



Maritime Helicopters

CASS

Continued Airworthiness Surveillance System

Nov. 2017

Meeting minutes

CASS Meeting

11/29/17	10:00AM	MTF
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MEETING CALLED BY	Isaac Mackey – Fairbanks lead
TYPE OF MEETING	Monthly CASS meeting
FACILITATOR	Isaac Mackey – Fairbanks lead
ATTENDEES	Bob Fell, Dave Jones, Steve Slade, Brent Estep, Dave Busga, 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
Add tracking system for new hire training and recurring requirements. Copy of the following; Resume Driver license A&P IA Any Manufactures training records and MHI forms; Summary of Employment MHI 016 Training verification form MHI TR0005 (for initial training) i.e. facilities, jobsite specifics, and company standards Should be able to track their MHI online 135 & 145 training process and be able to check off when completed Fire extinguisher training Copy of MHI Employee handbook received Drug test result verification Sept 22nd CASS Meeting extended deadline to 11/10 Nov 10th CASS Meeting extended deadline to 12/22 Jan 26th CASS Meeting extended deadline to 02/28 02/28/17 In the process of uploading information to the MHI portal for easier access. Feb 28th CASS Meeting extended deadline to 03/23 04/13/17 training matrix created. April 13th CASS Meeting extended deadline to 06/15 June 8th CASS Meeting Discussed the tracking in BamboHR. Brent and Dennis to follow-up. Aug 29th CASS Meeting extended deadline to 09/30		Brent Estep Dennis Busch Steve Slade	09/30	
N316MH 06/17/17 ACTT 3225.7 On the last flight of the day returning to Deadhorse the customer in the aft left hand allowed his wader strap to get caught in the door. The sound if the strap hitting the side of the aircraft was heard in flight. After landing the aircraft was inspected and damage was identified on the lower left fuselage aft of the passenger door. Bell PSE approved a repair and parts are ordered. The repair will take place during the 12 month inspection of the aircraft.	Isaac Mackey			

OLD OPEN ACTION ITEMS	INITIATED BY	RESPONSIBLE PERSON	DEADLINE	CLOSED
N328MH 07/19/17 ACTT 6446.8 The aircraft departed from WSS18 9 (Exxon Field site) enroute to Deadhorse. While enroute, the number 1 engine chip light illuminated. All other systems remained normal. Crew executed the emergency procedure per the checklist. Aircraft was safely landed at Deadhorse. Mechanic removed and inspected both Chip Detectors. Found slivers of metal on the aft chip detector that measured 1/4" in length. Mechanic cleaned chip detector and reinstalled them. A ten minute ground run was performed. When the #1 Engine was placed back to idle, the chip detector illuminated the caution light again. Upon checking the detectors again, there were more chips on the aft detector (metal) and nothing on the forward detector. Mechanic performed drain and flush of the #1 engine oil and inspected the filter (the filter was clean) Another 10 minute ground run was performed with the #1 engine chip illuminating once again. Upon removing the chip detectors, there was more metal slivers on the aft detector and one small (1/8") sliver on the forward chip detector. The #1 engine and combining gearbox were replaced.	Isaac Mackey			
N407PA 07/29/17 ACTT 7660.0 Upon shutdown in Coldfoot the pilot and mechanic noticed an unusual sound coming from the engine. The mechanic investigated and found one blade on the compressor was missing a large piece. The compressor was replaced with a serviceable unit. The aircraft was returned to service. The damaged compressor was sent into Airborne Engines for evaluation. The compressor had been removed for FOD damage from N407PA on 11/29/16. It was shipped to Airborne Engines and the impeller was subsequently sent to Cadorath for repair. The compressor had a total time of 2692.1 hrs. at this time. The impeller is original as well. The repaired compressor was reinstalled on N407PA on 12/28/16 at ACTT 7427.3 The impeller failed 232.7 hrs. after install. (2925.7 hrs. compressor total time)	Isaac Mackey			
N309MH 08/11/17 ACTT 3306.3 During FADEC manual mode check the manual mode switch was depressed while Eng. was at 100% RPM. NP recorded @ 118.82% for 4.32 sec. Engine was removed and disassembled. Turbine and gearbox was sent to an Engine Repair facility. Serviceable turbine and gearbox installed. Aircraft returned to service. Company Investigation initiated.	Isaac Mackey			

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
GOR FOD	N304MH 10/13/17 ACTT: During the fuel inspection in the annual fuel cell cleaning and inspection, a plastic cap was found inside the fuel cell (appeared to be a Jerry Can-funnel cap) Removed the FOD from fuel cell. Continued with the normal fuel cell cleaning. No damage was noted due to the FOD event.	
FIR Transmission chip light	N308MH 10/20/17 ACTT 4985.0 During Approach to GRB, the XMSN chip light flickered and then came on steadily. On short final the light went out. Coming to a hover the light flickered on and became steady. Pilot hovered to transient parking area about 50' from the landing area. While setting down the chip light went out and did not return. The mechanic and the Chief Pilot were notified Pulled both chip detectors to Main Gearbox and found small chip on lower plug. Recorded info, cleaned then installed the plugs IAW Bell 407-M/M-63. 20 minute ground run was completed with no faults noted. The plugs were checked again and the aircraft returned to service.	
FIR	Bell 206 11/02/17 Upon returning from the scheduled flight across Kachemak Bay to visit HEA powerline sites, I noticed debris on approximately the last foot, (1') of the main rotor blades while securing the aircraft back into the hangar. MX personnel were then notified. All sites visited were fairly open LZ's, with two requiring steeper than normal approaches and departures due to tall trees. At no time during the flight did I or the passengers notice any indications of a possible main rotor blade strike. The 30 day blade inspection was completed on October 26, 2017. The incident flight was the second flight since the blade inspection. No defects were noted after the first flight. After the second flight, maintenance noticed debris on the drive shaft cover that was not there the previous day. Not damage was noted. The aircraft was returned to service.	Closed
GOR starter generator	N309MH 11/7/17/ ACTT During the Turbine replacement on a rental, engine turbine, the starter was removed. Crew found the shroud was dented which pushed the shroud and screen into the fan blades. The blades cut the screen enough to disconnect the screen from the shroud. The starter was installed 20 hours prior to this removal, and was serviceable at that time (and was 324.8 hours from overhaul.	

Notable A/C items since last CASS meeting		
Item	Notes or Preventable measures to prevent this from occurring again.	Move to open action items
GOR oil cooler shaft	N308MH 11/21/17 ACTT 5025.7 During preflight, the main rotor blades were being rotated and a metallic knock was heard. Closer investigation found the aft oil cooler shaft bearing had a large amount of radial play. The mechanic was notified as was Fairbanks. The oil cooler was removed and replaced with a serviceable unit. The new unit was balanced IAW the 407 MM Ch. 18 and the aircraft was returned to service. The removed oil cooler assembly had been installed 111.8 hr. prior and at the time of install the AFT bearing had not been properly seated on the shaft causing movement.	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-17-07: ASB 412-17-174 412 crew door jettison mechanism, verification of
CAS Memo M-17-05, Bell 206/407 MEL rev 9

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 Degraded light, replaced gearbox monopole pickup
2.	N309MH – 04/19/17 – Wittier – FADEC Degraded Light, replaced HMU

AOG's for 2017	
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.	N407RH – 06/16/17 - GRB – FADEC Degrade light, replaced start relay
8.	N308MH – 07/10/17 – GRB – Engine failed to start, replaced battery
9.	N308MH – 07/11/17 – GRB – Engine failed to start, replaced Statrer/Gen
10.	N328MH – 07/12/17 – Deadhorse – Number 2 engine failed to start, replaced engine driven fuel pump.
11.	N314MH – 07/15/17 – YRB – Hyd. pump failure, replaced pump.
12.	N328MH – 07/20/17 – Deadhorse – Number 1 Eng. chip light, replaced Eng. and Cbox
13.	N307MH – 07/20/17 – PS5 – Engine failed to start, replaced battery.
14.	N407RH – 07/29/17 – GRB – Pilots ICS trigger switch broken, replaced switch
15.	N407PA – 07/29/17 – Coldfoot – Compressor Impeller damage, replaced compressor
16.	N312MH – 10/30/17 – PS4 – engine oil pressure
17.	N407PA – 11/09/17 – MTF – compressor oil leak
18.	N308MH – 11/21/17 – GRB – oil cooler bearing

AOG's for 2017 by Location	
PS4	1
PS5	2
MTF	3
GRB	9
VDZ	
HOM	
Kodiak	
Akutan	
Coldfoot	1
Deadhorse	2

NEW OPEN ACTION ITEMS	INITIATED BY	RESPONSIBLE PERSON	DEADLINE	CLOSED

Recent audit maintenance findings	
Finding	Corrective action

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

Next CASS meeting scheduled for	01/18/18
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