



FY 2016

27th
Annual

Aviation Safety Summary and Annual Report

Published by:

Office of Aviation Services
(OAS)

[HTTPS://WWW.DOI.GOV/AVIATION](https://www.doi.gov/aviation)



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Fiscal Year 2016 DOI Annual Aviation Safety Summary/Report

OAS - Point of Contacts

Mark Bathrick -Director
Office of Aviation Services (OAS)
(208) 433-5000

Keith Raley-Chief, Aviation Safety, Training,
Program Evaluations & Quality Management
(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

Cathy Barta - Aviation Program Evaluation
Specialist
(208) 995-6116

Monique Way- Aviation Safety Data Analyst
(208) 433-5003

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



The Department of the Interior (DOI) requires aviation programs to be adequately re-sourced and managed. Those requirements provide the basis that enable us to prevent all aircraft accidents.

Successful aviation programs embrace a just culture that balances safety and accountability.

Successful implementation of policy combined with proactive management of sound operating principles remain the cornerstone of a successful aviation program. Management must also assure those polices and practices are measured to ensure they remain effective.

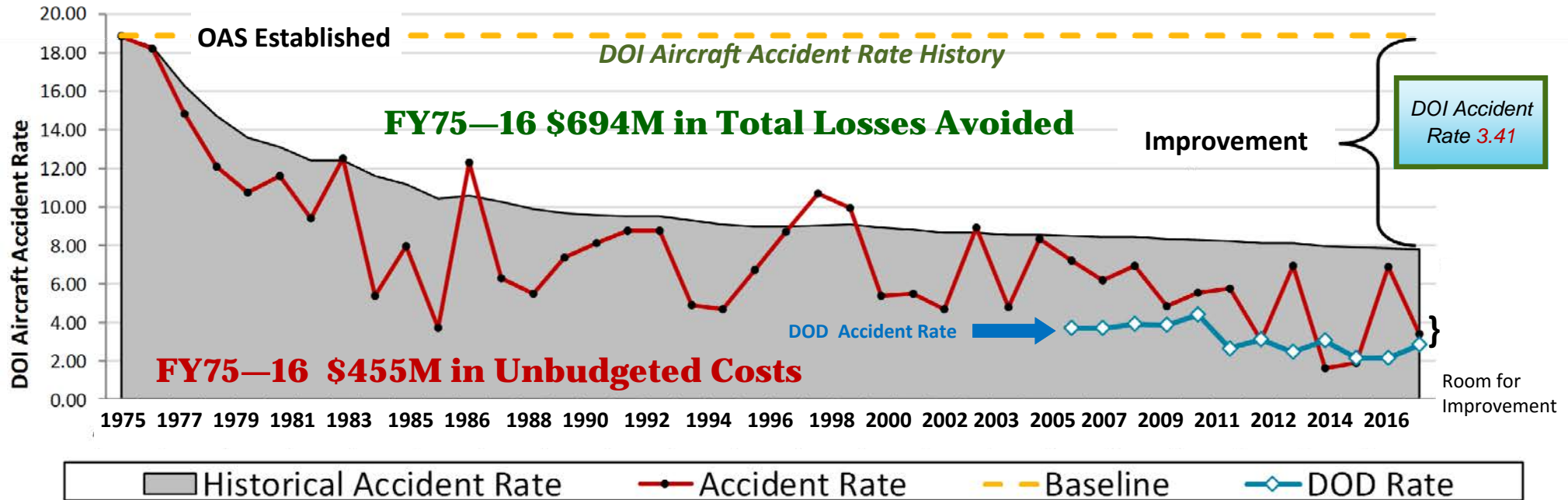
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Aircraft Accident Rate

The U.S. Department of the Interior recorded four incidents with potential (IWP's) and ended the year with two accidents. The **annual** aircraft accident rate is 3.41 per 100K flight hours, a decrease of more than half from last year. The DOI mishap rate is 10.23 which is a decrease from the previous year by 1.78. 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 FY16 is 3.41 accidents per 100,000 flight hours. As of October 1, 2016, flight data captured **58,673.02 total flight hours**, only 403.58 hours 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. Flight missions performed for DOI were supported in part by bureau requested and OAS supported aviation contracts that required: 2,396 vendor pilot evaluations, 864 vendor aircraft inspections, 354 Interior fleet pilot evaluations, and 78 Interior fleet aircraft inspections. Aviation Training supported 637 instructor led course offerings accounting for 5,217 student hours of training and the Interagency Aviation Training website recorded 26,043 course completions.³

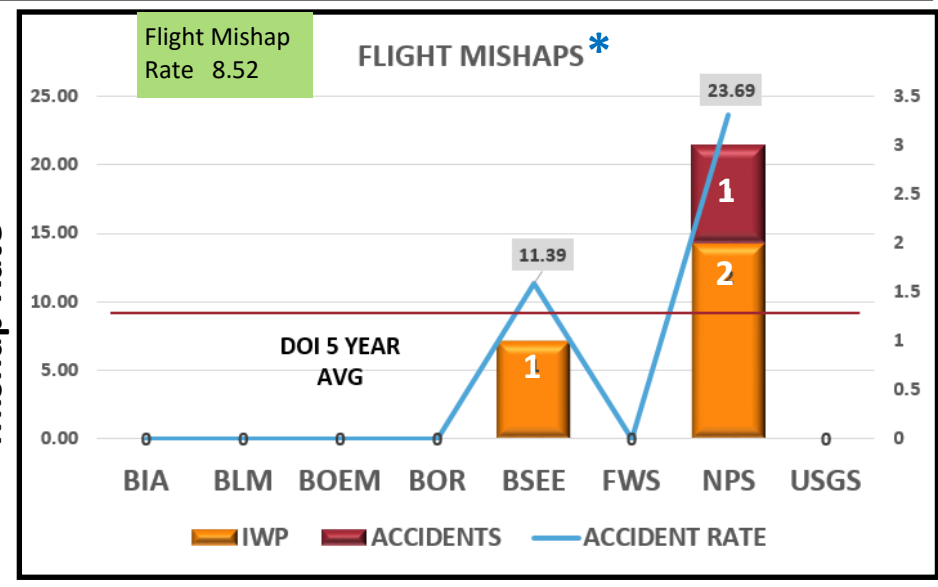
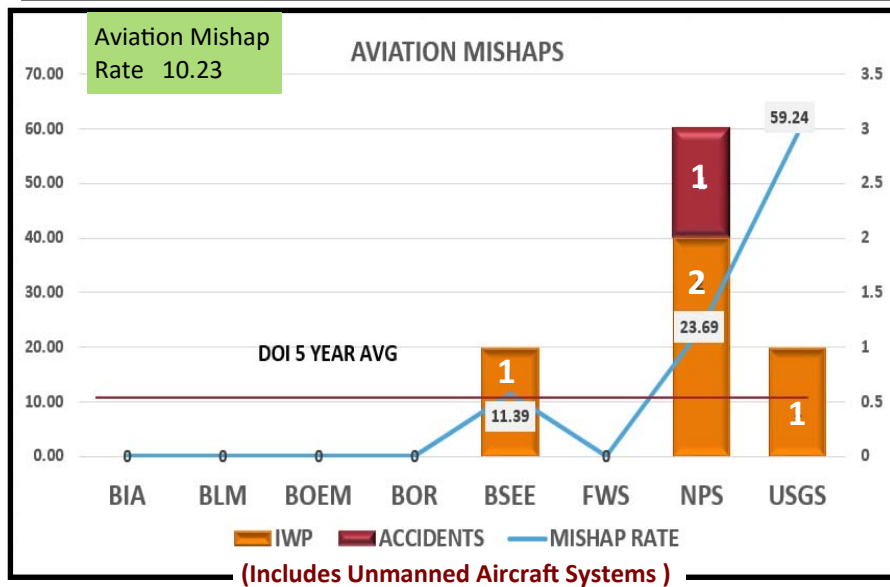
¹Historical aircraft accident rate is defined as total historical aircraft accidents per 100,000 flight hours flown.

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.

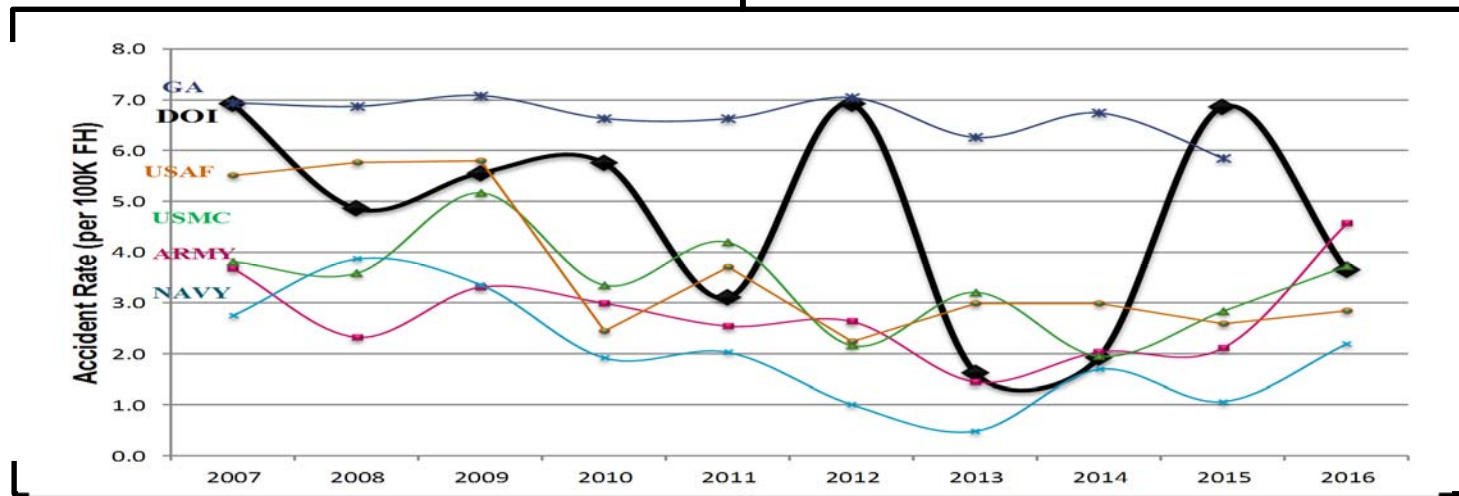


DOI FY16 Mishap Overview



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 + IWPs



DOI accident rate has **decreased** by 3.45 from FY15. Flight hours have increased by only 1% over last year.

**General Aviation 2016 data hasn't been updated as of Oct 2016

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



FY16 Aviation Overview

DOI FY16 Mishap Overview

IWP - Incident with potential

Location	Date	Severity	Operator	Aircraft	Description
Rockport, WA	9-12-16	Accident	Contractor NPS Pacific West	Bell 206B3 Helicopter	Substantial damage to the aircraft after landing.
Ely, NV	6-30-16	Accident	Fleet OAS	Cessna 206 "Stationair"	Abnormal runway contact: Substantial damage to aft bulkhead during unstable approach and landing.
Silver Salmon, AK	3-14-16	IWP	Fleet NPS Alaska	Cessna TU-206G	Fleet aircraft landed on off-airport and wing hit sand.
Valley Wells, CA	1-16-16	IWP	Fleet USGS Pacific	Falcon Fixed Wing	UAS crashed, significant damage.
Lafayette, LA	12-9-15	IWP	Contractor BSEE Gulf of Mexico	Augusta Westland A119	Near mid-air collision.
Lake Clark NP, AK	10-12-15	IWP	Fleet NPS Alaska	Piper Super Cub PA-18	Aircraft landed on gravel bar and right wing contacted the ground causing damage to rudder and elevator.

Incidental Cost associated with Mishaps

Cost Input	Cost	Cost Input	Cost
Bureau Investigation	\$ 4,000	OAS Investigation (reimbursable)	\$ 5,000
DOI Losses (i.e. a/c repair, recovery, loss of availability, loss of life)	\$ 7,400	Vendor Losses (i.e. A/C repair, recovery, loss of availability, etc.)	\$ 200,000
Fatality (0) *VSL	\$0	Minor Injuries (0)	\$ 0
Total Costs (6 Mishaps)		\$ 216,400	

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	\$ 6,255,182	15,408	\$ 406
Contract	\$ 54,627,323	43,265	\$ 1,263
Total Usage	\$ 60,882,505	58,673	\$ 1,038

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



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>

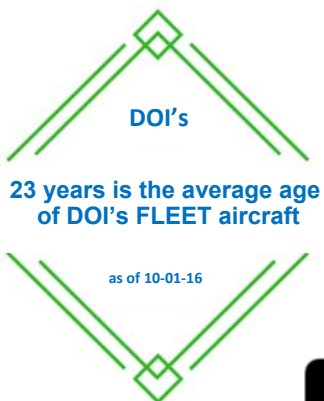


DOI's Fleet Aircraft Inventory

DOI Fleet Aircraft: 95

of A/C **Type of Aircraft**

- 2 - American Champion Aircraft 8GCBC Scout
- 1 - American Eurocopter AS350B2
- 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
- 16 - Cessna 206
- 15 - Cub Crafters CC-18 Top Cub
- 2 - DHC-2 Beaver
- 1 - DHC-6 Twin Otter
- 7 - Found FBA 2C
- 2 - P68 Partenavia
- 1 - Pilatus PC-12
- 8 - Piper PA-18 Super Cub
- 2 - Quest Kodiak 100
- 6 - Quest Kodiak 100 Amphibian



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 consistently exceeded the national average.

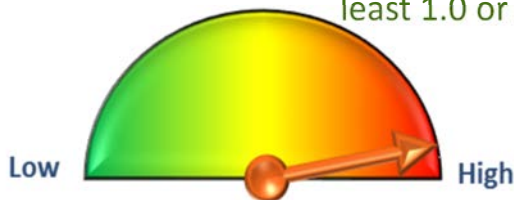
Fleet Manned Pilots: 93

Fleet Unmanned Pilots: 50

Inspectors Pilots: 13

(1.12) pilots per manned 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.

111,600 flyable hours annually

100%

80%

60%

40%

20%

0%

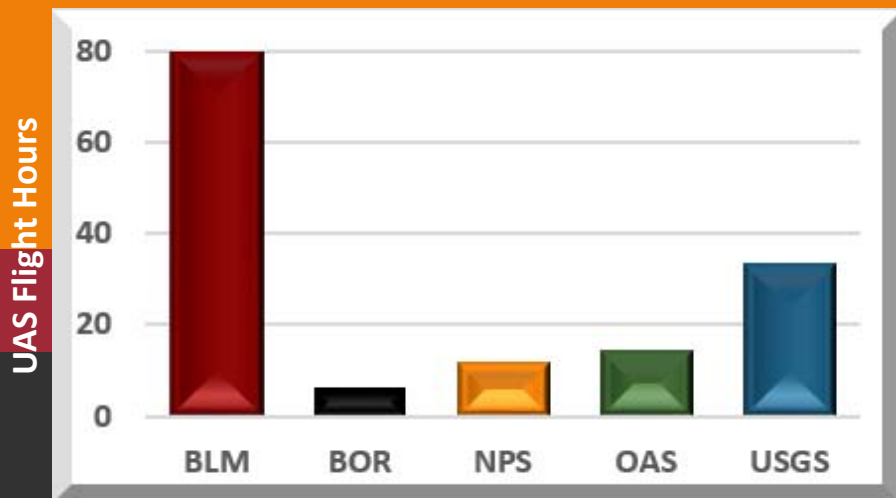
Fleet Pilot Capacity





Unmanned Aircraft Systems

Fy16 UAS Flight Usage by Bureau



of A/C
200
Type of A/C
Solo



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



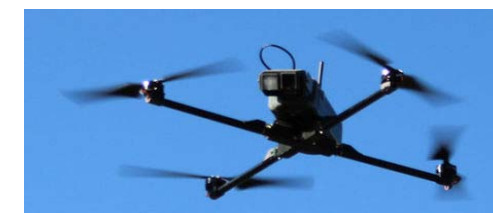
of A/C
2
Type of A/C
Apprentice



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



of A/C
12
Type of A/C
Falcon Fixed Wing



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

UAS SAFECOM Reporting, Completion & Mishap Rate



MISHAP Rate

SAFECOM Reporting Rate

SAFECOM Completion Rate



FAQ's for Unmanned Aircraft Systems (sUAS)

DOI has employed aircraft in support of its mission for over 50 years. The goal of the DOI Unmanned Aircraft Systems (UAS) program is to incorporate this new class of aircraft into DOI's government owned and commercially contracted fleet to support DOI missions for which UAS may be better suited than manned aircraft, achieving superior science, safety and savings.

Departmental aviation program evaluations reveal that field personnel are interested in UAS technologies and ask many questions regarding UAS use in DOI.

1. What is an unmanned aircraft system (UAS)? Definition per the FAA: "An unmanned aircraft system (UAS), sometimes called a drone, is an aircraft without a human pilot onboard – instead, the UAS is controlled from an operator on the ground. When you fly a drone in the United States, it is your responsibility to understand and abide by the rules."
2. How does DOI use unmanned aircraft systems? Please refer to the DOI website: <https://www.doi.gov/aviation/uas>
3. Why is DOI using unmanned aircraft systems? From the DOI website: "DOI mis-
- sions can be hazardous to personnel, require persistent presence, and often need to be conducted without disturbing native species or visitors to our lands. Development of the UAS program within DOI will support in the accomplishment of our mission through better science, greater safety, and increased savings." Also, resolution for data collection may be superior to other methods at a lower cost in some situations.
4. What types of unmanned aircraft systems does the DOI have? <https://www.doi.gov/aviation/uas/fleet>
5. What types of unmanned aircraft systems activities has DOI agencies been involved in? (<https://www.doi.gov/aviation/uas/news>) is a good resource for some of the projects where UAS have been applied, DOI has been exploring the application of UAS with fire-fighting, data collection (land and vegetation plots, resource flights, animal surveys) and search and rescue.
6. When we receive an application for a special use permit and they state they would like to use a sUAS, or drone, what guidance should we include or questions should we ask as part of the permitting

process? If you have a request from parties wanting to fly drones from lands managed by your agency, they must comply with your policies and regulations regarding commercial filming permits. Bureaus are encouraged to contact their aviation managers for information if there are concerns.

7. What training do pilots of unmanned aircraft systems receive? The training requirements for UAS pilot are outlined in OPM-11. https://www.doi.gov/sites/doi.gov/files/uploads/opm-11_08102016.pdf
8. Do agencies need flight approval to operate unmanned aircraft systems? There is a defined process for beginning a UAS program within your bureau. Refer to OPM-11 for details and contact your aviation manager. https://www.doi.gov/sites/doi.gov/files/uploads/opm-11_08102016.pdf



FAQ's for sUAS cont.

9. Who can receive a Certificate of Authorization (COA) to fly a UAS in the National Airspace (NAS)?
- Access to the national airspace system is gained through different channels depending on the nature of the mission. Operators are trained in how to use these authorities during the basic operator course. More information can be found in OPM-11. https://www.doi.gov/sites/doi.gov/files/uploads/opm-11_08102016.pdf
10. Do I need to get approval from the FAA to fly a model aircraft for recreation? No, please read the rules for Hobby Operators <https://www.faa.gov/uas/faqs/#ffr>
- However you cannot use your personal aircraft for any DOI business. Or use data obtained from your hobby aircraft. Only OAS approved aircraft may be used for DOI business.
11. If I fly a UAS for business purposes, such as new technology development, am I required to get approval from the FAA? Commercial operation of UAS is governed by 14CFR Part 107. DOI operation of UAS is governed by OPM-11. https://www.doi.gov/sites/doi.gov/files/uploads/opm-11_08102016.pdf
12. Can I fly a UAS under a COA or experimental certificate for commercial purposes? If you are referring to Government work, no. All DOI use of UAS should comply with OPM-11. https://www.doi.gov/sites/doi.gov/files/uploads/opm-11_08102016.pdf
13. Do UAS have Automated Flight Following (AFF) technology to be tracked? No DOI UAS are equipped with AFF. However it is technically possible to do so if needed.
14. Do I have to notify a dispatch center if UAS will be flying a mission on my unit? Refer to your agency policy, if in doubt contact your aviation manager for more detail.
15. What's the difference between a hobby aircraft and a commercial UAS? Hobby aircraft cannot be used for any commercial purpose. Nor can the data obtained from hobby aircraft. Any commercial use of UAS must comply with 14CFR Part 107. DOI use of UAS is required to comply with OPM-11 https://www.doi.gov/sites/doi.gov/files/uploads/opm-11_08102016.pdf
16. How will Part 107 affect the way we operate UAS and train operators? How part 107 will be integrated will be outlined in the OPM-11 which is being revised in the near future.

OAS UAS Division

Point of Contact

Brad Koeckeritz

Division Chief, Unmanned Aircraft Systems
(208) 433-5091

Steve Ramaekers

UAS Fleet Manager
(208) 433-5002

Colin Milone

Lead UAS Pilot Inspector
(907) 230-5037

Richard Thurau

Remote Sensing Specialist
(208) 912-2838



FY16 Aviation Overview



Bureau	Annual Flight Hours	Annual flight Usage Cost	Cost per Flight Hour
BLM	20,945	\$ 32,236,548	\$ 1,539

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	2,272	\$ 3,349,038	\$ 1,474

FY16 BLM Fleet Statistics		BLM UAS Flights 2016	
Manned Aircraft - 6% of Fleet	6	Number of UAS missions	22
Aircraft Age		Missions Kuna ID, Safford AZ, Douglas AZ, Meeker CO, Magdalena NM, Cold Springs WA, Cortez Mine Site, Salmon ID, Vernal UT, Snake River ID, Muskrat Canyon, Clackamas OR, St Johns AZ, Swan Falls Dam	
0-10 Years	2		
11-20 Years	1		
> 21 Years	3		
Pilots*	6	Aircraft System Type 3DR Solo - 26 Missions Falcon Fixed - 10 Missions Falcon Hover - 8 Missions	
Dual Function Pilots	5		
Independent	1		
Pilot to Aircraft Ratio	2.0	Flight Hours	80

*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 for FY16 at 100% with 1 remaining open from 2012 to 2015. There were 128 SAFECOMs submitted which account for 31% of DOI SAFECOMS. Reporting increased by 31% from FY15.

BLM flight hours have increased by 6% from FY15.

SAFECOM

BIA has one of the highest SAFECOM completion rate in DOI at 96% with 3 remaining open from 2012 to 2015. There were 27 SAFECOMs submitted which account for 6% of DOI SAFECOMS. Reporting increased by 18% from FY15.

BIA flight hours have increased by 8% from FY15.

BOEM

BUREAU OF OCEAN ENERGY MANAGEMENT

Bureau	Annual Flight Hours	Annual flight Usage Cost	Cost per Flight Hour
BOEM	545	\$ 813,103	\$ 1,492

No SAFECOM's were submitted by BOEM in FY16, 1 SAFECOM remains open from 2012-2015.

BOEM flight hours have increased by 62% from FY15.



FY16 Aviation Overview



Bureau	Annual Flight Hours	Annual flight Usage Cost	Cost per Flight Hour
FWS	11,435	\$ 3,954,571	\$ 346

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	12,662	\$ 9,492,146	\$ 750

FY16 FWS Fleet Statistics

Manned Aircraft—60% of Fleet 57

Aircraft Age

0-10 Years 21
 11-20 Years 13
 > 21 Years 23

Pilots 5
 Dual Function Pilots 37

Pilot to Aircraft Ratio .74

SAFECOM

FWS has one of the highest SAFECOM completion rate in DOI for FY16 at 100% with 26 remaining open from 2012 to 2015. There were 21 SAFECOMs submitted which account for 5% of DOI SAFECOMS. Reporting decreased by 5% from FY15.

FWS flight hours have decreased by 8% from FY15.

FY16 NPS Fleet Statistics

Manned Aircraft—33% of Fleet 31

Aircraft Age

0-10 Years 5
 11-20 Years 6
 > 21 Years 20

Pilots 6
 Dual Function Pilots 15

Pilot to Aircraft Ratio .68

NPS UAS Flights 2016

Number of UAS Missions 1

Missions A450 Training Course, Grand Canyon NP

Aircraft System Type 3DR Solo

Flight Hours 11.8

SAFECOM

NPS has a SAFECOM completion rate at 73% with 39 remaining open from 2015 to 2015. There were 39 SAFECOMs submitted which account for 10% of DOI SAFECOMS. Reporting decreased by 24% from FY15.

Aviation Mishaps = 1 Accident, 2 IWP

NPS flight hours have decreased by 6% from FY15.



FY16 Aviation Overview



Bureau	Annual Flight Hours	Annual flight Usage Cost	Cost per Flight Hour
BSEE	8,776	\$ 9,566,500	\$ 1,090

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	1,688	\$ 1,160,874	\$ 688

SAFECOM

BSEE has one of the highest SAFECOM completion rate in DOI at 100% with 1 remaining open from 2012 to 2015. There were 171 SAFECOMs submitted which account for 41% of DOI SAFECOMs. Reporting increased by **122%** from FY15.

FY16 Aviation Mishaps = 1 Incident with Potential (IWP)
BSEE flight hours have increased by 7% from FY15.



Bureau	Annual Flight Hours	Annual flight Usage Cost	Cost per Flight Hour
BOR	177	\$ 169,852	\$ 960

No SAFECOM's were submitted by BOR and no remaining open.

BOR UAS Flights 2016	
Number of UAS Missions	1
Missions	Yankee Fork
Aircraft System Type	3DR Solo
Flight Hours	6.5

BOR flight hours have decreased by 11% from FY15.

FY16 USGS Fleet Statistics

Unmanned Aircraft—27% of Fleet 20

Aircraft Age

0-10 Years	20
11-20 Years	0
> 21 Years	0

Pilots 0
Dual Function Pilots 0
Independent 1

Pilot to Aircraft Ratio 0.5

USGS UAS Flights 2016

Number of missions	18
Missions	Canyonlands, Flagstaff AZ, Conifer CO, Pawnee Grasslands, Wakefield KS, Glen Canyon NRA, Bluffton IN, Theodore Roosevelt NP, Flying J Ranch NM
Aircraft System Type	3DR Solo - 9 Missions Falcon Fixed - 4 Missions Falcon Hover - 5 Missions
Flight Hours	35.3

SAFECOM

USGS has one of the lowest SAFECOM completion rates at 38% with 8 remaining open from 2012 to 2015. There were 8 SAFECOMs submitted which account for 2% of DOI SAFECOMs. Reporting has increased by 167% from FY15.

FY16 Aviation Mishaps = 1 Incident with Potential (IWP)
USGS flight hours increased by 4% from FY15.



FY16 Aviation Overview

OAS

Bureau	Annual Flight Hours	Annual flight Usage Cost	Cost per Flight Hour
OAS	183	\$ 142,182	\$ 777

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

FY16 OAS Fleet Statistics

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

OAS UAS Flights 2016	
Number of UAS missions	2
Locations	Borah Peak ID, Kuna ID
Aircraft System Type	3DR Solo Rotorcraft
Flight Hours	15

Office of Aviation Services

PERFORMANCE

Performance	Quantity
Program Evaluations completed	12
Interagency Safety Communications Issued	14
Fleet Pilot Evaluations completed	354
Fleet Aircraft Inspections completed	78
Fleet Maintenance facilities inspections completed	4
UAS Operator Inspections	31
Commercial Pilot Evaluations	2,396
Commercial Aircraft Inspections	864
Point to Point Inspections	617
Fuel Service Vehicle Inspections	382
Cooperator Approvals	114
Technical Specifications for procurement reviewed and/or created	47

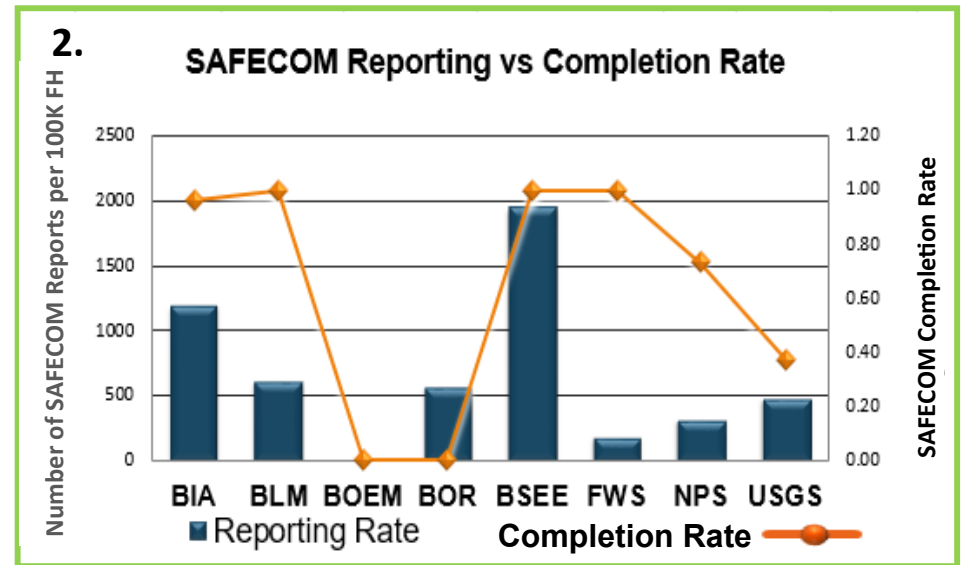
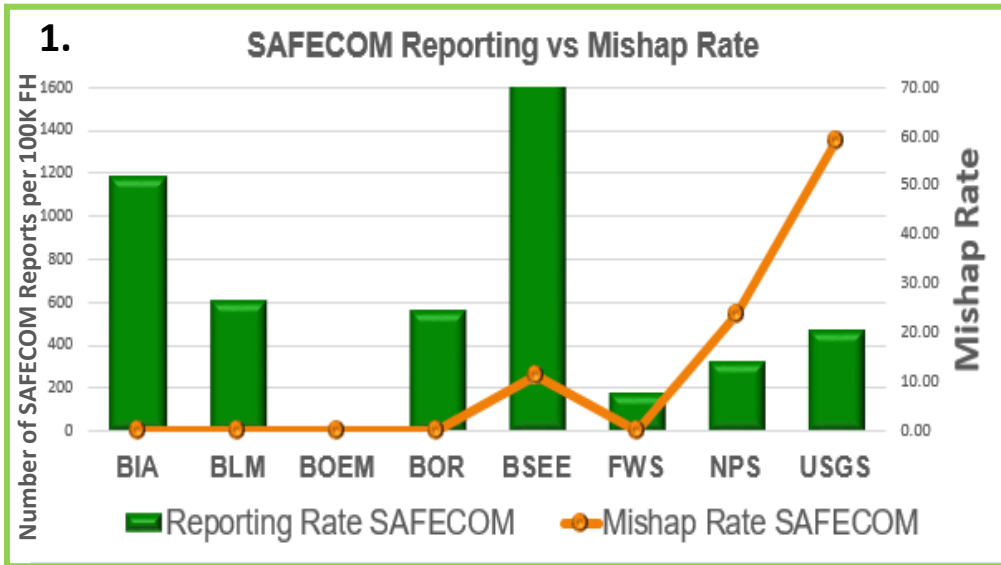
OAS flight hours have decreased by 5% from FY15.



OSM has no flight information.



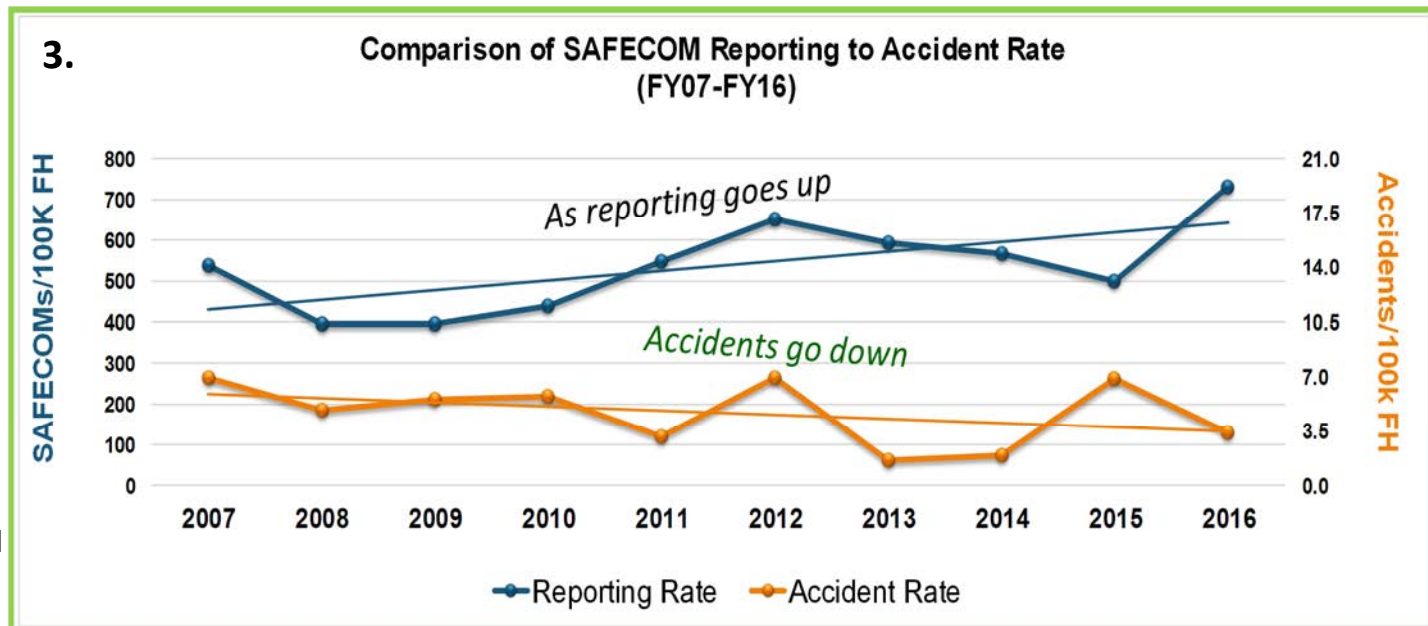
FY16 SAFECOM Overview



Slide 1– Without good reporting, you don’t know what your mishap rate is. USGS mishap rate is high, due to their low flight hours. BSEE is to be commended for increasing their SAFECOM reporting rate by 55% over FY15.

Slide 2– FY16 SAFECOM management continues to improve with DOI’s reporting rate increasing by 43% from FY15, the most significant increase by BSEE.

Slide 3– SAFECOM reporting for the period (2007-2016) increased 36%, the average accident rate of 4.69 decreased by 48%.



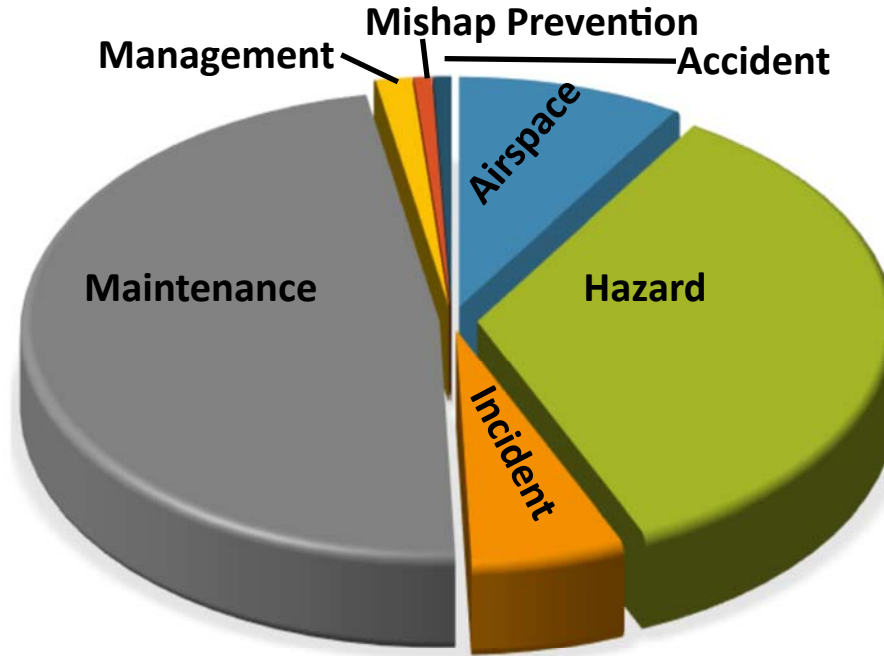


FY16 SAFECOM Overview

SAFECOMs by Category

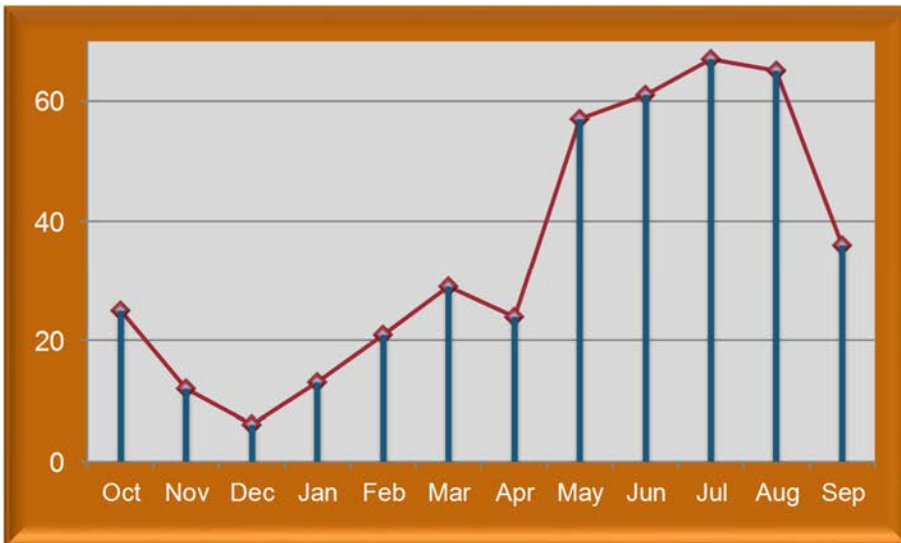
Top Maintenance Issues:

- ◆ Electrical
- ◆ Chip Light
- ◆ Engine
- ◆ Airframe
- ◆ Hydraulic
- ◆ Avionics (Radios)



Well represented Hazards Include:

- ◆ Other
- ◆ Pilot Action
- ◆ Policy Deviation
- ◆ Communications
- ◆ Instructions
- ◆ Weather



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

Bureau	Percentage of SAFECOM's Submitted by Bureau
BSEE	41%
BLM	31%
NPS	10%
FWS	5%
BIA	6%
OAS	5%
OSM	0%
USGS	2%
BOEM	0%
BOR	0%



SAFECOM Reporting Success

Did you ever think that by submitting a SAFECOM you could make a difference? Here's just one example of a SAFECOM that did make a difference: SAFECOM 16-0437 highlighted a problem that had been around for a while but everyone just accepted it. The SAFECOM led to an Interagency Accident Prevention Bulletin for greater visibility. Here's the story:

On June 26, 2016 an AS350 B3 was returning to the helibase after completing PSD operations when a 3"x 5" piece of the transparent plastic that covers the sphere chute on the machine broke and flew off. The qualified Plastic Sphere Dispenser Operator (PLDO) was aware that the sphere dust cover was cracked prior to launching on the mission, yet he felt there was no threat since that crack had been present for many years. After landing, the crew performed a post flight inspection but failed to identify any aircraft damage.

The next morning, the pilot conducted a preflight inspection on the same aircraft. Additionally, a mechanic performed a 50 hour maintenance inspection before the aircraft departed from the Cedar City Airport. Missions for that day included one reconnaissance flight, one crew transport flight, two sling load missions and a PSD operation totaling three hours of flight time.

After the helicopter was washed, two dents were discovered on the vertical stabilizer fin six inches below the anti-collision light. They were approximately one inch wide and three inches in length with a depth ranging from 1/8 -1/4 inch.

The mechanic conducted a visual and structural inspection and sent pictures to the contractor's Director of Maintenance. The Helicopter Manager informed the home unit Aviation Officer, Regional Helicopter Operations Specialist (HOS), and the DOI Maintenance Inspector of the damage to the aircraft.

The mechanic received word from Director of Maintenance that the damage was beyond serviceable limits and the stabilizer fin required replacement.

It cannot be determined for sure that the piece of plastic that departed the aircraft on June 26 struck the tail fin and caused the damage that was discovered after the aircraft wash.

There are numerous examples of things falling off or out of the aircraft that has resulted in fatal accidents, most often when they impact the tail rotor. Previous incidents have taught us many powerful and painful lessons. Continued mindfulness is required to prevent repetition of lessons already learned.

After the SAFECOM was released, several other sphere covers with cracks were later discovered by regional helicopter operations staff within the region where this occurred.



Reporting does make a difference!



FY16 Aviation Overview

Aircraft Mishap Review Board (AMRB)

DOI Bureaus and the Office of Aviation Services continued their efforts in FY 16 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.

In FY16, two AMRBs resulted in 9 additional recommended action items to which 4 have already been closed.

FY16 Aviation Program Evaluation Results & Performance

Location	Date	Result of Review
USGS-Southeast	1/16	9 Findings
BIA-Eastern	03/16	6 Findings
BIA-Navajo	04/16	5 Findings
BIA-Southwest	04/16	5 Findings
BLM-Arizona	04/16	4 Findings
BLM-Alaska	05/16	9 Findings
FWS-Mountain Prairie	07/16	9 Findings
USGS-Pacific	08/16	8 Findings
NPS-Intermountain	09/16	10 Findings
<u>BOR-Lower Colorado</u>		<u>3 Findings</u>
No Material Weaknesses Found		Total 68 Findings

OAS Training Division

- IAT.GOV website Update



Department of the Interior TRAINING BULLETIN

No. DOI TNG 17-02

Date: January 18, 2017

Page 1 of 1

SUBJECT: Interagency Aviation Training Areas of Responsibility

Distribution: All Aviation Operations

Discussion:

The Office of Aviation Services Training Branch (OAS-TB) developed a new page on the Interagency Aviation Training (IAT) website to communicate appropriate aviation training points of contact. The page illustrates geographical assignments of each partner area with the appropriate OAS-TB contact in addition to bureau/agency contacts. Bureau/agency contacts can be viewed by placing your cursor over the map. The new page can be viewed here: <https://www.iat.gov/trainers/index.asp>.

/s/ Keith Raley

Chief, Aviation Safety, Training, Program
Evaluations & Quality Management Division
Office of Aviation Services
U.S. Department of the Interior



FY16 Safety Improvement Opportunities

Bureau Continuous Accident Free Milestones

	BSEE	42 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

In flying I have learned that carelessness and overconfidence are usually far more dangerous than deliberately accepted risks.

— Wilbur Wright in a letter to his father, September 1900

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/>



Bureau Aviation Managers

BIA-Joel Kerley (208) 387-5371

BLM-Rusty Warbis (208) 387-5448

BOR-Phoebe Purcell (303) 445-3253

BSEE-Brad Laubach (703) 787-1295

BOEM-Lee Benner (202) 513-7578

FWS-Anthony Lascano (571)213-3021

NPS-Jon Rollens (208) 387-5227

OSM-J.Maurice Banks (202) 208-2608

USGS-Bill Christiansen (303) 236-5513

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](#)



Achievements

In-Flight Action Award

Jayson Danziger

Contract Pilot
Bureau of Safety and Environmental Enforcement

Wade Guillotte

Bureau of Safety and Environmental Enforcement

Louis Kuhn

Bureau of Land Management

Paul “Buster” Delmonte

Bureau of Land Management

Andrew Spence

Contract Pilot
Bureau of Safety and Environmental Enforcement

Award for Significant 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 migratory bird aircrew members who perform aerial surveys in often very remote regions of North America for many years to come.

Karen L.M. Morgan

U.S. Geological Survey

Steve Ramaekers

Office of Aviation Services

Gary Brennan

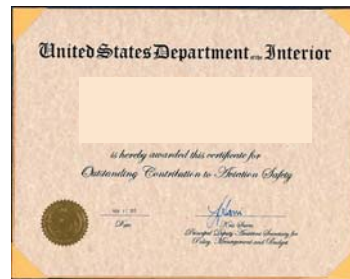
Office of Aviation Services



Departmental Award for Outstanding Contribution to Aviation Safety

Kevin Fox

Office of Aviation Services



Airwards

Chuck Greer

Bureau of Land Management

Michael Jardell

Bureau of Safety and Environmental Enforcement





Safe Flying Awards

These awards are restricted to DOI employees who have distinguished themselves by safe flying for the period considered.

Secretary's Award of Honor

25 years or more than 10,000 hours

James Bredy - FWS
 Michael Hinkes - FWS
 Fred Roetker - FWS
 Mike Spindler FWS

Award of Honor

20 years or 7,500 hours

James G. Castillo - OAS
 James L. Hummel - NPS
 Brian Lubinski - FWS
 James (Jim) R. Traub - NPS
 Mike Wade - FWS
 Charles Heywood—USGS

Award of Excellence

15 years or 5,000 hours

Joseph H. Bussard - OAS
 Stephen Earsom - FWS
 Edward Foster - OAS
 Kevin B. Fox - OAS
 Allen Neil Gilliland - NPS
 Nick Herring - NPS
 Mark Koneff - FWS
 Maria C. Mancano - OAS
 John Rayfield - FWS
 Bradley Scotten - FWS
 Phillip Thorpe - FWS
 Jim Wortham - FWS

Award of Distinction

10 years or 3,000 hours

Gary D. Brennan - OAS
 Raymond (Curtis) C. Cebulski - NPS
 Kenneth D. Fowler - OAS
 William I. James - OAS
 Arlyn E. Miller - OAS
 Colin B. Milone - NPS
 Nathan Olson - FWS
 Dave Ripetto - FWS
 Dan Stevenson - NPS
 Robert Sundown - FWS

Award of Merit

5 years or 1,000 hours

Paul Anderson - NPS
 Peter Aaron Christian - NPS
 Darry "Lynn" Ellis - NPS
 Fred H. Goodwin - NPS
 Patrick Kearney - OAS
 Terry Liddick - FWS
 Steve Mazur - NPS
 Walter Rhodes - FWS
 Robert Spangler - FWS
 Scott Taylor - NPS
 James V. Wittkop - OAS





DOI Accident Free Pilots



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

**Office of Aviation
 Services**



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

**Bureau of Land
 Management**



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	

U.S. Fish and Wildlife Services



Heywood, Charles

**U.S. Geological
 Survey**



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

National Park Service



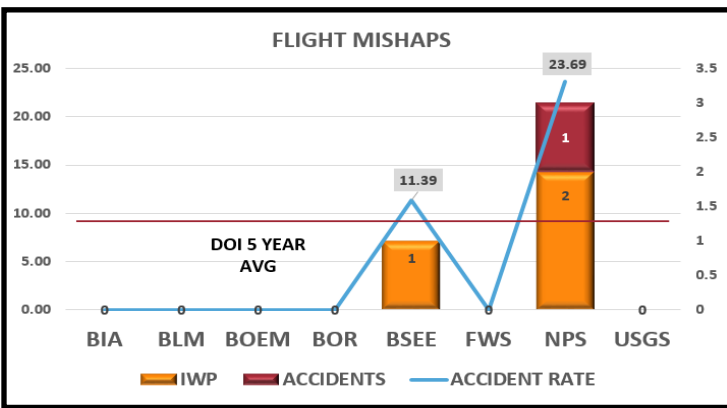
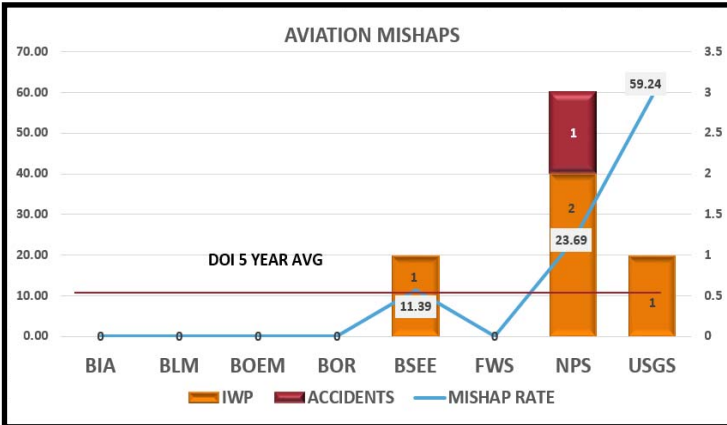
Burchell, Kenneth
 Chittick, Kevin
 Eavasick, Ryan
 Haapapuro, Eric
 Hertel, Jeffrey
 Lindley, Jonathan
 Perkins, Christopher
 Ryan, Timothy
 Tolson, David
 Wright, Keaton

NPS Park Police



EXECUTIVE SUMMARY

Take Away Sheet



2 Accidents and 4 Incidents with Potential

	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 FY16, two AMRBs resulted in 9 recommended action items, 4 have already been closed.

POLICY: OPM-29 has been through an extensive rewrite with many bureaus giving input. Be sure to read this document located at

<https://www.doi.gov/sites/doi.gov/files/uploads/opm-29.pdf>

RISK MANAGEMENT: [SAFECOM 16-0437](#) highlighted a problem that had been around for a while but everyone just accepted it.

The SAFECOM led to an Interagency Accident Prevention Bulletin for greater visibility. PremoMK III Plastic Sphere Dispenser (PSD) Machine Plexiglass Sphere Chute Cover Cracks https://www.doi.gov/sites/doi.gov/files/uploads/iaapb_2016-04.pdf

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: 68 Aviation Program Evaluation findings were found among 7 bureaus.

ASSURANCE: SAFECOM reporting has increased this year by 44% demonstrating the importance management has put on bringing safety concerns to light.

PROMOTION: Safe flying awards were given to 43 individuals from 4 bureaus/offices. Several Airwards for BLM and BSEE. and USGS were also awarded. Award for Outstanding Contribution to Aviation Safety was awarded to Karen Morgan from USGS, Steve Ramaekers and Gary Brennan from OAS. The Departmental Award for Significant Contribution to Aviation Safety was awarded to Kevin Fox.

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-4 years.

