



Aviation Safety Summary & Annual Report

FY 2015

26th Annual





Fiscal Year 2015 DOI Annual Aviation Safety Summary/Report

Mark Bathrick - Director
Office of Aviation Services (OAS)

Erin Horsburgh - Assistant Director (OAS)

Keith Raley - Chief, Aviation Safety, Training & Program Evaluations
(208) 433-5071

John Mills - Air Safety Investigator
(208) 433-5072

John Waddell - Air Safety Investigator
(208) 433-5073

Blaine Moriarty - Aviation Program Evaluation Specialist
(208) 433-5045

Martha Watkins - Aviation Safety Data Analyst
(208) 433-5070

DOI's Aviation Safety and Aircraft Accident Prevention program is founded on the four pillars of an integrated **Safety Management System (SMS)**:



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, reduce 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 establish safety as an overriding priority but also require components of accountability, including clear expectations, required actions, and a means by which they will be evaluated.

Inside this issue:	Page
Overview	2-16
Policy	9
Risk Management	12
Assurance	17
Promotion	18-22
Executive Summary	23





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>

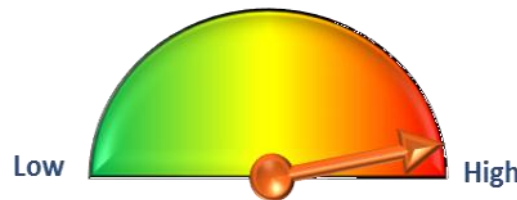


DOI Fleet Aircraft Inventory

Number of DOI Fleet Aircraft: 95

of A/C Type of Aircraft

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



High Diversity Rate

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

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

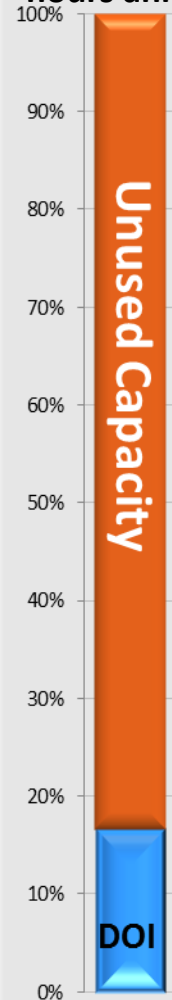
Pilots on average fly 100 hours per year, using this average DOI pilots exceeded the national average.



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.

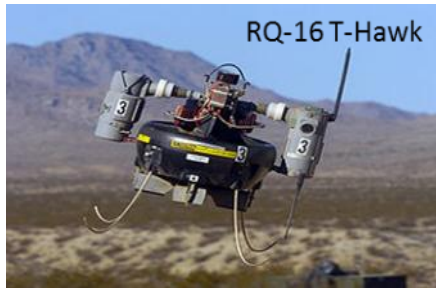
102,000 flyable hours annually



Fleet Pilot Capacity



Unmanned Aircraft Systems



RQ-16 T-Hawk

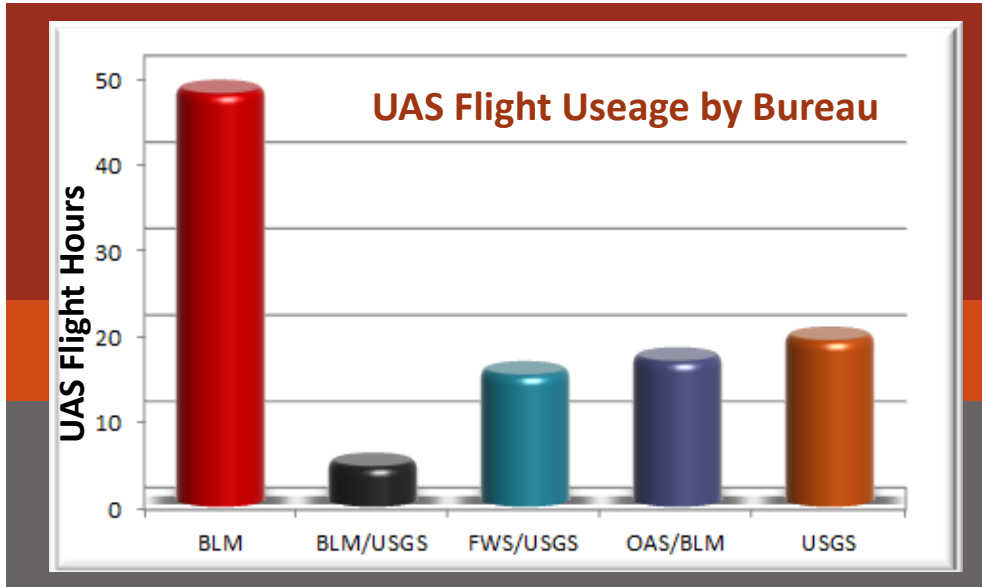
of A/C **Type of A/C**
 47 T-Hawk



of A/C **Type of A/C**
 12 Falcon



of A/C **Type of A/C**
 12 Falcon Hover



RQ-11A Raven

of A/C **Type of A/C**
 36 Raven A
 69 Raven B

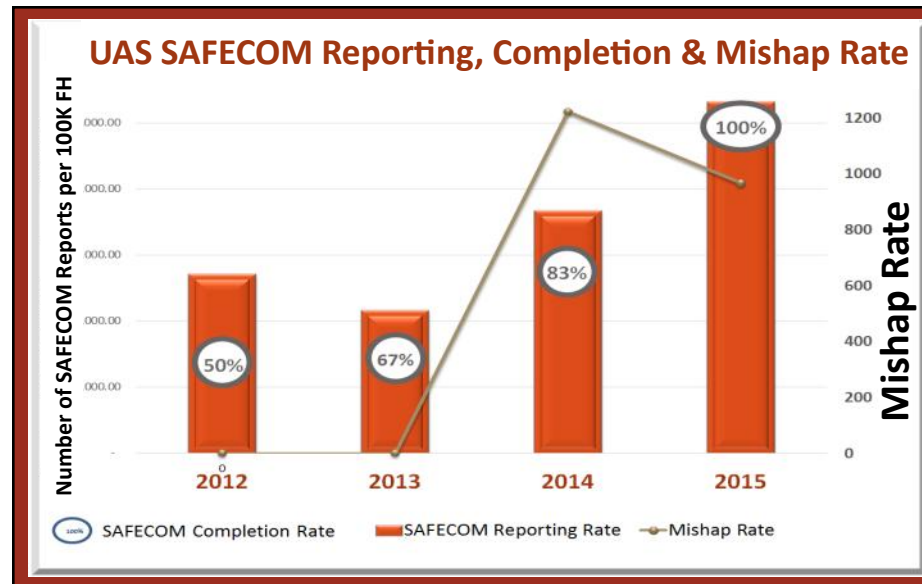


Super Bat

of A/C **Type of A/C**
 5 MLB Super Bat



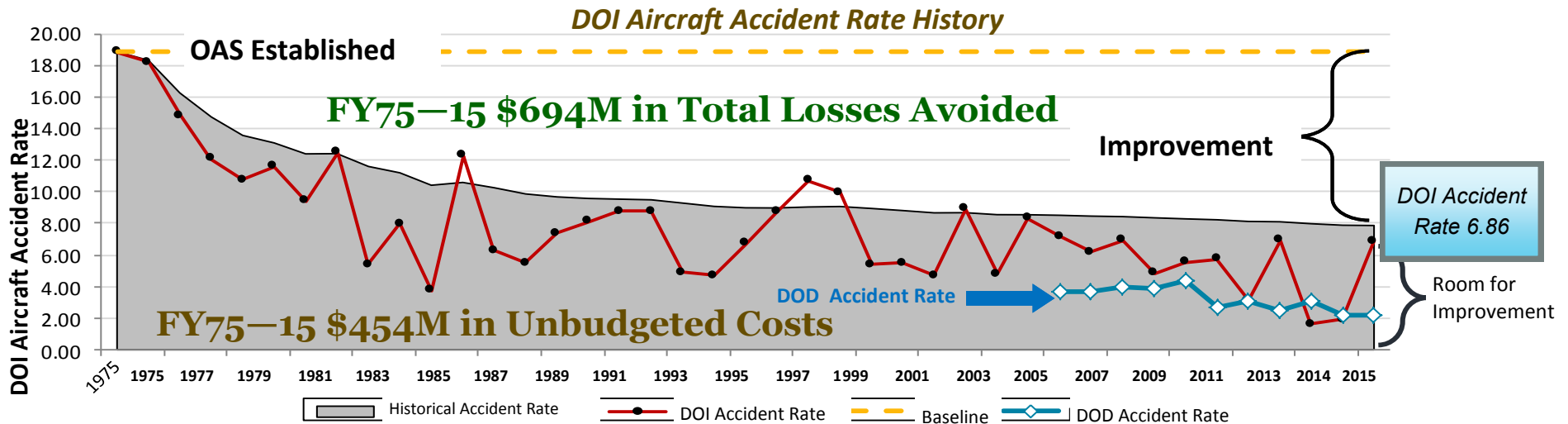
of A/C **Type of A/C**
 1 Pulse Vapor 55





Aircraft Accident Rate

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>)



The Department’s annual aircraft accident rate² 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

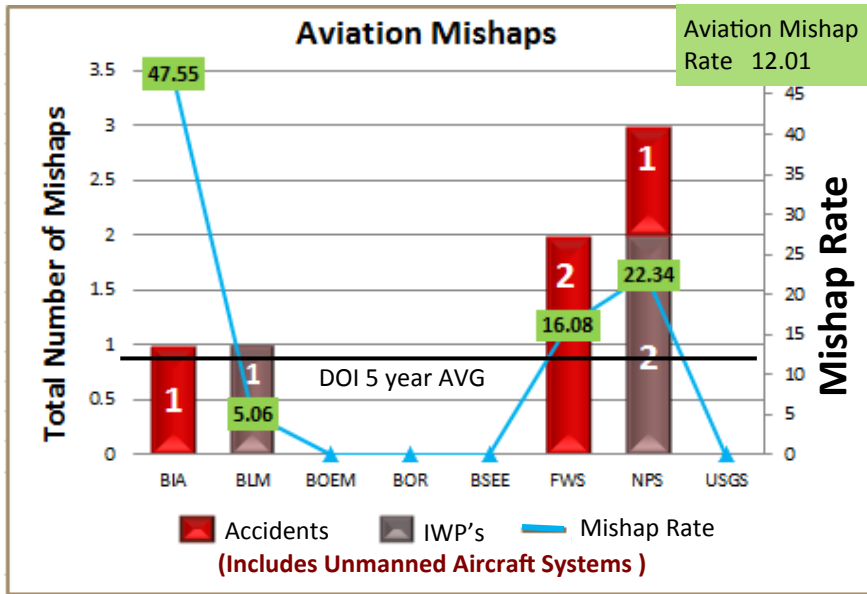
¹Historical aircraft accident rate is defined as total historical aircraft accidents per 100,000 flight hours flown.

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

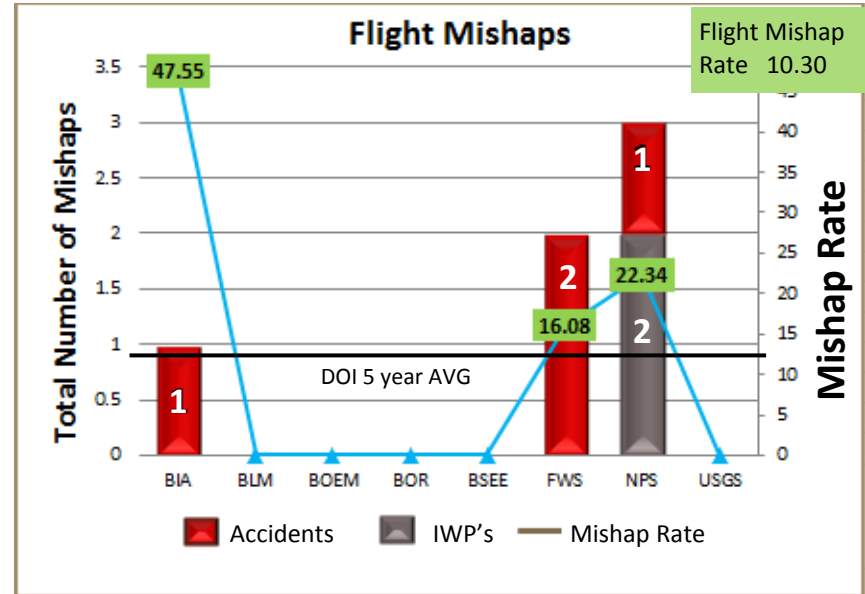
³Includes DOI Fleet, Commercial Vendor, and Cooperator aircraft from other agencies. Pilots receive evaluations for each specific special use mission area qualification.



DOI FY15 Mishap Overview

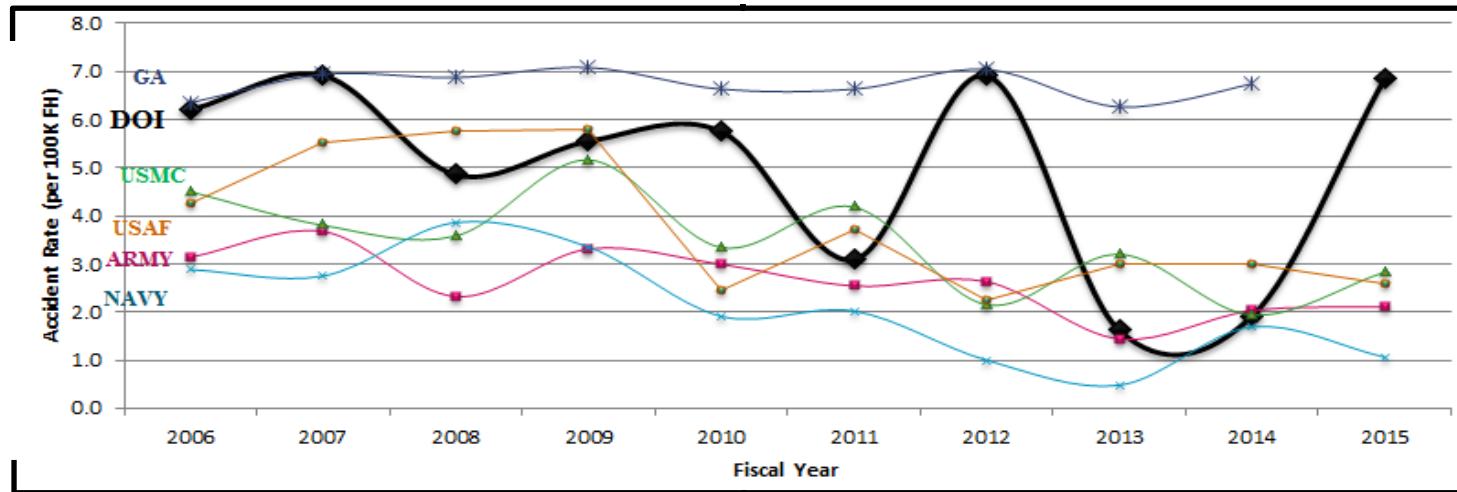


Aviation Mishap Rate includes UAS's, the Flight Rate doesn't include Unmanned Aircraft Systems.



Accident Rate

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 + IWP's



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

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



FY15 Aviation Overview

DOI FY15 Mishap Overview

IWP - Incident with potential

Location	Date	Severity	Operator	Aircraft	Description
The Dalles, OR	8-19-15	Accident	Contractor BIA NW Region	Aero Commander 500	Contact with runway occurred due to premature wheel retraction during takeoff.
Willows, AK	7-22-15	IWP	Contractor Not Bureau Operationally Controlled	American Champion Super Decathlon	During training event, aircraft contacted the runway causing significant damage.
Cold Bay, AK	7-24-15	Accident	Fleet FWS Region 7	Found Bush Hawk	Loss of directional control during off airport takeoff, resulted in substantial damage.
Carrizo Plain NP, CA	4-16-15	IWP	Fleet BLM California Region	Super Bat UAS	UAS inadvertently launched from the catapult without the engine running and impacted the ground.
Voyageurs NP, MN	2-14-15	IWP	Fleet FWS Region 3	Aviat Husky	Fuel exhaustion resulted in off airport landing.
Anchorage, AK	10-19-14	Accident	Fleet FWS Region 7	Cub Crafter CC18-180 Top Cub	Pilot lost directional control during off airport landing.
El Portal, CA	10-7-14	Accident	Contractor NPS Pacific West	S-2F3AT	Aircraft contacted trees resulting in impact with terrain during fire suppression operations.

Incidental Cost associated with Mishaps

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

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

	Annual flight Usage Cost	Annual Flight Hours	Cost per Flight Hour
Fleet	\$ 6,594,403	17,116	\$ 385
Contract	\$ 49,982,908	41,153	\$ 1,215
Total Usage	\$ 56,577,310	58,269	\$ 971

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



FY15 SAFECOM Overview

SAFECOMs by Category

Well represented Hazards

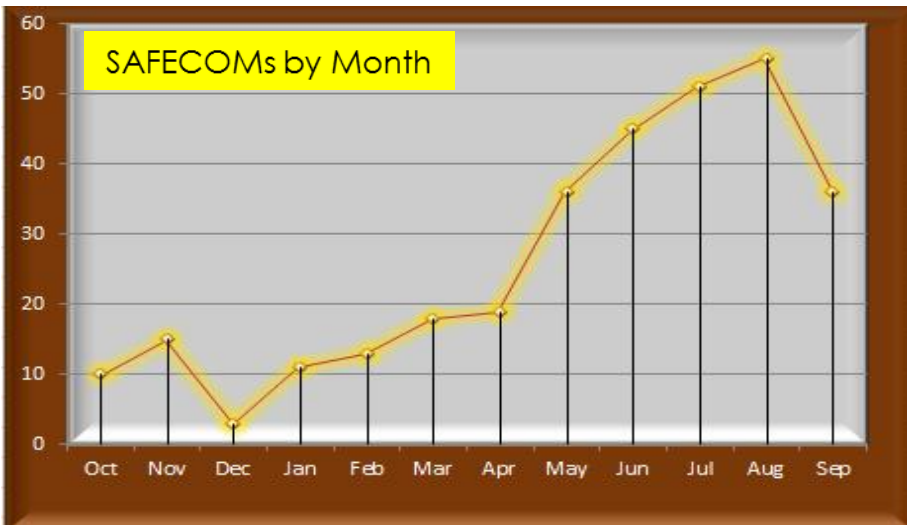
Include:

- ◆ Pilot Action
- ◆ Communications
- ◆ Policy Deviation
- ◆ Preflight Action
- ◆ Verbal Communication
- ◆ Mission Equipment
- ◆ Other



Top Maintenance Issues:

- ◆ Electrical
- ◆ Engine
- ◆ Airframe
- ◆ Avionics
- ◆ Chip Light
- ◆ Fuel
- ◆ Avionics (Radios)
- ◆ Oil



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

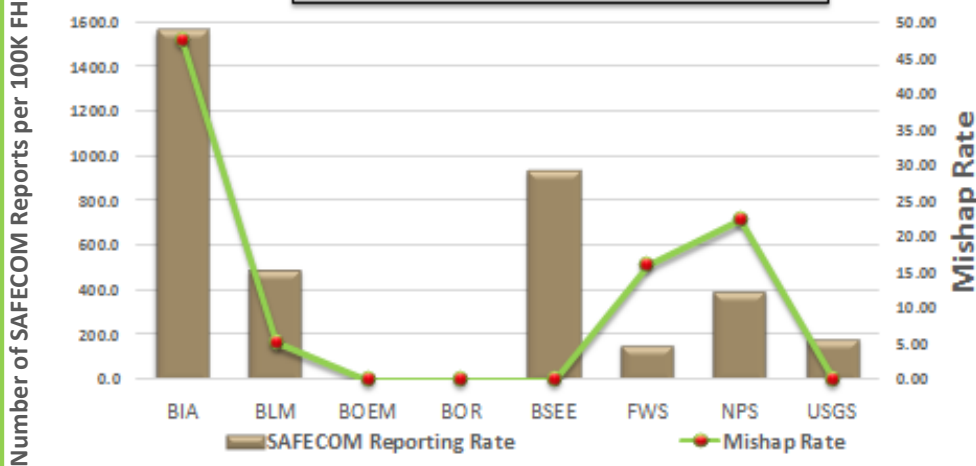
FY15 SAFECOMs	
Bureau	Submitted
BIA	11%
BLM	34%
BOEM	0%
BOR	0%
BSEE	27%
FWS	7%
NPS	19%
USGS	1%
OAS	2%
OSMRE	0%



FY15 SAFECOM Overview

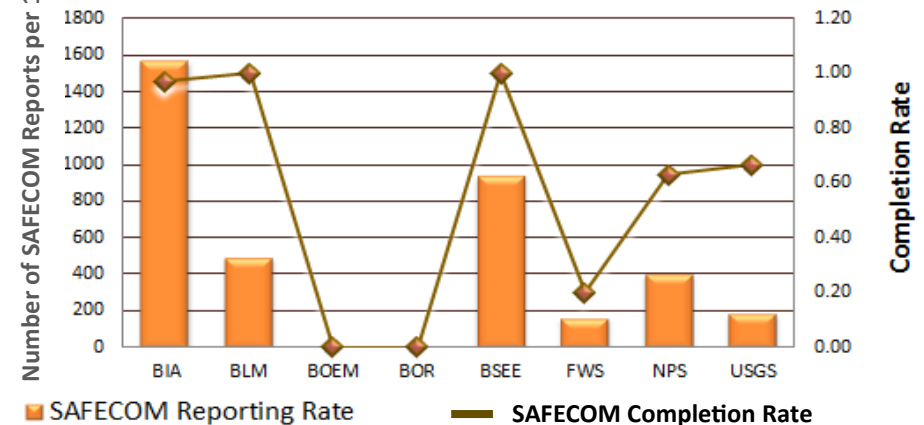
1.

SAFECOM Reporting vs Mishap Rate



2.

DOI SAFECOM Reporting & Completion Rate by Bureau FY15



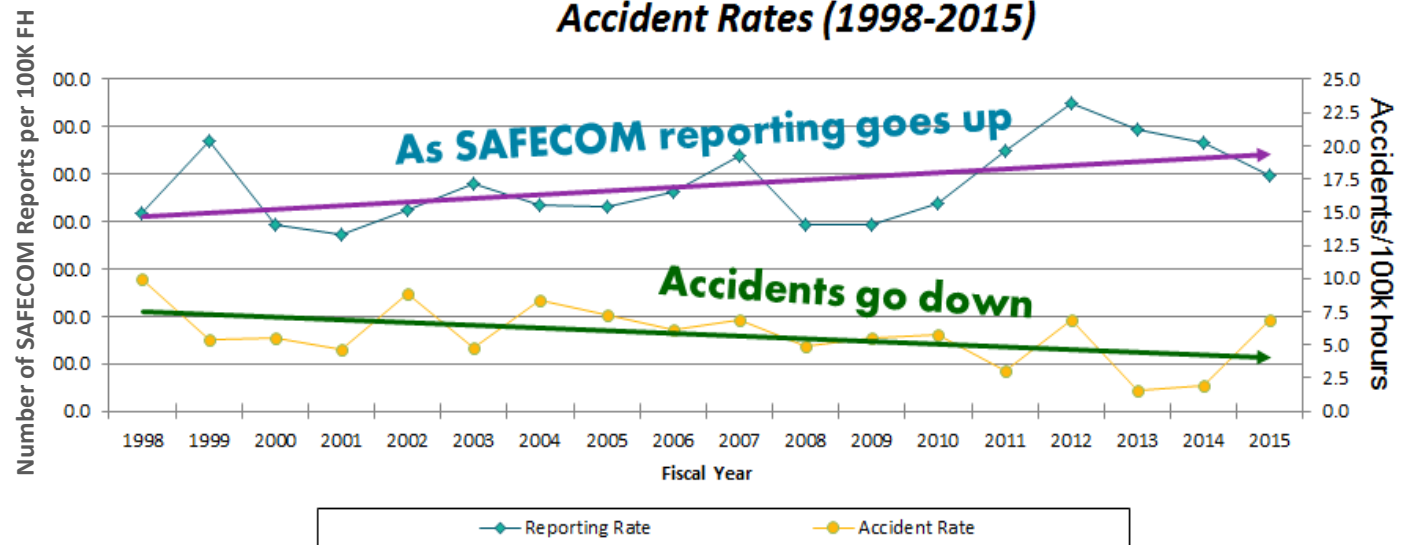
Slide 1– Without good reporting, you don’t know what your mishap rate is. BIA’s mishap rate is high, due to their low flight hours. BIA is to be commended for increasing their SAFECOM reporting rate by 65%.

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%.

3.

Comparison of SAFECOM Reporting to Accident Rates (1998-2015)





SAFECOM Reporting Success

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



Bureau	Annual Flight Hours	Annual flight Usage Cost	Cost per Flight Hour
BLM	19,780	\$ 28,807,039	\$ 1,456

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

Bureau	Annual Flight Hours	Annual flight Usage Cost	Cost per Flight Hour
BIA	2,103	\$ 3,288,406	\$ 1,564

FY15 BLM Fleet Statistics

Manned Aircraft - 4% of Fleet 6

Aircraft Age

0-10 Years	2
11-20 Years	1
> 21 Years	3

Pilots* 7
Dual Function Pilots 6
Independent 0

Pilot to Aircraft Ratio 1.17

BLM UAS Flights 2015

Number of UAS missions	22
Missions	Pawnee Grasslands, Silver Creek Project, Jornada NM Range, CA Desert, San Simon AZ, Safford AZ, Soda Lake, CA, Malta MT, NAO Boise, Spokane Field Sage Grouse
Aircraft System Type	Super Bat- 11 Missions T-Hawk - 11 Missions
Flight Hours	69.15

*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)

SAFECOM

BLM has one of the highest SAFECOM completion rate in DOI at **100%**. There were 98 SAFECOMs submitted which account for 34% of DOI SAFECOMS. Reporting increased by 20% from FY14.

FY15 Aviation Mishaps = 1 Incident With Potential (UAS)

BLM flight hours have increased by 15% from FY14.

SAFECOM

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

FY15 Aviation Mishap = 1 Accident

BIA flight hours have decreased by 4% from FY14.

BOEM

BUREAU OF OCEAN ENERGY MANAGEMENT

Bureau	Annual Flight Hours	Annual flight Usage Cost	Cost per Flight Hour
BOEM	337	\$ 489,975	\$ 1,456

BOEM flight hours have increased by 46% from FY14.



FY15 Aviation Overview



Bureau	Annual Flight Hours	Annual flight Usage Cost	Cost per Flight Hour
FWS	12,439	\$ 3,817,584	\$ 307

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

Bureau	Annual Flight Hours	Annual flight Usage Cost	Cost per Flight Hour
NPS	13,430	\$ 9,964,889	\$ 742

FY15 FWS Fleet Statistics

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	.74

FWS UAS Flights 2015

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

FY15 NPS Fleet Statistics

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

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.

SAFECOM

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.

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.



FY15 Aviation Overview



Bureau	Annual Flight Hours	Annual flight Usage Cost	Cost per Flight Hour
BSEE	8,178	\$ 8,835,722	\$ 1,080

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

Bureau	Annual Flight Hours	Annual flight Usage Cost	Cost per Flight Hour
USGS	1,621	\$ 984,071	\$ 607

SAFECOM

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.



Bureau	Annual Flight Hours	Annual flight Usage Cost	Cost per Flight Hour
BOR	199	\$ 247,443	\$ 1,244

BOR flight hours have decreased by 95% from FY14.

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

SAFECOM

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.



FY15 Aviation Overview

OAS

Bureau	Annual Flight Hours	Annual flight Usage Cost	Cost per Flight Hour
OAS	183	\$ 142,182	\$ 778

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

Manned Aircraft—1% of Fleet	1
Aircraft Age	
0-10 Years	0
11-20 Years	0
> 21 Years	1
Dual Function Pilots (Inspectors)	16
Pilots	1
Pilots to Aircraft Ratio	17

OAS UAS Flights 2015	
Number of UAS missions	6
Locations	San Simon Arizona & Stafford Arizona
Aircraft System Type	T-Hawk and Super Bat
Flight Hours	16.8

OAS flight hours have decreased by 299% from FY14.



OSM has no flight information.

Office of Aviation Services

PERFORMANCE

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



FY15 Aviation Overview

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.

FY15 Aviation Program Evaluation Results & Performance

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

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.



Aviation Program Evaluation Overview

The OAS Operational Procedure Memorandum 6, *Aviation Management Plans*, identifying the minimum standardized elements for DOI Project Aviation Safety Plans (PASP) 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.) be-

yond 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

Bureau Continuous Accident Free Milestones

	BSEE	41 Years
	OSM	29 Years
	BOR	18 Years
	USGS	9 Years
	*BOEM	4 Years
	BLM	1 Year

*contributed to BSEE's 40 year accident free milestone

*Safety is not a gadget
but a state of mind.*


Author Unknown

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 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

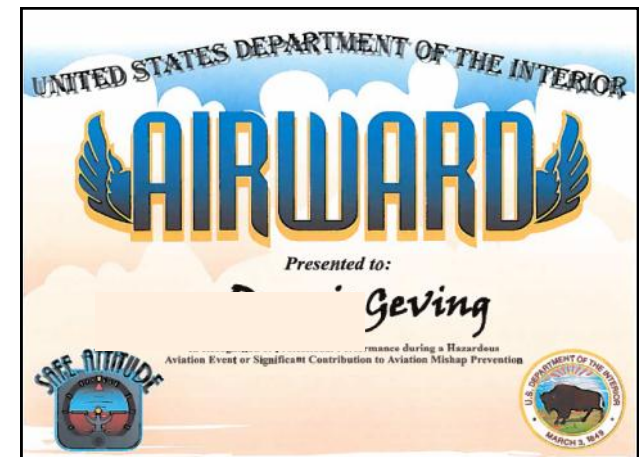
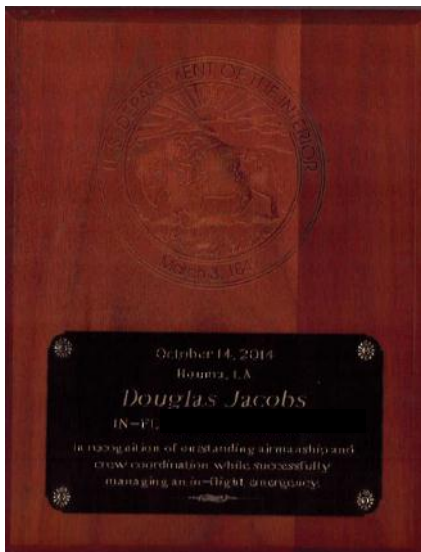
Dennis Geving
Bureau of Land Management

William James
Office of Aviation Services

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





DOI Accident Free Pilots



Office of Aviation Services

Bannister, Gene
 Barry, Andrew
 Brennan, Gary
 Bussard, Joe
 Castillo, James
 Foster, Ed
 Fowler, Dale
 Fox, Kevin
 James, William
 Kearney, Patrick
 Mancano, Maria
 Milone, Colin
 Miller, Arlyn
 Wittkop, Jim



U.S. Geological Survey

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



National Park Service

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



U.S. Fish and Wildlife Services

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



Bureau of Land Management

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



NPS Park Police

Burchell, Kenneth
 Chittick, Kevin
 Eavasick, Ryan
 Haapapuro, Eric
 Hertel, Jeffrey
 Lindley, Jonathan
 Perkins, Christopher
 Ryan, Timothy
 Tolson, David
 Wright, Keaton



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.



Pictured left to right: Brian Glaspell (Former Manager Arctic Refuge), Anne Marie La Rosa (Former Deputy Manager Arctic Refuge), Sally Jewel (Secretary of the Interior), Dave Sowards.

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.



Pilot Spotlight cont.

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.

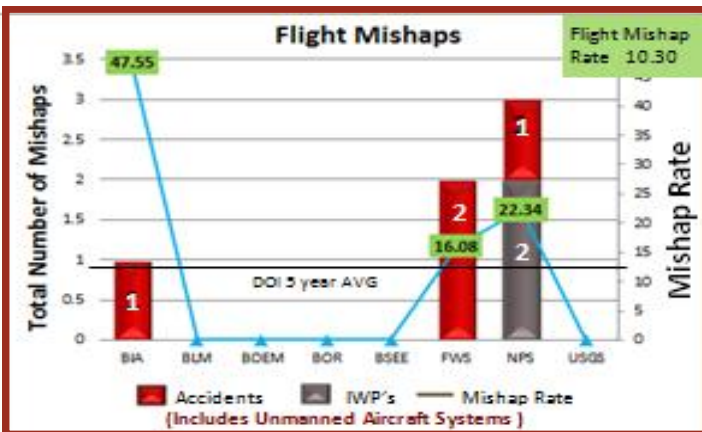
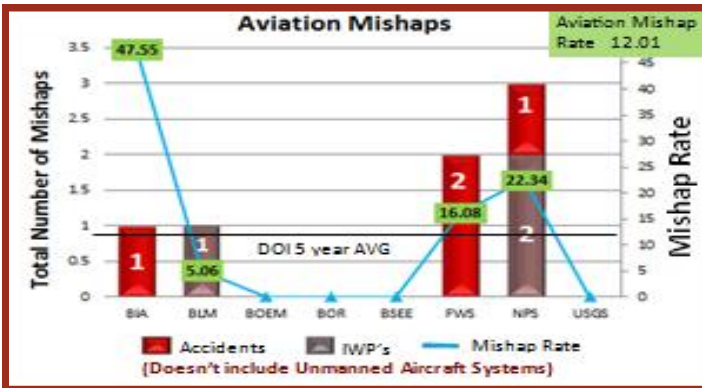
Ratings:

- ◆ 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



4 Accident and 3 Incidents with Potential

DOI Flight Usage Cost

Cost associated with flight hours only

	Annual flight Usage Cost	Annual Flight Hours	Cost per Flight Hour
Fleet	\$ 6,594,403	17,116	\$ 385
Contract	\$ 49,982,908	41,153	\$ 1,215
Total Usage	\$ 56,577,310	58,269	\$ 971

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.

