



25th Annual

Aviation Safety Summary & Annual Report

FY 2014



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Partnering for Better, Faster, Cheaper, Safer Aviation Missions



Fiscal Year 2014 DOI Annual Aviation Safety Summary/Report

Mark Bathrick—Director
Office of Aviation Services (OAS)

Keith Raley-Chief, Aviation Safety & 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 pro-
gram is founded on the four pillars
of an integrated
**Safety Management System
(SMS):**



Office of Aviation Services * Bureaus * Industry

Department of Interior (DOI) aviation safety and aircraft mishap prevention is based on the philosophy that all aircraft mishaps can be prevented and that mishap prevention is an inherent function of any position. **Zero aircraft accidents is every professional's goal regardless of the challenges.** Improved aviation safety saves lives, reduces cost, and drives efficiencies across all our mission areas.

Successful aviation programs require a partnership fostering a just culture that fairly balances safety and accountability. An organization's safety culture requires the assembly of characteristics and attitudes establishing safety as an overriding priority that receives the attention warranted by its significance. It also requires components of accountability including clear expectations, required actions, and a means by which they will be evaluated.

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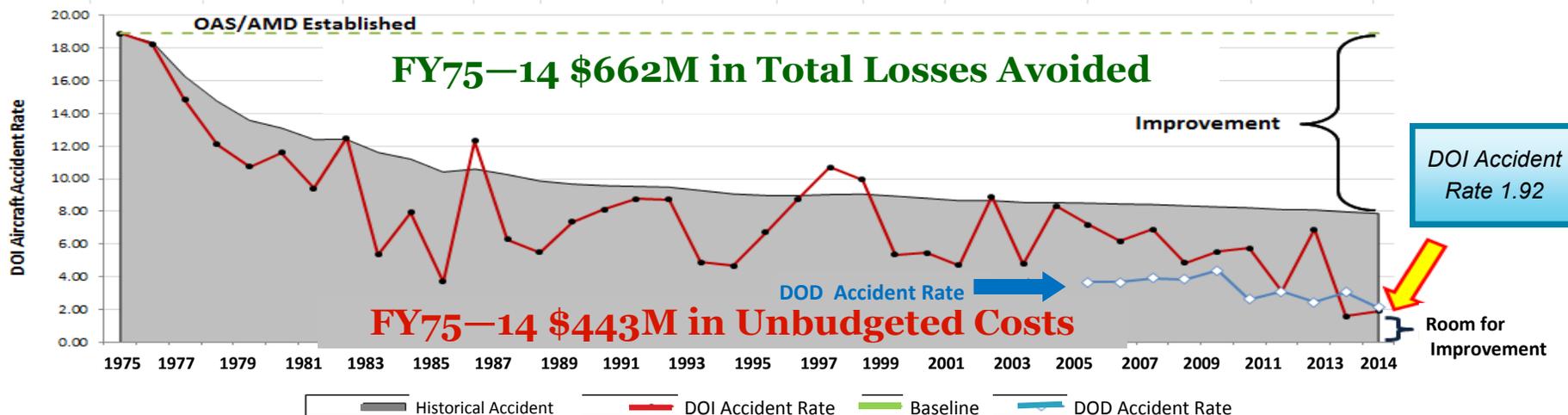




Aircraft Accident Rate

Based on accumulated flight data in FY14, the U.S. Department of the Interior (DOI) continued to **lower the historical DOI aircraft accident rate¹** to an all time low reducing the rate by 0.10 to 7.88 accidents per 100K flight hours. The **annual** aircraft accident rate was 1.92 per 100K flight hours, a slight increase 0.31 from last year yet completing **the best 9 consecutive years in DOI history**. **Zero aircraft accidents is an attainable goal**, but we must reaffirm our vigilance since we have **already suffered 2 accidents in FY15**.

DOI Aircraft Accident Rate History



The Department’s annual aircraft accident rate² in FY14 is 1.92 accidents per 100,000 flight hours. As of October 1, 2014, flight data captured for **FY14 reported 52,012.59 total flight hours**, 9,760.10 less than the previous year. This reduction can be attributed to sequestration, the government shutdown, and reduced fire activity.

Since 1975, DOI’s aviation safety program has resulted in estimated savings of \$662M to the Department and its supporting vendors in reduced losses. Over the last 10 years, DOI accident rates have exhibited a downward trend, achieving the most consistent trend in DOI’s history. 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: 1,552 vendor pilot evaluations, 1,048 vendor aircraft inspections, 383 Interior fleet pilot evaluations, and 100 Interior fleet aircraft inspections. Aviation Training supported 63,967 student hours of training and revised/created four courses in collaboration with bureau and interagency partners.³

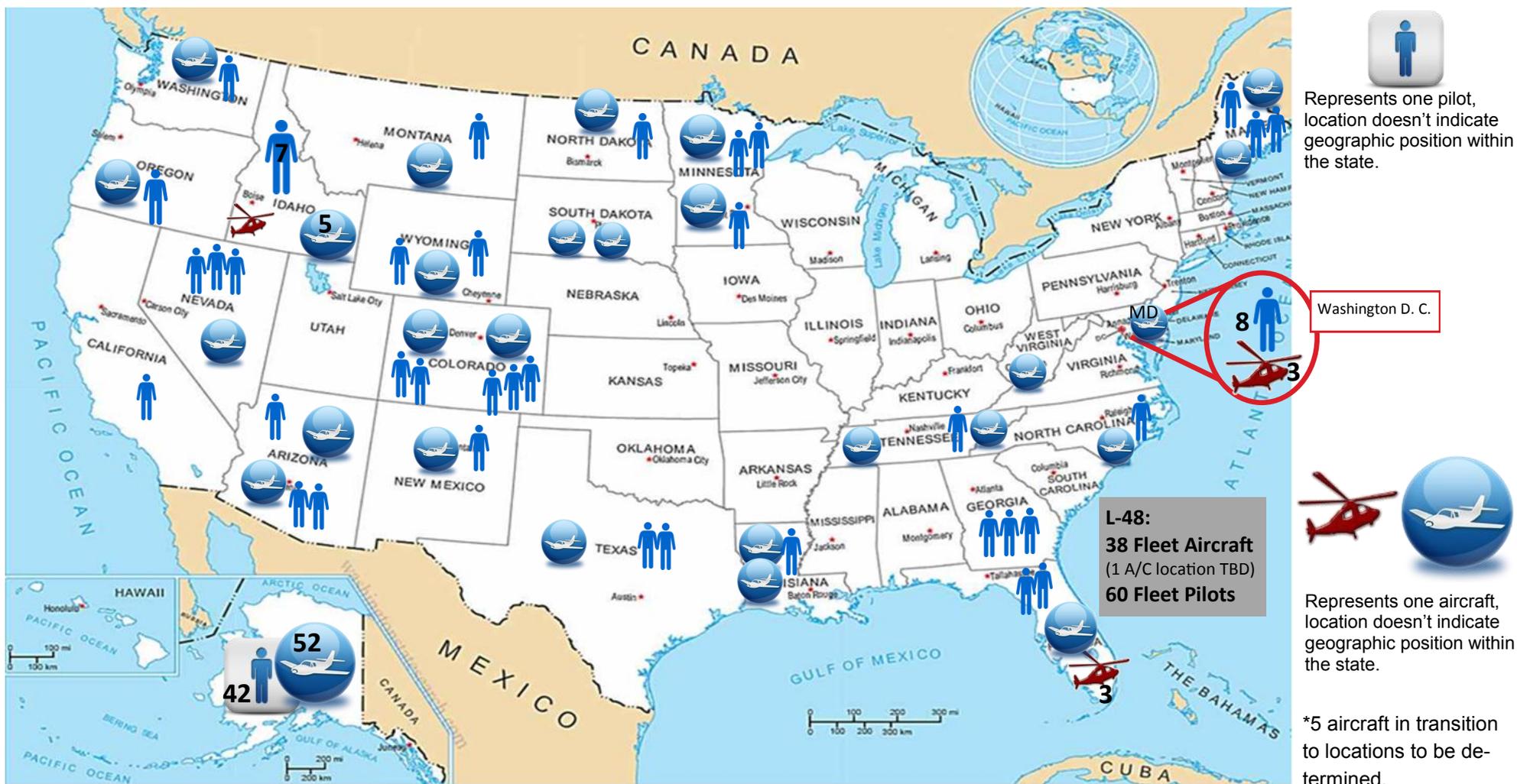
¹Historical aircraft accident rate is defined as total historical aircraft accidents per 100,000 flight hours flown.

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.



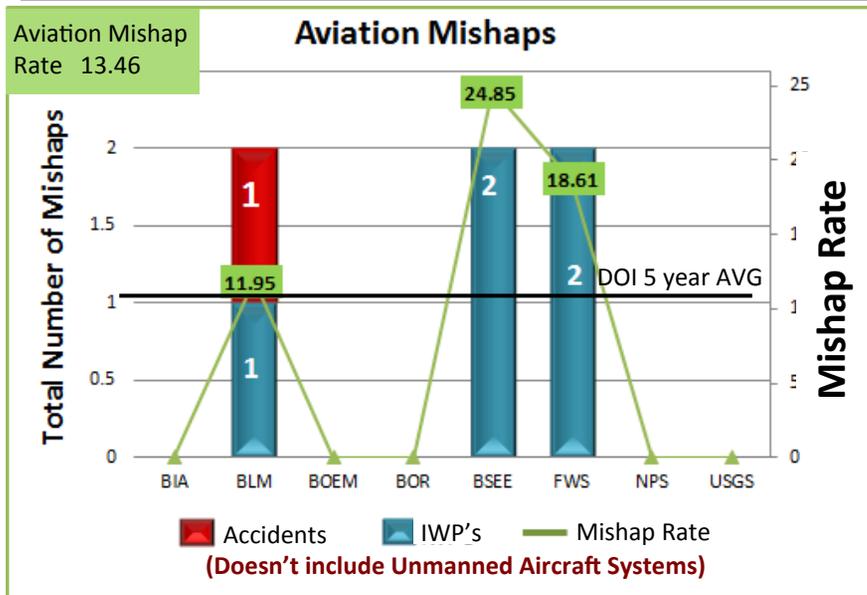
Department of Interior Fleet Aircraft & Pilots by State



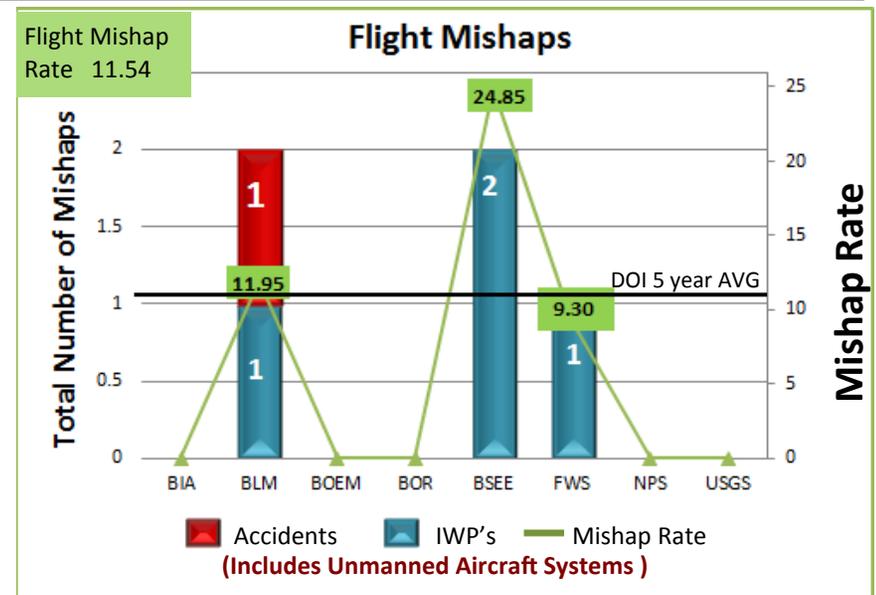
Note: Fleet aircraft and pilots occasionally move their home base location, for the latest information on where they are located you can call the Fleet Maintenance Manager in OAS-Technical Services at (208) 433-5082 for lower 48, or (907) 271-4324 in Alaska.



DOI FY14 Mishap Overview



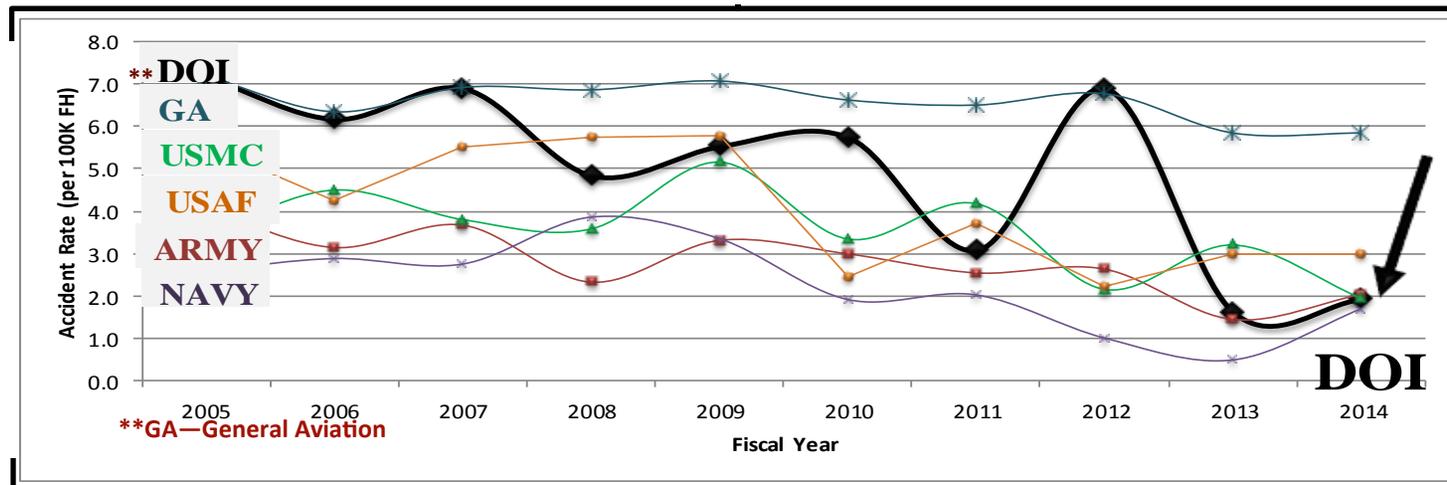
This year we have developed two mishap rates AVIATION and FLIGHT due to DOI having it's first Unmanned Aircraft System (UAS) mishap. The Aviation Mishap Rate includes UAS's, the Flight Rate doesn't.



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.

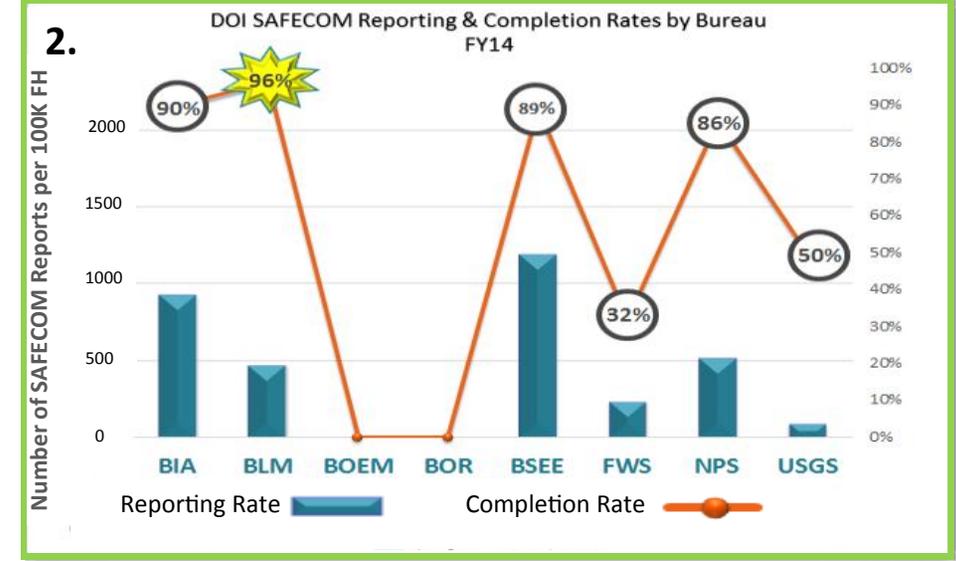
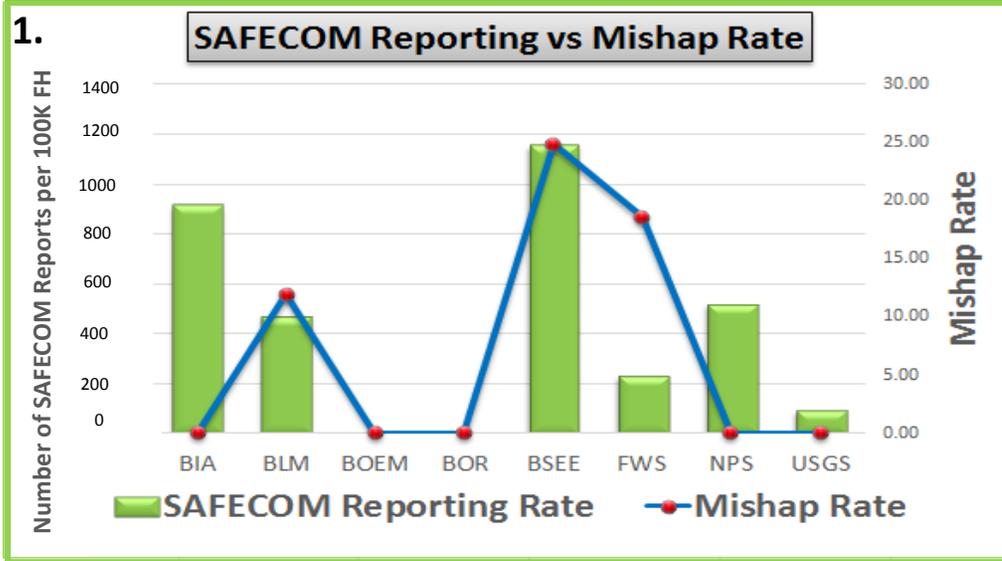
Mishaps = Accidents + IWP's



DOIs accident rate falls below DODs accident rate and well below DOIs five year average. Flight hours have decreased 34% over the last five years.



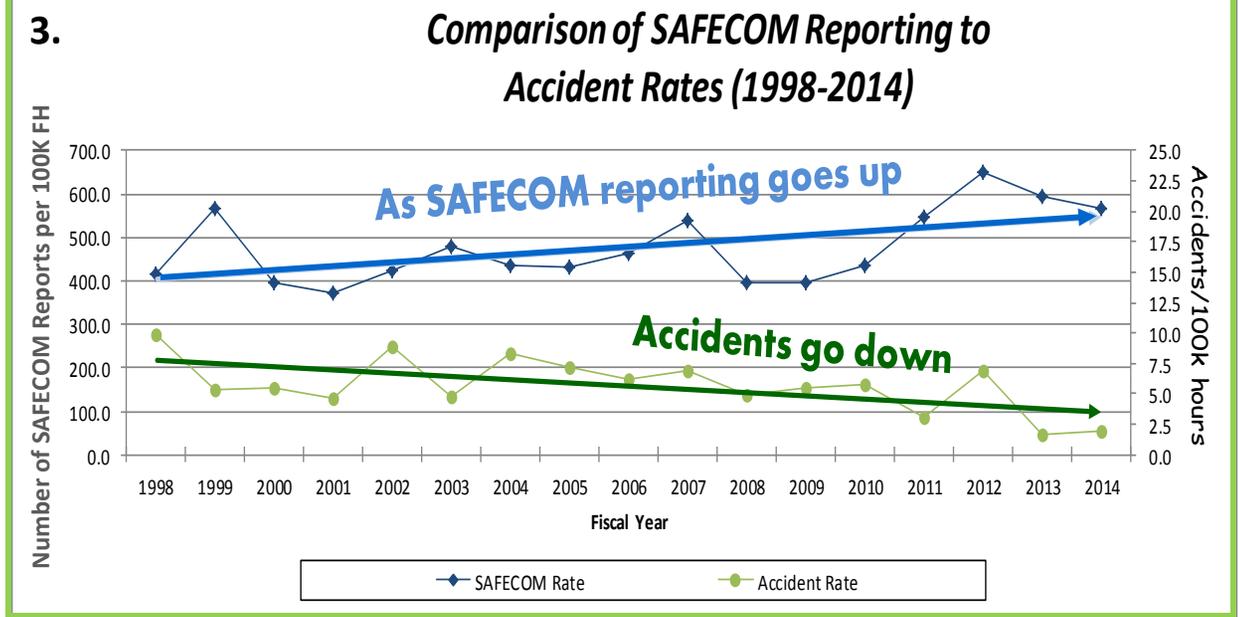
FY14 SAFECOM Overview



Slide 1– Without good reporting, you don’t truly know what your mishap rate is. While BSEE’s mishap rate is high, their desirable reporting rate affords them the opportunity to prevent minor incidents from becoming accidents.

Slide 2– FY14 SAFECOM management improved although the DOI reporting rate decreased 3%, the most significant reduction from one bureau was 28%.

Slide 3– SAFECOM reporting for the period (1998-2014) increased 36% and accidents decreased 80%.



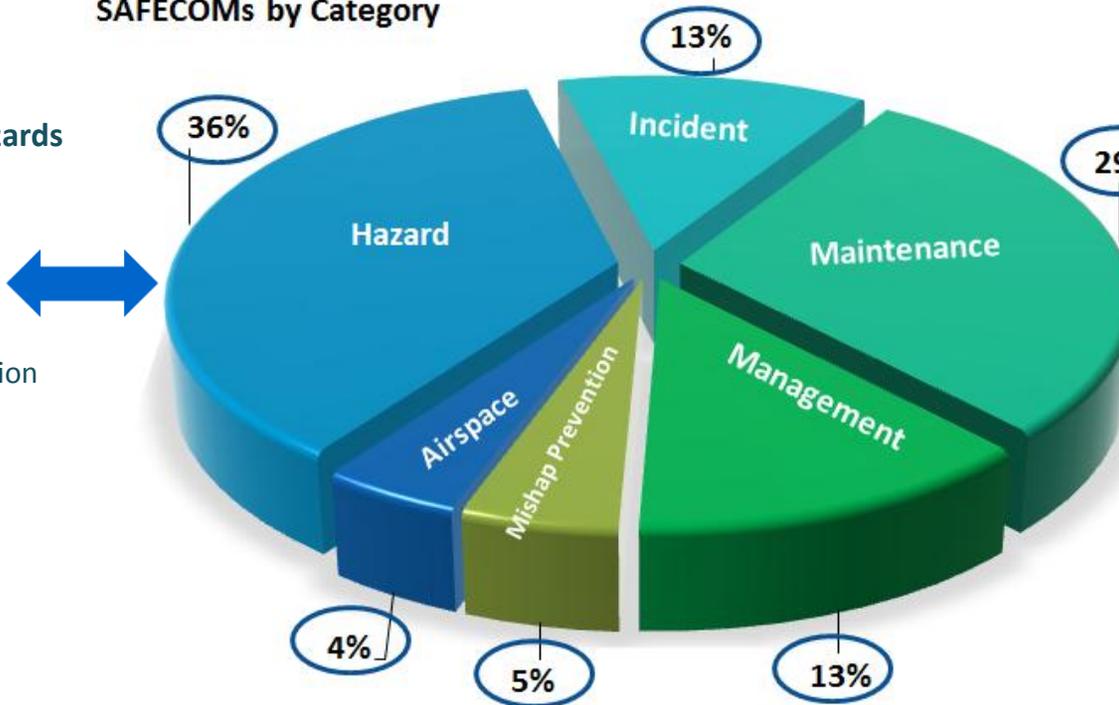


FY14 SAFECOM Overview

SAFECOMs by Category

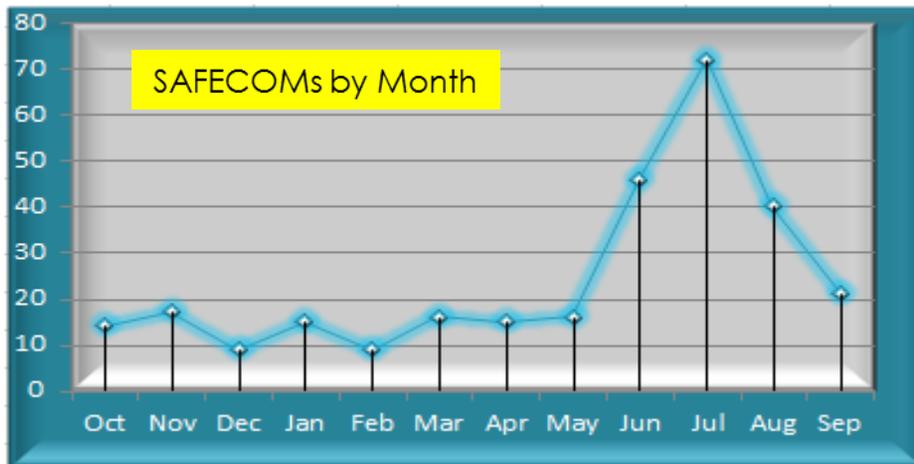
Well represented Hazards Include:

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



Top 6 Maintenance Issues:

- ◆ Engine
- ◆ Electrical
- ◆ Chip Light
- ◆ Airframe
- ◆ Mission Equipment
- ◆ Oil



FY14 SAFECOMs	
Bureau	Submitted
BSEE	32 %
BLM	27 %
NPS	19 %
FWS	9 %
BIA	7 %
OAS	5 %
OSM	1 %
USGS	1 %
BOEM	0 %
BOR	0 %

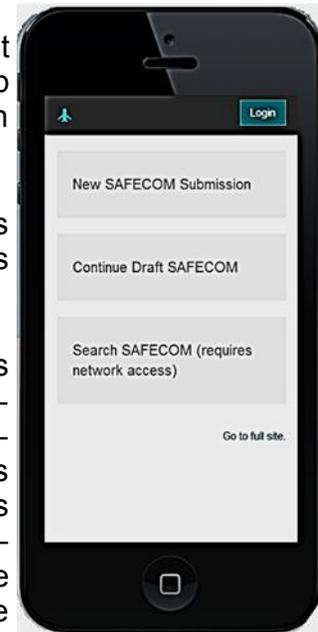


SAFECOM Mobile Web App Upgrades

www.safecom.gov/mobile

Last June we introduced the first SAFECOM Mobile Web App. It gave users the ability to submit SAFECOMs using smart phones, tablets and most other mobile devices. The SAFECOM Mobile Web App also provides users with the ability to fill out a SAFECOM without internet connectivity and submit it when connected.

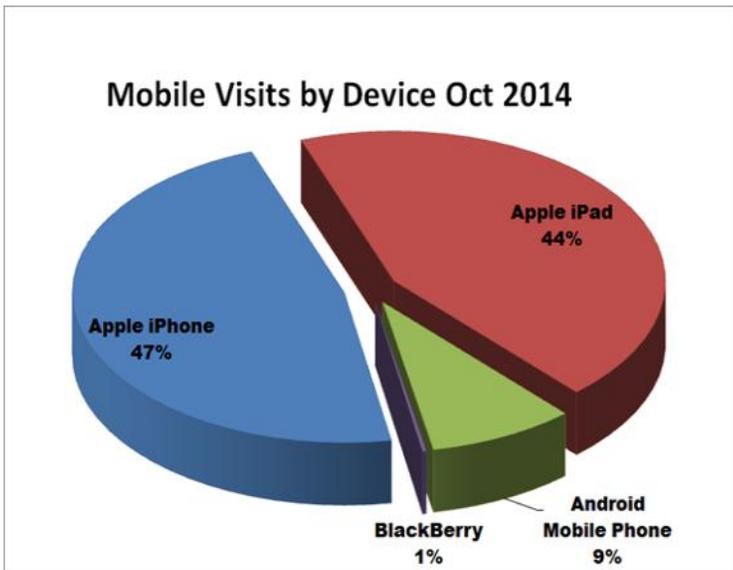
We've seen a modest increase of traffic with mobile devices since the introduction with Apple products (iPhone and iPad) leading the traffic. The SAFECOM Mobile Web App also works well with Android devices where we've seen an increase there as well.



The SAFECOM management and search functionality was introduced last month which completes the SAFECOM Mobile Web App by affording the user with the same capabilities as the legacy system. In other words, these changes enable all of the administrative functions Aviation Managers need to review, annotate and manage SAFECOM submissions. Those with manager credentials can login and see additional fields to categorize reports, record notes, provide the corrective actions that are used in the field.

SAFECOM reporting is a critical component of our safety program. Early identification, correction and reporting of hazards can save time, money, and most importantly, lives. There is a direct relationship between the reporting of all incidents, occurrences, and hazards which directly impact aviation operations.

The SAFECOM Mobile Web App is the first step in enabling mobile technology to improve aviation operations. These new developments are geared to make it easier for our Aviation Managers to review and respond to SAFECOMs using the same mobile device access. This type of access improves SAFECOM reporting, reviewing, and follow-up by allowing it to be quicker and more responsive with devices that are more ubiquitous amongst field operations.



The types of mobile devices used on the SAFECOM Mobile Web App this last month were mostly iPhones, iPads, and Android devices and the brave soul who tried to use the web browser on a BlackBerry.



Cont. SAFECOM Mobile Web App Upgrades

Where is the SAFECOM Mobile App?

www.safecom.gov/mobile

Remember that you can just navigate to www.safecom.gov and you'll find the link on the front page.

To use the form offline, you need to bookmark it!

The SAFECOM Mobile Web App allows the user to save the submission while off-line. Using your browser, bookmark the SAFECOM Mobile web app address.

The SAFECOM Mobile Web App has been designed to save the form and your inserted data on your mobile device so it is available when you're off-line. When internet connectivity is restored, select "Continue in-progress SAFECOM," then select the SAFECOM Incident, and "Jump to" to edit and submit the SAFECOM.

The SAFECOM Mobile Web App won't be available on your device if you clear your history, cookies, and data. If this happens, you will need to visit www.safecom.gov/mobile to add it back in to your device's memory.

Manager Login

Manager access is only available when you are connected to the internet. To access the admin functions from any page,

1. Choose "login" at upper right,
2. Enter SAFECOM manager credentials and click LOGIN,
3. Navigate to the search page.
4. Enter the search criteria and choose SEARCH,
5. Review the search results and choose the SAFECOM to review/edit
6. Review SAFECOM, note that the Admin-only fields are shaded blue
7. Make edits.
8. Choose SUBMIT and review edits.



Interagency Accident Prevention Bulletin 14-04
<http://oas.doi.gov/safety/library/prevent/FY2014/IAAPB1404.pdf>



FY14 Aviation Overview

DOI FY14 Mishap Overview

IWP - Incident with potential

Location	Date	Severity	Operator	Aircraft	Description
Lake Jackson, TX	9-30-14	IWP	Contractor BSEE GOM Region	AS350 B2	Front and rear passenger doors popped open during flight.
Burns, OR	9-14-14	IWP	Contractor BLM Oregon Region	Bell 206 L-1	During fire suppression operations the aircraft experienced a sudden updraft, pilot reduced power, bucket draped over the tail boom.
Fallon, NV	7-3-14	Accident	Contractor BLM Nevada Region	AS350 B3e	Pilot lost control of helicopter, substantial damage no fatalities.
Kangirsuk, Canada	6-12-14	IWP	Fleet FWS Region 9	Kodiak	Aircraft traveled beyond the end of the runway.
Ruby Lake, NV	11-5-13	IWP	Fleet FWS Region 8	RQ-16C T-Hawk	UAS- Substantial damage, engine failure, no fuel.
Camarillo, CA	11-11-13	IWP	Contractor BSEE Pacific Region	Bell 407	Engine chip light, lost oil pressure, number four engine bearing failed.
Port Alsworth, AK	10-21-13	IWP	Fleet OAS Alaska Regional Office	C-206	Bucking bar (repair tool) left in the aircraft flap well.

DOI Flight Usage Cost

Cost associated with flight hours only

	Annual flight Usage Cost	Annual Flight Hours	Cost per Flight Hour
Fleet	\$ 5,490,120	15,245	\$ 360
Contract	\$ 47,253,161	36,768	\$ 1,285
Total Usage	\$52,743,281	52,013	\$ 1,014

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



Incidental Cost associated with Mishaps

Cost Input	Cost	Cost Input	Cost
Bureau Investigation	\$ 7,670	OAS Investigation (reimbursable)	\$ 7,020
DOI Losses (i.e. a/c repair, recovery, loss of availability, loss of life)	\$ 207,973	Vendor Losses (i.e. A/C repair, recovery, loss of availability, etc.)	\$ 2,407,500
Total Actual Costs (7 Mishaps)		\$ 2,630,163	

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



FY14 Aviation Overview



Bureau	Annual Flight Hours	Annual flight Usage Cost	Cost per Flight Hour
BLM	16,741	\$ 60,250,918	\$ 3,599

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	2,188	\$ 6,916,089	\$ 3,160

FY14 BLM Fleet Statistics

Manned Aircraft - 4% of Fleet	4
Aircraft Age	
0-10 Years	1
11-20 Years	1
> 21 Years	2
Pilots*	8
Dual Function Pilots	5
Pilot to Aircraft Ratio	0.31

BLM UAS Flights 2014

Number of UAS missions	7
Missions	Horning Seed Orchard, ACEC Project
Aircraft System Type	Raven - 1 Mission T-Hawk - 6 missions
Flight Hours	18.9

*BLM pilots fly commercial owned government operated (COGO) aircraft in addition to fleet aircraft.

SAFECOM

BLM has the highest SAFECOM completion rate in DOI at 96%. There were 79 SAFECOMs submitted which account for 27% of SAFECOMS. Reporting went down by 84% from FY13.

FY14 Aviation Mishaps = 2

BLM flight hours are down 44% from last year.

SAFECOM

BIA has the second highest SAFECOM completion rate in DOI at 90%. There were 20 SAFECOMs submitted which account for 7% of SAFECOMS.

BIA flight hours are down 24% from last year.



OSM UAS Flights 2014

Number of UAS missions	6
Missions	Coal Mine Flights
Aircraft System Type	T-Hawk
Flight Hours	13.1

SAFECOM

OSM has one of the lowest SAFECOM completion rate in DOI at 50%. There were 2 SAFECOMs submitted which account for 1% of SAFECOMS. No manned flights were recorded this year.



FY14 Aviation Overview



Bureau	Annual Flight Hours	Annual flight Usage Cost	Cost per Flight Hour
FWS	10,749	\$ 6,686,261	\$ 622

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	11,003	\$ 13,776,916	\$ 1,252

FY14 FWS Fleet Statistics

Manned Aircraft—62% of Fleet	57
Makes	11
Models	12
0-10 Years	21
11-20 Years	11
> 21 Years	25
Dual Function Pilots	32
Pilots	6
Trainee	1
Independent	3
Pilot to Aircraft Ratio	1.36

FWS UAS Flights 2014

Number of UAS Missions	4
Missions	Pelican Surveys, Vegetation Survey Topock Marsh
Aircraft System Type	Raven & T-Hawk
Flight Hours	6.45

SAFECOM

FWS has the lowest SAFECOM completion rate in DOI at 32%. There were 25 SAFECOMs submitted which account for 9% of SAFECOMS.

FY14 Aviation Mishaps = 2

FWS flight hours are down 9% from last year.

FY14 NPS Fleet Statistics

Manned Aircraft—32% of Fleet	29
Makes	8
Models	11
0-10 Years	6
11-20 Years	7
> 21 Years	16
Dual Function Pilots	15
Pilots	7
Trainee	4
Independent	1
Pilot to Aircraft Ratio	1.07

NPS UAS Flights 2014

Number of UAS Missions	2
Mission	White Sands National Monument
Aircraft System Type	T- Hawk
Flight Hours	2.9

SAFECOM

NPS has a high SAFECOM completion rate at 86%. There were 57 SAFECOMs submitted which account for 20% of SAFECOMS.

Flight hours remained relatively the same compared to FY13.



FY14 Aviation Overview



Bureau	Annual Flight Hours	Annual flight Usage Cost	Cost per Flight Hour
BSEE	8,050	\$ 32,659,226	\$ 4,057

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	2,190	\$ 1,983,877	\$ 906

SAFECOM

BSEE has a high SAFECOM completion rate in DOI at 89%. There were 93 SAFECOMs submitted which account for 32% of SAFECOMS.

FY14 Aviation Mishaps = 2

Flight hours remained relatively the same compared to FY13.



Bureau	Annual Flight Hours	Annual flight Usage Cost	Cost per Flight Hour
BOR	375	\$ 544,846	\$ 1,453

BOR flight hours have increased 18% from FY13.

FY14 BIA Fleet Statistics

Manned Aircraft—1% of Fleet	1
Makes	1
Models	1
0-10 Years	0
11-20 Years	0
> 21 Years	1
Dual Function Pilots	3
Pilots Independent	1
Pilot to Aircraft Ratio	0.20

USGS UAS Flights 2014

Number of UAS missions	26
Missions	Elk & Pelican surveys, Sycan River Project, Vegetation survey of Topock Marsh, Ruby Lake and Kern Wildlife Refuge, Reyes National Seashore
Aircraft System Type	Raven & T-Hawk
Flight Hours	40.45

SAFECOM

USGS has one of the lowest SAFECOM completion rate in DOI at 50%. There were 2 SAFECOMs submitted which account for 1% of SAFECOMS. Reporting went down by 250%.

Flight hours remained relatively the same compared to FY13.



FY14 Aviation Overview

OAS Training Division

DOI-OS

Bureau	Annual Flight Hours	Annual flight Usage Cost	Cost per Flight Hour
DOI-OS	547	\$ 472,620	\$ 864

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

FY14 OAS Fleet Statistics

Manned Aircraft—1% of Fleet	1
Makes Models	1
0-10 Years	0
11-20 Years	0
> 21 Years	1
Dual Function Pilots (Inspectors)	13
Pilots	0

FY14 Aviation Mishaps = 1
OAS flight hours have increased 8% from FY13.



Bureau	Annual Flight Hours	Annual flight Usage Cost	Cost per Flight Hour
BOEM	156	\$ 626,389	\$ 4,022

Aviation Training 2.0 Information Update

On September 29, 2014, [Aviation Training 2.0 \(AT 2.0\)](#) was launched and made available to DOI bureaus, the USFS and our interagency partners.

In the first 60 days of the launch, there were 1,729 online course completions in AT 2.0. Over 300 new users created accounts in the system during that same period.

We have also seen significant activity from the new roles being offered, such as the Unit Aviation Training Administrators and Supervisors. Users with these roles have been busy getting folks aligned with their correct unit, getting training plans assigned, and performing compliance checking. Managers now have visibility into the aviation training activity of their personnel. We've received positive feedback on better usability and new features like compliance checking.

Listed below are some of the frequently asked questions providing additional information on AT 2.0. These are also being posted to the support section of the web site.

Why were changes made to the site?

Originally the legacy site was developed to give students some basic tools for managing their aviation training along with delivering some online course content. Since its original inception over 10 years ago, there has been a growing need for new functionality. Some requests could be incorporated into the legacy system and some could not. In order to meet a larger number of needs the underlying structures of the aviation training online system needed to be changed.

Was beta testing done prior to launch?

Yes. We appreciate the bureau/field personnel the personnel who participated in each of the three beta test groups prior to the launch. This was done over a 6 month period. Through their efforts, we received valuable input on functionality and usability.

Do some browsers work better than others when using AT 2.0?

Yes. The site was designed and tested to work with Google Chrome or Internet Explore version 9.0 or later. Users may experience problems with functionality if they are using a different browser.

(continued next page)



OAS Training Division

Are there new user roles in AT 2.0?

Yes. AT 2.0 is a role based system. When you log onto the system you choose a role that suits the specific tasks you are there to perform. For example, logging on as a student allows you to sign-up for course offerings, view your training records, or take online courses. Logging on as a supervisor takes you to a different set of tasks you can perform, such as viewing your direct report's upcoming training requirements. AT 2.0 gives you the option to sign on as a specific role so that you only have to see the functionality that specifically applies to the tasks you need to perform. It gets rid of the clutter and lets you focus on what's important right now.

What roles are available to users?

Below is a basic description of each of the roles available in AT 2.0:

- ◆ Student – any user whose purpose is to take aviation training
- ◆ Supervisor – users with direct reports in the system
- ◆ Unit Aviation Training Administrator (ATA) – a user that manages the aviation training needs for a specific local unit, such as a District Office, Field Office, Forest, Park, etc.
- ◆ Aviation Manager – a user that oversees the aviation training on a regional or national level. This user is usually equivalent to a Regional or National Aviation Manager.

- ◆ Instructor – qualified users that have completed the instructor certification process required by OPM 4 for DOI personnel or the IAT Guide for USFS personnel.
- ◆ Leadership – an executive level user that requires a dashboard of information to assess the overall health of an organization's aviation training.

Can a user have more than one role in AT 2.0?

It is very common for a user that is a student to also have the role of aviation manager, supervisor or instructor. AT 2.0 allows you to toggle between all of your assigned roles easily. The purpose of the role segregation is to simplify the task decisions you make when using the system for a specific purpose. Student and Supervisor roles are created at sign-up. Other roles, such as Aviation Training Administrator, are assigned by your organization's management in conjunction with the OAS Training Division or the USFS National Aviation Training Manager.

What if my training compliance record doesn't show credit for a course equivalent I took?

The legacy system did not have a way to track the equivalencies for courses completed elsewhere that might be granted equivalency for required courses. Examples would include NWCG courses or the DOI pilot ground school. AT 2.0 currently has very limited ability to determine equivalency, mainly granting equivalency for the old B3 curriculum. A more robust equivalency capability is planned for a future release. In the interim, users are encouraged to provide to

those reviewing their compliance a record of the training completed they believe is equivalent in accordance with existing policy.

Will there be additional enhancements in the future?

Our development strategy is to provide updates and enhancements to the system periodically throughout the year. This way we can get new high demand functionality to you quickly and still continue to work on other added features that will make your aviation training experience even better. Just like you, we want to have a system that is continually improving and adaptive to the ever changing needs of our aviation community.

What if I need help with AT 2.0?

Please send an email to iat_admin@ios.doi.gov.





Achievements

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 within DOI. This year, a group was selected based on their work on a critical policy that will positively impact aviation safety for years to come. This group consisted of a diverse set of individuals that worked collaboratively to achieve a policy that provides minimum standards for management plans and Project Aviation Safety Plans. Their great work (OPM-6) can be located here: <http://oas.doi.gov/library/opm/CY2014/OPM-06.pdf>



Dave Underwood - Bureau of Indian Affairs
Regional Aviation Manager

Blaine Moriarty - Office of Aviation Services
Aviation Program Evaluator

Meg Gallaher - National Park Service
Eastern Regional Aviation Manager

Brian Mullin - Fish and Wildlife Service
Aviation Training and Safety Specialist

Anthony Lascano - Fish and Wildlife Service
National Aviation Manager

Steve Rauch - Bureau of Safety and Environmental Enforcement
Aviation Safety Specialist

In-Flight Action Award

Jayson Danziger
Bureau of Safety and Environmental Enforcement
Contract Pilot

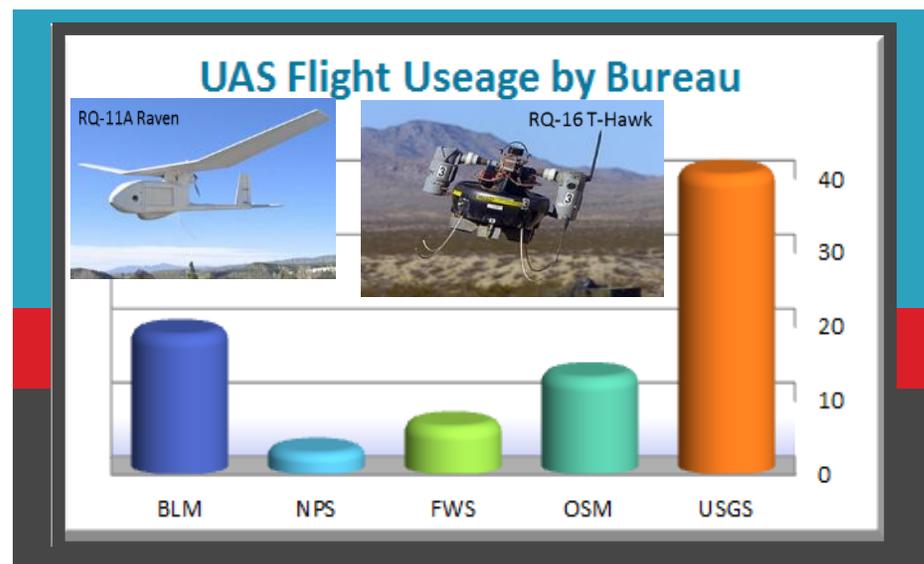
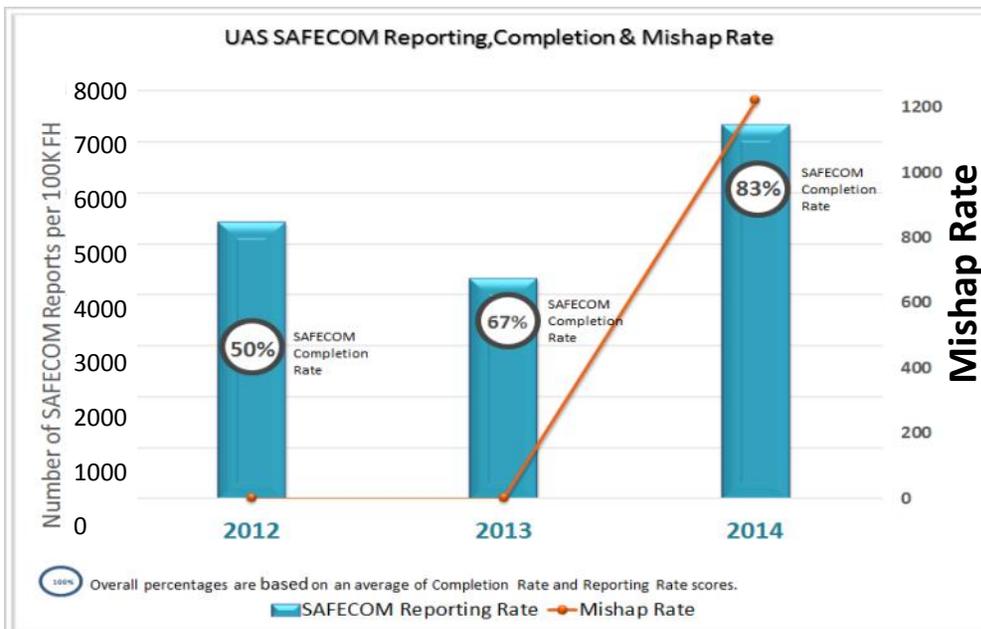
Airwards

Clay Voss
Bureau of Safety and Environmental Enforcement
Contract Pilot

Clayton Mitchell
Bureau of Safety and Environmental Enforcement
Contract Pilot

Matt Goertz - National Park Service
Contract Pilot

Unmanned Aircraft System





DOI Accident Free Pilots

Bannister, Gene
 Barry, Andrew
 Brennan, Gary
 Bussard, Joe
 Castillo, James
 Foster, Ed
 Fowler, Dale
 Howell, Gilbert
 James, William
 Kearney, Patrick
 Kornfield, Ed
 Mancano, Maria
 Miller, Arlyn
 Palmer, Earl



**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**

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



**U.S. Geological
 Survey**

Anderson, Anna Jo
 Barnett, Heather
 Bayless, Shawn
 Bredy, James
 Earsom, Stephen
 Ellis, James
 Flack, Andrew
 Fox, Kevin
 Guldager, Nikolina
 Hamrick, Harry
 Hink, Mike
 Hurd, Shay
 Kadrmas, Neil
 Koneff, Mark
 Liddick, Terry
 Lubinski, Brian
 Mallek, Ed
 Moore, Chuck
 Mullin, Brian
 Olson, Nathan
 Powell, Doug



U.S. Fish and Wildlife Services

Rayfield, John
 Rees, Kurt
 Rhodes, Walt
 Richardson, J. Ken
 Rippetto, Dave
 Roberts, Charles
 Roetker, Fred
 Scotton, Brad
 Shults, Bradley
 Sowards, David
 Spangler, Robert
 Spindler, Michael
 Sundown, Robert
 Thorpe, Philip
 Twitchell, Adams
 Van Hatten, Kevin
 Wade, Mike
 Ward, James
 Wittkop, Jim
 Wortham, James
 Yates, Sarah

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



National Park Service

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



NPS Park Police



FY14 Safety Improvement Opportunities

Bureau Continuous Accident Free Milestones

	BSEE	40 Years
	OSM	28 Years
	BOR	17 Years
	USGS	8 Years
	BIA	7 Years
	NPS	3 Years
	*BOEM	3 Years
	USFWS	2 Years

*contributed to BSEE's 40 year accident free milestone

Mishap prevention is an inherent responsibility of all employees.

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

-  [FAA FSS and Flight Safety](#)
- [Is it Spring Yet?](#)
- [Seat Fares](#)
- [Rotor Strike](#)
- [Mobile SAFECOM Web App](#)

Safety Alerts

-  [Copper pellets used in ACETA missions](#)
- [Gunner Strap & Tether Rigging](#)
- [AFF Inoperative](#)
- [Civil UAS Operations Conflicts](#)

Lessons Learned

-  [Haste Makes Waste](#)
- [Documentation of Maintenance Actions](#)
- [Eurocopter AS350/AS355 Sliding Doors](#)

Bureau Aviation Managers

BIA-Joel Kerley (208) 387-5371
BLM-Rusty Warbis (208) 387-5448
BOR-Jack Brynda (202) 513-0677
BSEE-Brad Laubach (703) 787-1295
BOEM-Lee Benner (202) 513-7578
USFWS-Anthony Lascano (703) 358-2059
NPS-Jon Rollens (208) 387-5227
OSM-J.Maurice Banks (202) 208-2608
USGS-Bill Christiansen (303) 236-5513



Aviation Program Evaluation Overview

DOI aviation program evaluation function serves as an integral element of the Department’s Aviation Safety Management System “Assurance” pillar and a critical Department compliance mechanism of the Federal Management Regulations, specifically DOI A-123 management controls assurance program. In collaboration with the Bureaus, OAS led aviation program evaluations are held on-site at Bureau aviation unit locations. The objectives of the program evaluations include:

- ◆ Assessment of unit compliance with DOI aviation policy and Federal regulation.
- ◆ Evaluation of OAS’s effectiveness in communicating and implementing DOI aviation policies.
- ◆ Identification of areas of potential improvement, sharing best practices, and support needs for each unit.

Location	Date	Result of Review	
BSEE–Gulf of Mexico Region	1/14	9	Findings
USGS–Alaska Region	03/14	7	Findings
FWS–Headquarters	04/14	9	Findings
BLM–Nevada	04/14	7	Findings
USGS–Southwest Region	04/14	8	Findings
NPS–Hawaii	06/14	11	Findings
BIA–Midwest Region	08/14	4	Findings
BOEM–Alaska Region	07/14	6	Findings
BOR–Pacific Northwest Region	08/14	9	Findings
FWS – Pacific Region	09/14	9	Findings
No Material Weaknesses Found		Total 79 Findings	

FY14 Results & Performance

In FY14, OAS conducted 10 aviation program evaluations amongst 8 bureaus resulting in a total of 79 findings and no material weaknesses. Findings, corrective actions, and aviation program enhancements were collaborated with bureau aviation managers and tracked using OAS’s ISO 9001-2008 certified program evaluation process (implemented in 2008). Since FY06, OAS has achieved a 71% reduction in completion time for aviation program evaluations. 100% of all Plan Of Action and Milestones (POAMs) have been fulfilled for the aviation program evaluations conducted to date in accordance with OAS’s ISO 9001-2008 process requirements.

The aviation program evaluation system is a proactive process for gathering and analyzing data to assess the health of aviation programs within the Department. Regular monitoring of key “vital signs” provides a quality assurance system to assess the safety of aviation services provided, ensures efficiency in the management of complex resources, and provides a means of sharing best practices.

From April 2005 to September 2014, a comprehensive analysis of 535 historical aviation program evaluation findings was completed within 85 evaluations. An analysis of these findings determined four major areas for improvement encompassing aviation program aviation plans, MOUs/IAAs, training, and safety.

The Top 5 Findings, 2005-2014

1. Required Line Manager (M2)/Supervisor (M3) training not conducted or current (per OPM-04).
⇒ [67%](#)
2. Lack a basic understanding of Project Planning.
⇒ [61%](#)
3. Incomplete or out of date aviation plans.
⇒ [53%](#)
4. MOUs/IAAs/SLAs are missing or out of date.
⇒ [49%](#)
5. Minimal or no SAFECOMs compared to total amount of bureau flight time.
⇒ [30%](#)



Aviation Program Assessments

Departmental Aviation Program Evaluations are conducted via a systematic process for analyzing and reporting information with regard to aviation programs within the bureaus and their respective units. These assessments are tailored to meet departmental and bureau needs in terms of regulatory compliance and continual improvement. Bureaus that participate in wildland fire operations participate in aviation program evaluations in concert with their readiness reviews. However, non-wildland fire (i. e. wildlife, law enforcement, etc.) aviation missions are rarely incorporated into these types of reviews and are (generally) reviewed less frequently. Fortunately, departmental aviation program evaluations provide an opportunity for personnel engaged in all mission types to connect with their national, regional/state and local aviation managers.

Each bureau should, and many already have, developed roles and responsibilities within their organization to communicate and implement essential information, not only internally within their bureau but to share with other units/

bureaus within the Department.

It all starts with planning. Over the past five years, we have discovered that Aviation Management Plans are either out of date or incomplete (60 % of programs reviewed in the Program Evaluation Process). As a result, the Executive Aviation Committee (<http://oas.doi.gov/director/EAC/eac.htm>) tasked a diverse bureau and OAS work group to develop minimum elements/requirements of a bureau National Aviation Management Plan (NAMP). During this process, the work group identified a lack of standardization within Project Aviation Safety Plan (PASPs). OAS Operational Procedure Memorandum 06 ([OPM-06](#)) was released July 21, 2014 which identifies NAMP standards, standardizes PASPs, and identifies management approval requirements.

Aviation Program Evaluations provide an essential component of continual improvement through self-assessment and best practice sharing that transcends throughout all Departmental missions.

Get Your Safety Culture here!

(The following is adapted from Shawn Galloway's 2013 article, [Stop Trying To Create a Safety Culture.](#))

Safety culture is the catch phrase and desire of senior executives, often expressed as "We need a safety culture!" So before you run down to the store to look for some safety culture, here's something to consider: you already have a safety culture - it just might not be what you want.

Safety practices, risk perceptions, and mitigation techniques have been and always will be a part of humanity, probably more so among those who are more successful in navigating life's risks. Back when a cavemen was eaten by a predator (hazard), all his friends realized that those predators were dangerous (risk assessment) and to avoid them (mitigation to reduce risk).

Safety is a part of every culture and everyone to some degree has, or is influenced by, multiple cultures. Organizational safety goals should not be focused on the creation of safety culture. Rather than questioning, "Do we have a safety culture?" ask, "Are we managing our safety culture or being managed by it?" Does your safety culture possess the characteristics you or your organization desire?

Misunderstanding the existence of safety cultures contributes to the desire for "wanting one." Moreover, this often results in the flash-in-the-pan program of the month, management fad, or another round of lip service. Cultures are the ultimate sustainability mechanism – bad or good. Programs and processes all work or don't work because of the culture. In other words, culture eats strategy for breakfast. (continued next page)



(Cont.) Get Your Safety Culture

Cultures are not a program; they are the interconnectedness that explains why efforts work, don't work, succeed, and fail. Safety cultures need to be considered, leveraged, and managed just as importantly as contractors, projects, and key performance indicators. Organizations are either managing the safety element of the culture or are being managed by it. Stop searching to create a safety culture. You already have one, but is it desirable? Is it as effective?

Leaders at all levels must move from the desire to create a safety culture to the realization that one already exists – they just need to figure out if it's one they want. They should focus on how to strengthen the cultural beliefs, decisions, and behaviors that influence the individual decisions carried out when no one is watching -- the most important part of cultural reality, safety or otherwise.

A company's safety culture is a direct reflection of the organization's overarching culture and the people who work in it. As a result, most employees will generate their perceptions of safety and its importance based on the attitude their employer projects.

Dr. James Reason has suggested that safety culture consists of five elements:

An informed culture. In an *informed culture* the organization collects and analyzes relevant data, and actively disseminates safety information.

A reporting culture. A *reporting culture* means cultivating an atmosphere where people have confidence to report safety concerns without fear of blame. Employees must know that confidentiality will be maintained and that the information they submit will be acted upon, otherwise they will decide that there is no benefit in their reporting.

A learning culture. A *learning culture* means that an organization is able to learn from its mistakes and make changes. It will also ensure that people understand the SMS processes at a personal level.

A just culture. In a *just culture* errors and unsafe acts will not be punished if the error was unintentional. However, those who act recklessly or take deliberate and unjustifiable risks will still be subject to disciplinary action.

A flexible culture. A *flexible culture* is one where the organization and the people in it are capable of adapting effectively to changing demands.

For those in positions of authority, leader-

ship is central to safety culture. The highest standards you can expect from the people you lead or seek to influence are the lowest you exhibit yourself.

By ignoring low standards you are approving them. You are communicating that low standards are acceptable. Leadership is the communication of the actions and standards you expect by words, deeds and silence.

If everyone is trained to do their job in a safe manner and proactively managing risk, you will then be approaching a new level of safety that is behavior driven. All the desirable elements within a safety culture must be actively encouraged and demonstrated by managers at all levels on a regular basis. Managers must also encourage staff to participate if their desired safety culture is to be achieved.

How would you describe the culture in your organization?



The Blame Game

In many workplaces people are hesitant to take notice of, or speak up, about conditions that cry out for improvement. People are especially reluctant to report errors made by others; and don't even think about someone reporting his or her own mistakes.

In recent generations our society has taken on a "blame culture" that always wants to point the finger at someone else. When someone is found to be responsible for a condition that should not exist, blame and retribution follow. In that environment people do not want to single out their friends and coworkers, much less themselves. Thus, the "See No Evil, Hear No Evil, Speak No Evil" approach to personal and work relationships is widely practiced.

Although the blame culture is antithetical to a strong safety culture, it continues to exist even at organizations that have implemented a Safety Management System (SMS). The SMS relies on reporting errors and conditions to detect hazards, assess the associated risks, and devise policies or procedures to mitigate those risks. Certainly errors and conditions exist that deserve to be reported so they may not be repeated, but reports are unlikely to come in if blame and retribution will be the result.

Ever hear of a "Just Culture?" A just culture is one in which people feel free to report errors and conditions – even their own errors – without fear of retribution for themselves or their coworkers. In a just culture such reports would be met with, "Thanks for

your input. Tell me a little more so we can be sure we come up with the right solution." Reports are solicited as a way to continuously improve the Safety Management System. A just culture enhances and strengthens the SMS. While the submission of safety reports is an obvious application of just culture, the concept impacts the use of all of the tools



in the safety toolbox. It encourages complete and accurate reporting of findings on internal audits, policy waiver procedures, and change management.

But, if you are thinking that a just culture is equivalent to a "No Blame Culture" think again. People are held accountable for their actions and their decisions. But rather than assigning blame, the idea is to identify shortcomings in the system that led to or

enabled mistaken action.

One of the best ways to identify safety concerns in DOI is with the SAFECOM system. The "SAFECOM" (<https://www.safecom.gov/> or Form OAS-34/FS-1500-14) is used to report any condition, observance, act, maintenance problem, or circumstance with personnel or aircraft that has the potential to cause an aviation-related mishap. A SAFECOM's sole purpose is for mishap prevention. A SAFECOM is not intended to fix blame and is not be utilized in disciplinary action against an employee or vendor.

Voluntary Hazard Reporting is a **leading** indicator of an organization's Safety Culture. Ownership over workplace safety is a **key** indicator of an organization's Safety Culture. SAFECOMs may be submitted electronically (<https://www.safecom.gov/>), telephonically, mail, fax or mobile application.

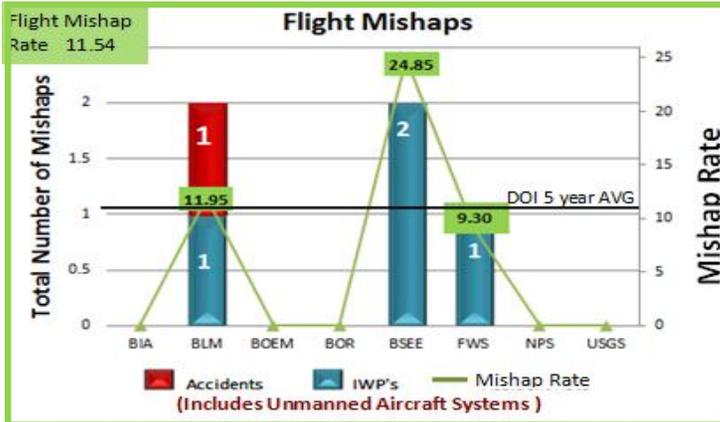
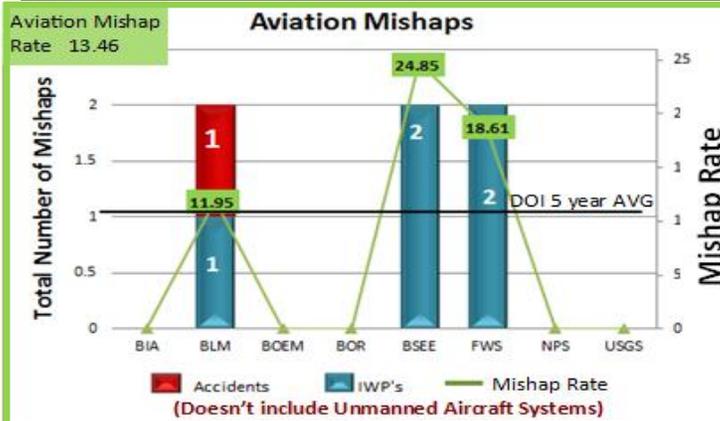
One thing to remember though, a just culture is NOT a "get out of jail free" card. It should not and will not absolve the person who engages in a willfully unsafe or illegal act, nor the individual who repeatedly shows disregard for established procedures.

Does a blame culture exist in your organization? Or are you on the road to a Just Culture?



EXECUTIVE SUMMARY

Take Away Sheet



1 Accident and 6 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	\$ 5,490,120	15,245	\$ 360
Contract	\$ 47,253,161	36,768	\$ 1,285
Total Usage	\$52,743,281	52,013	\$ 1,014

POLICY: OPM-11 provides updated supplemental guidance for Unmanned Aircraft Systems (UAS) users in order to prevent unauthorized operation of UAS. DM's also apply.

POLICY: OAS Operational Procedure Memorandum 06 (OPM-06) was released July 21, 2014 which identifies National Aviation Management Plan (NAMP) standards, standardizes Project Aviation Safety Plans (PASPs), and identifies management approval requirements.

RISK MANAGEMENT: Voluntary Hazard Reporting is a **leading** indicator of an organization's Safety Culture. Ownership over workplace safety is a **key** indicator of an organization's Safety Culture.

SAFECOM reporting and management is now available for mobile device users.

PROMOTION: In flight award was given to Jayson Danziger with Bureau of Safety and Environmental Enforcement. Several Airwards for BLM and BSEE were also awarded.

PROMOTION: Bureaus maintaining excellence in aviation safety through their continuous accident-free years record include: BSEE-40 years; OSM-28 years; BOR-17 years; USGS-8 years; BIA-7 years; BOEM-3, FWS-3 and NPS-3 year.

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: 79 Aviation Program Evaluation findings. The top finding showed Line Manager (M2) / Supervisor (M3) training not conducted or current (per OPM 04).

ASSURANCE: Over the past five years, program evaluations revealed that 60% of Aviation Management Plans were either out of date or incomplete.

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

