The Department of Interior (DOI) firmly believes that all aircraft accidents can be prevented. This year, DOI experienced a dramatic increase in our accident rate. This is a stark reminder of how we must reaffirm our commitment to aviation safety and adopt the attitude that zero accidents is an attainable goal. Furthermore, we must implement the supporting characteristics and assure they are in good working order every day. This dedication to aviation safety will save lives, reduces cost, and drive efficiencies across all of our mission areas.

Successful aviation programs embrace a just culture that balances safety and accountability. The characteristics and attitudes of a safety culture establishes safety as an overriding priority but also requires components of accountability, including clear expectations, required actions, and a means by which they will be evaluated.
Department of Interior Fleet Aircraft & Pilots by State

Note: Fleet aircraft and pilots occasionally move their home base location, for the latest information on where they are located you can call the Fleet Maintenance Manager in OAS-Technical Services at (208) 433-5082 for lower 48, or (907) 271-4324 in Alaska. Aircraft Locations can be found at https://sites.google.com/a/ibc.doi.gov/aviation-resources/doi-fleet
### DOI Fleet Aircraft Inventory

**Number of DOI Fleet Aircraft: 95**

<table>
<thead>
<tr>
<th># of A/C</th>
<th>Type of Aircraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>American Champion Aircraft 8GCBC Scout</td>
</tr>
<tr>
<td>7</td>
<td>Aviat A-1B Husky</td>
</tr>
<tr>
<td>1</td>
<td>Beechcraft BE200 King Air</td>
</tr>
<tr>
<td>2</td>
<td>Bell 206 B-3</td>
</tr>
<tr>
<td>2</td>
<td>Bell 206 L-3</td>
</tr>
<tr>
<td>2</td>
<td>Bell 412</td>
</tr>
<tr>
<td>4</td>
<td>Cessna 182</td>
</tr>
<tr>
<td>12</td>
<td>Cessna 185</td>
</tr>
<tr>
<td>2</td>
<td>Cessna 185 - Amphibian</td>
</tr>
<tr>
<td>15</td>
<td>Cessna 206</td>
</tr>
<tr>
<td>1</td>
<td>Cessna 206 - Amphibian</td>
</tr>
<tr>
<td>15</td>
<td>Cub Crafters CC-18 Top Cub</td>
</tr>
<tr>
<td>2</td>
<td>DHC-2 Beaver</td>
</tr>
<tr>
<td>1</td>
<td>DHC-6 Twin Otter</td>
</tr>
<tr>
<td>1</td>
<td>Eurocopter Astar AS350B2</td>
</tr>
<tr>
<td>7</td>
<td>Found FBA 2C</td>
</tr>
<tr>
<td>2</td>
<td>P68 Partenavia</td>
</tr>
<tr>
<td>1</td>
<td>Pilatus PC-12</td>
</tr>
<tr>
<td>8</td>
<td>Piper PA-18 Super Cub</td>
</tr>
<tr>
<td>8</td>
<td>Quest Kodiak 100</td>
</tr>
</tbody>
</table>

The unused capacity are flight hours that could be flown based on 100 flight hours per month per pilot.

Pilots on average fly 100 hours per year, using this average DOI pilots exceeded the national average.

Fleet Pilots: 85
Inspectors Pilots: 17
(1.07 pilots per aircraft)

Note: A pilot to aircraft ratio of at least 1.0 or greater is desirable.

*High Diversity Rate*

A low fleet diversity is desirable, due to savings in maintenance parts.

Average age of fleet aircraft:
- 23 YEARS
Unmanned Aircraft Systems

<table>
<thead>
<tr>
<th># of A/C</th>
<th>Type of A/C</th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
<td>T-Hawk</td>
</tr>
<tr>
<td>36</td>
<td>Raven A</td>
</tr>
<tr>
<td>69</td>
<td>Raven B</td>
</tr>
<tr>
<td>47</td>
<td>T-Hawk</td>
</tr>
<tr>
<td>12</td>
<td>Falcon</td>
</tr>
<tr>
<td>12</td>
<td>Falcon Hover</td>
</tr>
<tr>
<td>5</td>
<td>MLB Super Bat</td>
</tr>
<tr>
<td>1</td>
<td>Pulse Vapor 55</td>
</tr>
</tbody>
</table>
The U.S. Department of the Interior (DOI) started the year off with two accidents and ended the year with seven mishaps. The annual aircraft accident rate is 6.86 per 100K flight hours, an increase of 4.94 from last year. The DOI mishap rate is 12.01 a slight decrease from the previous year by 1.45. Zero aircraft accidents is an attainable goal, we must meet and exceed expectations set for ourselves through training, safety guidelines and safety tools. ([https://www.doi.gov/aviation/library/guides](https://www.doi.gov/aviation/library/guides)).

The Department’s annual aircraft accident rate\(^2\) in FY15 is 6.86 accidents per 100,000 flight hours. As of October 1, 2015, flight data captured for FY15 reported 58,269.44 total flight hours, 6,256.84 more than the previous year.

Since 1975, DOI’s aviation safety program has resulted in estimated savings of 694M to the Department and its supporting vendors in reduced losses. Over the last 10 years, DOI accident rates have exhibited a downward trend with the exception of 2012 and 2015. This includes two of the lowest annual accident rates in DOI history (FY13, FY14).

Flight missions performed for DOI were supported in part by bureau requested and OAS supported aviation contracts that required: 1,682 vendor pilot evaluations, 821 vendor aircraft inspections, 330 Interior fleet pilot evaluations, and 86 Interior fleet aircraft inspections. Aviation Training supported 95,781 student hours of training and revised/created three courses in collaboration with bureau and interagency partners.\(^3\)

---

\(^1\)Historical aircraft accident rate is defined as total historical aircraft accidents per 100,000 flight hours flown.

\(^2\)Annual aircraft accident rate is defined as total aircraft accidents in one year per 100,000 flight hours flown.

\(^3\)Includes DOI Fleet, Commercial Vendor, and Cooperator aircraft from other agencies. Pilots receive evaluations for each specific special use mission area qualification.
**Accident Rate**

DOIs accident rate has increased by 4.94 from FY14. Flight hours have increased 16% over the last five years.

**Mishap Rate**

Aviation Mishap Rate includes UAS’s, the Flight Rate doesn’t include Unmanned Aircraft Systems.

**Accidents** are defined by 49 CFR 830.2 and determined by the NTSB. An Incident With Potential (IWP) is an incident that narrowly misses being an accident and is determined by OAS. Mishaps = Accidents + IWPs.

**GA**—General Aviation-FY15 data not updated as of Nov 2015.
FY15 Aviation Overview

DOI FY15 Mishap Overview

### Incidental Cost associated with Mishaps

<table>
<thead>
<tr>
<th>Cost Input</th>
<th>Cost</th>
<th>Cost Input</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bureau Investigation</td>
<td>$16,080</td>
<td>OAS Investigation (reimbursable)</td>
<td>$9,900</td>
</tr>
<tr>
<td>DOI Losses (i.e. a/c repair, recovery, loss of availability, loss of life)</td>
<td>$1,005,562</td>
<td>Vendor Losses (i.e. A/C repair, recovery, loss of availability, etc.)</td>
<td>$1,280,000</td>
</tr>
<tr>
<td>Fatality (1) *VSL</td>
<td>$9,100,000</td>
<td>Minor Injuries (3)</td>
<td>$81,900</td>
</tr>
<tr>
<td>Total Costs (7 Mishaps)</td>
<td>$11,493,442</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All cost associated with mishaps have not been finalized due to ongoing investigations and repairs associated to the mishaps, these costs may rise.

### DOI Flight Usage Cost

Cost associated with flight hours only

<table>
<thead>
<tr>
<th></th>
<th>Annual flight Usage Cost</th>
<th>Annual Flight Hours</th>
<th>Cost per Flight Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fleet</td>
<td>$6,594,403</td>
<td>17,116</td>
<td>$385</td>
</tr>
<tr>
<td>Contract</td>
<td>$49,982,908</td>
<td>41,153</td>
<td>$1,215</td>
</tr>
<tr>
<td>Total Usage</td>
<td>$56,577,310</td>
<td>58,269</td>
<td>$971</td>
</tr>
</tbody>
</table>

These rates are associated to pay item codes associated to flight hours only, doesn’t include monthly rates, availability, standby etc..

*Value of Statistical Life (VSL) $9.1 Million - U.S. Department of Transportation*
The SAFECOM system is **not** intended for initiating punitive actions. Submitting a SAFECOM is **not** a substitute for "on-the-spot" corrections to a safety concern. It’s a tool used to identify, document, track and correct safety-related issues. A SAFECOM **does not** replace the requirement for initiating an accident or incident report. SAFECOM.gov

### FY15 SAFECOMs by Category

- **Hazard**
- **Maintenance**
- **Management**
- **Incident**
- **Mishap Prevention**
- **Airspace**
- **Accident**

---

### Top Maintenance Issues:
- Electrical
- Engine
- Airframe
- Avionics
- Chip Light
- Fuel
- Avionics (Radios)
- Oil

---

### FY15 SAFECOMs by Bureau

<table>
<thead>
<tr>
<th>Bureau</th>
<th>Submitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIA</td>
<td>11%</td>
</tr>
<tr>
<td>BLM</td>
<td>34%</td>
</tr>
<tr>
<td>BOEM</td>
<td>0%</td>
</tr>
<tr>
<td>BOR</td>
<td>0%</td>
</tr>
<tr>
<td>BSEE</td>
<td>27%</td>
</tr>
<tr>
<td>FWS</td>
<td>7%</td>
</tr>
<tr>
<td>NPS</td>
<td>19%</td>
</tr>
<tr>
<td>USGS</td>
<td>1%</td>
</tr>
<tr>
<td>OAS</td>
<td>2%</td>
</tr>
<tr>
<td>OSMRE</td>
<td>0%</td>
</tr>
</tbody>
</table>
Slide 1– Without good reporting, you don’t know what your mishap rate is. BIA’s mishap rate is high, due to their low flight hours. BIA is to be commended for increasing their SAFECOM reporting rate by 65%.

Slide 2– FY15 SAFECOM management continues to improve with DOI’s reporting rate increasing by 3% from FY14, the most significant increase by BIA.

Slide 3– SAFECOM reporting for the period (1998-2015) increased 20%, the average accident rate of 5.80 decreased by 45%.

As SAFECOM reporting goes up, accidents go down.
The SAFECOM system is the primary method which DOI and the USFS use to report any condition, observance, act, maintenance problem, or circumstance that has potential to cause an aviation-related mishap. It’s also a great way to record and share success as well! While it’s imperative that issues be addressed at the local level, it’s just as important to share them and their respective solutions throughout the system.

The goal in Department of Interior is to create a culture where people are encouraged to report safety issues and concerns without fear of reprimand or reprisal (excluding willful violations). An environment that encourages open and honest reporting of our own and other’s mistakes (and successes), improves efficiencies while providing a safer and more productive work environment. A reporting culture is essential to our type of aviation activities.

The unique missions and the environments in which we operate are often higher risk than those of general or commercial aviation operations. This proactive process of exchanging critical information allows the appropriate personnel to become engaged and affords them the opportunity to become part of the mitigation prior to it becoming a mishap.

There are many examples where someone submitted a SAFECOM that ultimately prevented the situation from reoccurring.

This was illustrated by a series of SAFECOM reports this last summer:

A SAFECOM report identified an issue with the Airbus 350 Series Tail Rotor Gearbox Input Bellcrank. A bushing installed in the bellcrank had slipped out on an aircraft. The first SAFECOM submitted raised the awareness of a vendor pilot, who paid close attention during his preflight to the same issue. He discovered the same error and submitted a SAFECOM on his experience. Another SAFECOM was submitted for similar occurrence a few weeks later. OAS Maintenance Inspectors identified this trend and notified the manufacturer. The Aviation Safety Division developed a Safety Alert (IA SA 16-01) to increase awareness.

Did this prevent an accident? We may never know if the bellcrank bushing would result in an accident, but thanks to those who submitted a SAFECOM, the issue is recognized and being addressed by the manufacturer. We do know the SAFECOM reports increased needed vigilance in preflights.
**FY15 Aviation Overview**

<table>
<thead>
<tr>
<th>Bureau</th>
<th>Annual Flight Hours</th>
<th>Annual Flight Usage Cost</th>
<th>Cost per Flight Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLM</td>
<td>19,780</td>
<td>$28,807,039</td>
<td>$1,456</td>
</tr>
<tr>
<td>BIA</td>
<td>2,103</td>
<td>$3,288,406</td>
<td>$1,564</td>
</tr>
</tbody>
</table>

*BLM pilots fly commercial owned government operated (COGO) aircraft in addition to fleet aircraft. Dual Function Pilots - Pilots who also have another job. (Ex. Scientist)*

**FY15 BLM Fleet Statistics**

- **Manned Aircraft - 4% of Fleet**: 6
- **Aircraft Age**
  - 0-10 Years: 2
  - 11-20 Years: 1
  - > 21 Years: 3
- **Pilots**
  - Dual Function Pilots: 6
  - Independent: 0
- **Pilot to Aircraft Ratio**: 1.17

**BLM UAS Flights 2015**

<table>
<thead>
<tr>
<th>Number of UAS missions</th>
<th>22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missions</td>
<td>Pawnee Grasslands, Silver Creek Project, Jornada NM Range, CA Desert, San Simon A2, Safford A2, Soda Lake, CA, Malta MT, NAO Boise, Spokane Field Sage Grouse</td>
</tr>
<tr>
<td>Aircraft System Type</td>
<td>Super Bat - 11 Missions, T-Hawk - 11 Missions</td>
</tr>
<tr>
<td>Flight Hours</td>
<td>69.15</td>
</tr>
</tbody>
</table>

**SAFE COM**

BIA has one of the highest SAFE COM completion rate in DOI at 97%. There were 33 SAFE COMs submitted which account for 11% of DOI SAFE COMS. Reporting increased by 40% from FY14.

**FY15 Aviation Mishap = 1 Accident**

BIA flight hours have decreased by 4% from FY14.

---

<table>
<thead>
<tr>
<th>Bureau</th>
<th>Annual Flight Hours</th>
<th>Annual Flight Usage Cost</th>
<th>Cost per Flight Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOEM</td>
<td>337</td>
<td>$489,975</td>
<td>$1,456</td>
</tr>
</tbody>
</table>

BOEM flight hours have increased by 46% from FY14.

**FY15 Aviation Mishaps = 1 Incident With Potential (UAS)**

BLM flight hours have increased by 15% from FY14.
## FY15 Aviation Overview

### FY15 FWS Fleet Statistics

<table>
<thead>
<tr>
<th>Bureau</th>
<th>Annual Flight Hours</th>
<th>Annual Flight Usage Cost</th>
<th>Cost per Flight Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>FWS</td>
<td>12,439</td>
<td>$3,817,584</td>
<td>$307</td>
</tr>
</tbody>
</table>

- Manned Aircraft—62% of Fleet: 57
- Aircraft Age:
  - 0-10 Years: 18
  - 11-20 Years: 13
  - > 21 Years: 26
- Pilots: 7
- Dual Function Pilots: 34
- Trainee: 1
- Pilot to Aircraft Ratio: 0.74

### FY15 NPS Fleet Statistics

<table>
<thead>
<tr>
<th>Bureau</th>
<th>Annual Flight Hours</th>
<th>Annual Flight Usage Cost</th>
<th>Cost per Flight Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPS</td>
<td>13,430</td>
<td>$9,964,889</td>
<td>$742</td>
</tr>
</tbody>
</table>

- Manned Aircraft—32% of Fleet: 29
- Aircraft Age:
  - 0-10 Years: 6
  - 11-20 Years: 7
  - > 21 Years: 16
- Dual Function Pilots: 19
- Pilots: 7
- Independent: 2
- Trainee: 1
- Pilot to Aircraft Ratio: 1.00

### FWS UAS Flights 2015

- Number of UAS Missions: 3
- Missions: Topock Marsh & Sequoyah
- Aircraft System Type: Raven
- Flight Hours: 15.2

### FY15 Aviation Mishaps

- FY15 Aviation Mishaps = 2 Accidents
  - FWS flight hours have increased by 14% from FY14.

- FY15 Aviation Mishaps = 1 Accident, 2 Incidents with Potential (IWP)
  - NPS flight hours have increased by 22% from FY14.

---

**SAFECOM**

- FWS has the lowest SAFECOM completion rate in DOI at 20%. There were 20 SAFECOMs submitted which account for 7% of DOI SAFECOMs. Reporting decreased by 25% from FY14.

- NPS has a SAFECOM completion rate at 63%. There were 54 SAFECOMs submitted which account for 19% of DOI SAFECOMs. Reporting decreased by 6% from FY14.

---

**Note:** These rates are associated to pay item codes associated to flight hours only, doesn’t include monthly rates, availability, standby etc.
**FY15 Aviation Overview**

**BSEE** has one of the highest SAFECOM completion rate in DOI at 100%. There were 77 SAFECOMs submitted which account for 27% of DOI SAFECOMS. Reporting decreased by 21% from FY14.

**BSEE flight hours** have increased by 2% from FY14.

**USGS** has a SAFECOM completion rate at 67%. There were 3 SAFECOMs submitted which account for 1% of DOI SAFECOMS. Reporting has increased by 33% from FY14.

**USGS flight hours** decreased by 35% from FY14.

### Bureau Annual Flight Hours Annual Flight Usage Cost Cost per Flight Hour

<table>
<thead>
<tr>
<th>Bureau</th>
<th>Annual Flight Hours</th>
<th>Annual Flight Usage Cost</th>
<th>Cost per Flight Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSEE</td>
<td>8,178</td>
<td>$ 8,835,722</td>
<td>$ 1,080</td>
</tr>
<tr>
<td>USGS</td>
<td>1,621</td>
<td>$ 984,071</td>
<td>$ 607</td>
</tr>
<tr>
<td>BOR</td>
<td>199</td>
<td>$ 247,443</td>
<td>$ 1,244</td>
</tr>
</tbody>
</table>

These rates are associated to pay item codes associated to flight hours only, doesn't include monthly rates, availability, standby etc..

### FY15 USGS Fleet Statistics

- **Manned Aircraft—1% of Fleet**: 1
- **Aircraft Age**
  - 0-10 Years: 0
  - 11-20 Years: 0
  - > 21 Years: 1
- **Dual Function Pilots**: 0
- **Pilots**: 0
- **Independent**: 1
- **Pilot to Aircraft Ratio**: 1

### USGS UAS Flights 2015

- **Number of UAS missions**: 15
  - Missions: Topock Marsh, Las Cienegas NCA, Jornada NM Range, Sequoyah, Denver, Gray’s Lake
  - Aircraft System Type: Raven, Super Bat & T-Hawk
  - Flight Hours: 38.99
OAS

FY15 Aviation Overview

<table>
<thead>
<tr>
<th>Bureau</th>
<th>Annual Flight Hours</th>
<th>Annual Flight Usage Cost</th>
<th>Cost per Flight Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>OAS</td>
<td>183</td>
<td>$142,182</td>
<td>$778</td>
</tr>
</tbody>
</table>

These rates are associated to pay item codes associated to flight hours only, doesn’t include monthly rates, availability, standby etc.

FY15 OAS Fleet Statistics

<table>
<thead>
<tr>
<th>Manned Aircraft</th>
<th>1% of Fleet</th>
<th>1</th>
</tr>
</thead>
</table>

Aircraft Age

<table>
<thead>
<tr>
<th>Age</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10 Years</td>
<td>0</td>
</tr>
<tr>
<td>11-20 Years</td>
<td>0</td>
</tr>
<tr>
<td>&gt; 21 Years</td>
<td>1</td>
</tr>
</tbody>
</table>

Dual Function Pilots (Inspectors)

| Inspectors | 16 |

Pilots

| Pilots | 1 |

Pilots to Aircraft Ratio

| Ratio | 17 |

OAS flight hours have decreased by 299% from FY14.

Office of Aviation Services

PERFORMANCE

<table>
<thead>
<tr>
<th>Performance</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Evaluations completed</td>
<td>10</td>
</tr>
<tr>
<td>Interagency Safety Communications Issued</td>
<td>12</td>
</tr>
<tr>
<td>Student Hours of Training completed</td>
<td>95,781</td>
</tr>
<tr>
<td>Fleet Pilot Evaluations completed</td>
<td>330</td>
</tr>
<tr>
<td>Fleet Aircraft Inspections completed</td>
<td>86</td>
</tr>
<tr>
<td>Fleet Maintenance facilities inspections completed</td>
<td>8</td>
</tr>
<tr>
<td>UAS Operator Inspections</td>
<td>11</td>
</tr>
<tr>
<td>Commercial Pilot Evaluations</td>
<td>1,682</td>
</tr>
<tr>
<td>Commercial Aircraft Inspections</td>
<td>821</td>
</tr>
<tr>
<td>Point to Point Inspections</td>
<td>586</td>
</tr>
<tr>
<td>Fuel Service Vehicle Inspections</td>
<td>380</td>
</tr>
<tr>
<td>Cooperator Approvals</td>
<td>153</td>
</tr>
<tr>
<td>Technical Specifications for procurement reviewed and/or created</td>
<td>174</td>
</tr>
</tbody>
</table>

OSM has no flight information.
Aircraft Mishap Review Board (AMRB)

DOI Bureaus and the Office of Aviation Services have intensified their efforts towards closing open Aircraft Mishap Review Board (AMRB) recommendations. These recommendations were the result of accidents that have claimed lives, caused injuries, and/or resulted in significant damage. AMRB recommendations are part of a bureau-led process aimed at preventing similar mishaps from reoccurring in the future.

OAS has been working closely with the Executive Aviation Subcommittee (EAS) to close key safety related recommendations.

In FY15, DOI AMRB recommendations have been reduced by 91%! As of this date, only 13 AMRB recommendations remain open. Three Bureaus have closed out all of their assigned AMRB recommendations.

OAS Training Division
- IAS.GOV website Update

Since the enhanced IAT website was launched at the beginning of FY15, over 15,000 people have visited it. In the past year, students have been able to enroll in classes, view their training history, and check their compliance status for upcoming aviation missions. Instructors have posted classes and downloaded course materials from the site and managers have utilized their increased abilities to view training completions, check unit and individual employee compliance and enroll their employees in courses.

Advances made to the site in the past year include better page flows and communication options, as well as, displaying DOI fleet pilot transcripts and allowing Continued Education Units (CEU) uploads from a web page.

Plans for continued improvement in the upcoming year include:

- Displaying credit granted for external course equivalencies to IAT catalog courses, in both the student transcript and compliance reporting;
- User Manual, additional self help options;
- Coordinator tools for workshop events and RTs;
- Access to non-IAT catalog courses;
- Merge tool for duplicate accounts;
- Search options to identify qualified instructors for a specific course or geographic area.

As always, the IAT Support Team is interested in hearing your feedback.

### FY15 Aviation Program Evaluation Results & Performance

<table>
<thead>
<tr>
<th>Location</th>
<th>Date</th>
<th>Result of Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>USGS—Northeast</td>
<td>12/14</td>
<td>5 Findings</td>
</tr>
<tr>
<td>NPS—Northeast</td>
<td>02/15</td>
<td>8 Findings</td>
</tr>
<tr>
<td>OSM—West</td>
<td>03/15</td>
<td>4 Findings</td>
</tr>
<tr>
<td>BLM—Idaho</td>
<td>03/15</td>
<td>5 Findings</td>
</tr>
<tr>
<td>FWS—Alaska</td>
<td>04/15</td>
<td>TBD Findings</td>
</tr>
<tr>
<td>BLM—Montana</td>
<td>05/15</td>
<td>5 Findings</td>
</tr>
<tr>
<td>BSEE—Alaska</td>
<td>06/15</td>
<td>2 Findings</td>
</tr>
<tr>
<td>NPS—Alaska</td>
<td>09/15</td>
<td>TBD Findings</td>
</tr>
<tr>
<td>FWS—Southwest</td>
<td>09/15</td>
<td>TBD Findings</td>
</tr>
<tr>
<td>No Material Weaknesses</td>
<td></td>
<td>Total 29 Findings</td>
</tr>
</tbody>
</table>

No Material Weaknesses Found
Aviation Program Evaluation Overview

The OAS Operational Procedure Memorandum 6, *Aviation Management Plans*, identifying the minimum standardized elements for DOI Project Aviation Safety Plans (PASPs) was placed into policy in July 2014. This policy required PASPs would be developed for all special use missions. For those bureaus that perform similar special use aviation missions on a recurring or routine basis, the required PASP could be rolled into a station/unit aviation plan that is reviewed at least annually. In this instance, in place of a PASP the bureau must have a documented process to capture the unique and special circumstances (ex. dispatch log, passenger manifest). Project supervisors and management-level project approvers are responsible for ensuring PASPs are completed. The Project supervisor should work closely with aviation managers in preparing these plans. The level at which a PASP is approved is based on the risk level as determined by the written risk assessment/bureau approved SMS (Safety Management System) within the PASP.

There has been a noticeable improvement during FY 15 Departmental Program Evaluations in the utilization of PASPs throughout the bureaus. Several bureaus with outdated Bureau Aviation Plans updated those plans to include the OPM-06 requirements. Although, there was improvement in the development and use of PASPs, there are some areas still in need of improvement. Specifically, plans often lacked management approval and required additional, detailed information under each element. For example for required elements under “Participants” includes a list of individuals involved in flights, their qualifications (Helicopter Manager, Passenger, Helibase Manager, etc.), dates of last aviation training, and the individual’s project responsibilities. Frequently, we found only a list of names without any qualification listed or last date of training. In some cases the individual listed failed to meet minimum training requirements after training records were reviewed. Another example included required Personal Protective Equipment (PPE) – where the PASP needs to identify the protective equipment and clothing necessary for that particular operation. Survival equipment (extra water, flotation devices, sleeping bags, etc.) beyond the normal PPE complement may be also be required. Under this element documentation in the plan would be listed “required PPE in the DOI ALSE Handbook.”

All aviation missions require detailed project planning and many PASPs are improving. You should review past PASPs and identify areas for improvement while noting changes in terms of people, location, aircraft, environment and training requirements. This review should include members of the entire project team such as an aircraft manager, pilot, aircrew member, supervisors and others that might be working on the project. Also, using your aviation experts such as Unit, State and Regional Aviation Managers as a resource helps ensure your project plans contain essential elements that may be outside your normal view/daily responsibilities and that the plan is properly vetted. The ultimate goal is that it contains the required pre-work which is the foundation for safe and efficient operations.
FY15 Safety Improvement Opportunities

Safety Publications
As part of the DOI mishap prevention program OAS in partnership with the U.S. Forest Service publishes a variety of safety publications.

http://oas.doi.gov/

Accident Prevention Bulletins
- Aircraft Fuel Pump Cold Weather Kit
- Aircraft Fuel Filters
- Fuel Additives
- Pilot’s guide to In-Flight Icing Online Course
- Identification of Helicopter Landing Site

Safety Alerts
- UAS Intrusions Impacting Incident Air Operations
- Kodiak Quest Crew Seat Locking Mechanism

Lessons Learned
- Helicopter Load Management
- Fire Whirls
- Engine Chip Light
- Helicopter Dip Site Operations
- Assisted In-Flight Emergency

Bureau Continuous Accident Free Milestones

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<thead>
<tr>
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<tbody>
<tr>
<td>BSEE</td>
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*contributed to BSEE’s 40 year accident free milestone

Safety is not a gadget but a state of mind.

Author Unknown

Bureau Aviation Managers

- BIA-Joel Kerley (208) 387-5371
- BLM-Rusty Warbis (208) 387-5448
- BOR-Jack Brynda (202) 513-0677
- BSEE-Brad Laubach (307) 486-57847
- BOEM-Lee Benner (202) 513-7578
- FWS-Anthony Lascano (703) 358-2059
- NPS-Jon Rollens (208) 387-5227
- OSM-J.Maurice Banks (202) 208-2608
- USGS-Bill Christiansen (303) 236-5513
Achievements

In-Flight Action Award

Jayson Danziger  Contract Pilot  Bureau of Safety and Environmental Enforcement
Douglas Jacobs  Contract Pilot  Bureau of Safety and Environmental Enforcement
John Mouton  BSEE Inspector  Bureau of Safety and Environmental Enforcement
Graeme Evans  Contract Pilot  Bureau of Safety and Environmental Enforcement

Airwards

Jason Glynn  Regional Operations Manager  Bureau of Safety and Environmental Enforcement
Alan Bell  Contract Pilot  Bureau of Safety and Environmental Enforcement
David Meyers  Oil and Gas Operator  Bureau of Safety and Environmental Enforcement
Dennis Geving  Bureau of Land Management

Secretary’s Award for Outstanding Contribution to Aviation Safety

This award is established to recognize an individual, group, or organization for outstanding contribution to aviation safety or aircraft accident prevention. This individual successfully helped secure state of the art aircrew safety-enhancing equipment for branch aircraft, which greatly enhanced the overall flying safety of BMBS aircrew members who perform aerial surveys in often very remote regions of North America for many years to come.

Mark Koneff  Fish and Wildlife Service

Promotions
DOI Accident Free Pilots

Heywood, Charles
Pali, Chris
Peacock, Calvin
Rabine, Virgil
Wright, Wayne

Anderson, Anna Jo
Barnett, Heather
Bayless, Shawn
Bredy, James
Earsom, Stephen
Ellis, James
Flack, Andrew
Guldager, Nikolina
Hamrick, Harry
Hink, Mike
Kadrmas, Neil
Koneff, Mark
Liddick, Terry
Lubinski, Brian
Mallek, Ed
Mullin, Brian
Olson, Nathan
Powell, Doug
Rayfield, John
Rees, Kurt
Rhodes, Walt
Richardson, J. Ken
Rippeto, Dave
Roberts, Charles
Roetker, Fred
Scotton, Brad
Shults, Bradley
Sowards, David
Spangler, Robert
Spindler, Michael
Sundown, Robert
Thorpe, Philip
Van Hatten, Kevin
Wade, Mike
Ward, James
Wortham, James
Yates, Sarah

Babcock, Jeff
Cebulski, Raymond
Christian, Peter
Drum, Gregory
Ellis, Darry
Gilliland, Allen
Goodwin, Fred
Herring, Nick
Howell, Galen
Larsen, Amy
Loach, James
Mazur, Stephen
Richotte, Richard
Sample, Scott
Sheldon, Dan
Stevenson, Dan
Taylor, Scott

Bell, Donald
Calderoni, Diego
Curl, R. Ryan
Doherty, Jonas
House, Greg
Lenmark, Paul
McCormick, Robert
Duhrsen, Jeffrey L.
Lazzaro, Joseph R.
McMillan, Seth
Meierotto, Martin
Warbis, Rusty

Recognizing Excellence
Promotions
Pilot Spotlight

David Sowards, Fish and Wildlife Service

Dave decided to become a pilot when working for a surveying company in northwest Alaska during the summer of 1977. Every morning Dave and the other surveyors were flown to a remote site where they spent the entire day walking across the tundra, crossing swamps, and swatting mosquitoes. After the pilot dropped off the survey crews, he would pick up the aircraft mechanic and they would go fishing until late in the day when it was then time to return and pick up the surveyors. That was when he decided to start a career in aviation.

In January 1978, Dave enrolled in the Aviation Maintenance Technician course at the Spartan School of Aeronautics in Tulsa, Oklahoma. After about 6 months of school, Dave decided that if he was going to work on aircraft he should also get his pilot license. Dave passed his private pilot check ride in July 1978, flying a Grumman TR-2. During the last 6 months of school Dave started working during the day and going to school at night. He worked in the sheet metal shop at Allied Helicopters rebuilding Bell 47 helicopters that were used for spraying crops in South America.

In 1979, Dave headed to Alaska for a summer job with 40 Mile Air in Tok, Alaska. The company had a Beaver, Seneca, Super Cubs, Helio Couriers, Cessna 206’s and a 185. Dave was surprised to learn that he was the only mechanic on the payroll. When Dave told the owner that he was fresh out of school and that some airplanes he knew nothing about, the owner said “that’s OK, we know a little bit about airplanes up here”.

At the end of the summer they offered Dave a full time position starting the following April on the condition that he obtain commercial and instrument ratings.

Dave showed up in April with his commercial and instrument ratings ready to be a Alaska pilot. He spent the next six years at 40 Mile flying all types of aircraft: skis, wheels, and floats. At the end of three years Dave earned his Inspection Authorization and became the Director of Maintenance.

One of his most memorable flights was when he was flying a Seneca to Fairbanks on a medevac flight. On board was a pregnant woman and two emergency medical technicians. As they were flying over Big Delta, the baby was born.

On January 20 1985 Dave accepted a job flying for the Tetlin National Wildlife Refuge. The Refuge had a brand new Super Cub. In the first year, they flew over 800 hours.
Dave moved to Fairbanks on January 20, 1988 to fly for the Arctic National Wildlife Refuge. The Refuge had a Cessna 185 (still in use today) and a Super Cub. Dave would fly the Super Cub, spring, summer and fall and then fly the Cessna 185 in the winter months. Dave and another Refuge pilot were the only two pilots at the Refuge so they would live at Barter Island 8 months of the year, then come back just long enough for a 100 hour inspection on the aircraft and back up on the slope. Dave flew for the Polar Bear project working on the pack ice, where a majority of the flying was in the Yukon and the Northwest territories.

Dave has also had his share of excitement. During a moose survey on the north side of the Brooks Range, the Super Cub he was flying developed severe vibrations. When Dave landed on a frozen lake to determine the cause of the vibrations, he discovered that about 3 inches of the propeller tip was missing. They were flown out that night by helicopter, but when they came back the next day with a new propeller, they discovered one of the tubes on the motor mount had broken. Being a resourceful A&P, Dave used hose clamps to fix the broken tube and then flew the airplane back to Fairbanks.

Three months later, while at Barter Islands, the wind was blowing 90 mph. The Cessna 185 was parked on the flight line and they couldn’t get down to the airport to see how it was handling the wind since the roads were closed. On the 3rd day the winds let up enough to fly back to Fairbanks. The airplane survived the windstorm but Dave decided to take a trip around the airport traffic pattern to make sure the airplane was airworthy. After take-off Dave felt the aircraft shudder and couldn’t stop the control yoke from traveling from stop to stop, full left aileron to full right aileron. When he looked out the right window he saw that the right aileron had torn loose from the wing and was hanging vertical from the inboard aileron hinge.

The airplane wanted to roll to the right, so it took full left aileron and rudder to keep airplane level. Fortunately, Dave was able to get the aircraft in position and landed safely. It turns out that the inside of the ailerons had become packed with snow during the storm that resulted in flutter from being out of balance condition.

Dave remembered that after seeing the aileron hanging vertical, he never looked out that window again until on the ground. As he put it: If you don’t like what you see, don’t look!

Dave says that flying for the Arctic Refuge is no doubt one of the best flying jobs in the state. There is always new country to see and many fine people to work with.

In June of 2015 Dave became the OAS Aviation Trainer for the Alaska Region. While he is looking forward to this new position, Dave said that he will gladly help the Arctic Refuge whenever they need an extra pilot.

On December 5, 2005 Dave was awarded the Secretary’s Award of Honor: Twenty years and 10,575 hours.

Dave Sowards – a DOI aviation professional.

Ratings:

- A&P Mechanic with an Inspection Authorization
- Flight Instructor, Single Engine, Instrument
- ATP Airplane Single Engine Land
- Commercial privileges, Airplane single engine sea, Airplane Multi Engine land
- Flight time: 18,000 plus hours, divided between Super Cub, 185, and a 206. Over 2,000 hours on floats.
EXECUTIVE SUMMARY

Take Away Sheet

POLICY: In FY15, DOI AMRB recommendations have been reduced by 91%! As of this date, only 13 AMRB recommendations remain open. Three Bureaus have closed out all of their assigned AMRB recommendations. Well done!

POLICY: OPM-6 is alive and well. Be sure to read about PASPs and look for best practices within your mission and geographic areas. Attention to the details ensures mission success and safety.

RISK MANAGEMENT: SAFECOM Reporting Success; because one person learned of a safety issue and submitted a SAFECOM, many DOI, USFS and external agency personnel who share the SAFECOM system became aware and took action.

ASSURANCE: 100% of all Plan Of Action and Milestones (POAMs) have been completed for aviation program evaluations conducted to date in accordance with OAS’s ISO 9001-2008 process requirements.

ASSURANCE: 29 Aviation Program Evaluation findings were found among 5 bureaus.

ASSURANCE: SAFECOM reporting has decreased this year demonstrating a need for continual safety awareness.

PROMOTION: In flight awards were given to Graeme Evans, John Mouton, Douglas Jacobs and Jayson Danziger for the second consecutive year with Bureau of Safety and Environmental Enforcement. Several Airwards for BLM, BSEE and OAS were also awarded.

PROMOTION: Bureaus maintaining excellence in aviation safety through their continuous accident-free years record include: BSEE-41 years; OSM-29 years; BOR-18 years; USGS-9 years; BOEM-3 years.