Docket No. SA-540

Exhibit No. 14 B

NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C.

Interview Summaries

(67 Pages)

Attachment 1

to the Human Performance Specialist's Factual Report

ANC17MA001

Interview Summaries

Interviewee: Natoshia Burdick, Safety Pilot, N1296Y
Interview date: October 16, 2016
Time: 0800
Location: Ravn Safety Office, Anchorage, Alaska

Present: Shaun Williams, Noreen Price – NTSB, Dave Lowell – Hageland Aviation

Ms. Burdick was represented by Mr. Mark Wilhelm, Hageland attorney.

During an interview, Ms. Burdick stated the following:

Ms. Burdick was the safety pilot of N1296Y, another Cessna 208 Caravan that was about five minutes behind the accident airplane flying between the same city pair. She was 24 years old at the time of the accident and held an Airline Transport Pilot Certificate with an airplane multi-engine rating with commercial privileges in single engine airplanes and a flight instructor certificate. She had over 3,000 total flight hours and about 1,000 flight hours in the Cessna 208. She was hired at Hageland Aviation Services, Inc. on June 16, 2014.

She began flying career in Renton, WA, before becoming a flight instructor and providing flight instruction in Oregon for a couple years. She began her career at Hageland Aviation as a second-in-command (SIC), before becoming a pilot-in-command (PIC) on the Cessna 207. After about a year flying the Cessna 207, she moved to the Cessna 208. She stated her current position as Line Check Airman (LCA) on the Cessna 207 and Cessna 208. In describing her duties, she stated that she flies as a line pilot until Justin or Willy called her to train someone in the airplane. She would also conduct checkrides as needed.

Ms. Burdick was asked to describe her trip starting from dispatched. She stated that she did not have much detail as to the phone calls with the Operations Control Center (OCC) since she was not the PIC of the flight. She stated that they fueled in Bethel and got released, that it was a normal Sunday. After departing Bethel, they went straight to Togiak, picked up bypass mail, then then proceeded to Quinhagak. The accident airplane was ahead of them and helped them unload in Quinhagak when they arrived. She then flew back to Togiak about 5 minutes behind the accident airplane. When she landed, she noticed the accident airplane had not arrived.

When asked to describe the preflight planning in more detail, Ms. Burdick stated that while in Bethel, they looked at the route and determined the necessary fuel for the route, plus an additional 30 minutes. The PIC fueled the airplane and as a safety pilot, she was just there to make sure everything was done correctly. She stated that the PIC called the OCC and "got the release." As for weather, she said they primarily looked at the two airports and reviewed the Area Forecast for the day. Since this was the first flight of the day for both of them, she said they look at weather over a broad area.

Ms. Burdick stated that she spoke with the accident pilots in Togiak and Quinhagak when they were helping each other load and unload their airplanes. She said the PIC of the accident airplane did not voice any concerns regarding weather and they did not discuss weather at all. He also did not mention his reasoning for flying from Togiak to Quinhagak about 4,500 feet. She stated that his ADS-B was not working so she was unable to see him on the screens in her airplane.

She stated that she spoke with the accident pilot a little along the way from Bethel to Togiak, but nothing significant was discussed. When on the ground, they were all just happy to be flying and talked about "regular stuff, nothing flight related."

Ms. Burdick stated that she had flown this particular routes several times. As for any areas of concern along the route, she said that it varied. She would stick to lower terrain if the weather was marginal. She further stated that she typically would not go over the mountain where the accident occurred. She would typically go more towards the west. She said the clouds over the route the accident pilot chose was changing, so she picked the spot of "good VFR weather." There were no company assigned routes for this trip.

When asked about altitude selection, Ms. Burdick stated that there was no real "normal" altitude, or guidance on altitude selection but said maybe around 2,000 feet if it was clear weather. It depended on if they wanted "to go high, or enjoy the scenery." She stated "wherever there is good weather, that is where you go. If not, you turn around." Ms. Burdick stated that she has turned around for weather before, but not on this route. She would not go to Togiak if the weather was down and only picked the good days to go; sometimes it involved a longer route.

Ms. Burdick stated that she and the PIC discussed the weather at the departure airport, enroute and the destination airport but it did not look like there were any concerns. There was a morning meeting conducted by the lead pilot, Brian Amik, to discuss the weather.

On the day of the accident, she reviewed the FAA weather cameras on one of the company computers in the dispatch area in Bethel. She said the dedicated computer was located by the phone where they would call the OCC. She said since the last shift was flown mostly under visual flight rules (VFR), they decided to fly VFR. The decision to fly under instrument flight rules (IFR) as opposed to VFR was that of the pilot, and depended on the weather.

When asked if she utilized any type of risk assessment in her flight planning or dispatch, she stated that if the weather was good, then it was typically a non-event. She would check the weather every single time. If was good, operations control agent (OCA) would release them. If the crosswind was over 20 knots or 30 knots, or there were five or more items from risk assessment level 2 (RA2), then the OCA would get a 119 official on the phone and they would have a discussion about comfort level. If the pilot felt comfortable, they would be released. She said this was done for every flight, if on the same manifest. When they would return to base, they would get a new release or risk assessment. A risk assessment value would be valid for an entire trip unless it changed to an RA3, at which point a 119 official would be contacted.

When asked to describe the process for determining a risk level, she said it depended on the pilot. Some pilots liked to have a discussion with the OCA, but she liked to tell them what the risk level was and OCA would double check it, but she insisted that it was still a conversation.

Ms. Burdick stated that the minimums for initiating a flight VFR was 600 foot ceilings and 2 miles visibility along the entire route. If it was lower, she would go IFR, and typically if they were at 600 feet and 2 miles, she would go IFR anyway. As for personal minimums, she stated that typically they were the company minimums. When she was lower time, she would set higher ones for herself. She stated that if she did not feel comfortable, she would call dispatch in Bethel and tell them she was not going to depart, but would never call the OCC. The only time she would speak with the OCC was after the decision had been made that they would depart.

When asked about airborne communications and weather updates, Ms. Burdick stated that pilots would call each other enroute and give updates. Sometimes they would file official pilot reports (PIREPS) if they were relevant, but other times it was just radio chatter.

Ms. Burdick could not remember how long it had been since she last flew the accident airplane but stated that it was when she flew the airplane from Oregon to Alaska.

When asked how maintenance concerns were addressed, Ms. Burdick said that if they had an issue, they would find a mechanic and discuss it with them. She gave an example of a nick in a propeller; she would walk out with a mechanic to see if it needed to be fixed. It it did not need to be fixed right away, they would continue. If it needed to be fixed, they would write it up in the maintenance log. When asked specifically about the flight instruments on the right side of the airplane and if they were broken or inoperative, Ms. Burdick replied "happens on occasion like anything else." She stated that inoperative equipment would be fixed in a timely manner depending on what was broken. She said if it was an attitude indicator, there were spares or fixes and just depended on the maintenance issue. There was a maintenance facility with Bethel with several mechanics. She stated that in her past three shifts, she had no airplane with an item deferred in accordance with a minimum equipment list.

Ms. Burdick described her work schedule as 15 days in a row, where she would fly every day. Sundays were typically a break for pilots who wanted to sleep in a couple hours. She considered herself a workaholic who liked to show up early and fly in the mornings. She stated "we are out there to work and we work." This type of schedule was year round. Her flight and duty time was tracked on a flight and duty sheet where she would write down the hours she flew, what time she began her duty day, what time her duty day ended and the number of landings each day before going home for the night. During this type of schedule, she said she would obtain about 7-8 hours of sleep per night. Her last day off was September 29, 2016 and on September 30, she flew an airplane from Palmer to Bethel.

The SIC from the accident flight accompanied her on the flight from Palmer to Bethel and flew part of the flight and she stated that he appeared to have a "good handle of the plane." She said they talked for a few hours, but not work related. This was the last time she flew with him and they did not talk much after that flight. They stayed at different pilot houses on separate ends of town

and did not hang out at night that much. The last time she said she spoke with the PIC from the accident flight was on the radio during flight.

Her last opportunity to observe the PIC's flying performance was when he needed a safety pilot. She said this was "a while ago." She remembered him as being a "professional pilot" based upon everything she saw when she flew with him.

When asked how well she knew the accident pilots, she stated that for the PIC, about as well as anyone out in Bethel. They always spoke about his time off and what he planned on doing and considered him a friend. She said the pilot group was like a big family in Bethel. She described the PIC as extroverted and the SIC as "happy all the time." She stated that she could not think of a time when she observed a hazardous attitude when it came to flying from either pilot.

When asked about knowledge of any significant changes in either pilot's personal life, she stated that the PIC was "super happy." He had just gotten married and would talk about his plans on his next time off and where he came from. The SIC "was super excited" to be flying for Hageland.

When asked how the pay at Hageland compared to other companies, Ms. Burdick stated that a couple companies paid more and Hageland was maybe slightly below average. She said the pilots were paid a daily rate until they reach 60 hours in 15 days. Anything above the 60 hours was paid as overtime. If a pilot turned down a flight or cancelled a flight, they were still guaranteed the 60 hours and the loss of pay would only affect the overtime. She described the morale as great among the pilots and said they are busier than other companies in the area.

Ms. Burdick stated that Hageland utilized a web based application tool (wbat) for managing safety concerns. She stated that she had in fact filed a few reports in the past utilizing the system. When asked if there were any particular hazards or risks that the company had recently been trying to hightlight, she stated that there was nothing glaring that she could think of that was "super scary."

When asked about the level of standardization and standard operating procedure (SOP) adherence among Hageland pilots, Ms. Burdick stated that they all adhered to SOP's. She said that was what the OCC was there for and what they discussed in the morning meetings. She stated that the "cowboy pilots" and "bush pilot mentality" did not exist. Senior pilots would say that if the weather was bad, not to push it. She stated that it was a very different culture that what she had heard it was "years and years ago." The pilots were now praised when they would turn around from both senior pilots and the company. She said the company did not put any pressure on them to make any flights. She felt no pressure or pushback from management or anyone else to take or continue a flight when she felt the conditions were unsafe. Actually, she said she felt supported. She stated that she would not even talk to OCC if she wanted to cancel, she would just tell dispatch in Bethel and cancel the flight. She said if she was not comfortable with going, she would not even get to the phone call.

When asked if the company provided special training tailored to the risks she faced such as Medallion training, inadvertent IMC training, or CFIT avoidance training, Ms. Burdick replied "just if the weather is bad, we turn around or stay VFR and pick up an IFR clearance." She would go through CFIT training every year in ground school and there was also a simulator where the

weather conditions would deteriorate and she would have to fly an instrument landing system approach.

Ms. Burdick stated that "dispatch" as she used the term referred to the people at the bases who built the flights and loads and the routes. She stated that they were just there to do the routes and put passenger weights on the planes. She clarified that the "routes" to which she referred was just the airports they went to, and not the actual flight route. The OCC and OCA would discuss weather. She continued to say that dispatch would talk to her about weather. If it was a clear day, they would not talk about it, but if the weather was marginal, they would ask her to check the weather and tell them if it was within minimums. She stated that if the weather was marginal, she said dispatch would ask if she wanted to do the flight or wait. If they waited, they would not talk to OCC.

Interviewee: Samuel Oas, Pilot-in-Command, N1296Y
Interview date: October 16, 2016
Time: 1000
Location: Ravn Safety Office, Anchorage, Alaska

Present: Shaun Williams, Noreen Price – NTSB, Dave Lowell – Hageland Aviation

Mr. Oas was represented by Mr. Mark Wilhelm, Hageland attorney.

During the interview, Mr. Oas stated the following:

Mr. Oas was the pilot-in-command of N1296Y, another Cessna 208 Caravan that was about five minutes behind the accident airplane flying between the same city pair. He was 27 years old at the time of the accident and held a commercial pilot certificate with airplane multi-engine land, single engine land ratings, an instrument rating, a flight instructor and an instrument flight instructor certificate. He had about 2,400 total flight hours and about 600 hours in the Cessna 208, all but 15 were as second-in-command (SIC). He was hired at Hageland Aviation Services, Inc. on March 15, 2015.

He began flying at Southern Illinois University (SIU) in what he described as "zero to hero." After earning his CFII, he instructed at SIU before working for a flying club in Chicago. He had flown about 1,300 hours in Alaska and been in Alaska about 1.5 years. He started at Hageland as a SIC and continued in that role for about four months before upgrading to Cessna 207 Captain in Bethel. He remained in that position for one year, two months. In September, 2016, he upgraded to the Cessna Caravan. He stated that for the SIC program, Hageland hired low time pilots and compared it to a paid apprenticeship. They were hired right out of flight school to build hours and show them how Hageland operated as a company. Mr. Oas stated that there was a 1 week ground school followed by a checkride.

When asked to describe his normal duties and responsibilities, he stated that he was relatively new. He would start his day looking at the weather along his routes. There was a computer in Bethel for the pilots that was located in the same office as dispatch. He would get the appropriate fuel for the first route and review the stops and number of passengers. He was responsible for making sure the airplane was plugged in and deiced, check flight times and ensure that engine times were in order. Also, he would ensure any discrepancies were "taken care of."

Mr. Oas stated that the day of the accident was his first day flying with a safety pilot in Bethel. He had not been there in about a year. He spoke with the accident pilot, Mr. Cline, the night before as they were staying in the same pilot house and discussed the trip since he was familiar with the route. Mr. Oas had never done this route in the Cessna 207 and had never been across that route. On the morning of the accident, he rode to the airport with the accident crew and picked up his safety pilot for the day. Due to having less than 50 hours in the Cessna 208, Mr. Oas had a safety pilot on board, Ms. Burdick. After checking the weather, the include the FAA webcams, he made the IFR vs VFR determination. He said that he considered IFR, but due to an icing forecast, elected

to fly VFR. He said weather was at least above marginal VFR conditions. Based on a suggestion from Mr. Cline, Mr. Oas decided to load 800lbs of fuel per wing.

After departing Bethel VFR, he proceeded direct to Togiak Airport across the mountain range. Along with the way, the safety pilot spoke with him about lower terrain to the south if he ever found himself in that position. They also discussed icing in the clouds over the mountain range. They arrived in Togiak second, behind the accident airplane by a couple minutes. He stated that the accident crew had already loaded their aircraft and helped load his. Once loaded, the two airplanes departed minutes of each other, bound for Quinhagak. During the flight, he never had visual contact with the accident airplane. He stated that the weather at this point had started to "come down" and scattered rain showers were present. He estimated the cloud ceilings to be between 2,500-3,000 broken to overcast. His altitude during the flight was 1,500 – 1,800 above ground level (AGL) and did not vary much. As he was flying to Quinhagak along the Goodnews River, visibility was 10 miles, except when in the rain showers where it would be reduced to 7 or 8 miles. When they arrived in Quinhagak, the cloud ceilings were about 1,300 overcast and the visibility was about 10 miles. The arrival was described as uneventful and the accident airplane was already on the ground. After the accident crew unloaded their airplane, they helped Mr. Oas unload. During the unloading, Mr. Cline joked with Mr. Oas about how slow he was. After unloading, the two airplanes left Quinhagak together. Mr. Oas stated that by the time he was taking off, the accident airplane was in a left turn. He had visual contact for the first couple of minutes, but lost the visual contact the second he (Mr. Oas) entered the mountain range. He stated this flight segment was a bit different than the inbound segment. He said the formation of valley fog was different. Due to taller terrain around them, he followed the Arolik River to remain over lower terrain.

During the flight he was not speaking much with the accident airplane. He received a garbled transmission but was unsure of what was said. He never saw the accident airplane on his ADS-B, so he was unaware of his progress through the route. During the flight, visibility reduced to about 5 miles, and remained consistent, not scattered. He was unsure of an accurate ceiling height but stated that they were widely scattered. He said that towards the north, the clouds looked like they were on the hills with obscured layers above. When they exited the mountains, he stated they were further south from when they approached Togiak from Bethel. By the time he got to Togiak, the visibility was consistent between 5 and 6 miles.

After landing and realizing the accident airplane was not there, Ms. Burdick became concerned and called Bethel. Mr. Oas stated that Mr. Gabe Olin answered the phone and stated that he had a position on the late airplane and he was only 5 minutes from Togiak. Believing they had deviated flight routes, he and Ms. Burdick proceeded to unload their airplane. During the unloading, he said Ms. Burdick received a phone call from who he thought was the director of operations, Mr. Luke Hickerson advising her of an ELT and told her to standby. Mr. Oas stated that the "weather came down" and the mountain ranges were difficult to see from Togiak. After unloading, they took off from Togiak to look for the accident airplane from the air. Ms. Burdick was the flying pilot and made all the phone calls at this point. Along the route of flight, Mr. Oas estimated the lowest visibility to be about 5 miles. The ceilings along the southern route were about 1,500 MSL.

Mr. Oas stated that he spoke with the accident crew at each destination but none of the conversations were regarding the conditions on the flight. Also, they did not discuss why Mr. Cline flew from Togiak to Quinhagak at 4,500 feet as opposed to a lower altitude.

When asked about any maintenance issues on his aircraft on the day of the accident, Mr. Oas stated that there were no issues and Ms. Burdick did not mention anything regarding the instruments on the right side of the airplane not working correctly. Mr. Oas later stated that the instruments on the right side were not as reliable or accurate. When he was an SIC, he would often look at the instruments on the left side. If there were issues, he would not trust the ones on his side. He said the discrepancy would not be entered in the logbook unless it was truly malfunctioning. As an example, he stated that he saw attitude indicators that would not erect and directional gyros that would precess more than 5 degrees in 15 minutes.

Mr. Oas stated there were no company routes or altitudes for this trip and the only published routes were night routes. When asked how he selected altitudes, he said he chose altitudes that would keep him 500 – 800 feet above ground level (AGL) over most, if not all, the terrain. There were cloud formations that were lower, but not ceilings. He stated that he mainly looked at terrain, looking for "wildlife, bears, that sort of thing." He said that it was the only option look at weather and terrain in the area.

When asked to describe his interaction with the operational control center on the day of the accident, Mr. Oas said it was only one call and straight forward. He was released under a risk assessment of RA1(a) which was no restrictions. The only unusual aspect of this flight was that he was with a safety pilot. The operations control agent (OCA) confirmed the route and since both airports were reporting VFR, there was no suggestion to file IFR. To conduct a flight VFR or IFR was a decision made by the pilot-in-command (PIC), according to Mr. Oas. He said Mr. Cline called first and then handed him the phone. Mr. Oas said the OCA told him "ok, you are going to the same place and you are released." There was "not a terrible amount of discussion." He said they did not discuss the weather at the airports but they did discuss the weather enroute and if IFR was necessary. He said that between Ms. Burdick and Mr. Cline, it was determined they were comfortable flying this route VFR as IFR could be filed enroute if needed. Mr. Oas added that the weather was "good VFR" and there was no real cause for concern. The only question mark was Quinhagak as it was IFR at the time of departure due to visibility and rain. He believed the OCA brought that up. Upon departure, he listened to the weather again and it had improved to VFR conditions.

When asked if he used any type of risk assessment in flight planning or dispatch, he stated that he did. He said it was more gathering information related to his flights and more times than not, information that he should already know. If he is calling the OCA, he said that he has already made the decision if the flight is doable. He stated that it was a rare day that the OCA would bring up new information. He said sometimes it did happen, usually if it was a risk assessment level of RA3. He said the OCA may try to talk the PIC out of the flight, or encourage it. They might try to bring new things to light and suggest waiting 30 minutes and check again.

When asked if the OCA has input into the decision of a risk level, Mr. Oas stated that more often than not, he made that decision. He said it was something he needed to have already looked into.

Sometimes he may let them tell him what was happening and confirm it is what he saw. He estimated that 90% of the time, he was looking at the weather and verifying online. He said he had never been talked into a flight. If he was on the fence, then it was most likely a risk level RA3. If there was any apprehension, he said he was usually told to delay the flight. He said he would not talk with the OCA if he was not going to do the flight or decided to cancel the flight. He said there were a few times when he was going to conduct a flight, but after the OCA provided pilot reports, the decision was made to cancel the flight.

Regarding the frequency of the risk assessment, Mr. Oas stated that one was completed for every flight and he would speak with OCA before every single flight, anytime he was going to fly the airplane. He then stated that multiple legs were still considered one flight. The risk assessment was approved for an entire route and the risk level would stay the same once he departed Bethel, regardless if the weather changed.

When asked about weather minimums for launching or continuing a flight, Mr. Oas stated that in controlled airspace the minimums were 600 and 2. Everywhere else they were standard 135 minimums. He said 600 and 2 had become unofficial minimum for everywhere. The OCC and Chief Pilot liked 2 miles, "no matter what." He said that personal minimums varied based on location. He was newer to the Caravan, but on the Cessna 207, ceilings and visibility personal minimums were regulatory minimums. His crosswind minimums were typically lower (more conservative) than the company minimums.

Mr. Oas stated that the last time he flew the accident airplane was during the summer when he was still an SIC. He said he did not have much experience with the Terrain Awareness Warning System (TAWS) that was installed in the aircraft and he had not been trained on the TAWS unit. Weather was available on board to the pilots through the ADS-B and Capstone units.

When asked about enroute communications, Mr. Oas stated that the primary tool to communicate with the OCA was by phone. He would relay through dispatch in Bethel to notify the OCA for flight following.

Mr. Oas stated that the normal schedule is 2 weeks on, followed by 2 weeks off and he would fly every single day. The day of the accident was his first day working extra. He had volunteered to go to Bethel to finish his 50-hour safety pilot requirement. The week prior to the accident he was working normal 0800-1700 days in Unalakleet, AK. Prior to the accident, he had about 35 hours remaining. When asked about his last day off, he stated that it was September 7, 2016. He came back to work early to train in Barrow, then went back to Unalakleet for his normal shift in the Cessna 207. He stated that some pilots were current in both the Cessna 207 and Cessna 208 and would fly both.

Flight and duty time was tracked through log sheets each day. He would add throughout the day to ensure he would not exceed his duty time.

When asked about his interactions with the accident pilots in the preceding 72 hours, he stated that he arrived in Bethel about 2000 the night before the accident. He was told the blue house was open and when he arrived both accident pilots were already there. He said the three of them stayed up

talking until about 2330-midnight. All three went to bed about the same time. They spoke about their careers and the fact that a few pilots were leaving and going to Corvus. He stated that Mr. Cline had spoken with him about a career opportunity after he built some time in the Cessna 208. That night was the first interaction with Mr. Welty ever. He described him as a really nice guy, friendly, and excited to be out there. He described Mr. Cline as reserved if he did not know you, but once familiar, outgoing. He said Mr. Welty seemed quieter than Mr. Cline.

When asked how the pay compared at Hageland to other companies in the area, Mr. Oas stated that he could not speak to the pay of the other companies. At Hageland, he said he was paid a daily rate until 60 hours of flight time, then an overtime hourly rate was added. He said if a flight cancelled, he was still paid his daily rate.

When asked about the morale at Hageland over the past year, he stated that it stayed the same. He said pilots who had been there over 3 years did not seem too happy. Mostly that was attributed to the pay for the amount of work required. In that respect, he said there were a lot of gripes, but overall good morale. When asked to elaborate on the staffing level for the amount of work, Mr. Oas stated that the last time he was in Bethel was about 8 months prior to the accident and at that point, it seemed adequate, but since he had just returned, he could not speak to if it had changed.

When asked the company's approach to managing safety, Mr. Oas stated that the company sent out regular emails and they also had WBAT forms and any issues brought up were corrected promptly. He stated that he did not believe Hageland had an ASAP program, just WBAT. When asked if the company had been highlighting any particular risks or hazards lately, he replied "no." There had been no discussion about the mid-air collision on August 31, 2016 as it was still in such a primary phase of the investigation.

Mr. Oas stated that everyone adhered to the operations specification and general operations manual. As for the "bush pilot mentality," he said that it existed in the past. He said the company was extremely proactive in "stomping it out." He mentioned an individual over the summer that had the cowboy mentality that was no longer with the company. He added "If a pilot brings something up, even another pilot may speak up and remind them they are paid by the hour and safety is put forward by the group."

When asked about the safety culture at Hageland, Mr. Oas stated that he had no gripes or concerns. He said it may have been one of the best in the western part of the state. If it wasn't, he said he would not still be there after 1.5 years.

When asked if he felt supported turning down flights for safety related reasons, he said that he beat himself up more than the managers or staff. He felt extremely supported. He stated that when he was new to the Cessna 207, there was 1 or 2 times where he turned down a flight and another pilot went and completed it.

When asked if there was any special training provided by the company that was tailored to the risks he faced, such as CFIT avoidance, inadvertent IMC or Medallion Foundation training, he stated that there were no formal courses, but some on the online training site.

When asked if he had ever experienced an inadvertent IMC encounter while flying at Hageland, he stated yes and that it happened fairly often. When it did happen, he said he turned around and cancelled the flight after letting the base know. He always felt supported by the company. He said the times that he had it happen, he departed for an airport that was reporting VFR, but there may have been a portion of the route that was IMC. If he ran into it, then he would turn around. He said more times than not, he would turn around before he got into it when he saw a cloud.

When asked about any simulator training at Hageland, he stated that it only when he was completing SIC training and the simulator utilized was at University of Alaska – Anchorage.

Interviewee: RieAnn Fullwood, Friend of SIC
Interview date: December 1, 2016
Time: 1300 AKST
Location: NTSB offices, Anchorage, Alaska

Present: Shaun Williams, Noreen Price – NTSB

Ms. Fullwood was represented by her sister, Kaci Fullwood.

During the interview, Ms. Fullwood stated the following:

Ms. Fullwood was the girlfriend of the second-in-command (SIC) of N208SD. They met in 2012 and had been dating for about four years at the time of the accident and lived together.

Her and Mr. Welty met in 2012 while he was still in the Army where he was assigned to work with Explosive Ordinance Disposal and was the recipient of the Bronze Star. After he separated from the US Army in 2013. After meeting Ms. Fullwood, he developed a love of flying and the airline flight crew lifestyle. Mr. Welty had a Bachelor's degree in Business Administration from Radford University and attended the University of Alaska, Anchorage for flight training. He completed his flight training in the spring of 2016 and was hired at Hageland Aviation Services Inc. following a meeting with the company President. Hageland Aviation Services Inc. was his first flying job.

When asked about his general attitude toward flying, Ms. Fullwood stated that Mr. Welty had no dislikes and was excited to move up the chain. Mr. Welty told her he liked that it was like the "wild west." That was defined as low visibility and below minimums. He also told a friend that he would agree with what the captain of the flight wanted to do.

Ms. Fullwood stated that Mr. Welty loved Alaska and wanted to build a cabin. He even sent her blueprints the night before of one he wanted to build.

Regarding personal habits, Mr. Welty displayed no changes in the past year. He preferred to eat meals vs. daylong grazing. He enjoyed both cooking and eating out. When not flying, he would normally be awake until around midnight or later, sometimes having problems falling asleep. He was utilizing Nyquil to remedy this problem and was also prescribed Ambien for Post-Traumatic Stress Disorder (PTSD) which he would use occasionally. Most days he would get up between 1100 and 1200 and consume coffee with breakfast. As for exercise, Ms. Fullwood stated that Mr. Welty was a very active person who enjoyed hiking, climbing and fishing. He was very high energy and could run on any amount of sleep. She described him as very healthy and in "pretty good shape."

Ms. Fullwood stated that on September 29th, her and Mr. Welty went rock climbing. That night, they stayed up late talking, until around 0200 and he left at 0700 on the 30th to pick up a female

pilot and her husband and drove them to the Palmer airport. Ms. Fullwood did not know the name of the pilot. On October 1st, Mr. Welty told Ms. Fullwood that there was bad weather, and so he was able to sleep in that morning. Also, at 1500 she received a text message stated that he had taken a "serious nap" of almost 2 hours. After flying, he attended a bonfire for a coworker's child's birthday.

On the night before the accident, she stated that she received a text message from Mr. Welty at 2240 and spoke with him sometime between then and midnight, which is when a final text message was sent to him for the night. On the morning of the accident, she corresponded via text message with Mr. Welty from about 0805 until the last response at 0821.

Ms. Fullwood stated that Mr. Welty loved Hageland Aviation and eventually wanted to be Nome based, since that is where she was from. Also, he wanted to goldmine around Nome. She said he had no complaints about the training and was excited to fly. He had confidence in his instructors, but told her the training in Barrow was "kinda sketchy" due to the conditions in which they were flying.

Interviewee: Angela Dawn Cline, Wife of PIC Cline
Interview date: December 8, 2016
Time: 1115 AKST
Location: NTSB offices, Anchorage, Alaska

Present: Katherine Wilson, Shaun Williams, Marvin Frantz – NTSB

Mrs. Cline declined to have a representative present during the interview.

During the interview, Mrs. Cline stated the following:

She was married to the accident PIC. He had traveled from their home in Montana to Bethel the day before the accident. They met in 2014 and were married in April 2015. They had moved to Montana in April 2015 but she had since moved back to Alaska. Mr. Cline's date of hire at Hageland Aviation was November 1, 2015. They had lived in Homer, Alaska, prior to moving to Montana.

Her husband was based in Bethel. His commute time was 8 hours door to door. He lived in pilot housing when in Bethel and shared the house with Gabe Olin. She thought Mr. Olin had a different rotation than her husband.

Before being hired by Hageland, her husband was the chief pilot for Homer Air for 3 years. He worked with Yute Air out of Bethel for 3 years. Before that, he worked in Colorado but she was not sure for what company. He earned his flight ratings in Colorado.

He had previously been married. Mrs. Cline had been dating her husband for about 1 and a half years before they got married. He had moved with his ex wife to Alaska.

Her husband loved working for Hageland and the schedule it provided them. He loved being a pilot. He had no concerns about flying for Hageland. He lost a friend from Yute Air in a plane crash in 2015. In August, another friend died in a plane crash and he was a little concerned. .He was worried but did not have any specific concerns. The accidents made him more safe and he did not take any chances. They had a fantastic life together and he did not ever want to lose that.

They would talk every day before he would fly. They talked the morning of the accident; they did not talk about the weather or the route of flight. She thought he had volunteered the night before to go in early to do some flights for Hageland.

He loved to ride his motorcycle, fish, hunt and travel.

He took the job at Hageland because it was a pay raise and he liked the schedule. He was not able to fly as often as a chief pilot. It was not long after he got hired that he changed airplanes and got upgraded; it was within 5 months of being hired. She was not sure if he got a pay increase with the upgrade and there was no change to his schedule.

On Thursday, September 29, 2016, she thought he probably woke up about 0900. They went for a motorcycle ride, made breakfast and had an easy day. They were not in a hurry and "floated up the Pike." He probably went to bed about 2300. He would fall asleep quickly and had no problems sleeping. On Friday, September 30, he had to be at the airport in Billings by 0620 so he got up around 0500. She clarified that he flew out of Bozeman to Seattle and then to Anchorage. From Anchorage he went to Bethel. He would fly to Anchorage on Alaska Airlines and then fly Ravn to Bethel. He had an easy time with flights that day and she thought he got to Bethel around 1800. He got his luggage and did not do anything else that night. He went to the pilot house, took it easy and got rested for work the next day. She did not recall when they talked but said he was usually in bed between 2200 and 2230. On Saturday, October 1, he texted her "good morning" before he went to work; it was probably around 0700 because he had to be at work at 0730. She thought he might have been on a weather hold for a while and did not start flying until 1100 that day. They talked again about 1900 Alaska time; he sounded good and did not mention being overly tired. There were no concerns as she recalled. She thought he went to bed about 2200-2230. When in Alaska, he was a homebody and usually stayed home.

On Sunday, October 2, he texted her about 0700. He would always text before departing for a flight. He seemed very good and to be in very good spirits. He did not mention any concerns.

He usually drank coffee and a protein smoothie in the mornings. He would have brought lunch with him and snacked throughout the day.

When not working, he would go to bed about 2300 and wake up about 0900. He had no daytime sleepiness. Everything was completely normal.

She was not aware of him being involved in any previous accidents or incidents or ever being disciplined for his performance. He received "atta-boys" for his work and performance. The pilots thought he was a top notch pilot and looked up to him because he was such a good pilot. The "atta-boys" were at his previous company.

He had no changes to his health (good or bad) in the previous 12 months; he was very healthy. He had no changes to his financial situation (good or bad) in the previous 12 months. He and Mrs. Cline were married in August 2016 and did not have any other changes (good or bad) in her personal life in the previous 12 months.

He had not had any recent injuries or illness in the days before the accident. He exercised quite a bit and had weights at the pilot house that he would use in the evenings. He had very good vision and had no issues with color vision. He did not have any hearing issues. He did not take any prescription medications but did take over the counter vitamins. She thought he tried to take his vitamins every day but was not sure if he did or not. He would have one beer in the evenings and was not a heavy drinker. She was not aware of him having any alcoholic beverages in the days before the accident. He chewed tobacco throughout the day. He did not use any illicit drugs. He did not take any medications, prescription or nonprescription in the 72 hours before the accident that might have affected his performance.

He never mentioned any pressures from the company to take a flight and she was not aware of him having any safety concerns.

She had heard him say previously that he had flown between Quinhagak and Togiak and said he was definitely familiar with that route. On flights, he would sometimes fly in IFR conditions. Inadvertent IMC would happen. She did not know what he would do if he was flying VFR and flew into IFR conditions; he would just tell her he got into "crappy weather." He felt the training he received was good.

She did not know of many friends he had at Hageland; he had friends from different airlines. He spoke of Natoshia, Gabe and Harry. He worked the same schedule with Natoshia. Gabe only worked 10 on and 10 off. Harry had a different shift. He was on good terms with everybody; there was not strife between any coworkers. He never mentioned Hageland being like the "wild west."

Her husband was a fantastic pilot. She did not believe this accident could have happened without some mechanical error. He had flown in Alaska hundreds of times. His friends felt the same way. They admired him and said what a fantastic pilot he was. He had a real sense and feel for flying. She did not think at this point in his life that he took any unnecessary risks that would put himself or his passengers in danger.

She had nothing else to add to the interview.

Interviewee: Sam Oas, Pilot-in-Command, N1296Y
Date: February 10, 2017
Time: 1300 EST
Location: via telephone
Present: Katherine Wilson, Shaun Williams, Marvin Frantz – NTSB; Eric West – FAA; Adam Ricciardi – Hageland Aviation

Mr. Oas was represented by Marc Wilhelm, Hageland attorney.

During the interview, Mr. Oas stated the following:

He would find out his first morning run the night before he went on duty, then he would fly as needed throughout the remainder of the day. Usually the only flight known before arriving in the morning was the first flight. The night before the accident he knew that he was going to Togiak because he had discussed it with his safety pilot. He also remembered discussing that night with the accident pilot the airports he was going to the morning of the accident and the time the trip might take, and that there would be several legs between airports, but he did not recall discussing specific routes between airports.

When he flew the accident leg, he did go further west than the accident flight, over lower terrain. This was due to the potential for rain and the presence of valley fog. This route provided better visibility and terrain clearance. This route was more reactionary; they did not expect fog before departure, but altered the route in-flight as appropriate. He would not notify anyone if he changed his route in flight. The decision to be made was whether they could take a safe route to get to their destination; if they could not, they would cancel the flight.

He received CFIT training during his initial SIC training in the simulator, then annually during recurrent ground school. He was trained on the GPWS in the University of Alaska's (U of A) C208 sim during initial training as SIC in the 208. He received additional GPWS training when he upgraded to C208 PIC. This second time the training was in the airplane. He did not know for sure if the sim at the U of A had a GPWS installed in it. He thought it had one installed, but could not answer with certainty. The GPWS (aural) warning could be inhibited by the pilot. He did not know of any company guidance as to when it can be inhibited. Typically, the only time he would inhibit it was when he went into an airport that may not be in the GPWS database. This would cause an alert even though there was no terrain concern. You would get a terrain inhibited light when the inhibit button was pushed. In his practice, he always re-activated it as soon as he was on the ground at the airport. He had never gotten into an airplane and found it inhibited. If a terrain alert went off in cruise, he would think that there might be terrain he was not aware of or a fault in the system. He was not aware of any formal training on how to deal with that situation; he would test the system and see if there was something that he needed to do.

He tested the system on the first flight every morning. He was taught this in his Caravan training. The GPWS was always part of the first flight check; he did not know if this was on a checklist. He was taught it by flight instructors and safety pilots; it was standard practice. Initially he used a checklist for the first flight, now uses a flow to accomplish the items on the checklist.

When the GPWS would go off sometimes as he was descending into an airport, it would happen when he was VFR. He was confident there was no terrain issue. It seemed to happen when arriving at airports with no instrument approach, so he would be visual. If it went off in cruise in IMC, he would take it seriously. He would investigate the situation, depending on where he was and see if there was terrain to be aware of. He would check his radar altimeter. He would make sure he was at minimum IFR altitude. He would investigate to see if there was an error on his part before assuming a system error.

He recalled the CFIT sim training scenario as a descent into an airport somewhere outside of Bethel with a lowering ceiling, emphasizing when to turn around when you cannot maintain proper obstruction clearance per Part 135. He executed a 180 from IMC back to VMC. During recurrent he received ground school and PC-ATD CFIT training. It included unusual attitudes in IMC and lowering weather minimums along the route. In the PC-ATD CFIT training, the GPWS was simulated; it was a Microsoft Flight Sim program. He thought conducting CFIT training in the simulator would be a useful tool if accessible.

Inadvertent IMC encounters happened in flight and in those cases would lead to discontinued flights. A pilot would turn around and notify dispatch as soon as practical. He was sure it was written down and thought if he could not maintain clearance from weather on a route that he should discontinue the flight. There were published weather minimums for certain routes.

He was vaguely familiar with the Medallion Foundation, and was aware it was a voluntary safety program that shaped certain aspects of their training, including CFIT training. All training that he received was from the company, not any from Medallion. He believed the CFIT training he received was adequate. Training in the sim was better for CFIT avoidance. The C208 sim at U of A was a better simulator for training in CFIT than a personal computer based simulator.

Most of the time, a go/no go decision was his. Sometimes the OCC would catch something or point out something that he did not consider previously such as a new NOTAM or a change in the weather that would influence his decision. The OCC could discontinue a flight if they did not like an aspect of a flight that he had not considered, but this did not happen in flight, but during the initial OCC / pilot call before the flight departed. During a flight, he could get weather updates from flight following back at his base. They could pass on information from weather cams along the route of flight, or from village agents who would report local changes in weather. He might then decide to turn around. The OCC had not discontinued a flight once it was in the air as far as he knew. The DCA (departure control agent) did not have official operational control over the flight, but he relied on their input. They may cancel a flight for weather along the route, or for low passenger counts. DCAs could schedule and cancel flights.

He did not recall getting any updated weather from a DCA or the OCC during his flight from Quinhagak to Togiak (on the accident leg) October 2nd. After they landed in Togiak, the safety pilot he was flying with received a call from the director of operations about an ELT alert. They took off to search for the source. During this search flight, the weather had deteriorated since their Quinhagak to Togiak flight, especially as they got closer to the signal. The ELT signal was

strongest in the area where the last Spider Tracks had the accident airplane but they were unable to reach it due to clouds and low visibility over higher terrain.

When they were flying the accident leg, they had heard Tim's voice on the radio, maybe five minutes into the flight; the accident flight was not far ahead. It was unreadable due to static, but did not sound distressed.

Pilots did not make "beer bets" concerning arrival times at airports. He was not aware of the routing of the accident flight when they both flew the previous leg, Togiak to Quinhagak. On that leg, Mr. Oas flew over terrain in VFR but stayed a little further south of a direct course due cloud clearances. For two planes on the same leg to fly separate routes was unusual, but not unheard of.

The accident crew made no comments to him prior to his departure from Quinhagak on the accident leg. There was no discussion about who could arrive in Togiak first. The accident crew helped him load and they were on their way. It was very routine.

During flights, it was common to discuss weather and PIREPs with other flights over the company frequency.

He was not aware of any comments from others about the company safety culture. He was aware of discussions about common pilot gripes, like SIC pay, but not about company safety culture.

Since the accident, there had been many broad changes. They seemed to evolve shift to shift, especially for the Caravans. For example, at the time of this interview, they were using night routes at all times, or had to file IFR if they could not maintain obstruction clearance. Initially they were doing IFR for all flights as long as an instrument approach was available into the airport. The OCC had also become more conservative, which was good; they were more likely to hold or wait on a flight. Also, there was a crosswind limitation of 10 knots at night that he heard on his last shift.

He had heard some speculation about what happened with the accident, but it was only opinion based, not constructive. Recent accidents, involving Harry and Tim Cline, had sobered the Bethel pilots. Pilots were taking a step back and maybe taking a second look at weather and routing and what they were willing to accept. An air of caution existed now among the group. He clarified that while they were being cautious now, prior to the accident they were always operating legally.

The night routes were defined in the company ops specs B050. If the aircraft was IFR capable, the pilot was IFR capable, and the airport had an instrument approach, pilots had to follow the night routes or file IFR. The restriction that all flights had to be IFR lasted at least a shift (two weeks); he was not sure if it lasted longer or not.

DCAs built flights based on passenger loads, schedules, and weather. They may hold or cancel a flight if no approach was available and the weather was too low. Flight following took into account weather reports from villages, they saw if a flight was possible even before it got to a pilot. They did not have official operational control, but, at least in Bethel, they were an integral part of the decision making process. Dispatch would consult the pilot based on what they can carry load-wise, then talk to flight following to see the weather along the route, then build the flight from there.

The decision making for the flight then went to the OCC and pilot. Dispatch may suggest a hold of the flight if needed due to weather. Any last minute conversations with dispatch regarding the latest weather occurred prior to getting with OCC and releasing the flight. Once he had been released for a flight, he had already talked to departure control and OCC and had determined the weather was okay.

The night weather minimums in flight were three miles visibility. He needed 600 feet and 2 miles to arrive in controlled airspace special VFR, such as Bethel to Chefornak (where he also needed 1400 foot minimum altitude). This was in his op specs.

There was no official training of what to do if a turn back was required. If he had to turn around in flight, he would first establish the airplane on a return path, then notify the DCA or flight following back at his base that he was returning; he might notify passengers. After landing following a turnaround, he had no formal steps to notify or explain to the company his actions. He would have already had the turnaround conversation with dispatch over the radio in flight. He would not have to notify the OCC in flight or after he landed. The flight might be cancelled or held at that point, but there was no formal process.

Dispatch would be aware that he turned around because he was already in contact with them, but the OCC, director of operations or chief pilot would call him.

On his flight over the accident route, he changed his course to the south about 10 minutes into the flight where the terrain was lower and the weather was preferable.

He though the C208 sim at U of A had a GPWS installed, but he was not certain. It had been a number of years since he had been in it.

The GPWS displays in the C208 had map displays that changed colors as terrain warnings and cautions came up. In training, outside of CFIT training, he did not recall receiving any aural alerts. He was trained on how to use the GMX 200 system that featured the terrain display in colors. Recurrent CFIT training was on a PC-ATD device with a yolk and throttle controls. He believed his initial and recurrent CFIT training covered white-out, flat light, and deteriorating conditions. Deteriorating weather conditions were stressed in both PC-ATD and full-motion sim training. The sim at U of A was in motion when he trained in it. White-out and flat light conditions were regularly discussed and trained during IOE and the safety pilot process in both the 207 and the 208. He was not trained in the 208EX.

The GPWS inhibit button stayed in when pushed, and the words “terrain inhibited” would appear in white light, which was very obvious to the pilot. The button was nearly directly in front of the pilot. The button only inhibited the aural warning. The terrain display was unchanged. The radar altimeter would still provide a warning if an altitude was set in it. There was no standard for what to set in the radar altimeter while en route, but normally for an approach, the missed approach altitude was set.

He was a line pilot, and a PIC in the Caravan and the 207.

Dispatch was an informal term for people at the base; it was not in the GOM. Departure control was not a term he normally used. The OCC in Palmer was responsible for releasing every flight. Dispatch, or departure control, was responsible for building flights based on passenger and cargo loads and weather. This was before it reached the pilot and OCC. He was not a part 119- required person. He understood that operational control rests with the OCC. He wanted to stress that the pilots were sobered by the experience of the two recent accidents. The pilots were not necessarily more cautious or acting more conservatively than they had been in the past, just sobered by the events.

Interview: Natoshia Burdick, Safety Pilot, N1296Y
Date: February 10, 2017
Time: 1432 est
Location: via telephone
Present: Shaun Williams, Katherine Wilson, Marvin Frantz – NTSB; Eric West – FAA; Adam Ricciardi – Hageland Aviation

Ms. Burdick was represented by Mark Wilhelm, Hageland attorney.

During the interview, Ms. Burdick stated the following:

There were no morning meetings on Sunday because pilots came in at various times. She and Mr. Oas looked at the weather in Togiak and Quinhagak. Togiak had weather cameras and government weather METARS. The cameras in both locations faced toward their route of flight. She did not know the exact direction but the cameras looked toward the mountains. When flying to the villages, if they ran into bad weather, they would turn around; otherwise they would continue the flight.

When they returned to the base from a flight, pilots would call the OCC for their next flight assignment. They would call dispatch (departure control) when returning to base due to deteriorating weather and dispatch would call the OCC.

Sundays operated a bit different than other days. Most pilots came in around noon. A few pilots would volunteer on Saturday to come in early to do bypass runs if there were any. Those pilots would typically know the day before what route they were going to fly.

They did not receive much training on TAWS besides checking the TAWS system before the first flight of the day.

The GPWS system could be inhibited in flight. Regarding guidance on when it can be inhibited, there was an email that stated that if under VFR and can see the alert was not accurate or if below 700 feet, then it could be inhibited and to state that it was an erroneous indication. If under IFR, a pilot would follow the GPWS warning and execute a go around. She thought this was the policy since the accident.

If a pilot received a GPWS alert in cruise flight, he should report it in WBAT; sometimes the alerts were erroneous. A pilot could also add it to a flight log at the end of the day.

She thought she had gotten into an airplane once or twice and the TAWS had been inhibited but she did not know how many times she had seen that.

The TAWS system was tested as a first flight item. It was not on a checklist but it was a flow for a runup; there was no first flight checklist.

As a safety pilot, she made sure the captain she was flying with was following procedures and executing flights safely and within the rules. Her role was not to teach pilots but it was a

supervisory role because the pilots she flew with were new to the airplane, making sure they understood everything that could occur during a flight versus in training. She would debrief with the captain after the flight.

She never had to report back that a pilot was not fit to be a PIC.

A safety pilot could be a line pilot who had some experience; a check airman had to do a check ride with the FAA to be qualified.

She became a safety pilot before she became a check airman.

She did not rely on any one person to make a decision about her flight. Pilots checked the weather and NOTAMS and the OCC would do the same. They would then get together to discuss it. It was the same with dispatch even before they decided to take a flight.

She could not recall a time when she and the OCC had differing opinions about whether a flight should be released or not.

Dispatch was not involved in the go/no go decision; per the GOM, they did not have operational control. But it was not like pilots did not utilize all resources available to them.

Pilots received CFIT training in a simulator during ground school. The scenarios varied but they would depart, get into weather, pick up an IFR clearance and return to base. For recurrent training, it was a PC-based simulator, not a full motion simulator. During initial training for the airplane, they would get into a full motion simulator.

She knew the Medallion Foundation's "big thing" was safety and the end goal was to get the Medallion shield to show that you were a safe company, did not take risks and had lots of things in place for safety, such as WBAT. She was not sure what training, beyond required 135 training, was required under the Medallion program.

Asked if she thought CFIT training at Hageland was adequate, she stated she thought it was. The company was making it better. There was a group of pilots putting together a training program consisting of multiple scenarios that would be completed in the full motion simulator annually.

For her, the CFIT training seemed straightforward.

She had encountered deteriorating weather ahead of her during a flight and had to circle around and file an IFR flight plan or return to base. She had not inadvertently flown into IMC, but if she did, she would return to known VMC.

On the day of the accident, after landing in Togiak and the accident airplane was not there, she called dispatch who told her that according to Spider Tracks the airplane was nearby. She then received a call from the director of operations.

The weather flying into Togiak at the time of the accident was the same as when she had flown

there earlier that morning – scattered layers of clouds here and there, she could see wide open areas of VMC. She and the other pilot departed Togiak to locate the accident airplane. They were able to get close to the signal by going around the clouds. One side of the mountain was obscured by the clouds. Her flight was just on the other side of the mountain where it was clear.

She had flown direct between Quinhagak and Togiak before. Regarding the terrain in the area of the accident site, there was one mountain peak, then kind of a saddle (low point) that went to another peak. The route she took between the villages would depend on the clouds and wind. If there was a lot of wind, she would go around to the north and east side of the terrain and stay higher. If there was no wind or clouds, she would fly about 700 feet agl. The terrain was on the descent path into Togiak. Depending on your altitude, a pilot might have started his descent to Togiak before crossing the terrain. When she flew at 700-800 feet agl, she would start her descent after crossing the terrain. There was a bowl with some smaller mountains after the terrain where the accident occurred. There was adequate time to descend to Togiak after passing the highest peak.

Typically, when flights departed out of Bethel, they took the same flight path because it was flat. On the Togiak runs, the weather varied so pilots would go different ways, for example she had previously gone around past Platinum and then up to Togiak; it just depended on the weather. It would not concern her if she saw a flight take a different flight path than she was taking. She would talk to the other flight to see what their weather looked like on their route.

On the day of the accident when flying Quinhagak to Togiak, she and the other pilot decided inflight which route to take based on where the clouds were. In this case, they went around the clouds to the path that looked easiest and clearest. She thought they were about 10 minutes into their flight when they decided to fly to the south.

Her flight did not communicate with the accident airplane on the accident leg.

She was asked what changes had been made in terms of operations at Hageland since the accident. She said they no longer flew the Togiak-Quinhagak run. All bypass goods were sent through Bethel now. She was not in Bethel anymore so she was not sure of other changes to the operations there, but she knew they had the CFIT training was in place. Pilots received an email from the company about TAWS – if in VMC and receive alert, verify that it is an erroneous indication. Pilots were to fly IFR if the pilot, aircraft and airport was capable and if below night VFR minimums. If one of those things were not true, pilots could fly VFR if the weather was good; they were to fly under standard day VFR rules if the above criteria cannot be met.

All pilots were required to go to the simulator and complete CFIT training between January and March 2017. She thought it was part of a new recurrent training they had to do CFIT training annually. She had not been yet so did not know too much about it. She did not know for sure, but thought that all pilots were to receive this training, not just 208 pilots.

During initial copilot and captain upgrade training, pilots were in the full motion simulator pretty much all day. She recalled it was one day in the simulator for initial copilot training and captain

training. They would go over procedures, instrument approaches, and emergencies; they did not just cover CFIT.

The full motion simulator was not a 208 EX; the simulator was the Bravo version. It did not have the new avionics, just the steam gauge.

She was hired to fly the 208 as a copilot.

She did not remember if the simulator had the GPWS installed.

Asked about training for the GPWS and if it covered how to interpret displays, meaning of warnings, and how to cancel/test the system, she said it was covered in ground school videos and also in training in the actual airplane.

If she inhibited the GPWS, she would think to reactivate it when completing her descent checklist; it was not an item listed on the checklist.

She would tell pilots she flew with that if they inhibited the GPWS to keep their hand by the button until the airplane passed the area triggering the erroneous indication and then to reactivate it and remove your hand. This was her method, not something in company guidance.

Training for the GPWS was one scenario in the simulator.

She thought the CFIT training scenarios varied from person to person; when she got in the seat, it was one scenario.

Asked if she recalled any simulator or ground school, CFIT related, that dealt with flat light, white out or deteriorating weather conditions, she said those topics were covered in ground school. She did not recall flying any of those scenarios in the simulator or other training device.

She added that there were no bets between her flight and the accident flight about who could get to Togiak first. She also had never heard of any bets taking place between pilots.

She did not have anything else to add to the interview.

Interviewee: Gerard Rock; Executive Director, The Medallion Foundation
Date: May 17, 2017
Time: 0835 AKDT
Location: FAA Flight Standards District Office (FSDO), Anchorage, Alaska
Present: Katherine Wilson, Marvin Frantz, Shaun Williams, David Lawrence – NTSB; Jeff Guzzetti – FAA, Adam Ricciardi – Ravn Alaska

Mr. Rock declined to have representation present.

During the interview, Mr. Rock stated the following:

He had worked in aviation for 40 years. He previously worked in St. Mary's, Alaska, as a manager for Wien Air Alaska, as a director at Alaska Helicopters for 16 years[1], and President of Evergreen Aviation for 12 years. He also owned two construction companies and served on the board of directors for Alaska Air Carriers Association since 1979 and Medallion board of directors since they started until he became the Executive Director about 3 and a half years ago. He was not a pilot and did not hold any FAA certificates.

His duties and responsibilities as executive director were to oversee Medallion programs and the employees that worked there. He reported to the Medallion board of directors.

The Medallion mission was to change the culture of aviation safety. Medallion worked with the carriers to try to get them to change the culture and how they did things. Medallion offered training and education as a part of that.[2]

There were currently seven stars that a carrier could earn through Medallion. Operational control looked at how a carrier performed oversight of their operation in terms of pilots and the carrier. As Medallion shifted its focus to SMS (safety management system), the ground and maintenance star was now separated into two stars. The maintenance star focused on CASS (continuing analysis and surveillance system) and how a carrier looked at themselves and reviewed discrepancies. Ground handling focused on how a carrier reported safety issues they might see and tied in with OSHA. Obtaining a Medallion star for CFIT (controlled flight into terrain) required carriers to incorporate scenario based training in a simulator for three conditions – whiteout, flat light, and deteriorating weather. The SMS star was optional for carriers and incorporated 14 CFR Part 5 "Safety Management Systems" and they were "trying to move carriers toward SMS." There were some Part 121 carriers that participated in the Medallion program who they would make sure were in compliance with the regulations. The Safety star looked at how a carrier handled safety reporting. The ASAP star provided carriers with a facilitator for the ASAP (aviation safety action program) program. The IEP star focused on a carrier's internal audit program and how the carrier was looking at their programs, making sure they were in compliance with the Medallion requirements and correcting any deficiencies found. Obtaining the Medallion Shield was the

[1] In an email communication received August 7, 2017, Mr. Rock clarified that he worked at Alaska Helicopters but was not the director.
[2] In an email communication received August 7, 2017, Mr. Rock added that Medallion also offered "SMS, TapRoot, Risk Assessment, CRM and Professional Speakers on Various Subjects"

culture part. He clarified that the ASAP star only applied to carriers that participated in the Medallion ASAP program; some carriers participated in the FAA's ASAP program. Medallion would make sure that carriers with the ASAP star were in compliance with the MOUs between the carrier and the FAA and Medallion and the FAA. The SMS star was also optional. Some Part 135

carriers were moving into SMS but it was mostly the Part 121 carriers that were currently participating. To obtain the shield, a carrier did not have to have the ASAP or SMS stars.

Medallion community outreach programs included working with schools, such as flight schools, to get kids involved in both maintenance and flight. They also discussed the risk of fatal and serious injuries via TV commercials. Medallion worked with Holland America Line and Princess Cruises to educate passengers interested in an air tour flight on their rights, such as questioning pilots about weather, and also about the importance of dressing warmly. Medallion also taught two courses for carriers – TapRooT and SMS. He clarified that it was the cruise lines that reached out to Medallion and Medallion worked with their safety people in Los Angeles to make sure they were comfortable prior to using an air carrier and to ensure there was an investigation of the carrier if there was an accident[3]; but the partnership was mainly for the education of passengers to let them know their rights when they go ashore.

To start the process of obtaining a Medallion star, the carrier's owner had to contact Medallion. There would be a discussion between Mr. Rock and the owner to make sure the carrier was willing to commit the resources and that they understood the program. Medallion expected the ownership to play a role in the process, reviewing[4] each year where they were in the program. A carrier would decide which stars they wanted to get and in what order, and if they wanted to obtain the shield. Medallion encouraged carriers to get all of the stars but some carriers chose to obtain less.

After a carrier committed to the Medallion program, a program manager would be assigned to work with them and help them understand the program requirements. It was up to the operator to build the program and educate their people on the program. The carrier would manage the program but Medallion would give them guidelines of what they wanted to see in the program. When the carrier was ready to move forward and obtain the star, the program manager would make a recommendation for an audit. The auditor would look at the carrier and make sure they were in compliance with the Medallion requirements. Medallion would only look at the carrier's program as it related to the star being obtained; they did not look at other parts of the carrier.

SMS was not required under the safety star because it was not a regulatory requirement for Part 135 carriers. For the 121 carriers, Medallion was "in sync" with the FAA. Medallion first wanted to see that a carrier had a FAA-approved SMS program before they moved into SMS with them. Medallion had seen some carriers that did not have a fully developed SMS program so they wanted a carrier's program approved by the FAA first; then Medallion would ensure that the carrier met the SMS star requirements. He clarified that the SMS star did not necessarily go above and beyond what the FAA required but Medallion would want to make sure that they were in compliance with the FAA requirements. There were other things that tied into SMS like how ASAP was being used. Some carriers used the WBAT system through Medallion and they wanted to make sure the carrier was in compliance. Medallion had taken every part of SMS and put it into their program. It was a struggle for some 135 carriers because the bar was high, but carriers were 80% there. The weaknesses were usually seen on the reporting side because it took resources. That was why Medallion

[3] In an email communication received August 7, 2017, Mr. Rock added it was a "cruise ship industry requirement of the carrier to have an audit after an accident not a Medallion audit. [It was a] Regulatory Compliance audit."
[4] In an email communication received August 7, 2017, Mr. Rock clarified this was an internal management review with program managers.

taught SMS prior to a carrier starting that star. He[5] would meet with the carrier to make sure they were going to commit the resources so they would know the carrier was committed.

It took about 2 and a half to 3 years for a dedicated carrier to get all five stars. A few of the processes "were imbedded to regulate that time frame." For example, when a carrier was ready for an audit to obtain a star, he would send an auditor in for the initial audit. There would be a recurrent audit 6 months later to make sure the processes in place were working before the carrier would be issued a star.

The final star a carrier would receive was the IEP star. Medallion would go in and look at their internal audit program and then would make sure it was still working 6 months later.

He said the shield was "a culture thing." Not only were they going in to see if things were working but also to talk to people. What they saw was that some carriers might move forward and obtain all of the stars but not the shield. Medallion looked at not only the processes in place but would also interview carrier employees at various locations; they did not only focus on the records location. Medallion might assign two auditors so that they could talk to both day and night employees. They would talk about safety programs and whether employees understood the reporting process, who to contact when they had a safety issue, feedback received after reporting a safety concern, and what fixes were in place. It was a struggle for some carriers with remote locations. Some carriers waited to obtain the shield to make sure their whole system was in place from the top down. The shield audit was about looking at the carrier's culture.

Medallion ensured carriers were meeting the shield standards through audits. After the initial audit, Medallion would conduct a 6-month recurrent audit. Once the star was obtained, the carrier would be audited annually. If a carrier only had the stars (no shield), auditors would only look at those programs. If the carrier had the shield, the auditor focused on two things – interviews with employees to look at the culture and the IEP; sometimes they would look at safety. IEP was required for a carrier to evaluate their programs.

They had made some changes in the last couple of years regarding the decision processes of the auditor and program manager regarding what they might review. They could look at any star but would typically only look at one. Medallion developed a questionnaire that would address each star where they saw issues resultant from changes from accidents, and if they saw a trend for example, they would add it to their list of hot items to examine. The questionnaire would change "year to year."

The shield was audited every year. They mainly looked at IEP because it was the carrier's responsibility to audit their stars – what issues were found and what were the corrective actions taken. If a carrier was not conducting an internal audit then they should not have the IEP star.

Medallion had 14 employees, including two program managers and two auditors. Mr. Rock would assign a program manager to a carrier and the carriers were pretty much divided between the program managers and auditors. One auditor lived in Seattle and covered the southeast Alaska carriers. There was also a new auditor in training that will be working in Alaska. One auditor came

[5] In an email communication received August 7, 2017, Mr. Rock clarified that he meant "we" rather than "he".

from FedEx, and he took about 1-2 years to get comfortable with the process[6].

His role in the audit process was "in the middle." He did not get involved in audits because if there was an issue, there needed to be a decision making process. A carrier would never get to an audit until the program manager made a recommendation.

Each carrier had a base month which was set when their 6-month recurrent audit was completed. The carrier would get a letter from Mr. Rock one month before their base month to see if there was an issue with them coming to do an audit.[7] The program manager might make a recommendation and the audit would be complete within 30 days. Most audits were conducted in the spring and fall when carriers were busy. They usually audited the tourism companies in the spring because they wanted to audit them when new pilots were being brought on board. The carriers that operated year round were usually audited in the fall. If the program manager did not submit a recommendation for an audit, the audit would not occur; but it would create some actions from Medallion.

Southeast Alaska was difficult to get to travel-wise, especially getting from Seattle to Anchorage, so it was easier for the auditor who lived in Seattle.

He said there were "50 something" carriers that were part of the Medallion program, with about 17 carriers joining in the last 3 years. He thought about 36 or 37 carriers had at least one star; some carriers did not have a star yet but did use some of the Medallion tools. Of the 50 or so carriers, 6 or 7 carriers were Part 121, and that information could be found on their website. He thought there were about 370 certificates in Alaska and of which about 70 were air carriers. Of those 70, there were about 50 which were part of Medallion.

The program manager was the key person involved with the carriers, and after an initial meeting with operators seeking to become Medallion carriers, Mr. Rock had little interaction with them. Mr. Rock attended some courses, events and trade shows; he attended most events that occurred in Alaska. The Medallion program manager for Hageland was Dave Flagg; however, in February 2016, Deb Walker filled in as the program manager because an audit was coming due. During the most recent audit prior to the accident, the auditor was Mark Stigar. The program manager that retired in February 2016 was Bob Gastrock.

Mr. Rock did not think he interacted with Hageland on a regular basis.[8]

Each of the Medallions stars would be looked at during an audit on a limited basis. For the CFIT star, the auditor would observe their scenarios to make sure the carrier was doing them, how the carrier set them up, as well as look at records. Like any auditor, if there were no issues identified, they will move on. For operational control, it was an interview process; they looked for changes in pilot staffing and how the pilots were being trained, as well as management.

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[6] In an email communication received August 7, 2017, Mr. Rock added "and receive the training [for] TapRooT, ISO9002 and SMS."

[7] In an email communication received August 7, 2017, Mr. Rock clarified that the purpose of the letter was to let the carrier know that Medallion was coming to do the audit.

[8] In an email communication received August 7, 2017, Mr. Rock clarified that he did not knteract with Hageland on a regular basis.

There were 40-80 components tied to each star and carriers used those to build their programs.

Regarding any guidance given to carriers, Medallion provided a document of the requirements which was maybe 3-4 pages long[9].

Mr. Rock suggested investigators look at the Medallion website to see how many carriers had obtained the CFIT star.[10]

The cost to carriers participating in the Medallion program depended on the carrier's revenue. The highest fee was to Alaska Airlines, around $3500 per year; most carriers paid about $600-1200 per year. The fees collected went into Medallion's operating budget.

Medallion's original funding was through earmarks that were managed by the FAA; however, the earmarks went away in 2009 but funding through the FAA continued with an OTA (other transaction authority).

Asked if Medallion had ever failed an operator during an audit, he said that they had and thought that those carriers probably did not make it to the initiation of an audit. If the program manager saw an issue, the carrier would not be recommended for an audit. If an audit was failed, Medallion could write a letter and put the carrier in a suspension immediately, or the carrier could give them an action plan and timeline to correct deficiencies that Medallion would hold them to. If the carrier missed the deadline, then Medallion would issue the suspension.

When Mr. Rock became executive director, he felt too much was on the shoulders of that position to determine if a carrier would move forward in the program following an accident or incident. However, the process had since changed as of a determination made at a recent Medallion board meeting on May 3. The new process includes the following: if a carrier had an accident or incident, the carrier would be placed in an "administrative hold" and must perform a TapRooT analysis within 45 days. As a part of the analysis, the carrier must come up with causal factors and fixes on how to manage the risk. The carrier must remain in administrative hold for 6-12 months[11] and must maintain the stars they had at the time of the accident but could not obtain additional stars during that period. Medallion would then audit the carrier to make sure the fixes were working, and if so, the administrative hold would be released[12]. If the fixes were not working, the case would go to the Medallion board of directors.

Although the Medallion program was voluntary, carriers signed an agreement indicating that they can be removed from the program.[13]

The program manager was responsible for making a recommendation for a carrier to be audited,

[9] In an email communication received August 7, 2017, Mr. Rock clarified that the complete program was 96 pages long.
[10] In an email communication received August 7, 2017, Mr. Rock clarified that 26 carriers had obtained the CFIT star.
[11] In an email communication received August 7, 2017, Mr. Rock clarified that the carrier "would" remain in administrative hold for 6-12 months.
[12] In an email communication received August 7, 2017, Mr. Rock clarified that when Medallion made sure the fixes were working, the administrative hold "could" be released.
[13] In an email communication received August 7, 2017, Mr. Rock added "or voluntary dropout at anytime."

including the initial, 6-month recurrent and annual audits. The program manager would sit down with the carrier to make sure they were ready for the audit, looking at records, talking with management, etc. It was hard to verify that every pilot at a carrier received CFIT training because there were no pilot signature indicating training had been completed and the audit was only once a year.[14] The program manager would glance through the records and make sure safety meetings were happening. If any issues were identified, corrective actions would take place right there.[15] For example, if a carrier did not conduct a meeting, they might rush and do the meeting so the program manager could move forward with the recommendation for the audit.[16]

Anytime the carrier needed assistance, the program manager would assist them. Some carriers were very engaged with the program manager, and other did not worry about the audit until it was due. He thought about 80% of the carriers were very engaged in the program. Carriers involved from the beginning of the Medallion program, such as Alaska, Era and others, were very dedicated to it. There was a lot of sharing of ideas and the program manager was good at pairing similar operators so one carrier could show the other what worked for them.

The program manager did not retain any notes from their pre-audit review of a carrier.

Medallion was "very choosy" about who they employed to ensure they were experienced and could work well with the carriers. Medallion looked for previous aviation experience; they tried "not to bring them up from ground zero." Program managers and auditors might[17] receive SMS training, TapRooT training, annual ISO9002 training and human factors training. TapRooT training was performed by an outside organization and the human factors training was provided by Mike Doiron from the Canadian equivalent of the FAA. Medallion taught ASAP training and would do ASAP training for the FAA too. It took 1-2 years to get an auditor up to speed on their program, depending on their background. Their newest hire was a former FedEx employee who had performed similar functions.

If a program manager saw that a carrier was struggling, they could call for a special audit. The program manager would email him and they might perform an audit outside the 12-month period.

Medallion would only facilitate a root cause analysis (such as TapRooT) with a carrier; they would not perform the analysis for them. A root cause analysis was required to be performed following an accident or incident for shield carriers but there was no timeline in which it had to be completed. Medallion would recommend that it be completed within 30-45 days of the event. Medallion required that two employees of the carrier take the TapRooT class but because they did not use it often and it can be complicated, Medallion would walk them through the process.

He did not think Hageland had reached out to Medallion to assist with their TapRooT analysis

[14] In an email communication received August 7, 2017, Mr. Rock clarified that it was hard to verify that every pilot at a carrier received CFIT training because there were "only check boxes on most company training forms. Medallion revised the CFIT star to require signature [sic] by the pilot receiving the training."

[15] In an email communication received August 7, 2017, Mr. Rock clarified that issues identified "most of the time were corrected on site during pre-audit."

[16] In an email communication received August 7, 2017, Mr. Rock added "or have a pre-audit with conditions that required follow up to show compliance.

[17] In an email communication received August 7, 2017, Mr. Rock clarified that program managers and auditors "will if they haven't had or" received SMS training, TapRooT training, annual ISO9002 training and human factors training.

following the Togiak accident, but he said "Hageland could do that internally." Under the new policy, Medallion will follow up with a carrier to make sure causal factors were being identified and mitigations were being put in place.

Following an accident or incident, Medallion would not go to the carrier and look at a star. However, when the annual audit came due, they would probably look at the star more closely. Hageland had only been a shield carrier for a year and only had completed their initial audit. Medallion was not a regulator so they tried to keep that to the FAA. He was not sure if training offered by a carrier to meet the Medallion requirements was approved training or observed by the FAA.

Some carriers had developed their own "Medallion manuals", and Medallion wanted carriers to integrate the elements required by Medallion into their GOM and not have them in a separate manual; Mr. Rock had been pushing for that since he became executive director. He thought about 60% of carriers incorporated the Medallion elements into their approved manuals.

The program manager (Ms. Walker, who was scheduled to be interviewed by the NTSB later) should be asked if Hageland had been encouraged to include the CFIT elements into their GOM.

Medallion did not track the safety record of a carrier; the program manager would review safety information but did not retain that information.

The Medallion program had no "retaliatory effect." They wanted carriers to operate above the requirements; they flew in risky environments. Looking at the size of the Hageland operation, he wondered if it should be a Part 135 carrier. Plaintiff lawyers were a problem in Alaska, but Medallion did not want to underscore the carrier or create an issue for them. They wanted carriers to be in the program. Hageland was a test bed for a lot of programs, such as ASAP.[18] The ASAP program generated a tremendous amount of trending and other information; it got carriers looking at themselves.

Medallion did not conduct training for carriers, they just gave guidance. Medallion also did not approve a carrier's training program but only ensured that the carrier was meeting the requirements of the star. He said, "Medallion does not approve anything."[19]

Carriers were required to set up a risk assessment for the environment in which they were flying. For example, flying in southeast Alaska would be different than flying in northwest Alaska. If a carrier had statewide operations, they may need different risk assessments depending on where they were flying. Some carriers got very creative identifying their risks and providing mitigations.

He thought the program manager (Ms. Walker) would know if Medallion provided the Flight Safety Foundation CFIT training aid as guidance to carriers. Medallion developed a safety

[18] In an email communication received August 7, 2017, Mr. Rock clarified that Hageland was not a test bed for anything as far as he knew. "The ASAP program was a test bed project between Medallion and the FAA started in Alaska to cover multiple carriers under one MOU."

[19] In an email communication received August 7, 2017, Mr. Rock added "Medallion recognizes the program meets our guidelines."

reporting system that was iPhone and iPad based, which they had shared with HAI[20], as well as other programs. Medallion had also been working on developing a human factors training for the past two years. They had developed safety videos and would like to develop a human factors video for pilots, not just for maintenance.

When asked if CFIT training should be tailored to Alaska flying conditions, he said that they had seen CFIT incorporated into the risk assessment, such as for single-engine operations. For example, the risk assessment might ask about the pilot's experience flying at the carrier and in Alaska, hours flying in the particular region, etc., and tied that to CFIT. Hageland had a "pretty innovative" risk assessment.

They would bring the 119 managers together once a year and would request that carriers bring in a tool to share with the group. Discussions in these meetings might be airplane specific; for example, following a Caravan accident, there will be a discussion because a lot of carriers operate Caravans.

Medallion had a number of ATDs (aviation training devices) and one motion simulator that carriers could use; pilots might also come to use them outside of the carriers. He felt there was an increase in use of the simulators in the last year; about a 20% increase year over year. People saw the advantage of using them, especially pilots new to Alaska. The Medallion simulators used NASA data to show actual terrain that pilots were flying in. He thought Hageland used the simulators at the University of Alaska.

Medallion did not have a say in who at a carrier chose to oversee a star. In small companies, it might be only one person, in others a whole department.

He did not know any areas of improvement that might have been suggested to Hageland by the program manager or auditor from the last audit. Hageland's last audit was for their shield and they had been working "pretty hard" and the program manager had been working with them "pretty hard" so they were pretty up to snuff on everything. He thought issues with carriers were more typical after they had been doing things on their own for a year.

Medallion operated independently from the FAA and the audits they performed did not replace FAA audits. The amount of time an auditor spent at a carrier depended on the size. If an auditor was just looking at one star, it might take half a day. A larger carrier like Hageland or Alaska Airlines might require multiple days and a couple of auditors.

He met with Clint Wease (manager for the FAA's Alaska Flight Standards Division) during the FAA quarterly meeting. Medallion did not receive the letter written by Mr. Wease to air carriers in May 2016 regarding CFIT accidents and he was "not familiar" with it. Medallion started making changes to the CFIT star; the CFIT committee and their board made recommendations for changes. The committee might include carriers from different parts of the state. The CFIT changes had been about a 2-year process. There were a lot of issues going on and big changes were coming in CFIT.

[20] In an email communication received August 7, 2017, Mr. Rock clarified that Medallion did not share this with HAI but rather it was shared with Medallion by another carrier and Medallion expanded upon it.

Changes to the program would be sent to carriers about a year in advance for feedback.[21] Medallion had seen VMC pilots put in operations involving IMC which they did not think was right, or pilots not feeling comfortable with the training received even if they had prior IFR experience. They also saw pilots turning off TAWS (terrain awareness warning systems); he questioned why it was being turned off if it was certified to be in the airplane. They wanted this added to the CFIT program that if the TAWS was to be turned off, the carrier had to have risk mitigation in place. Medallion could also respond with different tools depending on findings from NTSB investigations.

Medallion had a lot of interactions with the FAA, such as the FAAST (FAA Safety Team) team, sharing booths at fairs, working with the FAA's Alaska FSI (fatal and serious injuries) initiative, and participating in quarterly meetings with Mr. Wease per the MOU. They were also involved with the FAA on outreach programs.

Medallion did not share carrier information with the FAA. If they saw a carrier having an issue, they handled it like an ASAP report. Medallion would show they found an issue and the issue would stay in their record until it was resolved. If an operator came in or out of the program, they would provide that information to the FAA.

Medallion was audited by the FAA twice a year to make sure they were in compliance with the MOU. They were also audited annually by OMB.

The only documentation kept by Medallion was whether an audit was successful or not. There might be a situation where a carrier's audit was "successful with conditions." For example, a carrier may need to send an employee to one of the classes offered by Medallion but that class was only offered twice a year and the employee was not able to attend before the audit. In that case, the condition would be that the employee had to attend the class the next time it was offered.

Updated CFIT guidance for carriers was dated February 10, 2017, and was the form a carrier could use to perform their internal audit.[22]

Medallion tried to review one star every year to determine if the Medallion program needed updating, unless there were changes in the industry that affected their program. They took NTSB accident reports and compared those to their program. They also looked at trends in equipage, trends in the industry, and reviews of accidents. There might be small tweaks made or a large overhaul. Star program reviews and changes involved the program managers, auditors, board of directors, and himself. Changes to operational control were next since the changes they made to CFIT were tied to operational control. About 2 years ago they made changes to the safety star.

Lately, they had been working on the SMS and ASAP stars.

Of the 11 members on the board of directors, three or four were representatives from air carriers in Alaska.

[21] In an email communication received August 7, 2017, Mr. Rock clarified that changes to the program "were sent to carriers a year in advance [sic] February 2016."

[22] In an email communication received August 7, 2017, Mr. Rock clarified that the CFIT guidance dated February 10, 2017, was the form a carrier "would be audited on at their next scheduled audit."

FAA funding was about 45% of Medallion's budget and the rest came from multiple sources. Carriers paid a fee once a year.

He was not sure how many shield carriers there were. He thought it was about a 50-50 mix of carriers that wanted the shield versus those that just wanted to get a star.

There was an illusion that carriers had to have a Medallion membership to use their simulators. All of Medallion's simulators, except one, were open to everyone. In their public outreach, they encouraged everyone to come use them. The simulators were paid for with federal funds.

A star audit was different than a shield audit. The shield brought in the culture piece. With a shield audit, they tried to interview about 20% of employees of the larger carriers, meet with management, pilots, and dispatchers.

The two program managers at Medallion were Deb Walker and Dave Flagg.

Medallion worked on the Circle of Safety with the FAAST team so that passengers would know their rights; for example, if they were not comfortable with the weather then they should question the pilot, ensuring there was a passenger briefing card, and making sure they got a full safety briefing.

For changes being made to the CFIT star, pilots must receive training once a year and new pilots must receive it prior to any revenue flight.[23] Carriers were required to put their pilots through three scenarios and document it. Training used to be required twice a year.[24]

They moved the CFIT training of southeast carriers and tour operators to the spring. He had the authority to move base months. He did southeast carriers a couple of weeks ago and there were lodges coming on board after years of trying to get them on board. They did training in Anchorage to make sure it was happening. He did not know if it was carrier push-back, but he wanted CFIT training to be twice a year.[25] It will come up again when they discuss operational control.

Since he became executive director, he could recall one shield being suspended and there was a second one close to suspension. He did not know of a carrier who voluntarily left the Medallion program in the last year. He found more that carriers let their shields lapse. He had been more prominent in removing the shield – if a carrier was having a problem with a star or two, that was a culture issue and the shield should be suspended.

Medallion pulled a star this year from a new operator who missed training dates twice. In the 3 and a half years since he had been at Medallion, he had suspended 10-12 or more stars. If a carrier

[23] In an email communication received August 7, 2017, Mr. Rock clarified that this was always a requirement and that had never changed.
[24] In an email communication received August 7, 2017, Mr. Rock clarified that this requirement was eliminated because it was allowed to be done in the aircraft.
[25] In an email communication received August 7, 2017, Mr. Rock clarified that this was eliminated because of allowing it to be done in the aircraft; if they brought it back, it would require training twice a year in a simulator.

voluntarily gave the star back, then the carrier could get it back at any time. If the star is suspended[26], they could not get it back for a year. In the Alaska State Troopers accident, the star was voluntarily given back. He did not know how many CFIT stars had been suspended.

Medallion would audit all stars held by a carrier on a yearly basis.

There was a lot of communication regarding the CFIT star due to the changes being made. He wanted to see a restriction of 600-foot ceilings and 2-mile visibility rather than 500-foot ceilings and 1 mile visibility.

Communication between the program manager and carrier was ongoing throughout the year even though the audit was conducted only once a year.

Medallion did not keep any written statistics about carriers. They only kept the previous audit records, and when the carrier joined the program and received their stars.

He could not think of any carrier that dropped out just because they did not want to participate anymore. A carrier might voluntarily relinquish a star if Medallion found issues or if they wanted to take time to reevaluate their participation. He usually saw this when there was a change as to who was running the program at the carrier.

There were examples of changes to the CFIT star program in last 1-2 years but he could not read them off during the interview.[27] He recalled changes requiring pilots to sign off that they received CFIT training and if the TAWS was to be switched off, risk mitigation must be in place. When changes were made to the program, carriers had one year to implement the changes.

The CFIT audit points and associated form provided to carriers was just a tool for the carrier to use. Bigger carriers might have their own form that they used. Medallion encouraged carriers to incorporate the Medallion requirements into their program.

Other changes recently made included that Medallion wanted to see the TapRooT results from a carrier. Before, auditors would ask the carrier if they had any accidents in the last 12 months, if a TapRooT was performed and the findings and fixes implemented. Medallion now wanted to see the findings and fixes and also to know if they were working.

Medallion did not look at a carrier's accident history when issuing a star. They wanted carriers to get into the program regardless of their history.

They did not recommend to passengers that they look for a Medallion carrier to fly. There would be a video played on a loop at the tour desk on the cruise ship. There was also information about the Circle of Safety program at the tour desk.

The program manager did not dig into everything at a carrier like an auditor. The auditor would go through the checklist whereas the program manager was just looking at changes or concerns

[26] In an email communication received August 7, 2017, Mr. Rock clarified that this statement referred to if a star was revoked.

[27] In an email communication received August 7, 2017, Mr. Rock clarified that he offered to provide a copy to the NTSB.

and whether the IEP was working. The auditor would go to the carrier after the program manager. If they did 30 audits a year, he thought four or five came back with findings. If there were findings from the audit, the audit would go back to the program manager and the carrier would need to come up with fixes and a timeline. An audit must be completed 30 days before or after the carrier's base month; only he could approve otherwise. If there were findings from an audit, he would tell the program manager to go back to the carrier and then make a new recommendation when the carrier was ready for another audit.

The TapRooT requirements were not valid at the time of the Togiak accident. They were only recently approved by the Medallion board of directors on May 3, 2017.

CFIT training was not required for Part 135 carriers.[28]

The FAA FSDO manager received certificates when a carrier obtained a star or shield. Mr. Rock would sign the certificate and the FAA FSDO division manager would also sign it.

When a shield or star was revoke or suspended, this information was shared with the FAA in a quarterly report. He would also let Clint Wease (Alaska Flight Standards division manager) know during their quarterly meetings. He would not share why the carrier's shield was revoked, rather just that they were no longer in the program. He did not share that information because he did not want carriers to stop participating in the program.[29]

The Medallion board of directors had 11 board members total.

There had not been an increase in carriers dropping out of the program in the last year. They had one carrier go out of business and another carrier who surrendered a star voluntarily.

He was not sure if Hageland had a "Medallion manual" or if it was incorporated into their approved training program.

Medallion was a 501(c)(3) nonprofit organization. They were audited by OMB (US Office of Management and Budget) yearly and by the FAA twice a year to make sure they were in compliance with the MOU.

Funding from the FAA for Medallion had always been a grant so no bidding from other organizations was required. Current funding was with an OTA, and the FAA could choose who to give the money to. A little of the money received went to the star and shield program, but it also funded other programs the FAA was interested in. Medallion would give the FAA a 3-year business plan to approve or edit.

Asked what an effective training program was, he said Medallion did not judge a carrier's training program, the carrier did that. Medallion looked at the carrier's training to make sure it was in place; it was the carrier's training program. If the program was working for the carrier, then Medallion

[28] In an email communication received August 7, 2017, Mr. Rock clarified that CFIT training was not a regulatory requirement for Part 135 carriers.

[29] In an email communication received August 7, 2017, Mr. Rock clarified that their "policy [was] we don't share information." They always wanted the carrier to continue to change their safety culture.

would agree with it. It was the carrier's program and the carrier decided if it was working. Medallion looked for the existence of policies and procedures, not effectiveness.

He was familiar with the audit elements and the intent of the elements.

The FAA was looking to outsource some tasks and Medallion was in a pilot program to develop guidelines for issuing operating certificates to single-pilot and basic Part 135 operations. In the 5 years since this pilot project was started, Medallion had only issued one certificate and they were working on another one. The letter of agreement stated that the Alaska-based team oversaw the program. If they came through Medallion, they had to go through the Alaska FSDO.

Hageland had the Medallion shield as of June 2016 and they still had their shield. They had an audit coming up.

He did not know what the FAA did with the letter sent from Medallion that indicated that a carrier had obtained a star or shield.

A program manager could recommend a "special audit" if a carrier was struggling or falling out of compliance.

No issues were noted with Hageland in reference to operational control.[30]

An auditor would visit Hageland during their normal audit period and might pick two or three additional bases to visit. Bethel was a favorite to visit because it was a higher risk area.

During the last Medallion audit, the auditor visited Bethel, Palmer, and Anchorage (for records review); he was not sure if the auditor went to Fairbanks. The auditor could request additional help to do an audit. Mr. Rock could assign a program manager to assist as long as it was not the program manager for the carrier.

An auditor would not sit in on ground school training, the program manager would do that.[31] He was not sure how often that was done.

The program manager could answer how often Medallion sat in on carrier safety meetings. They sometimes got requests to sit in on training.

In October 2016, Medallion had two program managers and two auditors.

He would have to read the requirements to discuss how a carrier would fail to get an operational control star, but he knew they had had some failures.

He could not think of any FAA audits of Medallion's program that found they were out of

[30] In an email communication received August 7, 2017, Mr. Rock clarified that he knew of no issues from the previous audit.

[31] In an email communication received August 7, 2017, Mr. Rock clarified the program manager "would be the person if they" did that.

compliance with the MOU.

Mr. Rock once held a student pilot's license. He did not hold an airframe and powerplant mechanic certificate.

He clarified that he was president of Evergreen Aviation for 12 years. When he started with Evergreen, they had 7 aircraft; when he left, they had 112 aircraft.

Medallion received funding from the State of Alaska off and on, but had not received funding from the state for a couple of years.

He thought the highest fee paid by a carrier was Alaska Airlines, about $3500. The board of directors set the prices. They increased prices a few years ago but it was not a big change. For smaller carriers, they wanted them to participate so they did not want prices to be prohibitive.

He thought carriers joined the Medallion program because it gave them a safety organization without having to hire the staff; carriers felt safer using the program.

Carriers used to receive an insurance discount for being a part of the Medallion program. There used to be a 2% Medallion premium reduction, but he did not think that existed anymore. Insurers might have pushed Medallion participation to their insured operators, and premiums might have been higher if a company was not a Medallion participant. Now, because of the "soft" insurance market, Medallion membership probably no longer had a significant effect on rates.

The FAA did regulatory oversight and he had not heard anyone mention that the FAA went easier on carriers that were a part of the Medallion program. He hoped there was no FAA pressure to join Medallion.

During his quarterly meetings with his program managers, they would talk about specific audits or carriers and tried to identify why there were seeing issues or why the program manger missed something and the auditor caught it. He tried to be the objective side of it.

When asked "who audits the auditors", he said "that's basically me" and that would happen at the quarterly meetings.

Medallion had some interns but they were not included in the 14 employees. Employees included two that oversaw simulators, an accountant, an office manager, a CFI/DPE program manager, a program manager for the Super Cub simulator, Mr. Rock, two program managers, and two auditors. The auditors were part time employees because there was not enough work for them to be full time.

Medallion tracked when audits were due for each carrier.

Medallion did not have a lot of interaction with the NTSB. He was not sure that it was the NTSB's job to support the Medallion efforts. The director of the NTSB Alaska Region would speak at some of the Medallion-sponsored meetings.

Medallion held an annual dinner in October where awards would be handed out in a public setting.

When asked if he was aware of instances – either in the past, or hypothetically – in which a carrier would pay the annual fee to join Medallion, but insisted that Medallion not conduct any annual recurring audits after receiving a star or shield, Mr. Rock said he was not aware of this ever happening, and that many people inside of Medallion (such as the executive director, program manager, and auditors) would have to be involved in a "conspiracy" to do such an improper thing.[32]

Training was documented through pilot records. Medallion now wanted to see a pilot's signature that CFIT training was completed. Those records would be looked at during a carrier's audit.

Both the carrier and Medallion would initiate contact with each other in between annual audits. There were only 7-8 shield carriers until a few years ago and there was some pretty good dialogue with the ones that were engaged and moving forward.

Asked how a carrier should evaluate the effectiveness of a star if they did not have the IEP star, he said it was still up to the carrier to tell Medallion if it was working or not. If a carrier did not have records of training being completed or were having accidents, that could mean the star[33] was not effective.

He knew that companies, such as Argus and IS-BAO, were doing audits on behalf of other companies, such as in the oil and manufacturing industry. Medallion did not do regulatory audits. They would tell carrier's what their standards were and that they were voluntary; the carrier could get the star or not.

He did not know if a carrier's CFIT ground school module was a part of the FAA-approved training program.

It was a carrier's program and the carrier should be looking at their accident rates to determine if their program was effective. Medallion gave them their requirements and would see if the carrier met them.

Medallion did not provide human factors training for carriers.[34]

As long as a carrier met the Medallion requirements, that was all they looked at.

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[32] In an email communication received August 7, 2017, Mr. Rock clarified "I stated that it could not happen the Office Manager kept the audit schedule and would give me the 30 notice [sic] letter to sign, it would be copied to the program manager and auditor, our program managers and auditors all had the schedule."

[33] In an email communication received August 7, 2017, Mr. Rock clarified he was referring to the "program" star.

[34] In an email communication received August 7, 2017, Mr. Rock clarified that they brought in professionals to conduct the training.

There was no requirement for a Part 135 carrier to conduct CFIT training so those carriers doing CFIT training were going above the regulations. If they stopped doing the training, the carrier would lose that star. Medallion did not conduct regulatory oversight to determine effectiveness of training but they were making changes in the industry. Regarding a carrier's training program, he said "it's their program so they are the ones to determine the effectiveness of the training."

Mr. Rock did not believe the Part 135 regulations matched the flying conditions in Alaska. CFIT training was a tool for operators to use to determine if pilots were making the correct decisions. There was always room for improvement on how they oversaw things. It depended on the carrier. Hageland was the largest Part 135 carrier in the country, and they were flying in a challenging environment. There were few Part 121 accidents in Alaska. He had seen a huge change in how Hageland did business; with their OCC (operational control center), Hageland had moved themselves up to the Part 121 environment. But "rules are the rules." Medallion wanted to see Part 135 carriers implement a CRM program that was equivalent to Part 121 so they formed a committee; they were taking the tools used in the Part 121 world and applying them to Part 135.

The regulatory portion fell on the FAA.

Other Hageland improvements in the last four years included their risk assessment and big changes in their culture with pilots. The previous owners ran the program "out of their head" and the safety program was "in their head." The new owner was a safety-oriented person.

After the Togiak accident, Hageland said they did not know what to do to improve safety. They had equipment equivalent to a Part 121 carrier and their staff was very safety-oriented. They had looked at Hageland for a couple of years but, from an auditor standpoint, 80% of employees felt that they had a very strong safety culture compared to the previous 2 years. The other 20% rated the culture as a 7 or 8 versus rating it at 100%.

At the end of the day, Medallion wanted to work with carriers. If the carrier showed a disregard for the program, Medallion would take action. They would not pull the Hageland shield when they saw the changes that they were trying to make.

When asked whether the regulations for a large operation like Hageland were adequate to keep people safe, he said "I couldn't say." He thought there was always room for improvement; it depended on the carrier. Hageland was the largest Part 135 carrier in the country – "maybe they should be; maybe they shouldn't be." He had seen a huge change in how Hageland did business in the last 2 and a half years. They had moved themselves up in the operational control environment.

He had nothing additional to add to the interview, and stated that his "door is always open" to discuss the Medallion Foundation.

In an email received from Mr. Rock on May 18, 2017, the following additional statement was provided regarding how to make flying in Alaska safer:

The main thing if I had the pot of gold would be to improve the infrastructure. Alaska still had over 200 airports used by commuter carriers in Alaska that have no weather reporting. If we could get standalone weather stations at these airports used by carriers on a daily basis, and if we were to follow up with GPS instrument approaches, then this would push most carriers into the IFR environment. I personally believe that this would be the best thing we could ever do to reduce CFIT accidents in Alaska. While this may never totally eliminate them, it would move the majority of carriers into the IFR environment.

While we always push this with our delegation in Alaska, and I know the FAA also pushes for additional resources, funding had always been the issue, but maybe if a recommendation came from the NTSB would help to move us in that direction.

Interviewee: Debora Walker, Deputy Director, The Medallion Foundation, Inc.
Date: May 17, 2017
Time: 1305 AKDT
Location: James M. Fitzgerald Federal Building, Anchorage, Alaska
Present: Katherine Wilson, Marvin Frantz, Shaun Williams, David Lawrence – NTSB; Jeff Guzzetti – FAA, Adam Ricciardi – Ravn Alaska

Ms. Walker declined representation.

During the interview, Ms. Walker stated the following:

She was the deputy director at the Medallion Foundation. She had been in this position for 3 and a half years. Previously, she was a program manager with Medallion. In her current position, she was still a program manager.

She held an ATP certificate[35], and had about 2700 hours of flight time. She flew a BE1900 for a Part 121 operator, and her last experience as a pilot was in 2005; she also had done Part 91 aerial mapping. All of her Part 121 flight time was in Alaska. She had also worked as the Part 135 director of safety for Evergreen Helicopters[36], and the manager of safety and quality assurance for Bristow Helicopters; both companies were in Alaska.

She joined Medallion in 2011 as a program manager. Her duties were to work with the assigned operator as a mentor to help them building any operational areas they chose to engage with Medallion in the five operational functional areas. The program manager reviewed the operator's program to make sure they meet Medallion standards and they made sure the operators had processes to support the programs in place; if successful, the program manager would recommend the operator for the Medallion audit. If successful on the initial star audit, they would conduct a recurrent audit in 6 months, and then each year. She did not know how many carriers she was a program manager for, but it might be more than 10.

As deputy director, she was also responsible for the organization designation authority (ODA) program that Medallion had with the FAA. She also was responsible for marketing and trade shows. She had been the Medallion program manager for Hageland Aviation. She was their program manager for over a year.[37] The previous program manager for Hageland was Bob Gastrock. As program manager for Hageland, she reviewed Hageland's Internal Audit Procedures (IAP) star for the 6-month audit of that program. She also looked over other operational areas for the company's shield audit.

There had been recent changes to the CFIT-A star program. One change was to have the program

[35] In an email communication received August 7, 2017, Ms. Walker clarified that she also held CFI and MEI certificates.
[36] In an email communication received August 7, 2017, Ms. Walker clarified that she was also the flight operations training manager for Era Aviation.
[37] In an email communication received August 7, 2017, Ms. Walker clarified that she was assigned as the program manager around March 2016 until early 2017.

manager observe CFIT-A training in the simulator; there was a focus on enhancing training for TAWS. The program manager must ensure that each individual pilot signed the training form to document the CFIT-A simulator training.[38] The date of the CFIT-A program revision containing these changes was February 2016.

If a carrier had an accident, she would contact the carrier to remind them to conduct a TapRooT analysis. She did not know of a timeframe for completion of that analysis. She said that Medallion auditors provide oversight of Medallion program managers in that, if they found any holes in the audit, the program manager had not done their job.

When asked if any of the Medallion members of which she was the assigned program manager had failed to obtain a star, she refused to answer the question because it was not related to the Hageland Togiak accident investigation. She did not know if Hageland had a star refused or withdrawn. She was not involved in the last Hageland CFIT-A star audit recommendation or the audit. She was not sure who was involved in that from Medallion.

The Medallion standards committee met quarterly to review and discuss program requirements. There have been recent changes from the committee and from Medallion board members. She did not remember the date of the last group of changes, but it would have happened prior to the accident and they would have been in effect at the time of the Togiak accident.[39]

Outside of helping an operator prepare for an audit, it was not unusual for program managers to have contact with the operator throughout the year. Medallion could facilitate different operators getting together to share information.

She sat on the "safety council" where she could see several of her operators throughout the year.[40]

They had a checklist of standards, and they looked at the document to see that it supported the standards. She would go through the list and ask the operator to prove that they had done the training. For shield audits, she would ask for a sample of training records to ensure the training had been conducted. If she saw one or two training documents that did not have CFIT simulator training marked, that would not be a violation.[41] She would also look at evidence of an audit of their program and review; the carrier should have some documentation to capture those two processes.

Last spring was her last visit to Hageland before the recommendation for the shield. She did not

[38] In an email communication received August 7, 2017, Ms. Walker clarified that the program manager did not have to be present to witness the pilot signing the training form. She further clarified that "a continuation of changes to the program should include: Ensure each pilot signs the training form after CFIT-A training is complete; Observation flights 30-45 days after initial flight assignment; Seasonal and returning pilots must have an observation flight if there is a break in service of 3 years or more; Documenting ATD/Sim time on the training form."

[39] In an email communication received August 7, 2017, Ms. Walker clarified that the changes were "effective" rather than "in effect;" specifically, the "CFIT-A & OC [operational control] Stars were changed in February 2016, and expected to be in place by February 2017.

[40] In an email communication received August 7, 2017, Ms. Walker clarified that the "safety council" was the Aviation Safety Council of Alaska.

[41] In an email communication received August 7, 2017, Ms. Walker clarified that "if sampled documents have one or two missing items, this is not an [sic] finding but a reason to continue checking for further errors." She further clarified "as with any review, there can be items corrected on the spot or within a day or two and closed out."

have to do her pre-audit work at the carrier, but she always got better information from "body language" during her visits.[42] Hageland had no objection to her looking at the documentation and records and staff members were happy with their recent process changes. She did not observe the CFIT-A simulator training at Hageland, but she had observed simulator training at other carriers.[43] She had never sat in on a carrier's ground school or safety meeting, and said "that's not my scope as the program manager."

There was no formal or informal process to look at Medallion carrier CFIT accidents to reconcile them with Medallion star requirements. She had contacted Dave Lowell at Hageland after the last accident. She offered to help on the TapRooT analysis. She made some follow-up calls, and asked them to accomplish the necessary actions. Medallion did not see the results of the analysis, just what the corrective actions were as a result of the analysis.[44]

She said that a program manager's review for a shield audit was not much different from the individual star audits.

Medallion did not view CFIT-A ground school at Hageland, she just observed the simulator training for CFIT-A.[45] For an initial audit, she would review the operator's syllabus and simulator scenarios to make sure they match Medallion requirements.

For their review prior to an audit, Medallion only looked at the documentation[46] to see if they had the required documents and conducted the training, and did not actually look at the training. She would only look at their scenarios and see if it was backed-up by the syllabus.

She was shown the CFIT Avoidance Star Program Design and Process Measurement Audit Points (revision 14A) that read "the purpose of these Controlled Flight Into Terrain Avoidance (CFIT-A) Star audit points was to determine if the company had established an appropriately documented and effective training program for all pilots that emphasized the recognition of flat-light, white-out, and rapidly deteriorating visibility," and when asked how Medallion determined the effectiveness of a carrier's training program, she said that Medallion had no measurable criteria for the effectiveness of training an operator conducts. It was up to the operator to verify the effectiveness of the training.[47]

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[42] In an email communication received August 7, 2017, Ms. Walker clarified that she "did do pre-audit reviews with Hageland, which includes informal conversations with each responsible manager of which their body language can provide additional information to supplement the review."

[43] In an email communication received August 7, 2017, Ms. Walker clarified that she "was assigned Hageland at the last minute to validate that the IEP [internal evaluation] processes were working at 6 months, and to ensure the company was supporting their other stars in order to be put forward for a Shield audit. We had only just started CFIT-A ATD training in SE Alaska that spring."

[44] In an email communication received August 7, 2017, Ms. Walker clarified that as far as she knew, at the time of the email communication, Hageland has not conducted a TapRoot on this accident. She further clarified that "when a company does perform a Taproot, we do not necessary ask to see the results of that analysis, but do inquire about the corrective actions that come out of that analysis and how it has affected their program."

[45] In an email communication received August 7, 2017, Ms. Walker clarified that she had not observed Hageland's CFIT-A training.

[46] In an email communication received August 7, 2017, Ms. Walker clarified that Medallion looked "at the documentation to support the processes/procedures. In many cases there are more than a single document as evidence to support the procedures are being complied with."

[47] In an email communication received August 7, 2017, Ms. Walker clarified that this was done "through their audit and

The operators have 12 months to implement the new audit points that came from the February 2016 Medallion CFIT-A program revisions. She did not know if Hageland had implemented any of the changes yet. She is not usually familiar with operator-specific manuals.

She was shown the Hageland pilot proficiency check (PC) form that had a line 42 indicating "CFIT" to be evaluated, and asked about Medallion's review of the form for a shield audit. She replied that "I just take a sampling, and if what I sample looks good I stop looking." If deficiencies rise to a level of concern, she would have a discussion with the operator. If she found errors in record keeping, she would ask for corrective action and then follow up later.[48]

She would review the company's CFIT-A manual in preparation for the shield audit Medallion conducts prior to awarding the Shield. Then she will ask for records to validate the processes. Sometimes, she will catch form discrepancies. Ultimately, she looked for proof that they were following their processes. When asked about Hageland's CFIT training, she said that she was not familiar with Hageland's CFIT manual, had not observed their training, and added "it had not come up on my radar, and was not part of my purview."[49] She said that if need be, she would negotiate with an operator to see if a training event would occur during one of her visits to observe.

Hageland had received no stars from Medallion since she had been program manager. The time between receiving all the Medallion stars and the Medallion shield varied from operator to operator.

For the operational control star, she would do a pre-audit look, checking the following: do they have a written program; does it support the Medallion requirements; does it fit the organization; does it provide that a current flight risk assessment be filled out on a regular basis; do they have training for flight followers and controllers; have they done an internal audit/review of their program. She had visited the Hageland OCC, and it appeared impressive and seemed to work for the organization.

review cycles."

[48] In an email communication received August 7, 2017, Ms. Walker clarified that when she was presented the two forms regarding CFIT-A training during the interview, the forms were different from each other and she asked where they had come from – "whether their approved manual or their separate CFIT-A supporting document/manual."

[49] In an email communication received August 7, 2017, Ms. Walker clarified that "in preparation for the Shield audit, a review of company documents supporting company processes are reviewed."

She had never conducted an audit on Hageland for Medallion. She had only provided pre-audit support. For operators, she could brief them on the audit points, help with their programs if asked, and help provide resources from other operators that were willing to share information. Medallion would provide training in any Medallion-owned simulator an operator would like to use. They would also help in setting up simulator scenarios.

As a Medallion program manager, she did not interact with the FAA. She did have contact with the FAA through her work as an administrator for the ODA (Organizational Delegated Authority) program. When asked who her contact was at the FAA for her ODA work, she said it was not relevant to the investigation and did not answer the question.

The training for the program manager position involved shadowing of other program managers and auditors and reviewing other program manager's documents. She attended the TapRooT training and the Medallion Systems Safety/SMS course. She observed another program manager giving the Flight Risk Management course to an operator, and took the ISO 9000 and internal audit courses.

She had not conducted a review of Hageland since the accident. Their annual audit was currently due. They have not been contacted for a pre-audit visit yet.

She had visited Hageland's Anchorage location and the Palmer OCC.

She was not working with anyone else from Medallion on the Hageland program. When Hageland was applying for their initial Medallion Shield last year, she spent multiple days with them on the pre-audit preparation she provides as program manager. She did not keep any notes of this activity. During pre-audit activities, once she was comfortable, she will fill out an audit recommendation and send it to the auditor and the Medallion executive director. Notes from an auditor's interviews with employees are not shared with the program manager.

Regarding operational control versus flight following, she thought there was a hierarchy in place to deal with issues as they escalate.

Following the accident, Hageland chose not to have their Shield announced and presented at the annual dinner. They were still awarded the shield. As the new program manager, she got familiar with Hageland during the shield audit preparation process. She was not the one who recommended Hageland for the Medallion Shield.[50] She did not know how long it took Hageland to go from having five stars to being awarded the shield.

Regarding the Medallion audit point of requiring operators to have "effective training" she said that for Medallion, they[51] must document that training had occurred, audit records, and review any anomalies. "Effective training" meant operators are fulfilling their obligation to Medallion. The existence of a program that meets the Medallion requirements was the Medallion definition of an effective program. The Medallion mission statement was on their website. The primary point of contact at Hageland was Dave Lowell, the director of safety. Individual Medallion star managers were also contacts at Hageland.

[50] In an email communication received August 7, 2017, Ms. Walker clarified that she did make the recommendation.
[51] In an email communication received August 7, 2017, Ms. Walker clarified that by "they" she meant the carrier.

For shield audit prep, she performed a quick review for major changes and checked supporting documentation that supported the programs. The only progress tracked was whether they had been awarded a star. Then Medallion kept track of the audit due-dates.

No time frame was given for the completion of the TapRooT investigation by Hageland.

It would be a "professional embarrassment" if she recommended a carrier for an audit and the auditor found something that she did not. She could not speak for an auditor as to why the auditor would step forward and say an audit was not successful. With Hageland, she recommended them for an audit and the auditors did their job; the result was awarding Hageland the shield. She knew the shield was awarded before the Togiak accident but she did not know the date.

There were 14 employees at Medallion; five full time employees and the rest were part-time – three part-time "in house", and six part-time "out of house." She was not sure if the part time employees were under contract.

She had not observed a Hageland ground school or safety meeting. She had made no visits to Hageland other than the ones to the Anchorage and Palmer bases. It was not in her scope as program manager prior to making the shield audit recommendation. Hageland was no longer her company; Dave Flagg was now the Hageland program manager for Medallion. If Hageland were still her company, she would recommend that the program manager or an auditor visit at least one outstation. These discussions occurred during standards meetings, but she did not believe Hageland was a part of those discussions.[52]

For other operators, she had observed CFIT-A training on Medallion simulators.

She was never pressured to provide audit recommendations.

Regarding the value of Medallion to Alaskan aviation safety, she said that as operators add system safety concepts into their operations, she saw a culture change for the better. They were more aware of their responsibilities than they would be without Medallion.

She did not think CFIT was only a problem in Alaska. Regarding the increase in CFIT accidents, Medallion was trying to be more in tune with operator changes, particularly management changes. If a new manager came in with an operator and the company had not incorporated the standards into the SOPs, the new manager may not be aware or "in tune" with the new[53] standards and from a global perspective, they might see a functional area start slipping.

There were no "Medallion manuals", only carrier manuals. In many cases, the Medallion information required was separate from a carrier's GOM. She did not recall if the Hageland CFIT-A manual and the data required by it was incorporated into the company's approved training program. She did not evaluate where it was, only that it exists. She did not know if Hageland had a "Medallion manual."

[52] In an email communication received August 7, 2017, Ms. Walker clarified "we do include these discussions regarding upcoming audits which will occur in the upcoming audits."
[53] In an email communication received August 7, 2017, Ms. Walker clarified that the "new" standards were "Medallion" standards.

Medallion auditors measured company safety culture during a shield audit by interviews with as many employees as possible. The questions they asked were from a list of questions. Auditors did not keep written records of the interviews or other items during an audit. In determining the company's safety culture as part of a shield audit, auditors did not share the interview results with Medallion program managers.

Medallion was different from other private aviation safety organizations like Argus in two ways. First, Medallion provided a 2-tier structure consisting of mentoring first, then auditing. Secondly, Medallion assessed the company's safety culture by interviewing as many employees as possible.

The Medallion standards committee consisted of the program managers, the auditors, and the executive director. They provide recommendations for changes in Medallion programs to the board of directors through the executive director.

The pass-down from Hageland's previous program manager showed only the stars the company had achieved and when the next audits were due.

When asked what the Medallion mission statement was, she said she "could not remember"[54], and "you'd have to check the website."

She would not be surprised that CFIT accidents in Alaska were on a downward trend.

She interacted with the FAA because she was the administrator of the ODA program. She did not want to say who she was in contact with but it was someone in the Central Regional Office.[55]

The standards committee consisted of the program managers, auditors and executive director. The committee was separate from the board of directors.

The program managers and the auditors were separate. There were no records to look at. If an audit was passed, then the program manager just verifies they were continuing to follow the audit points. The results of the company culture surveys are provided to company management personnel, but no records were kept. During audit preparation, she would note insufficiencies on an audit point worksheet, and then work with the operator to provide due- dates for corrective actions. No notes were kept. She would only verbally brief the carriers on audit items. She did not recall when Dave Flagg took over as Hageland program manager.

Records of the last audit existed to prove that the company was an actual participant.[56] She said that "Medallion had a policy not to keep notes to protect the carrier and protect ourselves." There was no means to look at previous audits or interviews. There was an aversion to retaining records for past audits and identifying records for an operator, and they did not keep their own communications with the carriers for longer than 6 months. They were instructed not to keep any documentation to protect the carrier and their proprietary information; for example a carrier's

[54] In an email communication received August 7, 2017, Ms. Walker added that she could not remember "the exact wording."
[55] In an email communication received August 7, 2017, Ms. Walker clarified that this was the Alaska Regional Office.
[56] In an email communication received August 7, 2017, Ms. Walker clarified that this was the Audit Summary Report.

manuals were their proprietary information. She kept her own pre-audit notes[57], but did not share those with anyone else in the Foundation.

She would go through her boss if she observed something egregious at a carrier that impacted safety. It would be up to him to decide what to do with that information.

It did not matter if a carrier incorporated the Medallion elements (like CFIT-A) into their approved training but they did encouraged carriers to do so, for both ground and simulator, into their approved training program. She did not know if Hageland's CFIT-A training was incorporated into their approved training.

There was no means for an operator to just "pay out" to Medallion to get a star and not go through the audit program. She was not aware of any instance in which this was done, and that it would be wrong if something like that would be attempted.

The Hageland program manager responsibility was switched to Dave Flagg to lighten her load and because he primarily covered the Part 135 carriers.

Rob Stapleton was not a program manager, but he previously worked at Medallion.

She said that the Medallion standards committee provided recommendations to the Medallion board of directors.

She had nothing else to add to the interview.

[57] In an email communication received August 7, 2017, Ms. Walker added that she kept notes "to prepare audit recommendations."

Interviewee: Clint Franklin Wease, Alaska Region Flight Standards Division Manager, FAA
Date: May 18, 2017
Time: 1315 AKDT
Location: NTSB Alaska Regional Office (conference room), Anchorage, Alaska
Present: Katherine Wilson, Marvin Frantz, David Lawrence – NTSB; Jeff Guzzetti – FAA, Adam Ricciardi – Hageland Aviation

Mr. Wease was represented by Mark Tomicich, FAA counsel.

During the interview, Mr. Wease stated the following:

He had been the manager of the Alaska Region Flight Standards Division since June 2011. Prior to that he was the manager of the FAA Fairbanks Flight Standards District Office (FSDO) from September 2004 until June 2011. Mr. Wease began his career at the FAA at the Anchorage FSDO in August 1998 as an aviation safety inspector for operations. He held that position until the spring of 2002, at which time he worked for a short stint as an All Weather Operations (AWO) specialist for FAA. In September 2002, be became a front line manager at the Anchorage FSDO, and then went to the Fairbanks FSDO to become the manager there. He holds an ATP certificate and worked as a commercial air carrier pilot in Alaska prior to coming to the FAA.

In his current position as the Alaska Region Flight Standards Division manager, Mr. Wease was responsible for the oversight of 180 employees, certificates, surveillance and investigation of airmen and air carriers in the Alaska region.

He reported to the deputy director of field operations for Flight Standards, Michael Zenkovich.

He had been familiar with Medallion since its inception in 2002.

Medallion's mission was two-fold – to reduce fatal and serious injury accidents, and through voluntary means, and to raise the safety standard in the industry through the use of system safety principles.

He became involved with Medallion in 2002 when it was conceived, then had direct interaction with the ASAP program when he was the Fairbanks FSDO manager. His direct interaction with Medallion was when they conducted the ASAP training for the FAA inspectors. Currently, as division manager, his interaction was more directly involved as being a point-of-contact and administering agreements that the FAA had with Medallion.

He would attend Medallion board meetings, but not as a board member. Medallion would provide quarterly reports to the FAA. The FAA also conducted audits of their program performance, which involved "verifying Medallions was doing what their agreement says they'll do." The FAA FAAST team also partnered with Medallion.

He did not specifically conduct the FAA audits of Medallion's program performance, but the audits were conducted by people from the FAAST System Safety Analysis branch, AAL-290, in the Alaska Region. The audits were conducted semi-annually.

The Other Transactional Agreement (OTA) set forth the relationship between the FAA and Medallion. It contained the program objectives that they agreed on and collaborated on. The two employees from the AAL-290 System Safety Analysis branch conducted the semi-annual FAA audits of Medallion. These FAA employees also assisted with the FAA's ISO 9000 internal processes and internal quality assurance program audits, so they had some experience and training auditing. The employees developed questions around the OTA program agreement to verify specific aspects of it. Medallion had a policy and procedures manual that they were required to follow, so the FAA would go out and validate that they were doing what they said they would. For example, one year there was an issue with how much Medallion simulators were used, so the auditors checked the Hobbs meters of the simulators to verify the usage. The FAA would conduct an audit, indicate whether it met the requirements or not and then would send the results to Medallion.

The FAA reviewed the prior audit before doing the next one. They would look at the accounting system and how Medallion was accounting for the simulator. They never saw anything that was a showstopper. Medallion had a policies and procedures manual that the FAA looked at – in addition to the OTA – to make sure Medallion was doing what they said they were going to do. If there were any issues, he would call the executive director and have a meeting with him to discuss the issues; he very rarely had to do that.

Medallion would invite the FAA over quarterly to meet with auditors and discuss changes or enhancements to their audit system. The FAA might make recommendations to them. In 2016, the FAA made suggestions to the CFIT and operational control programs, such as encouraging the use of flight risk analysis, flying IFR, flying GPS VFR routes that had a minimum hard altitude, eliminating or enhancing special VFR procedures, recommending 600-foot minimum altitude and 2-mile visibility for carriers, and making sure training was adequate for flat light and white out. They also looked at the Medallion audit form and told them they could help the industry raise the bar by increasing their special VFR minimums. Medallion put the enhancements where they felt they fit best.

Enhancements to the CFIT star were discussed at a "Commuter Summit" meeting in Spring 2015. Operators were represented at this meeting by Part 119 management personnel. Mr. Wease said "we considered them high risk" and in May 2015, he put out a letter to all air carriers in Alaska regarding CFIT accidents.

Medallion worked with carriers but the carriers developed their own training which Medallion would audit. The expectation was that the training would become a part of the carrier's approved training program, and Medallion would give operators time to incorporate changes.

He was aware that some operators had a separate set of "Medallion manuals." Jerry Dennis, the previous Medallion executive director, wanted to raise the bar by having Medallion, but carriers were resistant to incorporate training for the Medallion stars into their approved training programs.

He had talked with John Duncan, and he confirmed that it was the expectation of the FAA to have the Medallion elements incorporated into the approved training program. The FAA told Medallion that they would pull their support if Medallion advocated separate training manuals rather than having the training elements become a part of the approved training.

He could only speculate on the number of carriers that had their CFIT training as a part of their approved training program but he could get that number to the NTSB.

The CFIT letter from the FAA mentioned that there had been 24 fatal and serious injuries in CFIT accidents and they wanted to reduce those; the FAA was trying to drive that metric down.

FAA auditors of Medallion did not go to carriers and did not check the efficacy of the program; they audited whether Medallion was doing what they said they would do. The FAA had no oversight function in that regards.

It was up to the carriers to ensure they were using the appropriate controls. It went back to the safety culture of the carrier. It had to start at the top and permeate down. It took time to change a culture.

Hageland provided an action plan to the FAA. They were establishing a FOQA program, conducting internal audits and "trapping bad behavior." If pilots had an issue identified through FOQA, they had to meet with the chief pilot before being released back to the line. There was a pilot from another operator who complained to Mr. Duncan once during an Alaska Air Carriers meeting about how carriers should not be responsible for "rogue pilots." Mr. Wease said "I can't be accountable for 'rogue' pilots; operators should put systems in place to trap those 'rogue' pilots."

There was push back from air carriers a long time ago because of the culture.

Air carriers would get the first four stars and then the IEP star before they could get the shield.

They now wanted carriers to start with SMS and build SMS principles.

There could be one manager assigned at a carrier for each star.

He recalled one carrier voluntarily giving up their star.

Due to a change in federal requirements, in 2014, the FAA funding to Medallion changed from a grant to an OTA-type award. This changed the relationship between Medallion and the FAA. Grants were for standard-setting organizations and were given with limited conditions. An OTA-type award required a contract, and Medallion had to perform a service per the contract. This required auditing by the FAA.

The FAA received one complaint about Medallion that was investigated by the DOT IG (Office of Inspector General); the result was that the complaint was not substantiated.

The frequency of his contact with Medallion, specifically Mr. Rock, depended on what was going on. They communicated at least a couple times a month via email, phone or in person meetings.

Mr. Wease received quarterly reports from Medallion that included information such as the number of operators in the program, any new operators, etc. The FAA also audited Medallion. It was a requirement to have an external accounting firm that was OMB-certified to look at Medallion's financials; that information was sent to the FAA FSDO accounting officer. He would know if a carrier had a star revoked from the quarterly reports received from Medallion; he might also hear about this information during meetings or from the director's report from a Medallion board meeting.

Audit results provided by Medallion to the FAA for the quarterly reports included the number of audits completed by Medallion as well as the number that were successful and not successful. The majority of audits performed by Medallion of carriers were successful. The FAA had no involvement if an audit of a carrier was not successful. However, he would have "gotten a call" if Medallion were aware of a non-compliance issue.

He was not sure how Medallion should determine the effectiveness of a carrier's training program without researching their policy and procedure manual. He thought Medallion should be looking at a carrier's training program as if they were the only ones looking at it. Maybe they could use a data-driven approach.

He heard about the Togiak accident through the FAA paging system. He also got a call from the Hageland CEO who said he was committed to getting to the bottom of the accident.

Following an accident, the office manager was to step up their surveillance of the carrier and find out what the carrier's corrective actions were. There would be discussions with air carrier's management and the carrier would have to get the FAA an action plan. If the carrier did not provide an action plan, "that's another story." In the case of the Togiak accident, Hageland had to do some analysis and provide the FAA with an action plan. Hageland also established the FOQA program, had to develop 7,000 different routes to monitor, and conducted an internal audit. Finally, Hageland contracted an outside organization to conduct a human factors audit of the company and Hageland talked about developing a human factors program. Hageland had to commit to a time frame to complete these actions, understanding that some items take longer than others. But until the risk was mitigated to an acceptable risk, the FAA will keep up the surveillance. He held weekly meetings with the office managers where he would get updates on progress.

Prior to this accident, there were no major concerns with Hageland. Previous issues the FAA had with Hageland were related to maintenance and Hageland was working on those issues. Back during the time of these previous issues (in 2013), it was possible that there were regional influences on the safety culture at Hageland bases, because back then they were run like separate certificate. But he felt that safety started from the top down and permeated throughout the organization.

Since 2013, he has had inspectors based at Bethel, Ketchikan, on the Kenai Peninsula.

He took a SMS approach to writing the CFIT letter that was published in May 2016. The impetus of the letter went back to 2013; it was personal to him, particularly the St. Mary's accident where a 5-month-old baby perished. That was on his watch so he wanted to solve this problem. The letter told operators of their responsibility to operate at the highest level of safety, and contained recommendations to help them do so. It pushed safety and was an attempt to move operators to take pro-active measures in the safety realm. It pushed operators to hold pilots accountable.

The office manager would "follow up" with the carrier after an accident and would let them know that they would be back in a period of time. The carrier might think they were in compliance but the FAA may institute some changes. They were still pushing these post-accident follow-up interactions with carriers if they have an accident.

They needed controls in place for single-pilot operations.

He said the process they used was a hazard/risk, or SMS-like approach. Operators have a duty to operate at the highest level of safety.

Asked what he would like to see changed if he had the "keys to the kingdom," he said the rules were written broadly to allow operators to operate within the confines of the operation and procedures were great as long as carriers followed them. He would make sure the carrier had an adequate cadre of check airmen and line check airmen to make sure procedures were being accomplished.

Management had to have oversight of the qualifications of their Part 119s in order to ensure they met the intent of the regulations with regard to intending to operate at the "highest level of safety."

Over 50% of commuter operations in the US were done in Alaska, much like a regional carrier. He felt that those carriers needed a dispatch program like Part 121 carriers. These carriers were operating as a scheduled air carrier operation like a Part 121 carrier but they were only a Part 135 operation.

A carrier had to have a training program that was specific to its environment.

Inclusion of the Medallion elements into an FAA-approved manual or training program was not required but it was the FAA's expectation for Medallion carriers.

There was no formal letter sent from Medallion to the FAA if a carrier had lost a star even though there was a letter sent to the FAA when a carrier obtained a star. He would get a verbal, not a written, notification if a carrier failed an audit and lost a Medallion star. He thought his response to a carrier losing a star would be to call Mr. Rock, the executive director, to find out what was going on. He could also be informed via the Medallion quarterly report to the FAA.

If the audit of a carrier by Medallion was not successful, the carrier had to come up with an action plan and give that to Medallion.

The FAA's audit of Medallion was to ensure compliance with the MOU rather than the quality of the Medallion programs.

Asked why CFIT training was not required per the FARs for Part 135 carriers, he responded "good question."

The onus was on the carrier to operate at the highest level of safety. The Medallion Foundation was a strategy or tool towards this end. The FAA should write a regulation on CFIT and operational control; there needed to be one level of safety.

Medallion membership allows the FAA to evaluate the intent of a carrier to operate safely.

The Medallion Foundation started in Alaska with the purpose of improving aviation safety in Alaska. This was the difference between Medallion and other private safety organizations like Argus and IS-BAO. Flying in Alaska was more challenging due to lack of weather reporting in remote areas and crumbling infrastructure. The Capstone and ADS-B projects, and the Weather Camera program had also helped reduce accident rates.

Challenges included a lack of weather reporting and a "crumbling infrastructure" in Alaska. Improvements include rulemaking in 1995-1996 for single-engine IFR, equipment improvements, Capstone and Capstone 1, and ADS-B. Capstone 2 had been planned to go statewide, but funding ran out. They had developed more instrument approaches, along with 230 weather cameras, which were beneficial but not approved sources of weather. They were getting rid of Flight Service Stations (FSS), and with National Weather Service budget crunches, weather reporting went down.

Commercial aviation, Part 121 and Part 135 operations, were driving aviation in Alaska. Infrastructure was crumbling and systems were shut down. Communication infrastructure was a problem as well. Culture was also an issue.

Asked if the FAA endorsed Medallion, he "guessed you could say that;" he agreed that by virtue of the contract with them, the FAA promoted Medallion.

FAA inspectors were experienced and the guidance for inspectors in FAA Order 8900.1 stated that carriers should include escape maneuvering for inadvertent IMC in there training, so while not specifically CFIT, it was related to CFIT. He recognized that it was not easy to make regulatory changes, but he did not think that meant they should not try to make regulatory changes to reduce CFIT accidents. They could do a product for Alaskan operators in reference to CFIT safety. Rule-making was a long, hard process.

He explained that the FAA had recently adopted the "compliance philosophy." The philosophy recognized that enforcement was only effective on a narrow set of folks who could not or would not comply. For example, the FAA spent hundreds of man hours in 2013 to revoke Hageland's certificate but those efforts did not go forward due to legal precedence from NTSB law judge judgements that stopped FAA lawyers from taking that on. Compliance philosophy accounts for operators that make inadvertent mistakes that did not warrant enforcement actions, while

prioritizing enforcement actions for operators who could not or would not comply. Most operators were trying to do well and to operate safely.

Medallion board meetings occurred more than once a year. He attended as the FAA representative and did not vote; he did not attend the executive sections of those meetings.

Asked to clarify why the FAA did not receive a letter from Medallion when a star was revoke or rescinded, he stated that it went back to the inception of the program. The program was voluntary so there was a certain amount of anonymity. He thought people might drop out of the program otherwise. He received notification of a star's removal, but it was not written, just informal. He said the intent of the FAA's CFIT letter in 2016 was strategic, not an endorsement of Medallion. He further said that he could see how the letter could be interpreted as an "endorsement."

When asked if FAA inspectors conducted enroute inspections in Alaska, he said they had 140 ASIs (aviation safety inspectors) in the region and "that is how we get around in the area." FAA inspectors conducted a lot of enroute inspections in Alaska but he did not know how their numbers compared to the number of those done in the lower 48 states. FAA inspectors sometimes purchased tickets on their assigned carriers and posed as passengers to conduct surveillance.

He was aware of the FAA audit of Hageland's parent company, HoTH. An outside team was brought in to audit the FAA and HoTH. The restructuring of the FSDO in Anchorage and the creation of the Polaris CMO was the result of the FAA and HoTH audits.

Regarding the pilot program with Medallion authorizing them to issue Part 135 certificates, he said the FAA wanted to disperse the risk so they dispersed how certificates were issued. The FAA recognized that western Alaska had the highest risk; they had a higher frequency of operations, lack of infrastructure, weather conditions and regulations of a Part 135 carrier that had lower controls than Part 121.

Medallion was a standard-setting organization. The money sent to Medallion from the FAA was only to be used in Alaska. The FAA wanted to gradually wean Medallion off of federal funding; they needed about $1.2 million to operate annually. About 45 carriers are Medallion participants, and if funding was lost to Medallion, the results could be "catastrophic" to Alaska aviation safety. The FAA then created a means for Medallion to remain funded, which was why they expanded the program to outside states like Hawaii.

Medallion was a brand. The policy following an accident had changed; now a carrier's shield or star would be placed in administrative hold, and the carrier had to do a root cause analysis and action plan. At the carrier's next scheduled audit, Medallion would look and see how they were doing. If they were doing okay, Medallion would release the shield or star back to them.

In 2015, Hageland was trying to get an IEP started. Mr. Rock called Mr. Wease and said that Hageland wanted Medallion to conduct an audit of their IEP program without the 6-month period between the initial audit and recurrent audit. Mr. Wease told Mr. Rock that was not how they did things and to tell Hageland they had to wait the 6 months.

He believed that CFIT training should be tailored to the carrier and flying conditions in Alaska. He would be concerned if he saw a cookie cutter CFIT training program. He said he thought the FAA and Medallion could "partner" to develop advisory information for CFIT.

Operating at a level of safety that only met the Part 135 regulations was not operating at the highest level of safety.

He had had disagreements with Medallion in the past. In those instances, he would get everyone in the same room to discuss. The FAA was currently working with Medallion on a pilot program to make Medallion a designee to certify single-pilot Part 135 operations.

He said "carriers own their accidents." Medallion was not a training organization or a regulated entity. The MOU says that everyone will make their "best efforts." He was concerned that the industry might lose confidence in Medallion if they were tied to a carrier's accident; that could that have a negative impact on Alaska safety. Medallion was "important" to improving aviation safety in Alaska, and that he would "hate to see get shut down."

He had nothing else to add to the interview.

Interviewee: Brian Asti, former Regional Auditor, FAA
Date: June 16, 2017
Time: 1505 EDT
Location: via telephone
Present: Katherine Wilson, Marvin Frantz, Shaun William – NTSB

Mr. Asti declined to have representation present.

During the interview, Mr. Asti stated the following:

He currently worked as an economic assistant for the Bureau of Labor Statistics (BLS) and held that position since December 2016. Prior to that, he had worked for the FAA from 2007 until January 2015. He held a number of different positions with the FAA, the most recent being regional auditor person of responsibility (POR). He started at the FAA as a cabin safety inspector; went to the 230 branch and worked as the whistleblower coordinator and then quality management system (QMS) regional contact; and then went to the 290 branch as the POR and held that position for 4 years. Between the FAA and Bureau of Labor Statistics, he volunteered his time on a construction project for 15 months in New York prior to moving back to Alaska, taking the summer off and then started at BLS.

His POR duties included auditing the FAA and fellow inspectors. He looked at it from a different viewpoint to make sure paperwork was completed correctly, and to identify issues with guidance so changes could be made or to make sure the office was following the guidance. He also went to other FAA facilities throughout the country to make sure they were also following procedures and policies. He also did whistleblower coordination and as a part of his audit duties, he audited the Medallion Foundation.

Asked how he maintained impartiality given that he was an FAA employee who was auditing the FAA, he said he was a core-comp, K-band employee so was given access to a lot of documents. If a problem was identified, there was corrective action that needed to happen; someone would have to fix the problem and come up with an action to make it not happen again. There was also a team that would come in once every 3 years to look at problem areas at the FAA to see how they were doing with their paperwork and would see if there were any corrective actions. That team would look at whether the problem still existed even with the corrective action put in place. He had to answer to more than just his regional manager. They had quarterly meetings with headquarters where they had to openly discuss the issues identified with everyone, so there were some checks and balances there.

He was based at the FAA regional office in Anchorage. He reported to a number of different people, primarily the managers in the FAA 290 branch. He also reported to Clint Wease for some items and AFS (Flight Standards Service) QMS (quality management system) team for other items.

He had more involvement with Medallion Foundation when he was in the FAA 230 branch. He worked with Medallion as they developed a QMS for their carriers. He did not help them develop the product but would be a "critical eye" and offer suggestions and changes to items. They were setting up a training course to get carriers QMS qualified as the FAA was doing the same. Then in the 290 branch, he audited Medallion by taking the grant agreement line-by-line to make sure they

were following what was in the grant agreement; however that changed over the years. He initially worked with Dennis Ward at Medallion. Mr. Asti would review Mr. Ward's manuals and files to make sure, for example, they were doing the checks on carriers they said they were and following through with corrective action. [redacted] He continued that Mr. Wease was a new regional manager and Mr. Ward was a former aviation safety inspector and federal employee so he had an outlook of "do what the manual says" and had the mentality of "come in and check it because we want to show you everything that we are doing." It was a different management when Mr. Rock took over. The FAA was pleased with the direction that Medallion was going, but Mr. Asti felt like he was going into an operator who would just answer the questions they were asked. Mr. Asti was told that was the route they wanted to go with the audit, to make sure just the grant was in place. The stuff he looked at with the manuals was not major things, just housekeeping and paperwork stuff that they would find. When he worked with Mr. Rock, it was basically having them update the manual so that it reflected what they were actually doing. Medallion was in the process of rewriting their manual which took a while to do but Mr. Asti never saw the rewrite.

When helping Medallion with QMS and building SMS, he would be very interactive and make suggestions to help them improve. But later on, he would just be pointing out to Medallion where they were not following the manual. His interaction was basically to suggest if they were going to do business a certain way, then the manual needed to reflect that. But if the manual said to do something and they were not, they needed to fix it. Mr. Asti gave an example where they used to audit Medallion's equipment each year, but with the change in management, the new person who came on board to oversee the equipment was overwhelmed by how to do that. Mr. Asti suggested that they mark their equipment with a tag to help them keep track of it. The next time he went back, they had metal tags on their equipment and were working on that. Mr. Asti did not say it had to be done a certain way but would rather give several suggestions and the company could choose one if they thought it was appropriate.

Asked if he would agree that Medallion was open to changes he suggested, Mr. Asti responded "definitely". Asked if Medallion ever seemed not open to making changes, he said he would not say that they were not open to making changes, but there were many ways to do something and if what they were doing worked then that was great.

Manual rewrites took a long time. Mr. Asti was not able to see the changes to the Medallion manual but would report back to management and would be told to keep working with Medallion to see what he could do to help them.

When he did inspections at a carrier and a problem was identified, he could say that they needed to do something a certain way and then there were actions that could be taken after that. With Medallion, he could not take any actions against them. He did not mean that to sound negative, it was a positive thing. He did not think they necessarily needed enforcement but said there was just no recourse for Medallion not following suggested actions. Asked why it was like that, it was explained to him that they did not have an oversight role of Medallion which was set up from FAA Headquarters to help reduce accidents in Alaska so the FAA only looked at the grant they received.

Regarding items from the grant that Mr. Asti audited, he said the grant stipulated that manuals needed

to be in place. The grant did not include specifics such as how often a carrier should be audited; that was in the manual, but the grant agreement stated that Medallion was to follow what was in the manual. The grant agreement would mostly be allocation of funds for certain pockets, such as how much money was to spent on a project as well as the outcome of the project such as have this many flyers or be in this many magazines. He never saw Medallion not meet the requirements of the grant agreement but said they might sometimes be behind in meeting the requirements. When Mr. Ward was at Medallion, Mr. Asti would go into their files and look at their financials to see what they were spending the money on and it was easier for him to add up how much money they were spending in each pocket. When Mr. Rock took over, Mr. Asti was told to ask Mr. Rock what he was looking for and he would tell him how much was being spent in that area. Medallion started getting money from the state of Alaska and they wanted to keep that separate from the FAA so that was why Medallion did not have him go into their system anymore and look around. It was agreed between Medallion and the FAA that the FAA would not look at anything at Medallion that the state of Alaska was paying for because it did not fall under the grant agreement.

He left the FAA because he and his wife like to keep life simple and they were given an opportunity to go to New York and volunteer their time. He did not leave because he did not like working for the FAA; it was for quality of life.

[redacted]

He never worked directly with Hageland. He heard they had many accidents, but he admitted that in his world he was mostly a Part 121 cabin safety inspector. Then when he became a regional auditor, he wanted to make sure people were doing what they said they were doing but also did not want to micromanage the inspectors.

He had the freedom to talk to employees and review documents at Medallion until Mr. Rock came along. After that, even Medallion employees were not spending much time discussing information anymore.

When Mr. Rock first came on board, Mr. Asti was told by his management, Clint Wease, that because they did not know much about him besides that he was from the Alaska Air Carriers Association to go over everything with a fine-tooth comb. Mr. Asti did that for the first audit and that was when they found that Medallion was deviating from the housekeeping aspects of the manual. Audits were

conducted every 6 months. When it was time to do the second audit, Mr. Wease told Mr. Asti that they were working well with Mr. Rock so to work with Medallion to resolve the items identified versus looking at them with a critical eye. When Mr. Asti worked with Mr. Ward, he would mark items in the audit and recheck them when he came back in 6 months. When Mr. Rock took over, if issue areas were found, Mr. Asti would give Medallion time to resolve it rather than give them a specific date of when it needed to be completed by. This was not so that the audit would not reflect anything negative but rather to give Medallion more time to fix things.

When doing an audit, Mr. Asti would come up with a list of up to 50 or so questions based on the grant agreement. He would change them for each audit so that he was not looking at the same stuff every time, unless there was a negative finding from the last audit. He would fill in his questions and give an explanation of that and also write a written report that he would send to his management team and the Medallion Foundation.

When he did the audits after Mr. Rock took over, Mr. Asti would find a lot more items not being completed as readily; Mr. Ward did what was in the manual "to the T".

[redacted] When he went in for audits, it would be very quick. After Mr. Rock took over, he did not think there was less cooperation, but employees were less open in sharing their concerns with Mr. Asti.

It was clear to Mr. Asti from when he was in the 230 branch that the FAA did not regulate Medallion; they were a support for Medallion. He did not recall who told him that. When got became an auditor, he was told by a previous auditor or maybe management, that he was going in to audit the Medallion Foundation grant but not regulate them like an operator. When Mr. Rock started at Medallion, it was Mr. Wease who told Mr. Asti that they needed to go in with a "critical eye." But at the time of the second or third audit, Mr. Asti was told that they did not need to be critical of Medallion but rather needed to collaborate with them; that was when the whole thing with the due dates for action items came up. He was not sure why there was a change in how they looked at Medallion but he could make an assumption. When Mr. Rock became the head of Medallion, that decision was not made locally; that was made at headquarters in conjunction with others. Mr. Asti did not know who this person was at all and his audit came up pretty quick after Mr. Rock started. They wanted to find out if they needed to spend more time with Medallion but after some interactions with FAA management and Mr. Rock, it may have eased concerns that they had. That was Mr. Asti's assumption though.

[redacted]

He would give management a draft copy of his report. The feedback was usually just changing things around. One time someone wanted him to change a whole sentence. Mr. Asti said no because that was not what Mr. Asti said and he did not want a report to go out with something that he did not say; they changed it back. He would get verbal feedback, but nothing in writing.

For the first audit of Medallion after Mr. Rock took over, Mr. Asti was told to be critical. After that, Mr. Asti was not told to not bring things up but was told not to be demanding. If Mr. Asti saw something, he was not going to not put it in writing; it helped him sleep at night. He thought the first audit he did with Mr. Rock was negative because he did it with a very critical eye and marked a lot of items. It was possible that he was told to ease up because the first audit was so critical.

He never entered any financial information into the audit, it was just the manuals. Mr. Asti clarified that he included in the audit how the money was being spent but his concerns outside of that were not included in the audit.

He never saw any repercussions for Medallion not following the manual. But when Mr. Asti would return for the next audit, it was obvious that they had looked at everything. He was not sure if Mr. Ward or Mr. Rock ever responded to his audit findings. Although the audit had Mr. Asti's signature at the bottom, the report would be sent to Medallion through Mr. Wease so Mr. Asti would not be included in any response to that if there was any.

The first audit that Mr. Asti did with a critical eye looked at Medallion overall including how they were doing business, their filing, their paperwork, their financials in terms of how the grant said the money would be allocated. The other concerns he had were auxiliary. He looked at housekeeping and how they did paperwork, not at their interactions with carriers. He had previously looked at whether they were doing audits of carriers but he would not use the information to go back to the FAA and say that a carrier was having a problem; that was the least of what he would do with that information. When Mr. Rock came on board, those files were shut.

When Mr. Asti looked at the financials, he would report back how much of the grant money had been spent in each area. [redacted]

The grant money usually covered one year and his audit was needed to allocate the funds. The money would change every time according to the grant, such as operating expenses. Mr. Asti would not know what the check was for.

He had nothing else to add to the interview.

The interview ended at 1609.

Record of Phone Conversation

Interviewee: Mark Stigar, former auditor, The Medallion Foundation
Date: June 26, 2017
Time: 1005 AKDT
Location: via telephone
Present: Shaun Williams – NTSB

During the phone conversation, Mr. Stigar stated the following:

He was a former employee and auditor at the Medallion Foundation. He performed the last audit of the controlled flight into terrain avoidance program at Hageland Aviation prior to the October 2, 2016, accident near Togiak, Alaska, of flight 3153.

When he first started at Medallion, when an audit was completed, the auditor would keep notes and emails, which made it easier to review a carrier prior to subsequent audits. Following legal advice, the auditors were told not to keep any records and to purge what records they did retain. When he would go to an operator to complete an audit, he would only have the checklist (audit points) to guide him through the audit.

After they were told no more notes and he purged his emails, he would go into audits in the blind. He would try to go over in his head where the operators were last year in terms of their programs, but without any notes, it was tough to have continuity. He surmised that if they passed the standard every time, then they were ok.

When it was completed, a post audit report would be completed, but there was no place on the report for comments. If a deficiency was found, depending on the severity, a rating of successful with conditions or unsuccessful would be issued. If successful with conditions was issued, they would be given a deadline, based upon how difficult it was to correct the situation.

He related an audit to just a snapshot in time. He said if someone choose not to follow the procedures, an auditor would not catch that six months earlier. He used the example of him being the last person to audit Promech Air. He said the audit took place in December, 2014 when there were just two employees working, the Director of Operations and the Chief Pilot. They had an accident the next summer, but he said there was no way an auditor would have caught what led to the accident.

If the audit points changed, the operator was required to modify their program to an acceptable level on the changes. The program manager would go in and review the program modifications to insure the changes were sufficient. Once satisfied, the program manager would recommend the audit on the operator. The auditor would then visit the operator and go through the checklist. Item one or two on the checklist was if they were utilizing the current version of the program.

The normal progression for a company participating in Medallion would be for them to start out getting their controlled flight into terrain avoidance (CFIT-A) star or operational control star and

then a safety or maintenance star with the internal evaluation star being last. An audit of the CFIT star for a company with about six airplanes and six pilots would normally take between one hour and one and a half hours. If they had five stars without the shield, then it would take about all day. Once an operator had the Shield, then they would alternate between the safety program and the internal evaluation program. The thought process of alternating was that if the audit went well with the internal evaluation star, it would tell them that the program was working at how they were looking at themselves.

He said the Medallion programs were like any FAA rules in that they are only good if you follow them.