FY 11
Aviation Mishap Review

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Ground Rules

NTSB 831.13 Flow and dissemination of accident or incident information.

(b) ... Parties to the investigation may relay to their respective organizations information necessary for purposes of prevention or remedial action.

... However, no (release of) information... without prior consultation and approval of the NTSB.

This information is provided for accident prevention purposes only.
FY 11
3 Accidents
7 IWPs
NO Fatalities
Recurring Issues

Mission Planning
Managing Risk
Risk Tolerance
Policy Violations

IAT Training
Flight Following
Mishap Reporting
Supervision
DOI Accidents FY 11

Reedsport, OR, December 31, 2010

$ 209,366

Northway, AK, August 3, 2011

$ 11,000

Seward, AK, September 23, 2011

$ 82,742
Port Alsworth, AK
April 14, 2011
Cessna 206 – Salt water corrosion

$ 50,432

Lake Clark, AK
December 2, 2010
PA-18 SuperCub – Sank after landing on ice

$ 91,150

Bethel, AK
April 15, 2011
DHC-2 Beaver – Internal engine failure

$ 74,592

West Palm Beach, FL
Undetermined
AS 350B2 – Tail rotor assembly damage

$ 30,000
Cinnabar, AK  
July 26, 2011  
Cessna 207 - Ran off narrow gravel strip  
$ 12,513

Manteo, NC  
June 19, 2011  
Bell 407 - Water drop on personnel  
$ 4,500

Wendover, NV  
August 13, 2011  
AS 350B2 - Wire Strike  
$ 7,575
Classification

Something just happened!!
What is it, and what do we do?
Who do we tell, and how?
Classification

Mishaps

Mishaps include aircraft accidents, incidents with potential, aircraft incidents, aviation hazards, and aircraft maintenance deficiencies.

Report all mishaps to your chain of command and via SAFE COM
Accidents

Aircraft Accident. An occurrence associated with the operation of an aircraft, which takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage.

The NTSB determines if a mishap is an accident (49 CFR 830.5)

Requires immediate notification to the AMD Aviation Safety Manager (888-4MISHAP)
Incidents

Aircraft Incident. An occurrence, other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.

The NTSB determines if a mishap is an aircraft incident.

49 CFR 830.5 lists 12 types of incidents that require immediate notification.

When in doubt... call the AMD Aviation Safety Manager (888-4MISHAP)
Incident-With-Potential

**Incident-With-Potential (IWP)**. An incident that narrowly misses being an accident and in which the circumstances indicate significant potential for substantial damage or serious injury.

AMD determines if a mishap is an IWP

Any damage or injury, no matter how slight, should be reported to the AMD Aviation Safety Manager. (888-4MISHAP)
Elevated SAFECOM

Elevated SAFECOM. A SAFECOM that identifies a Departmental-level aviation safety concern may be “elevated” by the AMD Aviation Safety Manager for a more thorough investigation. Elevated SAFECOMs are coordinated with the Bureau involved and may or may not include a visit to the event site.

AMD and the Bureau determine if a SAFECOM should be “elevated”
DOE FY 11 Aviation Mishaps

Five Steps To A Safe Flight
1. Pilot/Aircraft Data Card - Approved & Current
2. Flight Plan/Flight Following Initiated
3. PPE in Use When Required
4. Pilot Briefed on Mission & Flight Hazards
5. Crew & Passenger Briefing to Include:
   - Aircraft Hazards
   - Seat Belt & Harness
   - ELT & Survival Kit
   - First Aid Kit
   - Gear & Cargo Security
     (Not Under Seats)

Remember!
To report an aircraft accident call:
1-888-4MISHAP (1-888-464-7427)

File a SAFECOM to report any condition, observance, act, maintenance problem, or circumstance which has potential to cause an aviation-related accident.

Anyone can refuse or curtail a flight when an unsafe condition may exist.

Never let undue pressure (expressed or implied) influence your judgment or decisions. Avoid mistakes, don't hurry!

Twelve Standard Aviation Questions That Shout "Watch Out!"
1. Is this flight necessary?
2. Who is in charge?
3. Are all hazards identified and have you made them known?
4. Should you stop the operation on the flight due to change in conditions?
   - Communications
   - Weather
   - Confusion
   - Turbulence
   - Personnel
   - Conflicting Priorities
5. Is there a better way to do it?
6. Are you driven by an overwhelming sense of urgency?

NFES 1129 (1998)

7. Can you justify your actions?
8. Are there other aircraft in the area?
9. Do you have an escape route?
10. Are any rules being broken?
11. Are communications getting tense?
12. Are you deviating from the assigned operations of flight?

Anyone can refuse or curtail a flight when an unsafe condition may exist. Never let undue pressure (expressed or implied) influence your judgement or decisions. Avoid mistakes, don't hurry!

NFES 1129 (1998)
Quest
Kodiak 100

Mission
Migratory Bird Program
(waterfowl survey flight)

Damage
Substantial

Injuries
None

Procurement
Fleet

NTSB ID
WPR11TA083
Aerial hazard detection
How about the other side?
Approximate location of the poles and wires
Impact on center of prop spinner
Wires slid into prop
Damage to engine cowling
Damage to left wing
Damage to left aileron
Discussion
Northway, AK
August 3, 2011

DeHavilland
DHC-2 Beaver

Mission
Passenger transportation to off-airport site
(Special Use)

Damage
Substantial

Injuries
None

Procurement
ARA

NTSB ID
ANC11TA079
Discussion
Bell 206B-III

Mission
- Glacier Study

Damage
- Substantial

Injuries
- None

Procurement
- CWN

NTSB ID
- ANC11TA111
Non-riveted section. Glue bonded only.
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<td>28.2 °F</td>
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9:53 AM      | 46.0 °F     | 37.0 °F   |
10:53 AM     | 50.0 °F     | 37.9 °F   |
1:53 AM      | 52.0 °F     | 37.9 °F   |
Discussion
IWP
Manteo, NC
September 23, 2011

Bell 407

Mission
Fire Suppression

Damage
Vehicle Damage only

Injuries
None

Procurement
CWN

NTSB ID
N/A
Approximate location of helicopter and dipsite

Damaged truck
N21HX at dipsite immediately prior to water drop on truck

Note the lack of dust
Approximate flight path

Dipsite

Manager's Truck
Damage to truck roof after temporary repair
Discussion
Wendover, NV
August 13, 2011

AS 350 B2
Mission
Fire Suppression
Damage
Minor
Injuries
None
Procurement
Exclusive Use
NTSB ID
N/A
Discussion
Cinnabar, AK
July 26, 2011

C 207

Mission
Natural Resource Damage
Minor
Injuries
None
Procurement
ARA
NTSB ID
N/A
Discussion
Caliente, NV
August 26, 2011

**AS 350 B2**

**Mission**
- Fire Suppression

**Damage**
- Main Rotor Strike
- Replaced

**Injuries**
- None

**Procurement**
- Exclusive Use

**NTSB ID**
- N/A
Interagency Aviation
Safety Alert

No. IASA 10-02
March 23, 2010

Subject: Tossing objects under turning rotor blades

Area of Concern: Helicopter operations

Distribution: All Aviation Activities

Discussion: A Bell 206 L-1, configured for an aerial ignition mission was spooling up for a prescribed burn operation [SAFECOM 10-0170] In the aircraft were the Pilot, Fire Boss (FIRB), and the Helicopter Manager (HMGB) was approximately 50 feet in front of aircraft. The left front door of the aircraft was open at FIRB’s request and with the pilot’s approval. The aircraft was at flight idle and just after the radio check the HMGB heard the FIRB on air-to-ground say, “could you hold on to this” as FIRB was digging in his left front pocket. The HMGB then made two steps toward aircraft to take the object from the FIRB then heard a sharp noise followed by several other noises approximately twenty feet to left side of aircraft. The HMGB then signaled the pilot to shut the aircraft down. Dispatch was notified that there was a situation and the aircraft would not be available for the prescribed burn.

What Happened? A pocket knife was tossed by the FIRB from the aircraft toward the HMGB, which hit one main rotor blade. The FIRB had attempted to toss the knife into the grass just off the asphalt in front of aircraft to avoid anything falling from aircraft during flight. Upon contact with the rotor blade, the knife burst into pieces landing off to the left side of the aircraft. The pilot inspected the rotor blades finding the point of impact and the HMGB notified the Regional Aviation Maintenance Inspector (RAMI), Contracting Officer Representative (COR) and the Assistant Fire Management Officer (AFMO). The pilot contacted the company mechanic at same time.

Inspection of the rotor blades revealed two small gashes approximately 9 inches from tip of one blade and approximately 7 millimeters deep on the leading edge. Also found were several small paint chips on underside of the rotor blade which did not enter the “honey comb” of the rotor blade. Fortunately, no one was injured and the rotor blades were able to be repaired, saving thousands of dollars.
Discussion
Looking back at the past