



**Maritime Helicopters**

# CASS

Continued Airworthiness Surveillance System

June. 2017

Meeting minutes

# CASS Meeting

|          |         |     |
|----------|---------|-----|
| 06/08/17 | 10:00AM | MTF |
|----------|---------|-----|

|                          |                                                               |
|--------------------------|---------------------------------------------------------------|
| <b>MEETING CALLED BY</b> | Isaac Mackey – Fairbanks lead                                 |
| <b>TYPE OF MEETING</b>   | Monthly CASS meeting                                          |
| <b>FACILITATOR</b>       | Isaac Mackey – Fairbanks lead                                 |
| <b>ATTENDEES</b>         | Dave Jones, Dennis Busch, Steve Slade, Bob Fell, Isaac Mackey |

## Agenda Topics

1. Discuss old open action items
2. Review system reliability report trends
3. Review SDR,MIR,MDR reports
4. Review ASR,GOR reports
5. Review CAN's / CAS memos
6. Review tear down reports
7. Review Manufacture bulletins and AD's
8. Review notable items since last CASS meeting
9. Review AOG items
10. Discuss new open action items
11. Discuss recent audit findings
12. Review suggestions for next year's maintenance training
13. Other items
14. Schedule next meeting

| OLD OPEN ACTION ITEMS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | INITIATED BY | RESPONSIBLE PERSON                     | DEADLINE | CLOSED |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------------------|----------|--------|
| <p>Add tracking system for new hire training and recurring requirements.<br/> Copy of the following;<br/> Resume<br/> Driver license<br/> A&amp;P<br/> IA<br/> Any Manufactures training records and MHI forms;<br/> Summary of Employment MHI 016<br/> Training verification form MHI TR0005 ( for initial training) i.e.<br/> facilities, jobsite specifics, and company standards<br/> Should be able to track their MHI online 135 &amp; 145 training process<br/> and be able to check off when completed<br/> Fire extinguisher training<br/> Copy of MHI Employee handbook received<br/> Drug test result verification<br/> <b>Sept 22<sup>nd</sup> CASS Meeting extended deadline to 11/10</b><br/><br/> <b>Nov 10<sup>th</sup> CASS Meeting extended deadline to 12/22</b><br/><br/> <b>Jan 26<sup>th</sup> CASS Meeting extended deadline to 02/28</b><br/><br/> <b>02/28/17</b><br/> In the process of uploading information to the MHI portal for easier access.<br/><br/> <b>Feb 28<sup>th</sup> CASS Meeting extended deadline to 03/23</b><br/><br/> <b>04/13/17</b> training matrix created.<br/><br/> <b>April 13<sup>th</sup> CASS Meeting extended deadline to 06/15</b><br/><br/> <b>June 8<sup>th</sup> CASS Meeting</b><br/><br/> Discussed the tracking in BamboHR. Bret and Dennis to follow-up.</p> |              | <p>Brent Estep</p> <p>Dennis Busch</p> | 06/15    |        |

| OLD OPEN ACTION ITEMS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | INITIATED BY | RESPONSIBLE PERSON | DEADLINE | CLOSED |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------------|----------|--------|
| <p><b>01/26/17</b><br/>Akutan fuel truck. The truck needs new fuel filters for the aircraft fuel. The differential pressure gauge is inoperative and out of calibration.</p> <p><b>02/28/17</b><br/>The filters have been ordered and are a few weeks out on delivery. The differential pressure gauge is also on order.</p> <p><b>Feb 28<sup>th</sup> CASS Meeting extended deadline to 03/23</b></p> <p><b>April 13<sup>th</sup> CASS Meeting extended deadline 5/25</b></p> <p><b>04/13/17</b><br/>Brent to follow up with Larry Ally on differential pressure gauge and replacement filters being shipped to Akutan</p> <p>June 8<sup>th</sup> CASS meeting. Email sent to on site mechanic. Brent to follow-up and ensure this is closed.</p> |              | Brent Estep        | 06/15    |        |

|                                  |
|----------------------------------|
| System reliability report trends |
| N/A                              |

| Notable A/C items since last CASS meeting |                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                           |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Item                                      | Notes or Preventable measures to prevent this from occurring again.                                                                                                                                                                                                                                                                                                                                                                                                          | Move to open action items |
| Fuel Leak                                 | <p><b>N407PA 04/16/17 ACTT</b></p> <p>Fuel Switch and boost pumps were turned on for fuel sampling at the fuel filter. Pilot immediately noticed fuel leak to the engine deck from the line between the aircraft fuel filter and the HMU. Maintenance notified.</p> <p>Maintenance confirmed fuel leak. Had to replace line with a serviceable one. Issued CAN -17-03 to inspect the other B407s in the fleet for fuel lines being abraded by the cowling support struts</p> | Closed                    |
| Pitot Static Leak                         | <p><b>N314MH 05/01/17 ACTT 9605.1</b></p> <p>Static line cracked at L/H static port. Replace line and returned aircraft to service.</p>                                                                                                                                                                                                                                                                                                                                      | Closed                    |
| Sky Connect                               | <p><b>N308MH 05/15/17 ACTT 4752.2</b></p> <p>Sky Connect Dial/Annunciator Panel inop. Upon troubleshooting found broken ground wire. Repaired Sky Connect Dial/Annunciator Ground wire Sky10A22N IAW BHT-Elec-SPM Ch. 5. Aircraft returned to service.</p>                                                                                                                                                                                                                   | Closed                    |

| Notable A/C items since last CASS meeting          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                           |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Item                                               | Notes or Preventable measures to prevent this from occurring again.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Move to open action items |
| Float Bottle Leak                                  | <p><b>N309MH 05/16/16</b></p> <p>Mechanic on the floor in Homer noticed that the float system was leaking and both float bottle pressure gauges were low. Further investigation showed that the float bottle valves were only hand-tight. The System had been installed at Fairbanks.</p> <p>New O-rings were installed and the valves were tightened, then the system service with no faults. Several phone calls from Fairbanks to Homer hopefully clarified this procedure for the future.</p>                                                                                                                  | Closed                    |
| Transmission chip light                            | <p><b>N407RH 05/18/17 ACTT 6451.2</b></p> <p>Transmission chip light illuminated in flight. Checked and changed chip plugs, shavings found on lower plug. Drained oil replaced filter, reserved oil 20min penalty run with no chips. Returned to service.</p> <p><b>05/19/17 ACTT 6455.3</b></p> <p>Transmission Chip light illuminated in flight. Replaced main transmission with overhauled transmission. Aircraft returned to service.</p> <p>This transmission removed had 2000hrs accumulated. The overhaul cycle is 4500hrs. The transmission was sent to Able and we are waiting for a teardown report.</p> | Open                      |
| #2 Engine will not start in automatic mode         | <p><b>N328MH 05/26/17 ACTT 6390.3</b></p> <p>#2 engine failed to start in automatic mode. Removed and replaced the #2 AFCU. Ops check good.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Closed                    |
| #1 and #2 starter generators will not come online. | <p><b>N328MH 05/26/17 ACTT 6390.3</b></p> <p>Started the aircraft for the post maintenance ground runs and found that the #1 generator would not come online. Swapped Starter/Generator units and the problem stayed on the #1 system. Swapped GCU's and both generators failed to come online. Found a bad shield on the A pin to the #1 starter. Repaired the wire and replaced the #1 GCU. The #1 system worked. Replaced the #2 GCU and the 2 system worked.</p> <p>During the course of troubleshooting both GCU's were damaged by the bad shield on the A wire off the starter.</p>                          | Closed                    |

| Notable A/C items since last CASS meeting |                                                                                                                                                                                                                                                                                                                                                                                                                                         |                           |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Item                                      | Notes or Preventable measures to prevent this from occurring again.                                                                                                                                                                                                                                                                                                                                                                     | Move to open action items |
| FADEC degrade light (FIR)                 | <b>N309MH 04/11/17 ACTT</b><br><br>After engine start FADEC Degrade” light illuminated. Performed troubleshooting. FADEC “IgnIFLT” fault. Cleared fault; verified ignitor operation. Removed and replaced spark ignitor with new. Aircraft returned to service.                                                                                                                                                                         | Closed                    |
|                                           | <b>N309MH 04/12/17 ACTT</b><br>After engine start FADEC Degrade” light illuminated. Performed troubleshooting. FADEC “IgnIFLT” fault. Cleared fault and replaced FADEC Start relay (1K3). Performed 2 ground runs, no defects noted. Aircraft returned to service.<br><br>Closed at the June 8 <sup>th</sup>                                                                                                                            |                           |
| FADEC Fault (FIR)                         | <b>N407PA 4/11/17 ACTT 7458.0</b><br><br>Aircraft was on a 135 check ride and got the “FADEC fault”, “start fault”, “FADEC degraded” lights. Channel 1 failure switch to revisionary governor. Aircraft landed and would not go to Idle. Throttle was shut off to kill the engine and the “FADEC Fail” light illumined. Performed FADEC troubleshooting IAW Goodrich F/M Task 73-20-103 and replaced ECU. Aircraft returned to service. | Open                      |

|                                                       |
|-------------------------------------------------------|
| SDR,MIR,MDR, not listed on the notable A/C items list |
| None                                                  |

|                                                                   |
|-------------------------------------------------------------------|
| GOR, FIR, HAZARD REPORTS not listed on the notable A/C items list |
|                                                                   |
|                                                                   |
|                                                                   |

|                                                          |
|----------------------------------------------------------|
| CANS, CAS MEMOS not listed on the notable A/C items list |
| CAN-17-03 Fuel Line leak                                 |
|                                                          |
|                                                          |

| Tear down reports      |                |                          |
|------------------------|----------------|--------------------------|
| Aircraft and item name | Reason removed | Tear down report finding |
| None                   |                |                          |

| Recent AD's and manufactures bulletins not listed above |          |             |
|---------------------------------------------------------|----------|-------------|
| Number                                                  | Aircraft | Description |
| None                                                    |          |             |

| Other Notable Non A/C items since last CASS meeting |       |                           |
|-----------------------------------------------------|-------|---------------------------|
| Item                                                | Notes | Move to open action items |
|                                                     |       |                           |

| AOG's for 2017 |                                                                                 |
|----------------|---------------------------------------------------------------------------------|
| 1.             | N407RH – 02/14/17 – GRB - FADEC Degrade light, replaced gearbox monopole pickup |
| 2.             | N309MH – 04/19/17 – Wittier – FADEC Degrade Light, replaced HMU                 |
| 3.             | N314MH – 05/01/17 – PS5 – Pitot/Static leak, replaced L/H static line to port.  |
| 4.             | N407RH – 05/18/17 – GRB – Transmission chip light.                              |
| 5.             | N407RH – 05/19/17 – GRB - Transmission chip light, replaced transmission        |
| 6.             | N407RH – 06/07/17 – GRB – FADEC Degrade light, igniter                          |
| 7.             |                                                                                 |

| AOG's for 2017 by Location |   |
|----------------------------|---|
| PS4                        |   |
| PS5                        | 1 |
| MTF                        | 1 |
| GRB                        | 4 |
| VDZ                        |   |
| HOM                        |   |
| Kodiak                     |   |
| Akutan                     |   |
| Nikiski                    |   |
| Deadhorse                  |   |

| NEW OPEN ACTION ITEMS | INITIATED BY | RESPONSIBLE PERSON | DEADLINE | CLOSED |
|-----------------------|--------------|--------------------|----------|--------|
|                       |              |                    |          |        |

| Recent audit maintenance findings |                   |
|-----------------------------------|-------------------|
| Finding                           | Corrective action |
|                                   |                   |

| Suggested maintenance training for next year |  |
|----------------------------------------------|--|
| Bell 407 factory training                    |  |
| RR250 factory training / Airborne Engines    |  |

|                                 |          |
|---------------------------------|----------|
| Next CASS meeting scheduled for | 07/27/17 |
|---------------------------------|----------|