32nd Annual

FY 2020
DOI Aviation Safety Summary and Annual Report

https://www.doi.gov/aviation/safety

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INTRODUCTION

01

OUR PROGRAM

The Department's aviation programs are built on Federal Aviation Administration (FAA) regulatory requirements, Federal Management Regulations (FMR), Departmental Manuals (DMs), and industry best practices.

Safety Management Systems (SMS) have gained significant notoriety in the last few years and unfortunately, not all of it favorable. That said, perhaps it's time that we take a step back and view SMS for what it is ultimately trying to accomplish and then "reverse engineer" it through the methods in which those objectives and goals can be met. This requires engagement from executive management all the way through those who perform and support operations. Within that perspective, the most common paradigm is that this is a top-down management initiative with operations personnel at the end of that chain.

"What if?" is a great starter for initiating a paradigm shift…otherwise known as change. For example, what if operations personnel were to lead the effort, managing its way up to the executive level? How then could they not become engaged if those who perform the mission were leading the initiative? At the end of the day, it's up to those who live where the "rubber meets the road" to ensure concepts, requirements and goals become reality. Without them, initiatives like SMS are just another hood ornament – a hollow symbol that provides no value to operations.

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):

Policy

Risk Management

Promotion

Assurance

ISO 9001:2015 CERTIFIED

Office of Aviation Services * Bureaus * Industry

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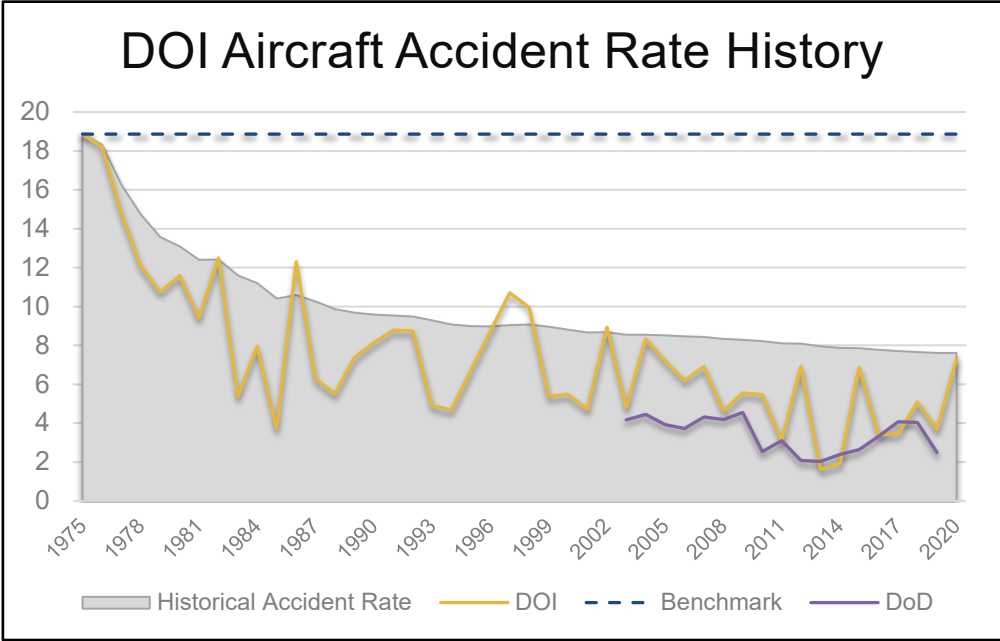(208) 433-5070

AVIATION OVERVIEW

02

FY 75-20

Total Losses Avoided

$848 Million
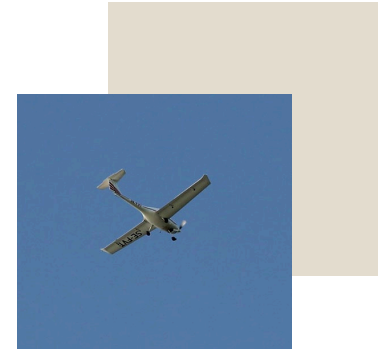
Unbudgeted Costs

$504 Million

DOI Aircraft Accident Rate History

Legend: Historical Accident Rate — DOI — — — Benchmark — DoD

Note: In 1975, the Department of the Interior recorded its first annual aircraft accident rate, as well as its first historical accident rate per 100,000 flight hours. The rate was 18.87 and has become the benchmark used to compare DOI safety performance.

Date	Type	Location	Agency	Aircraft	Description
02/27/20	Incident With Potential (IWP)	Gulf of Mexico	BSEE Contract	Augusta A119	While enroute to off-shore platform Eugene Island 342C, helicopter suffered an inflight impact with a seagull.. Bird entered the cockpit between the front edge of pilot door & door post before exiting lower aft portion of pilot window. Proper PPE prevented injuries to pilot & BSEE employees. No injuries, aircraft received minor damage.
05/31/20	Accident	Unalakleet, AK	BLM Contract	AT-802 Fire Boss	Aircraft dispatched to the Chiroskey River Fire near Unalakleet, AK. Pilots located a short lake appx. 4mi north of the fire to perform scoops. While departing with load 12, the aircraft impacted a small hill at the east end of the lake with the left float. No injuries, substantial damage to aircraft.
06/07/20	IWP	Isom Creek, AK	BLM Contract	AT-802 Fire Boss	During second scoop of the day, the aircraft began an uncommanded right turn that couldn't be countered with left full rudder. Pilot reduced power to idle, dumped the water load and coasted into a floating mass of vegetation. No injuries, no damage.
07/14/20	Accident	Birch Creek, AK	BLM Contract	AT-802 Fire Boss	During the 14th scoop of the day, the aircraft began an uncommanded hard right turn immediately after touchdown on water. Although full left rudder was applied, aircraft impacted shoreline at appx. 45 degrees. No injuries, substantial damage to aircraft.
07/30/20	Accident	Elgin, NV	BLM Contract	AT-802 A SEAT	Two AT-802A aircraft were on their third flight of the day after being dispatched from Mesquite, NV. to the Bishop Fire located approximately 1.5 miles northwest of Elgin, NV. Mission was to continue retardant drop. After following lead plane, first SEAT dropped retardant & executed climb out. Second SEAT flew through retardant covering windscreen. Mid-air collision between both SEAT aircraft when second SEAT executed climb out after dropping retardant. Two fatalities, both aircraft destroyed.
08/30/20	IWP	Woodward Fire PORE	NPS DOI Owned	Matrice 600 w/Ignis PSD	A small Unmanned Aerial System (sUAS) and a Type 2 helicopter with longline and bucket, came in close proximity of one another while operating in the same area on the Woodward fire. sUAS had been engaged in aerial ignition near helicopter. Helicopter reported sUAS appx 100ft below their aircraft. sUAS had lost signal and gone into "home mode" causing it to climb to altitude. No injuries, no damage.
09/22/20	Accident	Schill Fire Emmett, ID	BLM Contract	AT-802 SEAT	Three aircraft departed Ontario, OR to respond to the Schill Fire. The mishap pilot was instructed to drop following behind the first aircraft. He crossed the ridge and continued past the drop start and began to descend into the canyon without releasing the retardant. He started to climb out but was unable to clear the opposite ridge. One fatality, aircraft destroyed.

FY20 MANNED AIRCRAFT ACCIDENT RATE

Manned Aircraft

4 Accidents

2 Incident with Potential

6 Mishaps

Procurement Type	Hours	Percent of Hours Flown
Fleet	10,487	19%
Non-Fleet	44,312.41	81%
Total Flight Hours	**54,799.41**	

Approximately 384 hour increase in total hours from FY19.

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
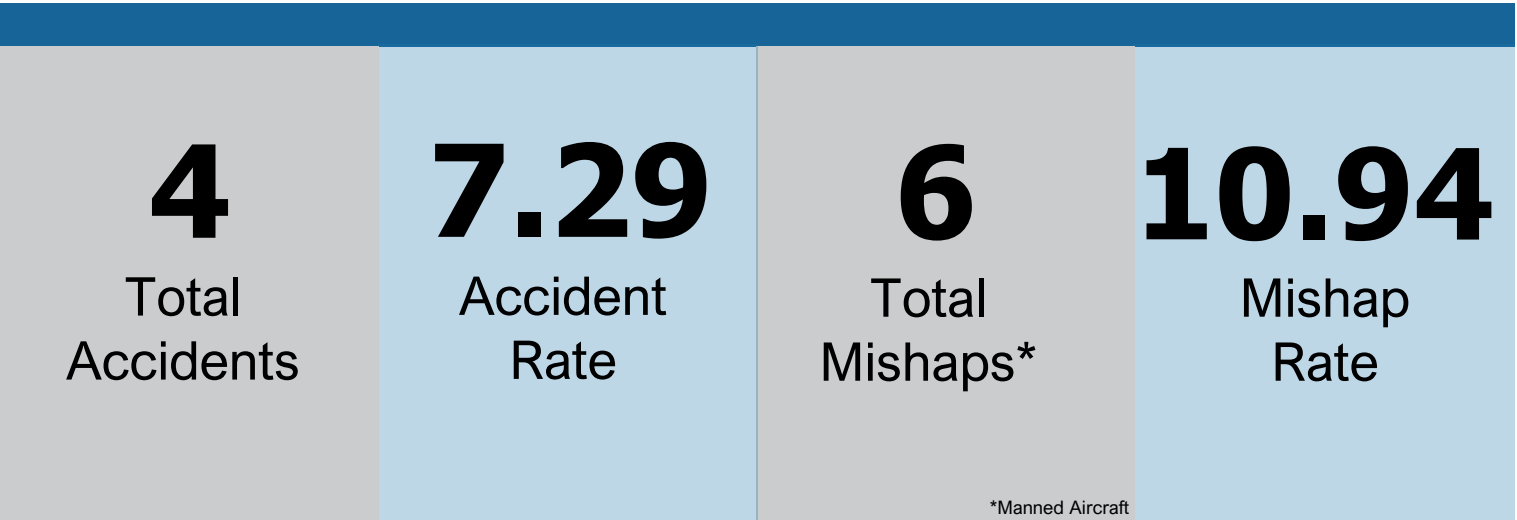
Incidental Costs Associated with Mishaps

Cost Input	Cost
DOI Losses	~$20,000
Vendor Losses	$8,388,257
DOI sUAS Losses	$30,480
Fatalities (3) VSL*	$34,800,000
Serious Injuries (0)	N/A
Minor Injuries (0)	N/A
Total	$43,238,737

*Value Statistical Life (VSL) $11.6 million Department of Transportation

4 Total Accidents

7.29 Accident Rate

6 Total Mishaps*

10.94 Mishap Rate
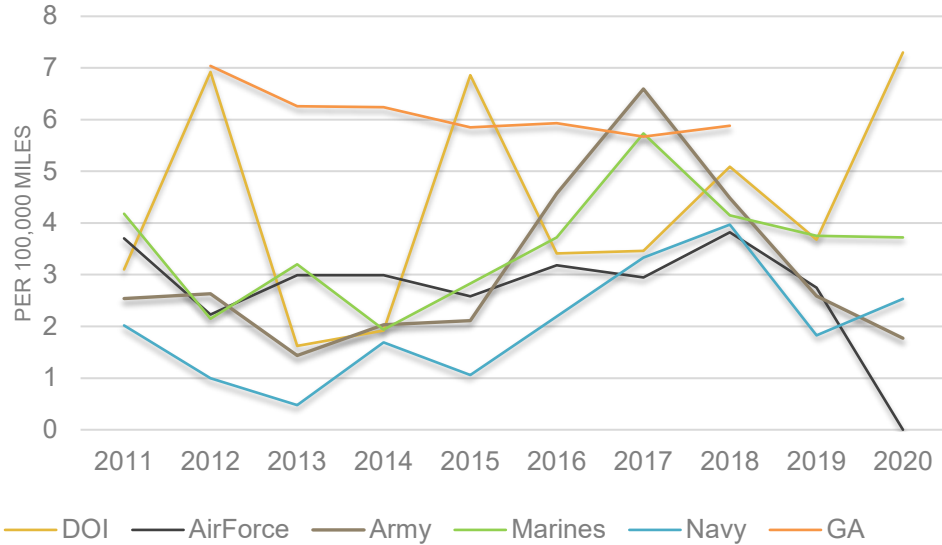
*Manned Aircraft

ANNUAL FLIGHT USAGE STATISTICS – Fleet and Non-Fleet Manned Aircraft

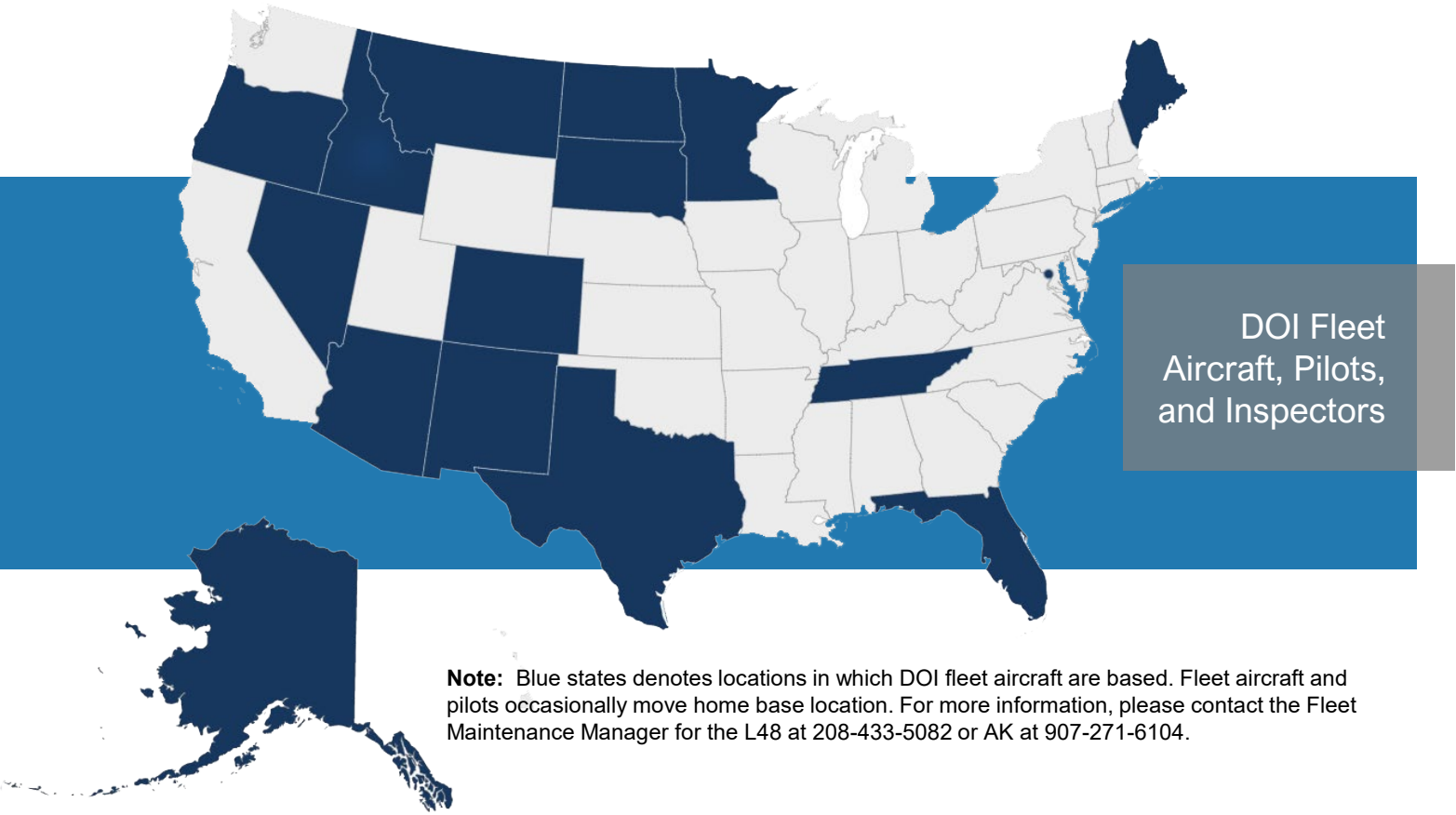| Procurement Type	Flight Hours	% Difference from FY19	Flight Usage Cost	Cost per Flight Hour	% Difference from FY19
Fleet					
FW	9,132.60	24.37% ↓	$3,808,013.50	$416.97	32.37% ↑
RW	1,354.40	6.31% ↑	$2,507,102.00	$1,851.08	25.67% ↑
Total	**10,487**	**24.37% ↓**	**$6,315,115.50**	**$602.10**	**41.69% ↑**
Non-Fleet					
FW	22,156.61	12.68% ↑	$42,976,011.81	$1,939.65	5.65% ↑
RW	21,456.07	.25% ↑	$29,858,850.62	$1,391.63	9.32% ↑
Other	699.73	N/A	$1,815,654.41	$2,594.78	N/A
Total	**44,312.41**	**7.91% ↑**	**$74,650,516.84**	**$1,684.64**	**9.25% ↑**
Grand Total	**54,799.41**	**12.68% ↑**	**$80,965,632.34**	**$1477.49**	**16.52% ↑**

OUR LOCATIONS

DOI Fleet Aircraft, Pilots, and Inspectors

Note: Blue states denotes locations in which DOI fleet aircraft are based. Fleet aircraft and pilots occasionally move home base location. For more information, please contact the Fleet Maintenance Manager for the L48 at 208-433-5082 or AK at 907-271-6104.

Aircraft Type	#	Aircraft Type	#
Airbus AS350 B2	1	Cessna T206 Soloy	1
Aviat A-1B	1	CubCrafters CC-18	22
Beechcraft B200 King Air	2	DeHavilland DHC-6 Twin Otter	1
Bell 206BIII	2	DeHavilland DHC-2	2
Bell 206L3	2	Found FBA-2C2	6
Bell 412EP	2	Partenavia P68	1
Cessna C-182	2	Pilatus PC 12/45	1
Cessna C-185	13	Piper PA-18	1
Cessna C-206	21	Quest Kodiak 100	8

89 Total Aircraft

53 Alaska

36 L48

FLEET INVENTORY
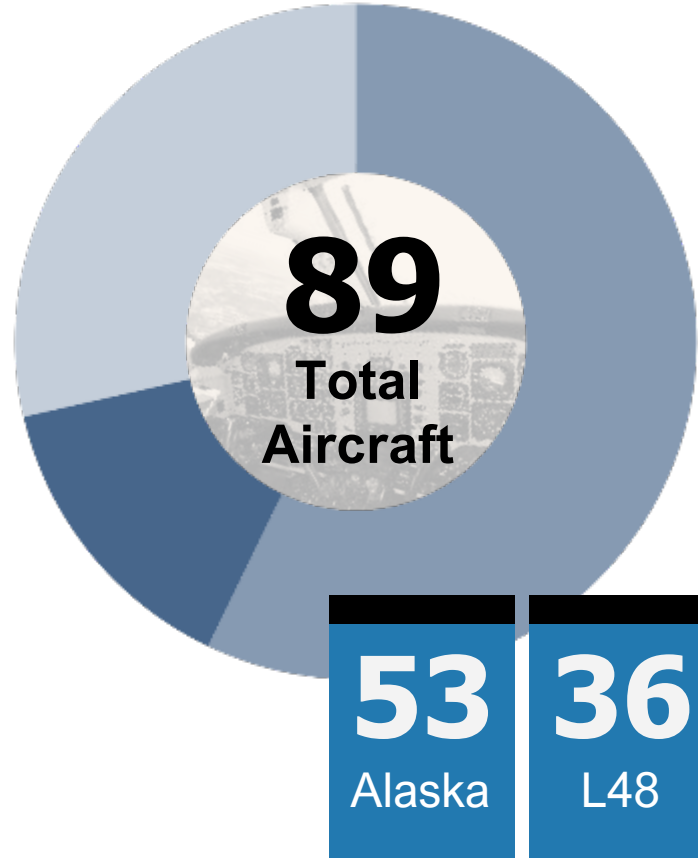
Aircraft by Bureau

	BLM	FWS	NPS	OAS	USPP	Total
Fixed Wing	7	47	27*	1*	---	**82**
Rotor Wing	---	1	2	1	3	**7**
Total	**7**	**48**	**29**	**2**	**3**	**89**

*Note: (1) NPS and (1) OAS Fixed Wing removed from service, to be sold.

Aircraft by OAS Region

	Alaska	Western	Eastern	Total
Fixed Wing	53	16	13	**82**
Rotor Wing	---	1	6	**7**
Total	**53**	**17**	**19**	**89**
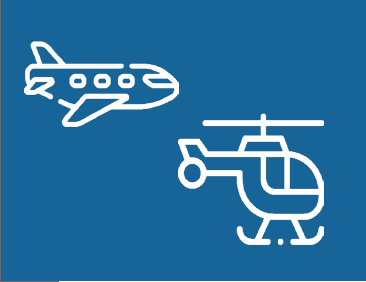
PILOT INVENTORY

Number of Pilots

65 Fixed Wing

7 Rotor Wing

17 Inspectors

89 Total

Average Annual Flight Hours

GSA Average

	FLEET PILOT AVERAGE	FLEET AIRCRAFT AVERAGE
Hours	118	118
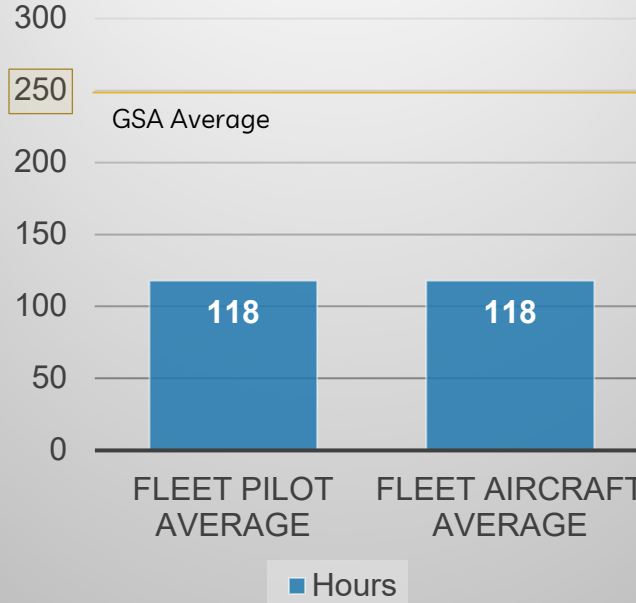
Fleet pilot and fleet aircraft averages were 24.84% and 26.35% below FY19, respectively.

Pilots by Bureau

	BLM	FWS	NPS	OAS	USGS	USPP	Total
Fixed Wing	11	37	15	1	1	---	65
Rotor Wing	---	---	1	1	---	5	7
Inspectors	---	---	---	17	---	---	17
Total	11	37	16	19	1	5	89

Pilots by OAS Region

	Alaska	Western	Eastern	Headquarters	Total
Fixed Wing	38	17	9	1	65
Rotor Wing	---	1	6	---	7
Inspectors	6	5	4	2	17
Total	44	23	19	3	89

Aircraft Type	#
3DR Site Scan	32
3DR Solo	448
Autel EVO	5
FireFly 6 Pro	24
Matrice 600 Pro	78
Mavic Pro	82
DroneVolt H10	1
Apprentice S15E	1
Parrot Anafi	147
Parrot Anafi Thermal	31
Skidio R1	1
Sky Hero Loki	2
Total	**853**

Flights by sUAS Aircraft Type

	Flight Count
MATRICE 600 PRO	1,807
3DR SOLO	843
PARROT ANAFI	513
MAVIC PRO	385
PARROT ANAFI THERMAL	48
FIREFLY 6	21
AUTEL EVO	4
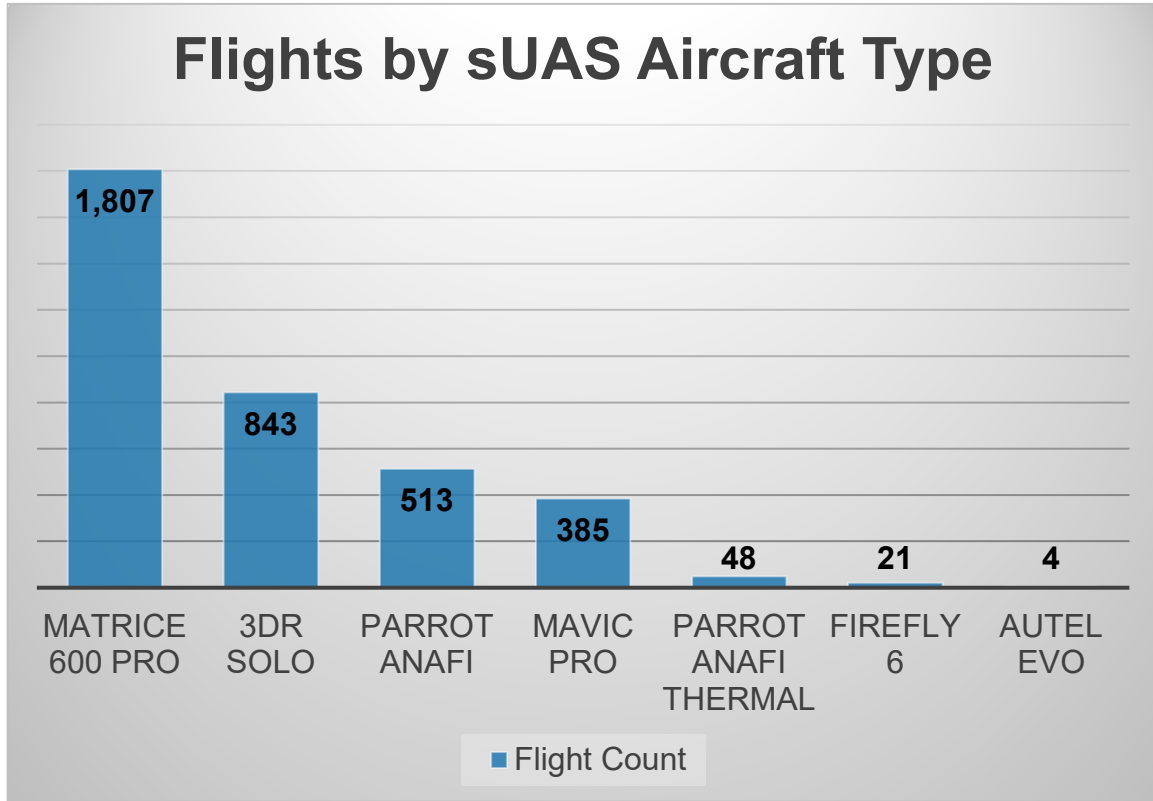
SUAS FLEET INVENTORY

sUAS Fleet Activity
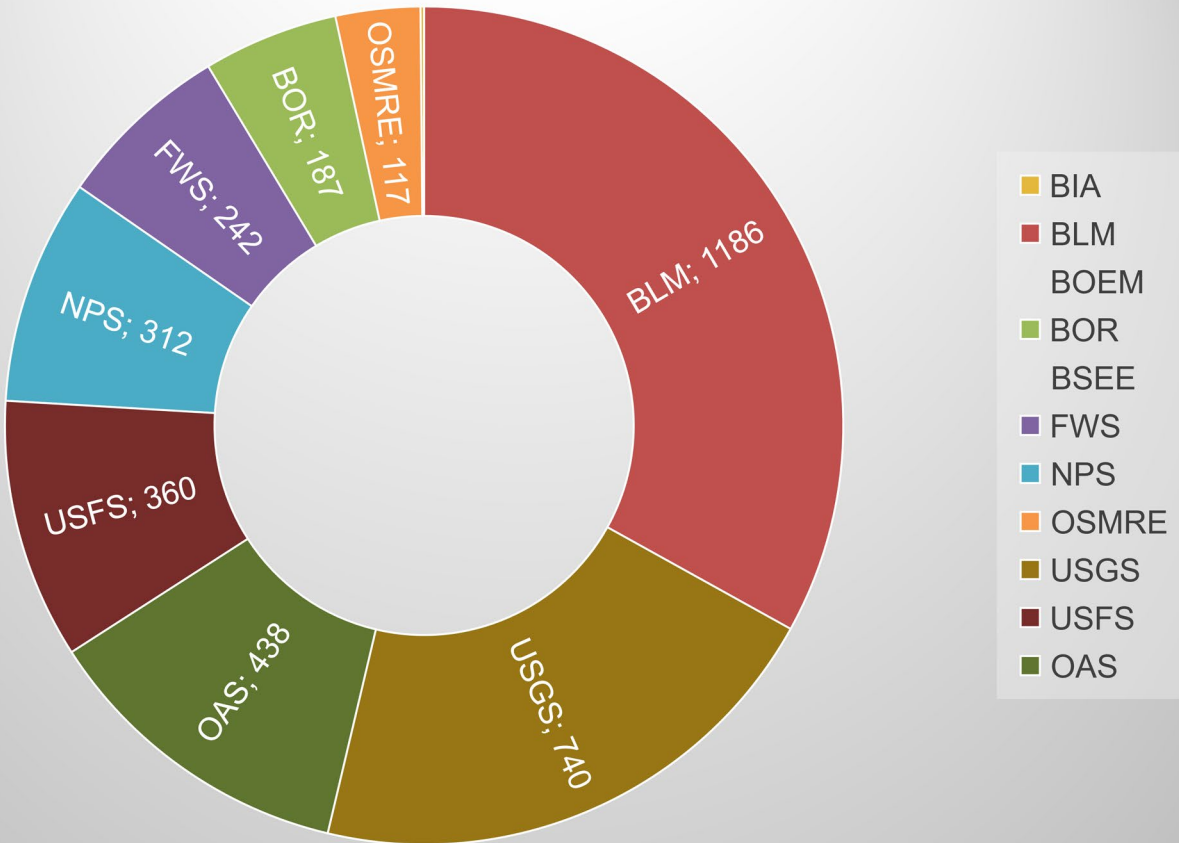
FY20 Bureau Overview

High level analysis of aviation safety and performance statistics that have been extracted from various databases.

Bureau of Indian Affairs

Manned Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Contract	2,037.55	$3,119,082.90	$1,530.80
Fleet	---	---	---

0 Fleet Missions

2,071 Non-Fleet Missions

SAFECOM
Aviation Safety Communiqué

Total Reported	23
Remaining Open	5
Completion Rate	78%

Top 3 Categories: Hazards, Maintenance, and Incident.

Submission Breakdown: 8% sUAS 91% Manned

Reporting Rates*
Percent difference FY19 to FY20

32.19%↑ Manned

686%↑ sUAS

Fleet Statistics	#
Manned Aircraft	0
Pilots	0
Unmanned Aircraft	9
sUAS Pilots	8

5 sUAS Flights

Top Categories: Training & Proficiency.

Aircraft Used: Parrot Anafi.

Bureau of Land Management

Manned Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Contract	22,650.86	$44,503,761.25	$1,964.77
Fleet	1,430.7	$1,696,268.50	$1,185.62

615 Fleet Missions

17,098 Non-Fleet Missions

SAFECOM
Aviation Safety Communiqué

Total Reported	135
Remaining Open	17
Completion Rate	87%

Top 3 Categories: Hazards, Maintenance, and Incident.

Submission Breakdown: 4% sUAS 96% Manned

Reporting Rates*
*Percent difference FY19 to FY20

28.84%↑ Manned

28.75%↑ sUAS

Fleet Statistics	#
Manned Aircraft	7
Pilots	11
Unmanned Aircraft	285
sUAS Pilots	146

1220 sUAS Flights

Top Categories: Interagency Fire, Mapping, and Training & Proficiency.

Aircraft Used: Matrice 600 Pro, 3DR Solo, Mavic Pro.

Bureau of Ocean Energy Management

Manned Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Contract	422.15	$698,811.23	$1,655.35
Fleet	16.1	$26,751.50	$1,661.58

5 Fleet Missions

127 Non-Fleet Missions

SAFECOM
Aviation Safety Communiqué

Total Reported	0
Remaining Open	0
Completion Rate	N/A

Top 3 Categories:
N/A.

Submission Breakdown:
0% sUAS
0% Manned

Reporting Rates*
Percent difference FY19 to FY20

Unchanged Manned

Unchanged sUAS

Fleet Statistics	#
Manned Aircraft	0
Pilots	0
Unmanned Aircraft	0
sUAS Pilots	0

0 sUAS Flights

Top Categories: N/A

Aircraft Used: N/A

Bureau of Reclamation

Manned Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Contract	23.3	$37,174.10	$1,595.45
Fleet	---	---	---

0 Fleet Missions

16 Non-Fleet Missions

SAFECOM
Aviation Safety Communiqué

Total Reported	0
Remaining Open	0
Completion Rate	N/A

Top 3 Categories: N/A.

Submission Breakdown:
0% sUAS
0% Manned

Reporting Rates*
Percent difference FY19 to FY20

Unchanged Manned

100%↓ sUAS

Fleet Statistics	#
Manned Aircraft	0
Pilots	0
Unmanned Aircraft	59
sUAS Pilots	24

187 sUAS Flights

Top Categories: Training & Proficiency, Mapping, and Maintenance & Inspection.

Aircraft Used: 3DR Solo, Parrot Anafi, Mavic Pro.

Bureau of Safety & Environmental Enforcement

BSEE
Bureau of Safety and Environmental Enforcement

Manned Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Contract	6,703.2	$7,777,104.80	$1,160.20
Fleet	---	---	---

0 Fleet Missions

3,977 Non-Fleet Missions

SAFECOM
Aviation Safety Communiqué

Total Reported	79
Remaining Open	1
Completion Rate	99%

Top 3 Categories: Hazards, Maintenance, and Incident.

Submission Breakdown: 0% sUAS 100% Manned

Reporting Rates*
Percent difference FY19 to FY20

13.46%↓ Manned

Unchanged sUAS

Fleet Statistics	#
Manned Aircraft	0
Pilots	0
Unmanned Aircraft	0
sUAS Pilots	0

0 sUAS Flights

Top Categories: N/A

Aircraft Used: N/A

U.S. Fish and Wildlife Service

Manned Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Contract	896.15	$800,760.96	$893.56
Fleet	4,431.30	$1,448,026	$326.77

1,537 Fleet Missions

477 Non-Fleet Missions

SAFECOM
Aviation Safety Communiqué

Total Reported	6
Remaining Open	0
Completion Rate	100%

Top 3 Categories: Hazards, Maintenance, and Incident.

Submission Breakdown: 0% sUAS 100% Manned

Reporting Rates*
Percent difference FY19 to FY20

18.95%↓ Manned

100%↓ sUAS

Fleet Statistics	#
Manned Aircraft	48
Pilots	37
Unmanned Aircraft	160
sUAS Pilots	68

242 sUAS Flights

Top Categories: Interagency Fire, Training & Proficiency, and Reconnaissance.

Aircraft Used: Matrice 600 Pro, 3DR Solo, Mavic Pro.

National Park Service*

Manned Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Contract	4,825.47	$6,387,011.37	$1,416.86
Fleet	3,669.30	$1,955,485.80	$532.93

1,828 Fleet Missions

4,063 Non-Fleet Missions

SAFECOM
Aviation Safety Communiqué

Total Reported	50
Remaining Open	10
Completion Rate	80%

Top 3 Categories: Hazards, Maintenance, and Incident.

Submission Breakdown:
8% sUAS
92% Manned

Reporting Rates*
Percent difference FY19 to FY20

213.42%↑ Manned

316.67%↑ sUAS

* Includes U.S. Park Police

Fleet Statistics	#
Manned Aircraft	29
Pilots	16
Unmanned Aircraft	65
sUAS Pilots	49

312 sUAS Flights

Top Categories: Training & Proficiency, Interagency Fire, and Maintenance & Inspection.

Aircraft Used: Parrott Anafi, Matrice 600 Pro, Mavic Pro.

Office of Surface Mining Reclamation & Enforcement

Manned Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Contract	60.40	$73,598.90	$1,218.48
Fleet	---	---	---

0 Fleet Missions

24 Non-Fleet Missions

SAFECOM Aviation Safety Communiqué

Total Reported	1
Remaining Open	1
Completion Rate	0%

Top 3 Categories: Airspace, Hazards, and UAS.

Submission Breakdown: 100% sUAS 0% Manned

Reporting Rates*
Percent difference FY19 to FY20

Unchanged Manned

Unchanged sUAS

Fleet Statistics	#
Manned Aircraft	0
Pilots	0
Unmanned Aircraft	34
sUAS Pilots	24

117 sUAS Flights

Top Categories: Mapping, Landscape Monitoring, and Training & Proficiency.

Aircraft Used: 3DR Solo, Parrot Anafi, Mavic Pro.

U.S. Geological Survey

Manned Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Contract	1,311.61	$896,645.55	$683.62
Fleet	34.1	$17,441.50	$511.48

10 Fleet Missions

1,000 Non-Fleet Missions

SAFECOM Aviation Safety Communiqué

Total Reported	6
Remaining Open	1
Completion Rate	83%

Top 3 Categories: Hazards, Maintenance, and UAS.

Submission Breakdown: 67% sUAS 33% Manned

Reporting Rates*
Percent difference FY19 to FY20

33.66%↓ Manned

21.46%↑ sUAS

Fleet Statistics	#
Manned Aircraft	0
Pilots	1
Unmanned Aircraft	201
sUAS Pilots	124

740 sUAS Flights

Top Categories: Training & Proficiency, Mapping, and Landscape Monitoring.

Aircraft Used: 3DR Solo, Parrot Anafi, Mavic Pro.

FY20 BUREAU OVERVIEW

Office of Aviation Services

Manned Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Contract	67.1	$88,903.40	$1324.94
Fleet	413.2	$209,353.50	$506.67

300 Fleet Missions

55 Non-Fleet Missions

SAFECOM
Aviation Safety Communiqué

Total Reported	1
Remaining Open	0
Completion Rate	100%

Top 3 Categories: Accident, Airspace, and Hazard.

Submission Breakdown: 100% sUAS 0% Manned

Reporting Rates*
Percent difference FY19 to FY20

100%↓ Manned

N/A sUAS

Fleet Statistics	#
Manned Aircraft	2
Pilots/Inspectors	19
Unmanned Aircraft	40
sUAS Pilots	10

438 sUAS Flights

Top Categories: Interagency Fire, Training & Proficiency, and Reconnaissance.

Aircraft Used: Matrice 600 Pro, Parrott Anafi, 3DR Solo.

POLICY &
ASSURANCE

03

GENERAL OVERVIEW

Performance	Quantity
Commercial Aircraft Inspections	676
Commercial Pilot Evaluations	483
Cooperator Approvals	50
Elevated SAFECOMs Completed	10
Fuel Service Vehicle Inspections	186
Fleet Aircraft Inspections Completed	106
Fleet Pilot Evaluations Completed	97
Interagency Safety Communications Issued	11

Performance	Quantity
Operational Procedures Memoranda (OPM) Revisions	2
Program Evaluations Completed	3
UAS Aircraft Inspections Completed (Fleet and Vendor)	39
UAS Pilot Inspections (Note: There are no Advanced Workshops in FY20)	27
Point to Point Inspections	376
Student Hours of IAT Training Completed	120,226
Technical Specifications for Procurement Reviewed	33

At-A-Glance

36,276
Online Courses Taken

328
Classroom Courses Offered*

141
Webinars Offered

* Includes ACEs, RTs, and Workshops

44,148
Total Courses Completed

https://www.iat.gov

In FY20, the OAS Training Branch successfully hosted one Aviation Centered Training (ACE) event. The event was hosted in Anchorage AK with 536 course completions.

In March 2020, due to COVID, nearly all in-person learning was suspended. In response, the OAS TB was able to offer an extension letter for training held in the classroom. Webinar efforts were increased to ensure that personnel were able to safely deploy for the 2020 field season.

The OAS TB was able to convert 22 course from Adobe Flash to HTML5 format prior to the end of Flash support which kept all courses available to users. OAS TB worked on the revision and update of 22 courses in FY20 ranging in stages from initial analysis to final certification.

TRAINING BRANCH UPDATE

IAT Completions

Category	2019	2020
Online	30,453	36,276
Residential Classroom	9,096	4,759
Webinar	957	3,113

■ 2019   ■ 2020

ACE Anchorage
114 Students
536 Completions

Flash Conversions
FY 20 – (2) Courses
FY 21 – (22) Courses

TRAINING BRANCH UPDATE

44,148 — FY 20 Course Completions

9% Increase

At-A-Glance

3
Program Evaluations Completed*

5
Best Practices Noted

*Due to Covid-19

Top 5 Best Practices for FY16-20

1) Utilization of tiered management plans as a means of ensuring National, Regional/State and Local Aviation Management Plans are consistent.
2) ALSE inspection and tracking program in place, facilitating consistent compliance with ALSE Handbook requirements.
3) M-3 training included in consolidated management meetings to ensure Line Managers and Supervisors meet OPM-04 requirements.
4) Aviation Mishap Response Plans exercised annually to prepare personnel and improve overall responses.
5) Aviation Managers and Procurement Specialists proactive communication regarding end product contracts to ensure OPM-35 compliance.

AVIATION PROGRAM EVALUATION

Aviation program evaluations are an essential means of providing feedback related to the operations, process, and outcomes of aviation programs with a focus on program enhancement. This quality assurance system assesses aviation safety, ensures efficiency, and provides a means for sharing best practices.

Top 5 Findings for FY16-20

1) Aviation training requirements not met.

2) Inadequate project planning, including Project Aviation Safety Plan (PASP) completion in accordance with OPM-6.

3) Incomplete, inaccurate, and/or out of date Aviation Management Plans.

4) Interagency Life Support Equipment (ALSE) inspection and tracking below Interagency ALSE Standard requirements.

5) Flight hazard maps lacking or inadequate.

AVIATION PROGRAM EVALUATION

AMRB Update

3
AMRBs Conducted

33
AMRB Recommendations

13
Recommendations Completed

AVIATION MISHAP REVIEW BOARD

AMRB recommendations result from accidents that have claimed lives, caused injuries, and/or resulted in significant damages and are a bureau-led process with the goal of preventing similar mishaps from occurring again in the future.

DOI Bureaus and the Office of Aviation Services continue efforts towards closing open Aircraft Mishap Review Board (AMRB) recommendations.

SOURCE SELECTION EVALUATION BOARD (SSEB)

18
SSEB Completions

0
SMS Assurance Site Visits*

*Due to Covid-19

Safety & Evaluation Changes

Updated Rating Descriptions

FAA violations added as a rating element

Adjusted numerical/weighted values

Aviation Safety Management System (SMS) is an approach to managing aviation safety that includes the formal, top-down, business-like approach to managing and reducing risk, which includes a systemic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures. SMS is an evolutionary development in aviation safety as it creates structured, repeatable, and proactive systems that can reduce aviation risk to the contractor and the government employees that use their services. Completed SSEB's were an evaluation of offeror's response to an SMS questionnaire.

RISK
MANAGEMENT

04

Using the SAFECOM system for punitive action is prohibited (352 DM 3.10B).

Submitting SAFECOM is **not** a substitute for "on-the-spot" correction(s) to a safety concern. It is 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.

27%
Of Total Submitted by DOI

SAFECOM Data

1,106
Total SAFECOM Entries*

301
DOI Bureau Entries
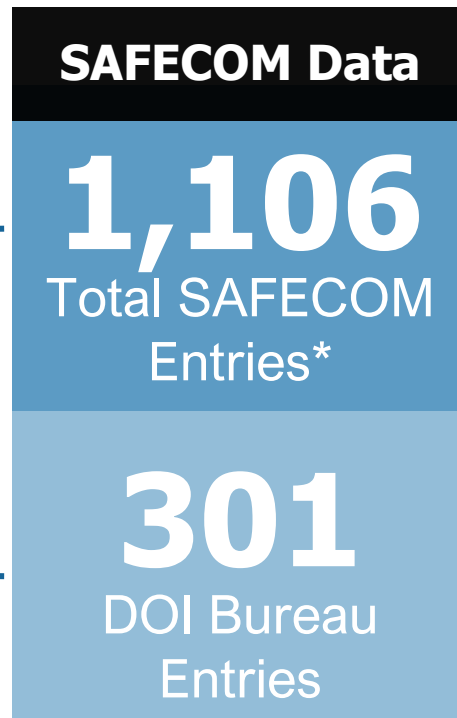
*DOI, USFS, States, & Cooperators

SAFECOM OVERVIEW

SAFECOM

Aviation Safety Communiquè

Percentage Submission By Bureau*

Bureau	Percent
BIA	7%
BLM	44%
BOEM	0%
BOR	0%
BSEE	26%
FWS	2%
NPS	16%
OAS	3%
OSM	0%
USGS	2%

*Manned & sUAS

SAFECOM Submissions FY15-20*

300
250
200
150
100
50
0

Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec

2015 2016 2017 2018 2019 2020
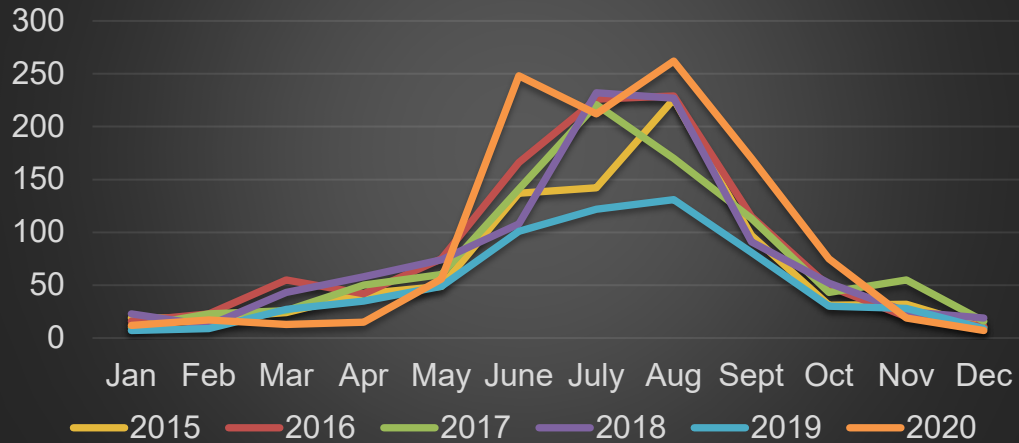
*All Agencies

SAFECOM OVERVIEW

FY20 SAFECOM Reporting Rate vs. Completion Rate

Bureau	Reporting Rate*	Completion Rate
BIA	1,128.80	78%
BLM	5,621.34	87%
BOEM	0	0%
BOR	0	0%
BSEE	1,178.54	99%
FWS	112.62	33%
NPS	588.59	80%
OSM	1,655.62	0%
USGS	445.86	83%

*Per 100,000 flight hours

Reporting Rate vs. Completion Rate
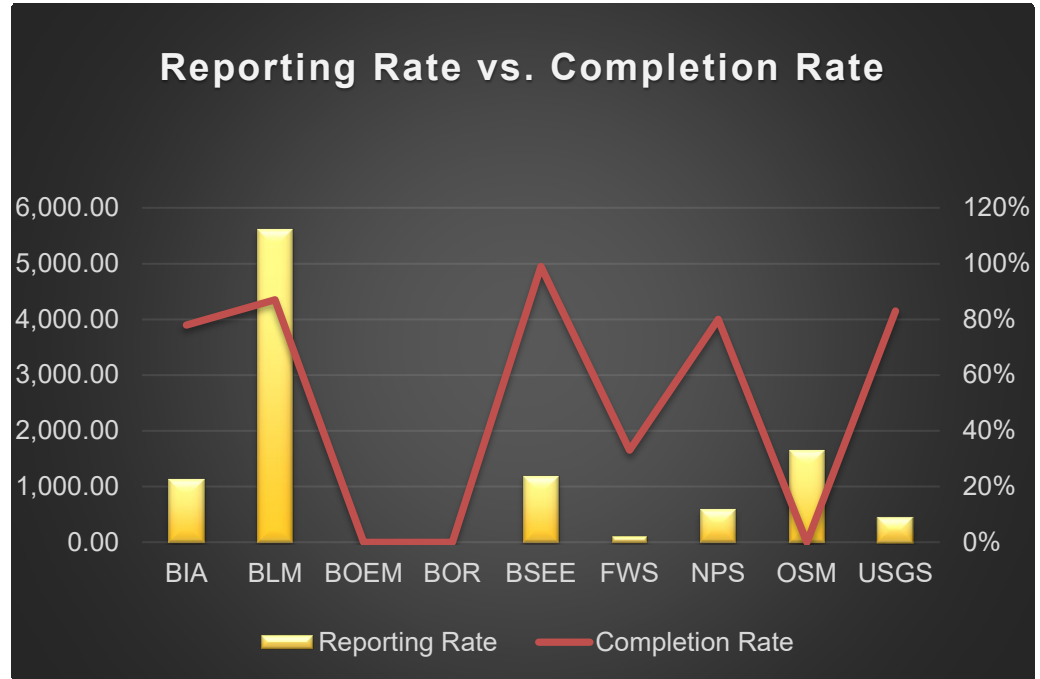
SAFECOM OVERVIEW

FY20 SAFECOMS BY CATEGORY

SAFECOM OVERVIEW

Maintenance

Avionics
Chip Light
Electrical
Engine
Fuel
Instrument
Landing Gear
Oil
Transmission

Hazard

Communications
Fuel
Mission
Equipment
Pilot Action
Policy Deviation
Pre-Flight Action
Ramp

Pie chart labels: Mishap Prevention, Management, UAS, Accident, Airspace, Maintenance, Hazard, Incident
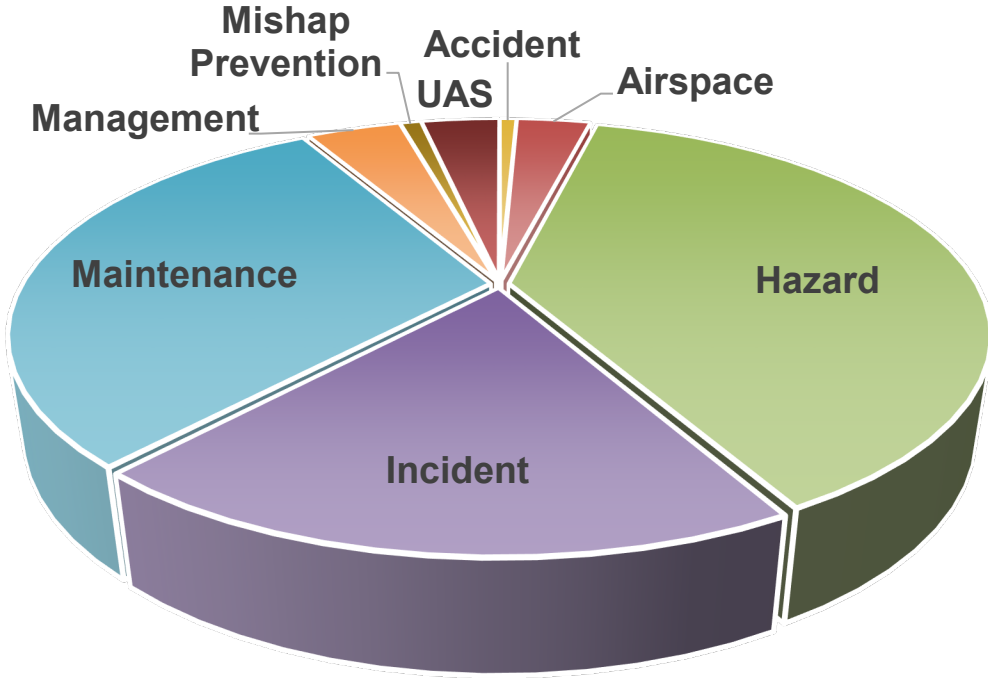
At-A-Glance

ENHANCING SAFETY – FLIGHT SIMULATION

1) The Fish and Wildlife Service (FWS) has provided two new flight simulators for all bureaus to take advantage; a Flight Modular Deck (FMD) and a Kodiak. Both are located on the campus of the National Interagency Fire Center (NIFC). Both simulators are Federal Aviation Administration (FAA) 3 axis full motion flight approved.
2) Simulators are designed to address the lack of pilot proficiency regarding Inadvertent Instrument Meteorological Conditions (IIMC). A training program has been developed for FY21 that will specifically address these issues.
3) Advanced graphics are embedded in the operating software of the simulators to provide an enhanced experience.

Simulators are available for use by all Bureaus. For more information:

Contact: Chris Greeley at christopher_greeley@fws.gov or 208-387-5249.

ENHANCING SAFETY

	Award	Recipient(s)
	Departmental Award for Outstanding Contribution to Aviation Safety	Nathan Olson
	Airward	Lily Konantz
	In-Flight Action Award	Adam Grenada
	Safe Flying Award	Troy Hamon Galen Howell Amy Larsen Brett Nigus Rich Richotte Don Welty

9 Total Awards

AWARDS & ACHIEVEMENTS

11 Safety Publications

4	1	4	2
IA SA	DOI APB	IA APB	IA LL

Publication Categories	Description
DOI & Interagency Safety Alert (SA)	Significant in nature and categorized as: operations, maintenance, and publications.
DOI & Interagency Accident Prevention Bulletin (APB)	General in nature with information regarding aircraft mishap prevention concepts, methods, procedures, and efforts.
DOI & Interagency Lessons Learned (LL)	General in nature and used to disseminate lessons learned from mishaps and subsequent investigations.

SAFETY PUBLICATIONS

Interagency Aviation Safety Alert

Publication Number	Title
IA SA 20-01	Improper Cargo Rigging and Cargo Security
IA SA 20-02	Aircraft Fuel – Sampling Quality Assurance
IA SA 20-03	Adjustments to Emergency Procedures for Drone Amplified Ignis II
IA SA 20-04	Synthetic Long Lines

Interagency Accident Prevention Bulletin

Publication Number	Title
IA APB 20-01	Aviation Life Support Equipment
IA APB 20-02	Safety Communique (SAFECOM)
IA APB 20-03	Radiant Heat in Wildland Fire Suppression Operations
IA APB 20-04	Fire Boss Operations

Interagency Lessons Learned

Publication Number	Title
IA LL 20-01	Operations at Non-Towered Airports
IA LL 20-02	Aviation Life Support Equipment (ALSE)

DOI Accident Prevention Bulletin

Publication Number	Title
DOI APB 20-01	Safety Communique (SAFECOM)

SAFETY PUBLICATIONS

Accident-Free Milestones

Bureau	Years
BIA	3
BOEM	9
BOR	23
BSEE	46
FWS	5

Bureau	National Aviation Manager	Phone
BIA	Joel Kerley	208-387-5371
BLM	Brad Gibbs	208-387-5182
BOEM	Richard Knowles	907-334-5268
BOR	David Rosser	208-433-5050
BSEE	Andrew Wareham	907-334-5278
FWS	Anthony Lascano	571-213-3021
NPS	John Buehler	208-387-5227
OSM	David Rosser	208-433-5050
USGS	Bill Christiansen	303-236-5513

ACCIDENT-FREE PILOTS

Fish and Wildlife Service

Last Name	First Name
Anderson	Anna
Bayless	Shawn
Bosch	Brandon
Coggins	Lewis
Daniels	Chris
Earsom	Stephen
Greeley	Christopher
Greil	Thomas
Guldager	Nikki
Hilwig	Kara
Kadrmas	Niel
Koneff	Mark
Liddick	Terry

Fish and Wildlife Service

Last Name	First Name
Lubinski	Brian
Mallek	Ed
Olson	Nate
Pepin	Dan
Rayfield	John
Rees	Kurt
Rhodes	Walt
Rippeto	Dave
Scotton	Brad
Shelden	Dan
Sherman	Lee
Shults	Brad
Spangler	Robert

Fish and Wildlife Service

Last Name	First Name
Sundown	Robert
Thorpe	Phil
VanHatten	Kevin
Wade	Mike
Watts	Dominick
Wortham	James
Yates	Sarah

Bureau of Land Management

Last Name	First Name
Allen	Lisa
Bell*	Don
Germann	Hans
Gusse	Walker
Hart	Travis
Lenmark	Paul
Mascheroni	Andre
Mazur	Stephen
McCormick	Robert
McCurdy	Michael
McMillan	Seth
Swisher	Christopher

*retired Dec 2020

National Park Service

Last Name	First Name
Bell	Steven
Capra	Jim
Eavasick*	Ryan
Enzfelder	Glen
Goodwin	Fred
Grenda	Adam
Hamon	Troy
Haapapuro*	Eric
Howell	Galen
Hummel	James
Larsen	Amy

* U.S. Park Police

National Park Service

Last Name	First Name
Nigus	Brett
Perkins*	Christopher
Richotte	Rich
Sample	Scott
Taylor	Scott
Thompson	Nick
Welty	Don
Wright*	Keaton

* U.S. Park Police

Office of Aviation Services

Last Name	First Name
Bannister	Gene
Castillo	James
Cook	Thomas
Curtis*	Scott
Englert	Rich
Flack	Andy
Fowler	Dale
Howell	Gil
James	William
Kearney	Patrick
Kopczynski	Jim

*retired Dec 2020

Office of Aviation Services

Last Name	First Name
Lindley	Jonathan
Miller	Arlyn
Pena	Terry
Wittkop	Jim

U.S. Geological Survey

Last Name	First Name
Heywood	Charles

ACCIDENT-FREE PILOTS

EXECUTIVE SUMMARY

05

FY20 DOI Executive Summary

Manned Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Contract	44,312.41	$746,505,516.8	$1684.64
Fleet	10,487	$6,315,115.5	$602.18

4,549 Fleet Missions

32,058 Non-Fleet Missions

SAFECOM
Aviation Safety Communiqué

Total Reported	208
Remaining Open	47
Completion Rate	85%

Top 3 Categories: Maintenance, Hazard, and Incident.

Submission Breakdown:
6% sUAS
94% Manned

Reporting Rates*
Percent difference FY19 to FY20

21.41%↑ Manned

5.34%↑ sUAS

Fleet Statistics	Bureau Total
Manned Aircraft	89
Pilots/Inspectors	89
Unmanned Aircraft	853
sUAS Pilots	456

3,621 sUAS Flights

Top Categories: Interagency Fire, Training & Proficiency, and Mapping.

Aircraft Used: Matrice 600 Pro, 3DR Solo, Parrott Anafi.

FY20 DOI Executive Summary

OAS provides aviation services to the Department of the Interior and other Federal, State and local government agencies. The OAS mission is "...to raise the safety standards, increase the efficiency and promote the economical operation of aircraft activities in the Department of the Interior."

Policy

4 – AMRBs Completed
33 – AMRB Recommendations
13 – Recommendations Completed

Assurance

3 – Program Evaluations Completed
5 – Best Practices Noted FY16-20
5 – Top Findings FY16-20

Risk Management

27% of SAFECOMs Reported were by DOI Bureaus.

Promotion

9 – Awards from three different bureaus.

5yr Mishap Rate

Manned Aircraft Rate

11.47

sUAS Rate

7.39

5yr Data Summary

Type	Total	Mishaps
Manned	235,295.41 hours	27
Unmanned	31,131 flights	23