



# Maritime Helicopters

## December 2016 Quality & Safety Notes



### End of Year Wrap Up

An exciting year is coming to an end! While we continued to expand our operations in 2016, adding several aircraft including our first medium, we've done a pretty good job of assessing new risks and handling most of our normal operations with safety and positive feedback from all of our customers. Some of our high points include flying the first contracts for a couple of customers with our new Bell 412 and adding more Bell 407s to our fleet! We've also flew a hefty summer for both InterMap and other customers way out in remote Alaska.

It was a down year for firefighting, but we always have to be prepared for those jobs. In fact, in 2017 we should be adding some more state firefighting jobs with Alaska DNR.

### Incident Reporting 2016

I have to thank everyone for continuing to embrace the Incident/Accident Reporting process this year. We have received compliments from both the Oil Companies and DoD auditors for having such a mature, participative program. And that means that I owe you all thanks for giving me timely, complete reports when things don't go the way we've planned. Here is a quick review of 2016 incidents:

**Flight Irregularities:** We've had 25 different reports of flight irregularities in 2016 with about half of those being related to **maintenance** issues which exhibited themselves in ground or flight. Several of these were Engine/FADEC related and the tracking of these issues through the Flight Irregularity Reports have helped discover trends and issues.

Five of the FIRs this year were **operations** related and the corrective action for those have resulted in either procedural or training changes in how we operate our aircraft.

There were also four events where aircraft walk-arounds or next day's preflights have revealed **damage** to the aircraft. Some of these happened in flight and some were discovered after a flight but could have happened either during landing or loading up for a subsequent flight. These FIRs have really driven home the need for thorough walk-arounds between **every single leg of flight**. The new change to the Operations Manual regarding pilot walk-arounds makes this a written requirement!

That leaves a couple FIRs that fit into the "I don't know" or the "what in the \_\_\_?" category. The most prominent of these is the damage to the tail rotor of 328MH. I called the State Troopers on this one because of the nature of the tail rotor damage found after a flight from Nikiski to Fairbanks. Because the airport at Nikiski has had some issues with vandalism, I think it's best that we call this our unsolved mystery and keep our ears open for any rumors of mischief around that airport which could have led to a nice hole in our tail rotor!

You can take some time and review the FIRs for this year and discover that about 6 out of 25 of these incidents were clearly human error/human factors incidents. We need to aim for zero human error incidents in the future and set a goal to reduce these by 50% in the coming year. Please **discuss** these incidents, ask questions, and let's find a way to reduce them!

**Ground Occurrence Reports:** Since we are still processing a couple of GORs for the year, all I can say is that we had either eight or nine GORs this year. And if I could sum them up I would say, **“We have to be more careful with our equipment when we bring aircraft in and out of hangars!!!”** . We’re not to the chronic ‘hangar rash” level yet, but it sure seems like we fly better than we tow aircraft. There will be new procedures for towing the B206s coming soon. The blades are going to have to be tied and tiedown tools will be sent out soon. Let’s make ZERO the goal for hangar rash in 2017!

**GORs:** There were a couple of shop incidents that were preventable and caused a bit of damage to components due to issues with special tools. Also in the back shops area, we have to make sure that we are correctly identifying work to be performed when we submit work orders to the shops. While not causing damage, we’re spending a bit of extra time identifying work twice. One of the biggest, and most expensive GORs this year, luckily did not hurt anyone. Alyeska’s hangar door at the Glennallen Response Base (GRB) came down with a crash in January and is only recently back in service.

Overall, I think that we are doing better in safety. Awareness and use of ladders, fuel samples, and good preflights seem to be more consistent. I have had a few heart attacks when watching some maintenance performed on top of the aircraft without the “three points of contact” we all need to maintain when up there. Because we’ve had to continually update our Health, Safety, and Environmental manual so may time this year to be compliant with different customers, I’ll be putting out a whole new version early in 2017.

**First Report of Injury:** We only had one of these this year and this injury ended up being a simple first aid case. All of us must be mindful that any reportable injuries increase our TRIR or Total Recordable Injury Rate with OSHA which we must report to all of our customers. And Maritime is still not a large company. Even with our rapid growth, we don’t have the sheer man-hours to diminish the effect of even one injury on our TRIR. We are entering 2017 with one great accomplishment. Since our last recordable injury was in 2013, our three year TRIR will be 0.0! So please! Please! Be careful this year!!!

## Audits 2016

This was definitely an expansion year for audits. With the coming of the Bell 412, comes and interest in larger companies which have more stringent audit requirements. We have very successful visits from Exxon, ConocoPhillips and the Department of Defense. Without going through requirements for individual companies, here are some findings and observations from our audits where we are applying corrective actions.

1. Tool Control: I think everyone realizes that the toolbox shadowing is being applied to all mechanic owned and company owned tool boxes.
2. Working at Height: Even though we have all the correct ladders and fall protection for the smaller aircraft we are going to have to embrace the use of work-stands for the Bell 412. This is pretty much an industry standard. So our workforce awareness of the proper use of work-stands is going to need some serious attention!
3. Differential Pressure Checks on our fuel systems: Although the checks are now on the daily/monthly fuel logs, we have had some issues with applying these checks due to their requirement for TWO people to perform the check (one pumping the fuel, one watching the gauges. Remember, this is not a “first use of the fuel systems in a day” check. Just a once-per-day check. If there is any chance that you can get that second set of eyes out to the fuel pumps when refueling, use it. If you aren’t sure on performing this check, get with whomever manages this at your site.
4. Emergency Response Plan Exercises (ERP): We are still in the crawl stage of having ERP exercises. While the awareness of the ERP Manual and the Emergency Pocket checklists is being trained, we still haven’t had enough actual practice going through the motions. My fault I’m afraid! So in 2017, just expect that if the Quality and Safety Department (me) is in your area that you may subject to participation in practice exercises for our ERP! Be like the Boy Scouts and Be Prepared!
5. There are more audit findings which we will need to address in 2017, I just wanted to cover some of the high points. As far as our own internal audits, be ready to be looked at very early in 2017!

## New Employee Training

I am continuing to improve the new employee training in Quality and Safety. One of the constantly changing sections in the Health, Safety, & Environmental Manual is the New Employee Training subject matter. New customer requirements for our HSE Training keep popping up and I know that everyone hasn’t been briefed on several new subjects. So along with the audit cycle this year, I will be attempting to catch-up everyone in the overall knowledge of our SMS (Safety Management System). The next page will include the extract from the HSE manual on New Employee subjects.

## 23.1 Initial Safety Orientation

An initial safety orientation will be conducted by the Quality & Safety Department. This program will cover the following (29 CFR 1910 Requirements) as needed:

- Introduction to the Company's Safety Program & SMS
- Introduction to Flight Irregularity Reports and Ground Occurrence Reports
- Safety Around Helicopters
- OSHA Rights and Responsibilities
- Walking and Working Surfaces
- Fire Safety and Means of Egress
- Hazardous Materials
- Hazardous Communication
- Lockout/Tagout
- Bloodborne Pathogens
- Machine Guarding
- Electrical Safety
- Personal Protective Equipment (PPE)
- Fatigue Management/Crew Rest
- Fork Lift Operation Awareness
- Back Safety (Material Handling)
- Hearing Conservation (Noise Awareness)
- Workers' Compensation and Accident/Incident Reporting
- Confined Space Entry Awareness
- Safety Publications
- Stop Work Policies

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(I want to keep the following reminder in the newsletter for a few more months until we get used to doing these walk-arounds. Good job so far at being mindful of our vehicle fleet!)

### Vehicle Walk Arouns

Have you done your vehicle walk-around???



## **New Station Audit Checklists (yes, I'm keeping this in here every month)**

The new station audit checklists are still working great for most stations. Please remember that each time you come on shift to take the time to go through the station checklist, see if you need any assistance and then send the checklist to me. Continue sending them to me at...

[safety@maritimehelicopters.com](mailto:safety@maritimehelicopters.com) or fax them to Fairbanks office at 907-452-4539

Issues worked on recent Station Audit Checklists

First Aid Equipment: Valdez

AED Batteries: Valdez

Fuel Quality: Akutan

Calibrations: Akutan

Vehicle Safety/Survival Kits: Several sites!

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## **Incident Reporting November/December (ONLY ONE FIR THIS MONTH!)**

**FIR:** Bell 407. On a normal takeoff from PS#2, the check instrument light illuminated and an "E" was visible on the torque gauge. Pilot depressed the Check Instrument and the "E" disappeared with the gauge functioning normally. After landing at Franklin Repeater, and upon normal shutdown, the pilot cycled the battery switch and the E illuminated again. Maintenance was contacted. After downloading ECU and TQ Gauge info, no exceedance was noted. Fault was cleared and aircraft returned to service.

**GOR:** Bell 407. During the servicing of the Left Hand float bottle, the float bags began to inflate. No power was applied to the aircraft at the time and there was only approx. 200psi showing on the bottle. A seam on the right front float bag was torn. The bag was later repaired. The float valves were removed and tested with no faults found. So, now the valves are installed and working normally...so why do a ground occurrence report on this event? One, we do these reports according to an industry standard of incident reporting when things are damaged, people are harmed, the environment is harmed, or lessons can be learned to correct our future processes. In this case we have a damaged float bag **and** we had an unexpected event during routine maintenance that could have caused more problems. I don't think this could have been prevented, but we are not aware that this type of inadvertent inflation **can** happen when servicing our floats.

**GOR:** We have a couple of other GORs which I am going to save for discussion next month because the corrective action for them will lead to some changed processes. One of those involves a torque wrench which had a calibration sort of "slip away" from us. Please be mindful of your dates on your calibrated tools! More later on this.

**Our Director of Maintenance asked me for a little space at the end of these safety notes to thank everyone for their efforts this year. I would also like to express my thanks for everyone striving to make Maritime Helicopters a great place to work and a SAFE place to work. Happy New Year!**

Dennis

**(Take it away, Steve!)**

## From the Director of Maintenance

Would like to extend my Holiday wishes to all our pilot, administrative and maintenance staff. We had a pretty busy year with the addition of our 412, another 407 and the controlled mayhem of our busy summer season as we now slide into the New Year.

In my 40 years of aviation, almost all rotary wing, I have been employed by large companies like the U.S. Army, Air Evac, PHI and Air Methods. But I will comment that our current flight, maintenance and support staff are some of the finest I've have the privilege of working with.

With facilities throughout the entire state, from Pump Station 4 a few hundred miles from North Slope, to Akutan at nearly the end of the Aleutian Chain, Maritime covers an area twice the size of Texas. I understand completely the numerous challenges that presents for us all, to include our parts and recordkeeping staff.

Running a maintenance department this widely dispersed would be a formidable job that anyone looking for a DOM position might think twice to tackle. But due to the caliber of our crews, maintenance and support staff, the professionalism and team effort I see almost daily, it has made running this maintenance program a lot easier than I would have first imagined. And I have you folks to thank for that (I still have the same number of grey hairs since I started!).

I do review all log books, flight times, corrective actions, staffing, etc. as I strive to stay up with the pulse of our fleet. If there is anything you feel might make your job easier, more productive or you have an idea for a better way of getting things done, please don't hesitate to call or email me directly. I will welcome and entertain any and all suggestions.

2017 is already shaping up to be very exciting with many new opportunities on the horizon. I am looking forward to again, working with everyone to capture and execute these new opportunities, with the many diverse challenges our industry brings. "On-Demand" work keeps things exciting and non-routine, which I personally like and I believe you all do also.

From flights crews interacting with their mechanics, to the maintenance staff keeping our fleet availability rate nearly 100%, to our other support staff working behind the scenes making sure the "beans and bullets" keep coming, please except my thank you for all your hard work.

Your professionalism and attention to detail does not go unnoticed.

Steve Slade

Director of Maintenance

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