Docket No. SA-540

Exhibit No. 2 O

NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C.

FAA Hageland Audit Results

(48 Pages)

Attachment 14

To Operational Factors Specialist Factual Report

ANC17MA001

FAA Hageland Audit Results

AFS-900 AUDIT ON HAGELAND AVIATION SERVICES INC.

APRIL 29 – MAY 9, 2014

ANCHORAGE, ALASKA

Hageland Aviation Services Inc. History

Hageland Aviation Services Inc. is doing business as Ravn Connect. They are part of the HoTH Corporation that includes ERA Alaska, Ravn Alaska and Ravn Connect. They are ranked as number 24 on the Alaska business list with $150 million in revenues for 2013.

Hageland Aviation Services Inc. currently operates an average of 3300 flight legs every week. They flew 63,000 hours in 2013 with over 110,000 base departures in the state of Alaska. Each base departure may have up to 5 flight legs. In comparison Alaska Airlines only had 25,000 departures in Alaska in 2013. Hageland Aviation Services Inc. operates 55 aircraft to over 100 communities daily and transports more than 450,000 passengers and 30 million pounds of mail and freight every year. Hageland Aviation Services Inc. has 12 bases of operation that includes Anchorage and Palmer, plus Fairbanks, Unalakleet, St. Mary's, Bethel, Aniak, Galena, Nome, Kotzebue, Barrow and Deadhorse. They currently employ 138 pilots, 78 mechanics.

Anchorage FSDO CMT Personnel

FLM: Dale Hansen c: [redacted] w: [redacted]

POI: Danny Larson c: [redacted] w: [redacted]

PMI: Roy Redifer c: [redacted] w: [redacted]

PAI: John Harvath c: [redacted] w: [redacted]

Hageland Aviation Recent Event History

- **April 8, 2014 (Accident):** A Cessna 208 (N126AR) operated by Hageland Aviation crashed under unknown circumstance near Kwethluk, Alaska, 25 miles East/Northeast of Bethel. The aircraft was destroyed. Two souls on board are confirmed fatal.
- **November 29, 2013 (Accident)**: A Cessna 208-B Caravan (N12373) operated by Hageland Aviation crashed near the St. Mary's, Alaska Airport while on a VFR flight plan in deteriorating weather. Of the ten souls on board, four (including the pilot and an infant passenger) were fatalities and the remaining six passengers all sustained serious injuries. The aircraft was destroyed.
- **November 22, 2013 (Accident)**: A Beechcraft 1900-C (N575X) sustained substantial damage as a result of landing short of the runway at Badami on a Visual Flight Rules (VFR) approach attempted in weather reported as 1/2 statute mile visibility.
- **May 4, 2013 (Accident)**: A Cessna 207 (N9400M) impacted terrain in the vicinity of Newtok Airport. Passengers aboard reported that they could see nothing out the windows and the village agents stated that visibility was very poor. Several passengers sustained injuries.
- **March 4, 2013 (Incident)**: A Beechcraft 1900-C (N575Z) slid off the runway in Savoonga after attempting a landing in 1/2 statute mile visibility.

Other Concerns with Hageland Aviation

- Part 119 Officials: The Director of Operations, Chief Inspector, and Chief Pilot are all new in their positions.

Enforcement Actions Initiated

The Unit – E CMT for Hageland has initiated 11 EIR's on the Air Carrier and 9 EIR's on their pilots and/or mechanics for a total of 20 EIR's in the first 6 months of FY 2014.

2014AL030007 – Hageland Aviation SE EPUA --Open

2014AL030002 – Hageland Aviation SE EPUA -- Closed

2014AL030005 – Hageland Aviation SE EPUA -- Open

2014AL030011 -- Hageland Aviation SE EPUA -- Open

2014AL030022 __ Hageland Aviation SE EPUA -- Open

2014AL030029 – Hageland Aviation SE EPUA -- Closed

2014AL030036 – Hageland Aviation SE EPUA -- Closed

2014AL030042 – Hageland Aviation SE EPUA -- Closed

2014AL030044 – Hageland Aviation SE EPUA -- Closed

2014AL030054 – Hageland Aviation SE EPUA -- Open

2014AL030098 – Hageland Aviation SE EPUA -- Open

2014AL030006 – Barrows, Rodrich - Admin Action/Warning Notice

2014AL030017 – Cooper, Clayton - Admin Action/Warning Notice

2014AL030021 – Lindeen, Tanya - Admin Action/Warning Notice

2014AL030024 – Harris, Brett - Admin Action/Warning Notice

2014AL040030 – Wolter, Robert A. - Admin Action/Warning Notice

2014AL030034 – Lloyd, Alexie A - Admin Action/Warning Notice

2014AL030043 – Miller, Andrew – No Action

2014AL030048 – Gustafson, Christian - Admin Action/Warning Notice

2014AL030049 – Lind, Larry - Admin Action/Warning Notice

The following cases were reviewed and analyzed by AAL-230 and are being processed by Regional Counsel:

- An EIR pertaining to improper autopilot maintenance with a recommended civil penalty of $55,000.
- An EIR pertaining to untrained/unqualified maintenance personnel with a recommended civil penalty of $50,000.
- An EIR pertaining to operation control with a recommended civil penalty of $22,000.

The CMT has investigations in progress that involve maintenance-related issues that will initiate enforcements.

- Wing strut inspection limit overflight on CE-208

Additional FAA Actions Initiated

Following the November 29, 2013 accident, Alaskan Region Flight Standards initiated the following actions:

- Removed Director of Operations and amended OpSpecs to remove night VFR operations.
- Anchorage FSDO commenced enhanced surveillance including special inspections of all operations. Anchorage FSDO Manager attended company meetings at base stations.
- Withdrew initial approval of company training program.
- Observed 2-day company-wide safety stand-down.
- AAL-230, AAL-240 and the Anchorage FSDO conducted a Joint Team-Focused Corrective Action Implementation Audit of EPUA. The findings are currently being evaluated by management for disposition.

AAL-230 determined that the owners of Hageland Aviation neglected to notify the U.S. Department of Transportation (DOT) of significant changes at the operation that occurred within the last five years. AAL-230 coordinated with DOT which will conduct fitness reviews of the three certificates – Hageland Aviation, Era Alaska d.b.a. Ravn Alaska, and Frontier Flying Service.

Operator Actions

Over the last 2-3 months the operator:

- Brought in a new Operations Management Team (Director of Ops & Chief pilot).
- Established an Operations Control Center in Palmer, Alaska, staffed with a licensed dispatcher and incorporated risk assessment as part of release procedures.
- Amended OpsSpecs to add 165 Night VFR routes that comply with 135.203, 135.205, 91.155.

- Amended OpsSpecs to establish higher limits for SVFR operations – AMEL aircraft to operate IFR.
- Retrained all operational control personnel, including pilots, on changes to OpsSpecs and Operations Control procedures.
- Conducted Safety Stand-downs in all facilities.
- Hired new Chief Inspector and five new inspectors.
- Loss of aircraft has increased usage of remaining aircraft and has increased maintenance activity due to checks coming due in less time.

CMT Response to Maintenance Issues Found During Surveillance

Oct 2, 2012 Letter to address problems with maintenance training program (10 or more)

Nov 29, 2012 Letter addressing GMM revision 9 and NEF program

Nov 30, 2012 Letter about PA-31 engine checklist

Dec 10, 2012 Letter about using TSO & PMA parts

Dec 26, 2012 Letter about PA-31 engine TBO's

Jan 5, 2012 Operational Control meeting and PowerPoint

Jan 30, 2013 100 day follow up on N861FT gear up landing

Feb 4, 2013 Letter on REIMS F406 landing gear issues

Feb 4, 2013 Letter on PA-31 engine TBO

Feb 6, 2013 Letter on PA-31 AAIP

Feb 11, 2013 100 day follow up on N169LJ engine failure

Feb 21, 2013 Letter on PA-31 TBO

Feb 26, 2013 Letter on issue of special flight permits (CAFP)

Feb 26, 2013 Letter on revision 7 to GMM and CASS program listing deficiencies

April 10, 2013 Letter addressing Continued Operational Safety and addition of aircraft

May 13, 2013 Letter on C-207 MEL and NEF program

May 22, 2013 Letter on revision 11 of GMM and ops spec D084

June 14, 2013 100 day follow up on N575Z crash in Savoonga

July 3, 2013 Letter on revision of C-208 MEL

July 9, 2013 Letter on revision of CAMP and GMM and STC

July 19, 2013 Letter on second review of CAMP revision and STC

Aug 14, 2013 100 day follow up on N9400M CFIT in Newtok

Oct 23, 2013 Letter on Base in Aniak with discrepancies

Oct 30, 2013 Letter on C-207 seat rails

Feb 26, 2014 Letter to cancel GMM revision 3

Feb 26, 2014 Letter on VDRP program comprehensive fixes

March 2, 2014 100 day follow up on N575X crash at Badami

March 7, 2014 Letter to EPUA audit team "requested focus areas of inspection"

March 10, 2014 100 day follow up on St Mary's crash

March 19, 2014 Letter on problems with VDRP with request for comprehensive fixes

April 14, 2014 Letter regarding MEL and NEF

Timeline of Communication between Hageland 119 Personnel and CMT

10/12/12 Letter received from operator stating schedule for company check airman/instructor training.

10/15/12 CMT sent letter to operator stating change of PAI to JAH.

11/5/12 POI sent letter to operator granting approval for the Training Program revision 14.

12/21/12 Received letter from operator outlining intent to add an aircraft to the certificate.

3/4/13 N575Z, a BE-1900C, slides off the runway at Savoonga, AK. Prevailing weather conditions are IMC with excessive crosswinds. Crew landed with significant tailwind and was unable to maintain directional control. Aircraft departed runway and sustained damage.

3/8/13 POI sent a letter of investigation asking company to address specific issues: release in poor weather conditions for the Savoonga incident, actions taken to ensure other operations will not be released in such weather conditions, barriers to compliance, how part 119 oversight is perceived by flight personnel, can 119 personnel provide adequate oversight given the size and scope of the operation, why did the pilot continue in the poor weather conditions, are aircrews getting adequate training, is there a safety culture problem within the company.

3/22/13 EIR opened against company for operational control aspects concerning Savoonga incident.

3/27/13 CMT sent LOI to agent for service regarding Savoonga incident. No reply received.

3/27/13 Letter received from DO, no subject line. Letter refers to a 15 day notification and tentative date for an event. Letter is possibly in reference to adding an aircraft.

3/28/13 Received letter from operator outlining intent to add an aircraft within 15 days.

4/30/13 POI sent letter to operator outlining deficiencies with submitted CE-207 MEL.

5/4/13 N9400M, CE-207, impacts terrain during a CFIT accident approximately 1 mile south of Newtok, AK. IMC conditions prevailed.

5/7/13 Sent letter to Nome Flight Coordinator for investigation/LOI opened.

5/10/13 EIR submitted for PIC of Savoonga incident.

5/13/13 Sent letter to operator outlining deficiencies with submitted CE-208 MEL.

6/5/13 119/CMT meeting at PAQ EPUA facility. 119 management informed the CMT that they plan to implement a risk assessment procedure. They stated the risk assessment was in place at the northern bases and would be implemented at the southern bases by July 31st, 2013. Surveillance revealed that the risk assessment procedure was not in place at the northern bases, nor was it put in place by the date given for the southern bases.

7/11/13 CMT was informed by Regional counsel that they would not pursue violations of 91.13(a) and operations specifications for lack of operational control against the company for Savoonga accident.

6/11/13 CMT sent LOI to agent for service regarding Newtok accident. No reply received.

6/19/13 CMT sent letter to operator regarding Aviation Safety Inspector duties and cockpit access in response to bills sent to the Anchorage FSDO for enroutes.

6/20/13 CMT inquired to the DO if the GPS unit from the aircraft involved in the Newtok accident could be provided to the FAA for analysis. The CMT did not receive any reply to this inquiry.

7/23/13 CMT sent an email to the DO asking for a status update on the topics that were brought up in the previous CMT meeting: risk assessment implementation, instrument training requirements for VFR pilots, any changes to company CFIT program, response to question about using radar altimeters in all aircraft, and any changes to policy regarding flight release and weather information/trends. The CMT has not received any of this information.

7/24/13 Regional counsel informed CMT that legal action concerning violation of A008 and procedures/manual requirements that specified within A008 will not be pursued.

8/1/13 CMT sent letter to operator outlining deficiencies with CE-208 MEL.

8/7/13 119/CMT meeting at ANC EPUA facility. When asked about what was done following the Newtok accident, 119 said the accident pilot was required to make a presentation about CFIT and then present it to all of the pilots at all of the EPUA bases. The CMT asked for a copy of this presentation and the locations/dates that it was going to be presented. The CMT has not received any of this information. DO explained company was nearly ready to distribute operations manual revisions for operational control due to the previous accidents and incidents. The CMT has not received any submittals or updates on this. According to DO, pilot involved in Newtok accident was going to head to the bases and conduct CFIT training. The CMT requested a copy of the presentation, but never received anything.

8/21/13 DO was informed that briefing cards in a certain aircraft are not acceptable. Operator said they would make the corrections. CMT has not been informed of the corrections.

8/26/13 CMT called and emailed the Chief Pilot and asked for a copy of the Newtok accident pilot's negative drug test, a copy of the TAPROOT investigation results and a summary of the proposed changes that the company came up with as a result of the accident. The CMT did not receive any of this information.

8/28/13 CMT sent a letter to operator asking about carabineer load limits and possible unapproved parts.

8/29/13 CMT sent a letter to the operator providing recommendations to address systemic issues associated with the Newtok accident. No formal response was received.

9/5/13 Operator sent a letter to FSDO in response to inquiry about carabineers being used in CE-207 fleet.

9/10/13 FDSO Manager sent a letter to members of HoTH Inc. requesting a meeting with the FSDO CMT members and FAA Regional management. Meeting cancelled due to furlough.

11/29/2013 Accident event involving a Cessna 208 aircraft on a VFR night flight from Bethel to Mountain Village, AK then diverted to the St. Marys airport while in IMC weather crashing in terrain east of the airport causing injuries and fatalities.

12/02/2013 POI contacted company president recommending actions based on the recent Badami and St. Marys accident including changes to Part 119 management positions and implementing more restrictive weather restrictions in the flight release process, and improvements to the flight release processes. See PTRS AL03 201403454

12/05/2013 Company Issued Ops Bulletin implementing SVFR restrictions on multi-engine and turbine aircraft. Also POI received request for approval of new Interim Director of Operations. POI recommended they should request the SVFR restrictions be incorporated into OpSpec B050 by company requesting amendment of that OpSpec if their intention was to make it a permanent company limitation for operations within the State of Alaska. See PTRS AL03 201403456 and PTRS AL03201403455

12/06/2013 Company owners met with FSDO managers and made commitments to FAA on measures to mitigate risk within the company. Company provided an example safety bulletin that went out to company about new Safety Assurance operations policy.

12/09/2013 Upon review and interview of requested candidate for Interim DO, POI signed and issued OpSpec A006 for a period not to exceed 30 days while company hires permanent DO. See PTRS AL03 201403455

12/12/2013 POI received request from Chief Pilot in include SVFR restrictions on multi- engine and turbine in OpSpec B050 by amending OpSpec to include a note limitation for the State of Alaska. See PTRS AL03 201403456

12/13/2013 Based on apparent training deficiencies in the Badami and St. Marys accidents and needed revisions discovered during company training manual/program review, Initial Approval was withdrawn this date with letter being had delivered to company president. See PTRS AL03 201402545

12/13/2013 FSDO Manager amended company OpSpecs to restrict all night VFR Operations in the State of Alaska via a limitation to OpSpec B050. In addition, OpSpec A008 was amended to include specific language on proper completion and retention of the company Risk Assessment Form. See PTRS AL03 201403460

12/13/2013 The CMT sent a letter to operator rescinding the approval for the operator's Training Program due to recent accidents, lack of autopilot curriculum, training modules for various aircraft, incorrect aircraft manuals and maneuvers missing from flight training curriculum.

12/14/2013 POI received request for amendment of OpSpec B050 from Air Carrier for inclusion of night routes in compliance with 135.203 and 91.155 per guidance from FSDO and Regional Manager. Request included 212 routes. POI validated all routes for proper obstruction clearance, drafted, signed, and issued, amended B050. See PTRS AL03 201403457

12/16/2013 Regional Manager and Team along with FSDO Manager and CMT met with HoTH corporations outlining issues related to risk and the FAAs expectations of the company in response to the events over the past 10 months.

12/16/2013 POI sent letter to company clarifying requirements to regain Initial Approval on Training Manual/Program including immediate action pilot seminars on recent changes, need for

company stand down to cover multiple subjects including estimating in flight visibility, company Flight Safety Program, Risk Assessment and the company's expectations on delaying, cancelling or diverting their flight if regulatory compliance cannot be met or maintained, and CRM. Revisions content of the Training Manual/Program. See PTRS AL03 201403461

12/18/2013 POI observed training seminar for pilots from Bethel, St. Marys and Aniak. Training went as follows; Roll call was taken and pilots in attendance signed an attendance sheet. The lesson covered recent changes to OpSpecs A006, A008, and B050. 135.203/205 and 91.155 were emphasized in conjunction with a discussion of recent OpSpecs changes. EPUA s Flight Safety Assurance program was discussed. EPUA s Risk Assessment program was discussed. Time was given for questions at the end to ensure pilots could clarify any concerns they had about these changes. Discussion continued until all questions asked were answered. See PTRS AL03 201403459

12/19/2013 POI observed above listed training for Kotz, Unalakleet, Galena, Deadhorse.

12/21/2013 POI observed above listed training for Barrow, Fairbanks, Nome and Anchorage.

12/29/2013 POI observed company's first full day safety standown for the first 65 pilots held at the conference room at the Coast International Inn in Anchorage.

12/31/2013 POI observed the second full day of Safety Stand down and training for the remaining 62 pilots. The agenda for training was same as listed above. See PTRS AL03 201402555

1/03/14 POI received request from company requesting consideration of Mr. Jason Wilson as approval for position of Director of Operations. If Mr. Wilson is approved as DO, company requests Mr. William Coon be approved as Interim Chief Pilot as Mr. Wilson Vacates position. See PTRS AL03 201404716

1/08/14 POI granted Initial Approval to company for its Training Manual/Program after it met all conditions set for return of approval. The Initial Approval granted was given with a list of conditions to be met by a specific date or the approval will be withdrawn. See PTRS AL03 201404715

1/09/14 POI completed review of proposed DO and Interim Chief Pilots resumes and conducted in-depth interviews of each. POI amended and issued OpSpec A006, per operator request showing Mr. Jason Wilson as Director of Operations and Mr. William Coon as Interim Chief Pilot not to exceed 30 days. See PTRS AL03 201404716

1/24/14 POI received request for approval of Mr. Luke Hickerson as Chief Pilot.

1/25/14 Company implemented Phase one of Operational Control Center (OCC) in Palmer and staffing using Operational Control Agents (OCA) under the direct supervision of the Director of

Operations or Chief Pilot. The OCAs are either 121 dispatcher qualified or will be teamed with a 121 dispatcher while on duty in the OCC. All flight releases for every flight in the company system is given through the OCC. Phase two will occur once all system designs are validated and Director of Operations is confident with delegated authority given to the OCAs under the supervision by an Operational Control Manager. POI validated by conducting observations and surveillance on three separate days of three separate shifts.

1/27/14 Received letter from operator requesting Luke Hickerson as chief pilot.

1/29/14 Received letter from operator requesting new Chief Pilot. POI reviewed Luke Hickerson's resume and conducted in-depth interview. POI approved, amended and issued the A006 and A007 with Mr. Hickerson as the Chief Pilot. See PTRS AL03 201404718

1/31/14 After much discussion and encouragement by POI, EPUA requested amended OpSpec B050 to include note limitation in the State of Alaska to limit weather conditions for SVFR for any aircraft to not less than 600 & 2. In addition, any aircraft to be released under SVFR must receive direct approval from a either the Chief Pilot or Director of Operations as an RA 3 on the Risk Assessment. See PTRS AL03 201404714

2/24/14 GOM Rev. 3 Accepted. Revision included all changes to chapter 2 on Operational Control to cover the company's new Operations Control Center (OCC) and the use of Operations Control Agents (OCA). Flight Coordinators no longer used. All flight releases and flight locating to be conducted through the OCC in Palmer. POI observed the training formal training of the OCA and also a portion of the 40 hours of the OJT required for the OCA to be fully qualified. The OCAs work under the supervision of a 121 dispatch qualified manager while on shift. The OCC is operational at all times any flight in being conducted by the company. See PTRS AL03201405037

2/24/14 A008 Amended and re-issued to included authorization to utilize OCC as the method of Operational Control for flight release and flight locating for all flights for EPUA. In addition, amended the language in OpSpec to address the improved Risk Assessment Tool and process being used as part of the new flight release procedures in conjunction with the OCC. See PTRS AL03201405042 for all details on steps accomplished prior to amendment and re-issue of OpSpec.

2/24/14 POI observed company-wide training seminar for all pilots conducted by Part 119 Management group on the new GOM Rev #3, OpSpec A008 Amendment, and the new OCC procedures.

3/25/14 EIR on St. Mary's accident completed and forwarded to AAL-230 for review and processing.

The CMT would like to have some focus by the Inspection Team on the following areas:

Observe use of the Hageland Risk Assessment/Safe Flight Categories Tool. Do the pilots understand how to use it and the interaction with OCC on the values derived from the Tool?

Perform Ramp Inspections to confirm proper loading of the aircraft both to and from the bases. Do the pilots have accurate weights of the cargo and bags loaded on to the aircraft? If necessary, validate by actually downloading aircraft if needed to validate weights. Ensure the load manifest documentation indicates weights and the respective zones.

Perform Enroute inspections to verify proper passenger cargo and baggage restraint, passenger briefings, checklist usage and MEL procedures if applicable.

If time is available, perform a review of Pilot Training Records.

Review Autopilot procedure and Manuals used to maintain autopilots and associated components used in aircraft specified in Operations Specifications paragraph A015, Autopilot in Lieu of Second in Command; used in Single Pilot IFR. The aircraft authorized are Cessna 208B, Piper PA-31-350 and Reims F406 aircraft. Note: operator said they have recently revised this maintenance process.

Reference: CFR §135.105 Exception to second in command requirement: Approval for use of autopilot system.

(a) Except as provided in §§135.99 and 135.111, unless two pilots are required by this chapter for operations under VFR, a person may operate an aircraft without a second in command, if it is equipped with an operative approved autopilot system and the use of that system is authorized by appropriate operations specifications. No certificate holder may use any person, nor may any person serve, as a pilot in command under this section of an aircraft operated in a commuter operation, as defined in part 119 of this chapter unless that person has at least 100 hours pilot in command flight time in the make and model of aircraft to be flown and has met all other applicable requirements of this part.

(b) The certificate holder may apply for an amendment of its operations specifications to authorize the use of an autopilot system in place of a second in command.

(c) The Administrator issues an amendment to the operations specifications authorizing the use of an autopilot system, in place of a second in command, if—

(1) The autopilot is capable of operating the aircraft controls to maintain flight and maneuver it about the three axes; and

(2) The certificate holder shows, to the satisfaction of the Administrator, that operations using the autopilot system can be conducted safely and in compliance with this part.

Do their manuals interface: GOM, GMM and CAMP

Maintenance Personnel Workload: Due to loss of aircraft and increased flight hours put on existing aircraft, are the inspection intervals being increased? Is the Deferred Maintenance Items (DMI) increasing?

Parts receiving and serviceability of parts – Previous issues with parts being shipped to outstations, i.e., An Autopilot Servo was shipped and installed on the wrong aircraft, a life limited part - Pratt and Whitney PT 6 Engine was shipped to Bethel. The engine was over its 12 year life limit.

Issues with receiving inspection of aircraft after work performed by an outsource maintenance provider (Vendor).

Listing Report - Air Operator

Designator: EPUA CHDO: [redacted]

Air Operator Name: HAGELAND AVIATION SERVICES INC

Previous Designator: [redacted]

Certificate Number: [redacted] Previous Certificate Number: [redacted]

Certificate Type: [redacted] Certificate Status: [redacted]

Transferred CHDO:

Certificate Issue Date: [redacted] Certificate Status Date: [redacted]

Validation Date: [redacted] Cert. Expiration Date:

Operating FAR: [redacted]

Operations RO/DO: [redacted] Principal Operations Inspector: [redacted]

Maintenance RO/DO: [redacted] Principal Maintenance Inspector: [redacted]

Avionics RO/DO: [redacted] Principal Avionics Inspector: [redacted]

Authorizations Exemptions: [redacted] Deviations: [redacted] Reliability: [redacted]

Certificated Kinds of Operation:

135 Cert Fixed Wing: [redacted]

CFR 135 Types of Operation Information:

Basic 135 Part Operator: [redacted] Day Only (No means Day/Night) [redacted]

Single Pilot Operator: [redacted] SeaPlane: [redacted]

Single Pilot in Command: [redacted] Extended Over Water (No means IFR/VFR Opers) [redacted]

Commuter 9 PAX or Less: [redacted] VFR Only, Fixed Wing: [redacted]

On-Dmnd 9 PAX or Less: [redacted]

10 PAX or More: [redacted]

Number of Personnel:

PIC Captains: [redacted] Other Pilots: [redacted]

Flight Engr Examnrs: [redacted] Flight Engineers: [redacted]

Pilot Examiners [redacted] Check Airman: [redacted]

Aircrew Prog Designees: [redacted] Flight Attendants: [redacted]

Dispatchers: [redacted] Navigators: [redacted]

Inspectors: [redacted] Designated Inspec tors: [redacted]

Non-Certificated Mech [redacted] Certificated Mech: [redacted]

Repairman: [redacted] Total Number of Employees: [redacted]

Designator: EPUA CHDO: [redacted]

Crew Member Training: [redacted] Airworthiness Agreement: [redacted]

Chief Executive Officer:

Name: [redacted]
Title: [redacted]
Address 1: [redacted]
Address 2: [redacted]
Address 3:
City: [redacted] State: [redacted] Postal Code: [redacted] Country [redacted]
Phone: [redacted] Extension: Foreign Phone:

Areas of Scheduled Operations:

AL: [redacted] CE: [redacted] EA: [redacted] GL: [redacted] NE: [redacted] NM [redacted] SO: [redacted] SW: [redacted] WP: [redacted]

HAZ / MAT Carried: [redacted] Assc Reference ID:
National Use: Special Purpose:

FAR 121, FAR 135 and FAR 121/135 Maint and Reliability Programs info (Y/N)

9 or Less - Approved Aircraft Inspection Program (AAIP) under 135.149: [redacted]
9 or Less - Maintained under 135.411 (a)(1): [redacted]
10 or More - Continuous Airworthiness Maintenance Program (121 or 135): [redacted]
9 or less 135 On - Demand CAMP: [redacted]
9 or less 135 Commuter CAMP: [redacted]
10 or More or 121 Approved Corrosion Prevention Program: [redacted]
10 or More or 121 - Reliability program Encompasses Entire Aircraft: [redacted]
10 or More or 121 - Reliability program Does Not Cover Entire Aircraft: [redacted]

NAME / ADDRESS

Name/Address Code: [redacted]
Name: [redacted]
Title: [redacted]
Address 1: [redacted]
Address 2:
Address 3:

Listing Report - Air Operator

Designator: EPUA CHDO: [redacted]

Air Operator Name: HAGELAND AVIATION SERVICES INC

Previous Designator: [redacted]

Certificate Number: [redacted] Previous Certificate Number: [redacted]

Certificate Type: [redacted] Certificate Status: [redacted]

Transferred CHDO:

Certificate Issue Date: [redacted] Certificate Status Date: [redacted]

Validation Date: [redacted] Cert. Expiration Date:

Operating FAR: [redacted]

Operations RO/DO: [redacted] Principal Operations Inspector: [redacted]

Maintenance RO/DO: [redacted] Principal Maintenance Inspector: [redacted]

Avionics RO/DO: [redacted] Principal Avionics Inspector: [redacted]

Authorizations Exemptions: [redacted] Deviations: [redacted] Reliability: [redacted]

Certificated Kinds of Operation:

135 Cert Fixed Wing: [redacted]

CFR 135 Types of Operation Information:

Basic 135 Part Operator [redacted] Day Only (No means Day/Night): [redacted]

Single Pilot Operator: [redacted] SeaPlane [redacted]

Single Pilot in Command [redacted] Extended Over Water (No means IFR/VFR Opers): [redacted]

Commuter 9 PAX or Less: [redacted] VFR Only, Fixed Wing: [redacted]

On-Dmnd 9 PAX or Less: [redacted]

10 PAX or More: Y

Number of Personnel:

PIC Captains: [redacted] Other Pilots: [redacted]

Flight Engr Examnrs: [redacted] Flight Engineers: [redacted]

Pilot Examiners: [redacted] Check Airman: [redacted]

Aircrew Prog Designees: [redacted] Flight Attendants: [redacted]

Dispatchers: [redacted] Navigators: [redacted]

Inspectors: [redacted] Designated Inspec tors: [redacted]

Non-Certificated Mech: [redacted] Certificated Mech: [redacted]

Repairman: [redacted] Total Number of Employees: [redacted]

Designator: EPUA CHDO: [redacted]

City: [redacted] State: [redacted] Postal Code: [redacted] Country: [redacted]
Commerical Phone: [redacted] Extension:
Foreign Phone:
District Office:

Name/Address Code: [redacted]
Name: [redacted]
Title: [redacted]
Address 1:
Address 2:
Address 3:
City: State: Postal Code: Country:
Commerical Phone: [redacted] Extension:
Foreign Phone:
District Office:

Name/Address Code: [redacted]
Name: [redacted]
Title: [redacted]
Address 1:
Address 2:
Address 3:
City: State: Postal Code: Country:
Commerical Phone: [redacted] Extension:
Foreign Phone:
District Office:

Name/Address Code: [redacted]
Name: [redacted]
Title: [redacted]
Address 1:
Address 2:
Address 3:
City: State: Postal Code: Country:
Commerical Phone: [redacted] Extension:
Foreign Phone:
District Office:

Name/Address Code: [redacted]
Name: [redacted]
Title: [redacted]

Designator: EPUA CHDO: [redacted]

Address 1: [redacted]
Address 2:
Address 3:
City: [redacted] State: [redacted] Postal Code: [redacted] Country: [redacted]
Commerical Phone: [redacted] Extension:
Foreign Phone:
District Office:

AUTHORIZED DBA

Designator Code	DBA Type	Authorized DBA Name
EPUA	O	[redacted]
EPUA	O	[redacted]

AIRCRAFT

FAR: [redacted]
Aircraft Make Model / Series:
Class:
Turbine:
VFR Only
Day Only:
FAA Approved MTC Program:
Structural Inspection Program:
AQP:

PAX Demonstrated:
PAX Approved / Cargo:
Reg Flight Attnds:
Number Of Aircraft:
Aircraft Used in Commuter Service:

FAR: [redacted]
Aircraft Make Model / Series:
Class:
Turbine:
VFR Only
Day Only:
FAA Approved MTC Program:
Structural Inspection Program:
AQP:

PAX Demonstrated:
PAX Approved / Cargo:
Reg Flight Attnds:
Number Of Aircraft:
Aircraft Used in Commuter Service:

FAR: [redacted]
Aircraft Make Model / Series:
Class:
Turbine:
VFR Only

PAX Demonstrated:
PAX Approved / Cargo:
Reg Flight Attnds:
Number Of Aircraft:

Listing Report - Air Operator

Designator: EPUA CHDO: [redacted]

Address 1: [redacted]
Address 2:
Address 3:
City: [redacted] State: [redacted] Postal Code: [redacted] Country: [redacted]
Commerical Phone: [redacted] Extension:
Foreign Phone:
District Office:

AUTHORIZED DBA

Designator Code	DBA Type	Authorized DBA Name
EPUA	O	[redacted]
EPUA	O	

AIRCRAFT

FAR: [redacted]
Aircraft Make Model / Series:
Class:
Turbine:
VFR Only
Day Only:
FAA Approved MTC Program:
Structural Inspection Program:
AQP:

PAX Demonstrated: [redacted]
PAX Approved / Cargo:
Reg Flight Attnds:
Number Of Aircraft:
Aircraft Used in Commuter Service:

FAR: [redacted]
Aircraft Make Model / Series:
Class:
Turbine:
VFR Only
Day Only:
FAA Approved MTC Program:
Structural Inspection Program:
AQP:

PAX Demonstrated: [redacted]
PAX Approved / Cargo:
Reg Flight Attnds:
Number Of Aircraft:
Aircraft Used in Commuter Service:

FAR: [redacted]
Aircraft Make Model / Series:
Class:
Turbine:
VFR Only

PAX Demonstrated: [redacted]
PAX Approved / Cargo:
Reg Flight Attnds:
Number Of Aircraft:

Designator: EPUA CHDO: [redacted]

Day Only: [redacted]
FAA Approved MTC Program:
Structural Inspection Program:
AQP:

Aircraft Used in Commuter Service: [redacted]

FAR: [redacted]
Aircraft Make Model / Series:
Class:
Turbine:
VFR Only
Day Only:
FAA Approved MTC Program:
Structural Inspection Program:
AQP:

PAX Demonstrated: [redacted]
PAX Approved / Cargo:
Reg Flight Attnds:
Number Of Aircraft:
Aircraft Used in Commuter Service:

FAR:
Aircraft Make Model / Series:
Class:
Turbine:
VFR Only
Day Only:
FAA Approved MTC Program:
Structural Inspection Program:
AQP:

PAX Demonstrated:
PAX Approved / Cargo:
Reg Flight Attnds:
Number Of Aircraft:
Aircraft Used In Commuter Service:

FAR:
Aircraft Make Model / Series:
Class:
Turbine:
VFR Only
Day Only:
FAA Approved MTC Program:
Structural Inspection Program: Y
AQP:

PAX Demonstrated:
PAX Approved / Cargo:
Reg Flight Attnds:
Number Of Aircraft:
Aircraft Used in Commuter Service:

FAR: [redacted]
Aircraft Make Model / Series:
Class:
Turbine:
VFR Only
Day Only:

PAX Demonstrated: [redacted]
PAX Approved / Cargo:
Reg Flight Attnds:
Number Of Aircraft:
Aircraft Used in Commuter Service:

Designator: EPUA CHDO: [redacted]

FAA Approved MTC Program:
Structural Inspection Program: [redacted]
AQP:

REMARKS

Designator: EPUA CHDO: [redacted]

Comment Text

[redacted]

1. Duties & Responsibilities

Company

Section 1 Purpose

This chapter defines the base locations and organizational structure of Hageland Aviation Services, Inc. (Company). It includes the authority and responsibilities of senior management and employees who are directly involved with conducting daily flight operations. The General Maintenance Manual (GMM) includes additional information regarding the personnel and structure of the Maintenance Department. Duties and responsibilities of positions not included in this chapter may be found in the GMM and other Company documents.

Section 2 Key Management Personnel

The following personnel are directly involved with management of regulatory compliance. This list does not illustrate other non-regulatory positions within the Company, nor is it intended to represent the entire Company hierarchy. Underlined titles are accountabilities required by [14 CFR Part 119].

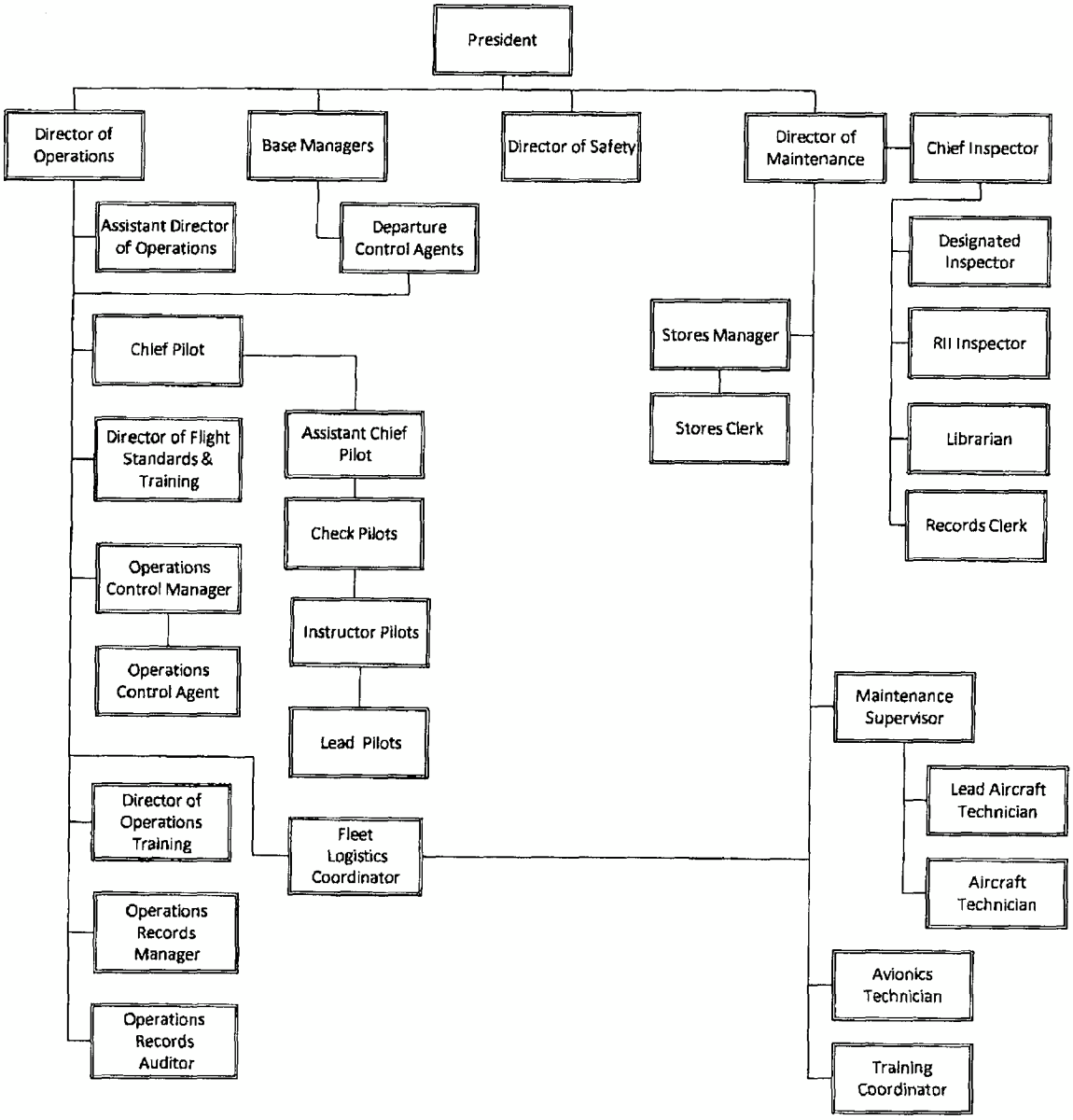
Title / Position	Name
President	Jim Hickerson
Director of Operations	Jason Wilson
Director of Safety	David Lowell
Director of Maintenance	Mike Harris
Chief Pilot	Luke Hickerson
Director of Flight Standards & Training	Ryan Stanley
Chief Inspector	Doug Deering
Asst. Director of Operations	Temporary Vacancy
Asst. Chief Pilot	William Coon
Fleet Logistics Coordinator	James Tweto

Hageland Aviation Services Inc. (EPUA) DBA: RAVN ALASKA / RAVN CONNECT

Company Management Personnel phone numbers:

President	Jim Hickerson office: [redacted]
Director of Operations	Jason Wilson [redacted]
Assistant Director of Training	Ryan Stanley [redacted]
Chief Pilot	Luke Hickerson [redacted]
Assistant Chief Pilot	Willy Coon [redacted]
Director of Maintenance	Mike Harris [redacted]
Chief Inspector	Doug Deering [redacted]
Director of Safety	David Lowell [redacted]
Operations Center Manager	Greg Tanner [redacted]

Section 3 Organizational Chart



Section 4 Chain of Command

Personnel are directly accountable to their immediate supervisor and then on through the organizational chain, ultimately ending for administrative matters with the President.

Section 5 Base Locations and Contact Information

** *For certain operations in the Anchorage-Palmer area.*

Anchorage	Dir. of Operations- Jason Wilson PO Box 220610 Anchorage, AK. 99522 4700 W. International Airport Rd Anchorage, AK. 99502 *Ravn Aviation Dispatch/Flight Locating*	Office Fax Freq. Email EMERG **
Palmer	Director of Maintenance-Mike Harris 801 Cope-Industrial Way Palmer, AK 99645	Office Fax EMERG. Email
Aniak	Base Manager- Margie Simeon PO Box 211 Aniak, AK. 99557	Office Fax Freq. Email EMERG
Barrow	Base Manager (on rotation) Brenda Sialofi / Leeza Scott PO Box 89 Barrow, AK. 99723	Office Fax Freq. Email EMERG
Bethel	Base Manager- Vance Sasinowski PO Box 2066 Bethel, AK. 99559	Office Fax Freq. Email EMERG
Deadhorse	Base Managers (on rotation) - Kelly Kadake / J. Weaver 100 Airport Way Deadhorse, AK. 99734	Office Fax Freq. Email EMERG
Fairbanks EMERG	Base Manager- Shannon Thrun 5248 Industrial Way Fairbanks, AK. 99709	Office Fax Freq. Email

Galena	Base Manager- Stephen Rockhill PO Box Galena, AK. 99741	Office Fax Freq. Email EMERG	[redacted]
Kotzebue	Base Manager- Nettie Hadley PO Box 697 Kotzebue, AK. 99752	Office Fax Freq. Email EMERG	
Nome	Base Manager- Paul Kosto PO Box 1490 Nome, AK. 99762	Office Fax MVH Email EMERG	
St. Mary's	Base Manager-William Riley PO Box 195 St. Mary's Airport St. Mary's, AK. 99658	Office Fax Freq. Email EMERG	
Unalakleet	Base Manager- James Tweto PO Box 207 Unalakleet, AK. 99684	Office Fax Freq. Email EMERG	

AFS-900 Audit Findings May 9, 2014
Hageland Aviation Services Inc.
Anchorage, Alaska

2. Introduction

The National Transportation Safety Board (NTSB) issued a Safety Recommendation A-14-22, dated May 01, 2014 to the Federal Aviation Administration (FAA) Administrator. The recommendation urges the FAA to conduct a comprehensive audit of the regulatory compliance and operational safety programs in place at operators owned by HoTH, Inc., to include an assessment of their flight operations, training, maintenance and inspection, and safety management programs, and ensure that permanent corrective action is implemented for all adverse findings. The audit team should be composed of inspectors from outside Alaska Region.

In response to a request from the AFS-1, which was based on the preliminary NTSB safety recommendation A-14-22, that an independent organization within Flight Standards, AFS-900, selected members from its Certification and Evaluation Program Office, Field Support Program office, Continual Improvement Program Office, and Special Emphasis Inspection Team to conduct an evaluation on Hageland Aviation Inc. (EPUA) 14 CFR part 135 operations. The evaluation was conducted from April 28 – May 09, 2014, at the EPUA main base of operation which is located in Anchorage and Palmer, AK. Station and aircraft ramp inspections were conducted in Anchorage, Barrow, Bethel, Deadhorse, Fairbanks, Palmer, and St Mary's. Multiple enroute inspections were also conducted on the various fleet types operated by Hageland.

The Special Focus Evaluation Team was comprised of David B Lusk, Douglas Dymock, James Wyrick, John R Toy, Mark R Trudeau, Rand Franklin, Richard Hudgens, Robin Broomfield, Ross F Demmel and William E Takala.

The purpose of the evaluation was to review key flight operations, training, maintenance and inspection, and safety management programs associated with aircraft make/model/series operated and maintained by Hageland Aviation (EPUA). The evaluation focused on compliance with Title 14 CFR parts 43, 91 & 135, as well as additional FAA related advisory guidance and requirements.

The AFS-900 team evaluation is not all-inclusive of the subject air carrier's aircraft, required aircraft records and record keeping system. It is the responsibility of the air carrier to ensure that all legal, technical and regulatory requirements are met.

3. Hageland Aviation Current Operations

The assigned Certificate Management Team (CMT) provided information shows that EPUA is currently doing business as Ravn Connect and currently operates an average of 3300 flight legs every week. They flew approximately 63,000 hours in 2013 with over 110,000 base departures in the State of Alaska. They currently operate 55 aircraft to over 100 communities daily; transporting more than 450,000 passengers, and 30 million pounds of freight and mail yearly.

EPUA currently has 12 bases of operation that includes Anchorage, Palmer, Fairbanks, Unalakleet, St Mary's, Bethel, Aniak, Galena, Nome, Kotzebue, Barrow, and Deadhorse.

Maintenance operations were observed at Palmer, Fairbanks, St Mary's, Bethel, Barrow and Nome, AK.

4. FAA Region/FSDO Actions following Nov 29, 2013 Accident

A. Issued letter to remove the individual that held the approved position of Director of Operations, and amended OpSpecs to remove night VFR operations

B. ANC FSDO commenced enhanced surveillance including special inspections of all operations

C. Withdrew initial approval of company training programs

D. Observed 2 day company-wide safety stand-down

E. AAL-230, AAL-240 and ANC FSDO conducted joint Team Focused Corrective Action Implementation Audit of EPUA

F. AAL-230 coordinated with DOT which will conduct fitness reviews of the EPUA, and the 14 CFR Part 121 operation of ERA Alaska

G. The FAA CMT for EPUA has initiated 22 EIRs in the first 6 months of FY14

5. Operator Actions – January 2014 to present

A. Brought in new Operations Management team (Director of Operations and Chief Pilot)

B. Hired new Chief Inspector and five additional Inspectors

C. Established an Operations Control Center in Palmer, AK. Staffed with certificated Dispatchers and incorporated risk assessment as part of the flight release

D. Amended OpSpecs to add 165 Night VFR routes that comply with 14 CFR parts 135.203, 135.205, and 91.155

E. Amended OpSpec to establish higher limits for SVFR operations – AMEL aircraft to Operate IFR

F. Retrained all operational control personnel to include pilots, on changes to OpSpecs and Operations Control procedures

G. Company established new Operational Control requirements and opened a new Operational Control Center (OCC) which is approved in OpSpec A008.

H. Every flight operated by Hageland Aviation was reviewed by a Flight Safety Assurance designee

I. Conducted Safety Stand Downs in all facilities

J. Employed Director of Flight Standards and assistant Chief Pilot

K. Internal Evaluation Program completed

L. Hageland Aviation began the assessment and planning process with a meeting with the Medallion Foundation on January 6. A detailed plan was developed where the company will receive its Operation Control Star, Maintenance and Ground Service Star and Internal Audit Star over the next twelve months. (Hageland Aviation received its Operational Control Star in April 2014)

M. Dual-Inspection Item (DII) program for 9 passengers or less and DII Inspector training module was submitted for acceptance by way of revision in February. (GMM revision 12)

N. Established an Operational Control Center (OCC) by January 31. All flights are risked and released by the OCC in Palmer. All personnel with delegated operational control authority work in the OCC. Hired a qualified part 121 dispatcher as OCC manager. Developed and implemented a risk assessment program with release data being collected daily for future evaluation of risk during different operational (seasonal risk) periods. Listed by name, are all persons with operational control in the GOM.

O. Hired an outside agency to conduct an independent safety audit of Operations and Maintenance. The audit process began on April 28

P. Raised SVFR minimums above regulatory and industry standards (B050) and prohibited all night SVFR operations and SVFR operation in multi-engine aircraft.

Q. Developed a Fleet Logistics Coordinator position.

6. General Aircraft Info (as of 05/09/14)

Make	Model/Series
Beech	BE-1900-C
Cessna	CE-180-H
Cessna	CE-207 / 207A
Cessna	CE-208-B
Piper	PA-31-350
REIMS-Cessna	REIMS-F406-F046

7. Manual Review

Noted: Company policy only requires the manual holder (department manager/supervisor) sign for revisions. No requirement to have covered personnel review manual for changes. Current revision is 14, published 5/1/14.

A. General Maintenance Manual (GMM)

1. GMM rev 14 released to maintenance organization without prior training.

2. No control exists within the GMM to ensure that all Hageland Aviation Service (HAS) MX-2 Non Routine forms are accounted for prior to approving an aircraft for return to service.

3. GMM pg. 4-1-29, rev12, This procedure for an Operational Check as written could lead MX to believe that an Airworthiness Release is not required until the aircraft returns from an Operational Check Flight, that is contrary to 14 CFR 135.443, for aircraft maintained under the CAMP program.

4. GMM pg. 8-7-1, rev 9, Non-Destructive Testing (NDT) Program. The NDT program does not reference the industry standard (ATA 105 or NAS 410) used to develop the NDT procedure and training program. Also, per industry standards, training requirements for NDT Inspectors are 1 year; EPUA has their training requirement set at 3 years.

5. GMM, page 4-1-33, rev 14, "Shift Turn-Over Log (MX-05) is not consistently being completed by maintenance company personnel as instructed in the GMM. Multiple cases observed that incomplete or interrupted on-going maintenance activities were not being recorded as required by GMM 9-1-18.

6. GMM parts program does not have specific procedures for parts control at the maintenance facility. Parts were observed stacked on shelves and on the floor; in various states of serviceability (tagged). Parts marked as quarantine, were not physically separated from other areas of the facility. These quarantine parts were stored on an open shelf, and easily accessible by anyone. (Ref., Order 8900.1, v6,c2,s26)

7. GMM does not have procedures to address partially completed task cards in the respective Approved Aircraft Inspection Program (AAIP). AAIP task cards are not formatted to allow an individual technician to sign-off individual steps within the task card. The cards are formatted so that one mechanic signs for the entire card (task). For extensive, multi-step tasks, this requires one mechanic to account for the work done by others who may have also accomplished steps within the task. Maintenance tracking /record keeping during shop activities observed in Palmer maintenance facility, indicates Aviation Maintenance Technicians (AMT's) rely on word of mouth or collective memories to cover in-progress maintenance tasks, (maintenance human factors).

8. During review of FAA Form 337 completed on 5/1/14 on N17GN, Cessna 207, TAT 25988.7, it was revealed that the GMM, Chapter 2.2.3 states that the Form 337 is to be submitted to the local CHDO. This contradicts the requirements contained in 14 CFR Part 43 Appendix B(3) which states copy will be sent to FAA Aircraft Registration Branch in Oklahoma City, OK.

9. Significant risk is evident in the area of Maintenance Human Factors. There is no evidence of an operator initiated maintenance human factors program.

10. Section 2-1-14, Paragraph A. The Maintenance Supervisor or Lead Aircraft Technician will determine which inspection is due in accordance with the appropriate inspection program. Currently, the Lead Technician pulls up the current Inspection in SINEX Solutions (maintenance tracking/management program). No Procedures to address the "How".

11. Section 2-1-14, paragraph C. "The person performing each inspection is responsible to use the standards and procedures of the manufacturer or EPUA. "If the two procedures conflict, Hageland's procedures will be followed." No procedures or decision tree to allow for the maintenance staff to ensure the process followed is of an approved source, i.e. Manufacturers/FAA.

12. Section 4-1-3, paragraph B (1)(a) – Aircraft Flight and Maintenance Logs (MX-01). This section states, "If additional room is needed to record corrective action, Form MX-02 should be used." Concern: How will one know if work is transferred to a Non-Routine? Recommend to establish procedures require an entry to show traceability that work was transferred to a non-routine.

13. Section 4-1-30, Materials Receiving Procedures - paragraph A. "All serial numbered aircraft components require a Receiving Inspection to assure conformity to part numbers, serial numbers, purchase orders and/or other applicable specifications.

It is unclear if this is a Palmer Maintenance Base function; or is this accomplished at all the outstations. In interviewing Inspectors at Bethel and Saint Mary's they seem confused on this process.

14. GMM Section, 2-3-1, Paragraph B (7). "Carry out a periodic review of all technical publications." Recommend define what is periodic.

15. GMM Section 4-1-5, Paragraph F., states, "Any serialized part, if replaced as part of a corrective action, must be listed on Flight Log." This policy does not seem to interface with transcribing the requirements for entries required by 14 CFR 43.9, 43.11 and 91.417 as stated in GMM Section 2-1-16. (i.e. The Aircraft Technician indicates under corrective action the A/C is being "released from Non-Routine Maintenance" with signature, License Number, Time and Date.)

B. Fuel Quality Assurance Manual (FQAM)

1. FQAM reference appendix's A, B & C are not included in the manual.

8. Maintenance Base Evaluations

A. Palmer Hangar - Stores/Parts Department

1. Observed used parts in main base upstairs store room area (Starter-Generator Mounting Pads) without identification tags as required by EPUA GMM, Maintenance Procedures, page 4-1-30, (notified Chief Inspector).

2. EPUA Parts storeroom maintenance facility (second floor) has several examples of used parts stored in the serviceable stock area, with no MX-122 Parts Control Tag attached. Parts are required to be identified per GMM, page 4-1-30, rev 14.

3. Both serviceable & unserviceable parts were observed in EPUA avionics repair area without MX-122 parts control tags attached.

4. No evidence of electro-static discharge (ESD) protective device available in avionics area. An ESD device is required for handling electrostatic identified components IAW Cessna 208 MM, Ch. 20-00.

5. No part and/or serial numbers on passenger seat dress covers located in the Palmer Hangar interior shop. Unable to confirm required flame resistant requirements of 14CFR Part 23, to determine traceability to the supplied Burn Certification documents. Ref. 14CFR 23.853 (a).

A. Bethel Hangar - Stores/Parts Department

Note: The following are serviceable and/or unserviceable parts that are improperly tagged and/or not properly segregated.

1. Cabin Vent Tube, P/N 0431163-18 vent-tube for CE-207 aircraft located on serviceable shelf with an unserviceable tag attached. Parts not segregated. Ref 8900.1, V6, C2, S26.

2. Bearings P/N 1-A4050 or 0442006-11 (4ea) no 8130-3 or EPUA tag to identify, condition of part or status.

3. Throttle Cable Assy, P/N 0510105-204, no form 8130-3, or EPUA tag to identify, condition of part or status.

4. Trim Change Chain, P/N 0432138. No 8130-3, no form 8130-3, or EPUA tag to identify, condition of part or status.

5. Numerous parts located in cardboard boxes did not have any form of identification (tags). Conditions of part(s) are unknown. Ref. GMM 4-1-30.

6. One Concorde battery was past serviceable date and was sitting on the battery maintenance bench. This part was not identified with a MX-122 tag to identify the condition or serviceability of the battery. Items were brought to the attention of DOM, Mike Harris for corrective action.

7. A Gill battery also sitting on battery maintenance bench, found boiling over with acid leaking out of vent plugs. Maintenance put rag over battery to keep acid from splattering. Items were brought to the attention of DOM, Mike Harris for corrective action.

B. Fairbanks Hangar - Stores/Parts Department

1. Unserviceable GCU, p/n-51538-001A, s/n-95224, was restocked in serviceable parts area.

2. Flap Motor p/n-475-208, s/n-4996, Serviceable Tag from Frontier Flying Service identified this component as overhauled and serviceable. This unit was never received by Hageland with supporting documentation to validate the Overhaul tag. This is contrary to 14 CFR 43.2.

3. Used elevator torque tube assembly was identified as serviceable. This part was returned to service by a technician who failed to complete the signature portion of the tag per the GMM procedures.

4. Used Pitot Tube p/n-856MG1, s/n-123080, identified as serviceable. This part was purchased from a parts broker without substantiating records.

5. Paint locker has numerous cans of expired paint.

6. Assortment of loose sheet metal in shop area not identified and status unknown.

Note: A spot check was performed 05/01 and 05/02 on Piper PA-31-350, N3536B SN# 31-7952205 which was in for the AAIP Event #1. The record keeping on this Piper PA-31 is very comprehensive with 19 pages of concise records of Aircraft and Part Times, AD's and Inspections completed and due.

The Supervisor and mechanics on both day and night shifts that were interviewed are knowledgeable and forthcoming. The Night Shift lead was very helpful and knowledgeable and answered questions about the PA-31 as well as the BE-1900 that were in for inspection and repair. All questions and queries were answered without equivocation.

9. Minimum Equipment List (MEL)

MEL for BE-1900C Rev. 3, 08/03/13, Incorporates MMEL BEECH MODEL 1900C, Revision 10 Dated: 03/31/2003:

A. All number installed columns require the actual number representative of their fleet. If their fleet has a varying number installed then there must be a means of identifying aircraft (such as "N" number).

B. These items are less restrictive than the MMEL, either by repair categories, repair times, no (M)/(O), or Proviso requirements.

- 22-1 missing required MMEL Proviso
- 25-2 "C" in MMEL, "D" in MEL, There is no (O), and "1" required makes no sense
- 25-2-01 Seat must be "secured" in upright position, which would render it immovable
- 25-3-01 MMEL has "C", which is 10 calendar days; MEL has "A" and 90 days relief "As required by FAR" may not be in an MEL unless specific CFR requirements are listed. Also Provisos are creative but all wrong
- 30-14 Item is not in the MMEL
- 34-11 "A" in MMEL and "C" in MEL. Also missing required Proviso from MMEL
- 35-1 Proviso does not comply with CFR 135.157 or (for Part 91 operations), 91.211

C. The following ITEMS are missing required MMEL Provisos (The MEL has the language incorporated into (M)(O) procedures, which is contrary to the MMEL/MEL PREAMBLE, and MMEL Policy Letters).

- 21-4
- 21-8
- 21-9
- 32-4
- 37-2 (second set of relief)

A. EPUA MEL indicates several areas where the MEL appears less restrictive than the MMEL. The following areas are:

- 22-10-02 Yaw Damper
- 22-10-03-01 Auto Pilot/Trim Disconnect
- 23-00-01 Communication System, Marine VHF listed in MEL with no corresponding remarks. No listing in MMEL. Further review of this item revealed no substantiating data to support installation of this component on EPUA aircraft.
- 27-50-01 Flap Position Indication
- 27-50-02 Primary Flap System
- 28-41-02 Fuel Low Level Indication System
- 28-41-03 not listed in MMEL, however listed in EPUA MEL, Fuel Flow Indicator

10. Weight & Balance

1. N1153C has a load schedule that is used as a checklist to ensure each cargo bay does not exceed max weight. This form is not part of EPUA's manual system.

2. N1553C, in for phase 3 inspection. Cargo floor panel weight was labeled as #1-41 lbs., #2-42 lbs., #3- 39 lbs. Equipment list the company uses for weight and balance information list each panel as #1-26 lbs., #2-26 lbs., #3-36 lbs.

- N1153C cargo floor boards were weighed and found weight was same as placarded. This weight is 34 lbs more than weights in equipment list. This additional unaccounted for weight may have caused numerous flights to exceed max takeoff weight.

11. Operation Base Evaluation

NOTE: Enroute inspections revealed no issues with actual in flight operations. All issues listed are in the area of station ground operations.

A. Palmer - Station Observation Overview

1. On or about February 20, 2014 Hageland Aviation began utilizing an operational control system patterned after Part 121 dispatch systems. Prior to this centralization of operational systems, pilots at the 10 outstations made operational control decisions (go/no go) based on local information available and in conjunction with a "station manager". This resulted in a variable standard for initiating flights based on local needs and pressures. After several accidents and incidents, the company restructured and centralized the operational control system by creating an Operations Control Center in Palmer, AK.

2. The center is operational from 0600 to 2100 or later if aircraft are operating. It is staffed by 8 employees. Three are certificated dispatchers and 2 are pilots. There is a person with responsibility and authority to manage the center. He is a certificated dispatcher. All have completed a documented training program consisting of 8 hours of instruction. In addition 16 hours of OJT are required for company pilots that may work in the center. Forty hours of OJT are required for new hires. There is an annual recurrent requirement.

3. The center provides weather information from several sources including the use of live cameras at village airports that they serve. Aircraft inspection and maintenance status information is available to the "Operations Control Agents" that staff the center. The agent has access to flight and duty time status, medical status, and check ride status via a computerized system. Prior to each flight the pilot calls the OCC where his/her qualifications are verified and weather information is discussed. The key to the system is the use of a Risk Assessment Card which must be used to determine the level of risk associated with the flight. This card was in use prior to the establishment of the OCC, but was not used properly. Prior to the OCC, the pilot simply talked to the Station Manager and there was no tracking of the level of risk for each flight. Now the card's proper use is mandatory by OpSpec A008 and the level of risk for each flight is tracked.

4. All flights are tracked live by use of ADS-B, Spider Tracks, and TAMDAR as appropriate.

5. Use of the Risk Assessment Card and the entire release procedure was observed for approximately 15 flights. All procedures were followed which resulted in the delay or cancellation of 4 flights.

6. It should be noted that the carrier has increased their Special VFR minimums 500' to a 600' ceiling and from 1 mile to 2 miles visibility. Also, all night VFR routes have been documented. Both the increase in SVFR minimums and the night VFR routes are required by OpSpec paragraph B050. No multi-engine SVFR is allowed. In addition, any use of SVFR for the C-208 must be cleared by the Chief Pilot or Director of Operations.

7. The Approved Training Program was reviewed however there was no scheduled training to observe. The Training Program design meets all the requirements of 14 CFR part 135, but only the minimum for approval.

B. Anchorage – Station/Flight Observation

1. Flight 6610- Cargo only. Various small boxes (cargo) were not covered by netting. Some straps were not properly attached, along with some straps being twisted and tied in knots. Corrected on the spot by the PIC. (Ref., GOM 5.2.2)

C. Bethel - Station/Flight Observation

1. N92JJ, observed refueling vendor, Delta Western, did not chock wheels as required by Hageland General Operations Manual (GOM), Chapter 5.1.5 B.

2. Requested daily fuel inspection records from Vance Sasinowski, Base Manager. He stated he did not have them and would have the vendor send a copy over. Per the Hageland GOM Section 5-1-2, Section 2, C. requires the Base Manager to have daily fuel inspection records readily available from mobile fuel tanker.

 Enroute Inspections completed as follows:

- 5-2-14

Bethel - Russian Mission

Russian Mission - Bethel,

Bethel - Toksook Bay,

Toksook Bay - Bethel.

- 5-5-14

Bethel - Chevak-Bethel

Bethel - Quinahagak-Bethel

- 5-6-14

Bethel - Hooper Bay-Bethel

D. Fairbanks – Station/Flight Observation

 Enroute Inspections completed - All flights were on aircraft N815GV, BE-1900C.

- 5-5-14

Fairbanks - Barter Island,

Barter Island - Deadhorse.

Deadhorse - Barter Island

Barter Island - Fairbanks.

 Following observed during enroute:

1. The company personal electronics policy (none allowed) was not enforced on any flights.

2. Station personnel did not follow GOM procedures regarding the chocking of aircraft during passenger loading and unloading.

3. Contract fuelers did not chock airplanes while fueling.

4. Daily fuel audit records were not available as required by the GOM.

5. A table of unknown origin was used to select the weight and balance data for basic operating weight and given payload. This data had been extrapolated by a company pilot and placed in the tabular format as a shortcut from the "See-Gee" calculator provided for the aircraft. The table was taped to the inside cover of the Aircraft Log "Can". This undocumented form is being used throughout the system.

6. 5-5-2014, Flight 3500, Fairbanks-Barter Island: Encountered icing that was not totally removed by the onboard aircraft deicing system. On the ground the PIC used a hand held sprayer system to spray deice fluid on the leading edges of the propeller and the propeller spinner. In some areas he used a

plastic card to remove ice. The GOM does not have clear and detailed procedures for the removal of ice prior to departure. There is however a detailed procedure for each type aircraft for the 5 minute pre-departure contamination checks.

7. 5-02-2014, Flight# 3190, Bethel-Russian Mission: A table of unknown origin was used to select the weight and balance data for basic operating weight and given payload. This data had been derived from a company pilot and placed in the tabular format as a shortcut from the "See-Gee" calculator provided for the aircraft. The table was taped to the inside cover of the Aircraft Log "Can". This form is undocumented in the EPUA manual.

E. Barrow – Station/Flight Observation

1. Barrow base fuel truck - main fuel filter was date: 18 Jan, 2013. No document provided to support the annual filter change requirement, per the Hageland GOM 5.1.2 Fuel Quality Assurance Manual (FQAM 6.4.0). Base Manager notified.

2. Fuel Filter Change Report/Record tracks annual changes and showed replacements for 2010, 2011, 2012, and 18 Jan 2013. No records found for 2014.

3. Jet fuel truck was leaking fuel while this inspection was taking place. This leak was noted from the nozzle to hose connection. About a cup of fuel leaked out at this time. Not following FQAM 8.1.0 regarding leak checks. Base manager notified.

4. Barrow Station Manager did not have a copy of the FQAM, nor did she have knowledge this manual existed.

5. Hydraulic Fluid comes from unknown source in a plan white one gallon can marked with "Mil-H-5606" and dated 1-24-2014.

6. Several sealant tubes were found past there expiration dates. These items were removed on the spot. Mechanic was unaware these sealants did have expiration dates. (i.e. 732 sealant 6/30/2012)

F. Nome - Station/Flight Operations

☐ Enroute Inspections Completed

- 5-6-14

Nome - Gambell (St Lawrence Island)

Gambell - Savoonga (St. Lawrence Island)

Savoonga - Nome.

8. No issues.

12. Aircraft Records

1. EPUA uses a total time correction sheet that has the actual airframe time listed on it. They use it to make correction on the aircraft log pages and aircraft records. These correction sheets have no procedure on how EPUA keeps them current. Also, no procedure on how this sheet is to be used when a Hobbs meter is replaced.

2. Review of aircraft records on N1242Y, N92JJ (log page 217992) and N575Z noted that after the performance of maintenance that required replacement of general hardware, switches, etc., this work is not being recorded. This is required per 14 CFR 135.411(a)(1) that references parts 43 and 91 which directs you to sections contained in 43.9 (a)(b)(c) and (d), and 14 CFR 43.11 (a) and 91.417 (a) (1) and GMM, Section 4-1-3, B(1).

3. N815GV contained a discrepancy dated 3/29/14 replacing the marine radio p/n IC-M204. The installed radio s/n-0233564 was repaired without any supporting data. This is addressed in Notice 8900.16 paragraph 8-10; it requires the installer to determine the radio does not interfere with the safe operation of the aircraft. This statement is not indicated when discrepancy is returned to service.

13. Aircraft Discrepancies

A. Aircraft Inspection – Palmer

- N208SD, Specific to Phase inspection and engine module maintenance in progress, paperwork for engine inspection/tests, and subsequent non-routines, did not reflect the current status of maintenance being performed.

1. N208SD, C208, Operational check initialed on CEScom check sheet, but not signed off on Phase Inspection non-routine sheet. (Per shift lead, technician completed the check, but did not complete sign off).

2. N208SD (Phase Inspection) Log page 186207, non-routine number 105: L/H fwd. I/B flap bell crank corroded & cracked. This discrepancy is also mentioned in shift turn over log on 5/2/14. No annotation of the level of corrosion (1, 2 or 3) noted as required by C208 AAIP, page 1-1-9, rev. orig, 05/15/08. Level 2 or 3 corrosion is required to be reported per Cessna CPCP and Cessna MM Ch. 5-30

3. Bendix/King KAP 100/ KAP 150/ KFC 150 Flight Control System for Cessna Models 208, 208A & 208B has requirements for inflight checks and adjustments, "....any time there has been a major system rework or airplane wiring change". The Hageland GMM, rev. 14, page 4.1.29, "Operational Check Flight", requires a check flight: "anytime the aircraft has been maintained, rebuilt or altered in a manner that may have appreciably changed its flight characteristics or substantially affected its operation in flight".

- The following will require an Operation Check Flight: 1) Engine change, 2) Prop change, 3) Primary flight control change or rigging thereof. A review of aircraft records for N208SD, C-208 indicates several instances of autopilot system discrepancies (Bendix/King Flight Control System) that were deferred, then cleared through corrective action, given an approval for return to service, then written up for an operational flight check.

- In discussion with the Chief Inspector, there is no repeatable standard in place to define when an operational check of the autopilot system is required. Notwithstanding the vague guidance per the Honeywell Installation manual, it is left up to the individual discretion of the AMT, as to what, if any operational/flight check is required after system maintenance. The EPUA GMM Operation Check Flight procedures do not address any criteria for in-flight checks of the autopilot system after maintenance.

B. Aircraft Inspection - Bethel

1. N6270H, ramp inspection revealed AW certificate torn and missing center section. Compass Card unreadable, several placards unreadable. Maintenance Supervisor was notified to take corrective action.

2. N1275N, ramp inspection, Cessna 207 revealed Compass Card unreadable, and sealant above windshield corroded. Maintenance Supervisor was notified to take corrective action.

3. The following logbook pages did not comply with the GMM, Section 4-1-3, B.

- N861FT, Reims 406, Log page 239283, dated 4/24/14, item 1, missing aircraft total time and P/N,

- N861FT, Reims 406, Log page 239289, dated 4/30/14, item(s) 1, 2 and 3, missing P/N's, missing aircraft total time, and dates.

- N23CF Cessna 207, Log page 217891, dated 4/19/14, item 1 missing date and time.

- N23CF Cessna 207 Log page 217897. Date 4/25/14, Item 1, missing acceptable reference, date and time.

4. N6270H returned to base with an inoperative Vacuum Pump. A new Vacuum Pump was borrowed from another operator (YUTE Air). New part was acquired that was approved for use under a Parts Manufacturer Approval (PMA), and has a 1200 hour life-limit. Observation identified that the receiving inspection process was unclear and the Inspector circumvented the new process as contained in GMM Section 4-1-32 (new revision 14) that was published 5/1/14. The Inspector was not trained to the new process in the GMM that was published 5/1/14.

C. Aircraft Inspection - Fairbanks

1. N815GV - FAA discrepancies (various pax seats had inoperative seat locks) provided to lead mechanic in FAI on 5/2/2014. A follow up found these discrepancies were not documented or addressed by EPUA. In this condition seat backs could not be locked in upright position for takeoff. This was contrary to EPUA GMM 2-1-16. Notified maintenance base lead mechanic.

2. N1553C, log page 242477 had a discrepancy (RH attitude Gyro R&R). Returned to service without a description of the worked performed. This issue is prevalent throughout EPUA's records. This practice is contrary to GMM 2-1-16 and FAR 43.9.

3. BE-1900 N815GV SN#UC-78

- Left prop has fiber showing on trailing edge of several blades and large spot on leading outer edge of blades SN#6774A & SN# 6043B. Discrepancy was signed off as repaired in accordance with (I/A/W) the Hartzell Repair Manual.

- Left prop has pitting/rock strikes on all blades. Discrepancy was signed off as repaired I/A/W the Hartzell Repair Manual.

- Right prop has pitting/rock strikes on all blades some filled with "bondo" (super glue repair). Discrepancy was signed off as repaired I/A/W the Hartzell Repair Manual.

- Right prop has fiber showing on trailing edge of several blades. One spot half inch long quarter inch wide near the blade tip on SN# 6681B. Very deep scratch with fiber showing on prop SN# 6688B. Was signed off repaired I/A/W with the Hartzell Repair Manual.

Note: Further research by company revealed that repairs made to propeller assembly could have been major by definition. Per Hartzell manual 135F 61-13-35 classifies unidirectional material in the propeller is visible it is a major repair. Company elected to R & R propeller assembly.

D. Aircraft Inspection - Barrow

1. During ramp inspection of N575Z Beech BE-1900-C was missing various placards and compass correction card. These items were corrected on the spot and the compass correction was faxed in from Palmer.

14. Evaluation Summary

The Hageland Aviation management and employees were very cooperative and supportive to the AFS-900 team during this evaluation. The cooperation and support of the ANC-FSDO-03 Management staff and assigned Principal Inspector team assured the expeditious completion of the aircraft and records evolution through their continued support. During the course of this evaluation the PIs were informed of the items listed in this report.

15. Status of System Safety at Hageland Aviation

History

Prior to January 2014 Hageland Aviation operated as a traditional 14CFR part 135 carrier with On-Demand and Commuter authority. The company philosophy was to maintain compliance, but only to the minimum level. This attitude was demonstrated when the company's response to comments made by the Principal Inspectors was typically, "Where is that required by regulation?", as reported by those Principals. The apparent assumption on the part of company was that simply complying with the regulations offered an acceptable level risk. That assumption may have been a contributing factor to 2 fatal accidents in a 5 month period.

After those 2 fatal accidents and discussions with the Certificate Management Team, the company began to develop a policies and procedures that indicated a philosophical change in their decision making processes. The company made many changes to the level and quality of staff and incorporated a 14 CFR part 121 style Operations Control Center, as an example. These significant changes are discussed in the body of this report in detail.

Current Level of System Safety

The company has implemented system safety principles to a degree that has positively impacted flight operations. All flights are now "released" on a risk based decision process using a Risk Assessment Card for each departure. The PIC must contact the Operations Control Center and, after pilot qualifications, aircraft airworthiness, and weather are discussed, a joint decision is made regarding the canceling, delaying, or continuation of the flight.

There is clear responsibility and authority assigned for the operation of the Control Center. The Director of Operations has ultimate responsibility which can be delegated to the Manager of the Control Center.

This process meets the criteria for 3 of the safety attributes. There is a procedure that is clear, there are controls, and there is a person with responsibility. There are no process measurements and interfaces are not defined.

While this process meets criteria for 3 of the safety attributes, it is by happenstance not by knowledge of system safety. In a discussion with the Director of Operations (DO) regarding the Operations Control Center, it was revealed that the company is developing an Internal Evaluation Program (IEP) with regard to flight operations. When asked how it would work, he stated that the company is tracking the risk level that is determined for each flight and the weather at the time of departure. That information would be reviewed to see how the program is working. When asked questions about who would do the review, when would it be done, how would it be determined that changes needed to be made, and would those changes be evaluated after implementation, the Director had not considered any of those questions simply because he had no knowledge of system safety principles. When system safety was described to the DO at the lowest level in general terms, he wanted more information and realized that the IEP he was developing would be of limited value without utilizing the concept of system safety.

With regard to maintenance operations, there is no definable level of system safety being employed. Many procedures are not clearly written. Controls, where utilized, are not always followed. Responsibility and authority are not clearly defined in several areas. There is currently no documented audit procedure, with the exception of a CASS Program for the Beech 1900s.

Conclusion

Hageland Aviation has an evolving safety culture. Based on the actions the company has taken, a decision to develop a more robust safety culture has been made, but company personnel lack the training and knowledge to do so effectively. With the assistance of an organization that is qualified to train and implement system safety principles, the company could develop a safety culture that is promoted by training, combined with a safety assurance system and true risk management. The use of an outside organization will allow company Managers to continue to provide oversight to their respective departments, which is vital to continued safe operations. The size, scope, and areas of operations by Hageland, places them in a relatively unique position within the 14 CFR part 135 world. All of those considerations should lead to an effort that encourages full implementation of system safety. It appears that Hageland Management would be open to such an effort. However, there will be a need for continued oversight and guidance by the CMT to ensure that expectations are met.

General Discussion

When a carrier uses only compliance with 14 CFR part 135, especially as it relates to a "9 or less" operation, as their standard for providing safety to the traveling public the question can be asked if that standard meets Title 49 Section 44702 which states "it is the duty of an air carrier to provide service with the highest possible degree of safety in the public interest". Regulations provide minimums; system safety provides standards of success that are measureable in terms of how well factors that influence the severity or likelihood of injurious or loss-producing events are eliminated or controlled. There is a vast difference between using compliance as a standard and using system safety when making appropriate risk based decisions.

Hageland Aviation management personnel have demonstrated, through their actions, which if provided with information and training in system safety principles they would be open to an effort to implement those principles. One might believe that statement to be true for many other 14 CFR part 135 carriers. While 14 CFR part 135 regulations may be made more restrictive and create higher standards of compliance, those standards will not provide the level of safety that is provided by the implementation of system safety principle s.