Maritime Helicopters

June 2016 Quality & Safety Notes

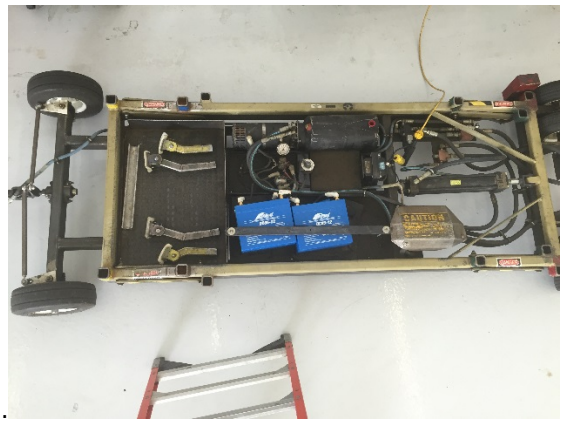
What about the Stuff on the Ground?

Looking through the last few months Q&S Notes, I notice that we've been discussing a lot of in-flight happenings and general aviation safety topics, getting ready for the busy summer season. I've even hit upon some of the aviation maintenance issues as we keep pushing to provide better and better aircraft to our customers. But it seems we haven't been visiting the topic of our ground support equipment and facilities enough.

After reviewing the station checklist last month, which will now get passed out to all the remote sites and everyone can start the self-auditing of their own hangars and equipment. About time, Safety Manager! I'll cover that at the end of this letter, but for now I want to talk a little more about taking care of "Our Stuff"

Ground Support Stuff

You'll see in the Incident Reporting section this month, that we had an aircraft damaged due to a bad piece of ground support equipment. We've all done it, grabbed a Tug-A-Lug or a battery cart, or placed customer equipment in one of our dollies or carts and not thought twice about the condition of the equipment. I can tell you that one of the little carts we use for baggage in Fairbanks, has a flat tire more than it has four inflated tires. (Last minute update! As of yesterday the tire is fixed! $12.99 for two tire at WalMart) When we grab one of these pieces of equipment, we just assume that it is functional…Assume… We don't do that with aircraft, there are a thousand little checks to be done before we launch a helicopter.



This is a universal issue. U.S. Army Aviation only added an overall Program Manager for aircraft ground support equipment in 2003. Before that? It was just up to somebody in a unit that cared about tugs, tractors, battery carts, diagnostic tools, etc. to go out of his/her way to fix the equipment. The Air Force has had the "AGE" (Aircraft Ground Equipment) shop for decades.

So what do we have? We have us. Forty to Sixty coworkers all with a lot on our plates. A small company must rely on the whole workforce constantly auditing and diligently performing pre-use inspections of ground equipment to maintain our gear. There is no way that we can solely rely on our mechanics to notice and fix everything that is wrong with the physical equipment of our company. Think back to the last time you went to grab a piece of equipment and it was *1. Not complete 2. Not charged 3. Leaking 4. Dirty/Filthy/Oily/Unwashed* 5. *Not tagged properly 6. Otherwise contaminated with FOD or loose items that could migrate to aircraft. 7. JUST NOT RIGHT!!!* Did you tell someone? Did you clean it? Fix it yourself? Charge it? Tag it?

What I'm asking for is this. All auditing aside, when you go to use a piece of equipment, take the 60 seconds to look at its condition. And when you go to put it away for the night, make sure it is in a serviceable condition for the next day. And, if you see something wrong, TELL SOMEONE!



Last word here: I'm writing this just assuming that everyone already knows how to check their ground equipment. If you don't know, ASK! Let the management know if you need oil, parts, or procedures for any particular piece of equipment.

NEW STATION CHECKLIST!

As I mention in the April **AND MAY** Safety Notes, we're now implementing the new Station Quality & Safety checklist! This short checklist is extracted from the larger internal audit checklist and should cover items to be looked at when coming on shift at any of the remote sites. The intent is for personnel coming on shift, to go through this quick internal audit and email the results to me, noting any deficiency so we can begin work on corrective actions. I'm going to have Jessica attach the checklist to this email, then I would like to get the first audits by the end of June! After that , I will send out another email stating the policy for how these self-audits will be performed when you come on shift. Short version? If you are on a 2&2 schedule, you fill out and send the audit when you come on shift. If you are on shift for more than two weeks, you perform the audit once a month at your station. Send your completed audit sheets to me at:

safety@maritimehelicopters.com or fax them to Fairbanks office at 907-452-4539

The audit checklists will be completed for Kodiak, Akutan, Nikiski, Pump Stations 4, 5 & GRB, as well as Valdez.

As with our internal audit back in November, the goal of these checklists is to have relevant **SELF-AUDITS** and corrective actions that are more methodical in their application.

Dennis

Air Data Calculations and the Wind

I had an unusual situation this month where the Garmin 500H wind data from the AHRS wasn't even close to the winds observed at a pinnacle landing site at the same approximate altitude. So here are just a few words from Garmin and our Chief Pilot to help in landing in areas where wind can be a big factor.

We've all be trained in wind speed identification, and everyone has their own tricks as far as judging drift, crab angle, terrestrial associations from vegetation or water. Hopefully, even when we have all the best new data from a nice Garmin, we are checking these indicators. But where does Mr. Garmin get his advertised (highly accurate) wind data?

According to the 500H sales pitch:

Experience the AHRS advantage

In place of sensitive gyro instruments, the G500 uses Garmin's super-reliable GRS 77 Attitude and Heading Reference System (AHRS). Combining inputs from GPS, magnetometer and air data computer, the Garmin AHRS provides an accurate digital referencing of your aircraft's dynamic orientation in space. Also, unlike some competitive attitude/heading sensors, it's even able to restart and properly realign itself while the aircraft is moving.

Should be perfect, right? Well, as long as the AHRS Calibration has been correctly performed, and the wind is generally consistent, with stronger winds being more accurately displayed than mild winds. Calculating from track drift, the AHRS has an uphill battle from what a lot of experts refer to as the Garbage-In element of wind. The best use of Garmin wind data is to check it *before* you leave cruise flight and then use terrestrial indications or a nice wind sock when you get closer to your landing. And, when in doubt, ***perform your wind circle and get the real info at your landing area!*** This is a flight safety issue so the 3 minutes it takes to do a 20 degree, 60 KIAS circle to find out the wind is well worth the effort.

Incident Reporting May/June

GOR: The Ground Occurrence Report that led to the discussion of our ground support equipment was from the Kenai/Nikiski aircraft. While checking on 193AL (Bell 206), it seems that there was damage to the cross-tube in the area supported by the Tug-A-Lug and also an antenna was bent. Apparently, the rubber pad that fits on top of the Tug-A-Lug support leg was missing and bare strut/leg had done a little damage to the aircraft. Everyone please remember that the Tug-A-Lugs need to be spot checked for serviceability before each use. (And don't leave the struts attached to the cart when you tug under the aircraft. Get the tug underneath the aircraft and then put the struts on).

FIR: There have not been any Flight Irregularity Reports to mention for this month. In lieu of that, I'm going to post the link for the 2003 A-Star fatal accident from the Alaska State Troopers for your examination.

Bad Situation.

http://www.ntsb.gov/investigations/AccidentReports/Reports/AAR1403.pdf

Next Month: More about our self-auditing and hopefully No GORs or FIRs!

FINALLY

This would be classified as a FAIL while using Ground Support Equipment!

Dennis S. Busch

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