Docket No. SA-540

Exhibit No. 2 C

NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C.

Interview Summaries

(30 Pages)

Attachment 2

To Operational Factors Specialist Factual Report

ANC17MA001

Interview Summaries

Interviewee: James Michael Howery
Date: December 19, 2016
Time: 1215 est
Location: via telephone
Present: Katherine Wilson, Marvin Frantz, Clint Johnson, Noreen Price – NTSB; Eric West – FAA

Mr. Howery was represented by Glenn Brown, FAA attorney.

During the interview, Mr. Howery stated the following:

He was the Assistant Principal Operations Inspector (APOI) for the Hageland certificate at the FAA AL09-Polaris Certificate Management Office (CMO). He had been an APOI since November 2014 in AL03 before being assigned the Hageland certificate in summer or fall 2015. His duties and responsibilities were those as assigned by the POI and consisted of surveillance, certification, projects and investigation. He sometimes worked with credentialed aviation safety inspectors (ASI) if help was needed on his assignments. His duties varied and he could not say what percentage of his time he spent on the Hageland versus other duties assigned to him. He thought about 70% of his time might be spent on the Hageland certificate but if he was assigned an accident, for example, then that would take up a significant amount of his time. He clarified that 70% of his time on the Hageland certificate was a very rough estimate.

Prior to working for the FAA, he attended Embry-Riddle Aeronautical University (ERAU) and earned a Bachelor of Science degree in Aeronautical Science and a Master of Science degree in Safety Science. He spent about 11 years at ERAU as an instructor, examiner, standards pilot, and adjunct professor, and also helped develop differences training and ADS-B software. He also spent 4 years in the US Army prior to attending ERAU. As a part of his Master's degree, he took courses in human factors and accident investigation and at the FAA he attended their accident investigation course. He was first hired by the FAA in August 2012 in AL03 as an ASI and then became an APOI in November 2014.

He held an airline transport pilot multiengine land, commercial single engine land, multiengine instructor, instrument instructor, and remote pilot certificates and ratings. He had about 5,000 hours total time when he started at the FAA but was not sure of his time since then. The FAA had a program for POIs to maintain flight currency. He flew every 3 months in Dallas, Texas, in a Cessna 172, Piper Seminole, and Beechcraft King Air aircraft. He also maintained his tailwheel currency in Alaska flying a Super Cub and 180 either with a tailwheel or skis.

When assigned the APOI position, there was no specific training provided by the FAA.

His other duties were a mix of Part 91 and 135 assignments and he previously was assigned as the POI of a flight school. Regarding his role in accidents and incidents, it was a function of manpower and sometimes those duties and projects got assigned to people such as himself. Asked about his

workload, he said he got paid to work 8 hours a day. If he was in the field doing surveillance, it was expected that he performed the work he was tasked with. If he worked over 8 hours, he would receive compensation such as compensatory time. If there was a task that he could not complete, he might have another ASI finish it. Asked how often that happens, he said he worked until he finished the assignment. If he needed help he would ask and get the help he needed.

As a part of his duties, he traveled to the central hubs of the airline and would arrange flights to small villages to do surveillance. He would also travel to the bases where flights started and ended to do surveillance there as well. Surveillance included ramp checks, en routes, and record checks. He also surveilled the training program, including the new hire class and training for aircraft with different capabilities. If he received any complaints from pilots at the airline, he would follow up on those. He recalled going to Barter Island to watch airplanes coming in after receiving complaints about it. He liked to talk to pilots and would ask them about the infrastructure, any problems such as with radio frequencies and lack of communication. He would then pass any concerns on to FAA 220 branch.

He spent most of his time in Bethel and was required to go there. Asked why he was required to be at the Bethel base, he said there was a program where someone (POI, APOI, or ASI) was assigned to be there during a specific block of time. Bethel was also the busiest Hageland hub. The purpose was to put surveillance in the highest risk location. They worked 4-day shifts and thought they were in Bethel 200-300 days a year, but they tried to have an ASI there all of the time. There was a full time ASI position in Bethel but that person recently left and a new ASI was assigned. He did not know why the previous ASI left Bethel. He thought they rotated through 10-15 qualified ASIs to do surveillance in Bethel. There was a roster and last year he thought he was in Bethel every month, although he may have skipped a month or two. He also did some shorter trips to complete 44709 reexamination rides or check airman checks.

He did not know the accident crew and he did not recognize their names.

He described the operational control process at Hageland as an agent at the station generating a flight with the manifest, passengers and weight and balance that would be sent electronically to the OCC. The operational control agents (OCAs) would look at this information and other information pertinent to the flight. At that time, the pilot would call the OCC for the release saying he performed the risk assessment. The OCA and pilot would either agree or disagree on the risk assessment. He thought the OCA had overriding authority. If the risk assessment was above a certain level, management had to release the flight. The information would then be sent back to the station with the OCA's initials and indicating that the flight was released. The release was good for 30 minutes.

Asked the difference between tier 1 and tier 2 operational control, he said the pilot and the OCA released the flight. This was the basic operational control that Hageland had unless someone from management was required to release the flight based on a risk level of 3 or higher. Regarding whether base agents had operational control, he said as passenger manifests changed the base

agents would make a draft manifest which would be sent to the OCC. It was up to the OCA to make sure it was okay. Regarding his understanding of the roles of the departure control agents at the base and OCAs, he preferred to reference the manual but he believed it was just as he described that the base agents dealt with the passenger manifests. There had previously been problems with the bases doing operational control so that function was moved to the OCC in Palmer, Alaska.

The OCC was like a Part 121 dispatcher. He conducted surveillance of both the OCC and bases to make sure it was working in accordance with the manual. Asked if he ever saw base agents or OCAs not following the manuals, he said it was a broad question so "of course". If he observed that, he would apply corrective actions depending on the findings and how egregious the violation was. He could not recall any surveillance issues at the OCC. He recalled something from a few years ago when the OCC was first in place and how they were using their systems. The problem was with the RA process because required conversations between the pilots and OCAs were not occurring. Since procedures have been formalized and put in the manual, the problems have been alleviated. Hageland had previously sent concerns to the CMO about reports of pilots wanting to avoid flying IFR. When visiting the bases, he asked pilots how they felt about the OCC. Pilots like that they could say the OCC was making the decision and not them which alleviated pressure on them from passengers.

He believed the decision to fly IFR versus VFR was that of the pilot. He did not think he saw the OCA and pilot disagree on the flight plan to file but he had seen an OCA turn down a flight for weather. He then clarified that he had seen disagreement between a pilot and OCA and had also seen an OCA bump the risk assessment to a higher level that required management approval. He also thought the OCA could override a risk assessment value and make it a level 3 which would require a call to management.

He did review Hageland aircraft checklists but could not think of the timeline of when he did it last. Their guidance was to make sure the operator followed the manufacturer's checklist although there was some allowance for an operator to deviate from the manufacturer's checklist or to make their checklist more efficient.

He had observed pilots using a checklist for the first flight of the day. He thought the checklist might say "engine run up" and then the pilots would recall from memory the items for that check. He did not recall if pilots tested the GPWS before the first flight of the day but he did listen for the 500 foot alert when landing at an airport. The test of the GPWS was to be done as required per the manufacturer's checklist. He did not recall if this was to occur before each flight or only on the first flight of the day. He believed he heard the GPWS alerts sound during a flight but could not recall when or if it was at Hageland. He believed pilots had reported alerts going off and scaring passengers. If he received reports of the GPWS erroneously alerting in a certain location, which he thought he had heard in the past, he would pass those concerns on to the 220 branch.

Hageland pilots used the accepted checklist in the cockpit. He was not sure if he had seen a pilot pull out the POH to complete a checklist.

In October 2016, he completed 5 en routes. He could get buy off to go to different locations other than Bethel and he would try to arrange flights out to other villages. He tried to make several stops but that sometimes did not happen because of weather.

He could not recall if he had ever seen a pilot inhibit the GPWS. He believed there was a policy about it. If he had observed that, it would be a concern to him and he would have looked it up in the manual to see what the policy was. He further stated he had not observed a pilot disabling the GPWS and it would be a "big deal" if they were.

Risk assessments were completed for a flight and a flight might contain multiple legs. He had heard of pilots changing a destination to lower the risk assessment level.

He and the FAA reviewed the risk assessment when it was being developed and made several recommendations. The recommendations were for improvements, such as when a certain number of risk factors were present, the risk assessment level became a 3, looking at winds and other aspects a little more closely, and getting the procedure in the manual, but that was a long time ago. They had improved the OCC significantly after that.

Regarding whether the PIC can communicate directly with the OCC, he said some airplanes had sat phones or the pilots would call their base to relay information to the OCC. Pilots also had company-issued cell phone and could call when they landed. He did not believe pilots were to use their cell phones inflight to communicate with the OCC.

He did not think the flight risk assessment was an approved or accepted procedure per their guidance.

Asked about changes at Hageland since the accident, he said in May 2016, the FAA sent certificate holders a letter discussing CFIT and encouraging operators to adopt VFR routes. A follow up letter was sent in June 2016. He also had monthly meetings with the part 119 management at Hageland where the letter was discussed. The guidance provided was not required. After the accident, Hageland came to the FAA with how they were going to address the issues. Their first proposal was not acceptable but it was amended and pilots will now fly under night VFR rules to airports less than 20 nm away and flights over 20 miles away would be flown IFR with an IFR flight plan filed. There were numerous potential routes that could potentially be flown.

He had never flown between Quinhagak and Togiak. He was not aware of any complaints from pilots about flying between those two villages. He recalled complaints about similar mountainous terrain and the FAA took action against a pilot for a violation which turned out to be unintentional. He had not heard any specific complaints about the terrain along the accident route.

He would have to look at the GOM but he thought the risk assessment included the pilot's fitness for duty. He was not sure what else was included beyond pilot qualifications and medical fitness for duty.

He did not think calls between the OCA and pilots were recorded. Asked should they be, he did not know if recording calls would be beneficial and said there were some other agreements with the certificate holder, flight compliance monitoring, and oversight of the flights.

When he surveilled the OCC, he would be at the stations looking at the weather the pilots saw, their communications, etc. He would also go to the OCC and do the same thing. He thought the last time he did that was October or November 2016, and clarified that he was at the OCC specifically 3-4 months prior to the interview.

Regarding operational changes that had taken place since the accident, he said there was an agreement being worked with the certificate holder, although some of the agreements were not able to be implemented right away. They were looking at the hiring process and interview process, assessing navigational aids, and radio coverage to identify what was not working across the state. The 20-mile limit for VFR flights was also a change since the accident. The FAA also held a company-wide stand down at Hageland and requested that pilots send them concerns about any pilots who were not following operations per the company manual. He realized some things might not be going on in safety areas. He was not sure if pilots could report their concerns anonymously. There were procedures and regulations in place and if people acted outside of that, there needed to be a system in place for pilots to report that. FOQA and flight compliance monitoring were examples of that.

Asked how OCAs were able to meet their responsibility stated in the GOM to inform "the PIC promptly of any possible factors that might affect safety or efficiency," he believed direct communication between the OCC and airplanes was a Part 121 requirement and Part 135 operators did it as much as the system would allow.

He had not seen an oversold flight at Hageland that required an extra airplane be brought into the system to carry the extra passengers. He would have to look up whether that scenario would be considered a scheduled flight or not. He had observed passengers missing a flight due to a delay and being booked on the next flight.

He had observed training for inadvertent IMC during his surveillance of Hageland. The Medallion Foundation also had a CFIT program and many operators had adopted that training. He could not recall what Hageland trained its pilots to do if they encountered inadvertent IMC. He had encountered pilots turning back because of weather along a route, both when he was aboard and not. He had not been aboard a flight that inadvertently entered IMC. He thought it was a positive thing that pilots turned back even when he was not on the flight. He did not recall a GPWS going off in flight unexpectedly. If it did, he would have to follow-up with the pilot.

He had observed CFIT training and believed it was offered from Hageland and Medallion. He thought the Medallion training he observed was a different carrier. He could not say specifically what was included in that Medallion training; he did not know if it was included in ground school but knew it was covered in simulator training. He did not know if the Medallion training was included in Hageland's approved training program. He knew that Medallion had several flight training devices they used for the CFIT training. He thought he had observed this training within the last year. He believed Hageland provided their own CFIT training.

Part 135 was very broad and AL09 managed 6-8 large Part 135 operators. They all used Medallion's CFIT flight trainer. He did not believe Hageland had any simulators to his knowledge. He did not recall Medallion's involvement with Hageland's training. He did not recall if the flight training devices used by Medallion had GPWS. Hageland used a 208 simulator at University of Alaska but that was not a part of their approved training program. He did not know if this simulator had a GPWS installed in it. He had no specific knowledge of Hageland's training in the use of the GPWS system.

Regarding the AFS-900 audit of Hageland, he thought most changes to the operator were made before the audit and he did not know what changes were made since the audit. The audit was the result of two NTSB recommendations and he thought they were closed "acceptable" by the NTSB. The question was clarified to reference two audits conducted by the FAA, one of HoTH operators and one of the FAA office in Anchorage. Mr. Howery said that as a result of the FAA audit, AL09 was established with the purpose of conducting oversight of high risk operators.

He could not say if one RA conducted in the morning was sufficient for a multiple-leg flight. He had seen flights modified in the morning to account for a higher risk. Flights usually last 2 hours, maybe longer, but not all day.

Mr. Howery participated in the audit of Hageland's training for the C208 EX. He could not recall when the surveillance was conducted but there was an instructor assigned to the initial cadre that presented the training. During the simulator session, the instructor would pause the simulator and ask Mr. Howery questions about the new systems. Mr. Howery answered the questions based on his experience and knowledge of the G1000. He also thought some of the issues may have been discussed at the certificate management team meetings. According to 8900, Hageland must come up with differences training. He thought that was what he was surveilling at the time. He did not recall if it was pre-acceptance or for the final approval. He did not recall if he gave input during more than one simulator session. He knew the POI surveilled some of the training also.

He did not believe the accident flight was a scheduled flight and therefore the destination, Togiak, did not need to be listed in C070. He did not know the frequency of flights between those two villages. He had never been to Togiak.

He thought the Hageland DO had the full support of the company president.

Asked if there were any changes he would like to see Hageland make, he said he would like to see all passenger flights file IFR flight plans.

He did not see additional action from the FAA regarding the accident because the FAA had sent letters to operators on how to avoid CFIT accidents in May 2016. Also, changes were moving forward at Hageland as he previously mentioned – FOQA, use of VFR routes, flying minimum enroute altitudes for VFR and GPS routes, human factors training, leadership training, pilot evaluations, flight compliance standards department, pilot professionalism, and all flights being flown IFR if possible. There was a timeframe that the FAA was holding them to.

Asked what he believed caused the accident, he believed someone did not follow the procedures and regulations in place at the company.

There were a lot of assignments after the St. Mary's accident in 2013. He had knowledge of the audit as a result of that accident. Since the accident, changes included operational control and the culture; it was a very different company back then than it is now.

Asked if he saw any similarities between the St. Mary's accident and the recent accident near Togiak, he said in St. Mary's there was almost no operational control. In the more recent accident, there were processes and regulations in terms of the company and pilot that were not followed. The recent accident pilot may not have followed VFR rules for cloud clearance or minimum altitude, or guidance for postponing or delaying a flight. He knew that one flight flew between the same villages and made it to Togiak because the pilot followed the processes and procedures.

He thought the most recent accident was a one off event. Hageland had "buy in" from the president who explained this when talking to new hires. Hageland seemed to be "totally in to safety." That was different than St. Mary's. There was buy in from the company management "all the way down." There had been a good shift in culture over the last 3-4 years.

If he were a POI, he would first hire an APOI. He thought the most positive aspect of the accident was the institution of flight data monitoring. It was a big unknown whether a pilot was following the rules; "we can't know what we don't know." Data monitoring was one of the best safety improvements they could have, so the biggest thing he could do would be to follow through. He believed the St. Mary's accident and a recent training accident triggered the need for data monitoring. High risk operators were much different than single pilot operators and they needed their own surveillance.

AL09 covered commuter operators, air carriers and other operators.

The Polaris CMO came about as a result of the St. Mary's accident and the subsequent training accident. The process started then. Polaris covered the commuter air carrier certificates. The intent was to improve FAA management of certificates. Regarding the new FAA Compliance

Philosophy, he thought it was important to have different tools in the toolbox. They needed to have the deviation tool to use when needed. Right now, the data could not show the usefulness of the new Compliance Philosophy.

He would sometimes announce to the operator when he would be doing surveillance work and sometimes not. For example, he would have to schedule a check airman observation. The guidance to inspectors was to give advance notice so that the operator could prepare for the visit, but on the other hand, part of doing surveillance was the operator not knowing in advance.

It would be an abnormal procedure for an instrument such as the GPWS to be inhibited. If an instrument was inhibited for a flight, that would be a huge issue because it was against the manufacturer's procedures.

The CMO had all of the current Hageland manuals electronically. Most revisions were received electronically but it depended on whether it was a major or minor revision. The operator would usually email both he and the POI the revisions.

He would come to Hageland and talk to new hires during ground school to explain the FAA's role and safety issues they saw in the field. There were also a few company training events that Hageland held in Anchorage where everyone was brought in. He could not recall if there was a stand down for the latest accident but he recalled Hageland gave pilots a briefing about the accident. Mr. Howery listened over the radio. The Polaris certificate management team also had meetings with company managers. When he was in Bethel, he would attend the morning briefings if he had an early flight. He thought ground school was offered yearly, but there were also 2-3 new hire classes in the past 6-12 months; it used to be only one class a year.

FAA inspectors assigned to the Hageland certificate included the POI, PMI, APMI, and PAI. There was also a Bethel inspector position that was recently filled but he did not know what his duties would be and that position was not assigned to the certificate.

Mr. Howery ran an FAA program 2 years ago where FAA inspectors flew as ticketed passengers on Hageland flights. It was effective at first and resulted in several EIRs which the company was responsive to. But it quickly became clear after that that these were FAA inspectors and pilots connected the dots really fast and the program became less effective. The program was not uncovering gross violations. They were not currently doing this program.

He believed Hageland was working on SMS at this time, as he would see SMS information on the whiteboard and they had SMS elements in place. The company's safety director is big on SMS.

Initially when he audited the differences training for the G1000-equiped aircraft, he was concerned about the instructors' understanding of the system, but through follow up and feedback, the FAA felt it was adequate. They were keeping good control on it in that only certain people were authorized to operate that airplane.

In recent years, the FAA's relationship with Hageland management had been excellent, they got follow up actions and Hageland would follow up with the FAA on actions they had taken. It was a dramatic difference from 4-5 years ago. The Hageland management was very inadequate before. Now when the FAA attended meetings, Hageland management was also in attendance – director of operations, president, chief pilot, director of safety, manager of safety. Hageland now had adequate staffing for management; previously they did not have adequate staffing or accountability. Management now wanted to operate safely.

He believed CRM training was required but he could not recall if he had ever observed CRM training at Hageland.

The purpose of the second crewmember on Hageland flights was to act as a second crewmember, not to just help loading and unloading cargo. When he did enroutes, there was sometimes just a PIC and sometimes a PIC and SIC. He never observed any CRM issues during two crew flights.

Asked if the Medallion Foundation CFIT training was adequate, he said it was hard to gauge and they only knew if it did not work. Within a training program, they were not allowed to use advance training devices, they had to use full flight simulators or level 6 FTDs. He did not believe Medallion had this equipment.

Asked if Hageland's training, procedures, manuals and checklists were standardized, he said their procedures met the FAA's requirements and their standardization had improved over the last few years.

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

The interview ended at 1436.

Interviewee: Charles Gillespie
Date: December 19, 2016
Time: 1450 EST
Location: via telephone
Present: Katherine Wilson, Marvin Frantz, Clint Johnson, Noreen Price – NTSB; Eric West – FAA

Mr. Gillespie was represented by Glenn Brown, FAA attorney.

During the interview, Mr. Gillespie stated the following:

He had been the POI for Hageland Aviation for a little over 3 years. Previously he was at the Anchorage FSDO, where he had been the POI for as many as 70 operators at one time. To provide oversight, he used the Safety Assurance System. He would work with the director of operations, chief pilot and check airmen. He would maintain the company OpsSpecs. He would primarily do paperwork in Anchorage, and also did enroutes, check airman observations, base inspections and group operations. He would spend 4 nights and 5 days in Bethel every 6 weeks conducting surveillance on Hageland. During these 5 day periods, he would conduct a least 3 en route checks. He would visit other Hageland sites once a quarter on average. Between him and the APOI, they visited the bases twice a year.

At Hageland, flights were assigned by a dispatch control agent (DCA) at the station. Pilots called the Operational Control Center (OCC) and speak with an operational control agent (OCA). Together they reviewed the plan for the flight and weather and NOTAMS, and determined if it can go. The OCA and the pilot each completed a risk assessment (RA) worksheet, and then compare their results. A 119 management person or assistant must be involved if the risk level for the flight was an RA3. A typical flight would be 1.5 to 4 hours. He felt that one RA for multiple legs of a trip was adequate. Pilots were paid whether they made it to a destination or not. Changes to the RA were up to the pilot once a flight had begun. If the pilot was following the manual, he would turn back to base if the weather deteriorated. If something changed, the OCA could and should contact the pilot if necessary. All pilots were issued company cell phones or a message could be relayed to a pilot. He felt the RA and the release process at Hageland was structured and implemented very well. There was a robust safety culture from the president/owner down; all were very genuine in their safety concerns. Infrastructure in Alaska did not allow all flights to be conducted under IFR.

He stated the checklist used by Hageland included first flight of the day and run-up items. Testing the Terrain Avoidance and Warning System (TAWS) was a first flight of the day item. It was approved to be on that checklist. He did not know if Honeywell called for the item to be checked other than the first flight of the day. Use of the Ground Proximity Warning System (GPWS) was covered in initial ground training. Pilots then went to flight training and received more training on the system, its uses and how to preflight check it.

Medallion guidance was fairly generic. Hageland took what Medallion provided and conducted scenario-based training at University of Alaska in the simulator. Hageland did not tell pilots they were receiving CFIT training but rather they made it a scenario in the simulator where pilots would receive the TAWS warning. He did not think the simulator had the Garmin G1000 avionics package. All C208 pilots got some training in this simulator. It was also used for evaluating potential new hire pilots. Pilots got one simulator session for recurrent training. Pilots were trained not to inhibit the GPWS. He had no knowledge of the current process of inhibiting the system; he did not think there was any special emphasis on not inhibiting the GPWS system. He did not recall hearing the GPWS on any flights he took with Hageland. When they first started flying the Caravan, they used to get spurious alerts; this was alleviated with updated software. The director of operations (DO) said two places still got warnings on VFR approaches. He thought the company was contacting the appropriate agency to update the database.

A flight training device (FTD) was used by the Medallion Foundation for controlled flight into terrain (CFIT) training. The scenario involved flying in clouds, giving the pilot some turns and then the TAWS alert. The pilot knew it was coming and would do a climbing turn. The FTD did have a GPWS.

Inadvertent entry into IMC by a Hageland pilot should lead to a 180-degree turn to exit the conditions. If that did not work and they were IFR equipped, the pilot should climb and obtain an IFR clearance from ATC.

Changes at Hageland since the most recent accident included the use of published night VFR routes (resultant from the St. Mary's accident) on all flights, both day and night, which adds substantial ground and altitude clearance, and every flight that was capable of IFR flight (crew, aircraft, infrastructure) must fly on an IFR flight plan. Future changes included implementing a Flight Operations Quality Assurance (FOQA) program, adding more people to the OCC to monitor FOQA data and to ride with pilots as part of the FOQA program, hiring a director of flight standards, updating and consolidating company manuals, and developing a professional standards group to do psychological evaluations of potential new pilots.

The OCC and pilots were typically on the side of safety. During the release process, OCA/pilot conflicts would be resolved by management personnel. An RA3 required a discussion with management and a flight would be cancelled for an RA4. The OCA would determine a pilot's fitness for duty through questioning the pilot during the call he made to the OCC for determining the RA for the flight.

He was not involved in the Hageland audit conducted by the FAA in April and May of 2014. The creation of the OCC was the main result of that audit; Hageland also had a maintenance control facility. There were other changes but he could not recall them at the moment. The audit of FAA oversight of Hageland Aviation led to the creation of the Polaris Certificate Management Office (CMO) within the FAA to provide oversight for 7 large part-135 operators.

He knew the accident pilot only by sight. He knew the pilot used to work for Yute Air before Hageland. He never flew with the pilot.

He thought there were no staffing, turnover, or workload issues at the Polaris CMO. The relationship between the CMO and Hageland was good and professional. He had had a few disagreements with the chief pilot and director of operations, but they had always been able to resolve their differences. The FAA's new compliance philosophy had made it easier.

To accommodate excess passengers or cargo, extra sections were added to Hageland flights as needed. For sending bypass mail on flights, the rule governing transportation of mail stated that the flights must be scheduled flights. If there was excess mail that did not fit on an airplane, the pilot would make multiple runs. This would be considered part of the original flight.

He was not sure if the accident flight was a scheduled flight or not. If the flight was scheduled and Togiak was not approved in the Hageland OpsSpecs, he did not know how the flight could be considered a scheduled flight.

Regarding changes he would like to see at Hageland, he would like to see them get rid of the 207s and operate only IFR-capable 208s. He was pretty excited about the FOQA program. He thought the FOQA program that was coming to Hageland would be a good thing. Other changes at Hageland, such as flying IFR when able and using GPS VFR routes, were robust safety measures. He did not know the timeframe for the implementation of these but thought some of the changes were to be made by the first part of 2017.

He has not seen any attempts at interference in operational control by the president of Hageland.

The biggest hurdle to improving safety would be establishing a professional standards system to perform more rigorous background checks of pilot applicants. They were now moving forward with this.

He discussed his aviation background. He began flying in Alaska in 1990 with Yute Air, then went to Penn Air in 1997. He flew Caravans and Navajos until 2004. Then he flew the Saab 340 with Penn until 2011. He was hired by the FAA on October 26, 2011, and was a POI at various operations for 3 years prior to beginning work with Hageland.

As POI, most of his time was spent working with OpsSpecs and company manuals, and conducting check airman observations. He conducted a monthly Certificate Management Team (CMT) meeting with the Hageland management personnel. The meeting was well-attended by Hageland; there were a lot of discussions. Hageland wanted to add aircraft to their fleet. The CMT was looking at MELs, training manuals and curriculum.

He had a robust workload that kept him busy, but Polaris had quite a bit of resources he could call on if he got behind on something, which did not happen too often; most of the time he could do everything himself. He and the APOI did pretty good accomplishing tasks. Division of duties between the Assistant POI and himself just depended on time available and priorities.

He had heard that the accident pilot told other pilots that he had worked for several other operators and he was glad that Hageland did not "push him out the door" like other operators may have. The pilot believed it was his risk assessment and if he did not want to take a flight, he was not going to be pushed out the door. He had heard this about the accident pilot before the accident.

He did not believe that the characterization of Hageland operations as "the wild west" was true at the time of the accident, but it would have been accurate 3-4 years ago. His entire office was on the Bethel rotation and also traveled to other locations. They had an inspector at the base 4-5 days a week. There was a recent departure of a Bethel full-time inspector for family reasons.

He has observed crew resource management (CRM) training at Hageland. He thought the CRM program was typical and met the requirements of FAR 135.330. CRM was taught in simulator sessions and included both single and dual pilot CRM. When he had observed CRM in flight during en route surveillance, he thought it was good and the right seat pilot acted as a second crewmember. En route inspections were conducted while on the Bethel rotation. He spent 4-6 weeks of his time doing en route inspections.

There was no way for the OCC to directly contact a pilot in flight; a pilot could call the OCC when they landed.

Hageland was required by the FAA to establish a differences training program when they began receiving the C208B EX aircraft because they were equipped with the Garmin G1000 avionics suite, unlike the C208 aircraft Hageland had previously operated. The DO had thought it was just another Caravan, so Hageland had sent 2 pilots to Cessna for 12-16 hours of training on the G1000, which was a very robust avionics system. FAA evaluation of those pilots and the differences curriculum was not satisfactory. It was obvious they did not have the full 50 hour G1000 course. So he or his assistant POI sat in on all G1000 training Hageland conducted, and observed the first 6 check-rides that used the G1000 to validate the training program. The training program was adequate but a work in progress. The training program was now in the initial approval stage that would expire at the end of December 2016.

At Hageland, instructors only trained pilots. Check airmen conducted evaluations; they were former instructors. Check airmen were approved by the FAA after an FAA observation. He thought Hageland had 15 check airmen but was not sure how many on the 208.

He received standard FAA flight training in Texas to maintain his currency in a C172, Seminole, and King Air 90GTX.

He last observed the operation of the OCC in Palmer in August 2016. OCA training was accomplished by a licensed dispatcher; their supervisor was a licensed dispatcher with substantial amount of experience. The OCAs were qualified and well supervised and trained. He was notified about the accident via a text message from the director of operations. He and the DO spoke on the phone but it was unknown if there were any fatalities, which were confirmed a couple hours later. Asked what he did after he was initially notified, he advised the rest of the CMT, then contacted the PMI, PAI, and an assistant. There had been no significant changes in POI oversight since the accident. He had had about 6 meetings with the DO and chief pilot to discuss what Hageland was doing to mitigate the chances of another accident. The CMT always had someone out in Bethel. Hageland had not shared anything with him about looking at safety data since the accident.

The interview ended at 1615.

Interviewee: John Edward Flynn
Date: February 7, 2017
Time: 0910 AKST
Location: Hageland Aviation, Bethel, Alaska
Present: Katherine Wilson, Marvin Frantz, Shaun Williams – NTSB; George O'Connor – FAA, Adam Ricciardi – Hageland Aviation

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

During the interview, Mr. Flynn stated the following:

His duties as a departure control agent (DCA) for Hageland Aviation, were to build manifests and sometimes make routings for the planes and pilots. The lead DCA makes schedules for planes, pilots and routings. He could do this if the lead agent was not available, but that seldom happened. He had no role after the launch of flights. He did secondary monitoring of flights via computer tracking and Flight Master Software. To monitor he used Spider Tracks, and another program that was like a radar called OFMS. The flight following section (upstairs from his worksite in Bethel) was the primary monitor of flights. If he noticed that a flight had not reported as arriving or was not made aware of a flight departing, he would call flight following. He clarified that flight following would write down the departure time of a flight but sometimes a computer glitch did not allow the departure time to be updated in the system. He interacted with the Operational Control Center (OCC) in Palmer for passenger count changes and weather issues, such as if a pilot called him to say the weather was "not do-able" or if he saw weather changing. This happened 4-5 times per day typically.

He had been a DCA since July 9, 2013. He reported to the lead DCA on the shift. Pete Wilson was his official supervisor. He spent 27 years in the Army as an infantryman, and he worked in ground and air operations for the Guard. He started at Hageland as a ramper, worked as a ticket agent and with cargo for a total of three weeks; then he moved to the DCA position. He worked a 14 day-on/off schedule from 0700 to 1900 and sometimes later.

He checked and printed weather and NOTAMS for pilots; that was done every morning. Then he helped build manifests. On Sundays, this process usually started around 1130 but on the day of the accident he started around 0900 because he had a lot of bypass for Quinhagak. He worked with the other DCA on shift; it was normal for two DCAs to be on duty. The number of flights he worked at any one time varied and the DCAs would coordinate who was working which flights. Ten to fifteen flights were the most he had worked at once; he did not feel he was overworked. He interacted with pilots regarding loads and maximum payload.

Mr. Olin was the other DCA on duty the morning of the accident. Mr. Flynn did not recall talking to Captain Cline on the accident day. He saw Mr. Olin joking with Cline and Natoshia. Cline seemed normal.

He only printed information for pilots after he verified on the computer that the flight had been released by OCC. He would print the information and the pilots would take the information from the printer; he did not discuss what was printed with the pilots.

Sometimes he interacted with pilots and village agents. He does not attend the morning briefings. He reviews weather for some villages. For example, if a village was close, he would call the village agent to tell them the flight's ETA and the load on board. He had to call the village so the agent could go to the airport and meet the airplane. He was not involved in the risk assessment process.

He did not attend morning briefings. He would sometimes review the weather and depending on minimums, highlight airports that were down because of weather. There was nothing unusual about the weather on the accident route; it was all VFR. For weather sources, he looked at ADDS information and FAA webcams. He heard about the accident when Natoshia called from Togiak; Gabe spoke with her but he did not recall what was said. Then Mr. Olin started the notification process; Mr. Flynn did not recall if he did anything personally after hearing about the accident.

Mr. Flynn would track airplanes on the software to know where they were on the route. He would sometimes call pilots when their flight turned yellow on his tracking screen; this was due to the "black hole" in some areas. After 10 or 15 minutes of the system not tracking the flight, it would turn blue. If this happened, he would call the airplane and/or the village it was heading to. He shared weather and passenger changes too by calling pilots.

He trained for the DCA position in Anchorage. This was specific for the Dash aircraft. His OJT training was 3 months long and included James Wilbur walking him through how to build manifests and flight strips, weather forecasts and NOTAMs; Harvey, the main flight follower, also provided some OJT. He took a couple of test as well with Mr. Thurston. The training was hands on. He has had no recurrent or refresher training.

Before the accident flight, he had worked 1-2 flights that day because it was a Sunday and the workload was low. He was not involved in the scheduling of flights. The lead DCA assigned pilots and planes. The accident flight was an extra section to bring mail to Quinhagak from Togiak; the flight left Bethel empty. The route from Bethel to Quinhagak to Togiak was a scheduled route Monday through Friday. The flight was an "extra section" because they had mail they had to bring over to Togiak.

There was a total of 4 DCAs in Bethel; 2 were lead DCAs.

He liked Hageland for the camaraderie. He has no safety concerns and no knowledge of other people's safety concerns.

DCA OJT was 3 months; there was no annual recurrent training. Sometimes he does ride-alongs to help with cargo loading and unloading. Those flights helped him in his DCA position. It was good to observe pilot operations.

He thought the DCA training program was adequate to a degree. It could use improved testing on building manifests, or a program that teaches how to build manifests and flight strips.

He could not recall hearing anything good or bad about Cline or Welty. He did not know Welty since he was new.

The lead DCA made routing decisions, such as if the flight had more than one stop, but had no input on the actual flightpath the plane followed or the weather package the pilots got. The lead DCA determined the aircraft for the flight.

Weather was printed before morning meetings. For the Bethel area, the weather was generated by ADDS; he did not go in and specify the weather to be printed.

As far as training for village agents, he thought that mostly they learned their job from experience. They had 10-15 years' experience and had lived in the area most, if not all, of their life. The village agents would use terrain features to determine ceiling and visibility. A few villages had weather equipment but most did not. He did not know if they had any formal weather training.

The training he received in Anchorage was provided by Era, not Hageland. He was trained on how to read aviation weather reports because he was a private pilot working on an instrument rating.

He did not know how long they had been flying the accident route, but it started after he was hired. They were no longer flying that route but he did not know why they stopped. He was not aware of any changes made since the accident.

Flight following tracked souls on board and fuel, would watch where flights were going, and close out flights. Pilots would call flight following when they could reach them. Flight following and DCAs used the same frequency to contact pilots.

Information on the manifest included passengers, mail, cargo and bypass. The lead picked the actual airplane to be scheduled for a route. After the airplane was scheduled, they would ask the pilot how much they could take on board.

If he saw on ADDS that weather was deteriorating or a village agent called to say weather was deteriorating, he would call the pilot to let them know. If it needed to be reported, he would tell the pilots the visibility and / or ceiling. It worked both ways for the pilots and DCAs to call each other.

For pilots in flight, the sources of weather would include village agents, DCAs, and the OCC. The OCC may call the DCA with weather changes and request they relay them to pilots via radio. DCA also used webcams. He had seen deteriorating weather on a webcam and called a pilot before. For the accident route, there were only cameras at Quinhagak and Togiak, not in-between. The government ADDS website was also a source for weather.

The lead DCA controlled pilot assignments. The accident flight was Bethel to Togiak to Quinhagak to Togiak to Quinhagak to Bethel.

The OFMS site had a more accurate picture of flight paths with a 10-15 second delay. He once monitored an unusual flight path and reported it to the destination station, Anchorage in this case. This was about a year and a half ago. After the St. Mary's accident, he was re-evaluated to check that he could look up weather, and make flight strips and manifests

He had not heard of pilots making any "beer bets" when flying.

When a pilot called the base, it was usually flight following that answered unless it was a specific request for downstairs. Pilots might request information from webcams, ADDS, or village agents. Whoever answered the call would review the weather and report back.

Weather radar was separate from the monitoring software.

The risk assessment number was not given to DCAs; that was between the OCC and pilots. He would call the OCC if a pilot radioed him and said he was turning around in flight. Anything else, like an irregular report was handled by the OCC.

If a pilot had an inoperative instrument, they would call the DCA or whoever else answered the radio. If the pilot had a mechanical issue on taxi out, they would offload the payload and the pilot would go to the mechanic.

How planes and pilots were scheduled was random. They would look at the number of planes they had, the weather, and see who was available to go to a location. Seldom, but sometimes, they would not send a specific pilot to a village or would not use some pilots if the crosswind was too high. The pilot might tell the DCA that he could not fly the route or the airplane, but usually the pilot would tell the OCC if he could not fly a particular flight.

Safety concerns could be reported to the lead pilot. He made a previous report but it was not on the Hageland side. He did not remember if he had ever reported a safety concern on the Hageland side.

After the St. Mary's accident, the risk analysis changed. Before that accident, it was between the lead DCA and the pilot. Now the DCA is not involved in risk analysis.

He was unaware of any qualifications that must be met for a DCA position.

Once a pilot told him of a GPWS problem, but he could not remember the details; it was not the accident airplane.

He retired from the Army with the rank of E-8. He was a private pilot with about 112 hours of flight time, all in Alaska at Merrill Field. He earned his pilot certificate in June 2013. When he was off duty, he would go to Elmendorf for IFR training.

The flight strip listed the route and other information about the flight. It was only on the computer.

The interview ended at 1130.

Interviewee: Gabriel Olin
Date: February 7, 2017
Time: 1123 akst
Location: Hageland Aviation, Bethel, Alaska
Present: Katherine Wilson, Marvin Frantz, Shaun Williams – NTSB; George O'Connor – FAA, Adam Ricciardi – Hageland Aviation

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

During the interview, Mr. Olin stated the following:

He was a departure control agent with Hageland Aviation and had been in that position for 8 years. Prior to working for Hageland, he had not been in the aviation industry; he worked on power plants and steel mills. As a departure control agent, he looked at passenger and mail loads and determined what to put on an airplane; he created the manifest. He reported to the Bethel station manager.

He received on the job training when he first started at Hageland, and went to Anchorage to do some training with the director of operations. There was no recurrent training for his specific job but he did get annual company training on topics such as hazmat.

He did not hold any FAA certificates or ratings.

He had received various training over the years and had previously had some weather training. Prior to the OCC being established, the departure control agents received weather training but that was not a part of his job anymore. The weather training he received had been conducted by Hageland. Since the OCC came about, he did not have any operational control.

He had no authority to stop a flight or dispatch a flight. His job was separate from the day to day pressures. He worked about 11.5 hours per day, 2 weeks on and 2 weeks off.

During a typical day, he would look at the fleet status report, did a brief review of the weather to see where he thought they could or could not fly, looked at passenger and mail counts, assigned planes and would go from there. He looked at the weather for general planning purposes and would not make a manifest for a flight going to a location where the weather was bad.

Unofficially he was a lead departure control agent. There were only two departure control agents working at a time. His company card and file did not say he was a lead, it was just that he had the most experience of the two. He usually worked the Hageland flights and the other person usually worked the Ravn flights.

The OCA would look at the number of passengers, weights, any pilot restrictions (such as VFR only), and aircraft records (such as VFR only or remaining flight hours until inspection). He did not recall how long Hageland had been flying the Togiak route. Togiak was the newest

destination but they had been flying it for a while at the time of the accident. They were no longer flying to Togiak except for charters.

Pilots made their risk assessments with the OCC. The pilot and OCC would determine whether a flight could go VFR or IFR once they determined the risk factors.

As far as training for the village agents, he thought the Bethel station manager could better answer that. He thought the village agents would look at the weather in relation to things like a tower. If the entire tower was visible, the agent would know the ceiling was above the height of the tower and report it as such. The OCA would use this information for reference only and use it in conjunction with weather reported by villages with weather equipment. All the information would be taken together to determine if a flight could go VFR or IFR.

There had been no changes to his job since the accident.

The role of flight following was to determine routing for a flight and handle any inflight communications. The OCC determined whether a flight can go and did tracking.

If there were any changes in weather, he could call Palmer for the pilots and see if the weather dropped. Ultimately it was up to pilot to determine whether to continue a flight, but the departure control agents were constantly getting weather information and relaying it to pilots. Pilots would call flight following who would call the departure control agents to get that information. Departure control and flight following had VHF radio contact with pilots.

Hageland had 70 flights per day but he did not know how common it was for them to be out of contact with pilots. If the VHF radio did not work, they could at least relay through other planes so there was never really a time when they could not get ahold of an aircraft.

He did not recall if he did the manifest for the accident flight. He was not sure if the flight went Quinhagak – Togiak – Quinhagak – Togiak or Togiak – Quinhagak – Togiak – Quinhagak. He recalled that the cameras in Quinhagak and Togiak were good and the flight was legal to fly to both villages.

He could look at the area forecasts and Palmer looked at that too. The pilot would determine if the weather was good enough or not. He would call a pilot and say the weather was dropping and if the pilot was turning around, he would call the OCC to let them know. This would happen a couple times a week where the OCC would call and say the weather was changing and he would relay that to the pilot because the OCC could not contact them directly.

Prior to being a departure control agent, he was a ramper for a couple months.

He recalled that the day of the accident was a typical morning; nice day, laid back. The day was just starting so there not many flights. On Sunday, they typically did not start flying until 1130 but the crew had come in before that to run mail. The flight was scheduled by him the night before. The scheduled second in command (SIC) was close to upgrading and he knew that the accident SIC was new and wanted to see the flight route so they switched.

Mr. Olin talked to the accident PIC about the weather and said it looked good. There was nothing out of the ordinary with either pilot. They talked in person. The accident crew was happy to be going on the flight and there were no concerns.

Pilots would typically show up to the base at 0730 and he would see them constantly throughout the day. Mr. Olin did not attend the morning briefing; he was busy setting up the schedule.

He learned about the accident when the PIC of the second flight to Togiak reported an ELT going off. He initiated the emergency response plan that was outlined in the book. He called the director of operations right away. The weather in the area was deteriorating. They sent one airplane to look for the accident site but the weather deteriorated so they did not send anyone else.

The OFMS system updated an airplane's location every 10 seconds and spider tracks updated every couple of minutes. He did not stare at either system; that was the role of the OCC and flight following.

He did not receive any specific training on how to use OFMS or spider tracks but he thought it was pretty self-explanatory.

He thought having two departure control agents on duty was adequate for the workload.

The base manager worked until 5 PM and there was an assistant manager on duty on the weekends.

He liked working for Hageland. The people were good and the schedules were good.

He had not heard any concerns about the accident pilots or the accident route either before or after the accident.

He was not required to do ride-alongs but he would sometimes ask to do it. He thought if people were not from the area, doing ride-alongs would be beneficial, but he thought most people grew up in Alaska.

There were no pressures to take a flight or continue a flight that he was aware of.

Asked if the training he had for his job was adequate, he said it was a different training culture when he was hired and he could not speak to the training received by new employees. When he was hired, training was more unofficial and "on the fly."

He had known the accident SIC before he came to work at Hageland and said he was excited to have a new flying job. He last saw the accident SIC the day before at work. He was not aware of the accident SIC having a flying job before Hageland.

Asked what his response would be if someone referred to Hageland as the wild wild west, he said that would be an unfair statement. His fiancé flew for Hageland and he did not think she would fly for them if it was unsafe.

He had verbally reported safety concerns to the company; it was nothing major and he felt like the company handled it well.

He described the safety culture at Hageland as excellent now; there was zero pressure for a pilot to go fly. It was made abundantly clear to pilots that they did not have to do anything they were not comfortable with.

He had never heard about any "beer bets" between pilots to see who could get to a village first and had not heard any concerns about instruments being inoperative in airplanes.

If there was no AWOS, he would call the village to confirm if the weather was still good. If it was deteriorating at all, he would call Palmer and let them know. If he saw that the weather was really bad, he would call the pilot. If the OCC called him, he would relay to the pilot to turn around. Everyone was ok with a pilot turning around. He did not recall there being any disagreements.

Asked why he thought the second flight to Togiak went a different route, he said maybe to see a different part of the hills.

He did not talk to pilots about their competitions or if they had any.

He did notice that the two flights going to Togiak were taking different routes but that did not concern him.

All he knew about the accident was that they flew in to a mountain.

He had nothing to add to the interview.

The interview ended at 1207.

Interviewee: Luke Hickerson, Director of Operations, Hageland Aviation

Date: June 13, 2017
Time: 1405 EDT
Location: via telephone
Present: Katherine Wilson, Marvin Frantz, Shaun Williams, David Lawrence – NTSB; Eric West – FAA, Adam Ricciardi, Ravn Connect

Mr. Hickerson was represented by Mr. Mark Wilhelm.

During the interview, Mr. Hickerson stated the following:

In his role as director of operations, he had responsibility as a Part 119 manager. He was responsible for everybody that was involved with operational control from initiating to terminating a flight. This included the OCC and its staff in Palmer, and the second tier which was the pilot group. Through the organizational structure, they all ultimately reported to him.

He was the CFIT star manager at some point in time and was currently the Operational Control star manager. Medallion had a set of audit points that the carrier was committed to maintaining compliance with. As a star manager, he would look at the carrier's program to see what could be improved to be in accordance with the star elements. At the end of the day, it was Hageland's program and there were elements of the star that Hageland had to be in compliance with for the Medallion program.

Coordination of the audits went through Hageland's safety department. As the manager of the star, Mr. Hickerson was essentially the one being audited because he had control over changing the program at the end of the day.

As the CFIT star manager, and also as the director of operations, he would be involved in reviewing the content of the CBT and simulator portions of training. CBT and simulator training was required for the CFIT star.

Asked about his impressions of the CFIT training, he said everything could be improved but one of the challenges they had was how to make training meaningful. They could make a great program but the viewer might not see it as meaningful, so they were continuously asking what could be done differently. CFIT simulator training used to be a one-time event. Recently, Hageland intertwined it with multiple training sessions. If pilots were told that they were about to receive a CFIT scenario, it would be less effective than if it were intertwined in a realistic scenario. They tried to make the scenarios as "real life" as possible and had been making changes in the last 7-8 months.

Regarding the reference to the risk of nonprecision approaches in CFIT per the Hageland training, he was asked how often Hageland pilots flew nonprecision approaches in Alaska. He said pilots flew GPS approaches "quite a bit" and thought those were a large portion of the approaches they flew. They still flew some VOR/DME and localizer approaches. They trained on all types of approaches. After the ACE accident, nonprecision approaches were discussed a lot.

He did not know if Hageland provided CFIT training to pilots prior to obtaining the CFIT star as he was not in a management role then. He did not know when Hageland obtained the star.

Pilots were not given a hard copy of the CFIT A Training Manual but an electronic copy was provided on the Litmos training site. There was no requirement for pilots to read the manual. They could receive the information from the manual in CBT and simulator training. If there was one message they gave to pilots, it was there was no reason to continue a flight and they should turn around, go to alternate, or file an IFR flight plan. The message in his opinion "had not been muddied at all." This message was not a result of the Togiak accident, but was the message given since at least February 2014 when he began in management.

The CBT and simulator training listed in the CFIT A Training Manual was provided to pilots in initial and recurrent training. Since the Togiak accident, CFIT training provided in initial training was more in depth. They took a look at what they were doing and how they could improve. CFIT simulator scenarios were now imbedded into multiple sessions during initial training.

CFIT CBT was provided in initial and recurrent training. There was no additional ground school module regarding CFIT.

Hageland's "attitude on flight in marginal VFR conditions" as stated in the CFIT-A Training Manual was if a flight could not maintain VFR, then turn around, go to your alternate or obtain an IFR clearance. The regulations were clear, at least at Hageland where they set the bar for special VFR minimums at 600 feet and 2 miles visibility in 2014. Hageland was looking to continuously increasing what the minimums were.

Mr. Hickerson was asked about the CFIT-A training self-audit and program review that was conducted annually. He stated that as Hageland looked for continuous improvement, Mr. Hickerson would sit down with Mr. Crane, the director of training, for about a day discussing the program, any changes or improvements needed and if anything new was included in the Medallion audit points. They would discuss how that would affect their operations.

Regarding whether Hageland measured the effectiveness of their CFIT-A program, he said they tracked air turnbacks due to weather which to him said that pilots were making good decisions and following company guidance given to them. They did not look at a reduction in incidents and accidents based on CFIT training. He did think their CFIT-A program was effective.

CFIT CBT training was a part of the FAA-approved OTM, CFIT simulator training was not. His understanding as to why simulator training was not included in the OTM because it was not required per the regulations; simulator training was conducted in accordance with the Medallion checklist. The CBT and simulator training were listed in the CFIT-A manual so that it was all in one document for the purposes of the Medallion program.

Hageland had discussed including CFIT simulator training in their OTM, but not in reference to Medallion. Hageland believed their training was good and effective so it should be in their OTM. It would be included in the OTM, not because of Medallion, but because they thought it was "the

right thing to do" and "the correct training to do." The OTM was currently being revised to include the CFIT simulator training; Hageland had been spending a significant amount of time discussing it with their CMT (certificate management team).

During Mr. Hickerson's lecture at the beginning of initial training, he discussed previous Hageland accidents, starting with the St. Mary's accident, in the context of needing pilots to understand why the company does what it does.

He was asked to clarify who at Hageland was responsible for overseeing CFIT training. He said the CFIT-A program responsibility fell under the director of training but the chief pilot was responsible for setting up the simulator portion of the training, such as coordination and scheduling of pilots.

He did not know the percentage of C208 flights that were flown single pilot but said it depended on their staffing. If the pilots were available, they would use a second pilot; he would like to have a second pilot in every airplane. Pilots were checked and qualified as a SIC so when two pilots were on board, the second pilot would be acting as SIC.

On the accident flight, the second pilot was acting as SIC.

There might be a time when a second pilot on board was not acting as SIC, such as during OE (operational experience) when the check airman would not be acting as SIC. It would be possible that a pilot checked and qualified as a SIC might not perform those duties on a flight. Hageland would sometimes put another person, such as a pilot or ramp person, on the aircraft to help load and unload cargo in a remote location.

Hageland had notified the FAA that they intended to voluntarily enroll in the SMS program. Training for Hageland staff was to occur in September 2017. They enlisted a third party to audit their program and get ISSA (IATA Standard Safety Assessment) certification as well.

Asked about training for how to assess fitness for duty, he said in the last recurrent ground school, Hageland brought in a contractor to provide a human factors module and Hageland was currently looking for a long-term program to institute into initial and recurrent training. In terms of education of fatigue, that happened in the last recurrent training. They reached out to a person at NIOSH. They had the fatigue identification piece and were looking at an FRMP (fatigue risk management program). Hageland had the elements of an FRMP with the education of fatigue in training, reporting of fatigue through WBAT fatigue report, and a way to stop the flight through a risk assessment; a RA4 would cease the flight and a report would be made. Hageland was working with their safety department to develop a formal program, but the elements were there.

The TapRooT analysis of the Togiak analysis was not yet completed. The former director of safety had started it and was picked up by the new director of safety, Stu Green.

Mr. Hickerson was asked to clarify if there would ever be a scenario where a SIC-qualified pilot would be sitting in the right seat but not perform the duties of SIC. He explained that Hageland had a safety pilot program. In other aircraft, such as the C207, an SIC could not be listed so for

familiarity of new routes or similar scenarios, they would put a second pilot on the flight and they would not be listed as an SIC. The safety pilot might also sit in the right seat on a C208. They had seen huge benefits from having the safety pilot program.

In the case of the Togiak accident, the right seat pilot was acting as SIC. The PIC did not require a safety pilot given his experience. The C208 did not require an SIC.

Instructor would follow the guidelines in the CFIT-A Training Manual for CFIT simulator training. The manual stated the elements that must be included in training – flat light, whiteout and inadvertent flight into IMC, as well as other things they felt were important such as filing IFR. There were no other written lesson plans or guidance for instructors beyond what was in that manual. Instructors could construct the CFIT scenarios as they saw fit as long as the required elements were covered.

The last time he observed CFIT training was in the last 6 months. Asked how well the simulator recreated the weather conditions required to meet the CFIT elements, he said they had some challenges recreating flat light conditions and they had to get creative on how they simulated that; it was difficult because they had to simulate being in VMC conditions with a horizon. It was not exact but they were doing the best they could with the tools they had and to the best of their ability.

The idea behind embedding CFIT scenarios throughout training was to make them more realistic rather than giving pilots a "heads up" that that scenario was about to happen. Then they had the ability in the simulator if they did not get the pilot reaction they wanted, to pause the simulator and discuss the options if faced with that situation in flight. Those kinds of scenarios will leave a stronger impact on the pilot group if they could get themselves in a position where they were not comfortable in terms of CFIT. CFIT could happen to anyone and pilots needed to be aware of those scenarios.

Hageland had recommendations listed in the OTM but their PIC requirements were consistent with the FAA requirements.

Asked about a section in the GOM that stated a pilot can act as PIC with 1000 hours, Mr. Hickerson said that was accurate. If a pilot was hired with less than 1000 hours, they would operate the C208 or B1900 as an SIC.

An SIC could log flight time if the airplane is type certificated for two pilots or it was required by the carrier. Hageland allowed for two pilot crews to fly up to 10 hours in one day. Mr. Hickerson could provide documentation about this.

He did not know why the CFIT CBT was listed in the OTM but not the simulator training seeing as neither were required per the regulations. However, Hageland believed it was important to include CFIT simulator training in the OTM and was working on that.

The FAA had access to their Litmus site and the CFIT CBT was available on that site. He was not aware of the FAA providing any feedback on the CFIT CBT. Hageland let the FAA know when they were offering ground school and the FAA CMT would attend a portion of the initial or

recurrent training. Hageland would let the pilot group know that the FAA was not their enemy and it was a team effort with the same goal in mind of safe operations; that was not always how that relationship was portrayed at carriers in Alaska. He thought the FAA was familiar with their entire training program.

The goal of CFIT simulator training was CFIT recognition. They operated VFR and it was his opinion that that increased the CFIT risk. They wanted to make sure that pilots understood that CFIT was real, they need to recognize it and needed a plan to avoid it. This was a real life scenario and if not vigilant that CFIT events can happen and have happened in the past. The end result was always to have a safe operation. They trained pilots to turn around and come back, go to the alternate or file an IFR flight plan. They tried to train early recognition rather than getting into the situation. There was never a penalty for turning around and never a penalty for getting back on the ground safely, "end of story." CFIT training was more of a training event than a checking event.

He was familiar with the letter from the FAA written by Mr. Wease about CFIT. He did not know if the FAA had ever observed CFIT training at Hageland. If they had, he believed he would know about it if it took place.

Other changes made at Hageland since the Togiak accident were amendments submitted to the FAA in regards to things they were going to be looking at over the next year, installing FOQA-type equipment on their entire fleet (although the equipment was not yet available for all airplanes), and installing spider tracks on all airplanes that did not have it as an accompaniment to ADS-B, particularly the C207s did not have that capability until now. They also hired a new director of flight standards who will oversee the flight inspection department that will incorporate the FOQA equipment; however, the flight inspection department might be moved under the safety department so flight operations was not overseeing that. They were in discussion with the FAA about establishing published VFR routes; Hageland agreed to making VFR routes and the carrier operated about 8000 routes. Hageland conducted a safety risk analysis (SRA) and found some holes in what their plan was going to be. Hageland planned to provide better guidance about how they conduct VFR operations. Finally, Hageland incorporated suggestions from instructors and check airman into their initial ground training.

As the director of operations, he did not want to go through the accident investigation process again and wanted to make the necessary changes to avoid that. Hageland brought in a third party auditor to evaluate their Part 135 and 121 operations. He hoped they would offer insights on how they could improve safety.

He had nothing else to add to the interview.

The interview ended at 1510.

Interviewee: Charles Gillespie, Hageland POI

Date: June 28, 2017

Time: 1400 EDT

Location: via telephone

Present: Katherine Wilson, Marvin Frantz – NTSB; Eric West – FAA

Mr. Gillespie was represented by Mark Thomas, Chief Counsel FAA.

During the interview, Mr. Gillespie stated the following:

He explained the FAA's Safety Assurance System as an oversight system that allowed he and the APOI to focus on risks at a carrier. There were items that could be selected, for example accidents, and from that selection a data collection tool would be generated. The tool was a list of questions with a yes-no answer format to use at the carrier. If the tool resulted in negative responses, follow up action was needed, such as an enforcement case, discussion with the carrier or generation of another data collection tool to dig deeper. The most common response was to contact the carrier and have them rectify the negative response. A lot of times the questions asked in the data collection tool were not regulatory, they just pointed to safety aspects.

Training listed in Hageland's OTM was approved by the FAA. Either he, the APOI or another FAA person sat in every ground school offered by Hageland; they were very involved in the training program. He had reviewed the CBT modules in the past and believed that the APOI had reviewed the CFIT CBT module. He and the APOI discussed that the CFIT CBT was not required per the Part 135 regulations; CFIT training was done by Hageland to meet the requirements of another organization. His understanding of the CFIT CBT was that it was an adequate, generic CFIT training course. He was not concerned that it was generic and not tailored to Hageland operations.

CFIT was also discussed during initial new hire and recurrent ground school training, as well as in aircraft specific training. Hageland focused on training and teaching pilots not to get into a condition that would lead to CFIT and also talked about previous accidents. Hageland also did simulator training in initial and recurrent. Cessna 207 pilots did their simulator training at the Medallion Foundation flight training devices (FTDs) and Cessna 208 pilots did their training at University of Alaska-Anchorage.

He had observed CFIT simulator training even though it was not a part of the approved training program. It had probably been 2 years since he had observed it but thought the APOI had done so more recently. The scenarios involved giving the pilot a bad vector that put him on a course with terrain in weather. The pilot would continue ahead until he received a TAWS alert and would then do a 180-degree climbing turn. Pilots were not given advance warning that that was going to happen in the scenario; it was very realistic. Hageland also trained for inadvertent IMC but he had not observed that scenario specifically.

Asked how a pilot would recognize deteriorating weather conditions, he said when he used to teach pilots, he would teach them to select a point ahead of the airplane that he could just barely see. Assuming the airplane was moving at about 120 mph or 2 miles a minute, he would tell the pilot that if he got to that point in less than a minute than the visibility was less than 2 miles. Hageland's minimums were 600 foot ceilings and 2 miles visibility.

Surveillance of Hageland had not increased since the accident but it was "pretty constant;" there was always someone with eyes on them. There had been a lot of discussions with Hageland about changes to make following the Togiak accident. Hageland submitted a letter indicating they were voluntarily creating an SMS, they hired GHS (a global safety and security company) to audit the carrier and help bring the operation up to ISSA (IATA Safety Standard Assessment) standards, implemented pilot professionalism training, and were looking into FlightSafety International to train their Caravan and B1900 pilots. Hageland also invited the FAA CMT to the GHS debrief; GHS did not tell Hageland anything that the FAA had not been telling them all along. There were action items that came about as a result of the debrief. GHS will be working with Hageland for 18 months and then it will be 3 years for Hageland to meet ISSA standards.

Training for CRM for single versus dual pilot operations discussed when there were two pilots that the non-flying pilot would run the navigation and radios.

When a Hageland flight had two pilots on board, the second pilot was used in the role of SIC. He had never seen a second pilot on a flight not acting in the SIC role.

Hageland pilots were very familiar with the Alaska aviation weather camera program. In Bethel, and possibly at other stations, there was a computer dedicated to the weather camera site so that pilots could view the weather camera images at the stations they were going to. There often was no terminal at the outstations and he was not sure if the internet on a pilot's cell phone was good enough to pull up the weather cameras from the villages. He had not seen a pilot do this.

Pilots could tune into an AWOS or ASOS station via the radios or they could call back to their base for updated weather. He had not seen a pilot call back to the base for weather.

He had never seen a TAWS inhibited during a flight and that was something he and other inspectors paid attention to.

Hageland pilots typically flew at the cardinal altitudes. The minimum altitude a Hageland pilot could fly was 500-600 feet agl but he had not seen a flight fly that low to receive a TAWS alert. A pilot would typically turn around if he was on board. He had not heard of a flight receiving a TAWS alert by another inspector when they were conducting an enroute inspection.

He thought the C208 simulator at UAA had a TAWS, but was not certain.

He had not heard any concerns about the Class B TAWS terrain clearance altitude being 700 feet agl but Hageland pilots being able to fly as low as 500 feet agl.

He was surprised that St. Mary's and Togiak accidents involved CFIT given the equipment on the C208. The pilots should have received TAWS alerts and the moving map would have been showing red. As inspectors, they watched for TAWS and whether it was inhibited.

The FAA evaluated the effectiveness of Hageland's training when they performed observations of check airmen doing checkrides; when the FAA observed checkrides, they were validating the training.

He was not aware if Hageland was looking at turnback data as a measure of CFIT training's effectiveness. He knew that Hageland collected that data and presented the numbers as a percentage of flights. They collected "quite a bit" of data at the OCC in Palmer.

He did not think that better CFIT training would have avoided the St. Mary's or Togiak accidents. For the training to work, the pilot would have to recognize that he was in a dangerous position. He had heard the director of operations say when he was being hired, that the latent risk was the most dangerous. The director of operations used an example where a pilot did not follow procedures and report anything out of the ordinary. The pilot's reason for not reporting it was that it was a common occurrence at that airport.

Mr. Gillespie did not think management was putting pressure on pilots to continue a flight; rather it was self-induced by the pilot possibly due to get-home-itis. He thought pilots had been flying in Alaska so long that they did not see some things as a risk. Since the accident, Hageland was really focused on accountability of its pilots and with FOQA will be able to monitor the altitude flights are flown at; but FOQA could not measure visibility, so there was no way for Hageland to track the visibility during a flight. This depended on pilot integrity. There was accountability when an IFR flight plan was filed but under VFR rules, there was no accountability once the flight departed Class D airspace. He thought the easiest fix but not possible was to not fly VFR. Hageland had tried to have all flights file an IFR flight plan if capable but the infrastructure out west did not support it. Hageland was doing what they could by providing human factors and pilot professionalism training, as well as improving the hiring and vetting process of pilots.

The Hageland director of operations was monitoring weather at airports, and watching flights going in and out, checking compliance.

Hageland pilots got paid if they turned around or not. In training, management reinforced that the pilots did not do the carrier any favors by pushing the limits and continuing a flight rather than turning around.

He had nothing else to add to the interview.