

ATTACHMENT 1

to Operations/Human Performance Group Chairman's Factual Report

Interview Summaries

DCA10IA001

Interview: First Officer Richard Irwin Cole
Date: October 25, 2009
Location: Northwest Airlines Training Center
Time: 1000

Present were: David Tew, Malcolm Brenner, David Lawrence- National Transportation Safety Board (NTSB); T.R. Proven –FAA; Pete Sahler – Northwest Airlines; Dan Coogan – ALPA, Christopher M. Brown - ALPA Representative.

During the interview, F/O Cole stated the following information:

He was 54 years old. His date of hire with Northwest Airlines (NWA) was January 3, 1997. He began flying with the civil air patrol at age 14 in a Piper Cub airplane. He flew in the ROTC at the University of Puget Sound. He went into the U.S. Air Force in 1980 and flew F-111s for about three years. He was an instructor at Mountain Home AFB training base. Neck problems caused him to leave the Air Force. His neck problem was that he had a disectomy which removed part of a disk to relieve pressure on a pinched nerve. He had not had any neck problem since. He did not receive a military disability. He flew for Pan Am from 1989 till 1991 where he was a F/O on the B-727. He worked for Express One International from 1991 to 1996 and was an S/O, F/O and Captain on the B-727. In 1997, he started at NWA as an F/E on the B-727 for 3 years. He was an F/E on the DC-10 for 3 years and F/O on the Airbus A-320 for 6 years. He had about 11,000 total flight hours of which about 4,500 to 5,000 were on the Airbus A-320. He was never a civilian instructor or check airman. He had no failures during proficiency checks. He stated that he had no previous accidents, incidents or violations.

His medical certificate required him to have glasses with him and he said he had his glasses on the incident flight. He stated that he had no medical problems during the previous six months and he was taking no medications. The local police gave them a breathalyzer test. He was drug tested by NWA after the flight [urine test and breathalyzer].

F/O Cole stated that there had been no major changes in his health in the past year. He characterized his health as good. His hearing was good. He had a personal physician but had not visited him in two years. He did not take prescription medicine. He drank alcohol and his last use before the event was probably on Sunday drinking beer while watching football on television. He smoked tobacco, about 1 pack per day. His last use before the event: he perhaps smoked a cigarette outside about one hour before departure. He did not smoke in the airport or airplane. F/O Cole said not smoking for 3-4 hours was not a problem for him. He might get “jittery” if he had not smoked all day. There were no major changes in his financial situation in the past year. He said he had no financial worry. The merger had initially improved pilot salary by 10%, but the NWA pilots had experienced a 40% pay cut earlier. He stated he was not in financial trouble. He did not experience any major changes in his personal situation during the past year. He lived at Salem Oregon. He had two children from his first marriage, a 14-year old daughter and 16-year old son, and relocated to Salem to be close to his children. He was currently in his second marriage, to a woman from Germany who also had a 14-year old daughter and 16-year old son. He was off the first of the month and at the end of the month and

the three trips he had were compressed a bit more together. He had 2 full days and three nights off before the current trip.

When he was not working, his typical sleep schedule was to go to bed between 2300-2400 and wake up about 0700. He generally slept straight through the night and felt rested with about seven hours sleep. When he was at home, he sometimes took naps in the afternoon, from 1300 to 1400 or from 1400 to 1500, if he did not receive sufficient sleep. This happened about half the time. He normally had no trouble falling and staying asleep. He has never sought medical assistance for sleep issues.

The captain was personable, nice, and had a good attitude. He was from Alaska but lived in Seattle where First Officer Cole grew up. On the first day they discussed backgrounds and hit it off well. He seemed like a conscientious pilot. He was concerned about the proper things, and made sure everything was done. He was a very nice man. In the event, they allowed themselves to get distracted and got deeper and deeper into it.

He was based at MSP. For commuting, he preferred to fly long trips—5 day sequences-- so he did not have to fly too many times back and forth between his home and his base. He usually commuted to his base on the day prior to beginning a trip and stayed in a hotel at his own expense. Two 5-day trips and a 4-day trip were a good monthly sequence. This month he had a good schedule: three 5-day trips with 2-days off between.

On Saturday October 17, he completed his second trip sequence at MSP, caught the 1430 CDT flight to PDX, arrived at PDX, drove about one hour to his home at Salem and arrived there about 1800 PDT. He ate dinner with his family, watched football on television, and went to bed between 2300-2400.

Asked about training on fatigue, he said that it was discussed at annual training but not in depth. They were not trained on how to recognize fatigue and deal with it. There was also discussion about distractions but not in depth, no human factors perspective. If you call in fatigued, the company will remove you from the trip with no questions asked. You are still paid for the trip. They will replace you and coordinate your schedule. They may return you to base. The policy is not to hold it against you, with the consideration that the company has legal liabilities if they were to force you to fly. He called in fatigued on his first trip ever about 12 years ago. The company was not very happy about it. There were no designated rest periods in the reserve schedule at that time. The crew was contacted at 1600 with an evening flight. He had been awake all day. They experienced a long maintenance delay at one of the enroute stops, arrived late at their next stop at 0300, and were scheduled to fly one more leg. All three flight crew members refused to fly the last leg due to fatigue. The company took them off the schedule but the local agents tried to pressure them to take the flight because the passengers had been waiting several hours. There were no ramifications of their calling in fatigued. He may have called in fatigued a second time but could not recall. He did not know specific names of other pilots who had called in fatigued or what their experiences might have been. After calling in fatigued, a person may get a couple of one day trips instead of the sequence they were assigned.

He did not mind staying at a hotel at MSP at his own expense. He stayed at several, although one local hotel gave pilots a good discount of \$50. It had a good van service and breakfast. This

month, his first trip had an identical schedule with an evening flight to SAN that allowed a same day commute. He was able to nap before the trip and it was uneventful. The middle trip began with an early departure so he arrived the day before.

On Sunday October 18, he awoke after about 7-8 hours sleep. He used the computer and watched sports on television in the morning with his stepson. About 1600 PDT, the two children from his first marriage and other friends of his children came to visit and his children stayed over for the night. He spoke with them, ordered pizza for dinner about 1900 PDT, watched a movie with his wife, and went to sleep between 2300-2400 PDT.

On Monday October 19, he awakened about 0530 PDT with an alarm clock to get the children ready for school and allow his wife to sleep late. About 0700 PDT, he drove all the children to school [they all attended the same high school]. The quality of his overnight sleep was limited and he was tired all day Monday, and probably took a nap in the afternoon. He made preparations for his upcoming trip [paying bills, read letters and prepared his clothes], chauffeured his children home, watched Monday night football, and went to bed at 2300 to 2330 PDT. He did not conduct company business over the weekend other than perhaps reading messages.

On Tuesday October 20, he awoke about 0330 PDT. His sleep was good but too short and he felt tired. He showered, dressed, drank coffee, and drove to the airport where he caught the 0630 PDT flight that arrived at MSP at noon. He slept on the airplane for about two hours, probably in and out of sleep but mostly asleep. Sleep quality on airplanes is not 100% but is restful. He was less tired when he arrived than when he departed and planned to take a nap in the reclining chairs available to pilots. There were several rooms available to pilots at MSP to rest. There was a quiet room with complete darkness and multiple recliner chairs. The recliner chairs lay almost flat and there were blankets and pillows. He normally did not use the quiet room because there were generally other crews asleep there, it was very dark, and one stumbled around and heard other alarm clocks. There was the main crew room with some chairs but it was noisy and there were no pillows. Finally, there were smaller side rooms where the pilot could close the door, sleep individually, and set an alarm without disturbing others. He liked these and they were available most of the time. However, he was unable to nap at MSP on Tuesday October 20 because of vacation issues. He was on the computer and telephone in the crew room computer area for about two hours. He was unable to access his e-crew account. He ate an early dinner at a Chinese restaurant at the airport consisting of General Tao's chicken. He was scheduled for a 1720 flight to SAN and checked in at noon. The flight was uneventful. He met the captain ("Tim") at the airplane. They departed on time. The flight was a little bumpy, maybe moderate turbulence, and the arrival was uneventful. They arrived at the layover hotel about 2000-2030 PDT and he went to his room. He was tired, did not eat, and went to bed at 2230-2300 PDT. The captain met his wife who had flown down from SEA for the layover.

On Wednesday, October 21, he awoke about 0600-0630 PDT. The quality of his sleep was good and he woke up rested and wide awake. He received about seven hours sleep. He made coffee and went on the computer to determine why he was off the computer system. About 1000 PDT, he went for a walk along the docks. He ate lunch around 1100 PDT at a restaurant across the street from the hotel, the meal consisted of fish and chips and soda. He returned to the hotel to

prepare for meeting at the 1300 van to the airport. The trip to the airport took about 5-10 minutes. At the airport, he purchased a small salad to eat on the airplane since they normally are not provided food. He ate it at the top of climb. He also ate some of the crew meal that became available, consisting of meat and potatoes with lemon pie. He normally drinks 4-5 cups of coffee per day. He drank 1-2 cups when he awoke and 1 cup on the airplane.

There had been many personnel changes within the company and everything was in a state of flux which was causing problems for everyone. Everything was changing causing a headache. He said that some procedures were just interim. New checklists may only be good for a few weeks. The F/O said that at the start of the trip, he found out he did not get the vacation time that he wanted. He had been locked out of the Delta computer system and had been on the phone for hours trying to correct that. The phone conversation occurred before the trip started. The bid had closed so he did not get what he wanted. He said their vacation slot was different from Delta's. The NWA pilots slot was in the first three months. Everybody was encountering problems. The company was trying to do the best they could but everything was changing. The NWA pilots were having the most changes. F/O Cole said he told the captain of his frustration at being locked out of a vacation bid. The F/O said he was going to have to take whatever they gave him. There are lots of changes - manuals, checklists, bidding, etc. Most of the changes were on the Northwest side because Delta was the acquiring airline. F/O Cole said there was no excuse for not monitoring the aircraft. He said he had to take blame. He said they had tunnel vision and were so "focused".

The incident occurred on the second day and second flight of his sequence. The first day and first flight of the sequence was from MSP to SAN. It was preplanned for the captain to fly the first two flight legs. The F/As arrived on the airplane when it flew into SAN and the airplane was about 20 minutes late arriving into SAN. There was a delay of about 20 minutes in getting a departure slot from SAN. The airplane was on autopilot during the climb and there were no problems during climb. They used headsets until they reached cruise altitude then removed their headsets. Climbing out of 400 feet and in managed mode, he said you normally would put the autopilot on. F/O Cole said he usually flew manually until the airplane was cleaned up. He would disconnect the autopilot at about 1,000 feet when landing.

When asked if there were any direct clearances, he said they followed the flight plan. He reported there was a little turbulence at 35,000. They elected to climb to 37,000. He recalled the optimum and maximum altitude was 37,000. Captain noted the airplane was "just not climbing". They were in open climb mode. At first, the climb rate was about 100 feet per minute. Later the climb rate increased to about 300 feet per minute. He did not recall any conflict in call signs with other aircraft. There was no congestion on the radio frequency. The amount of traffic was "no more than usual". The dome light was on bright Number 1 radio head was on the ATC frequency with the previous frequency in the inactive window. Number 2 radio was set on 121.5 and the company frequency was in the inactive window. He did not recall sending any company position reports. He filled out the flight plan in accordance with company procedures. He did not know what happened to the flight plan after the flight. He assumed it went into the trash. He said the toggle mike switch on the ACP affects speaker volume when toggled between hot mike and cold mike. In hot mike, the speaker volume goes down.

The last time he talked to Denver Center was when they were just East of Pueblo, CO which was shortly before they had a meal. He said that their meal was brought to the cockpit about 2 hours into the flight. He said that the captain ate his meal first. The F/O said he had a small salad earlier. He said the F/As did not normally come to the cockpit during flight. He said that they were only required to talk to the flight attendants before takeoff to determine if they were ready for takeoff. He was pretty sure that was about the last time that he had radio contact with Denver center. He said the Denver center was a large sector and he didn't expect to hear another call for 15-20 minutes. When asked if it was unusual not to hear from ATC for an hour, he replied "absolutely".

They were about one hour into the flight, maybe over Arizona, when the captain and he discussed the crew monthly bidding. One week earlier, they had found out the results of the first "merged" bid. The captain was fairly upset that he did not get the schedule for November that he wanted. He had been a senior pilot at NWA. The new system gave him different trips which caused him to have to come to work an extra day earlier. The captain did not get the trips that he wanted. F/O Cole said he got the trips he wanted on the bid. The new procedure for bidding was different from what they were used to at NWA. At Northwest they had gotten a paper schedule of trips. With the merger, they had to submit a request on the computer to bid for trips. They had a discussion of the bid. The captain was disturbed that he was going to lose about three days because he would have to come to work a day early for each trip. They discussed what the captain had done wrong in bidding. The captain was frustrated with his bid. The captain realized that he had made an error in bidding. He said it was a very complicated bid system. NWA had held clinics to help crewmembers on the bidding system. Some of the clinic instructors were often barely used to the system themselves. There were two editing programs to use when bidding. One program worked on a remote laptop. One editing program worked on a company computer. The F/O said he never thought he could be so distracted for so long. The captain had his computer out and his bidding information was stored on his computer. As an instructor, First Officer Cole was happy to assist when the captain indicated he needed help. It began as a light conversation but the captain pulled his computer out and it became involved. His tray table was folded halfway. He said this was more stable than full open. The focus of the conversation became more and more on the bid issues. The F/O said he showed the captain how to go through the bidding procedure. He said that the captain brought out his computer when they were over Eastern Colorado. The captain put his laptop on the desk. When asked if the computer being on the desk would block the pilot displays, he responded "yes". The captain's computer was turned so that the F/O could see the screen. The F/O said he later got out his own computer and showed the captain how he had structured his bid. They were still hearing radio calls and communications but never recognized that they were being called. There was chatter on the radio the whole time. The radios were set at normal volume for the regular radios, a little lower for 121.5 to avoid nuisance transmissions. They both monitored Denver center and 121.5 during this flight. The cockpit lighting was set on the bright setting. The F/O said both computers were open until they were contacted by the F/A, who "rang" them about five minutes before the scheduled arrival. He said the Lead F/A Bonnie asked when we were getting in.

F/O Cole said they realized they were over MSP and had missed their descent point. It was dark outside the airplane. F/O Cole contacted ATC although he did not recall what frequency he used to contact the controller. The F/O said "someone" [he did not know who] gave them the correct

radio frequency. He thought he might have made contact initially on frequency 121.5. When he contacted ATC, he did not have to adjust the volume. ATC asked them for verification and asked for our altitude and position. They did not ask for an ident. Within a minute, they gave us a turn of about 20-30 degrees. The F/O said he initially thought it was a turn back to MSP. He later read it was an identifying turn. ATC asked for their fuel state but did not initially ask why they passed MSP. Later ATC asked “nature of problem” as they were being vectored. We said “crew distraction”.

The captain said his MCDU was blank – nothing was on the screen. When they were cleared back to MSP, the F/O programmed an arrival and then ATC changed the arrival. ATC gave them a heading and vectored them to runway 35. He had to put MSP into the MCDU again as the destination so he could program the arrival. On the mode display, “airports” was selected and this allowed them to see Eau Claire airport.

He stated that with an ACARS message receipt, normal messages do not print out – only weight data printed automatically. There was no aural tone associated with an ACARS message. On the right side of the lower screen of the ECAM, you would get an indication of a company message or an ACARS message. A message would not automatically show up on the screen, you had to “pull it up”. After they were back in radio contact, the F/O said he went to “pull up” ATIS info and noticed there were several messages on the lower screen. All he saw were the headings of the messages which said “contact ATC” or “ATC is looking for you”. The F/O said he inadvertently pushed the “delete all” button which erased all the messages. Company procedures for NORAD were to try the ACARS and ask someone in the area to try and make contact. The F/O did not know if the company did these things.

The captain told the F/A that we would be about 20 minutes late. He later told FA Bonnie what had happened. Neither pilot napped during the event trip.

Only about five A-320 aircraft had SELCAL capability – they were the extended range over water airplanes. He said that the incident airplane did not have SELCAL. Their fuel when they landed was about 10,000 lbs. Pilots were paid when they were off for fatigue. The only regular communication with the F/As was when they confirmed the F/As were ready for takeoff. They would normally give the F/As a double chime signal when they were leaving 10,000 feet or starting below 10,000 feet. For a bathroom break, they would call a F/A so they could prepare for it. The Lead F/A called a F/A from the back of the plane and a cart from the galley was placed across the aisle. A codeword was given. The pilots would check that the right people were in place. A F/A would go into the cockpit when a pilot exited. When the bathroom break was over, the F/A would look thru the viewer, the pilot would enter the cockpit and the F/A would exit. He did not recall when the food trays were removed.

Bid results came out as a list of everyone and the trips and dates they each had. On the trip system now he could pull up his line when he opened the program as it automatically downloaded results. The captain said he had gotten three early starting trips and would have to come to MSP a day earlier for each trip.

He thought at least three ACARS messages had been sent to them from the company. Radio duties were;

- On ground, F/O talks to ATC
- Captain talked to pushback crews
- On runway, NFP talked
- Inflight, NFP operated radios – although other pilot talked while you ate.

Multi function control and display unit (MCDU) inputs were done by FP. Both pilots acknowledged inputs. The captain programmed the FMS for the flight to MSP. This was normally done by the FP and checked by the NFP. The NFP performed the cockpit preflight. FMS was programmed for the Sketr arrival but was not programmed for a runway. The autopilot will step from point to point on the programmed flight plan until reaching a discontinuity, at which point the airplane would go to a heading mode and the current heading but there would be no aural chimes. The indicator light for heading was green. When they were over MSP, the weather below was overcast and they did not see the city lights. They did not see MSP on the PD but did see the Eau Claire airport. When asked what his position was, he referenced the distance and radial from Eau Claire. They may not have flown directly over MSP.

They both had 121.5 frequency on the #2 radio. F/O Cole did not hear anyone on the frequency after the F/A called. He broadcast on the frequency and someone gave him a frequency to call.

The new bidding system was nothing like their old bidding system. You needed a computer to bid or see what you got. As a commuter, he did not have the “luxury” of attending classes. The last couple of months, there had been a desk with knowledgeable people to help with problems. The captain was not complaining of a problem with his bid due to any financial concern. He was concerned with a loss of days at home. He stated that the bidding system was complicated and frustrating. The meals they received were left over from the first class service. He said there were no procedures to check the SELCAL.

With regards to the Northwest crew room, he said there were a lot of new computer areas they were using:

- Got NWA company emails on NWA site
- Check flights on the Delta system
- To list on a flight, they needed to go to one of three sites depending on which computer you were using

Interview: Captain Timothy Cheney
Date: October 25, 2009
Time: 1334L – 1510L
Location: Northwest Airlines Training Center

Present were: David Tew, Malcolm Brenner, David Lawrence- National Transportation Safety Board (NTSB); T.R. Proven –FAA, Pete Sahler – Northwest Airlines; Dan Coogan – ALPA; Christopher M. Brown - ALPA Representative.

During the interview, Captain Cheney stated the following:

His full name was Timothy Brian Cheney and he was 53 years old. His date of hire at Northwest Airlines was 11/18/1985. He began flying as a private pilot in Anchorage, AK, flying for Sear [no longer in business] flying Twin Otters and turbo Beavers and his own private float plane. He flew air cargo for Ryan International on contract with Emery International Airlines. He flew F/E and F/O on the Boeing 727, then upgraded to captain, but never finished qualification. He was hired by Republic Airlines on 11/18/1985 and flew as F/O on the DC 9, and F/E on the Boeing 727. Republic merged with Northwest Airlines later. His total flight time was estimated at over 20,000 hours. On the A320, he flew 3-4 years as an F/O, and 7 years as captain. His estimated total A320 time was about 10,000 hours with about 7,000 hours as pilot-in-command (PIC). On the DC 9, he was an instructor for 1 year at Republic. He stated he had no previous accidents, incidents or violations. He had no failures of check rides or proficiency checks. He stated that the only limitation he had on his medical was to have reading glasses, which he had on the incident flight. . .

Captain Cheney stated that his health was excellent and that there had been no major changes in his health in the past year. His hearing was OK. He used reading glasses. He did not use prescription medicine. He drank very little alcohol and did not use tobacco. He drank about 3-4 cups of coffee per day,. In the 72-hours before the event, the only medication he took was his daily aspirin because he had irregular heartbeats. He had a stress test performed because of the irregular heartbeats, but nothing was found and the irregular heartbeat was not on his medical record. There were no major changes in his financial situation in the past year and his finances were OK. The NWA Chapter 11 action made a major financial impact and had been a distraction that created a “bitter and angry” environment but he tried to leave it out of the cockpit. Everyone was very bitter and angry about it. There had been no major changes in his personal life in the past year. He had been married for 27 years to the same spouse and had two grown children, a 23-year old daughter and 19-year old son. Neither of his children lived with him. His wife was a nurse and worked part-time. They lived near Seattle, WA. He stated that his vision and hearing was good, took no prescription drugs. He did take dextrol in the past for urination, but not in the last year. He does drink alcohol, does not use tobacco, and drinks 3 cups of coffee per day. 72 hours prior to the incident flight he took one aspirin. When not working, his typical sleep schedule was to go to bed at about 2330 and awaken about 0730. He normally got up once during the night around 0300 for a toilet break. He tried to obtain six hours sleep per day. He did not nap, and wished he could. He felt rested at the time of the event. On overnights, he stated he remained on pacific coast time (“on my watch”).

Regarding sleep problems, he went to Alaska Sleep labs about 15 years ago because his wife complained of his snoring, and was told he does not have sleep apnea and he was not diagnosed with sleep apnea. He voluntarily began sleeping with a CPAP device to control snoring for his wife's sake. He has not otherwise sought medical assistance for sleep issues, but not on trips, and he did not bring it on the incident trip. He "guesses" it helped him sleep. He stated he had no personal problems "other than this event." "It's been a huge change".

For commuting purposes, he bid trips that left late in the afternoon and ended early in the day so he could jumpseat to MSP without having to overnight there. The Northwest Airlines policy was that if you booked a jumpseat up to 10 ½ days in advance or listed as a passenger with a back up flight available, and you were bumped, the company would provide you with a must ride priority on the next flight. However, the new Delta Airlines policy that was now being implemented was more complex, required booking trips from 1 ½ to 3 ½ days in advance, was not as user friendly, and might result in a pay cut if no jumpseat was available and the pilot had to ride in a backup seat.

He stated this was his first trip with this particular F/O, and thought he was "ok". He said "I've flown with better before." When asked about suggestions for the F/O to be better, he stated that everyone was struggling with the new Delta Airlines procedures, but he thought the F/O could have been better on the preflight items. Regarding the preflight, he stated that the "Delta procedures are so culturally different than ours" and "we're still trying to figure out who does what". The non flying pilot versus the flying pilot have different procedures, and are different than "how we used to do" them. When he was flying, it was the F/O's duty to do the overhead cockpit items, but they were not done well by this F/O. He stated that he was the flying pilot for both legs [day one and the incident flight]. He stated that there were no minimum equipment items (MELs) on the airplane.

He stated there were no fights, they did not fall asleep, they did not argue. But they did do a good job coming in. He stated they did not watch the press info until they got back to their home. He stated that "there's no excuse", and "I let my guard down", and "I wish I could explain why". When asked if he ever nodded off, he stated "no" and felt well rested. He stated they talked about vacation bidding, procedures, and insurance but could not remember if they spoke about insurance on this particular flight. He stated that with the merger "there's a lot going on", and "I just don't understand this". He stated that "when things get quiet" in the cockpit, you notice it, and said they heard "chatter" on the radio.

His October bid schedule was good. He had about six days off-duty before this trip. His sleep was average. He did outside projects, house projects and errands around the house. On Monday night, October 19, he went to bed at about 2230 On Tuesday October 20, he awoke at about 0400 after going the night before. His sleep must have been okay because he was awakened by the alarm. He caught a 0630 PDT flight from SEA and arrived at MSP about 1130 CDT. At MSP, he spoke for about one hour with a preferential bidding system (PBS) instructor about the bidding process. . The instructor was helpful. Captain Cheney then sat in a recliner chair in the crew room. Some Delta Airlines crew schedulers were there and he spoke with them for about 35-40 minutes about Northwest and Delta company differences on jumpseat policy. He then

checked in for his flight and went to the airplane. The preflight duties were normal. The airplane arrived in SAN about 1930 which was about 30 minutes behind schedule). His wife had come from SEA to join him for the SAN layover and he met her in the hotel room. The hotel drove them to a nearby restaurant where he “ate too much”: a hamburger, two tacos, and a beer. They walked back to the hotel, they watched the news, and he went to sleep about 2230-2300 MDT.

On Wednesday October 21, he awoke about 0730 MDT. The quality of sleep was pretty good. He and his wife walked about 20 minutes to a restaurant for breakfast, then returned to the hotel and sat on the deck. He made a 1300 pickup to depart the hotel. He sometimes had difficulty falling or staying asleep at hotels, which could be noisy. He usually turned on the room fan to mask the noise. However, the SAN hotel was good,.

He characterized workload on the event flight as normal. He had never received training on fatigue but read some material on his own. He had never called in fatigued. He did not know any pilot who did call in fatigued although he heard it happened. Pilot morale was better now than it was three years ago. It was average. There were many changes happening. Regarding the drug testing, he clarified that Delta airlines did drug test the crew. On the cockpit overhead flow during preflight checks, the F/O is suppose to put the seat belt sign “on” and the parking brake was left “off”, so under the new Pilot Flying versus Pilot Not-flying duties, it was all new to them. There had been four phases of operational manual changes since the merger. He stated that in the “old system”, the captain always did the overhead preflight, and the flows were now different and this was a “cultural” change. In MSP, the F/O did not perform the overhead flow as now required, and in SAN, he forgot portions of the flow as well. Captain Cheney “We’re all learning these procedures”, but he thought the F/O “could’ve done it better”.

There were no problems with the aircraft, but did note that it was slow to climb to from FL350-FL370, and in “open climb” went up only 200 fpm at first, but then continued and everything normal at cruise flight. He used his headset up to top of climb, and did not use them in cruise flight until the top of descent. He was not exactly sure where the volume on the speaker was set, but he did hear radio transmissions, and the F/O was working the radios.

He stated the non-flying pilot was responsible for the radios under the old NWA procedures, and that had not changed with the new Delta procedures. On the SAN-MSP leg, he stated that the radio panels were set up with the ATC frequency selected on the #1 radio, and out of 10,000 feet he selected frequency 121.50 on radio number 2, and “believes” he had it on the whole time. He took his headset off a little before reaching cruise altitude. He has had the opportunity to simultaneously use the speaker and headset.

He stated that at cruise altitude FL370 [he was not sure how long after reaching cruise altitude], a F/A called and asked if they wanted any extra meals. They said yes and also asked for a restroom break. When he left the cockpit, he told the F/O “you have the aircraft”. He then came back into the cockpit and they both ate their meals, put the meal trays on the floor, and then a discussion started about a brand new bidding system. The captain said he thought he started the discussion. He asked the F/O “how’d you do on your bids”. He stated that he was not happy with his bid results because he did not receive the bid he expected. He asked the F/O “you commute, how’d you do on yours”. The captain said he then pulled his laptop out, and put it on

his lap. He had a copy of the bids on his laptop, and noted that most all the changes they had seen were in electronic format, and required a laptop. He pointed out his bids to the F/O, and after 4-5 minutes of talking, the F/O pulled out his laptop. The captain stated he then folded his laptop and placed it on top of his flight bag located next to his knee, and spoke more about the bids as the F/O showed him his bids. The captain then pulled out his table and started taking notes, and never heard a radio call though he heard “chatter but never a radio call”, and that “no one called us” that he was aware of. He stated that both laptops were out, but with the laptop out, he could see the display. He didn’t recall what he last saw on the ND. He stated that it was supposed to be a conversation on how to bid, and was never intended to go that long. “This was only suppose to take 10 minutes”, and he was “blown away” with how long the conversation lasted. He said he felt embarrassed about this. He said “I was wrong” and “let another force come from the outside and distract me”. He stated that they continued to talk about bidding for what he thought was 15 minutes, then a F/A called up to the cockpit and asked what time they were going to land.

He then looked at his MCDU and saw no flight plan, flipped his NAV display from Arc to Rose (compass), saw Duluth to the left, and Eau Claire to the 2 o’clock position with no estimated time of arrival (ETA) shown, and white lines along the FMS display. He said after 24 years of flying “I’ve never, ever, been in this situation”, put his “passengers at risk”, and “you don’t know how sorry I am”. When asked about his displays, he said he kept “airports” up on his EFIS display to show where the airports are. He stated that he then realized what had happened and told the F/O “we just flew over the Minneapolis airport.” He told the F/O to contact ATC because “we need to get this thing on the ground”. He could not recall the time frame because he was “in shock”, but his first thought was to fly the airplane and get on the ground, and “we’ll explain afterwards.” He stated that the F/O did a pretty good job and got them back onto the correct ATC frequency. When the F/A had asked “when are we going to get there”, he didn’t answer. He later got on the passenger address (PA) system and said “they are taking arrivals from the east, we should be on the ground 25-28 minutes” and did not further explain the situation. He said to the F/O, “they’ll find out on the ground”. The F/O was working the radios and the captain was flying. He said he did not initially notice the ACARS messages on the ECAM. After he spoke on the PA, and while being vectored to the Eau Claire 8 arrival, he sent a message to dispatch saying “we’re inbound”. At that point he saw the messages, but did not read them as they were heading back to MSP. After contacting ATC, they started getting vectors. The F/O had put the arrival in, but then ATC changed the arrival and he “stuck” that one in. He said he could not recall all the vectors they were given, but recalled ATC mentioned possible holding. He said he figured the vectors were to verify they were actually flying the aircraft. He asked the F/O to let ATC know “everything’s ok”, and he said something about “flight crew distraction” to ATC.

With reference to position reports, he did use a specific prompt in the MCDU. When texting to dispatch, he used a free text function. When dispatch sent a message, a message would appear on the ECAM, but he did not initially notice a message on the event flight. He stated that on the B-757 airplane, there was a chime when you received a dispatch message, and stated “I sure wish we had one of those today or I wouldn’t be sitting here” today. Captain Cheney said “It’s no excuse for what we did, but it sure would’ve helped”. He stated he did fly the B-757 aircraft

with SECAL, but never really used SELCAL on the Airbus, and was not sure if they even had it on the aircraft.

At the top of climb, he stated that he believes it was “Bonnie” who came up during first break. On the flight plan page, he stated that an arrival was programmed into the FMS, and that he “put it in”, but did not enter a runway. He stated that he didn’t recall if they received any “direct-to” routings.

He stated that after he switched his pilot display he saw Duluth and Eau Claire. He did not see MSP and knew he was past it.

He stated that he had used the help of the bid helpers, and had utilized the “practice bid” but did not do very well on it, had downloaded the bid practice, and mentioned he had a MAC and F/O had a Dell and the download doesn’t work on a MAC.

When asked about the disposition of the flight plan, he didn’t recall if Rick had done a top of climb fuel computation. The Captain did do a mental fuel computation and compared it to the MCDU, but couldn’t remember if Rick had written anything. The Captain also doesn’t know what happened to the paperwork. The Captain said a chief pilot entered the cockpit in MSP and Captain believes he may have taken the paperwork.

Regarding company reports, he stated that after a conversation with a dispatcher on his jumpseat, he asked about position reports, and the dispatcher said “don’t send us something unless it’s absolutely necessary” because “we’re getting inundated with those things” and because they already track the airplanes, know the fuel and know where you are at. He did not send one, and didn’t know if the F/O had sent one.

He stated he and the F/O were drug tested on arrival in MSP.

Interview: Bill Trinka, Dispatcher
Date: October 26, 2009
Time : 1323L
Location: Northwest Airlines Training Center

Represented by Murray Auger, Director of Dispatch Service, Northwest Airlines

During the interview, Mr. Trinka stated the following:

His full name is William J. Trinka. He started with Republic Airlines on November 26, 1979 where he was an assistant dispatcher for six months before becoming a full time dispatcher. He stated that he was the dispatcher of NW188.

He was first alerted to a problem with NW188 when a fellow dispatcher advised him that a crew was relaying a “courtesy notification” to have NW188 come up on an ATC frequency and the

fellow dispatcher had sent the NW188 crew an ACARS message. He checked his flight explorer display screen and noticed NW188 was approximately 30 miles southwest of Sioux Falls, SD. On his display screen, the flight appeared to be on course and at FL370. Sioux Falls was about 120 miles and 40 minutes flying time to MSP, and at that altitude everything seemed normal to him. He did not know how the fellow dispatcher came to know that NW188 needed to be contacted. He also stated that there is no way to contact the aircraft via voice frequency unless the aircraft was actually monitoring that frequency, as would be required if the ACARS was on MEL.

About 10 minutes later, he received a teletype from another assistant dispatcher on duty, who had sent another ACARS request to NW188 to come up on a frequency. When he looked at the message, he noticed on the flight display that NW 188 was between Redwood Falls and Sketr intersection. Sketr was approximately 50 miles from MSP. He stated that most all the flights he was in control of arrived over the Sketr intersection, and he expected NW188 to hold at the Sketr intersection, and that most flights were already taking a 15-20 minutes hold before moving on to MSP. He noticed that 188 had flown past Sketr at FL370 and was flying directly to MSP. At that time he became concerned and walked over to his supervisor's [Dave Francisco] desk and asked them if they had any additional information. He was told that they had received a call from MSP center that the flight was not talking to anybody.

He believed that his supervisor had received "several" calls from MSP center about NW188. He did not know how far back the messages had been received, but that there had been "numerous calls" regarding NW188. He had observed 188 overfly MSP at FL370, and was still very concerned about 188 and began second-guessing ATC and expected them to ask for souls onboard and fuel to exhaustion, which he had begun to research. He returned to his supervisor's desk and provided this information. ATC never asked for this information.

As he relayed this information, there was a Delta security coordinator on the line with the Domestic Event Network (DEN), who was communicating with ATC facilities. The security coordinator then got off the line, and said he had heard that NW188 was now in contact with ATC. He also advised that ATC was planning on issuing several turns to NW188 during the descent back to MSP via the Gopher arrival. They did not tell him why.

His supervisor sent a text page to the director of dispatch Murray Auger but did not get a reply. . He advised Dave Francisco that he would try and give Murray Auger a phone call, went back to his desk, and asked Daunte MacLachlan, who was giving him a competency check, to query the NW188 aircraft computer. This query was a message sent to the aircraft and a fuel on board (FOB) report would automatically be sent to the dispatch desk. He stated he believed the fuel came back as 10,600-11,200 pounds of fuel. Mr. Trinkka then contacted his supervisor with this information. Mr. Trinkka stated he was getting a competence check during this event. When the flight was over Gopher, he again queried the aircraft for fuel onboard, which was then approximately 8,600 pounds. He then contacted MSP ATC traffic management [Scott Schillerud] in the tower and asked him to ask the controllers to protect NW188 from any ATC initiated go-arounds. Regarding his request to the ATC tower to limit any ATC initiated go-arounds for NW188, he stated his desire was to let ATC know that this particular aircraft would

need priority on arrival. He stated that during holding into MSP, he would be prompted to fuel “query” the aircraft, but the procedure was not normal.

While the NW188 flight was between Gopher and Farmington VOR, which was basically a long downwind for landing,, Mr. Trinka received a call from one of his NW sector managers, who said he had received a phone call from the NW Flight Operations Chief Pilots office who asked him to send an ACARS message to the crew of NW188 to advise the crew to remain in the cockpit after they blocked into the gate, and to not send the message until the aircraft was on the ground. Once he received an “on” time, he sent the message. He did not receive a reply from the aircraft.

After the aircraft blocked in, he sent a Dispatch Incident/Diversions Report, which was distributed to management.

Calls from ATC regarding a NORDO are routed to the Chief dispatcher or the ATC Coordinator. Chief dispatchers support regular dispatchers, and Mr. Trinka stated they sometimes rotate between positions. There was one domestic chief dispatcher on the NW side. There was no set procedure about who speaks to who when a call comes in from ATC, so they route it through the Chief dispatcher who will then route it to the aircraft dispatcher.

Messages between dispatcher desks are done by text. He estimated that 6 or 7 messages were sent to the flight. He stated that there is no way for a dispatcher to know if an ACARS message was received by the crew, and they use ARINC (service provider) to relay these messages. All messages are assumed to be received unless they are notified by ARINC. Messages are sent via a data frequency automatically set on the number 3 radio. The weight and balance was sent to the aircraft separately, not from dispatch, and would print out automatically. The company was looking into getting ACARS text messages to print out automatically. Mr. Trinka stated that NW has its own designated radio frequency around the country, and flights can call dispatch directly from the aircraft, but only on that frequency and not on 121.50.

Mr. Trinka stated that he believed other dispatchers were trying to relay messages to NW188 through the aircraft they were working, but there was no formalized procedure. All company dispatchers were located in Atlanta and were centrally located on the same floor with the Chief dispatchers and ATC coordinators. Mr. Trinka stated that there were about 10 domestic NW dispatchers on duty that day, and that he was working 26-28 flights that day, and there were approximately 10-15 flights that were airborne at the time of the event. He said dispatchers are set up to cover specific geographic regions. Mr. Trinka stated that there was one MEL on the aircraft regarding a lavatory door, and that there were no significant route NOTAMS for the flight. The first time he learned that NW188 was NORDO was when he was about 40 minutes from MSP.

There are no formal procedures in the dispatch manual regarding the line of communications to the dispatcher on record when a flight is NORDO.

Mr. Trinka stated that he is required to jumpseat yearly on a Northwest flight, and has seen the ACARS messages received in flight.

Mr. Trinkka stated that the merger transition for dispatch from MSP to ATL went “smoothly”. He also stated that dispatchers, airport ops (ACS) , maintenance control, crew scheduling, operations planners, and centralized load control (CLC) are authorized to send ACARS messages in flight.

He stated that he thought there was possibly a way to send a weight and balance message directly by inserting an “indicator” on the weight and balance and that would sound a “ding”, but he was not sure and stated that the company was checking on it. When asked what other information was available for the “query” call to the aircraft, the stated FOB, position, flight level, altitude, holding information. He was asked about SELCAL, and stated that when the flight had overflowed MSP, he asked the chief dispatcher to do a SELCAL on the flight. When asked about the SELCAL frequencies, he tried 131.9 or 131.7, but wasn’t sure, and believed it was through the company network.

Interview: David P. Francisco, Chief Dispatcher
Date: October 26, 2009
Time : 1509L
Location: Northwest Airlines Training Center

During the interview, David Francisco stated the following:

He stated that his name is David P. Francisco. His date of hire at Northwest was July 27, 1990. He was accompanied to the interview by Murray Auger, Director of Dispatch Service, Northwest Airlines. He graduated Embry Riddle at age 22, and joined Business Express Airlines as a dispatcher. On October 21, 2009 he was the Chief Dispatcher, and at about 0030Z, he got a call from the Minneapolis, St. Paul (MSP) Air Traffic Control (ATC) Sector Supervisor requesting that he send a message to Northwest flight 188 for a NORDO (no radio contact), and the frequency to send was 124.87 MHz. He sent the text message via ACARS to the aircraft and sent a copy to the dispatcher for the flight 188. He stated that Northwest gave the chief dispatcher’s desk phone number to all of the Air Route Traffic Control Centers (ARTCC) centers so that ATC messages to specific dispatcher’s could get relayed to the dispatcher for the particular aircraft. He stated that this was based upon a “script”, and the process worked well. He said there is no way for the chief dispatcher to know if the aircraft had received the message unless the dispatcher of record advises him that the aircraft responded. However, if the ACARS message “rejects” from the aircraft, the chief dispatcher would get that rejection. By the lack of an ACARS rejection, the chief dispatcher knew the cockpit had received the message. He stated that he had no rejects on any of the 3 messages he sent. Regarding SELCAL, he stated that he attempted to SELCAL the airplane after the second or third call from MSP center. He said that he sent a third ACARS message that was more urgent, and got up to speak with the dispatcher. He stated that he made 8 SELCAL attempts across the two company frequencies (131.9 and 130.7) that the crew may be monitoring. He stated that had he sent the message as a FUV (free uplink voice) versus FUT (free uplink text), it may have initiated a SELCAL alert to the aircraft, but he was not sure about that. He stated he was not sure if the chime was active on Northwest Airlines airplanes. He stated that he saw, during the course of the event, that 3 other dispatchers

had sent messages to the aircraft, and he said that this was not unusual. He stated that the day was very quiet, and that this event did not interfere or burden him. He stated he was not aware of what the ARTCC procedures were regarding NORDO flights. He also said he did not know that the aircraft had flown through Denver center as a NORDO. He realized that there was a problem when the aircraft flew over the holding patterns at Sketr intersection at FL370. He said other airplanes were holding at altitudes “in the mid to upper 30’s”. He stated that there were only about 4-5 airplanes in holding patterns over Sketr, but it was busier on the Eau Claire arrival side. He stated that the dispatchers file an incident/irregularity report for incidents such as this, and would provide NTSB investigators with a copy. He said that the dispatcher for the particular flight is responsible for filing this report. He stated there are hard copy records of the ACARS message, and that the last message received from the aircraft was at 01:25Z. He stated that he had the opportunity to SELCAL (selective calling) the airplane using the VHF radio. He attempted to SELCAL over the company frequencies on the possibility that the crew would monitor the SELCAL frequency. He said that when a dispatcher needed to contact an aircraft in flight, they would “reverse the flow” and would contact the ATC center and would have them contact the airplane and advise them to call the company on the company frequency. Regarding the FUT/FUV inputs for ACARS texting, he stated he has not tried it because of the possibility of “locking up” the computer. He stated that they received about 4-5 notifications of a NORDO flight per day, and that weekends seem to be the worse. He stated that there were no problems with the dispatch office move from MSP to ATL after the merger. He said the only difference is that in MSP he had a Northwest Dispatch Director sitting next to him, and in ATL there was the DEN (Domestic Events Network) coordinator sitting at that position. He said that there was a little “pushback” when the DEN coordinator in the ATL office contacted the DEN to speak about a Northwest flight (since there was no NW director on duty in ATL). This was resolved and they advised that the flight was talking with ATC. He said that in total, there were about 7 ACARS messages sent and 8 attempts on SELCAL for a total of approximately 15 individual attempts to contact the flight. He stated that the DEN had advised them they were at combat ready status to launch the fighters, and that they were within minutes of launching an intercept.

Interview: Vance Harris, Northwest Airlines Principle Operations Inspector (POI)

Date: November 19, 2009

Location: NTSB (by conference call)

Time: 1400

Present were: David Tew, Malcolm Brenner, David Lawrence- National Transportation Safety Board (NTSB); T.R. Proven –FAA (by phone); Pete Sahler – Northwest Airlines (by phone); Dan Coogan – ALPA (by phone)

During the interview, Mr. Harris stated the following information:

He stated that his full name is Vance Martin Harris and his date of hire with the FAA (Federal Aviation Administration) was June 1984. Prior to the FAA, he said he was an Army Reserve technician and flight instructor in fixed wing and rotor wing tactics at Willow Grove Naval Air Station just outside of Philadelphia, PA.

He said he had been the temporary POI at Northwest Airlines for a year and a half following the death of the office manager and the previous POI assuming the position of office manager. He said he bid on the POI position and was selected as a temporary POI because of the impending merger with Delta Airlines. He had previously been an assistant POI For Northwest Airlines for nine and a half years, was a DC-9 Aircrew Program Manager for six years, and for two years was the Partial Program Manager on the DC-9 [the position was similar to an assistant APM and the title was utilized due to the size of the program]. He also spent 1 year as an assistant POI as soon as he came onboard from the FSDO (Flight Standards District Office) and served there for three years before going over to the air carrier certificate office. He stated that he was not qualified on the A-320. He said that after the merger of Northwest and Delta, he would be the Assistant POI to the Delta POI in Atlanta, but would remain based in MSP because of the significant infrastructure that would remain in MSP.

He stated that there had been a Joint Transition Team (JTT) formed for the merger. He said he was in charge of the day to day operations of the airline, and that David Gerken would be in charge of merger related events. The JTT handled the majority of the merger issues, but there was overlap between the JTT and operations. The JTT had been in effect for over a year. At the inception of the JTT, there were meetings with Delta Airlines, Northwest Airlines, his office, and they also contacted the USAirways FAA office to learn the best way of going about a merger to make it go more smoothly. One of the recommendations they had was to separate the oversight of the merger portion and the day to day operations. He said there was an “unbelievable” amount of information flowing across the groups. He said that at the very beginning, they had to figure out how to integrate the flight operations manuals, procedures and philosophy, and this process began back in January. He said that a comparable process was being developed at Delta Airlines and his office had developed a close coordination with Delta Flight Operations. He said that they decided to take a “phase of flight” approach to this integration. He said that they put together an “A-team” [analysis] made up of Delta and Northwest pilots, instructors, and management pilots and ALPA. This team looked at impact changes from both carriers on training, and other divisions, looking at differences and similarities of the various phases of flight, and would adopt a “best practices” approach. He stated that Phase one kicked off in early February, 2009 when Northwest management personnel came to MSP to brief him of the Phase one changes. Phase one was focused on pushback, climb and cruise because it presented the fewest differences and allowed the pilots to “test the water” on the evolvement of the process and minimize the changes. This decision for the changes came about from Delta, Northwest, and management and was presented to the POI. After the changes were presented, there was an approval process, then it went to the printers, then to the pilots. Phase one implementation went into effect April 1, 2009. It was “their plan” and the FAA would review it. Since Delta was the acquiring airline, about 75% of the changes would impact the Northwest group, and 25 % would impact the Delta group, and “this was just the way things worked out.” 2 months later was Phase 2, and 2 months later would be phase 3, and currently they were in Phase 4 (which began October 1, 2009), and the final phase would begin January 1, 2010 when a single operating certificate began, if everything went according to plan.

With reference to the Flight Operations Manual (FOM), Phase 4 was the largest of the phases, and included approximately 142 different items. Some of these items were minor, related to certain forms to fill out during events like bird strikes. He stated that he got verbal feedback

from APMs and also reviewed comments from oversight activities through debriefs, pilot deviation information, and ASAP feedbacks. After a month and a half into each phase, Northwest would brief them on their view of the operational changes. He said that from April 1-September 30, 2009, there were 10 Element Performance Inspections (EPI) performed which dealt with 88 separate activities, asked 1356 questions, and 3.9% of the questions documented “minor items not done correctly (i.e. Pilot said something wrong on a checklist, got out of sequence on a flow, etc). The preceding six months, there were 1574 questions asked, and 1.7% negative response was received. The increase in negative responses was due to changes in the way the flight deck was being managed. He stated that he felt “very confident that the airline was running a safe operation”. This was the same type of information they got from the ASAP reports. He said to date this year they had 4,973 individual pilots reports concerning 3,188 events. To date, he said they got about 6-8 “comments” from ASAP reports per week (out of 120 ASAP reports) regarding issues with procedures or philosophy related to the changes. One of the common concerns was related to the amount of information coming to the pilots. He said that when his inspectors were out observing line operations, the pilots were doing a “solid job”. He said he does not have any specific concerns regarding the flight deck operations, but he was glad they were in the final operational phase, since phase 5 would not have any procedural changes to the flight crews.

He said that “change is difficult”, and Northwest Airlines philosophy was different than Delta Airlines. He said Northwest had a very structured process for what the F/O did and what the Captain did, and there had been some “frustration” on the Northwest side. He said there had been questions on why some things changed, but by and large the crews had been accepting of the changes. He said that he “hardly at all” got out on the line but he had “exceptional personnel” to assist him.

Regarding the overflight, as he understood it, the captain and F/O were engaged in a review of the bidding process on the flight deck. He said he had not reviewed the ASAP report of the event because of the separation required by their Memorandum of Understanding (MOU). The bidding process that the pilots were working on took effect November 1, 2009 and was a new system that used a new software application for the pilots. He said information had been sent out to assist pilots on this (software and training people). , POI Harris said he understood the importance of pilots bidding their schedules. He said that the pilots picked a “bad venue” to review the bidding process, and that particular distraction caused the overflight. He stated that 10 days after the event he met with Lynn Melin, Managing Director of Procedures and Standards at Northwest and expressed his concerns. POI Harris said he wanted to see everything Northwest had done and would do to address the issue. He said that he would forward that information to the NTSB. He said that Delta and Northwest had provided the flight crews the best information in a segmented manner so as not to completely overwhelm them with the changes.

He stated that, though he was “biased”, he believed he had excellent communications with Delta and Northwest, and that the reestablishment of ASAP and FOQA at Delta was “exceptional”, and he “has a good feel” about what is going on.

He acknowledged that “there is a lot of distraction on the flight deck because of change, because of bidding issues and what not” but believes the flight crews are doing a good job as is his staff.

He stated that this event came as a complete surprise to him, and he asked whether this was a recurring problem at his flight operations meeting and nothing he heard indicated that this type of behavior was being exercised. He said that you would get a hint about whether this was an issue through the line check pilots, APDs, and APMs, but it had not come up. He said he knew that ALPA, and the company both discouraged behavior like the event. He said he would be surprised to see this type of behavior in the presence of a line check airman, FAA inspector, or even an ALPA representative in the cockpit. He stated that nobody in his office was aware that this is a reoccurring event. Regarding the event pilots themselves, he only knew that they were off line flying and were appealing the emergency revocation of their certificates. POI Harris said he had no additional information, and was not aware of these particular pilots having any previous problems at Northwest

He stated that, at about 8:15pm on the night of the event while the aircraft was at about 10,000 feet on descent to MSP, he was notified about the event by Lynn Melin via a conference call with Mr. Melin and Glenn Fink, who was a Training Captain on the A320. He said he was not normally informed of NORDO events.

He said that he did not know the pilots personally.

Regarding morale, he said that after talking with his APMs, he considered morale “solid”, but acknowledged “frustration” with the changes, but in his opinion the flight crews were feeling good about the merger. He said they may not like the procedures, but overall believed the merger was a good thing. He stated that morale was better than three years ago because the NWA bankruptcy was “tough” because the flight crews took a 30-40% pay cut and there were work rule changes. During the bankruptcy, he said the FAA paid particular attention to make sure the crews stayed “focused”, and was doing the same thing now with this merger. Additionally, he said the morale was much better now with this merger than it was during the previous merger between Northwest Airlines and Republic Airlines. He said the pilots overcame those merger problems, and they would overcome this. He said the distractions in the cockpit were due to procedural changes in the bidding process, and inherently those would be distractions.

Regarding the use of personal equipment on the cockpit, he said there had been no changes to the use of PEDs since it was already prohibited by company policy.

The interview concluded at 15:00

Interview: Reo Pratt, Northwest Airlines A320 Aircrew Program Manager (APM)

Date: November 19, 2009

Location: Phone interview

Time: 1500

Present were: David Tew, Malcolm Brenner, David Lawrence- National Transportation Safety Board (NTSB); T.R. Proven –FAA (by phone); Pete Sahler – Northwest Airlines (by phone); Dan Coogan – ALPA (by phone)

During the interview, Mr. Pratt stated the following information:

He had been with the FAA since February of 1997. He said that prior to the FAA, he flew corporate aviation for about eight years, and prior to that he was chief pilot for a small Part 121 carrier called Viking Airlines, where he flew Convairs and B-727s. He stated that he came to the FAA as assistant APM in 2004 and in 2006 became APM on the A320 at Northwest Airlines. He stated that he was typed rated on the A-320 airplane has flown the aircraft, but has not flown the airplane in revenue or line service. He said he had various assistants including an assistant APM who was a very experienced A320 pilot who had previously flown for USAirways. He said he was not involved in the Northwest/Delta merger integration team, but would help resolve any fleet specific requests or questions the team may have, and that occurred regarding all the fleets.

Regarding the merger, he said he had never before been in a merger of this size and that they were all “forging new ground” with this merger. He said there had been major changes that had required more work, and said they had “battles” with the company regarding procedural changes that had been sought and rejected, but the process was “respectful and energetic”. He said it had been a high level of work and activity for each step in the process. He said he used to collect NTSB blue cover accident reports, and that he learned that every large merger in history had some type of accident associated with the merger and they voiced this concern with the APDs, and this merger was a “huge historical risk” and they didn’t want to participate in past history. He said that the feedback he had received regarding this event, both before and after, was that this event was a “one off”, and he had never heard of this happening before.

Both before the Northwest 188 event and after, he had positive experiences with a lot of captains who would identify the merger related issues during the pre-flight briefing and worked to keep them out of the cockpit,. He said that this event had nothing to do with the cockpit procedural changes that had been recently implemented. He said that the distraction was an effect of the merger, but was not anything related to the phased in procedural changes.

He stated that he did not know the incident pilots personally, and did not recall if he had been on an observation ride with them.

He said there was no audible tone associated with the ACARS message, and was not aware if there was an option for it. He said he asked a USAirways pilot if they had that option, and was told they did not have that option as well.

Regarding pilot morale, he said that it had been “fairly positive”, but he had heard some antidotal evidence of pilots who had some seniority concerns, but had not heard anything personally.

When asked how each phased change was communicated to the pilots,, he said that the pilots would receive the manuals three weeks prior to the procedure change, and would also receive an

overview of each change. He said that pilots were also required to participate in online “distributed training” for each phase change. They were paid for the training, and failure to complete the training would prevent them from signing on for a particular trip. He said that he “believes” that the language in the Northwest FOM regarding the prohibition of laptops in the cockpit prior to the merger was identical to the current language.

He stated that he did not know about the A320 MEL 23-24-01B that references an “ACARS chime”, but believed it might be a part of the software changes to the flight warning computer (FWC).

He said that there was no consideration from the FAA office regarding merger related changes that effected vacation, bidding and pay issues. He said that he receives an overview of the line operations reviews, and had not seen any ALPA feedback forms that were shared with the company. He said that the phase 4 implementation was still scheduled for January 1, 2010 and that there was no discussion of delaying it. He stated that FAA was briefed on a December 15, 2009 “Pilot Orientation Part 2”, but it was not an FAA mandated deadline.

Interview concluded at 1530