next load plan to minimize their ground time. He said if they went down stairs while above 16,000 feet, you were required to take a portable walk around O2 bottle. On descent, out of 16,000 feet, they went down to check the load. They were supposed to do this for every flight, and every time he was on the airplane, they would do it. He couldn't say if they were going down all the time.

He said he did not coordinate the loadmaster checklist with the flight ops department. He was not aware that there was guidance in the FCOM for the pilots restricting all personnel from going down to the main deck during flight. He said the issue had come up before regarding animal handlers.

He said he believed it was the POI who signed off on the accepted cargo operations manual.

He said there was a requirement in the loadmaster checklist to conduct a post-flight inspection, including a through flight. If there was a problem, they could put something in the remarks section of the loadmaster report. The report would be sent electronically. The report would document any problems, and also provide a timeline for any delays at a particular station.

At the time of the accident, there were no restrictions to tie down points on the seat track, and they were all available to the loadmaster.

He said he had multiple decorations from the military, and got out at an E4 ranking.

He said they screened jumpseaters through a security department procedure that included wanding and searching jumpseaters to ensure there were no items hidden.

He said the check loadmasters used a checklist when conducing check rides and evaluations. They had sent one person to the Boeing course late last year, but he had to get pulled out do for "real world operations" and didn't complete the course. He and another loadmaster was supposed to go this year but cancelled due to the accident.

When the 747's were coming, they tried to get more guys checked out to stay ahead. Mike Sheets was transitioned to the 747 as a loadmaster from the DC8. In the last year, they hired about 3 loadmasters. One was a transfer from the flight attendant group who had never been a loadmaster, but that was a very lengthy process and they do not plan to do that again.

The 1996 evaluation form he first created had been altered over time. They were in the process of implementing that form formally in their manuals since the accident, and the FAA has not yet signed off on the change.

In the last year, they had only one individual get a remedial check ride, and he received a nonotice check ride and failed. He was retrained, and he flew with this person, and noticed that there was a 6300 pound pallet in the back of the airplane on a 4500 pound floor limit. They called maintenance and grounded the airplane. It happened during an FAA audit, and the FAA was aware of the event. It happened early last year, and happened on the accident airplane. That person was subsequently terminated.

He said he had done about 4 check rides in the last year. He came to National after 27 years on the road, going to Focus Air to reduce the amount of travel he was doing. Amerijet was next, and National recruited him to piece together a loadmaster program.

He said the new main deck walk around procedures was located in the cargo operations manual.

He said they had added about 300 pages to the cargo ops manual, and had reviewed lots of data and done his homework to put enough information in the manual to ensure the loadmaster would make a safe and informed decision. He said he felt comfortable that "we have learned our lesson." He believed that the loadmasters now understand they have the support to say "no." He said that although IATA said to audit stations every 2 years, some stations were now to get audited up to every 6 months.

There was no requirement prior to the accident for the loadmaster to complete the loadmaster report every leg, but they now required it to be complete every leg so they could spot trends in the operations. Those reports were reviewed within 24 hours of receipt and special events were sent to upper management.

He said most of their loadmasters had military experience.

Since the accident, he had spoken to each loadmaster about complacency, and everything they do would be under watchful eyes. Prior to the accident, they did not get very many loadmaster reports, but since the accident they are receiving additional data.

When asked to clarify his earlier comment regarding loadmasters having a different way of doing things, he said it was to expose the new loadmaster to the different styles and techniques different loadmasters used to achieve certain goals. Loadmasters should learn the good ways and bad ways to complete a job.

NAC had about 15 other carriers that they contracted to load for. Post-accident, loads heavier than 20,000 pounds would require NAC to contact NAL for a strapping load plan based on the specific load.

Interview concluded at 1515 EDT.

18.0 Interview: Adam William Puyear, National Airlines Director of Training and Standards

Date: July 31, 2013

Location: National Airlines Offices, Orlando, Florida

Time: 1430 EDT

Present were: David Lawrence - NTSB; Normand Bissonnette - FAA; Mark Barker -

DOD (Observer); Jose Rodriguez - National Airlines; Sam Goodwill - Boeing

Representative: Dane Jacquez; McKenna, Long, & Aldridge, LLP

During the interview, Mr. Puyear stated the following:

He was 42 years old and had been the Director of Training and Standards at National Airlines for 14 months. Prior to that he had been the Senior Manager of Curriculum Development at Atlas Air and left that position to get back into pilot training.

He had an ATP certificate and was type rated in the Beech 1900, Airbus 320, Boeing 757 and Boeing 747 in which he was trained at Atlas. He had about 3500 total hours of which about 300 hours was PIC. He probably had quite a bit more PIC but much of that was CFI dual-given. Of the PIC time, about 100 hours was in the Beech and the rest in small aircraft. He did no line flying with National Airlines.

He began pilot training in the mid-'90s, did a lot of 10-day instrument ratings and 5-day commercials – pretty intensive pilot training, and taught ground school for a small commuter airline. He was an Airbus instructor at Northwest, flew for Ryan International until he got tired of flying, wanted to get back into training, and then took a Director of Training position at Spirit and moved on from there. He got his Airbus 320 rating at Northwest.

His duties at National Airlines included regulatory compliance and effectiveness for pilot, flight follower, and flight attendant training. He had 3 full-time staff and additional 6 or 7 pilots in the B757 and B747 each who were simulator instructors and check airmen, and flight follower instructors. Flight follower training for dispatchers was also under him though they reported to somebody else. National Airlines had 10 dispatchers who all had a dispatcher certificate.

He knew both Jeremy Lipka and Jaime Brokaw. Jaime lived near Ypsilanti. Jamie, his brother, and his wife came to his office to discuss the process to get an ATP and his work schedule so he could go fly other airplanes and get the flight time he needed. He had never heard any negative

comments about either pilot's proficiency or competency. He had reviewed their training records since the accident but also would have known of any problems prior to doing that because there were not that many pilots.

He learned of problems from comments on training forms, emails, and informal discussions with check airmen. He also solicited information from check airmen after they conducted an evaluation and conducted annual meeting with them.

National Airlines conducted B747 simulator training at Kalitta in Ypsilanti, Michigan and United in Denver, Colorado. B757 training was in Miami. The training was dry – National Airlines provided their own instructors and check airmen except in the case of the type rating when they would have to solicit the assistance of the FAA. He didn't recall any pilot comments on the quality of the actual training. He had no responsibility for loadmaster training nor did he conduct regular meetings to discuss loadmaster training. Pilots did CRM training but he did not know if loadmasters did.

He had never conducted enroute or jump seat line observations as he was occupied doing other project management. There were a lot of projects going on that needed his attention and there was never a good opportunity based upon the workload that was here.

Flight operations team meetings were conducted daily at 0830 including Jeff Miller, the Vice President Flight Ops, Chief Pilots, Fleet Managers, Jose, manager of the OCC, and manager of Operations Training to discuss and review daily operations. Standards meetings were held quite often, every couple weeks or at least monthly, with safety at which things like flight data gathering and analysis and SMS were discussed.

National Airlines conducted flight data gathering and analysis but did not have a formal FOQA program. He thought all aircraft were QAR equipped or had some sort of system the safety department uses to collect data. Monthly meetings were held to discuss the data with the training department. Recently late and long flairs and flair duration had been issues which were made emphasis items for the check airmen to discuss with the crews during checks. National Airlines was not AQP nor are they in the process.

Fleet managers assisted in the creation of the LOFT scenario. It had been JFK-Miami at the time of the B747 accident. He did not recall the malfunction or the action it was intended to illicit.

He had observed training at all the training locations. Regarding B747 training, in January he went to Denver to teach and observe in the simulator and in February he taught and observed ground school in Denver which included general subjects like deicing, hazmat, and CRM.

National Airlines exited level one SMS development. They were not doing anything specific in the training department nor working with safety to develop SMS.

Students had a survey available that was published on line to comment on training but he did not know the ratio of the number of students who had gone through training vs. the number who had completed a survey. He hadn't looked at the survey web site since the accident but last time he

checked earlier this year, around March shortly after the survey was developed, there were in excess of 20 surveys completed. He did not recall any trends - none came to mind. He thought the on line form was created earlier this year. He would generally hear of problems informally via emails, through the instructors, conversations, and office calls. He thought there was a paper written form in the FOTM but he didn't think it was used and he didn't know if the pilots knew it existed. Nobody had noted problems with training courses but occasionally commented on a device, instructor, or schedule through the fleet manager or just dropping by the office. He would then call United or Kalitta to fix the problem

His last B747 simulator observation was in January of a 6 month recurrent training event. The pilot could have done better but he recently came back and did very, very well. He also observed classroom instruction in February.

He was not line qualified. There were plans to get line qualified but for the same reasons he was unable to get out to Dubai he was unable to do 2 months of training.

He was not aware of any specialized pilot training or procedural changes regarding floating pallet centerline cargo, military MRAP vehicles, or Cougars. He thought there might have been some guidance provided when the company began carrying 18 ton MRAPs but wasn't sure. Pilots were not provided specific training.

Upset recovery was trained in the simulator but he had not observed it. He couldn't reiterate the nose high recovery maneuver for the B747.

There were no specific pilot training challenges associated with transitioning from the DC8 to the B747 other than perhaps a few pilots new to electronic flight displays needing some extra training. He thought Patrick wrote the initial B747 pilot training curriculum which had not changed since the accident. National Airlines had not included any coordination with the loadmaster or a load shift in the LOFT scenario which had remained the same since the accident. He had reviewed a previous DC-8 LOFT scenario in place before he arrived that included some things like load shifts. He did not know the simulated malfunction. There was only an initial and not a recurrent LOFT requirement.

He had around 500 hours in the A320, about 500 hours in the B757, and about 100 hours in the B747.

National Airline was hiring, all due to growth in the B757 fleet, with 6 pilots in simulator training in Miami and 6 more scheduled for August. There was no recent hiring nor planned to be in the B747. New hire pilots typically had many thousands of hours. Examples of recent interviewees included a 13 year line check airman from Northwest in the B757 and a pilot with 8,500 hours of jet time in RJs. He had never heard any negative comments about or had any issues here with low-time, non-ATP pilots who only had a commercial certificate rating. Five B747 pilots had recently earned their ATP and were all said to be great pilots. He had no issues at all with pilots who had a commercial rating.

There were discussions about moving loadmaster training under the Director of Training. Nobody is pushing back against the idea - but it wasn't done that way at Atlas where loadmaster training was done by ground personnel and there wasn't a Director of Flight Operations Training. The people in flight ops at Atlas were responsible for training pilots, dispatchers, and flight attendants. That may not have been a great process but it was not uncommon.

Check airmen who conducted IOE reported to the flight operations department. He did not know the B747 failure rate percentage but did keep detailed records and could go back and check. Last failures were last August.

His duties and workload were now manageable and had gotten better since completion of the certificate move, logistical and physical move of both himself and the company, and the addition of aircraft requiring pilot and differences training - which had all been challenging.

He was not line qualified nor had he conducted any line observation flights but he did not feel this impacted his ability to do his job as he relied on feedback from people at his disposal like Jose, the chief pilots, Ted Latham (sp), check airman, instructors and other subject matter experts who wrote the training programs.

He thought the office he currently holds was previously held by Don Wood - who wasn't here when he arrived. Darrell Coleman had been an acting interim director. He didn't know why the position had been vacant or why the previous director left.

He had met the new POI, Bill Royal (sp) and the old POI, Dale Mitchell (sp). The Detroit FAA office used to observe simulator training and checking events quite often - probably at least monthly. The airline was not big enough to have an APM.

He had no questions for the interviewers.

Interview concluded at approximately 1530 EDT.

19.0 Interview: Andy Smith, National Airlines B747-400 Captain

Date: August 1, 2013

Location: National Airlines Offices; Orlando, Florida

Time: 0945 EDT

Present were: David Lawrence - NTSB; Normand Bissonnette - FAA; Mark Barker -

DOD (Observer); Sam Goodwill - Boeing

Representative: Morgan Campbell; McKenna, Long, & Aldridge, LLP

During the interview, Captain Smith stated the following:

His name was Andrew Raymond Smith, and he was 41 years old. His title was B747-400 Captain for National Airlines, and he was not a check airman. He met FO Brokaw on April 18, 2013 during a positioning flight from Fresno to McGuire and then to Ramstein. They flew together as a double "augmented" crew on the B747-400 for those legs. He said he was actually

operating the flight with FO Jay Webb, and the first section was flown by Pat Bensimon and Jamie Brokaw. He said he did not fly with the FO, and only sat in the seat with him in the cockpit during cruise while they performed pilot monitoring duties. He said he spent an hour with the FO.

They had a conversation together that was general and aviation related. He said the FO seemed like a dedicated aviation professional, and told him he was thinking about buying an Aztec. The FO did not relate any concerns about his family life or personal issues. He never actually got to observe the FO flying the airplane to assess his piloting skills. He said the FOs pilot monitoring skills were great, and he was very professional. They had a conversation about scheduling issues, but nothing out of the ordinary.

He said when he (Andrew) rested on the airplane, he typically would rest in the seats and not in the crew bunk area. He said there was no requirement to use the crew bunks. He remembered seeing Jamie and Patrick using the crew bunks on those particular flights.

He remembered having been exposed to the FO during the 18th and 19th, and the talked about general subjects. He met the FO initially at the hotel in Fresno, and he remembered the FOs passion for aviation, and that he said he was a flight instructor.

Regarding the main deck walk-around for the flight crews, National implemented a new policy where the PIC or his designee would pre-flight the main deck on a walk around with the loadmaster. The previous policy was for the PIC or designee to walk the deck, but not necessarily with the loadmaster. Most of the procedures were in accordance with the AC 120.

Regarding transport of the MATVs, he said he had been with National since the Air Atlanta days, and based on his observations, he felt their procedures were rigorous. He had not observed any issues carrying those types of loads, and never had a load shift other than a few crew bags move during flight.

For training, prior to the accident the pilot did a cargo main deck training module. An additional item is now to walk around the main deck with the loadmaster, and it was his observation that most crews were complying with the procedure.

He said he had observed loadmasters going to the main deck during flight on several occasions, mainly to check the straps. Most times they went down follow turbulence encounters to verify that the straps did not come loose.

He knew Mike Sheets, the accident loadmaster, and had flown multiple times with him. He said in his opinion that Mike was one of the most professional loadmasters, and was very meticulous. He could not remember specifically if he ever observed Mike going down to the main deck to check on a load during flight. When asked if loadmasters were allowed to go to the main deck when the pilot FCOM restricted personnel on the main deck during flight, he said there was a restriction, but if it was absolutely necessary, they could notify the pilot and take a walk around bottle with them. He had never seen a loadmaster specifically use a checklist, but saw it where they sat so assumed they used it for their duties.

He did not recall if he ever had a load that included an 18 ton Cougar. Typically, the most MRAPs he saw on a load were 3 vehicles and a military trailer. Most of his flights with Mike Sheets did not involve carrying those types of vehicles.

When asked if there were concerns about pilots like Jamie with low time, he said he had not heard any concerns. He said Jamie and his brother were both very professional. When he flew with Air China, it was not unusual to see low time pilots flying as FOs.

The new main deck cargo walk around procedures were implemented about a month ago. He had never seen anything as significant on the B747-400 like this event, and considered the airplane safe. The accident was quite upsetting to him.

He said he originally transitioned to National Airlines from Korean Air, where he was an FO on the B747 with no chance to upgrade to captain. He was looking to advance his career by coming to National. He could not think of anything that would make him leave, other than maybe an opportunity to fly passengers.

He said that the National Airlines fatigue policy was generally if a pilot reached a critical point, they could call in fatigue. He did not know of any specific events where a crew called in fatigue, though he had heard of crews doing it. He did not know if any of those crews were disciplined for doing so.

He said generally loadmasters were paired with the flight crew, although their duty days differed based on the job requirements.

He could not think of anything specifically to improve the operation, and said most of their policies were in line with Boeing policies and industry standards.

Interview concluded at 1020 EDT.

20.0 Interview: Art Curtis, National Airlines Dispatcher

Date: August 1, 2013

Location: National Airlines Offices; Orlando, Florida

Time: 1110 EDT

Present were: David Lawrence - NTSB; Normand Bissonnette - FAA; Jose Rodriguez -

National Airlines; Mark Barker – DOD (Observer); Sam Goodwill - Boeing Representative: Morgan Campbell; McKenna, Long, & Aldridge, LLP

During the interview, Mr. Curtis stated the following:

His name was Arthur Hebbard Curtis III, and he was 55 years old. He was the Lead Flight Follower for National Airlines, and had been in that position for about 8 months. He had been with National Airlines for about 20 years. He held a dispatcher's license.

He began his career in aviation loading airplanes with cargo. He was formerly a flight follower for a Part 135 operation in Michigan. In 1993, he was hired by Murray Air when they were still a Part 135 operation. They subsequently began passenger flights and upgraded their operation to Part 121. He then got his dispatcher's license in 2001.

His roles and responsibilities included providing the captain with flight plans, runway analysis, graphic weather, GPS information and imports, NAT tracks, and sending electronic copies of the Jeppesen plates. They had 10 dispatchers at National, and all had licenses. They had hired about 5 dispatchers in the previous year. Their typical schedule was 5 days on and 3 days off, and their shifts were 9 hours long. He personally bid for midnight shifts. Dispatchers at National handled both the cargo side and the passenger side of the operations.

He said he worked the accident flight, but not the prep part, and took over when the crew was already in Camp Bastion. When he got on duty, the crew was in Bastion loading the cargo. He said he spoke with the captain on the phone. He said the decision to go from Bastion to Bagram instead of directly flying to Dubai was due to the lack of overfly permits to Pakistan. He said the Bagram to Dubai dispatch release was emailed to the flight crew in Bagram. The captain then would write the release information down on his flight plan. The flight crew would take a picture of the completed flight plan and email the picture to the dispatcher showing the on/off times and fuel load.

He said he talked to the captain in Bastion, and they were friends, so the conversation was personal and not really work related. They spoke about a mutual friend's death. He said the captain did not convey any concerns about the flight or the cargo load.

He said the loadmaster is responsible for the weight and balance. He also assisted in notifying the flight crew about hazmat onboard he airplane. The weight and balance was completed by the loadmaster. Dispatcher was sent copies of the weight and balance by the loadmaster.

He said they also monitored the duty times and time on duty for the flight crews via the departure time and projected hours on duty. He said he did not remember the duty times for the flight crew on the accident flight. He said about 20% of the time the crews would be "bumping" up to their maximum duty day, and that was usually due to slow loading of the cargo. He did not remember any of his flights having fuel issues while in theater.

He said if the flight crew had any issues, their point of contact was with the dispatcher, but in reality they would contact the ground ops guys at the airport.

He got his dispatcher's license and training in CVG. He was not a pilot and had never flown an airplane.

He did not know how the company could have prevented the accident.

Dispatcher's work both the cargo and passenger flights. On the day of the accident, he went off duty right before the accident. When he learned about it, he was quite upset, and didn't want to watch any TV.

He said there were no phone calls received from Bagram. When the crew was on the ground, the flight crew would communicate with ground ops. Mechanics would talk to maintenance control.

The out message was a block out time, and should have included the fuel onboard.

The duty day is limited to 30 hours for an augmented crew, and the dispatchers monitored the duty times as they approached 24 hours on duty. In the past, they have had to make adjustments to crew duty times where they delayed an outbound flight so the crew could get additional rest.

He knew Mike Sheets, the accident loadmaster, and had known him for years. He had never heard a bad word about him. They knew each other from living in Michigan. The last time they talked was about 8-10 months ago, and he never relayed any concerns with his family or finances. He said that Mike was happy about his job.

He said he had ridden on a DC8 for training purposes in the past, but National did not have a jumpseat observation program for dispatchers. There were no familiarization rides available for dispatchers, although Andy Routsong, manager of dispatch, had been discussing the idea. In his opinion, he said it would certainly help him do his job.

There were thunderstorms in the Bagram area, but it did not affect the flight plan.

He did not remember receiving any phone call from the crew while they were in Bagram. He did not know of any tactical departure techniques used by National Airlines crews. He remembered the crew sending an "out" report to note their block out time in Bagram, but did not get the off time for the flight.

Interview concluded at 1200 EDT.

21.0 Interview: Carlos Velliz, National Airlines Director of Safety, Security and Quality

Date: August 1, 2013

Location: National Airlines Offices; Orlando, Florida

Time: 1310 EDT

Present were: David Lawrence - NTSB; Normand Bissonnette - FAA; Jose Rodriguez -

National Airlines; Mark Barker - DOD (Observer); Sam Goodwill - Boeing

Representative: Dane Jacquez; McKenna, Long, & Aldridge, LLP

During the interview, Mr. Velliz stated the following:

His name was Carlos Raul Velliz, and he was 49 years old. His title was National Airlines Director of Safety, Security and Quality. He had been in that position since March or April of 2010. Previously, he was the Director of Safety at Cayman Airways. He said he was a pilot but he was not line qualified at National Airlines. He had about 4000 hours of flight time, mostly as an FO, and no PIC flight time. Prior to Cayman, he was a Part 129 General Manager from 2005-2009. Around 2009 he was with Aero Panama, and prior to that in the 1990's he was Director of

Safety for Arrow Cargo in 1997 and 1998. He was with Fine Air when they merged with Arrow Cargo, and was VP Safety and Compliance. In 2003 he was with Planet Airways for a short time, which was a DOD contract carrier operating 727's.

He said he had ridden on several National Airlines flights, mainly to DXB. The last time was about a year and a half ago.

His roles and responsibilities included focusing on SMS implementation, ASAP oversight, FOQA flight data analysis, and a joint responsibility for the security program with the Director of Security. He was also a liaison to the DOD and their safety program.

He said they finished level 1 of SMS implementation in January of 2013, and planned to go to level 2 in March of 2014, though it may happen sooner.

Regarding FOQA, they still did not have a full mature program, but were data collecting. They had 2 airplanes with QARs, and hoped to have all their airplanes equipped soon. He said the program "was in its infancy."

His staff included 3 people; a safety assurance manager and a flight safety analyst. He wasn't sure if the accident airplane had a QAR onboard. The QARs got downloaded through an Aerobytes server and they had problems sometimes with the downloads. The data was pulled, and after they looked at it, they assessed it to see if it concerned them, and would initiate an event report to the SRB (Safety Review Board). He said they were able to download the data even when the airplane was in theater. According to their review of the FOQA data, the current trends they saw on the B747 were hard landings and flap exceedance. They had a steering committee to review the FOQA information. He said he had not received any reports of pilot concerns regarding the downloading of FOQA data, and they had previously sent out a message to the group advising them of the process. They had no negative comments from the pilots. National Airlines did not have a pilot union on the property.

He also said the FOQA data indicated they had one overweight landing, but it was minor.

Regarding the ASAP program, he was very happy with it. It was about a year old, and the pilot group was the most active participants, even though they were the only group to have the program. It was a voluntary program, and de-identified. They also had a crew irregularity reporting system.

The ERC was comprised of one of his analysts, a pilot ERC member, and the FAA. The current problem was, with the move to the new FSDO, they did not have an FAA member on the ERC. They had not received any ASAP reports concerning cargo loading issues or load shifts. For the irregularity reports, they had 1 report filed that was specific to ground ops equipment issues.

He said the loadmasters did not have an ASAP system, mainly because they were not certificated and it wasn't sure how to fit them in with the FAA since the program provided certificate protection. They had an MOU for the dispatchers and flight attendants to have ASAP. He said

that their policy, written in the SMS manual, prohibited discipline for filing an irregularity report.

They had a daily operational meeting, and he would raise safety issues on a weekly basis. The SRB held quarterly meetings. The SMS working group was made up of various departments, of which training was invited to participate. It had about 16 total team members.

Irregularity reports and ASAPS where filed online with the web based access tool – WBAT. A pilot could also go online on the company intranet and download a .pdf copy of the form. They could also send him an email, or file a hotline request which was a phone recording. That option had never been used.

The common theme from the flight crew irregularity reports:

- 1. Over the last eight months they had a number of engine related anomalies and airworthiness issues that resulted in an event, like an engine shutdown.
- 2. They had an increase in problems arising from a lack of overfly permits being issued by Pakistan.
- 3. They have had a number of TCAS RA events while in theater, which was likely do to the increased drone traffic there.

For the loadmaster irregularity reports, they had not seen many since most events were instead being entered into the remarks section of the loadmaster report form instead of on WBAT. He said they have notified all employees to file their irregularity reports via WBAT, and they were asking all employees to make these reports. Of the 10 loadmaster irregularity reports filed, most were for rejected loads like improperly built pallets, build-up issues, or netting issues. Since the accident, he had not seen an increase in the number of irregularity reports being filed.

They had talked about starting a LOSA program but had not followed up with it. In 2011 it was recommended following the SAT audit, but the company opted not to do one, especially since the accident since it was suggested not to conduct one immediately following an accident. He said it was currently being discussed. This was for a pilot LOSA program.

Loadmaster LOSA was also being considered and being reviewed as a part of their risk management plan. He did not have dates on when that was to begin.

In WBAT, there is a safety assessment that is part of the software. It had been in effect since 2012, and it was still in the development stages and they were still learning the system. A risk analysis was not done on the carriage of heavy, center-loaded floating palletized loads like the MRAPs or MATVs. They had never done a risk analysis on the carriage of those types of vehicles prior to the accident. When asked why not, he said "it's not on our radar." He said they had a SA audit that didn't bring up anything regarding those loads, but acknowledged the audit results were prior to the company carrying those loads. He said they were still new to safety assessments. When asked if he was involved in the decision to begin carrying large heavy military vehicles, he said that he was never asked. He reported directly to the President of the company, and met with him within the monthly SRB meetings.

He said he did not know of any safety issues with the company transitioning from the DC8's to the B747's. When asked if he saw similarities between the Bagram accident and the Fine Air accident in MIA, he said "yes." He added "in my professional opinion, we are a new entry carrier, and we are going through a period of growth and change."

He said the loadmasters report issues on the loadmaster form, and they were emphasizing with the loadmasters the need to file irregularity reports.

He said the SRB was comprised of all the required air carrier management positions, the president, and any invitees. He said he knew of no friction between the other members, and "we are a small company," and management is very supportive.

He had worked with the DOD for over 15 years, and considered them safe and consistent and good to work with. He said "we are comfortable working with the DOD."

He said he met with the FAA about 2 times per week. He knew of only 1 fatigue report in the last year.

He had done a few small accident investigation course, but nothing formal.

He said he did not think the FAA had been out looking at their operation enough.

Interview concluded at 1427 EDT.

22.0 Interview: James Thomas VanZino, National Airlines (Former) Chief Pilot

Date: August 1, 2013

Location: National Airlines Offices; Orlando, Florida

Time: 1436 EDT

Present were: David Lawrence - NTSB; Normand Bissonnette - FAA; Mark Barker -

DOD (Observer); Jose Rodriguez - National Airlines; Sam Goodwill - Boeing

Representative: Morgan Campbell; McKenna, Long, & Aldridge, LLP

During the interview, Mr. VanZino stated the following:

His name was James Thomas VanZino, and he was 51 years old. He was no longer employed with National Airlines. While at National, his last title held was System Chief Pilot. He left the company July 12, 2013 and the reason for leaving was a unique opportunity at AAR Airlift Group, enabling him to combine all his skills into one job. He was the Chief Pilot at National for just under 3 months and was System Chief Pilot at the time of the accident. Prior to being the Chief Pilot he was Fleet Addition Project Manager for the B747 certification and also the B757 Fleet Manager briefly, for a period of less than a month. He had been with National since April 2010. Prior to National he was an FAA Inspector Air Carrier at the EMAI FSDO in Michigan. Prior to that he worked for Amerijet Airlines in Miami, and he was a B767 certification Check Airman on a contract basis. Prior to that he was with Airborne Express for about 13 years.

His total time as a pilot is just under 7,000 hours and 2,500 hours of that was PIC. His type ratings included the B757/767, DO328 and SIC only time on DC-8. He did not have a B747 rating.

He did not know the accident crew personally, but he knew the captain for just briefly, meeting him on a trip to Dubai, and the first officer he knew by name only. After the accident he personally did not conduct a review of the crew's personnel records as he was not a party to the investigation. He was in Orlando at the time. He believed somebody reviewed the crew records but could not say exactly who did it. He knew it was done though as he remembered seeing the paperwork for it and he thought this was directed by Carlos Veliz but did not know who Carlos had doing this. He was not informed of the outcome of that review.

While he was Chief Pilot, he had not received any comments nor were any reports submitted about flying with any of the accident pilots. None of the pilots involved in the accident ever submitted any reports to him regarding operation, fatigue etc. He doesn't recall anything from them. He never got the chance to be line qualified in either of the company's aircraft. He got the opportunity of riding on the initial proving flights of the B747, which one of the Capt.'s from the non-operating of the accident flight was involved on that. He flew 2 other trips on the B747 but none with the accident crew.

After he became Chief Pilot he was scheduled to go into the next B757 class that was coming up that summer. As Chief Pilot he had 2 Fleet Managers, one was Jose and the other Steve Smith which reported to him. The Line Check Airmen reported thru the Fleet Mgrs. to him but with a "very strong dotted line" to the Training Dept. He never received any reports from the Line Check Airmen conducting OE with regards to loads or cargo transported out of theatre. He did not recall having any reports from pilots about center load cargo, floating palletized military vehicles on flights, MRAPs, etc., on flights prior to the accident. Post-accident, he had some phone calls about it as they were originally scheduled to fly similar loads but they never flew them. Concerns were about the same type of cargo from the same airport.

During his tenure as Chief Pilot, he never had any crew reports regarding fatigue, scheduling and long duty days. To the best of his knowledge the company always scheduled crews in accordance with rules and regulations and they did a very good job at it. He stated that there is a Fatigue Risk Management Plan in place at National and also every morning with the Dir. of Ops, Jeff, each flight was looked at for duty time issues. He did not recall any pilot calling in for fatigue, and if any, it might have been a flight attendant, not a pilot.

When asked if he was aware of any type of policy for the pilots to go down to the main deck and do a main deck walk around and if they were trained to observe the cargo loads, Mr. VanZino stated that he did not know the answer but from previous experience he could say that on the two types he flew, the Load Master was responsible for the cargo load and the crew was busy doing crew duties during the loading periods, and the Capt.'s would go down and look as well as they could but lower decks sometimes were so full that they could not get very far back.

He was asked if he was still with the company when they implemented the policy about the Pilot in Command or his designee going down and walked the main deck with the Loadmaster, and he stated that he didn't know when that was instituted.

When National started flying these heavy military palletized vehicles out of theatre, he was not Chief Pilot at the time, he was still doing addition projects at the time, so not involved with inputs/assessments from pilots, ops or any other departments on the subject.

He was involved in the hiring process of a couple of pilot classes at National. The process was pretty standard along with normal industry standard. They received resumes all the time so they would not have to put out a job vacancy notice. They had a review board composed of the Dir. of Training and the D.O. Before Jose was in the office they used a Check Airman to help out. They would look for people with previous B744 experience, preferably type rated and previous experience in the cargo world. They were pretty successful in finding people with those characteristics. He had no concerns with low time pilots without an ATP certificate and they were all hired prior to him coming on to National. However, they were always active in helping them to complete their ATP requirements.

Capt. Steve Smith took his position at National.

When asked why he joined National, he stated he wanted to get back into the private sector, into the commercial world. He also stated that the FAA was not a good fit for him at the time. He knew about National and all his skills really helped out, that is why he joined them.

He was also asked, based on his short time at National, if there was anything he would have changed or done differently. He stated that his answer would be no, that everything that he did during his tenure at National he felt good about.

Interview concluded at 1501 EDT.

23.0 Interview: Mike Vollmer, Former Director of OCC, National Airlines

Date: August 2, 2013

Location: National Airlines Offices; Orlando, Florida

Time: 0815 EDT

Present were: David Lawrence - NTSB; Normand Bissonnette - FAA; Mark Barker -

DOD (Observer); Sam Goodwill – Boeing; Jose Rodriguez – National Airlines

Representative: Morgan Campbell; McKenna, Long, & Aldridge, LLP

During the interview, Mr. Vollmer stated the following:

His name was Michael David Vollmer, and he was 46 years old. His former title was Director of OCC. He was not currently employed at National, and took a job as a captain on a Hawker. He left NAL on July 11. When he was employed at NAL, he was not line qualified.

He had an ATP with type ratings on the 747, DC8, and YS11. He had 6500 total hours, with about 4000 hours as PIC.

His background included 29 years in the Air Force and reserves, and he was still currently serving as a safety logistics officer. His civilian flying was as a CFI, and included Airborne Express in 1996-2009 where he served as a line pilot on the DC8 and the Chief Pilot on the DC8. He also spent a short time with Dynamic Airways. His date of hire at NAL was July of 2012 and he was hired as a project manager until January 2013 when he became Director of OCC.

He oversaw 3 areas; crew scheduling, ground ops, flight control/dispatch. He was working on the accident day. He walked into the office at 0725, and they had folks standing around on conference call to Bagram. There was a little confusion with what happened to the airplane at first. The first thing was to determine the disposition of aircraft, and found out it crashed. They gathered materials, and called the NTSB for official notification. They ran through their respective emergency response checklist: these were located online and hard copy. Carlos Velliz printed out hard copies from their ERP. He said they had just gone through a table top exercise several weeks prior.

He did not know the crew, but had met 2 of them, and had ridden around with them on flights.

Flight crews were scheduled for days on and days off, not trips. They bid 2 months at a time, 30 days in advance, 20 days on and 10 days off. They were scheduled on a "ad hoc basis," but they try to schedule out as far as possible. Once scheduled, they review daily schedules and duty times, looking 3 days ahead, and looked for opportunities to shorten their duty days. A fleet manager was available to assist and review schedules, and was also a point of contact.

Duty time problems for pilot would be with the crew scheduler, then up the chain of command, though he tried to handle issues at his level first. Schedulers were available 24/7 to the crews. There were a total of 7 schedulers at the airline.

When asked if he scheduled the loadmasters, he said "to a degree, yes," and they took care of travel and hotels, but their schedules were mainly run through ground ops. Usually the loadmasters were scheduled with the flight crew. He said crew schedulers did not work with the loadmasters on their schedules, and that was "left up to Gumby."

They had an "IBS" crew track system to track duty times and flight times.

He said they had no fatigue calls while he was there. They had a fatigue risk management program at NAL, and was part of the daily review. Jeff Miller had also set up a tracker that looked at multitude of things, and they looked at scheduled versus actual duty times to compare how they were doing.

He remembered having one conversation about concerns with a pilot regarding the long schedules and duty times. There were many venues for a pilot to contact the company about concerns. He was not aware of a formal fatigue policy at the airline, but anyone called off they were off. No concerns were relayed to him from the passenger side either.

The total number of dispatchers was 10 or 11 total. They would operate up to 4 flights at a time since that was the number of airplanes. Dispatchers were all licensed, and it was a requirement. Dispatchers did not do familiarization rides and he said "we are going to have to do that for the flag operations."

Pilots would talk to dispatch, LMs to ground ops, and mechanics to maintenance control for any issues. He was not aware of any issues raised by the crew that day, though the accident happened a 7am local.

He did not have a dispatcher's license. He came to NAL through an executive placement service, and he said "Jeff later talked me into coming."

He said "I was in aviation management with Airborne Express, then doing active duty, and enjoyed leadership roles". He went to Dynamic Airways in management, Jeff called him and the NAL job was closer to home.

He said Adam Puyear replaced him in the OCC.

He did not know if crew had a conversation with dispatch on the day of the accident. After the accident, he said he had the grief associated with the loss associated at a small company.

When asked if he regretted leaving, he said you always regrets not being able to complete getting things done like certain projects.

After the accident, he was gathering up a lot of data for the NTSB like personnel records and flight duty times, etc.

The OCC was in an open area, margins of the interior space used for cubicles and offices. OCC desks were in a line, the lead in front of the row with 1 or two flight followers, followed by ground ops. There are other positions associated with the crew schedulers. All positions were open 24/7.

His role with ground ops was minimal, basically high level support.

He said all lines into OCC were recorded, but there were some issues with the recording, and had a few issues come up on a QC. He did not believe there were any recordings between OCC and the crew..

Interview concluded at 0910 EDT.

24.0 Interview: Paul Grandahl, FAA Principal Maintenance Inspector (PMI)

Date: September 24, 2013

Location: National Airlines Offices; Orlando, Florida

Time: 0915 EDT

Present were: David Lawrence – NTSB; Normand Bissonnette – Federal Aviation Administration (FAA); Sam Goodwill – Boeing; Mark Barker – Department of Defense

(DOD) Observer

Representative: Brad Preamble, FAA Counsel

During the interview, Mr. Grandahl stated the following:

His name was Paul Harry Grandahl, and he was 57 years old. He currently was an assistant principal maintenance inspector. He had been assigned to Kalitta Charters "2," which was a Part 121 operator. He oversaw no other certificates. His background included being an A&P mechanic since 1983, and he worked 4 years in general aviation at a local FBO (fixed base operator). He then went to a Part 135 operator flying Falcon 20 jets at Willow Run Airport. He became their director of quality control, and in 1998 they received a Part 121 certificate and transitioned into DC9 aircraft. In 2001 he left and went to the FAA. He had been the National Airlines PMI since 2004 until the certificate moved to Florida in July. He was not a pilot, and held an A&P mechanic's certificate. He had an assistant PMI for one year in 2012, and that person then became his front line manager (FLM). He also shared duties with the principal avionics inspector (PAI) for National Airlines.

He described his roles and responsibilities as performing surveillance, manual reviews, evaluations of programs, risk management, and utilizing the data that was collected by the "CMT," and inputting it into ATOS (Airline Transport Oversight System), which was soon to be replaced by SAS (Safety Assurance System). He described ATOS as primarily an inclusive closed loop system of surveillance and evaluation and certification of a Part 121 operator. It included evaluation of new programs and certification, doing surveillance and oversight, and a risk management system to mitigate risks at an operator for items identified as high risk.

He learned about the accident from the Director of Quality Control at National Airlines, William Phillips, who called him on the morning of the accident. He reminded National to keep certain records for investigation purposes, he also asked for a 30 day list of deferred items on the airplane. He reviewed those records and nothing stood out.

He characterized his communications with National as "open communications with management, the Director of Maintenance and the Director of Quality Control." The Director of Ops was also open to communications. They would come to him with questions, and they worked well together. National had a good compliance attitude, and they were always interested in what he had to say. National would also come to him for his opinion. He said National completed level 1 of SMS (safety management system) implementation.

For Advisory Circulars, he would verbally approach them, or would email it to them if it was something like a notice or parts notification and ask them to respond back to him. For new programs required by regulation, he would make sure they had current information. He also used the 8900 for guidance as well, and would document it in PTRS (Program Tracking and Reporting Subsystem).

He was not aware of any current increased FAA surveillance of National. He said the maintenance quality control had a high level of regard for safety, from his direct observations and interactions with the airlines. He had not made any maintenance recommendations to National Airlines.

He said loadmasters were considered part of the operations side at National Airlines, and the airline described that based on who the loadmasters answered to in their organizational chart. For National, ultimately the loadmasters and loading supervisors answered to the Director of Operations. There was nothing in ATOS that dealt with loadmasters. He had nothing to do with the cargo operations manual at National.

He said ATOS was their work plan, and they had scheduled tasks in ATOS. Along with cargo loading equipment oversight, ATOS addressed those, and the inspection and maintenance program and surveillance programs. They had high criticality items required that were every 6 months and medium criticality items that were required every 12 months and low criticality items that were required every 36 months. Cargo loading equipment and continuous analysis surveillance were high criticality items. He said he had attempted to observe the loading process, but had only seen the 747 loaded once when he went to DXB (Dubai) last year for 5 days. He was able to observe the loading process on a more regular basis with the DC8's when they were coming through the YIP airport. In DXB for the one time he observed them, they loaded only general items and military items. He could not remember if the load was going into Afghanistan. He said he was not allowed to go to Afghanistan because of State Department restrictions. The State Department would not issue them visas to travel to Afghanistan, and they could only observe the aircraft in DXB. He said they had one cabin safety inspector out of Minnesota who was able to do an enroute cabin inspection, and he said he heard that there was some fallout from it. When asked how he would survey an operation overseas like the 747, he said that you would just go to DXB and "see what you see." He said that when he went to DXB, he would observe the 757 when it arrived and left.

He also observed cargo equipment movement when he was in DXB. He did not observe any of the pallet build ups since that was the POI's responsibility. They would look at loads to see if there was anything obviously wrong with them. The one time he observed the 747 in DXB, he noted up some twisted nets at their attachment points. He said he got ahead of the load master as the airplane came in, and he inspected about 30 pallets. They shut down the load, and they went over all the pallets.

He said he attended the air cargo course at the academy; it primarily focused on the equipment and certification status of the equipment, and the documents for the straps. In DXB, he only observed netted pallets, and the straps were used to just stabilize the equipment on the pallet. He did not observe any center loaded pallets, and all were on the side rails. He never had an opportunity to observe the straps. He said that would be part of his responsibility. He said the airplane came in empty, and he was there to look at the equipment that he could access before they started loading. He did not recall if the straps were on the airplane for him to look at.

He said they did use "P" items for minor task surveillance, but did not use "R" items since that would conflict with ATOS. They were not allowed to document surveillance with PTRS, which

was the function of ATOS. They only used PTRS for evaluations and reviews. This was because they only wanted surveillance to be documented in ATOS. EPIs were for scheduled inspections. For focused inspections, they would create a CONDOR (constructive dynamic observation report) for a direct observation report to specifically look at something. They also had a random inspection process. If he or any other inspector saw something of concern, they had the direct observation process, and that would go into the database. He did not recall if any outside inspectors had done that.

September 2012 was the last time he had observed the operation. He had attempted to go over there since, but their office did not have the funding. That came from his front line manager, and they listed those items as "unresourced." He said there was no way to "farm it out" the surveillance and the only surveillance they could do was "on paper." He said for cargo loading or items that would drive them to go over there and look at them, and they could not get over there to accomplish those items, they would indicate that in their ACAT (Acquisition Categories) which was their basis for doing their risk assessment for the airline, and would elevate the risk for further assessment. He said the FLM does not have to respond to unresourced items, but would acknowledge the increased risk level noted in ACAT, and would be placed in the comment field. He said there was no specific threshold when the risk indications got elevated, and they would keep increasing the risk assessment.

In general, he saw an increase number of VDRPs, which was their voluntary reporting disclosure program. This was an online program where the operator was allowed to self-disclose non-compliance items. Some of the items he noted were in their MELs (minimum equipment list), which included situations where maintenance signed off an improper MEL. This was mainly due to the communication challenges of flying overseas and around the world. It was also due to their growth mode and change in management with their move to Florida, replacing personnel in Michigan with local people.

He said the lack of surveillance overseas was primarily due to the lack of funds. He was not involved in the travel plans and financial discussions.

Maintenance did have an ASAP (Aviation Safety Action Program) at National. His understanding was that National had just started using the WBAT program for data collection and analysis. The VDRP was not available for individuals to self-disclose. Other than the ASAP, there was not a program for a mechanic to self-disclose a safety issue, other than simply going directly to management, and the mechanics were not a part of the ASAP program. He was not aware of any irregularity reports that maintenance could submit.

When National first approached the FAA to put the 757 passenger operations on their certificate, they formed a team to look at the implementation. They requested all the evaluations that would normally be done be through CONDOR, and did a risk assessment through table tops and approving runs. They used that for their targeting of their surveillance. Shortly after that, National came to them with the 747 program. They basically did the same thing and formed a team to review the implementation, which included a manual change review, approval runs, and re-evaluation of the airline in ATOS and assessed the risks. The approving runs went between JFK and LAX, and also overseas. He did not think they carried freight on the approving runs.

They had concerns that it was a new airplane, but National was an existing airline and was established. During that time, they became more on sight in YIP, going to morning meetings with National management.

When National shut down their DC8 operation, they had very few mechanics in YIP since most of their operations were based in DXB. He did have surveillance responsibilities for those mechanics. When asked how he would provide surveillance of mechanics overseas if he wasn't there, he said "you answered your own question." National did very little contract maintenance except for heavy maintenance, and their line maintenance was done by their own employees since they flew with the airplanes. The heavy checks were done in XIAM (China) where Northwest did their heavy checks.

Mechanics were onboard every flight. They had a rotating staff, and rotated them back to the US. They were scheduled based on whoever was on the list and was dependent on what the airplane did. The mechanics could be with the airplane for over 24 hours, but they had sleeping arrangements on the airplane. They also had inflatable mattresses they used. He did not know if the crew berths onboard the airplane were only for flight crews or also available to the mechanics.

Regarding fatigue risk management of the mechanics, he said they received complaints about mechanic fatigue, and discussed that with director of maintenance and director of QC. The 747 had an unknown schedule, unlike the 757 which had a set schedule. National said they would not require a mechanic for over 8 hours, and if on duty more than 8 hours, they would go to the hotel. He issued CONDORs for when they went to DXB to talk to maintenance personnel about fatigue. He had a geographic based inspector who would assist him. When asked how he would know if National was adhering to their 8 hour rule for their mechanics, he said he wouldn't other than interviews with their management and personnel and documented those results in ATOS. There had been a lot of turnover in their maintenance personnel. The original director of maintenance came over from Northwest Airlines, and they were not used to that environment. National ended up hiring mechanics from Kalitta, Atlas and Evergreen; guys that were used to going out and staying with the airplane. He said there were no international rest rules for mechanics, in part because it was not unusual for a mechanic to go out and fly with an airplane for an extended time. He said they had received some complaints about fatigue not only from the mechanics, but sometimes from the mechanics spouses. The last one he remembered getting a mechanic fatigue complaint was from about a year and a half ago. He had heard there may have been others.

His oversight of National's maintenance records was done by following the EPIs (Element Performance Inspection) in ATOS. The records were in YIP until National moved down to Orlando, and he went there about 4 or 5 times when they started up their maintenance control down there.

He said he was not aware if National had a fatigue risk management program. He was not aware of any risk analysis done for the carriage of 18 ton military vehicles.

Prior to the accident, he did not know of any definition of a special load for loadmasters. Since the accident, there is one, and it concerns anything above a certain height, and concerns the fact there is no freight above 96 inches.

When asked if mechanics were allowed on the main cargo deck of a freighter during flight, he said they were not since it did not have a communications system down on the main deck.

He said he currently had an enforcement action pending against National, and they had also been notified of it. It was opened in mid-June, and was specific to the carriage of MRAP (Mine-Resistant Ambush Protected) vehicles, and was still in the investigation phase. It was based on how they carry those loads. He said the FAA was not notified they were carrying multiple MRAPs prior to the accident. It would have caused them to request more information, to see if it fell within the scope of their existing manuals. He said it was out of his area of expertise if the carriage of these vehicles would constitute a change in the operations requiring a risk analysis be conducted, but it in his opinion it would need to be addressed.

He did not recall when exactly he heard that National was carrying the large MRAPs, but remembered he heard from maintenance personnel at National they wanted to move the MRAPs since the other carriers were doing it and they wanted to do the same. Their office was not notified.

He said he was scheduled for the FAA 21059 Air Cargo Operations Inspectors course, and attended it. It covered locks, straps, ULDs, and nets to help them determine airworthiness and certification basis of that kind of equipment. This happened early in his carrier, most likely in 2003.

He said he had come across a few non-TSO straps, but National had never come to him about non-compliant straps.

Regarding NAC (National Air Cargo), the contracting agent to load the airplanes, he would evaluate them using an EPI in ATOS as a contractor to National, but National had ultimate responsibility for their oversight.

He could not recall if the course he attended had anything to do with the weight and balance, only the stops. Loading process oversight was the responsibility of the POI. The straps he noted that were twisted on his one visit were not covered in his formal training.

Regarding ATOS, risk elevation at National was brought to the attention of headquarters, but there were no oversight concerns with National.

Regarding the POI, PMI and PAI relationship, they all had oversight authority of the airline, and sat down quarterly to talk about the risk assessments. Those positions answered to the FLM. The typical frequency to visit an airline was driven by ATOS. The carriage of MRAPs was currently under his investigation, specifically the carriage of five of them at a time. The operator was responsible for the suitability of the loads, and the FAA through the performance of EPIs and enroute inspections.

As PMI, he was not responsible for oversight of the carriage of the loads, but was asked to do the enforcement investigation since the POI was busy, and he wanted to get the education.

Flying mechanics were considered the same as ground mechanics. There were restrictions in the US for mechanics, but not internationally. There were no time restrictions for mechanics that went international like there was in the US. Regulations in the US for mechanics were for 4 uninterrupted days for a month. Those rules don't apply when overseas.

The POI, PMI and PAI are all under ATOS. He and the PAI work out of the same database, and each has their own risk assessments. The POI was separate. Sometime they "cross drive" an issue if it's a shared concern, for example the cargo handling situation. Maintenance was required to do inspections every 6 months, but ops not as often.

Risk assessment was based on 30 risk indicators, numbered 0-9, with 9 being the worse. They used them to define a criticality score. High criticality was a weighted value. As they raised the risk indicators, that took the criticality indicator up for that element. As principals, they could adjust the priority score, since it was all a very subjective process and not something they did very often. The end result was to identify the highest level of risk within the elements. They were trying to get to a means to lower the risk. They could lower the risk by working with the operator or other processes. They did this through ATOS and action items, notifying the airline that they discovered the risk assessors, and contact the airline to ask them how they were going to lower the risk. They would attempt to determine and see if the risk was being mitigated to a lower level. At the time of the accident, they had just wrapped up a safety action team (SAT), which ATOS allows for risk mitigation. NASIP (National Aviation Safety Inspection Program) had also run an assessment. The primary problem with National was that they were having problems training and hiring loadmasters, and they worked with the operator for changes. It was subjective what risk level would drive them to increased surveillance above normal surveillance.

Approving runs on routes that do not have cargo are part of the risk assessment. They asked them for the routes, and then internally they would come up with a plan on how to test them. CONDORs were a constructive dynamic observation reports, used for focused data collection to target specific issues. That information was fed into the ATOS database.

He said inspectors would have to be proactive in finding out what type of loads an operator was carrying. There was no process for the operator to tell the FAA what specific loads they planned on carrying.

Chains were not allowed as tie downs on the main cargo deck, and not allowed by Boeing. On their service checks National would be required to inspect their straps, and they were also required to inspect cargo loading equipment. To his knowledge, ATOS did address cargo loading equipment but did not address cargo securing.

He said he felt qualified to do his job. Everything he saw on his one visit was palletized and secured, and none was strapped down.

Regarding accepted and approved manuals, the regulations drove some parts of the manual to be approved, and that was driven by the Opspecs. Accepted manuals generally had to do with policies and procedures not specific to the Opspecs. He had found National had referenced both the Boeing and Telair manuals. The acceptance process for manuals generally was handled by the appropriate principal inspector, using 8900 as a guide.

Maintenance complaints could also be made to the hotline, but he was not aware of any loadmaster complaints, but that may have been seen on the ops side. Sometimes they actually got calls directly to the office, but he was not aware of any complaints specifically from the National loadmasters.

He said that after he was told there was no funding to travel to conduct surveillance on National, and "there was nothing more I can do." He was not aware of what his manger did to request the issues be driven higher. He said their ATOS and data were reviewed by the regional office.

He did not see any exceptional speed of growth at National. They had up to four DC8's, and they were a company that had a lot of ideas that didn't come through. He did not see any rapid growth since they only added a few airplanes.

He did not consider National's operation was a "work around" for oversight, and their operation in DXB was the reason they bought the airplanes, to fly DOD missions.

There was no difference in how the FAA handled a deviation from something in an accepted manual or approved manual for enforcement.

He said the FAA principals got "string training" which included a standard listing of inspector course that needed to be taken. They learn the basics for the jobs, ethics, and communication skills. They then split off and learn specifics for their POI, PMI and PAI jobs. He had not received specific cargo operations training, other than the cargo equipment oriented training.

The FAA had enroute inspections defined in ATOS, and they were typically considered random inspections. They had one ops inspector volunteer to go to Afghanistan for an enroute. Ramp inspections were only done the one time in DXB for the 747. He thought they may have done one at one of the Air Force bases on the east coast for a ramp inspection, and he believed the airplane was empty. They had tried a half dozen times to do ramp inspections, but the trip would always change or cancel and the airplane would not be there.

He had never heard of a "ULD group" within National that inspected cargo straps. He did not know of any group with National that inspected the straps or pallets. He knew of National's requirement to ensure the straps were on the airplanes during the service checks.

He said the hardware on the main deck would fall under his responsibility as PMI since that equipment was part of the service checks and inspection program. He said National was going through PDU (power drive unit) problems with sand contamination. He had no knowledge they were using the seat tracks to secure cargo. He did not know about the allowance for seat tracks before the accident, but he did know now. He said he volunteered to take the enforcement

investigation since the POI was busy. He also did not know about "D" ring limitations and restraint capabilities based on angles of the straps.

He said Steve Fox would be considered the expert on Boeing certification issues. He never talked to him prior to the accident about load securing issues since they did not know National was carrying MRAPs.

He said if he had the opportunity to ramp check National, he would have asked questions about how they were tying down the cargo.

Interview concluded at 1115 EDT.

25.0 Interview: Dale Mitchell, FAA Principal Operations Inspector (POI)

Date: September 24, 2013

Location: National Airlines Offices; Orlando, Florida

Time: 1230 EDT

Present were: David Lawrence – National Transportation Safety Board (NTSB); Normand Bissonnette – Federal Aviation Administration (FAA); Sam Goodwill – Boeing; Mark

Barker – Department of Defense (DOD) Observer Representative: Brad Preamble, FAA Counsel

During the interview, Mr. Mitchell stated the following:

His name was Dale Allen Mitchell, and he was 55 years old. His current position was front line manager (FLM). He started as the POI for National Airlines in February 2012. Prior to that he was the POI for Spirit Airlines. Previously he was with Zantop Airlines for 24 years, and came to the FAA in 2003. At Zantop, he was a pilot, check airman, chief pilot, Director of Training, Director of Safety, and left as the Vice President of Operations. He held an Airline Transport Pilot (ATP) license with an A320 type rating. He estimated his total time at 7,500 hours, with about 5,000 hours as Pilot in Command (PIC). He did not have any flight time in any of the type of airplanes flown by National.

His immediate supervisor was his FLM, Mario Mendoza. He used to have an assistant POI after 2 or 3 months as a POI for National, however he retired at the end of November 2012. He did not oversee any other certificates. As POI, his responsibilities included oversight of the operations of the air carrier, including all operational aspects of National Airlines, training, operation of the aircraft, and "basically complete oversight on the operations side." He used the 8900 guidance to conduct his job, and for surveillance he used the ATOS (Air Transportation Oversight System) model. This was used for manual review and regular surveillance, and was documented electronically within the software.

He learned about the accident from the Director of Operations (DO) at National, Jeff Miller. On initial contact they thought they had lost an aircraft, and they were trying to get the facts. As the facts came in following the accident, he talked to the DO, and made sure they implemented the

emergency response plan and they locked down all records. He had good communications with National Airlines management, the DO, the chief pilot, the Director of Training, the Director of Safety, and communicated with them daily in some cases.

He communicated with the line crews while sitting in on the National ground schools. He did some check airman observation work of the 747 and 757 crews. National had about 12 total check airman, and more than 3 were on the 747. He said he had been to the simulator "half a dozen times at least." He mostly used the services of local 747 qualified FAA inspectors, Todd Mountain and Brent Montel, to observe 747 simulator sessions.

Regarding increased oversight of National, he said the only thing he recalled was on the maintenance side, where a safety assurance team (SAT) team was put together for cargo loading. It was an option in ATOS to put together a SAT to look at items that may be deficient. For that SAT, they were looking at training of loadmasters. When asked if he had oversight of the loadmasters, he said he would have to say it fell under both specialties, but there was no guidance in the 8900. He did not recall if loadmasters were identified in the Federal Aviation Regulations (FARs).

When asked about National's safety culture, he said that the 119's, in his opinion, were just new at starting up the safety management system (SMS) program and DOD (Department of Defense) inspections. He found their safety culture to be "satisfactory." National had just completed level 2 of SMS implementation before they moved to south Florida.

When asked if he knew the accident crew, he said he knew Jeremy Lipka and had met the others in class, and did not know the loadmaster. He had not reviewed the crew's records since they had been locked down.

He used ATOS (Airline Transport Oversight System) for his work plan. Accomplishing these items was "tough" since the planes were all overseas. He got to DXB (Dubai) in September 2012 and was there for a week, hoping to see some cargo loading and do some enroute flying on the airplanes. He saw one cargo loading operation while in DXB, and that was all he got accomplished. He had tried to get jumpseat authority into Afghanistan, but they could never jumpseat on them since they were not allowed to jumpseat into Afghanistan. He was able to get one inspector on a flight, but had to pull him off, and they have not been back since. The State Department was the one that prohibited them from traveling into Afghanistan. The inspector had the proper documents, but the State Department told him it was a prohibited country for them to travel to. He asked his FLM how to do surveillance on airplanes out of theater, and the State Department was the ones prohibiting them. They were not told why. The airplanes never come back into the US for them to inspect them. All of these surveillance items were listed as "nonresourced" in ATOS due to where they are operated. Those items would roll over into the next month, and they would try and do them then. In ATOS, it would show those items as being moved forward. He did not know how long those items could continue not being accomplished. He did not know the software well enough to know if there was a threshold of how many nonresourced items there could be before the operation had to be looked at.

On the ops side, there had not been any attempts to survey the operation since September 2012. On the maintenance side, he believed they had gone over there once or twice. Because the theater of operation the airplanes operated in, they could not get the approval to send him over "just to not do the inspection." While he was on the certificate, the airplanes never came over to the US for him to inspect the operation. The 757's would primarily operate between DXB and Afghanistan 7 days a week. It was once sent to China for maintenance, but they also had issues getting there to conduct inspections because of funding to get into China. They also tried to use geographic inspectors overseas, but encountered the same issues. He was told National was the only airline operating passenger flights in and out of Afghanistan.

For line checks, National would bring the 747 to the US, and they would fly it to 2-3 destinations getting line checks. That was the only time the airplane would come to the US, and National did that because they knew the FAA could not do line checks overseas. They would have to do 2-3 legs to get the captains line checked, and he did observations of pilots who were already qualified, and the initial observations were done by individuals qualified to conduct the line checks.

He said they tried several times to get ramp inspections done. In September 2012, he ramp inspected the 747 loading in DXB, and also observed the carry-on bag program for the 757 while he was there. National brought the 747 over to the US twice while he was on the certificate to do the pilot line checks. Under ATOS the inspections would come up every quarter, but he did not know if there were an actual minimum number of inspections required.

When asked if he conducted station facility inspections, said that they did not have any, and they had a leased gate in DXB, and the National offices at DXB were over at the cargo side where parts and maintenance supplies were located. National put all their manuals on the airplane on a laptop. He looked at personnel records for hazmat training and cargo loaders, and observed them at their offices in DXB. The manuals he did observe were current and up to date. Opspecs approved National to have their manuals in electronic format. When asked how he ensured National's compliance with the FARs when they operated overseas, he said the FAA was not the issue, and they wanted to conduct the surveillance, but the State Department would not allow them into Afghanistan.

Regarding National's fleet changes and the FAA's risk analysis, he said that when he came on the certificate, National had the 3 DC8's, and 3 747's and 1 757, but they had since parked the DC8's. In doing so, it decreased their total risk by parking the airplanes, and the crews were transitioned into the remaining aircraft.

He said National tried to hire current and qualified pilots for their airplanes. He thought the Director of Training was qualified on the 757 from his time at Ryan, and he did all the writing for Atlas/Polar. He said he had a talk with the Director of Training about audits, and was trying to put a QA (quality assurance) program together. He talked with the chief pilot and the Director of Safety about a LOSA (line operations safety audit) program. They wanted to implement one, and he told the Chief Pilot where the guidance was for LOSA so they could get one together since he personally wanted to see one at the carrier. That occurred about 6-8 months ago.

When asked if a risk analysis was done for position changes in management, he said that National management had a pretty good turnover rate when he first got on the certificate. Since Jeff Miller came from Airtran as Director of Operations, he came in and hired qualified people. He said he had no concerns about the management at National.

He wanted to see loadmaster training, and there was no loadmaster training guidance or 8900 guidance. He worked with the head loadmaster, and they put checklists together so the loadmasters had sort of some guidance. Loadmasters were there as an extension of the captain, being given the authority to load the airplane together and loading of hazmat. The loadmaster would bring the load sheet to the captain and they would both sign for the weight and balance. At National, they trained them as a loadmaster and gave them a card saying they were a loadmaster, but the position was not certified according to the FAA.

When asked if loadmasters were considered "other operations personnel" as defined by 121.400, he said he considered them as other operations personnel, the same as when an outside mechanic would touch the airplane and you would want to ensure he had a certificate in their pocket before you allowed them to work on an airplane, but they are not certificated. The SAT team came together to look at loadmaster training, as well as a lack of records since the record keeping was not there. Regarding how he conducted oversight of loadmaster training, he said you would have to go out and look at other carriers and formulate "best practices" since there was no guidance, and that was part of the problem. He contacted the Kalitta group to get an idea of how they trained their loadmasters, and he would work with Gumby on their training. Training hours for a loadmaster were defined in the Cargo Ops manual. There was no FAR defining the number of hours needed for loadmaster training. When asked if loadmasters should be certified, he said "that was way above my pay grade," but that there should be guidance, and they should be certified. He was told National was getting their loadmasters from other carriers.

The Cargo Ops manual was an accepted manual. The difference between and approved manual and an accepted manual was that an approved manual "basically had regulatory items in it." An accepted manual was similar to the GOM (general operations manual), with procedures and policies that were tailored for a company. The regulations said that you had to have a manual for every position in the company, and he considered the manual for loadmasters a requirement since "you had him loading the airplane."

The title of check loadmaster was something the company came up with to go out and monitor the loadmasters similar to how check airmen go out and look at the pilots, and just an internal program to the company. They had no FAA function. He said Gumby was responsible for the training of check loadmasters.

He said loadmaster training was under Gumby, and Gumby was in charge of keeping track of the loadmaster training. The Director of Safety was keeping the data for training of loadmasters, and the Director of Training did not oversee the training of loadmasters. The Director of Training only kept the training for the pilots and flight following, and did not have the training of the flight attendants. The other departments were all separate with regards to training records. He voiced his concerns, and they since hired more people to oversee the training. He said he did not have any concerns with Gumby overseeing the training and records of the loadmasters since, at

the time he was POI, they only had 3 or 4 loadmasters at the time. Gumby and Jeff Miller had responsibility for the Cargo Operations manual and made the decisions on what went in the manual.

He said National was in the process of coordinating the operations manuals with the Cargo Ops manual when he was POI. They were working on it, and they were moving everything into Jeppesen pubs.

To his knowledge, loadmasters were allowed on the main deck to check the loads per their checklist before and after a flight. He was not aware of any discrepancy between the Cargo Ops manual and the FCOM (flight crew operating manual), which prevented personnel on the main deck during flight. When shown the loadmaster checklist and the language of the FCOM, he said the two manuals did not "interface." He did not know if National was aware of that discrepancy in the manuals, and he was also not aware of it. He said, to his knowledge, loadmasters were only allowed to go down before and after flight to check the loads, to record discrepancies like broken straps or broken ULDs. He said there was a procedure for the loadmasters to log those discrepancies.

When asked how he would know loadmasters were performing their duties in accordance with the Cargo Ops manual when they were overseas, he said "I would not." He said he had not gotten any reports from the check loadmasters about their inspections of other loadmasters. Once the certificate began to move to south Florida, he was getting little if any data from National Airlines since they were primarily dealing with that CMO (certificate management office). Prior to the SAT review, they did not have a check loadmaster program.

He said he was familiar with WBAT (web based access tool) for the ASAP (Aviation Safety Action Program) and SMS programs. They choose to use that for data collecting under SMS, and they would send reports to him. Pilots were a part of the ASAP program, and they were working on flight attendants and dispatchers. Loadmasters were not part of ASAP, and that was the "airline's prerogative." FAA could accept an MOU (memorandum of understanding) for loadmaster ASAP. He said he would encourage ASAP participation.

He learned National was carrying heavy rolling palletized stock in early 2013, and was not aware of it in 2012. He was not informed by National, and it may have been someone in the office that said Kalitta and others were hauling them. He discussed it with Gumby, and Gumby said they were hauling them. Gumby told him the weight was within in the guidelines, securing and strapping of the vehicles, and he looked and the Cargo Op manual and it referred you back to the Boeing manual and Telair manual. He could not answer if National was referencing the Boeing and Telair manuals. He said Gumby taught it, and the Boeing and Telair manuals were available on the computers. He thought it was under the Telair floor section of the manual.

The FAA did not conduct a risk analysis when it was discovered that National was hauling these heavy loads, because the manual seemed sufficient. If they were following their manual there should not be an issue. Subsequent to the accident, there was a review of the manuals since they were not sure the loadmasters were referencing the Boeing and Telair manuals, and National took out the Boeing and Telair guidance and put it into their Cargo Ops manual for one stop

shopping rather than having to references separate manuals. The review was started there, and before it was completed the certificate moved to Florida. He recommended to Jeff Miller that they get a "DER" involved in the manual re-write to make sure the loadmaster, who does not have an engineering degree, could read it and apply it. The FAA was also a part of the manual review. He was not aware that National was strapping the heavy vehicles to the seat tracks until after the accident and he saw pictures of the strapping.

He was told the flight crews would be involved in the manuals integration, but the certificate moved so he did not know the status. National flight crew training on cargo was very basic and included damage to straps, etc. He never received a complaint or ASAP report from the flight crews regarding loads. He did not get any comments from the check airmen either.

When asked if the FAA was currently conducting enforcement proceedings against National, he said "yes," primarily because they had 5 MRAP (Mine-Resistant Ambush Protected) vehicles on the main deck, using tie downs on seat tracks, which could have exceeded seat track limits. It was a concern of his that National was transporting these type of vehicles, and that the FAA had not been able to conduct any enroute inspections. He also had an issue with the manuals and if they were complete or not, since the operators were following the manuals. He did not remember if the National Cargo Ops manual had seat track allowances in its manual when the Boeing manual did not.

He did not know how loadmasters were scheduled. While he was POI, they would bring a guy out of a hotel to help with the loading, and a separate guy would come out and fly with the crew. National was using loadmasters on the flights while he was POI. He said he was told that they used loadmasters from a "timeliness" standpoint to help get the loads completed sooner.

There were no duty time or rest requirements for loadmasters. National did have a fatigue risk management program, and the flight crews were included but to his knowledge the loadmasters were not. He was told the loadmasters were scheduled with the flight crew. He had no knowledge loadmasters were being scheduled up to 30 hours. He said loadmasters could get rest in the airplane in the bunk rooms, though he believed they typically did not use them.

He was not told by National they were carrying 18 ton MRAPs, and when he was originally heard they were hauling the military vehicles, he heard they were hauling "hummers."

He said National Airlines defined a special load as one over 20,000 pounds. When asked if there were special procedures for transporting special loads, he said "there are now." Prior to the accident, they would call Gumby for special loads since they did not have a special loads team.

He did not attend any specialized cargo training as a POI previous to the accident. Since the accident, they had been set up to attend the Boeing weight and balance course. They were trying to get all the principals of cargo operators to go. He was not scheduled to go anymore since he now was an FLM.

The non-resourced ATOS inspections would go to the FLM, and then to the regional office.

For an initial manual, the certification team would take the SAIs to review it, even if it was an approved or accepted manual.

He said there was no training for the flight crew on exactly how a load should be secured or strapped down when they reviewed a cargo load. Though he had been through multiple cargo classes during his career, there was no in-depth training for cargo operations for flight crews and they only taught basic information.

The Part 121 regulations say you have to have the manuals but the regulations don't actually say you have to follow them. He said one would have to "dig deep" to find out the regulatory issues. The responsibility for the manual was with the FAA, but for the new manual revision he would only approve it if it had been reviewed by an engineer.

Regarding the PMI/POI/PAI relationship with the FLM, they would have meetings, usually at the beginning of the quarter. They would pull some geographic inspectors off the floor to help them figure out how to get things done. Their problem was with overseeing a carrier that primarily operated overseas and the FAA could not get there in time to inspect the airplane, and the process to travel and get approval took so much time.

He said the FAA was very frustrated by having the non-resourced items in ATOS. When asked how you could resolve a non-resource item in ATOS, he said the regional office had to "buy off" on the non-resourced items, and he did not know the process beyond that. He said he asked the "DEPMs" if ATOS software would get to a point where a total number of non-resourced items would force a stop in operations, and he did not know if the software had that function. He said he let the new POI and PMI know what was going on with the non-resourced items at National.

He said National was trying to extend their passengers operations for flag domestic, which would require a domestic station as well as an international station. He did not know the status of that application.

The SAT was for training documentation and scales and weights.

He said he didn't know if the ATOS software would flag a limit of non-resourced items. ATOS would show an accumulation of the non-resourced items at the end of each year. The EPI's in ATOS were not necessarily aircraft specific. The non-resourced items would roll into the next quarter. ATOS would not necessarily track the non-resourced item as an aircraft specific item. He said he was the one who accepted the Cargo Ops manual that included the new loadmaster checklists.

He believed Paul did a ramp check when the airplane was in YIP (Ypsilanti, MI) for line checks.

He met National Director of Training prior to him coming to National, and he said he had faith in the changes National was making in management.

There was a chain of command, and his was to his FLM, to the office manager, to his FLM, and then to the regional office. The issue was the State Department that would not allow them to

enroute into theater. The change in venue was the biggest change that had made it difficult to survey the operations. If he still had the certificate, he would have raised his concerns about the accumulation of the non-resourced items, but the certificate moved to Florida.

The enforcement action was a result from the information coming out since the accident, and mainly regarded the tie down of the heavy vehicles.

Risk level actually went down after the reduction of airplanes at National. The change of venue is what had made it difficult from a risk perspective.

The information that had come out since the accident was the reason for the enforcement action. It was not necessarily the fact that they were carrying the vehicles but how they were carrying them.

Risk assessment was done with a word picture in ATOS. The reason the risk level did not go up with the addition of the new management was because the positions were filled with quality persons.

Zantop, who he had previously worked for, was a cargo operator. They only had bulk loading, and did not use straps at that airline. They had no opportunity to stateside surveillance, other that one time when they were supposed to fly into Chicago on a UPS contract, but that flight cancelled before they could get there. He said he would call over to National to get their schedule, but it was difficult to schedule oversight on supplemental carriers since they were not a scheduled operation. The FAA was not given permission to access their scheduling system to see when and where they could conduct their surveillance.

Personnel records and manuals were available to the FAA through National's ATMS system.

The basis to accept a manual was to use the same procedures they would use for an approved manual. He said most inspectors would use that approach, but it wasn't required.

Regarding pilot experience, he had a conversation with the chief pilot regarding low time pilots. National felt that, since the pilots came from the DC8 and had been with the company for a long time, they were valued employees wanted to give them a shot at flying the other aircraft. It was not illegal or against the regulations for low time pilots to be in the right seat, and he "did not have a leg to stand on" to tell National they could not hire low time pilots.

He had not had any reports on fatigue issues. He had no ASAP reports as far as loads, but he had one in that regarded using a guy for a cargo loading job who was over 65.

Regarding Part 117, he said "whether it is a passenger 757 or cargo 757 that goes down in a school yard, the damage is the same."

He felt he had the assets necessary to do his job while the certificate was under him. He said if the certificate had not moved to Florida, they were going to put out a bid for an assistant POI to assist him. He said he would have wanted to have additional training for cargo operations. They were getting a little anxious about not being able to survey the operation.

He said that the FAA could not require an operator to provide them with an airplane to conduct an enroute inspection since the FAA could not impose cost on an operator. He did not know why the State Department had objections to their travel into Afghanistan if they were just turning around and leaving on the same flight.

Interview concluded at 1540 EDT.