



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

January 24, 2020

Attachment 4 – Compass Airline's Personnel Interview Summaries

OPERATIONAL FACTORS

DCA19CA081

Interviewee: Zachery Schrader – Accident Flight Dispatcher

Date: March 20, 2019

Location: Via Teleconference

Time: 1404 CDT

Via Teleconference: Mr. Schrader – Event Dispatcher; Shawn Etcher – NTSB; Eric West – Federal Aviation Administration (FAA); Jonathan Gourdoux – Compass Airlines; Alexander Lindsey – Airline Pilots Association (ALPA); and Mr. Thomas Swords – Compass Airlines Dispatcher and Representative for Mr. Schrader.

Mr. Schrader was represented by Thomas Swords, a co-worker.

During the interview, Mr. Schrader stated the following:

He was 29 years old and was an aircraft dispatcher. His date of hire was May 18, 2015. He had an FAA Dispatch certificate.

His most recent training event occurred in February of 2019 and was his yearly recurrent training.

He began as a ramp agent then became a gate agent; however, he wanted to do something else. He began flight training but decided that he did not want to become a career pilot. His father knew a dispatcher with an airline, which provided him with an opportunity to observe what a dispatcher would do. After observing what a dispatcher's job entailed, he decided to attend school to obtain his dispatcher's certificate. After receiving his certificate he was hired on at Compass Airlines as a dispatcher.

During flight training he had accrued about 20 hours of total flight experience and had just completed his first solo flight.

He had never been terminated or asked to leave from any of his employers.

When asked who was in his chain of command, he stated that he would report to the dispatch supervisor of the day, then his duty manager, and then to the head of System Operational Control.

He felt that staffing had been good during his time at Compass. He did say that there were dispatchers that had left Compass and that sometimes they had been short staffed on dispatchers. When they were short staffed, some dispatchers would schedule themselves to work open shifts in order to be paid overtime. He quantified that there were a "few open shifts." He further stated that he had picked up extra work in the past but that it had been "a little while," which he later clarified as in February. He stated that the day of the accident was his normal work scheduled day and not an overtime day.

When asked how he normally prepares a dispatch release, he stated that he will begin building the flight by looking at weather turbulence charts and winds aloft, convective activity,

and then plans a route around storms. He stated that he will attempt to plan a route to avoid turbulence and other weather, unless the standard flight plan would avoid the weather any way. Once he determined the route the LIDO¹ software will then assist in calculating the flight.

When asked what he normally used for weather determination he stated that he will use aviation weather.gov and WSI² optimum as well as looked at the pictorial charts. WSI Fusion was what he will use to look at various radars and PIREPs³. When asked how he was able to display all of that information, he stated that he made it available on different tabs and screen at his work station.

He further stated that there are standard routes already in their system and he felt they use those routes the majority of the time. He further clarified that most of their flying was along the west coast and the standard route worked fine.

The day of the accident there had been forecasted turbulence on the west coast and the charts he referenced showed that the turbulence was at most altitudes. The SIGMETs⁴ covered a “fairly large area” however, he filed the flight along the standard route as the was convective SIGMETs around the bay area, but the standard routing would have kept the flight clear of that.

When asked if he had communicated with the crew at any time prior to the turbulence encounter, he stated that he only filed the flight plan and talked to them after they had encountered the turbulence.

When asked what he would do if a crew provided him with a PIREP via ACARS⁵, he stated that he would pass along the information to the other dispatchers in the room with him. When he would receive a message from a crew via ACARS the message would pop up on his computer screen. When asked if he could file a PIREP via his computer so other flights, rather company flights or not, could have some of the same information, He stated he could by using the telephone and file it verbally with 1-800 WXBRIEF. He further stated that he was not sure but did not think he could file it from their computers.

When asked if there were a lot of PIREPs how he would keep track of them, he stated that he kept a piece of paper nearby and would write down the ACARS message or if the crew called him via the radio. He kept that piece of paper at his workstation as he also kept track of maintenance items on the same piece of paper. On the day of the accident they had received “a lot” of turbulence PIREPs which ranged from severe to moderate.

When asked if he could cancel a flight, he stated that if he felt a flight needed to be canceled, he would discuss it with the duty manager, but he would not be the one that would cancel a flight. If it was weather, he could delay a flight if needed but he could not recall ever canceling a flight himself.

¹ Lufthansa Systems – at the time of the accident Compass was using the LIDO software for flight planning.

² The Weather Company

³ Pilot Reports

⁴ Significant Weather Information forecast

⁵ Aircraft Communication Addressing and Reporting System

When asked to describe how many flights he typically would work on an average day, he stated that it was about 38 flight a shift he would work. However, he typically had 6 to 8 flights in the air at one time and at the most maybe up to 10 flights would be in the air at a time. He was required to monitor his flights and he also had a supervisor that was monitoring all of the flights. He felt that it would get to be a little challenging if there was bad weather at one of the hubs, but normally he felt it was “not a big deal.” If he ever felt that he was getting behind other dispatchers would come to assist by taking other flights from him. He stated he could ask the supervisor, but he has never. He stated that he has had other dispatchers assist him when he was behind. He stated that a supervisor will also watch the workload of all of the dispatcher.

When asked how he would be notified once the airplane was no longer at the gate and had pushed back for departure. He stated that on their screen there would be a list of all of the flights they are working, once a flight pushed back a letter “A” would appear next to the flight, and once the flight became airborne the letter “A” would turn blue.

When asked what information he would include in a dispatch packet, he stated that it would include the weather packet would be compiled by their LIDO software; however, he would select an alternate, if one was needed, TOLD⁶, and fuel load. After the LIDO software would compile the packet, he could review the release.

When asked how far he likes to keep flights from convection activity, he stated the manual stated at least 20 nautical miles and that he would file the route at least that far away or further.

When asked if he had heard or observed any issues with the accuracy of the information within the dispatch release, he stated he had not heard of anything and felt that it was accurate. He further stated that he had never had any issues with the information with the packet.

When asked for clarification of depicting weather activity on the radar, he stated that it depicts convective activity and that was what he would plan the flight around. He further stated that the guidance required at least 20 nautical miles away from the convective activity and upwind from that activity.

When asked how he would determine the potential for Clear Air Turbulence, he stated that he used SIGMETs and PIREPs that were on the websites he obtains his weather information. He also would use the PIREPs provided by company aircraft.

On the day of the accident, he had filed the flights he was working about flight level (FL) 300⁷ as the SIGMETs were from FL200 to FL300.

When asked if weather.gov and WSI where pretty similar and agreed with each other with the information, he stated that they “pretty much matched up.” He further clarified that he had never noted any difference in the information between the two.

⁶ Takeoff and Landing Data

⁷ A level of constant atmospheric pressure related to a reference datum of 29.92 inches of mercury, stated in three digits that represent hundreds of feet. Source Aeronautical Information Manual “Pilot/Controller Glossary.”

Dispatchers did have access to the WSI app, and they had discussed the app in their training during the training module where they reviewed the weather charts. He could not recall if that was trained during initial dispatcher training but that it was discussed during their annual recurrent training.

When asked if the LIDO software packet included the weather charts for the flight crews or if it was all textual information, he stated that it's all text and that there were no weather charts in the weather packet. In the IOCC⁸, a pilot can obtain their releases on their iPads, there was a pdf document available with the weather charts; however, since most of the stations utilized the teletype printers, the dispatch release printed at the station would not include the graphical weather charts. In order for a gate agent to provide the graphical charts to the crew the gate agent would have to locate a laser printer at the station to print the release off.

He classified workload as "higher than usual" due to the turbulence along the west coast.

When asked if he felt the flight release contained a lot of information, the right amount, or too little in order to provide all of the information to the flight crew, he stated that the flight release had a lot of information on it and that it has become a little longer since they started using the LIDO system for flight planning. He further clarified that it might include a SIGMET that was a way away from the flight planned route.

When asked which he felt was better to provide the graphical charts or the textual information, he stated the he preferred to see the visual charts as it made it easier for him to visualize the area that textual information was providing. He had never heard or knew of any crews having difficulties with a dispatch release.

When asked how he would classify the training he received at Compass, he stated that the training was "good enough" he wished they would provide a little more hands-on training when it came to reviewing charts, accessing their manuals, etc. and that the training actually consisted of "a lot of PowerPoints." He felt he was trained and learned all he needed to successfully do his job.

When asked if he had ever ridden in a cockpit jumpseat as part of his work requirements. He stated that he was required to ride in the jumpseat at least 5 hours per year on company aircraft. When asked how he accomplished that with most of the flying on the west coast and he was based in the central part of the US he stated that he would fly out to the west coast and then fly on the jumpseat of the company aircraft.

Interview concluded at 1459 CDT.

Interviewees: Daniel Thompson and Thomas Swords

Date: March 25, 2019

Location: Compass Headquarters Conference Room 203

Time: 0904 CDT

⁸ Integrated Operations Control Center

Present: Shawn Etcher, Katherine Wilson, Brian Soper, Michael Richards – NTSB; Brian Hirsch – National Weather Service (NWS); Jonathan Gourdoux – Compass Airlines

Representative: declined representation

During the interview, Mr. Thompson and Mr. Swords stated the following:

Mr. Swords was the flight software administrator but also worked as a dispatcher, service supervisor, and dispatch instructor; he also sat on the ASAP ERC⁹.

Mr. Thompson was a dispatcher, but also worked as a supervisor, trainer and the assistant software administrator to Mr. Swords. On any given week, he would work in all these roles except as a trainer which was reserved for when a training class was in session.

As a supervisor, Mr. Thompson started at 0500. He would be the first supervisor to arrive and oversaw the dispatch group; there were 3-7 dispatchers on duty at any given time. He would receive a brief from the overnight supervisor. There was not a lot going on overnight as operations usually stopped between 0200-0300 and there was a bit of a gap in operations from 0300-0500. He would then open all systems/applications for weather, the flight planning software, his email, and websites with main line partners. He would check his email to see if there was anything pressing from overnight, look at planned flights for the day, and identify any MELs¹⁰; there was a supervisor checklist to follow. He would also make sure the tail routing for American flights matched; he did not have to do that for Delta flights. There was a head start phone call with Delta in Los Angeles at 0600 that he participated in. At 0616, he would join the ATC¹¹ telecon. At this point, he already had an idea of what the weather would be like from reviewing the weather app and the overnight brief. The ATC call would look at any weather and traffic issues for the day. The head start and ATC calls lasted 5-10 mins. Next, he would disseminate information to dispatchers about known weather issues or problems during day. Those tasks took up the first 2 hours of his shift. Around 0630-0700, flights were getting airborne so he would handle maintenance, station and operations issues that dispatchers needed assistance with; weather was not usually an issue that early in the morning. The rest of his shift would be to handle dispatcher oversight, filling in for the duty manager as needed, routing issues, and anything else that came up. He would monitor weather, dispatchers and other problems that would come up during the day with the airline. At 1500, he, as the outgoing supervisor, and the outgoing duty manager would have a pass down briefing with the oncoming supervisor and duty manager. The overnight shift worked 1500 until 0100. The duty manager and supervisor worked a parallel shift with the same start and stop times.

Mr. Swords stated that the duty manager and supervisor shifts are scheduled during the same time and that it was a team work concept. There were daily operations meetings at 1000; it was a company wide call to discuss all operations. The duty manager was involved in the operations itself but also other activities, so it was the supervisors who were involved in the direct operations and interaction with dispatchers. A couple of the duty managers were licensed

⁹ Aviation Safety Action Program Event Review Committee

¹⁰ Minimum Equipment List

¹¹ Air Traffic Control

dispatchers, but it was not required. Supervisors had to be licensed dispatchers and must stay current with a yearly recurrent competency check.

Both Mr. Thompson and Mr. Swords were working on February 13, 2019, the day of the accident. They recalled there being challenging weather on the west coast but did not remember specifics of the accident flight. Mr. Thompson worked that day from 0500 until 1300. As he went through his morning process, he did not remember what drove him to do it, but he sent an email to the dispatch group for rain prediction and added a note to be aware of turbulence that day. In his role as a supervisor, he would share information that became available to him. He did not know why he sent that email, perhaps it was because he had worked all week and was aware of weather in that area that week. He normally tries to look at things that may happen hours before they do when it came to weather, he felt that helped keep everyone working together.

Mr. Swords recalled that PIREPs were reporting turbulent rides throughout the day. Compass manuals for SIGMETs were advisory. Airlines would not cancel flights based on SIGMETs. From an operational point of view, when he saw a large block of severe turbulence, he knew crews needed to be cautious when operating in those areas, but they seemed like a broad net to capture all general aviation to air carrier type stuff. Dispatchers needed to interpret that information very carefully.

Mr. Thompson thought dispatchers tried to process SIGMETs as they evolved, expired, and were reissued. Dispatchers would communicate with aircraft via ACARS. It was frustrating because he believed SIGMET were reactionary rather than predictive. They usually received PIREPs first and then a SIGMET would be issued. From the supervisor's position, he would tell dispatchers to send this information to their flights. They would usually say they had already been sending PIREPs, but they will also send the SIGMETs as they come in.

If a dispatcher was tuned in to what they were doing, they would know to anticipate a SIGMET being issued and had hopefully already communicated PIREPs to their flights. As a supervisor, Mr. Thompson would make sure dispatchers were reaching out to flights.

Mr. Swords stated they did not send an ACARS message to all aircraft but rather relied on dispatchers to communicate with each flight they were working individually.

Mr. Swords recalled a severe PIREP at FL340 between Las Vegas and Phoenix. He told his dispatchers to let their flights know via ACARS. Then it turned out to be an erroneous PIREP.

The duty manager was less involved with weather and more involved in the operation, scheduling, and maintenance.

Mr. Thompson's role as a supervisor was to make sure dispatchers were on top of things – if they see something (such as severe weather), say something (to other dispatchers). The SOC¹² can get loud; they had short walls and they were also communicating with each other.

¹² System Operational Control

By midday, they would have 5-6 dispatchers on duty; the max on duty was 7 because they had 7 stations. Mr. Swords thought they had 7 dispatchers on duty in the early afternoon and then dispatchers would start going off shift throughout the evening. The number of dispatchers on duty varied depending on whether it was a week day or weekend day and also the time of day.

Mr. Swords stated LIDO was designed to distribute flights equitably among the dispatchers on duty. Dispatchers worked 10-hour shifts, and typically 30-40 flights per shift. Mr. Thompson believed on a typical shift a dispatcher was working 6-10 aircraft in the air, 5-6 aircraft on the ground and 1-2 that just landed at any given time. There were also 6 or so in preflight mode.

Mr. Thompson felt they had a good group in dispatch with open communications and good morale so when another dispatcher was behind or needed help, there were plenty of dispatchers who would step in and help alleviate some pressure on the other dispatcher. The supervisor on duty could also step in. It was generally the responsibility to monitor the dispatchers and decide who needed help.

A supervisor could see all flights and can offload the flights to another dispatcher. Mr. Swords clarified that if a supervisor took over a flight for a dispatcher, he would see that flight through to the end; he would not hand the flight back to the dispatcher.

Mr. Thompson believed the flight planning software was good and he could switch a flight from one desk to another; any dispatcher could switch a flight to another desk, it did not have to be done by a supervisor. The supervisor should manage the dispatchers on duty to make sure there was no one overwhelmed but unwilling to ask for help, maybe because of pride. A supervisor should recognize when a dispatcher was new and perhaps had not handled an IROP¹³ situation before. It was a community effort with the supervisor having the overall picture of what was happening on the floor.

Mr. Swords said that he did not want a dispatcher to get behind, but he also wanted a dispatcher to deliver a quality product. There were days when he could not keep up with the workload and in those cases, he would not complete a release until he was satisfied with it. In those cases, a flight might be late.

Mr. Swords described the flight planning software as a semi-automated process. LIDO had the ability to entirely automate the process, but Compass did not use it that way. They used some automated features to help the dispatcher, but the dispatcher had to make the decision as to whether the flight would go or not. The first screen a dispatcher would see was a list of flights assigned to that desk. The dispatcher would select a flight and a page would appear to look at weather, MELs, aircraft performance restrictions, pilot qualifications, and alternate airports. A dispatcher could select the runway for the arrival. LIDO would filter NOTAMs¹⁴ for the route and time of day the flight was scheduled. LIDO would also make a preliminary judgement if an alternate was needed. The dispatcher could elect to use that alternate or do something different. LIDO also calculated takeoff and landing weights, and TLR for the takeoff and landing, and AeroData¹⁵ would calculate

¹³ Irregular Operations Report

¹⁴ Notice to Airmen

¹⁵ AeroData, Inc.

the maximum takeoff and landing weights. The dispatcher would accept it and the actual analysis was the next step performed by LIDO. The dispatcher could pick a predefined route for city pairs, could pick a different route, or could build his own route; the dispatcher could make changes as he wished. Depending on the route, the dispatcher would add extra fuel if needed. The dispatcher could also review MELs. LIDO could calculate the enroute fuel based on the route given to the system. If everything was fine, the dispatcher would transmit the page and send it out. Once it was sent out, the AeroData transferred to the TLR that was attached to the weather package. Each airline used a separate system to pull their paperwork – Delta used DeltaLink and American used Saber Desk.

Mr. Thompson added that LIDO would also look for the most fuel-efficient way to fly, however flying shorter routes at FL360-380 was not always smart logistically. A dispatcher would look at the flight levels while also considering a flight level that had the cleanest air and smoothest ride. It was more difficult early in the day to do this because there were not a lot of airplanes flying to give ride reports like they would receive later in the day. A dispatcher would use his best judgement if he did not have any ride reports. For longer flights, a dispatcher may choose a lower altitude because of the ride reports and would also give additional fuel in case the crew had to fly lower. It was important to make sure a flight was legal. If there was a SIGMET, Mr. Thompson would put that in the remarks even if it was in the weather package so that crews were aware of it upfront. He used the remarks section about 1/3 of the time and reserved it for something that was out of the norm. If there was turbulence, he would want to make crews aware of it there. There were some dispatchers that always used the remarks section but there was a concern that if it was used too much that pilots would stop reading the remarks.

Mr. Swords stated that LIDO could automate remarks, for example, if the dispatcher wanted to have a remark for every flight into a specific airport. However, these remarks appeared later in the release and were not as easily noticed. The remarks mentioned by Mr. Thompson were presented on the first page of the release.

Mr. Swords stated that the air traffic control call was the command center call with the airlines they do not actively participate but they were listening in. Compass was invited to participate but they did not actively participate. Dispatchers had access to CWAs¹⁶ and they could be filtered on WSI, but he did not think they were great because they could clutter the WSI Fusion screen which made it more difficult to do flight following.

Mr. Thompson used the turbulence predictor tool. It was a good visual reminder of where turbulence was and its severity.

Mr. Swords stated that WSI had a FPG (flight plan guidance) which was like an AIRMET¹⁷ for jets. WSI refined the product and issued FPG and gave conditions that would affect aircraft operated by Compass.

¹⁶ Center Weather Advisories

¹⁷ Airmen's Meteorological Information

Mr. Thompson added that they got notified of TAPS¹⁸ events. They were automated and it was a resource when they saw them. When it was severe information, they got that information out as well. He thought use of TAPS was underutilized.

Mr. Swords thought training material where FPG and TAPS were explained better would be good for dispatchers.

Mr. Thompson stated there was not a lot of interaction with other operations, but they were in contact with Delta Weather.

If a flight was late, Mr. Swords stated the delay would be coded with the reason why, for example, dispatch. That data was compiled at the end of the day and would be evaluated by the respective departments the next day. The SOC, for example, would consider what caused the dispatch delays such as dispatcher workload or issues with the paperwork. A dispatcher might be counseled if a pattern was identified. He felt no one would lose their job for a delay. It was the stations that coded the delays and dispatch got blamed often. On a dispatcher's flight list, flights would turn yellow then red to remind the dispatcher of the time until departure. A flight will first appear white, then turn to amber 2 hours before departure if a release had not been started, and then red 1 hour before departure if the release had not been started. The supervisor could see when a flight turned red and would need to step in.

Mr. Thompson added that they would generally start receiving calls from the stations about 45 minutes from push time if the paperwork had not been received and things could get a little intensive. If the paperwork was not received by a flight's departure time, it would get chaotic.

Mr. Thompson thought the time to complete a release for a "clean flight" was about 8-10 minutes. If there were maintenance factors, difficult weather, station issues, routing issues, or anything out of the norm, it could take 20+ minutes. There was a bit of a delay with LIDO versus Saber as LIDO was doing its analysis. During those "delays", Mr. Thompson would look at his other flights.

Mr. Swords added there was another step in the LIDO process where will do a "first run" and produce a release; however, it would not send the release until the dispatcher signs in and selects that "first run.". He also felt that most dispatchers were against going to too much automation in the dispatch process.

Compass developed their own dispatch resource management (DRM) training that was provided in recurrent training. There were some exercises, but it was really addressed during OJT (on the job training). They taught dispatchers to utilize their resources to get all of the information they need. When Mr. Swords talked to new dispatchers, he would try to talk about workload management and the importance of producing good work while also being efficient. But until a dispatcher actually did the job, it was difficult to know the things that go into the job. Mr. Thompson added that it was hard to simulate the SOC so that was why OJT was best. OJT lasted about 6 weeks.

¹⁸ Turbulence Auto-PIREP System

The SOC had designated OJT trainers. There was a checklist to follow. They tried to pick more experienced people to be OJT instructors to sit with new hires. A new hire would first watch the experienced instructor work the desk then the trainee would work up flights with supervision. The new hire would get more latitude and the new hire would not be monitored creating the paperwork, but the paperwork would be reviewed before it was sent. There was also a requirement to do jumpseat observations. Finally, the new hire had a final comp check with an examiner which may also include an observation by an FAA inspector.

Dispatchers were required to observe in the jumpseat for 5 hours per year per the FAA. However, Compass requires dispatchers observe in the jumpseat for up to 20 hours if the new hire dispatcher had no aviation experience; observations would also include night operations.

To do flight following, dispatchers primarily use WSI Fusion. LIDO would display a flight's out time, would change a flight to light blue when airborne, and would also display the time of landing and at the gate then would drop off the dispatcher's screen. The NetLine system would display the aircraft assigned to the dispatcher. A dispatcher could customize WSI Fusion to show what they wanted to see. PIREPS would appear on the screen. If a severe PIREP were to come in, a dispatcher would ask others working if they saw it because there was sometimes a delay for PIREPs to appear on others' screens.

The RPM turbulence filter on WSI generally correlated with what they were seeing but it did not show altitude of the turbulence so a crew may not fly through turbulence if they were flying at a different altitude, for example the flight was at FL260, but the severe turbulence was at FL390.

TCAS¹⁹ RAs²⁰ would not be reported to a dispatcher. The Flight Operations Manual (FOM) Chapter 4 would state the reporting for a TCAS RA.

The primary safety program in place was ASAP but Mr. Swords believed that any true safety concern was handled through dispatch. A dispatcher would report to the chain of command, such as a route issue. There was also a hotline that went to the department of safety. He did not know if dispatchers used the dispatch irregularity reports. Finally there was the quad system if there was an incident on the aircraft but that was not really a system that dispatch used.

Mr. Swords thought there were 5-6 dispatch ASAP reports per month, but the ASAP ERC did not hold regular meetings; they could go more than a month without a meeting. ASAP reports might include a concern over a MEL item not being removed or issues with LIDO. Mr. Thompson added that not all ASAP reports were a violation so it would get kicked out of the program. There used to be a LIDO working group but that did not appear to be active because of the difficulty scheduling meetings. Mr. Swords commented that dispatchers would often come to him or email him with safety concerns.

Regarding the email that Mr. Thompson sent to dispatchers on the morning of February 13 to be aware of turbulence, he stated that he sent the email because it was early in the morning and not all dispatchers were there so he knew they would see it in their email when they came on duty.

¹⁹ Traffic Collision Avoidance System

²⁰ Resolution Advisory

If it was information that needed to be shared in real time, he would visit the dispatchers' desks. Supervisors will send updates as a precursor to the day.

Delta Weather was an approved weather source, but they also used them as a secondary source. Their primary weather sources were NWS and WSI. Each dispatcher could choose which to use but they had to use approved sources. Mr. Thompson did not think their dispatchers interacted with Delta Weather often. A supervisor might interact with Delta Weather if there was a difference in the RAM TAF²¹ and they needed to make a comparison. Delta Weather could write them a TAF.

In ground school, Compass gave new hires the knowledge of how to access those products, but new hires were not encouraged to use them. In OJT²², a trainer might show them how to access them. Mr. Swords thought Delta products were harder to get to than WSI or NWS products so they would always have WSI Fusion on a screen and they could find turbulence info. With Delta Weather, a user would have to wind your way through subcategories to find what they wanted.

Mr. Thompson stated newer dispatchers typically will use WSI, as that's what they were trained on, some will use the CoSPA²³ product in time. Dispatchers could spend weeks learning all of the possibilities on WSI; however, they train the essential tools during ground school and then during their on job training they will be exposed to different styles and preferences.

During recurrent they go over the basic standards; but they don't get to in-depth with each system.

A concern Mr. Swords had with recurrent training was that it seemed like they had to cover everything in the manual. Training was the same every year and there did not appear to be time to go deep into any one issue.

Dispatchers were trained to share PIREPs with supervisors and other dispatchers. The only way they could report the PIREP into the system was to call Flight Service Station via the telephone. they have tried to input PIREPs via their computers but for some reason they were unable to report the PIREP. A supervisor can see a dispatcher communicating with their respective flight, on their monitor; however, they are not sure if a pilot has given the PIREP to air traffic control. They do not think that dispatchers are filing PIREPs.

CWAs were available but were underutilized by Compass' dispatchers. OJT instructors helped take classroom knowledge and translated it to using it on the job.

SIGMETs were displayed on WSI so dispatchers were aware of convective activity.

When Mr. Swords trained the initial classes, he would give them the bare essentials about weather. He would show them how to display the weather but his assumption was that the new hires had received training on how weather when getting their license so they should know the

²¹ Real-time Atmospheric Monitoring Terminal Area Forecast

²² On-the-Job Training

²³ Consolidated Storm Prediction for Aviation

basics of SIGMETs, what they mean for aircraft; they did not distinguish how to make a judgement of a high importance event or not. Mr. Swords thought they give new hires the essentials of how to find SIGMETs but thought they could do better on how to interpret them.

CoSPA was not an approved weather product.

Mr. Swords thought it was better to discuss the requirements for new hire with the SOC manager. For many new hires, they did not have prior experience as a dispatcher, and some did not even have aviation experience.

Training for new hires included 3-4 days of training just LIDO, then OJT for 6 weeks. During the initial ground training, which was 3 weeks in duration, they cover a variety of dispatch topics, including a weather module which covered everything a dispatcher would need to access regional partners' products, and modules on aircraft systems. There were checks throughout the training and if a dispatcher was not comprehending what they were taught they may give them more training or they may also decide not to continue the training for that dispatcher.

Pass down dispatchers had a bit more challenging job because they had to get caught up with flights that were already active versus dispatchers starting in the morning. The more senior dispatchers took better shifts like weekday day shifts.

PIREPs displayed on WSI were from NWS and not just WSI subscribers

Regarding PIREPs from Compass crews, Mr. Swords said crews might tell them it was bumpy at a certain level, but it was not a formal report.

Asked if there was an ideal time to create a weather package, Mr. Swords said when the release is sent, LIDO will update the weather with the latest weather information. Also, when the paperwork was printed, LIDO would update the weather. If the weather updated and a pilot saw that an alternate was now needed, he would call dispatch. LIDO would give dispatchers weather alerts when the weather changed; a dispatcher can then go review the weather and make changes if needed.

The operational flight plan (OFP) was a document that the crews received. If updated, each version would have a new version number. If a change was made and there was a new version, the dispatcher would call the station to make sure the crew had the correct version.

Compass dispatchers used WSI and looked for PIREPs and SIGMETs, and also relied on pilot reports to see if they needed to reach out to a flight enroute. A dispatcher would also ask pilots to give ride reports.

There were mandatory verbal weather briefings on some flights (pilot-dispatcher interaction) such as Los Angeles to Reno and Seattle to Fairbanks; the Seattle to Fairbanks flight also required a midflight report because was the longest flight they operated. 95% of communication with crews was via ACARS versus via a radio call.

When working the supervisor desk, the supervisor could see all flights for the day. The supervisor would filter through ACARS messages.

Mr. Thompson stated that when doing a verbal brief there was no set criteria for that briefing; however, if there was a special airport, challenging approach, or a long-distance flight as they have into Mexico, they do a verbal briefing prior to the flight. Also the route from Seattle to Fairbanks they do a preflight brief and a mid-flight mandatory briefing.

Mr. Swords stated that it was the pilot's responsibility to call their dispatcher for the briefing.

If conditions warrant, they would solicit ride reports from pilots but usually pilots would report on their own. An example Mr. Thompson provided was for a flight to Reno to Los Angeles, he was talking to those pilots and would ask them to send ride report because they had multiple flights going there later in the day. If a pilot inquired about a ride route that was deteriorating, a dispatcher might reach out to other flights in the area.

More often a dispatcher would not work both legs a crew was flying so there would be a pass down to another desk.

When asked when they would notify crews of turbulence, Mr. Thompson stated that if a report was moderate or severe, he would communicate that to the crew; but he would like to have more information before he communicated that to make sure he could provide all of the information he could to the crew. Like all turbulence reports he felt the categorizing was very subjective and he also felt that pilots do not want to call turbulence severe because that would require additional paperwork.

Whether a dispatcher used the LIDO suggested routing was very dispatcher specific. Mr. Swords usually used the standard route suggested by LIDO, but some dispatchers rarely used the standard. FlightAware had a feature where you could pull up the most used route between two cities so it could be assumed the flight being dispatched would be flying that route and the dispatcher could route it that way.

For technical issues, dispatchers would contact the 24-7 help desk at WSI. If it was a password issue, Mr. Swords could reset passwords.

All dispatchers had their own WSI account.

If a dispatcher thought a flight should be cancelled/delayed, he would talk to their supervisor. If the supervisor agreed, then he or she would go to the duty manager and tell them. The official decision would be made by the duty manager, but the dispatcher had operational control.

Dispatchers did not do DRM training with flight crews. Captains would come in for 3-4 hours in the SOC as part of their Captain Leadership class.

Asked if there was anything else, they wanted to add, Mr. Thompson said they needed more development of TAPS, how its relayed and disseminated.

The interview concluded at 1243 PM.

Interviewee: Zeeshan Raj, Dispatcher for Compass Flight 6058

Date: March 25, 2019

Location: Compass Airlines Conference Room 203

Time: 1531 CDT

Present: Shawn Etcher, Katherine Wilson, Brian Soper, Michael Richards – NTSB; Jonathan Gourdoux – Compass Airlines; and Brian Hirsch – National Weather Service.

Mr. Raj did not wish to have a representative present.

During the interview, Mr. Raj stated the following:

He had been with Compass for a little over 2 years and his date of hire was Feb 20, 2017. He began his career as a crew scheduler and had been a dispatcher for a little over a year. Mr. Raj was working on his commercial pilot license and that was his stated future career; talking to pilots on the phone helped him.

He was 29 years old. He had enjoyed aviation his entire life and it was his first job in the U.S. He moved from India in 2015 and got his certificate through ATP schools in Dallas.

The day of the event, he was working an overtime shift and he started around 0400. That day he was also scheduled for his annual competency check. He had a person monitoring his duties that day as part of his competency check.

He worked about 42 flights that day and described the day as “typical.” Normally a dispatcher would work 35-40 flights a day. The 42 flights he worked included a few pass down flights from another dispatcher. The weather in California was not good and complicated things; it created more work for dispatchers because they needed to keep the crew informed of weather information like SIGMETs and PIREPs. was a day that required more work for both dispatchers and pilots. The LIDO²⁴ system would automatically put SIGMET²⁵s in the weather packet. If something new showed up, he felt it was a dispatcher’s responsibility to let that crew know.

Although it was a busy day, he was focused on his duties and not that he was getting a competency check. He described the weather in the airspace as one that pilots would not want to be in, and he felt it was his responsibility to let his flightcrews know if something “popped up.” The flight that he dispatched was about 1,000 feet above the accident flight, and he felt the turbulence encountered on the accident flight was a result of Clear Air Turbulence. The SIGMET, he thought, covered the entire state of California, from San Diego to Fresno. He knew when the

²⁴ Lufthansa System

²⁵ Significant Meteorological Information

flight plan would initialize the system it would update the weather. He had a lot of flights going across the airspace and he was trying to give them updates. Sometimes the tops of the SIGMETs or the times of the SIGMETs would change and he made sure his crews knew about it.

He normally queried other Compass flights to provide him with ride reports. That way he knew what altitudes to file for other flights; he normally filed flights flying the route from San Jose to Seattle at FL270 or FL280 depending on the direction they were going. Some of the reports he received were for moderate chop, but air traffic control was reporting it was severe; these reports were “way before” the event flight. One of the company flights did report that Oakland Center had issued a severe turbulence PIREP²⁶. He tried to find the PIREP but could not and wondered if Oakland Center had just not reported it yet. The Compass flights were just reporting light to moderate turbulence.

A dispatcher usually worked a 10-hour shift and he was scheduled to end his shift at 1430 local time. At 1430 another dispatcher would take over the desk and it was his responsibility to brief, or pass down, the incoming dispatcher. His briefing would include MEL and CDL²⁷ issues, routing issues, weather, etc. The pass down, on the day of the accident, was just like any other pass down he had provided in the past. He even passed down the information he received from one of their flights that Oakland Center reported severe turbulence to their crew even though there was nothing in the system to validate it. That evening, watching the news, was when he first heard about the accident flight. He wondered if it was his flight, so he texted a colleague.

For him it was a normal day, the weather was not great, but he classified it as a busy day. He felt it was a challenging day. He did not know that his flight was 1000 feet above the accident flight until a week or so before this interview.

For him to prepare a flight, he would first look at the weather radar to see if there was anything building or if there were storms and which way the storm was moving. He would also look at what the weather fronts were doing. He always had the National Weather Service 6- and 12-hour prog charts pulled up on one of his monitors at his workstation. He felt that gave him a big picture of what was forecasted. He would then look for any PIREPs in the area, and if he saw a cluster of PIREPs, for moderate turbulence, in an area he would try not to file through that area. Sometimes he would select the preferred route that air traffic control wanted but may change a little portion of that route to avoid the weather. He also would look at where the freezing levels were, in case they had airplanes with a MEL issue. Before changing an aircraft with a MEL that could not fly in icing, for example, he would talk to his supervisor to see if that aircraft could be assigned to fly a route with warmer weather.

After looking at all of the weather, he then checked the MELs for the aircraft and then checked to see if the flight was staffed with a high minimum captain. He also wanted to give an alternate airport that he felt would be a good alternate in case it was needed. He also looked at the National Weather Service METARs²⁸ and TAF²⁹s, as he chose to stick with one approved resource.

²⁶ Pilot Report

²⁷ Configuration Deviation List

²⁸ Meteorological Aerodrome Reports

²⁹ Terminal Area Forecast

He had seen where one METAR said one thing and a TAF may say something different. He always went with the most restrictive report or forecast when he observed differing information. He then would look at what the winds were doing at the airports, in order to plan for which runway would work for the flight. He made sure that there was nothing specific for the airport (i.e., runway usage after tower closes). Dispatcher dispatched a flight airport to airport rather than runway to runway because they did not know which runway air traffic control would assign a flight when it was arriving. He looked at all of this information while he was building a flight plan.

He took the PIREPs seriously, even if they were not entered into the system, and would communicate them to any of the flights that were operating in the area that the PIREP was issued. When he sent a SIGMET to a flight via the airplane ACARS³⁰, he attempted to communicate as much of the information as possible. He would attempt to describe the location of the SIGMET from a specific fix and he would include the distance, severity, type they reported, and he would also include the time it was issued.

He typically built a flight plan an hour ahead of departure. Some dispatchers felt that it was too late, but he liked to give the crew the most updated weather; waiting to build the flight plan was a risk to him getting behind if there were a lot of crews calling with issues. If he waited to build up a flight plan it allowed him to make sure he captured the most updated weather. An example he provided as to why he would also wait until that time to build a release was sometimes the aircraft assigned to a flight had a deferred APU³¹, he would contact the station to verify they had a ground power unit to provide the aircraft with power at the gate, and if the station did not have a ground power unit he would have to request to change the aircraft so as not to strand an aircraft.

Typically he estimated the he would have about 12 flights in the air at one time flying that he was doing flight following for. At the same time he estimated that he would have about 4-5 other flights departing within an hour.

When he was a new dispatcher, he felt it was a real challenge to monitor aircraft in flight while flight planning another flight. Over time it became a natural process for him, and he felt it was no issue now. Dispatchers had 3 monitors at their workstation. One monitor had their LIDO system which he used to build flight plans, one monitor had the WSI system operating, and the other monitor would monitor flights that were assigned to that dispatcher; it would show if a flight was not in flight or not on the ground after a predetermined amount of time as well. Also the supervisors will be watching all of the flights. If a flight was not reporting on the ground or airborne, he may be asked what the status of that flight was from the supervisor.

Since his name was on the dispatch release, he was still responsible for the flight. If he was working on a release for a flight and an airborne flight called in or sent him a message, he gave priority to the flight in the air. If a flight had a mechanical issue, he would open up the QRH³² to see if they needed to divert or continue because he had a joint responsibility for the flight.

³⁰ Aircraft Communication Addressing and Reporting System

³¹ auxiliary power unit

³² Quick Reference Handbook

The dispatch release needed to be at the station 90 minutes before the flight's scheduled departure. The flight number would turn red on his screen when it was past submission time.

His workload the day of the event was "a little different" as he was being checked. Other than that he felt the workload was "fine."

He actually messaged his crew on the day of the event about the turbulence report from Oakland Center, then forwarded the message he received to other flights. He forwarded that message about 2 hours before the accident flight encountered turbulence.

He estimated he would get a PIREPs from crews about 50% of the time without asking for it. He felt it depended on the pilot.

The competency check he received on the day of the accident was done by a duty manager who was competency check qualified. They had supervisors that were also competency check qualified. He thought the regulations were either 4 or 6 hours of observation being required for a competency check. Typically, the check went longer than that; he estimated his lasted about seven and half hours.

He received DRM³³ training in initial, which included using the resources in the operation like other dispatchers, supervisors, etc.; they should use any resource to make the operation successful. Just prior to his competency check he had just completed his recurrent training. During recurrent they received some DRM training.

If he had a safety concern, he would report that concern via the ASAP³⁴ program at Compass; he could also report an issue via the Compass hotline or in person. If it was a safety issue, he would want to bring in his supervisor and the safety department. He had filed two ASAP reports during his time at Compass, and he knew it went through a process.

When asked if he had occupied the cockpit jumpseat, he stated that regulations required at least 5 hours in the jumpseat per year, but the dispatch manager required 10 hours per year and last year he did about 15 hours. The present year he had done about 7 hours. He did get paid to observe flights from the jumpseat.

When asked for clarification on when he completed his shift and when he had the notice of the severe turbulence report, he stated that he completed his shift at 1430 central standard time, which was prior to the event. About 2 hours prior to the accident, he received a severe turbulence report and that it was near Fresno, California. He did find out that the flight that he had dispatched had encountered turbulence; however, he was not aware of it for about a month after the event. He did not know his flight had encountered turbulence until he was told about a month later. He pulled his communication with that crew to see if there was any discussion, and there was nothing he could find that he had communicated with them during his shift. However, the dispatcher he had passed the flight to before leaving for the day, had communicated with them after the event and that communication was that there were no injuries. He had not communicated with them as the

³³ Dispatch Resource Management

³⁴ Aviation Safety Action Program

time that the message about injuries was sent was about 15 minutes after his shift had ended and he had left.

When asked about the advisories he had that day, he stated that the advisory that he could recall was the WSI SIGMET for turbulence which included an area from San Diego to past Fresno. As he was building that flight's release, he confirmed that the SIGMET was on the weather packet. He could not recall any Convective SIGMETs at that time. They did have CWAs³⁵ on WSI, but they were not always activated. When he looked at the weather radar it was showing cells moving towards Fresno. There were no PIREPs in the accident area.

When asked why he thought the accident flight had encountered Clear Air Turbulence, he stated that he felt that it was Clear Air Turbulence because when he left there were no reports of severe turbulence in the area and no PIREP in the area, just the SIGMET. He felt the accident flight was the first one to be impacted by the turbulence. He could not recall what the winds aloft were the day of the accident.

After his 200 hours of dispatch license training in Fort Worth, Texas, he came to Compass. The dispatch training that the school taught him was how to decode the weather and he learned all of that at the school. When he came to Compass, he knew how to read the weather. He received additional training when he came to Compass such as WSI, Delta Meteorology, but he knew how to interpret the weather from the school.

On the job training was part of his training but most of the training was done in the classroom. After the classroom he went to the operations side and sat at a desk with a dispatcher for 3 to 4 weeks which he felt depended on how well a dispatcher was learning. They then did a competency check to make sure the dispatcher could read and understand the weather. During his on the job training he was assigned to 4 different trainers. At the end of training was the competency check.

While riding on the jumpseat he would ask pilots what can dispatch do to get pilots what they need. He then would ask how the FMS³⁶ would tell them the information when it came to fuel planning. It helped him to be able to understand what the crew would be doing. Also they practiced sterile cockpit during the jumpseat observation so he only asked questions when they were above 10,000 feet. He would also ask about what a CAT II³⁷ downgrade would affect the flight and what it would take to do a CAT II approach. He felt it was great information for dispatchers to know.

When asked to clarify the difference between minimum and bingo fuel, he stated that minimum fuel was the fuel required prior to taking the runway for departure. Bingo fuel, or decision fuel, was the fuel quantity they had to see before they would have to leave a hold to divert.

When he received a ride report from a crew, he stated that he would verbally pass the information to another dispatcher. During a pass down he usually would include weather, SIGMETs, any issues with the planes (MELs and CDLs), crew status if there was something that

³⁵ Center Weather Advisories

³⁶ Flight Management System

³⁷ Category II

the pass down dispatcher should know (i.e. sick crew). He would also ask the incoming dispatcher if he or she had any questions or concerns.

He would copy the SIGMET into the ACARS and then he would also send them a brief message explaining the tops and the location of that SIGMET. He considered that when he sent a message to the crew other than the SIGMET he was just preparing the pilots for the information that he was sending to the printer.

The third screen he had at his workstation had multiple resources on it and he brought up the various screens from the tabs at the bottom, as he did not want to hide his WSI and LIDO screens. He wished he had a 4th screen so he could manage his screen real-estate challenges.

Graphical depiction could not be sent via ACARS and its only on the dispatch releases. ACARS could only receive text messages.

He had observed crews looking at the releases during preflight and making decisions on that information. He noticed that they would go through the textual and the graphical depiction available on the release.

When asked if he had used the remark section on the dispatch release, he stated that he used that section often. He provided an example of a flight from Los Angeles to Omaha; if he was payload restricted, he would tell the crew via the remarks section, and then notify the station of the payload limitation.

They have certain airports that required a verbal briefing. He provided an example of the airports that required the briefing was Medford, Oregon, Fairbanks, Alaska, Puerto Vallarta, Mexico, and Reno, Nevada. Fairbanks had a midpoint brief as well as the preflight brief. The midpoint brief was where the crew would call in over a radio frequency to confirm fuel on board and get an update on weather.

He felt that the remark section was used for payload restriction, alternate, holding fuel or flow, etc.

When asked how he kept track of any PIREPs that came in, he stated that he had sent the information to the wrong crew. Over time it became part of his job to keep track of the information. The more you did it the more natural and easier it became. There was no tracking system for that information that he could recall, nor did he write it down.

They did have a dispatch pass down form, which was a document that he could print out and that was something he considered to be in writing. He would only use it if he felt it was significant enough; ride reports would be what he would consider verbally given and would not put it on the form.

The pass down briefing between dispatch was not recorded, no checklist was used, and no written acknowledgement was required.

There was no overlap once the dispatcher receiving the pass down and that dispatcher agreed with the information; then the departing dispatcher was cleared to leave.

He felt that if there was a simple way to log the corporate knowledge from one shift to another, he would use it.

Interview concluded at 1733 CDT.

Interviewee: Heidi Marie Owen

Date: March 26, 2019

Location: Compass Airlines Conference Room 201

Time: 1125 CDT

Present: Shawn Etcher, Katherine Wilson, Brian Soper, Michael Richards – NTSB; Jonathan Gourdoux – Compass Airlines; Brian Hirsch – National Weather Service

Ms. Owen was represented by Mr. Thomas Swords, Compass Dispatch Supervisor.

During the interview, Ms. Owen stated the following:

She was a duty manager in the Compass System Operational Control Center. Her date of hire with Compass was September 17, 2011.

Her duties included being a supervisor when needed as other supervisors may be off for vacation or other needs. The supervisor was the go between for the dispatchers and duty manager. The supervisor focused on just the dispatch side of the SOC. As part of her duties she also did competency checks for dispatchers, both initial and recurrent checks.

She obtained her dispatcher certificate in 2007 from Anoka dispatcher school and then went to work for Mesa Air Group until 2009 in Arizona. She moved back to Minnesota and worked at Mesaba Airlines³⁸ from January 2010 to January 2011, and then in September 2011 she was hired at Compass. Ms. Owen was an instructor at a local dispatch school not associated with Compass and had been an instructor at that school for a year.

She stated that dispatch staffing was more than adequate with regard to the Code of Federal Regulations (CFR). There were times that they were busy which was why they had a current dispatcher as a supervisor available to assist with dispatching flights, communicating with crews; referring to departures, she said “on time is good”.

When asked about competency checks, she stated that prior to an initial new-hire check, the newly hired dispatcher would have done their classroom hours, then they went to the SOC where they did their training of operating a dispatcher desk during their OJT. Once that was completed and the trainer felt that the newly hired dispatcher was ready, they were scheduled for the competency check, which was to take place with a designated supervisor; there were a few

³⁸ Mesaba Airlines was a regional airline based in Eagan Minnesota. It ceased operations on January 4, 2012

supervisors qualified to do competency checks. Once they made that decision, they scheduled the time with the new hire and the SOC manager notified the FAA as well. A competency check occurred during a regular dispatcher shift and started promptly when scheduled for. The designated supervisor would sit with the dispatcher at one of the dispatcher workstations and observe how the new hire evaluated the day, dispatched a flight, communicated, and performed flight following; the dispatcher would also answer questions to understand his or her knowledge, for example, about dispatch, ATC, company manuals, and FARs. The result of the competency check was either a pass or fail.

During a new-hire competency check, the quantities of flights the dispatch candidate would work could be less than a current and qualified dispatcher would work during a shift; however, that determination was up to the supervisor performing the competency check; they looked at time management. Some competency checks would last for the entire shift, as they wanted to make sure everything was completed. When she gave a competency check, it would typically last between 8 and 10 hours because she had never seen this person dispatch before.

When asked if they had dispatchers not successfully complete the competency check, she stated that it was rare that a dispatcher would not pass. She had had a few that had not passed the required competency check; she estimated that the number of fails to be about 3. When that occurred, it would be up to the SOC manager to decide what the course of action would be. The manager would determine what the applicant needed, which could include more desk and/or classroom training.

When asked what some of the causes of the failed check were, she stated that the failure rate could be a wide range of items. The competency check consisted of several sections and each of those section had multiple subsections.

When asked how long initial new hire training took, she stated that desk training was about a month in duration. The OJT sheet they used during training was for that new-hire's entire training sessions and there was also a competency check form.

When asked if the initial competency check was different than a recurrent competency check, she stated that both had the same requirements and were the same competency check.

When asked if they saw any specific areas that were issues for dispatchers, she stated that she did not see any specific issues for dispatchers. However, she was unsure of any issues in the classroom part of the training as she did not conduct any of that training.

If a dispatcher did not pass a competency check, the FAA would be notified; she did not notify the FAA personally. The FAA did participate on many of the competency checks for both initial and recurrent.

When asked to describe her duties as a dispatch supervisor, she stated that situational awareness was key for a supervisor. If, for example, a dispatcher fell behind in their assigned tasks, she would talk to that dispatcher to see what was going on and if they wanted assistance and then decide if workload needed to be redistributed. Even if the dispatcher said he did not want

assistance, she may take flights off his desk or field phone calls until the dispatcher got caught up or have another dispatcher monitor the ACARS for that dispatcher's flights. She would not assign flights to another dispatcher if they were falling behind in their work. It was very rare that she would have to take on a flight for another dispatcher.

She was not working on February 13, 2019, the day of the accident.

If a dispatcher was handling an inflight emergency on one of their flights, she would off-load work from that dispatcher so they could focus on the emergency. During an inflight emergency there was a lot of communication occurring which was one of the reasons she would reduce the workload from that dispatcher.

When asked to describe a typical day for her, as a supervisor, she stated she would walk in to the dispatch room, look over the two television monitors to see if there were any ground stops or delay programs that may be in effect. She would then look at the monitor with the Aviation Weather Center (AWC) website displayed to understand the weather which provided her with a brief look at the weather. The monitor with the AWC website was not dedicated to weather information. She would then talk to the supervisor on the previous shift - she usually worked the evening shift - for mechanical issues, aircraft out of service, and other "big picture" items and received a pass down from the outgoing supervisor. She then accessed the websites she typically used at her workstation. She would communicate with each dispatcher to verify that they were doing ok. She would try to run the operation on time and was constantly communicating with dispatchers, stations, and ATC. She would do aircraft swaps if that needed to be done. She did do some communicating for a dispatcher if they were busy, including sending or replying to an ACARS from a flight. Also part of her duties would be to contact air traffic control in order to provide support and information to the dispatchers. Dispatchers could communicate with each other via their interoffice messaging (Skype), which could be used to send a message to all dispatchers or to a specific dispatcher, by phone or walking over to their desks. If there was something a dispatcher needed to see visually, she would print it out.

When asked how she processed a PIREP when received from one of their flights, she stated that depending on what kind of a PIREP it was, she would communicate that PIREP with nearby company flights as quickly as possible. She would also look at the Aviation Weather Center web page and if the PIREP was not there she would call flight service station to get it entered.

When asked how often she contacted flight service station to report a PIREP, she estimated that she did not call very often. If the PIREP was "out of the blue" then she would communicate it to flight service station.

She was not sure if competency check failures had to be reported to the FAA.

When asked what the turnover rate of dispatchers was, she stated that they had some "lifers" in dispatch, but she estimated that normally a dispatcher would start to look and interview at other carriers after they had been at Compass for about 2-3 years. The OJT supervisors even had a turnover rate, but she was not certain what that was.

Competency checks were done by one of four check supervisors, which she was one. Typically the way it was set up at Compass was that recurrent training was concentrated in February and March of each year. She may do 3 or 4 competency checks in a month and then go months without doing any. The class size of an initial dispatch new-hire class was about 4.

She was not certain how many dispatchers were currently employed at Compass, but she estimated around 20; dispatchers were based in Minneapolis.

When asked to describe the difference between a duty manager and a supervisor, she stated that a duty manager was focused on the flight operations, which included crew scheduling, maintenance planning, parts gathering, and maintenance control. As a supervisor they were focused on the dispatch part of the SOC. The duty manager was the go-to position to get information from their partner airlines. She knew which position she would work based on the bid schedule that was developed and the schedules were for 6-months at a time. She added that sometimes the schedule may change if someone had a family emergency or something that they needed to be off for.

The maintenance and scheduling departments of the SOC had their own respective supervisors, but as duty managers they were the contact for all.

The majority of dispatchers were straight out of school and had recently received their dispatcher certification. As part of their training, during some of their modules they talked about the aircraft specific information as it pertained to their aircraft. They also focused on mountain waves since they had flights in and out of Salt Lake City. They did mention turbulence and weather hazards in 4 of the modules (modules 1, 7, 8, 10). The modules were done in person. During a dispatcher's training, the desk training showed the tools that a dispatcher had available and how they were to be used to identify hazards, in order to avoid them with their flights and how to communicate that information to their crews. They were not required to teach SIGMETs, as the dispatcher learned that during their certification, but the dispatch candidates were checked on it.

A dispatcher also was given an enroute competency check, which included hazards enroute and they were examined on how they communicated that information to the crew and how to report that information to other dispatchers. An example she provided was, a line of thunderstorms may have just "popped up" and they would ask as part of the competency check what the dispatcher would do and how to identify the hazard. Convective SIGMETs would be included during that section.

The weather report section of the competency checklist could be a lot of things and they wanted to make sure a dispatcher was able to identify, decipher, and communicate that information to the crew.

The weather data section of the competency checklist would include testing on winds aloft; PIREPs would be in that category. She provided an example of, if air traffic control wanted the crew at a different altitude than filed, they were tested on if a dispatcher could look at the information, determine if that would be acceptable, and then communicate that to the crew. She felt hazards were taught in dispatch school and were discussed considerably during practical tests.

She felt a new hire would learn a lot about hazards during their OJT. The instructor would be able to help a new hire dispatcher to apply what they had learned during their certification training and new hire training.

OJT may vary with each new hire and they may be exposed to various instructors as well at various shifts during training.

Weather patterns that they encountered in the Compass system were broad, but they did focus on mountain waves and thunderstorms in Texas (how to recognize and prepare); however, they may not worry too much about lake effect snow since they did not fly much around the Great Lakes. They also trained dispatchers on what kind of weather could be expected in Seattle during the spring time, Los Angeles during different times throughout the year, and other more localized weather. Normally, if the weather was clear during a competency check she would ask the dispatcher what conditions they would expect at certain times of the year and she wanted to know what a dispatcher would do if faced with those conditions. If the weather was clear at that time, she would simulate a weather situation to determine how a dispatcher would avoid the area and route the flight around that area.

CWA questions were not listed on the competency checklist but a supervisor, during the check, might ask a dispatcher about them. She did not think they covered CWAs that much during OJT; however, she also stated that CWAs may turn into SIGMETs and that discussion may depend on the OJT instructor.

Ms. Owen normally worked nights and weekends but, in her experience, when she had called the flight service station, they had always answered the phone and she had never had issues getting flight service personnel on the phone. The morning shift was “a different animal” than the night shift; each had their issues.

Dispatcher passdown was part of the competency check even though it was not specifically listed on the checklist.

For passdown there was a formal checklist a dispatcher could print off and complete; however, she knew some dispatchers did not use it. She had seen paper passdowns multiple times on a shift but there was not a requirement to use the form; she did not think she had ever seen just a verbal passdown. She further stated that she may receive a verbal passdown from an off going supervisor, but she would write it down on the passdown form. As a supervisor, they had a log they were required to keep. Some of the items that they logged were when they updated stations on equipment issues, that they communicated with dispatchers every so many hours during their shift, and time stamps for ATC telecons. As a supervisor they were required to initialize the duty log and then sign off the log at the end of their shift. The duty manager also had a similar system.

She was an instructor at Academy College, a local dispatch school that was not associated with Compass. At that school they would get a candidate ready for the practical test to obtain the candidates' certificates. She had been instructing at that school for about a year. She taught weather avoidance and how to build a route. She would continue instructing at the local school and had been tasked in developing course material as well as obtaining information for advance flight

planning. She felt that some of the issues she had seen at the local school was with organization. However, she felt she had not seen very many deficiencies at the school during her time as an instructor there. She felt that when a student had completed the training and the practical exam, they were ready to be dispatchers.

CWAs were not something she covered during training, nor did she have it on her competency checklist to cover during the check. She further stated that as a dispatcher she did not use CWAs.

When asked how, as a dispatch group, they handled in-flight emergencies such as turbulence, she stated that as a duty manager she would start off with how they received the notice if it was either via phone or ACARS. One of the first questions they would ask would be if anybody was injured. If the turbulence was classified as severe turbulence with no injuries, it would be considered a QUAD 1 which required only an IROP. Classifying something as a QUAD 3 would be if there was no emergency but a passenger or an employee may have been injured or an illness to alert. If they were informed of an emergency, then it would be classified as a QUAD 5. QUAD 2 was used only for a test and QUAD 4 was used if they had exceeded the Department of Transportation taxi time limit. There would also be follow up QUADs as the event progressed and the final QUAD update would be when the flight was finished, blocked in at the gate, and the injured were being transported to the hospital, if required. A QUAD 8 classification would be if there was damage to the aircraft. During an event they could use multiple QUADs depending on the event.

Ms. Owen was not involved with hiring dispatchers at Compass.

When asked if she had ever had a current dispatcher not pass a recurrent competency check, she stated that she had but it did not occur often.

When asked if dispatchers worked overtime, she stated that dispatchers did work some overtime, but it was offered on a voluntary basis, and that junior manning did not occur often.

When asked if she had observed any accuracy issues with items on the dispatch release, she stated that she had not and felt there was not much room for inaccuracy since dispatchers communicated with the pilots.

When asked if EFBs³⁹ would hinder communication with pilots if pilots could have internet access in flight, she stated that EFBs would not hinder a dispatcher from communicating with the crew, she felt it may make communication easier.

When asked if she was aware that the graphical weather charts available at the end of the dispatch release was not always available to the crew as it depended on what type of printer was used to print off the release, she stated that those charts were great, but she did not realize that a crew did not always receive those charts.

³⁹ Electronic Flight Bags

She felt that flight crews communicated with dispatch but that the level of communication varied, and it was not uncommon for crews to ask for information from their dispatcher.

She was required to sit in the cockpit jumpseat during flight at least 5 hour per year per type aircraft being dispatched per the CFRs; however, at Compass they required 10 hours per year for dispatchers and up to 20 hours per year for new dispatchers. The regulations did allow for that time to be reduced; however, they did not reduce the time. Normally when she sat in the cockpit jumpseat the crews did not discuss or complain about anything to her. She further added that she could do some of the yearly requirement in the simulator and observing crews during simulator training was more beneficial as it allowed her to observe what crews do during various emergencies and scenarios; she felt it was more beneficial than sitting in the cockpit jumpseat during a revenue flight. She further stated that if a dispatcher did some of the observations in the simulator then they could not reduce the yearly requirement in the CFRs. She last observed a flight from the cockpit jumpseat in October of 2018 on a round trip flight from Seattle to Orange County, California.

When asked if the paper passdown sheet that a dispatcher could fill out was retained, she stated that a dispatcher's passdown sheet was not; however, the supervisor and duty manager logs were retained and archived. The shift log was recorded in ACCESS.

Interview concluded at 1311 CDT.