NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

October 10, 2018

Attachment 2 – Dispatch Interview Summaries and Statements

OPERATIONAL FACTORS

DCA16IA215

Interviewee: Ping Chung Lueng
Date: October 4, 2016
Location: Conference A – JetBlue Headquarters
Time: 1302 EDT[1]

Present: Mike Richards, Brian Soper, Shawn Etcher – NTSB, Andrew Averna - JetBlue

Via Telephone: Inspector Dave Burnham, Jim Shelor– Federal Aviation Administration (FAA), Captain Ekstrand – Air Line Pilots Association (ALPA)

Mr. Lueng was represented by Mr. Jon Tahmazin, Manager, Dispatch Support.

During the interview, Mr. Lueng stated the following:

He was 58 years old, and was employed at JetBlue as a flight/aircraft dispatcher. He was hired on November 7, 2007. He held an FAA Dispatcher certificate. He had no flight time as a pilot. His most recent training event was a Spring Special Emphasis Training (SEP) and his most recent recurrent training was in November 2015.

He became a dispatcher in June 1987 prior to that he worked as a load planner in Hong Kong. Five years later he was employed at Lufthansa airline, then worked for Saudi Airline as a dispatcher beginning in 2004 and then became employed at JetBlue.

He has never been terminated or fired from any employers.

His chain of command is the duty supervisor, then the Manager on Duty (MOD), then the system operation controller.

JetBlue has been growing "fast" and that the workload is "high." He normally works a 10-hour shift from 1400 to 0030. During the 10-hour shift the first hour normally consists of pass down flights from the morning dispatcher and that normally around 2100 the peak of the workload is decreasing. He considered the current workload as "heavy" as compared to 2007.

JetBlue provides the dispatchers with "a lot" of tools to do their job. If there is a concern over a flight he will try and catch the flight on the ground. Once they are airborne they "try and catch them." If the flight is airborne, and there is concern over weather, he will send a message to the captain via ACARS[2].

JetBlue began using a new flight planning system in October 2015.

Dispatchers are multi-tasking, sending an ACARS to a flight, an IM[3] to another department, etc. He has to prioritize. Dispatchers are busy and they have a lot of tools to use, such as flight

[1] Eastern Daylight Time
[2] Aircraft Communications Addressing and Reporting System
[3] Instant Message

explorer and CoSPA[4], which has a 2-hour weather prediction, and pilot briefing through WSI[5], as well as dispatch resource management (DRM).

They have a "very good" dispatch environment.

Their tools allow them to plan for fuel, holding, etc. He has taken several hours working a flight before do to various reasons, including weather.

Transcontinental flights are challenging as he is responsible while it is in the air. If a flight is facing a large headwind they only have so much fuel they can put on and sometimes they have a tech stop in Salt Lake or Denver. He felt that he has to run analysis to make sure that they have enough fuel.

The day of the incident he remembered working a flight that was going from John F. Kennedy (JFK), New York to Seattle, Washington. The flight was needing to deviate towards the south, for weather; however, the deviation reduced their fuel to a point that the flightcrew requested to divert to Salt Lake City. He ran "a lot of analysis" for the tech flight on the day of the event. He knew fuel was tight and he requested for the crew to deviate through the Midwest but they elected to go further south, which subsequently required a tech stop. He felt everything was under control on that day but he was "very busy."

He divides his time by giving any flight that is in the air his priority and any flight on the ground he felt can wait. If he felt, he was running behind he could ask his supervisor to take some of his flights. Even though it was manageable, it was a "heavy" workload on "one man." He saw the deviation of the incident flight but did not see any active PIREP[6].

Some crews have really good communication with the dispatcher, but some flightcrews "stay to themselves." He felt it was his responsibility to communicate with the crew. He feels he is there to provide a service. Some pilots are good at providing interaction with their dispatchers some do not. Sometimes he will issue a new version to a crew but the crew did not respond so he has to contact them to verify.

JetBlue has some good tools to preplan the flight.

If he has to get in touch with a crew, he utilizes ACARS or he could request a phone patch.

Felt most of the pilots are willing to respond to any request he has.

Most of the time he "tries his best" to watch his flights once the flight is in the air. If a dispatcher needs to overflow some flights as they are busy, they have a good working relationship within dispatch and he or others may pick it up to help, as others would for him also.

He can delay a flight if he needs to. If he cancels a flight he talks to the system controller and then the MOD. He has cancelled a flight, but it was a "long time ago" and estimated that it was

[4] Consolidated Storm Prediction for Aviation
[5] Weather Service International Corporation also known as The Weather Company
[6] Pilot Report

possibly in springtime. However, if there was a safety reason with a flight, then he felt that it is his responsibility, as the dispatcher, to cancel that flight.

As a dispatcher he works between 25 and 50 flights per shift and at any time could have 25 flights he is monitoring, which usually includes carryover flights from the morning shift. Usually once his shift ends he would pass down maybe 10 flights to the overnight dispatch shift.

The day of the event he classified his workload as "a little more busy" because of weather on the continent. They had flights from Boston destined for the west coast and they had weather in upstate New York. Flights from JFK had weather from about Michigan down to the "pan handle." The reason it was busier for him was because he was running a lot of analysis, as he wants to make sure fuel is sufficient for the flight.

They also have the ability to off load a few people, prior to departure, to allow for enough fuel or they can plan a tech stop. He looks at the economics of the flight.

He communicated to the incident flight after he saw their "tag" change to RAP[7]. He sent the flightcrew a message via ACARS but it took a few minutes to respond to him. When the crew responded they reported severe turbulence. He did not communicate with the incident crew prior to departure from Boston nor did he communicate with them enroute prior to the incident. The flight crew did not communicate with him either but he had noticed on flight explorer that they were deviating around some weather. He did notice the flight stayed at flight level 320 during the deviation.

When looking at a weather radar, color of the echoes is a factor. He looks at it as if it is orange it means stay away, yellow they deviate a little but may come back to the route. The colors on the weather radar, that he could recall, were green, yellow, orange, red, and purple. He thought the radar around the incident flight was yellow but no orange.

He only remembers high level PIREPs, which reported as around flight level 390. The PIREPS reported light chop. If light to moderate chop would be reported that is when he would start to communicate with the crew.

He does not feel that contacting the flight crew is a bother as it is part of his job to keep the flight crew informed. He and the pilot share responsibility for the safety of the flight. If he sends something to a flight crew and they do not want it, they can throw it away but he wants to let them know.

He has pulled flight plans out of the system, in the past, so the crew would be unable to get a pre-departure clearance from air traffic control until they talked to him. If a pilot provides a PIREP he shares that with other dispatchers within JetBlue. A PIREP that is given by JetBlue crews stays within JetBlue. He views PIREPS on his flight explore, aviation weather center (AWC), as well as internal reports. He feels flight explorer is not real time and maybe delayed by two or three minutes. He has "so many tools" that he can utilize.

[7] Rapid City Regional Airport, Rapid City, South Dakota

He does discuss with flightcrews while enroute about what he is seeing on the weather radar. He will provide suggestions to the flightcrews. Flightcrews fly the plane, he only provides a suggestion. The commander is flying so he will let the pilot know but he is "a little dispatcher."

He does not think that the WSI pilot brief is any different when it comes to the weather radar, as what the flightcrews see with the on-board radar.

The WSI representative will provide information to the dispatcher via IM. When the WSI representative goes home after their shift, he can still get information from the tech supervisor.

He uses echo tops to look at the color, green is better.

If a crew is around weather, they have radar and he expects something to happen, but he still contacts the crew. After the crew reported they had turbulence, he looked at the radar and there were some tops in the area but "not that high." After the flight landed in RAP he saw some cells but not as intense as he has seen before and only saw yellow.

He was surprised when the crew reported they hit turbulence, but at that point there was nothing he could do but to deal with the aftermath. He had not communicated with the crew prior to the turbulence encounter. He first noticed that the tag was changed to RAP. He recalled that the crew had deviated a little after departing Boston.

He had considered turbulence for his route when he was planning the flight, prior to departure.

He tried to plan a route to avoid the turbulence. However, he utilized the flightplan generated route.

On the release there were remarks for extra fuel, which was for possible deviation, long taxi out; however, there were no CDR[8]'s at the time.

The route and/or avoidance was dependent on the crew but not solely on the crew as the flight is his responsibility also.

The flightplan package has SIGMET[9]s, Convective SIGMETs, area forecast, etc. but he did not talk to the flightcrew prior to departure.

He was tracking the movement of the thunderstorms along the incident flight's route. He observed weather along the route when the flight passed Minneapolis. He saw some deviation but he had run a lot of analysis for his flights that he was monitoring. He did not contact the crew. He continued to monitor the flight. If he felt it was necessary to talk to the crew, he would issue an ACARS message to the flight.

He expected the flightcrew to communicate with him as communication is very important. He felt the flightcrew should be more proactive also. However, he still has responsibility also. He felt the event was avoidable.

[8] Coded Departure Routes
[9] Significant Meteorological Information

He felt that workload was a factor but not "a lot."

He felt that in order to avoid an event like this there needs to be better communication.

If it is a really busy day a dispatcher can ask for help. The dispatcher should spend more time flight following.

They are taught CRM[10] with the flightcrew, but CRM only occurred during initial training. When he joined JetBlue that training was combined with the flightcrew. During recurrent training they only talk with an instructor about DRM[11] on the floor.

If he really has some severe weather or severe turbulence, he will send an ACARS to the crew and then follow up after the flight passes through the area and ask for a PIREP.

At the time of the incident he had about 20-22 flights under his responsibility and probably about 15 or 16 of those flights were in the air. He felt the workload was "not so high" and "not as busy" at the time of the incident. The tech stop flight was before the incident flight and close to the time of the turbulence encounter. He had talked to the tech stop flight crew prior to the incident and had to follow up with that flight after the incident. He was "occupied."

He felt the dispatcher job really requires some attention and focus. Sometimes other flights may distract a dispatcher.

He felt JetBlue was a "good airline." He tries his best to avoid any incidents under his control. He gives more priority to a flight in the air than on the ground. The incident flight was "quiet" from his side and from the airline crew as well.

He utilizes flight explorer and flight aware for flight following and weather. He does not utilize WSI Fusion[12].

His normal shift is 1400 to 0030 and the WSI contact leaves the dispatch area around 2000 to 2100.

He was comfortable with the deviation the flightcrew was doing, prior to the incidient, and that almost every flight has some kind of deviation. The workload was "heavy" for that night and he may have been occupied with other flights around the time of the incident. He felt if he would have talked to the crew earlier they may not have encountered the turbulence. He felt that he did not follow up properly with the crew other than the remark on the flight dispatch release.

Interview ended at 1444 EDT

Interviewee: Ioannis Eleftherios Koveos
Date: October 4, 2016
Location: JetBlue Conference Room A

[10] Crew Resource Management
[11] Dispatch Resource Management
[12] WSI Fusion is a "proactive flight tracking application" SRCE: https://business.weather.com/products/fusion

Time: 1508 EDT

Present: Michael Richards, Brian Soper, Shawn Etcher – NTSB, Andrew Averna - JetBlue

Via Telephone: Marshall Ekstrand – Air Line Pilots Association (ALPA)

Mr. Koveos was represented by Mr. Jon Tahmazin, Manager, Dispatch Support.

During the interview Mr. Koveos stated the following:

He was 42 years old and was employed at JetBlue as a dispatcher, supervisor, and trainer. He was hired at JetBlue on September 26, 2007.

He had a FAA dispatch certificate as well as a commercial and private pilot certificates, with ratings for instrument airplane, airplane single-engine land, and multiengine land. He had between 250 and 300 hours of total flight experience as a pilot, of which most were in a single-engine airplane.

He became a pilot after graduating from high school and attended a college with a pilot training program, as well as Flight Safety in Vero Beach, Florida to complete his ratings. In 2000 he became a dispatcher and was subsequently employed by Atlas Air as a dispatcher prior to being employed at JetBlue. He has never been fired or terminated from any of his employers.

He reports directly to the manager and then to the director within JetBlue.

He felt that dispatch was staffed "properly" and "adequately" for the amount of flights they operate and for any future growth that may occur. During the afternoon shift, that he typically works, they usually will have about 25 flights to flightplan for and a dispatcher will usually monitor about 10 flights in the air at a time.

When a dispatcher comes on duty at the beginning of their shift, they open up all of their applications. Then a dispatcher will read all the messages from emails, read and initials documents, advisories of the day, and brief themselves of the weather. Normally a dispatcher will verify no flights are attempting to contact them. At that point a dispatcher will start to flight plan upcoming flights. They plan to have the dispatch ready within 2 hours of estimated time of departure, which is optimal. The dispatcher must have the flightplan filed no later than 1 hour prior to departure, otherwise there could be a departure delay on dispatch.

If a flight has an MEL or penalty associated with it, the dispatcher will work with maintenance control to attempt a fix on the item or swap with another aircraft, if they have that ability. If they do not maintenance would have to fix it.

If there was a weather issue or a dispatch related concern, he would go to his manager or to the director. This would allow others to provide direction in case he had missed something. He would also work with the manager on duty to correct the concern.

He does have the ability to cancel flights. In order to do so he would advise the operational side of the dispatch room and the MOD. If a flightplan was filed, they would also take it out of the system. He has canceled a flight in the past but he could not recall the reason it was canceled, as it has "been awhile" nor could he recall if he canceled one at JetBlue or his previous employer.

Dispatchers at JetBlue utilize flight explorer for the progression of a flight as well as check for any potential weather issues. Dispatchers will also solicit information from flight crews to help with other flights, along with position reports.

Dispatchers are not afraid to ask flightcrews for information while inflight. He has asked for PIREPs as well as ride reports. He prefers to utilize ACARS unless they don't have ACARS then they do a phone patch.

As a supervisor, he supervises the rest of the dispatchers and looks over their messages they send out and ones that they receive. He tracks all the flights at JetBlue when he is a supervisor. As a supervisor he oversees up to 13 or 14 dispatchers at a time. He further reported that at any one time he could be overseeing up to 150 flights.

In order to contact the crew after the flight has departed the gate, they would normally use ACARS. If it is urgent they have also contacted the air traffic control tower, if the plane is taxiing out. They are notified that the airplane has departed the gate with a block-out time, which corresponds to brakes release, he further clarified that it only means the brakes were released but does not necessarily mean it has departed the gate and is taxiing.

Dispatchers can overlay weather via flight explorer. It provides them the ability to show where their flights are and a dispatcher can overlay weather as well. The system also allows them to observe other flights not just JetBlue flights, if needed. Most dispatcher uses the system just to monitor JetBlue flights. On the day of the incident, there was pockets of weather and most flights were circumnavigating around the weather. Similar to widely scattered thunderstorms. The weather was predominately in the middle of the country.

A dispatcher will typically give enough fuel to deviate. If there is a front, or a solid line, the dispatchers will typically avoid solid lines. Every dispatcher has their own amount of fuel that they like to provide for deviations; however, transcontinental flights are sometimes limited with the amount of fuel they can carry. He usually would provide 30 to 45 minutes of extra fuel on top of what the FAA requires for reserves; however, there is no specific amount required at JetBlue.

There were deviations by other carriers operating in the area as the incident flight; however, he classified the deviations as "minor." If there were deviations that they felt were more than "minor" they briefed the dispatchers working flights in the area, sometimes air traffic control will put out required routes for that area.

Typically, JetBlue will utilize optimized routing considering winds and other variables. Dispatchers can also "mark out areas" to avoid. He could not recall what was done for the incident flight.

A dispatcher provides the route of flight, fuel and what he fueled for; such as, route avoidance, route weather, alternate, etc. which would be located in the remarks section of the release. He would also provide precautionary statements to the crew, if there was weather that almost required an alternate airport. He was not sure if the flightcrews appreciated the remarks, but as a dispatcher they are required to put remarks on the release. While in flight typically flightcrews are appreciative of suggestions from dispatch. He could not recall if there was any communication with the flightcrew, prior to the incident.

Around the time of the incident there were flights going around in the area of the incident but no JetBlue flights diverted going into that area.

Around the time of the incident, the dispatcher working the incident flight was "busy" working other flights. He, as the supervisor, could share the workload with other dispatchers; however, the incident dispatcher was "handling it." After he received a message that the flight was diverting the incident dispatcher, had to devote more of his time to the incident flight. As a supervisor he has "off-loaded a few times" the workload from other dispatchers, but did not, on the night of the incident, for the incident dispatcher.

JetBlue is going to hire more dispatchers for flight following in anticipation of growth.

He felt task saturation for dispatchers occurs typically with delays, which gives the dispatcher more flights to work in a shorter period of time, as well as departure delays and possible diversion flights. Diversion flights now become the equivalent of two flights for a dispatcher, the flight that diverted and then the departure of that flight either to their original destination or to another destination. When delays happen, there can be more task saturation for a dispatcher. He felt task saturation is more situationally dependent and not just a specific number of flights.

A dispatcher weather briefing usually consists of a pass down from the previous dispatchers. They will go through WSI pilot brief and view their charts. There is no formal briefing and it mostly consists of a pass down briefing. WSI contractors, located in dispatch, put out a general email of the weather usually once in the morning and once in the afternoon, but nothing verbal.

A dispatcher will notify flightcrews of changes they see by contacting the flightcrews via ACARS. An example he provided was a line of weather. Severe turbulence, also displayed in flight explorer, will usually have a dispatcher let the flightcrew know. He was not aware of any latency issues with flight explorer. Usually he will see the aircraft move, on the screen, approximately every 3 minutes. He has not seen any latency issues when it comes to weather, and he felt flight explorer is the best system to overlay all the information of the flight's path and the weather.

He does interact directly with the WSI contractor that is located within the same room as the dispatchers. He feels confident, when it comes to a reroute of a flight, with the weather information he, as a dispatcher, has to plan a route of flight with the products they have and he does not discuss that with the WSI contractor.

The presentation of weather radar is typically done with flightexplorer as well as WSI pilot brief. Those are typically the ones that are used and WSI pilot brief is the primary means. The colors on the radar screen are; green for rain, yellow for thunderstorms, orange for higher moisture content, not sure if there are any other colors on the radar. If there is yellow he looks at that as able to get around, green is low level rain which is no problem, and orange is a "no-go." He thought other controllers interpreted it the same way.

He does have an iPad with the WSI application, which is the same as what the pilots have. He does not use the iPad as he prefers his computer. A few dispatchers do use the iPad but he is not sure why they do. He primarily utilizes the computer as that is what he is used to.

If a pilot provides a PIREP to a dispatcher, the PIREP is disseminated with the rest of the dispatch group within JetBlue. The PIREP is saved in their system but there is no rule a dispatcher must follow. However, if there is severe turbulence he, as a dispatcher, will notify maintenance, as there is an inspection required. Most of the time, depending on the severity, he will share the information with the rest of the JetBlue dispatch.

He does utilize the National Weather Service (NWS) ADDS system for PIREPS; however, the WSI pilot brief is their primary means. He assumes that a pilot will provide a PIREP to air traffic control, who in turn will notify the NWS to put it in the system. He does not enter a PIREP into the ADDS website. If a PIREP is given to a dispatcher, at JetBlue, it is shared only within JetBlue.

Optimized flight planning uses only winds aloft and fuel economy for the flight path. However, if they need to avoid a weather they have the ability to "hatch an area" to optimize around that area, and that is done on occasion. He was not sure how the incident dispatcher planned the incident flight but he felt that he only provided fuel for deviating.

The incident dispatcher did not send out any messages, he first noticed a message when they received the ACARS message from the incident flight that the flight was diverting. He, at that point, walked over to the incident dispatcher and then began communicating with the MOD.

Following the diversion message, he went to the incident dispatcher and asked a few questions such as why is he diverting; however, at that point the incident dispatcher was busy getting his numbers for the diversion flight and he, as the supervisor, began communicating with the other leaders in the room. He did not have to "off shed" any of the flights from the dispatcher, as he did not see him struggling with his flights, and this was his only airborne issue.

He did look at the radar, following the incident and noticed pockets of weather cells in the area. He also wanted to see what other dispatchers were reporting, which was light chop at higher altitudes. There were no other PIREPs in the area. He thought the color of the weather cells were yellow and red, but they were isolated. He noticed other operators were also deviating. He thought the cells were approximately 15 to 20 miles from the incident flight.

Dispatchers are not sure where the internet is sporadic for use in flight by the flightcrews.

He has been a supervisor at JetBlue for about 6 years. He is a relief supervisor, which means he may be called upon to fill in as a supervisor role but when not filling in as a supervisor, he is a dispatcher. As a supervisor he could dispatch a flight, and some do on occasion, but there is no requirement that he does so while in the role of supervisor. He is a relief supervisor depending on the schedule, as he may do no shifts to a lot of shifts as a supervisor within a month depending on the vacations. During the month of the incident he was predominately a relief supervisor due to the vacations of the other supervisors.

Dispatch does not interact with pilots during CRM training except during initial training. They do not have "CRM courses" that are similar to the flight crews. They do not conduct training with pilots during recurrent training. He felt that the training with pilots was good and was beneficial.

He is required to conduct enroute cockpit observations, or familiarization flights, at JetBlue once a year. The requirement for a dispatcher is 5 hours a year of cockpit familiarization flights. He goes to those flights prepared to ask questions and that it is "good to see" how pilots feel about the operation.

Dispatchers take responsibility for the flight. Dispatchers have a part and a say in the flight. At JetBlue, there is a program called "Leading Edge" where new captains come to the dispatch floor and sit with a dispatcher, to see what a dispatcher does. He felt that dispatchers would like to have flightcrews come and sit with them to see what a dispatcher does during a shift. He has not sat with a crewmember, in dispatch, for "a while."

A dispatcher typically will look over weather and radar for the area that encompasses their respective region that they are working.

ATC sometimes will have advisories, via required routing, that would put a flight into the weather. As far as dispatchers, they are required to do due diligence to route around the weather. They do have an ATC coordinator that will brief the dispatchers and they do request, through the FAA command center, for a particular route; however, their request is not always approved. They have noticed that during the summer, of the incident, there were considerable issues with the required routing being planned through the weather.

He felt overall things were "fine" at JetBlue. However, he would like to see flightexplorer display the flight information quicker and that flightaware provides them with the needed information at a more rapid update rate.

Interview concluded at 1638 EDT

From: [redacted]
Sent: Wednesday, August 17, 2016 11:18 PM
Subject: F429 BOS/SMF 11AUG

Dear Steve and John.

No ATC initiatives on that night were issued for west bound transcon flights and I just planned and filed the optimum and economical Route out of BOS. The flight was planned with full tank with some extra gas for possible departure delay out of BOS and possible enroute weather deviations.

On that night most of my transcon flights both east and west bound at some point have enroute weather deviations but somehow no bad rides were reported. As noticed in the flight explorer, the flight has changed the tag to RAP. I asked the flight to confirm the possible diversion. Upon receipt of his diversion message, I sent him fuel summary and change his destination to RAP with amended release.

Duty Supervisor, SYS Ops and Mot crew desk were notified.

In case of any more questions, please let me know.

Thanks

Ping

KBOS HYLND4 HYLND HANAA Q816 AGDOX Q816 HOCKE BAE J16 FSD J82 CZI J32 PARKA J32 LLC ANAHO SLMMR3 KSMF

Report Text: FSD UA /OV FSD270060/TM 0125/FL330/TP MD90/TB CONT LGT CHOP
Report Text: FSD UA /OV FSD270030/TM 0100/FL390/TP B757/TB CONT MOD CHOP
Report Text: FSD UA /OV FSD/TM 0120/FL350/TP B737/TB CONT LGT

Flight: B60429
Tail: 632

BOS - SMF

Captain's Message:
EXTREME TURB
SEVERE INJURIES
DIVERTING RAP