



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

January 24, 2020

Attachment 2 – Compass 6058 Flight Crew Interview Summaries

OPERATIONAL FACTORS

DCA19CA081

Interviewee: Kevin Chamberlain

Date: March 7, 2019

Location: Via Teleconference

Time: 1001 PST

Via Teleconference: Captain Chamberlain – Captain of Flight 6058; Shawn Etcher- NTSB; Jonathan Gourdoux – Compass Airlines; Alexander Lindsey – Airline Pilots Association (ALPA); Rob Plunkett, Senior Labor Relations Counsel for Airline Pilots Association (ALPA).

Captain Chamberlain was represented by Mr. Rob Plunkett, Senior Labor Relations Counsel for the Airline Pilots Association (ALPA).

During the interview, Captain Chamberlain stated the following:

He was 25 years old, and a line captain. He had a scheduled flying line since May 2018 and had been on reserve for 2 months and also had a buildup line for 3 months before being able to hold a line. He was based at Los Angeles International Airport (LAX) and had been there for 3 ½ years. His date of hire at Compass was July 2, 2015.

He currently held an ATP unrestricted pilot certificate with an E170/190 type rating. He also had a first-class medical certificate issued April 11, 2018 and had no restrictions or limits.

He had approximately 4,010 total hours of flight experience, 2,490 of those hours were in the E175 and 1,115 hours as pilot in command in the E175.

He was the pilot monitoring on flight 6058 on February 13, 2019.

When asked about his pilot history he stated that he was passionate about flying since he could remember. He grew up in an aviation family and was the 5th captain from his family. He accrued flying time growing up as a kid and did his first solo flight on his 16th birthday. He received his private pilot certificate at the age of 17. After graduating from high school he went to Utah Valley University and received his instrument and commercial ratings. When he finished at the university, he had about 400-500 hours of total flight experience and then moved to Phoenix, Arizona where he obtained his certificated flight instructor certificates. After which he instructed other pilots and flew about 100 hours per month until he had accumulated about 1,500 hours of total flight experience at which time he applied and was subsequently hired at Compass Airlines, when he was 21 years old. After about a year and a half he upgraded to captain. He has flown 12 or 13 different aircraft during his pilot career.

At Compass his chain of command was the chief pilot at LAX. Recently the LAX base was given a new chief pilot and he has not interacted with the new base chief pilot. If he had a concern about something, he would call his chief pilot but has not had the opportunity to reach out to the new LAX chief pilot.

He stated that he has the ability to refuse a flight, there has been a few times he flew a flight with inconveniences to the passengers and example he gave was the lavatories being inoperative on the

flight, but he has never been pressured to take an aircraft. Once he flew a flight Nashville, Tennessee to LAX they were at Nashville longer than anticipated due to icing and departed at the very last minute due they were legal to depart due to their duty limits which he was watching closely but he knew the company needed the aircraft at LAX for the next day.

He feels that he has been at the airline long enough and has met a lot of the dispatchers, which he stated they are very nice, and some go the extra mile but those that don't, does not mean they are not great dispatcher. As a captain out of the 10 dispatchers on duty there were about 2 or 3 that will usually send multiple messages about AIRMETS, SIGMETS or of significant weather changes, and request for a fuel update. The majority of the flights he will not have any interaction with dispatch; however, if he needs to call them, they are "pretty informative" and if he were to rank them, he would say they are "exceptional."

In regard to flight 6058, he could not recall for sure if he had interacted with the flight's dispatcher. He thought they did but could not recall for sure. He didn't think there was any communication with the dispatcher on the phone for that flight, and usually he will only text dispatch if there was something that would affect the flight.

A dispatcher at Compass Airlines has a way to leave notes on the dispatch release. The location for the remarks was a box, right above the captain signature line and about 80% of the time there is "none" in that box but other times some will include remarks there, if for example, there was adverse weather, why the fuel was planned the way it was, and anything else pertinent to the flight.

On February 13th they had a report of 0945 and he was able to sleep in. He felt had really good rest the previous night. When he woke up, he did some miscellaneous items then got on the bus with the rest of his crew and went to the airport. The airplane was already at the gate and they got "things going," nothing seemed different. After they had done their procedures, they began boarding passengers. He did not think they had to deice before the flight, and they taxied out on a single engine as the line to depart was long and they were about number 17 in line. They started up the other engine when they were number 4 or 5. They climbed out normally and got above the weather. After they arrived in LAX, they had expected to a LAX to San Francisco to LAX turn but were removed from that.

When asked to elaborate on the Seattle to LAX flight, he stated that they got up to cruise and he had briefed the FAs, as this was day 3 of 3, that the ride was going to be smooth and they were going to FL350. The route normally takes the flight further east and down over Tahoe and Fresno and most of the flights go over the Sierras. He estimated that the total flight time was about 2 hours in length and about half way, as they were approaching the Sierras, he and the first officer took a restroom break, one at a time, which he estimated was about 5 minutes in total time. They were on top of the clouds and it was really bright and "fuzzy". He further provided that it was hard to see the cloud tops. During the time he was in the back on his restroom break, the air was smooth with a little light chop. As they progressed over the Sierras, he told the flight attendants that there was a weather system going through the west coast and they were going to be crossing the jetstream, and during that time they should sit down, which he thought would have been for the next 30 minutes. The flight attendants were going to take their seat and he returned to the cockpit. The seatbelt sign was already on, since they were using the restroom, but had been off for maybe the

first one-third of the flight. Once he returned to the cockpit, he and the first officer briefed any changes and neither had their shoulder harnesses on but used the 3-point seatbelt restraint.

Somewhere between Reno and Friant VOR¹ they got into a little light chop maybe a little worse than light chop, which last for about 20 -30 seconds with the worst turbulence maybe 10 seconds in duration, which he classified as moderate turbulence. The airplane oscillated a little more, they went up in altitude by no more than 150 feet and then the airplane settled back down to FL350. They determined that they did not have severe, but it was moderate borderline severe turbulence, but he restated that it was not severe. On the air traffic control frequency, he heard company, which they had been issued a traffic call from air traffic control that was at FL340, the aircraft then audibly alerted them with a traffic advisory. He stated that he began looking outside and also, he did what they were to do, which was to turn on the aircraft exterior lights. During the entire process he never visually acquired the other airplane. He noted on the TCAS² that the other flight was within 800 feet of them. He then also heard on the frequency that the company passed under them and they had responded to a TCAS RA³ and he could hear it in their voice that they were in turbulence. Towards the end of the turbulence encounter, the air was smooth with intermittent light chop. He called the flight attendants to make sure they were okay, that everyone was in their seats, and everything was stowed. He reported that they had experienced moderate borderline severe to air traffic control. The rest of the flight continued as normal to LAX uneventful.

He thought they were definitely on top of the clouds but no closer than 1,000 feet and no more than 4,000 feet from the top of the clouds. He estimated that the tops of the clouds were in the upper 20's to low 30's in altitude; however, at no time while in cruise could he see the ground.

When asked if he used the onboard weather radar, he stated that it was not on because at the altitude they were at the precipitation does not affect them that much and he had the terrain page on in case something happened and they needed to descent, since they were over the Sierras. There was nothing in front of them that would have caused him to turn the radar on. Most of the time if he is using the radar, he clicks on the upper left corner of the MFD⁴, scroll down to Weather, and then press the weather bar on the MFD to turn the radar on. Normally he has it on standby, but they have to press weather, which if not already on, will say "wait" if it has to "boot up." Does not use most of the modes available on the weather radar, except for the altitude compensation mode. He felt that it works well for him and he could "tweak it" for what he was looking for. He feels there is not a lot of convection most of the time, when he is flying, and will not use the radar.

When asked what he thought of the weather radar, he stated that he felt the radar system was "exceptional" and that there have been times on a short flight he would check the radar app on his phone before departure. He felt it would pretty much matchup with what his phone app showed, and it depicts things well ahead, no radar is perfect but with the different modes its exceptional.

He has not used the turbulence mode on the radar because of his paperwork and that air traffic control gives him the most accurate report, he felt most pilots don't use the turbulence function.

¹ Very-high Omnidirectional Range

² Traffic Collision Avoidance System

³ Resolution Advisory

⁴ Multi-function Display

The dispatch release was usually printed off on older printers and does not include graphical pictures of the weather. He estimated about 10% of the releases he receives will have a pictorial depiction of the weather, which will include winds and temps on the maps. He does like those more than the normal releases he receives because the normal release has so much wording and text. He estimated that 30 out of the 50 pages of the dispatch release are AIRMETs and SIGMETs and he only looks for the ones along his planned route of flight.

When asked if there were any apps on their EFBs other than their manuals and approach charts that he used, he stated that Compass has been trying to roll out a turbulence finder, but he was not sure of the status of that. He knows that some airlines have a turbulence finder on their EFBs. He did not hear much about the turbulence finder that Compass was looking at. He does not have the WSI app on his EFB. There was no connectivity to the internet in flight, and they were told they have to leave the EFB in airplane mode while in flight but the EFB can be used to access charts and manuals. He was not sure if anyone tried to access the internet through the passenger internet which was called "GOGO."

When asked he determines the severity of turbulence, he stated that light turbulence was where the turbulence scale started. He feels that severe turbulence, which he has experienced on a flight from Minneapolis to Washington Dulles. He recalled that, on that flight, he was pilot flying but was new to the company at the time, and the captain he flew with said it was 100% severe. He further classified that what he experienced on February 13th on the above flight was not severe. When a flight encountered severe turbulence, the airplane was banking back and forth, and he could not read the displays in front of him. He knows most use the "coffee cup" determination and during moderate a cup will spill some of the coffee and if the flight attendants had a cart out in the back it would be hard to maneuver. Severe turbulence will usually cause things to fall over in the cabin. He was sure his flight attendants would have told them if anything spilled so that helped him judge that it was moderate instead of severe turbulence. He also stated they did not experience any g-loading that would have exceeded the limitations for the airplane. He felt there was always moderate in the air but from his experience it "rattles you" but not bad enough to be dangerous. He and his first officer determined they went through moderate turbulence.

When asked to clarify his estimate on the graphical description on the releases, he stated that he gets the graphical depiction on his dispatch release about 10% of the time. He felt it depended on the station and the printer they are using. He further provided an example of a flight from LAX to San Francisco when the release is printed it done so on the older printers. When they are in San Francisco for the return flight it contains approximately 5-6 more pages with the graphics, and he likes that a lot more. The other flights are printed with a dot matrix type printer. He wasn't sure on what stations provided the pictorial depiction but he did know San Francisco gave the pictorial and the others use the text version as it gives him a lot more information on the winds, ice, turbulence, etc. Although he wasn't sure its station particular; he knew he has received the maps from San Francisco. Not sure if its dispatch or just the outstation that determines if the weather depiction will be on the release, but he wished the map would be done more.

When asked to clarify what he meant with what he stated about the remarks section on the dispatch release; he stated that he has seen dispatchers occasionally include some remark for turbulence.

He provided an example of one he saw that the dispatcher stated they were filed at FL280 due to turbulence in the 30's. He felt since the accident he has seen a spike in remarks for turbulence. He has also seen remarks that include AIRMETS and SIGMETS in the remarks but could not remember if that had been the case on the flight on February 13th.

When asked to clarify if he has been able to get changes on the dispatch release by talking to the dispatcher, he stated that he has been able to get changes to the release for more gas, alternate, etc. most of the time he has not had to have any disagreement with a dispatcher. He recalled one time when he had done a diversion where they were given an alternate and he has had dispatch say, "sounds good." He also has had a fuel issue before but after talking with the dispatcher they agreed on the needed fuel, he felt that dispatch and himself were on the same page.

When asked if he saw any automated messages about weather on the release, he stated he could not recall seeing automated messages about weather. He did remember on that day there were areas of turbulence. He further stated that SIGMETS cover a large area and most pilots still fly through them and he felt that most pilots rely on PIREPS. There was not enough information given to him on February 13th to make him take another route.

He felt most pilots don't use turbulence function on the radar because they either don't know what it does or how to work and they also have other information available include pilot reports. The turbulence function will depict white for moderate or severe turbulence, he felt there was other sources pilots would use. He felt the most accurate description for the weather was a PIREP. Dispatchers will sometimes send the a PIREP over ACARS to a flight. He does not file PIREPS on line but has given several over his career to air traffic control and has once or twice texted dispatch a PIREP.

He does not reach out to flight service enroute since he has paperwork, air traffic control, and will look on his radar app at the gate to see weather.

When asked if there was a protocol on seatbelt usage for flight crew, he stated that a flight crew must wear their seatbelt, including shoulder harness, when they are operating below 10,000 feet. At the time of the turbulence he had the 3-point and they are supposed to have the seatbelt on when seated. He briefs the flight attendants that he will call them, only if there was moderate or severe turbulence ahead, that was not forecasted. He also stated that if doesn't call they can assume it will be light chop or less. If inflight he will call the flight attendants and alert them of upcoming potential turbulence. When they operate in light turbulence the passenger seatbelt sign should be on and reiterated that it was for his flight.

He felt a lot of pilots at Compass complain about other airlines that have better resources on their EFBs than they do, and they are not afford the same resources at Compass as they are at other carriers, He felt that major airlines have better resources, but he felt Compass Airlines dispatchers do a great job. Pilots have iPads at other carriers as well with software that provides a lot better information. He has noticed lately that Compass will send reports to ACARS which was an improvement since he had started at Compass. He knows it comes down to money investment and he felt they should not compromise safety.

When asked if he felt there may be ways to mitigate turbulence events and he stated that he felt it would be to have a more abundant resource for weather. Also if there was possibility, when a flight may encounter mountain waves, to increase the separation between aircraft from 1,000 feet to maybe 2,000 feet of separation.

Interview concluded at 1137 PST.

Interviewee: Erin Christopher

Date: March 7, 2019

Location: Via Teleconference

Time: 0800 PST

Via Teleconference: First Officer Christopher – First Officer of Flight 6058 on February 13, 2019; Shawn Etcher - NTSB, Jonathan Gourdoux – Compass Airlines; Alexander Lindsey – Airline Pilots Association (ALPA); Rob Plunkett, Senior Labor Relations Counsel for Airline Pilots Association (ALPA).

First Officer Christopher was represented by Mr. Rob Plunkett, Senior Labor Relations Counsel for the Airline Pilots Association (ALPA).

During the interview, First Officer Christopher stated the following:

She was 34 years old and was a first officer with Compass Airlines. She had been holding a line and not on reserve since September 2018. She was hired by Compass on February 22, 2018.

She currently held a restricted Airline Transport Pilot certificate with a type rating for EMB170/190. She also held a first-class medical certificate issued on October 12, 2018 with no restrictions.

She had approximately 1,450 total hours of flight experience with about 600 of those hours in the EMB175 aircraft.

She was the pilot flying on flight 6058 which occurred on February 13, 2019.

She had learned to fly in the military beginning in Pensacola with API⁵, then flew T34 aircraft, then T35 aircraft and then flew the F18 for the Navy, where she flew for 4 years. The last 3 years in the Navy was as a non-flying tour. She came to Compass Airlines.

She was based in Los Angeles, California and reports to the LAX chief pilot. If she had something that she was concerned about she would also report it to the LAX chief pilot but she has not encountered anything like that in her career at Compass.

Compass does have an ASAP program and she has used it one time but did not recall anything about the response from that report.

⁵ Aviation Preflight Indoctrination

When asked if she could recall the flight from Seattle to LAX on the day in question she stated that there was mild turbulence activity, south of the Sierras and they were flying at FL350. She was the pilot flying that flight and the first part of the flight was smooth. She further recalled that there was a little light chop after going over the Sierras and they were flying at Mach 0.78 which was near the “barber pole”⁶ which she then reduced the speed, when they encountered bumps, to Mach 0.77 but did not feel a need reduce below that. They were in the clouds when they got a traffic call but did not see them as it was a cloud layer between. Then she recalled they had a severe turbulence and RA and that their flight was only a TA in their cockpit. The Captain looked out the left window to look and see if he could visually acquire the traffic. When they got the traffic alert (TA) they had encountered some moderate chop, she pulled the throttles back and the autopilot never kicked off. It lasted about 5-10 seconds maximum. Once they came out of the backside of the turbulence, they discussed that they were okay, and they were not in severe turbulence. The captain of their flight reported that to air traffic control as “heavy moderate” and that they only had a TA. Then they switched frequency shortly thereafter. Air traffic control had asked them to report if there were any injuries. Everyone, on their flight, was seated at the time and no one was injured, which they reported to air traffic control. Didn’t feel any other turbulence the rest of the flight. She further stated that the turbulence they encountered “came out of nowhere.”

When asked to describe how she classifies turbulence she stated that if it’s kind of bumpy, but she can drink a soda without getting it on her then she classifies that as light, and like she did on the flight in question, she pulled back the speed, which occurred about a minute before they encountered the moderate turbulence. To her moderate is more of a strain in the seatbelt and more challenging to see the cockpit screens. Severe she has experienced in the FA18 but not in the E170. Severe was getting tossed around and the jet is all over the place. Could only recall that when they got the traffic call, they were above a cloud layer; however, did not remember visually observing any lifting in the clouds but there was light cirrus round but no build ups.

When asked if they had the onboard weather radar on, she stated that they did not use the radar on the flight and there was no need to.

When asked how she operates the weather radar she stated that she just turns it on and then tries and bracket the altitude. She will set it to between 100 and 150 miles and then slowly scroll it in as weather approaches them. The radar is easier to learn during flight, but they learn the basics in the classroom and learn the rest of how to use it during IOE and LOE. She has not used the turbulence function on the weather radar, but it was trained in the classroom. When she brackets her altitude, she will adjust the tilt and will have it painting slightly down if at high altitude in order to paint the ground at the far end of the range.

Normally while in flight one pilot will have the terrain function up on their side and the other will have the weather radar on. She was not certain if they could have the terrain on the PFD and the weather on the MFD.

When asked how close the other aircraft’s altitude was to them when they received the TA she could not recall but was able to recall that the traffic symbol showed as a yellow symbol on their display.

⁶ “barber pole” is a euphemism for the maximum or minimum airspeed limits depicted on the airspeed indicator.

Seatbelt usage she said was at pilots discretion and depended on turbulence reported or encountering.

Compass Airlines does have EFBs and she felt they are “fine.” She used it for charts and publications. They do have the WSI app on their EFBs; however, there was no WI-FI available to them in flight and most crews would use Foreflight to help navigate around weather cells.

When asked to clarify the ride after the turbulence into LAX she felt it was smooth with occasional light chop.

She clarified that there is a seatbelt policy at the airline when it came to descent and passing through 10,000 feet.

She was at LAX and commuted to work out of Salt Lake City, Utah.

She further clarified that she did not feel the need to reduce the airspeed to turbulent penetration speed or slower, which for the E175 was Mach 0.76.

She normally does not contact flight service or use HIWAS unless needed, as she felt that air traffic control always gives them what they need to know.

She further stated that the airspeed was close to the “barber pole” but was “jumping” a little which was why she reduced the engine thrust to achieve Mach 0.77. She did momentarily reduce the engine thrust to idle when they encountered the moderate turbulence.

She had no changes that she could think of that she would like to see made at Compass.

Interview concluded at 0839 PST