Maritime Helicopters

CASS

Continued Airworthiness Surveillance System

July 2019
Meeting minutes

CASS Meeting

07/18/19	10:00AM	MTF

MEETING CALLED BY	Isaac Mackey - Fairbanks Lead
TYPE OF MEETING	CASS Meeting
FACILITATOR	Isaac Mackey - Fairbanks Lead
ATTENDEES	Bob Fell, Dave Jones, Steve Slade, Brent Estep

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. Safety Program Effectiveness
14. Other items
15. Schedule next meeting

OLD OPEN ACTION ITEMS	INITIATED BY	RESPONSIBLE PERSON	DEADLINE	CLOSED
RIN Overflight N407PA 06/22/18 ACTT 8017.3 Tonsina AT&T Contract aircraft. The communication of the RINs remaining on the Left and Right Hand Pylon Side Beams lapsed between the pilot/mechanic/CALM records. The exceedance for these beams ended up being 24 RINs. Crew attributes the failure to the inability to keep the CALM program sheets current during field operations and non-business hours at the home station. Left and Right Pylon beams were replaced. The aircraft was returning to Fairbanks for the completion of the AT&T fuel haul, maintenance found out that the RINs had been exceeded by 24. Mechanic had been called two days prior to this and informed that there were 90 RINs remaining. The crew was unaware when actual RINS were exceed. Fairbanks maintenance Lead discussed the issue with the field mechanic. **Sept 18th CASS meeting moved this item to an open action item.** **Dec 6th CASS meeting kept this item open, in progress** Training and standardization required. **Jan 10th CASS left this as an open item. No update** **Feb 21st CASS meeting closed this item.**	Isaac Mackey	Dennis Busch	02/21/19	Closed

OLD OPEN ACTION ITEMS	INITIATED BY	RESPONSIBLE PERSON	DEADLINE	CLOSED
GOR 2018-12 10-19-2018 Bell 206 M/R Hub Found M/R Pillow Block Shim pushed away from the Bolt and coming out during a daily check. Removed M/R Hub assembly and sent to MHI Fairbanks for repair. Repair Station Teardown Report: PN 206-011-001-159 S/N A-253 Pillow block shims protruding out Trunnion P/N, S/N removed and new P/N, S/N installed with no record of work performed. Grease appears to be purged shortly before removal from aircraft Pitch horn seal folded over inboard (approx.) 1/4" of circumference of seal. Yoke cavity filled approx. 2/3 of the way with grease Yoke has Brinelling .001 inch deep with spalling in two locations .003 inch deep Strap Pin pitted beyond limits. Strap fitting pitted beyond limits. Grease Relief Valve on pitch horn has plier marks. Total cost for repairs $30,150 **Dec 6th CASS meeting moved this item to a new open action item.** Cycle Akutan mechanics thru Homer base for recurrent training. Better recordkeeping required. **Feb 21st CASS meeting closed this item.**	Isaac Mackey	Steve Slade	02/21/19	Closed
N316MH 11/10/18 ACTT 3692.4 Pilot reports intermittent engine surging on flight. After troubleshooting removed and replaced Engine Fuel Control S/N BR57117 and installed Fuel Control S/N BR50858 IAW RR C30MM and BHT206L4MM. Ops check good. Aircraft returned to service. **Dec 6th CASS meeting moved this item to a new open action item.** Dec 17th Teardown report revealed lever bearing, spool bushings, Teflon tube and fly weights were all worn which would cause the surging issue that was reported. Also found the throttle shaft bushings worn. The fuel control was repaired and returned to service. Total cost $4,860.98. The fuel control has 1252hrs. since O/H (2500hr overhaul). **Jan 10th CASS left this as an open action item. Waiting on teardown report** **Feb 21st CASS meeting closed this item**	Isaac Mackey	Isaac Mackey	02/21/19	Closed

OLD OPEN ACTION ITEMS	INITIATED BY	RESPONSIBLE PERSON	DEADLINE	CLOSED
N328MH 11/17/18 ACTT 6800.4 Bell 412, While folding aircraft blades, attached the 2 forward blade fold kit attachments to aircraft, then went to attach third point. The support tilted forward and could not stop fold kit from contacting the pitot tube. The support bracket was damaged. Removed damaged support and replaced with new ($412.65). Repainted and performed pitot static test. Talked to the mechanic about slowing down the task and assessing the risk beforehand. This was damage that could have easily been avoided. **Dec 6th CASS meeting moved this item to a new open action item.** **Jan 10th CASS left this as an open item. Waiting on Dennis** **Feb 21st CASS meeting closed this item.**	Isaac Mackey	Dennis Busch	02/21/19	Closed

OLD OPEN ACTION ITEMS	INITIATED BY	RESPONSIBLE PERSON	DEADLINE	CLOSED
N314MH 12/15/18 ACTT 10,373.3 While at Coldfoot Repeater the aircraft had three failed attempts at a start. The engine would light off normally but when the Ng reached 35% it would stall and stay there until the starting time limits were reached. At that point ASPC security was contacted along with Dave Jones letting them know the situation. The PS4 helicopter was sent down to pick up the pilot and 2 AT&T employees and return them to PS5. The next morning the PS4 helicopter flew the Mechanic and an AT&T employee up the site. The aircraft was covered and heat was apply to the engine components. The aircraft was started on the second attempt and then flown back to PS5. After landing the engine fuel nozzle was replaced and several successful starts were performed. The aircraft was returned to service. Waiting on teardown for fuel nozzle from HASS **Jan 10th CASS moved this to an open item. Waiting on teardown report.** Jan 11th Teardown report showed the fuel nozzle was missing an internal pin. Total cost including replacing part and overhaul was 679.35 The fuel nozzle was previously overhauled 09/07/16 by HASS and had accumulated 641.5 hrs. on N314MH prior to the engine starting issue. **Feb 21st CASS meeting closed this item.** Discuss the disassembly of fuel nozzles with mechanics during tool box talks and audits to remote locations.	Isaac Mackey	Isaac Mackey	02/21/19	Closed

OLD OPEN ACTION ITEMS	INITIATED BY	RESPONSIBLE PERSON	DEADLINE	CLOSED
N326MH 02/07/19 ACTT 9548.7 Pilot reported beep trim will not stay matched. Maintenance investigated and found both governor Teleflex cables binding. Cables were removed. Parts on order. The 105MM call out for an inspection of this area that is not tracked in the AAIP. **Feb 21st CASS meeting moved this to an open item.** **05/21/19** items sent to be added to the next revision of the 105 AAIP. **July 18th CASS meeting discussed getting the next 105 revision done by third quarter of 2019.**	Isaac Mackey	Steve Slade	09/30/19	
N312MH 02/14/19 ACTT 3915.6 Aircraft arrived in MTF from GRB with three main rotor head bearings out of limits. Grounded aircraft and removed the main rotor head for evaluation. Investigation in progress. Planning on corrective action of mechanic training on elastomeric bearings. **Feb 21st CASS moved this to an open item.** **07/18/19** This has been discussed as tool box topics and a formal elastomeric inspection training will be conducted at the annual training in October. **July 18 CASS meeting closed this item.**	Isaac Mackey	Jackson Cole / Dennis Busch	07/18/19	Closed

N193AL 02/14/19 ACTT unk Engine chip light. Waiting on FIR **Feb 21st CASS moved this to an open item.** **N193AL #8 bearing failure** **01/06/19 ACTT: 8072.3** Statement from onsite mechanic "As requested, (Fig 2 of Ch. 72-50-00 attached for reference) I pulled #11 and #8 for cleaning on 1.6.19, ACTT 8072.3 and afterwards realized we had no O-rings (rookie mistake) cleaned, lubed and reinstalled, had some leaking at run up, but was able to slow both #11an #8 to a slow leak (slow, dribble, leak whatever you want to call it). The pilot and I were very comfortable with it till we got O-rings in. **Finding statement**: See the attached reference from the RR OMM Ch. 72-50-00 for the procedure to remove and reinstall the #8 bearing. **01/29/19 ACTT: 8084.0** (Fig 2 of Ch. 72-50-00 attached for reference) Mechanic showed up with bag of O-rings, minus #10 O-ring for #8 so I changed both #13 O-rings for #11, and leak check was good. Updated relief mechanic on situation. I called the DOM and informed him we still needed #10 O-ring, and I believe it was shipped out the next day, after that I don't know when or what went on because we crew swapped. **02/12/19 ACTT: 8089.4 (Verify)** From FIR: "Engine chip light illuminated. Called maintenance on the sat phone we wiped off the chip detector and reinstalled. Engine was making noise and we got another engine chip light within two minutes of ground run. We found that the turbine section of the engine was bad." **02/21/19 ACTT 8089.4 (Verify)** From FIR: "Replaced engine" Compressor removed S/N CAC-91334 Turbine removed S/N CAT-97928 Gearbox removed S/N CAG-90101 **02/27/19** compressor quote for inspection at $1039.00 **03/06/19** turbine quote for repair/overhaul at $80,154.83 Also included was the teardown report for the turbine showing the possible disturbance of the #8 bearing. **July 18th CASS meeting closed this item.**	Isaac Mackey	Steve Slade	07/18/19	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	Responsible Person
FIR Damaged window	**N316MH 02/01/19 ACTT 3728.7** 6 - 69" long pieces of freight needed to be loaded. In the past, 3 of these pieces would be loaded internally while the other 3 get secured to the cargo racks. Pilot pulled out litter seats to accommodate the long pieces of freight and loaded 3 of the 6 pieces. 2 pieces went horizontal on the passenger side with the litter seats out, and the 3rd piece was put at an angle up high near pilot head with the bottom down by the aft passenger seat. Due to limited daylight, freight handlers on the ground were determining if 3 pieces could go 2/1 and the other 3 go on 2/2. After handler was coordinating if the freight should go together the next day or not, it was decided to just pull the pieces out. The handler pulled out the 3 pieces that was at an angle and when the pilot went in to retrieve the other 2 pieces it was discovered that the pilot side, middle window was broken. Pictures were taken immediately and sent to Dave Jones. Pilot was told the aircraft was deemed safe to fly and flew back to Deadhorse with no freight on board. Short customer delay & consult with Fairbanks Maintenance & Base MGR Maintenance replaced the window and returned the aircraft to service. Window cost was $2400. **Feb 21st CASS closed this item.**	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	Responsible Person
FIR Overtemp	**N312MH 02/09/19 ACTT 3909.4** 2 miles north of PS12 the weather started to deteriorate with both ceiling and visibility dropping to minimums. I made the decision to abort the flight and return to PAGK. At this time I had turned on both Anti Ice, Defrost and max heat during the turn and it was at this time both myself and my passenger saw the "Check Instrument" Light on the caution panel come on. My immediate action was to lower the collective and observed an "E" in the MGT readout. As neither myself nor my passenger saw any indication of a precautionary flashing warning prior to the steady state "Check Inst" light I decided that we probably had a faulty gauge and decided to continue to PAGK. During the maintenance check at PAGK the maintenance computer (laptop) was unable to find fault in the system and with a conference with FAI the decision was made to return the aircraft to the GRB. Following a review of the system in the hangar the computer showed that in fact I had had an "overtemp" of 801.9 Deg (22.9 deg) I can only conclude that during my decision to abort the flight, combined with the increasing of the heat and anti-ice system and my attention outside the During standard pipeline surveillance and approximately cockpit I failed to observe the overtemp situation until I had unintentionally exceeded the MGT limitations. Maintenance performed the overtemp inspection called out in Ch. 72 of the RR OMM. No defects were noted. The aircraft was returned to service. CAS memo O-19-01 sent 02/11/19 to instruct flight crews on proper power setting in cruse flight. **Feb 21st CASS meeting closed this item.**	Closed	
Fuel Boost fail	**N327MH 03/21/19 ACTT 10,552.1** Before start, both fuel gages were in the normal range. During the takeoff run I noticed the #2 fuel pressure gage at zero. Pilot rejected the takeoff and returned to the hangar. A terminal at the #2 Supply tank, boost pump switch was found to be broken. It was repaired and the aircraft was returned to service. **July 18th CASS meeting closed this item.**	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	Responsible Person
Fuel pressure	**N327MH 04/14/19 ACTT 10,560.1** Fuel differential pressure switch #1 inop. Removed #1 differential pressure switch and installed serviceable unit. Aircraft returned to service. **July 18th CASS meeting closed this item.**	Closed	
Mast seal replacement	**N328MH 04/15/19 ACTT 6816.4** Mast assembly was removed to replace mast seal leak. Technician noted corrosion and pitting on the mast pole during initial inspection. Mast assembly was sent to Bell at Piney Flats for evaluation and repair. The mast assembly repair was rejected and a new mast pole was purchased. The mast assembly was exchanged to expedite the down time and the serviceable mast assembly was installed. The aircraft completed the required ground runs and flight checks and was returned to service. **July 18th CASS meeting closed this item.**	Closed	
Mast Bearing Installation (GOR)	**N315MH 04/25/19** Following 5-41, 1500 Hour mast inspection, aircraft had a chip light. During teardown, it was noted that mast bearing had been installed incorrectly resulting in damage to mast and bearing. During reinstallation of swashplate it was also noted that grease was on top of the outer ring under the mast boot where it did not belong. Further inspection found the seal had broken loose and was rotating and allowing grease to escape. A new mast and bearing was ordered and installed in the aircraft. The damaged mast and bearing were sent for evaluation. Replaced seal in out ring, old seal had broken loose and was rotating. Aircraft was returned to service. Procedural corrections and company retraining to follow. **07/05/19** Refresher training from Jackson required for individuals doing the overhaul of mast assemblies. Training date TBD. **July 18th CASS meeting moved this to an open item pending completion of training.**		Isaac Mackey / Jackson Cole

Notable A/C items since last CASS meeting			
Item	Notes or Preventable measures to prevent this from occurring again.	Move to open action items	Responsible Person
High Oil Temp	**N320MH 05/20/19 ACTT 1713.6** Pilot was flying back to Deadhorse from the field site and shortly after takeoff, noticed the engine oil temperature was higher than normal. Pilot looked up the emergency procedure (electronic logbook), to be ready in he had to do an emergency or precautionary landing. The Emergency procedure states that if the engine oil temperature rises above maximum to land as soon as possible. Pilot lowered the collective as a precaution, noted the oil pressure was unchanged throughout the flight. No unusual noises were heard and the flight continued to Deadhorse while closely monitoring the engine oil pressure and temperature. The oil temperature never exceeded the maximum limit and the aircraft was safely landed at Deadhorse (PASC) Maintenance replaced the oil cooler bypass valve with serviceable. Ops check good and the aircraft was returned to service. **July 18th CASS meeting closed this item.**	Closed	
Broken Slider Window	**N319MH 06/02/19 ACTT** After the last flight of the day, with the aircraft shutdown and blades stopped, the exiting APSC passenger from the front seat got caught up in the slider window latch mount, JD Weyers scooted out of his seat to the ground, his weight pulling on the snagged, down jacket, which quickly cracked the slider window beyond the horizontal support and broke off a shard of Plexiglas from the bottom, rounded edge of the slider window. The slider was open slightly because the knob that latches the window had been missing for nearly two weeks. A new window was sent to PS4 from Fairbanks ($303.00). **July 18th CASS meeting closed this item.**	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	Responsible Person
Loss of Window in Flight	**N309MH 06/07/19** Enroute to remote site, one of the passengers said, "One of the windows just popped out. Pilot looked back and thought the window was still in place. Pilot asked over the ICS and the Customers said that it was the smaller slider/vent window. Pilot did not here or feel anything that would lead him to believe there had been a strike of the object against the aircraft so continued to landing site about 3-5 minutes away. No Damage was found at first landing spot. At second landing spot the aircraft was checked again. Aircraft was returned to Airport and contacted Aviation Coordinator via sat phone. An Aircraft log entry was made and aircraft was approved to continue operation under Maritime's FAA Approved Non Essential Furnishings (NEF) program. A new window replacement was ordered and will be sent down when the next mechanic goes down for relief. **July 18th CASS meeting closed this item.**	Closed	
Door Open in Flight	**N315MH 06/14/19** Enroute from Kenai back to homer, the left, rear passenger door popped open in flight. Cruise speed was 100kts at 700' AGL pilot was the only one on board so he stopped, on a rural road clearing, checked the aircraft then continued flight. Aircraft was checked once again at Kenai. No Maintenance Comments, nor actions taken by maintenance after incident 07/18/19 Upon further investigation Homer maintenance replaced the left rear door latch. Ops check good. Aircraft returned to service. **July 18th CASS meeting closed this item.**	Closed	
Grease pack seal leak	**N328MH 06/21/19 ACTT 6825.2** During routine maintenance the 42 deg. Gearbox grease pack seal was found to be leaking beyond limits. The seal was removed and replaced and aircraft was returned to service. **July 18th CASS meeting closed this item.**	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	Responsible Person
HSI inop	**N328MH 06/21/19 ACTT 6825.2** Copilot HSI pops circuit breaker after inverters are powered on. Removed and replaced HSI with serviceable unit. Ops check good and aircraft returned to service. **July 18th CASS meeting closed this item.**	Closed	
Engine FADEC light	**N309MH 07/12/19 ACTT 4024.9** AOG for engine FADEC light After lifting off from one of the forest service plots both the FADEC fault light and the restart Light came on. I returned to the maritime maid. Rob cleared fault and both lights came on again after a 5 min ground run. Faults were cleared again and both came on again within 5 minutes of departing maritime maid toward Juneau. Maintenance replaced FOST adapter. Aircraft returned to service with no further issues. **July 18th CASS meeting closed this item.**	Closed	
Igniter box (GOR)	**N328MH 07/07/19 ACTT 6840.4** Pilot reported engine #2 starting "not normal". Maintenance investigated and found #2 engine igniter working at half capacity. Replaced exciter box with new. Ops check good. Aircraft returned to service. **July 18th CASS meeting closed this item.**	Closed	

SDR,MIR,MDR, not listed on the notable A/C items list

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 19-02 – ASB 206L-19-182 – tail rotor blade inspection
CAN 19-03 – AD 2019-07-10 – LCR-100 AHRS
CAN 19-04 – AD 2019-07-07 – Swashplate bellows removal of
CAN 19-05 – ASB 412-14-160 RB – main driveshaft nut replace
CAN 19-06 – AD 2019-08-10 – oil line restrictor (incomplete)

CAN 19-07 – AD 2019-09-02 – Oil check Valve
CAN 19-08 – Bell TT strap retirement time, increase of
CAN 19-09 – ASB 407-19-119 – AC inspection
CAN 19-10 – ASB 407-16-112 RC – AC inspection
CAN 19-11 – ASB 206L-16-176 RC – AC inspection
CAN 19-12 – ASB 206L-19-183 – AC inspection

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 2019
1. N312MH – 02/09/19 – GRB – Engine overtemp
2. N193AL – 02/14/19 – Akutan – Engine chip light (#8 bearing)
3. N327MH – 03/21/19 – Valdez – boost pump wiring
4. N327MH – 04/14/19 – Valdez – Fuel differential pressure switch
5. N328MH – 04/15/19 – MTF – Mast assy
6. N320MH – 05/20/19 – Deadhorse – Oil pressure bypass valve
7. N328MH – 06/21/19 – Deadhorse - Grease pack seal leak
8. N309MH – 07/12/19 – Juneau – FADEC fault
9.

AOG's for 2019 by Location	
PS4	
PS5	
MTF	1
GRB	1
Tonsina	
VDZ	2
HOM	2
Kodiak	
Akutan	1
Coldfoot	
Deadhorse	1

NEW OPEN ACTION ITEMS	INITIATED BY	RESPONSIBLE PERSON	DEADLINE	CLOSED
N330MH FM Radio issue added by July 18th CASS meeting **07/06/19 ACTT 7071.1** TDFM-136A FM Radio Displays main RF module Fail. Removed TDFM-136A And Replaced with serviceable TDFM-136B IAW Technisonic. Ops check good aircraft returned to service. **07/16/18** Teardown report on TDFM-136A confirmed bad module. Spoke with Radio masters tech about cause, determined to be a weak part of the radio and subject to failure. **07/08/19 ACTT 7085.8** TDFM-136B FM Radio display will not show frequencies on display. Removed and replaced TDFM-136B With serviceable NPX-138D. Ops check good aircraft returned to service. **07/18/19** Waiting on teardown report **07/16/19 ACTT 7099.5** NPX-138D FM radio indicates "module Comm error". Removed NPX-138D and installed serviceable TDFM-136A. Ops check good aircraft returned to service. (installed same TDFM that was removed 07/06/19)	Isaac Mackey	Isaac Mackey	09/15/19	

Recent audit maintenance findings	
Finding	Corrective action
Repeat Finding: Tool Control: Tool control is still an issue in Fairbanks hanger for maritime helicopters. Maritime is not following their own policy on consumable items as they were present and toolboxes and on accounted for in personal drawers. **Recommendation:** Ensure that Maritime Helicopters mechanics are following documented company tool control policy to include specific areas such as consumables in tool boxes to meet the intent of AOG guidelines section 4.4.9.	There is a very mature tool control program at Maritime. The GMM prescribes the on-shift and off-shift inventories which are being accomplished by mechanics and also spot checked by maintenance leads and Q&S. One consumable item to which there was some confusion was spools of aircraft safety wire. This is being allowed into tool boxes in a shadowed position as with other tools. Photos evidences of daily inventories, shadow boxing and actual tool drawers attached as exhibits 1905201H (#1-#5). Disagree with this as a high risk item. Maritime has had only one FOD incident in five years which involved a customer having access to the aircraft and leaving a rag on the aircraft.

Recent audit maintenance findings	
Finding	Corrective action
Repeat Finding: FOD control. During walkthrough of the Maritime Helicopters maintenance facility it was noted that FOD was present in company tool boxes, and does not meet the expectations of ExxonMobil Aviation Services for FOD control as outlined in the AOG paragraph 4.4.10. **Recommendation:** Ensure that FOD programs meet the intent of the ExxonMobil AOG section 4.4.10.	Spot checks are ongoing. CAS Memo produced and attached as exhibit 190502H #1 regarding FOD Program Promotion.
Finding: Incident and Hazard Reporting. During the review of the Safety Management System (SMS) program for Maritime Helicopters, the answers provided to the Advisors' questions indicated that the incident and hazard reporting system is not effective, and is not being tracked in the Maritime Helicopters SMS system. **Recommendation:** Work to further refine the incident and hazard reporting program and begin tracking and trending of reports. This can be done by the use of safety promotion, training, and increasing the general understanding level of the SMS as a whole.	Not certain about the comment here. Enclosed are exhibits 190501 (#1-#3). The Flight Irregularity Report and the Ground Occurrence Reports have good participation and tracking from the initial incident through management review at the quarterly Continuing Aviation Surveillance System Meetings' Safety Review. FIRs and GORs are also distributed to the workforce in the form of the quarterly safety notes as part of Continuous Improvement and Safety Promotion
Finding: Publication Control. While conducting aircraft hangar inspection in Fairbanks, Alaska it was noted that printed publications were present in aircraft tool boxes which is against Maritime Helicopters publications control policy. **Recommendation:** Ensure that the policy is being followed as written, and copied publications are not present in tool boxes.	There was a single evidence of a mechanic whom had printed a page from the Bell manual to accomplish a task and then not destroyed the copy. GMM reference changed to include the printing of "uncontrolled copy" footer on all technical manual reproduction. Exhibit 190503M #1
Finding: Aircraft Logbooks. During review of aircraft logbooks it was noted that aircrew preflight signature acceptance documentation was missing. **Recommendation:** Ensure that pilots are following logbook documentation procedures for acceptance of aircraft regarding pre-flight.	CAS Memo attached to stress completion of records and will also include the system for changing errors made in aircraft logbooks associated with finding 190505L Exhibit 190505M #
Finding: Emergency Response Plan. During review of the Maritime Helicopters emergency response plan program it was noted that expectations do not meet ExxonMobil AOG 10.2.1 guidelines. There was no documentation on drills, and how they manage the deficiencies noted during drills. **Recommendation**: Ensure that the emergency response plan drill deficiencies are identified, and assigned to personnel for rectification with target dates for completion.	Discussed the ERP addition to the iAuditor program. (Exhibit 190506M #1). It was also discussed that ERP has been added to the Safety Portion of the Quarterly CASS Meeting with the complete Safety Committee attending. Management participation in ERP has been positive and ERP will be added to regular audit schedule. ERP is still discuss at all indoctrination Training and (now) annual instead of biannual safety training

Recent audit maintenance findings	
Finding	Corrective action
Finding: Audit Plan. During a review of the Maritime Helicopters quality assurance program it was identified that no annual audit plan exists, and no tracking of audits was available. **Recommendation:** Create an annual audit plan, and tracking system to ensure scheduled audits are completed on an annual basis.	Audit plan has always existed and *was previously* more focused on a manual system with results entered into an Excel format. Now, with iAuditor (discussed with Aviation Advisor and on the *suggestion* of the aviation advisor) the audit plan is stored in iAuditor. Exhibit 190507 #1
Finding: Risk Register. During review of the Maritime Helicopters quality management program it was noted that there was no audit feedback to the risk register to identify new risks in the Maritime Helicopters operation. **Recommendation:** Ensure that the audit function has a tie back to the risk register to ensure risk identification and risk mitigation for the quality management system that meets the intent of the ExxonMobil AOG section 2.0.3	Finding Under Review. Having added the Safety Review portion to the quarterly CASS meeting. The "management involvement and feedback" is being accomplished.
Finding: Shelf Life Control. During a review of the Maritime Helicopters spares department items were identified that were past shelf life, and did not match dates being tracked in the stores control system. **Recommendation:** Ensure that all items entered into the stores control system are entered accurately, and match shelf life dates on parts that are on the shelves.	There was a single item that was transcribed into the CALM program improperly. It was not expired during the audit visit and the monthly, shelf life item inventory would have caught the mistake. Exhibit 190501L #
Finding: SMS training. During the review of the SMS program it was noted that SMS training is accomplished every two years. Given the findings concerning incident and hazard reporting, the Advisor felt training on the Maritime Helicopters SMS could be stronger. **Recommendation:** Conduct SMS training annually.	Quality & Safety has added SMS training on annual basis
Finding: Stabilized Approach. During a review of the Maritime Helicopters operations manual it was noted that the stabilized approach rate of decent exceeds the AOG allowable of 750 ft. /min. **Recommendation:** Ensure that the Maritime Helicopters operations manual notes that if a rate of decent exceeds the AOG maximum, that a verbal briefing is conducted to meet the intent of the ExxonMobil AOG section 6.11.3.d.	The Maritime SOP has been revise to reflect the policy of AOG's 750 ft./min rate of descent for stabilized approaches Exhibit 190503L #1 (2 Pages)

Recent audit maintenance findings	
Finding	Corrective action
Finding: PED Policy. During a review of the Maritime Helicopters operations manual it was noted that there is no personal electronic device policy. **Recommendation:** Ensure that Maritime Helicopters creates a personal electronic device policy, and inserts it into the current operations manual to meet the expectations of the AOG section 6.11.6.	Maritime SOP Changed to include a more AOG compliant policy regarding Personal Electronic Devices. Exhibit 190504L #1
Finding: Dangerous Goods Storage. During a review of the Maritime Helicopters spares department it was noted that dangerous good items are not segregated on the shelves from standard spares. **Recommendation:** Ensure that all dangerous goods items are segregated in a dangerous goods area in the store room.	Dangerous Good Categorization is for shipping of items aboard aircraft under IATA. The flares in question were in their original packaging and stored IAW the SDS. (190509L #1). Flares have been moved to a military style ammunition can on the insistence of the aviation advisor.

Suggested maintenance training for next year
407 main rotor bearing inspection training. 206 Mast overhaul/assembly training

Safety Management System	Evidence	Effectiveness
Emergency Response Plan-Old	18 Feb- Exxon Table Top ERP Planning for 2019. Amended ERP Checklist Sent to Exxon	Exxon still calls for pre-season exercise. Need to confirm with Project Manager that this fits the bill Close this items as acceptable ERP plan
New	Probably need to do an exercise with the Koala/B412 primary/backup---self supported ERP up at OSI?	Discuss possibilities due to two aircraft being there.
	This is the year for RED Cross training	Need to have all departments begin compiling list of names for CPR/AED/First Aid training. Cost is still $27.00 each. Instructor recertification is complete. Need approx. $150 of expendable supplies for classes.

Safety Management System	Evidence	Effectiveness
Station Checklists-Audit Program-OLD NEW	Most Stations now using iAuditor. Several bumps along the way with scheduling. 40%-50% at best Began iAuditor led audit of Fairbanks Base. Homer still needs to complete a monthly iAudit. July was complete except for Kodiak Need to work with Homer as far as automated version Adding Fuel Vendor Audits due to OSI Audit finding (Big State) OSI looking for completion on several issues	Attempted Fall audits at Pump Stations 4&5, turned back for icy roads. Reschedule and now schedule Homer and Fairbanks audits. Fairbanks annual audit complete now Checklist added RII pay schedule?
Management of Change OLD NEW	AW119-UPDATE Other new Aircraft/Systems?	Need Status update from Steve? Aircraft already working, ask Steve to just review effectiveness of MoC? MoC for NVG operations started by D. Jones

Safety Management System	Evidence	Effectiveness
Overall Safety Effectiveness-OLD	Incident Reporting improved this quarter	Still a bit slow on GOR/FIRs, but even getting some input from new employees on these
	New BBS coming?	Behavior based Safety Observations-Program on hold as ISNetWorld okay with us using Alyeska Program. Add Anonymous Reporting to Toolbox Talks and Safety Letter
	Still haven't purchased new ladders for Fairbanks (went to backburner as there were many opinions on what to buy)	48" ladders purchase for Fairbanks; just like the Homer ones. Working out well
	Awaiting Exxon audit results	ASRAP response in progress. 85% answered. Awaiting CAS memos on discussed items from DoM
	Still need a major ERP exercise at both bases.	Keep stressing Toolbox talks! (**record)**
		Need Fire Drill at Homer.
	We had one first aide injury in April.	Managed well from down from **possible recordable**, due to interaction with Alyeska, McGriff, & Maritime Mgmt. Well done!
	Training	SMS Training to be added annual instead of biannual…Dennis

Next CASS meeting scheduled for	08/22/19