



Maritime Helicopters

April/May 2017 Quality & Safety Notes



In the Starting Blocks for Summer!

As I write this month, I feel like there is just enough time to send everyone out for the summer with last minute advice. Like the mom who yells, “Wear your raincoat!” as the kids run out the door. As the Maritime dance card fills up for the summer months, we’ll be hard pressed to write the perfect logistics support plans, emergency response plans, and crew schedules for what looks to be a busy year.

Emergency Response Plans

On a recent trip to Homer, I spent some time with Dave B. and Bob, discussing our Emergency Response Plans. WE came up with one simple fact. When you are flying helicopters over 200,000 or so square miles, there is no “one size fits all ERP. With that in mind, let’s talk a little “Maritime South” with respect to Emergency Response Plans. Remember that as far as flight plans go, it’s Company, Customer, or FAA flight plan every single time we fly.

Akutan: No Internet equals no SkyTracker for the mechanic on duty. However, the aircraft can be watched from Homer and Fairbanks. But, possible the best tracking is if the mechanic at Akutan can be on the radio for the first couple miles across the strait, and then the aircraft loader can be on the radio with the aircraft the second half of the passage. Both pilots & Mechanics need to continue to cultivate the local relationships with the village (including the boat/barge owners) as well as the East Aleutians Borough emergency service people. This is one of our biggest challenges, but I think that basically everyone in the village should be aware (to some extent) when the aircraft is flying back and forth between Akutan and Akun.

Kodiak: The apartment does have internet while the hangar does not. So the mechanic can help out with flight following/Skytracker watch (assuming the guest account is current: see Dave B.) I’m aware that at Homer, the FAA flight plan is most often used, and there are some repeaters around the island to keep in comms. But if the mechanic can watch the Sky Tracker, especially in after-hours/weekends situations, that would be much appreciated. If you are down in Homer, and you are flying to new, or little flown areas, please do feel free to call Homer or Fairbanks and we can keep an eye on you!

Nikiski: We’re working on a plan to include the drilling rig expeditors to assist in flight following for the short flights within the Cook Inlet. Stay tuned for possible “aircraft feet wet” “aircraft feet dry” calls from and to shore if that works. In the meantime, if you are flying out of Nikiski AND have a mechanic available, they can help with flight following. Otherwise, Homer has you on their flight tracker screen.

All the flight following in the world doesn’t help in an emergency if you aren’t familiar with our ERP Manual and our Emergency Response Checklist (version 16 is current right now). Ensure that you have the checklist available and that you occasionally go on the Safety portion of the maintenance portal to be familiar with Emergency Response!

OLD BUSINESS

Vehicle Walk Arounds

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 or fax them to Fairbanks office at 907-452-4539

Aircraft Walk-Arounds

Recent reviews of the Flight Irregularity Reports are showing up a bit of a disturbing trend of our aircraft being damaged while either unloading or loading. Some pictures from the Nikiski aircraft show what appears to be fairly specific loading damage. Namely, that while hot loading, people are placing boxes or other loads on the Bell 206 step and "shoving" the load towards the helicopter.



NOTE: Depressions are about eight inches below the Left Passenger Cabin Door

Two points on this: 1. We have to keep our customers briefed on how to load and unload our aircraft. In addition to this type of sheet metal repair, we've had aircraft come back from the field with windows popped out or cracked, and upholstery torn. The sheet metal repairs are especially costly. 2. We *must* continue to perform our through-flight walk-arounds to identify this kind of damage for both pilot and customer safety as well as for our ability to identify and train individuals who are being "kinda rough" on our equipment.

NEW FEATURE!!! TADAH! TADAH! TADAH!!!

The Safety Data Sheet of the Month

As I have looked at the usage statistics from our Safety Data Sheet program through 3E Company, it's hard to notice that most of Maritime doesn't access our SDSs...ever. There's no scolding meant here. If you don't want to take a look at any of the information which we pay for, so we have knowledge of the kinds of chemicals we use, that's just a choice. But while taking the Red Cross, First Aid class last week, we had an instructor give us a rapid fire interrogation of our knowledge of first aid for various chemicals. It's sad to say that nobody knew what to do for first aid in situations when chemicals as common as Windex were ingested, sprayed in the eyes, or in contact with bare skin.

I suppose I believe in chipping away at glaciers sized problems with an ice pick, so here goes. I picked Jet B/JP4 Jet Fuel as a first, experimental look at some of the data in our SDS database.

AVIATION TURBINE FUEL, JP-4 WITH ANTI-STATIC ADDITIVES: (abbreviated version compiled at great effort, but very little expense by your Safety Manager)

What is JP4? It's really nothing more than some refined hydrocarbons, also called Jet B. Sort of a mixture between Kerosene and Gasoline and having more dangerous additives like Benzene, it isn't really that good for humans. But it's how our aircraft "go". Some of the components, like benzene, can be absorbed through the skin...not good. So if you wonder why we keep the rubber gloves around the fuel systems, there's your answer. For the pilots or mechanics out pumping the stuff, some eyeglasses with side shields are recommended, as well as long sleeves and gloves.

First Aid: If you get any JP4 in your eyes, you need to flush your eyes with running water for at least FIFTEEN MINUTES! If it's on your skin, wash with soap and water for at least 15 minutes. If you ingest any, DO NOT INDUCE VOMITING but seek medical attention! If you inhale enough to cause respiratory distress, you may need artificial respiration or oxygen.

Firefighting: Nasty stuff when burning. Believe it or not, it is hard to get Jet Fuel to burn. You can put out matches in it at most temperatures. (Don't try that at home!). A Dry Chemical, Foam or CO2 Fire Extinguisher will work.

If you want to know more, remember the website

<https://www.3eonline.com/EeeOnlinePortal/DesktopDefault.aspx>

You can use the general user name, [Mechanics](#) and the password, [maritime2015](#)

Incident Reporting April/May

Flight Irregularity Reports

FIR: 02/27/17 Bell 407 (Un-forecast weather)

After landing at Prospect Creek, the weather deteriorated to approximately ¼ mile with heavy snow and mist. The Chief Pilot was called and plans were started for a possible Remain-Over-Night (RON). A vehicle was scheduled to bring aircraft covers and overnight equipment for aircraft. After a several hour mission delay, the weather improved and the vehicle was never sent.

What can I say? Preparing for a contingency on the ground is much better than being in the clouds and hoping to get to the ground!

FIR x2 (one Bell 206, one Bell 407 (see above))

There have been two Flight Irregularities in April and May with aircraft having to stop operations and land because of unforecast weather. Without going into both sets of details, I wanted to mention that while Alaska a bit lacking in some remote area observation and forecasting, things are getting better for us here at Maritime. AT&T, through the Alyeska Pipeline extranet system, is allowing us access to their cameras at their repeater sites.

That is great for anyone on the Pipeline (PS#4, PS#5, GRB) but if you need an observation and don't have extranet access, you can call me, (Dennis Busch at the Fairbanks office or my cellphone, or Dave Jones at Fairbanks) we can look up the cameras and either send you a screen shot or just let you know how it looks where you are going.

The Valdez crew can *maybe* work something out with GRB for camera shots if you are going north??? Here is the list of available cameras as of 5/26/2017. (The “not available” sites may or may not be available in the future.)

Prudhoe Bay Franklin Bluff Costa Hill Slope Galbraith (*not available*) Atigun Margaret Hill (*not available*) Kaaruk Cold Foot Eagle (*not available*) Fish Bench Livengood (*not available*) Aggie Pedro Dome (*not available*) Fairbanks Buck Donnley Dome Nicole Knob (*not available*) Yost (*not available*) Round Top Gakona (*not available*) Stuck Kimball Pass (*not available*) Tiekel Tsina (*not available*) Ptarmagin (NorthEast South) Valdez Keystone MW

FIR: 04/11/2017 Bell 407 (FADEC FAULT/Failed ECU)

While performing confined area landings for an annual Part 135 Checkride, the FADEC Failed to Reversionary Governor Mode. Pilot and Check Airman returned aircraft to home field. During shutdown, the aircraft wouldn't wind down to idle when the throttle was placed in IDLE position. The Aircraft was shut down after two minutes at 100% rotor RPM. Then, when engine was shutdown, the FADEC horn and light came on after engine stop.

Maintenance performed the FADEC troubleshooting and discovered the Engine Control Unit (ECU) to be faulty. Maintenance replaced ECU with a serviceable unit. After operational checks, aircraft was returned to service.

If you haven't looked over the FADEC Reversionary Mode procedures recently, this might be a good reminder.

FIR: 04/12/2017 Bell 407 (FADEC Degrade)

After engine start, FADEC Degrade) light illuminated. Engine was shut down and maintenance began troubleshooting. (away from base station). The pilot and Fairbanks Maintenance used the FADEC diagnostic “button” on aircraft. The aircraft was started again and no FADEC lights were noted. A successive start was also successful that day. The aircraft was moved to Homer and a subsequent start showed the same FADEC Degrade. Through troubleshooting, the 1K3, 2K4, & Starter Relays were replaced. Aircraft was returned to service.

Ground Occurrence Reports

GOR: 04/12/2017 Bell 407 (Fuel Leak)

During preflight, when the fuel valve and fuel boost pumps were turned on to sample the airframe fuel filter, the pilot noticed fuel leaking onto the engine deck, coming from the fuel line between the Fuel filter and the Hydro-Mechanical-Unit. Fuel switches were turned off and maintenance notified.

Maintenance confirmed fuel leak and replaced worn line with a new serviceable line (that's an eleven hundred dollar fuel line, folks). Fairbanks maintenance lead issued CAN-17-03 to have the remainder of the Bell 407 fleet checked for lines that may be contacting the cowling support and possibly causing fuel line damage.

There are a couple of lines in these B407s which are awfully close to the cowling supports when you close the cowling (or as they move past the lines during closure) Please add these areas to your preflights and daily inspections if you weren't already.

GOR: Bell 407 5/16/17(Emergency Floats)

A mechanic at one of the base stations noticed that the float system was leaking and that the pressure in both float bottles was low. Further inspection showed that the float bottle valves appeared to have only been hand tightened.

The mechanic properly tightened the float bottle valves (replacing the O-Rings as a preventative measure during reassembly) and then serviced the float system. Aircraft was returned to service.

This incident has begun an investigation as to the float bottle tasks and if there are differences in how the two bases are putting them back together. There will be several tool box talks on this subject and then, on the next install on a float system, possibly N307MH? There will be some classes, standardizing the proper procedures. This GOR will be kept open for the time being until corrective actions and training are completed.

Alyeska Safety Meeting Topic (Operation Discipline)

I don't always include items from Alyeska Pipeline Service Company in these safety notes, but as they have been fielding the newest version of their Operational Discipline Procedures, I thought it might be interesting for pipeline and non-pipeline crews alike to review one of their short documents regarding OPDeep as they call it. This document really just demonstrates how they do their Corporate and Self Assessments as they take on each new task. Please take a look and keep in mind the "Five Objectives" which must be met in all of their processes as you work at your sites this summer.

This is just FYI and is in no way an endorsement of anything other than the idea of Operational Discipline.

[Operational Discipline](#)

HAVE YOU PACKED YOUR MOSQUITO SPRAY IN YOUR SURVIVAL EQUIPMENT?



That's it for April/May See you in a few weeks!

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Oil Movements/Pipeline/Valdez Division Operating Procedure

Title: Operational Discipline

Number: OMPV-0002

Page: 1 of 4

Revision: 4

Effective Date: 2/22/16

Approved by: John Baldrige, Sr. Director, Pipeline Operations	Approved by: Melanie Myles, Director, Oil Movements	Approved by: Scott A. Hicks Sr. Director, Valdez Operations
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Purpose

Over time Alyeska has developed processes and procedures to ensure safety, integrity and compliance objectives are met. These are based on common sense, lessons learned, laws and regulations; and they address PPE, fire prevention, and building safety; environmental protection and spill prevention; control of stored energy and work; process safety; and shift and job turnover. Taken together, these requirements comprise a system which impacts every task or activity undertaken in the Division.

To heighten focus on these requirements and increase emphasis on the critical importance of following the rules, we have adopted the term "Operational Discipline" to refer to our behavior and performance in carrying out the requirements of Alyeska's processes and procedures.

This procedure defines Operational Discipline (OpD) and identifies related accountabilities.

Five objectives must be met in every activity to meet the expectations of Operational Discipline. They are:

1. A safe work area is provided.
2. The environment is protected.
3. Equipment and systems are controlled.
4. Work is planned, scheduled, implemented, and controlled.
5. Communications are sufficient and effective.

Accountable Resources

- Sr. Director, Pipeline Operations
- Sr. Director, Valdez Operations
- Director, Oil Movements
- SERVS Director
- Managers and supervisors are accountable to ensure individuals and teams under their supervision are trained, qualified, and accountable for understanding and carrying out the principles of Operational Discipline.
- All Operations Division Personnel



Oil Movements/Pipeline/Valdez

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Definition

Operational Discipline (OpD)	<p>The embodiment of Alyeska's values and principles in management systems that are developed, implemented, and maintained to:</p> <ol style="list-style-type: none">1. Structure operations and maintenance tasks in a manner consistent with APSC's expectations.2. Ensure that every task is performed deliberately and correctly.3. Minimize variations in performance. <p>The desired result is that every Operation & Maintenance work task is performed in a disciplined manner - adhering to all approved procedures and work practices - every time. The expectation is that a strong, ongoing focus on flawless Operational Discipline assures excellence in work quality and safety.</p>
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PROCEDURE

A. General Information

Operational Discipline is all about due diligence as we go about our work each and every day. The challenge for every person working in the Operations Division is ensuring the requirements of APSC policies and procedures are followed by everyone. The goal is flawless operations and maintenance.

B. Objectives and Associated Requirements

1. A Safe Work Area is Provided

Associated requirements include, but are not limited to:

- a. The authority to stop work is fully understood and practiced by all TAPS workers.
- b. Proper personal protective equipment (PPE) is used.
- c. Housekeeping is maintained and hazards are identified.
- d. Individual and team behavior is in accordance with all safety rules, policies, and practices.
- e. Site specific safety plans are prepared and implemented.
- f. Safe Performance Self-Assessments (SPSA) are properly completed as appropriate.
- g. Loss Prevention Observations (LPOs) and safety attests are conducted.
- h. Area and facility access is controlled; all rules, conditions, and permissions for entry are followed.
- i. All traffic rules are adhered to.

2. The Environment is Protected

Associated requirements include, but are not limited to:

- a. Environmental plans are written and environmental briefings are held as appropriate.
- b. Air emission sources are managed in accordance with air quality permits and regulations.



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- c. Water systems and wastewater discharges are managed in accordance with water quality permits and regulations.
 - d. Pollution practices are employed to minimize the generation of waste. All waste is properly managed.
 - e. Oil and chemical spill prevention and mitigation measures are taken and maintained.
 - f. All spills are properly reported, responded to, and cleaned up.
 - g. Fish and wildlife protection measures are taken and maintained.
 - h. Vegetation and water bodies are properly maintained to protect wildlife habitat according to permits and regulations.
- 3. Equipment and Systems are Controlled**
- Associated requirements include, but are not limited to:
- a. Energy isolation is properly done, maintained, and documented.
 - b. Car seals are properly used, maintained, and documented.
 - c. Equipment out of service requirements are properly used, maintained, and documented.
 - d. Physical jumpers and electronic bypasses are properly used, maintained, and documented.
- 4. Work is Planned, Scheduled, Implemented, and Controlled**
- Associated requirements include, but are not limited to:
- a. Work scope is reviewed and understood.
 - b. Engineering review is completed (as applicable).
 - c. Job requirements (time and resources) are verified.
 - d. Operations and Maintenance work procedures are correct and ready on time.
 - e. Safe Operating Committee (SOC) is performed and reviewed (as applicable).
 - f. Job Loss Analysis (JLA) is performed and reviewed (as applicable).
 - g. Work is correctly planned and scheduled.
 - h. Materials (parts and supplies), tools, and personnel are available.
 - i. Operating area, systems, and equipment are ready when needed (as applicable).
 - j. Notification is made to OCC 24 hours prior to requesting remotely operated equipment turnover for maintenance.
 - k. Permits are properly prepared and followed.
 - l. SPSAs are completed.
 - m. Work completion is assured and documented.



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5. Communications are Sufficient and Effective

Associated requirements include, but are not limited to:

- a. Active, two-way communication is practiced ensuring information, requirements, and expectations are understood by all parties.
- b. Turnover is proper and thorough.
- c. Coordination of activity between areas, crafts, teams, and individuals is effective and sufficient.

C. Continuous Improvement

All managers and supervisors will continuously advocate, promote, and monitor Operational Discipline in all aspects of work performance. Effective use of LPS tools is a primary vehicle for maintaining focus on and continuously improving OpD performance.

References

- [EC-71-XXX](#), *Emergency Contingency Action Plans* (all pipeline, OCC, and VMT volumes)
- [N-8.00.01](#), *Pipeline Pump Station Access and Orientation*
- [SA-38](#), *Corporate Safety Manual*

Records

None	All records generated as a result of this document will be retained in accordance with CW-200 , <i>Records Retention Schedule</i> .
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Revision History

Revision	Date	Revision Summary
4	2/22/16	Full scheduled review performed. Updated document owners to add John Baldrige and Scott Hicks. Changed TAPS employees to TAPS workers per MAC Action 15254. Rewrite to align with APSC policies and procedures. Removed situational awareness and all performance indicators. Section C updated. Section D deleted.
3	1/21/14	No SOC. Rewritten definition for Operational Discipline in Section 3.0. Improved language for the performance indicators in Section 4.0. Other minor edits. No SOC required.
2	8/29/12	Added SERVS Director to Section 2.0 Accountable Resources. Measurements section rewritten. Other minor edits. No SOC required.
1	10/10/11	Revised to add language requiring notification of OCC for requesting equipment to be taken out of service. No SOC required.
0	6/16/10	Original issue of OMPV-0002. Supersedes the following departmental documents: <i>N-6.00.18, Pipeline Operational discipline, O-6.00.01, Valdez Marine Terminal Operational Discipline, D6.1.02, SERVS Operational Discipline, and OMD-0102, Oil Movements Department Operational Discipline.</i>