



33rd Annual

FY 2021

DOI Aviation Safety Summary and Annual Report

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

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Partnering for better, faster, cheaper, safer aviation missions.

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INTRODUCTION



01



OUR PROGRAM

Perseverance – As defined in most dictionaries, is the persistence in doing something despite difficulty or delay in achieving success. The continuation of the pandemic has tested us in ways that we would have never imagined before it began. The entire planet had a crash course in risk management. Learning to trade one risk for another, attempting to mitigate to a lower threshold or just what their tolerance is within any given situation. It's also important to point out the new opportunities that it presented as well. For example, the large scale, rapid adoption of telework and other related technologies enabled many to continue and improve efforts that support field operations.

All that said, there is no substitute for the people performing the missions in the field or those in support roles that require on-site, in-person interaction. The challenges they faced were exacerbated by well-intentioned and meaningful risk mitigations however, adding complexity and other challenges to an environment that's often unforgiving and filled with other risks beyond COVID-19.

As the pandemic edges its way towards an endemic, we need to continue our efforts in mitigating the spread of this deadly virus but also refocus in areas that may have taken a back seat. The inherent risks associated with natural resource aviation operations remain ever present, are independent of the virus, and can impact your life just the same.



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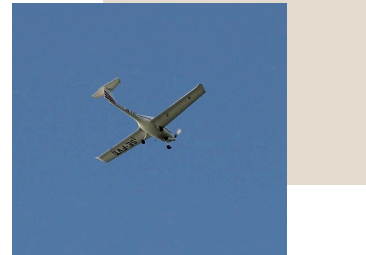
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OAS POINTS OF CONTACT



AVIATION OVERVIEW



02



FY 76-21

Total Losses Avoided

\$1.1 Billion

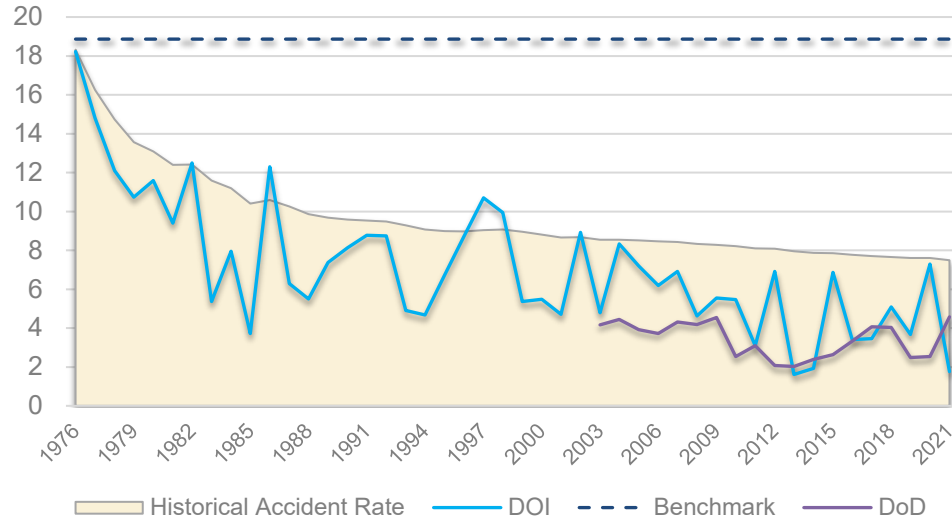
Unbudgeted Costs

\$528 Million

FY21 Accident Rate

1.67

DOI Aircraft Accident Rate History



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.

AIRCRAFT ACCIDENT RATE HISTORY



FY21 MISHAP OVERVIEW

Date	Type	Location	Agency	Aircraft	Description
04/30/21	Incident With Potential (IWP)	Tarpon Bay, FL	NPS	Cessna 206	A pilot-in-command (PIC) and Non-Fleet pilot were conducting float plane operations training in Tarpon Bay, Florida. During the training, multiple water landings and a go-around were conducted prior to initiating in a cross-wind landing. The sequence resulted in a go-around and another approach where the rate of descent increased beyond normal parameters. The aircraft bounced approx. 20ft after initial contact with the water. The PIC took control of the airplane and elected to continue the landing, the aircraft bounced again and then settled on the water. No injuries, minor damage to aircraft.
07/10/21	Accident	Wikieup, AZ	BLM	Beechcraft King Air C 90	An aircraft was involved in an accident while conducting wildland fire aerial supervision operations near Kingman, Arizona. The flight was under the operational control of the Bureau of Land Management (BLM), using the U.S. Forest Service (USFS) Call-When-Needed (CWN) airplane. Two fatalities, aircraft destroyed.
08/15/21	IWP	Ford, WA	BLM and BIA	AT-802 Fire Boss	A flight of four Fire Boss observed a CL-215 following closely behind them as they performed a water scoop on the Ford Corkscrew fire near Deer Park, Washington. The CL-215 overflew the last Fire Boss at an estimated 50-150ft above the aircraft. The CL-215 proceeded to drop on the fire despite the Fire Bosses being cleared as #1 to drop by Air Attack. These two exceptions to guidelines and terse, emotional radio conversations caused the Fire Boss flight to elect to leave the fire and return to Deer Park. No injuries, no damage.



FY21 CREWED AIRCRAFT ACCIDENT RATE



DOI Total Flight Hours

Procurement Type	Hours	Percent of Hours Flown
Fleet	12,273.40	20%
Non-Fleet	47,489.95	80%
Total Flight Hours	59,763.35	

Approximately 4,963.94 hour
increase in total hours from
FY20.

Crewed Aircraft

1

Accidents

2

Incident with
Potential

3

Mishaps

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.iaat.gov/>
<https://www.doi.gov/aviation/library/guides>

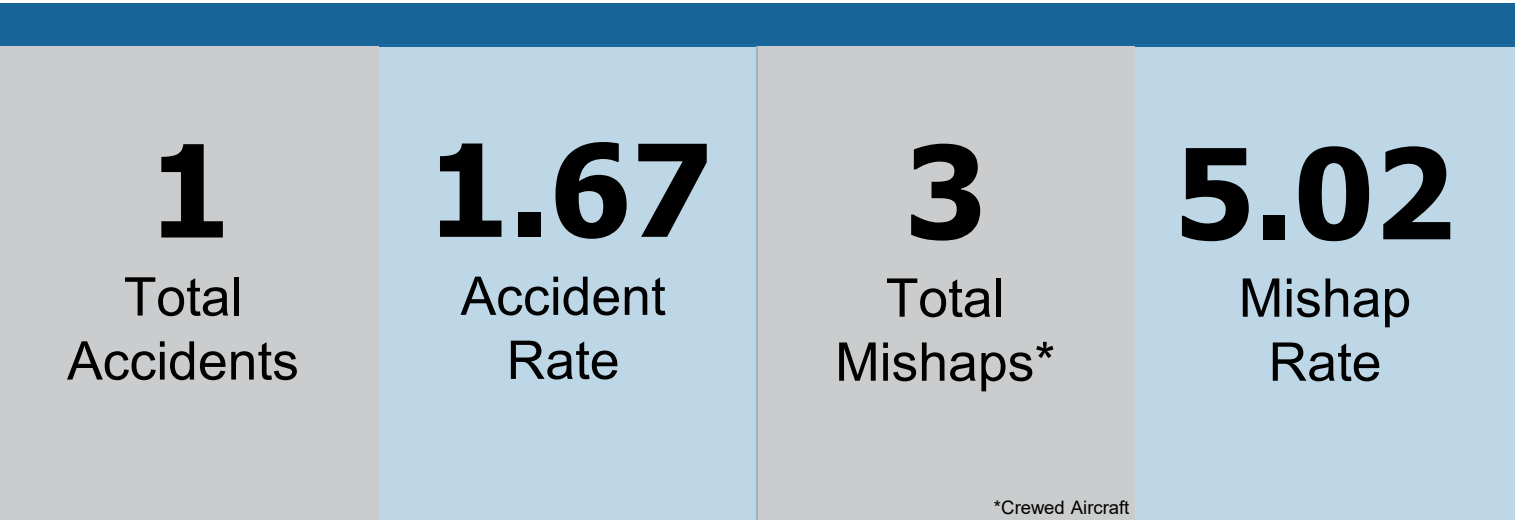
FY21 CREWED AIRCRAFT ACCIDENT RATE



*Value Statistical Life (VSL) \$11.8 million [Department of Transportation](#)

Cost Input	Cost
DOI Losses	~\$100,000
Vendor Losses	\$380,000
DOI sUAS Losses	~\$3718.00
Fatalities (2) VSL*	\$23,600,000
Serious Injuries (0)	N/A
Minor Injuries (0)	N/A
Total	\$24,083,718

Incidental Costs Associated with Mishaps



*Crewed Aircraft

5-year Data Summary

Crewed Mishap Rate



7.37

Total Mishaps



26

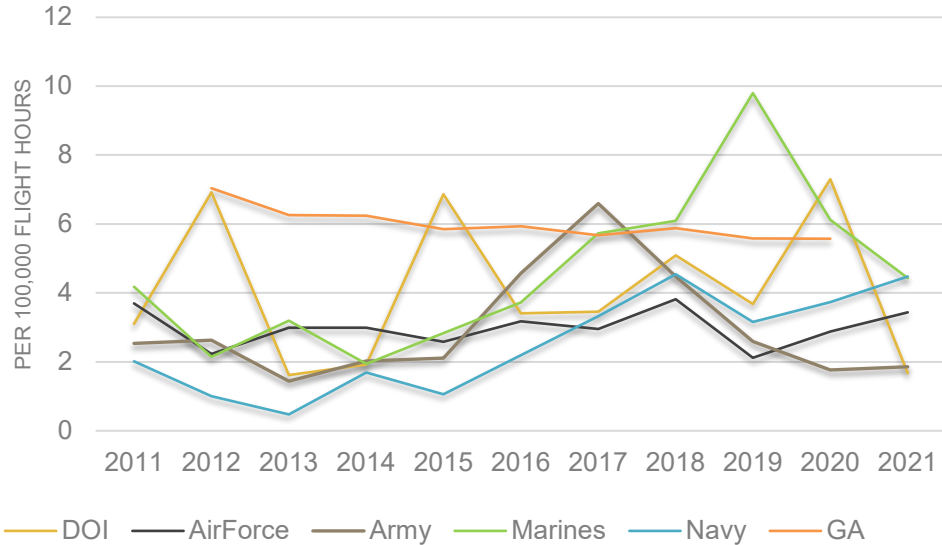
Total Hours



352,939

Crewed Mishaps = Accidents + IWPs

Crewed Aircraft Accident Rate Comparison



AIRCRAFT ACCIDENT RATE COMPARISON



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

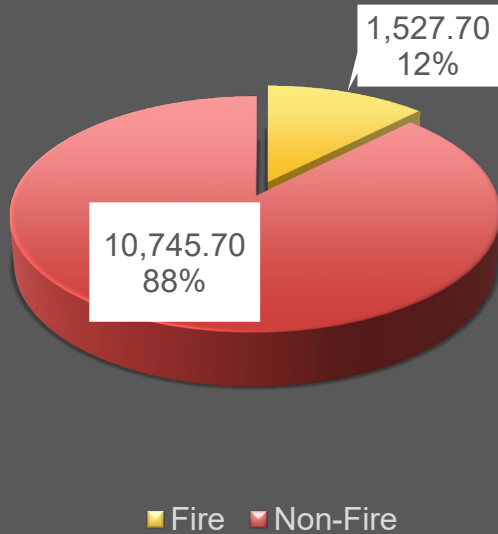
ANNUAL FLIGHT USAGE STATISTICS

Procurement Type	Flight Hours	FY20 Percent Difference	Flight Usage Cost	Cost per Flight Hour	FY20 Percent Difference
Fleet					
Fixed-wing	10,471.3	14.63% ↑	\$3,868,693.5	\$369.46	11.39% ↓
Rotor wing	1,802.10	33.05% ↑	\$3,278,043.1	\$1,819.01	1.73% ↓
Total	12,273.40	17.03 ↑	\$7,146,736.60	\$582.30	3.28% ↓
Non-Fleet					
Fixed-wing	24,090.19	8.73% ↑	\$55,317,961.35	\$2,296.29	18.39% ↑
Rotor wing	23,067.95	7.51% ↑	\$35,051,295.62	\$1,519.48	9.18% ↑
Other	331.80	52.58% ↓	\$412,332.00	\$1,242.71	52.11% ↓
Total	47,489.94	7.17% ↑	\$90,781,588.97	\$1,911.59	13.47% ↑
Grand Total	59,763.34	9.06% ↑	\$97,928,325.57	\$1639.60	10.90% ↑

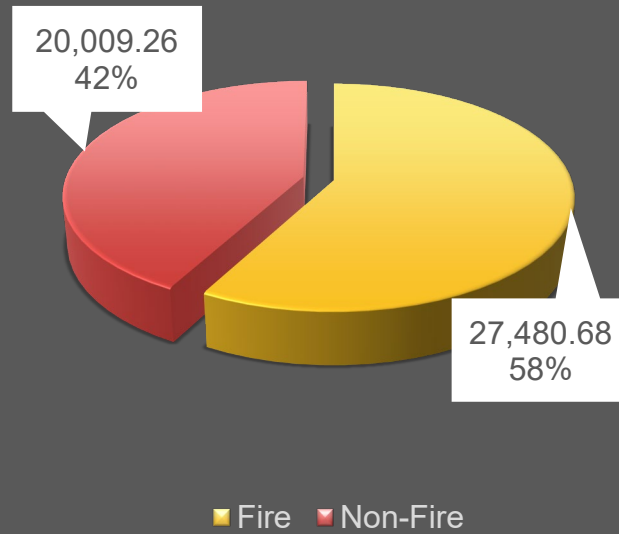


ANNUAL FLIGHT USAGE STATISTICS – Fire and Non-Fire Missions

Fleet Flight Hours



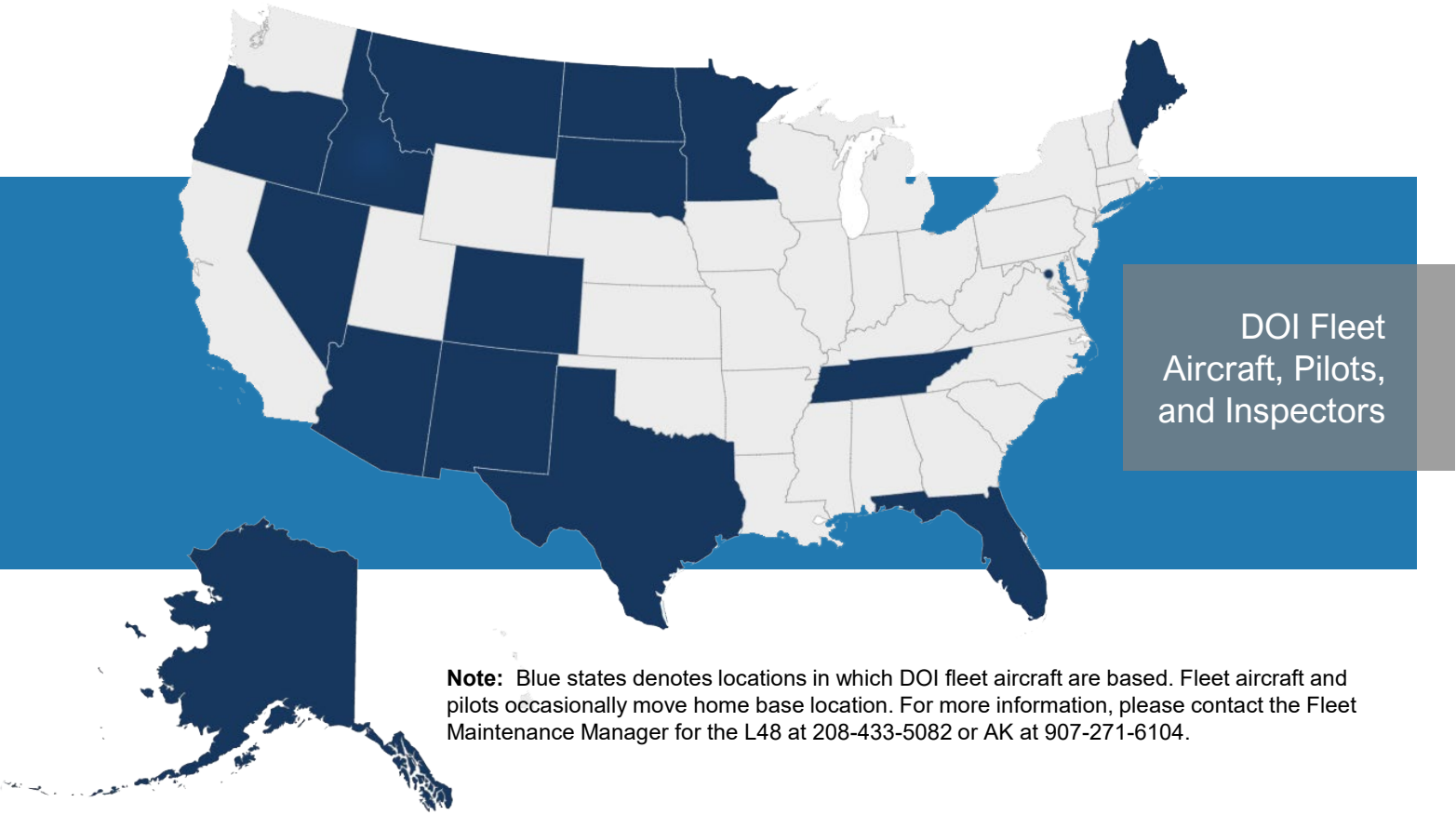
Non- Fleet Flight Hours



ANNUAL FLIGHT USAGE STATISTICS



OUR LOCATIONS



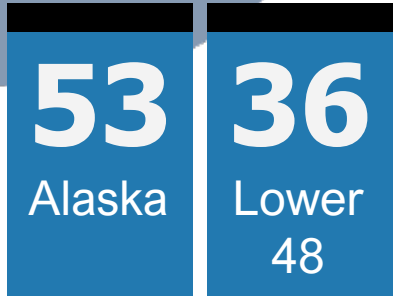
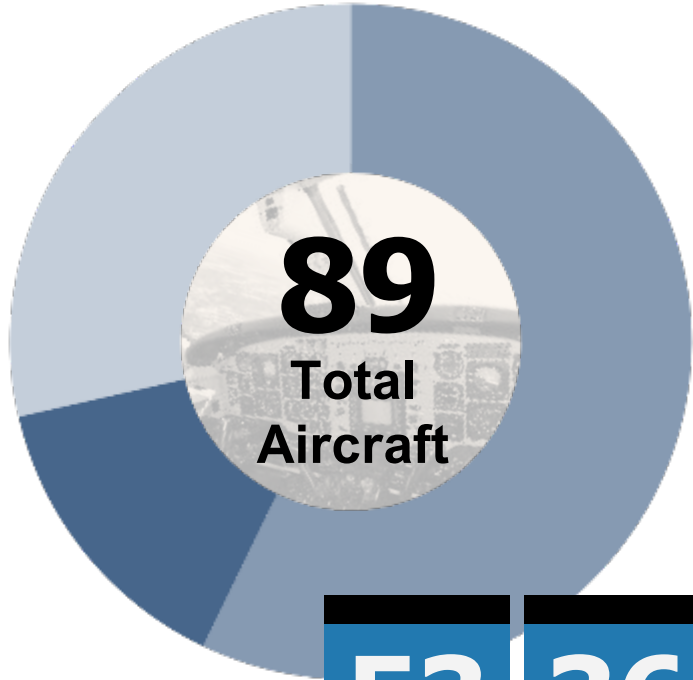
DOI Fleet
Aircraft, Pilots,
and Inspectors

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.



FLEET INVENTORY

Aircraft Type	#	Aircraft Type	#
Airbus AS350 B2	1	CubCrafters CC-18	22
Aviat A-1B	1	DeHavilland DHC-6 Twin Otter	1
Beechcraft B200 King Air	2	DeHavilland DHC-2	2
Bell 206BIII	2	Found FBA-2C2	6
Bell 206L3	2	Partenavia P68	1
Bell 412EP	2	Pilatus PC 12/45	1
Cessna C-182	3	Piper PA-18	1
Cessna C-185	13	Quest Kodiak 100	8
Cessna C-206	21		

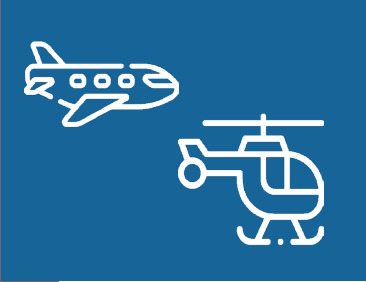


Aircraft by Bureau

	BLM	FWS	NPS	OAS	Total
Fixed Wing	7	48	26	1	82
Rotor Wing	---	1	5	1	7
Total	7	49	28	2	89

Aircraft by OAS Region

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



Number of Pilots

72

Fixed-wing

15

Rotor wing

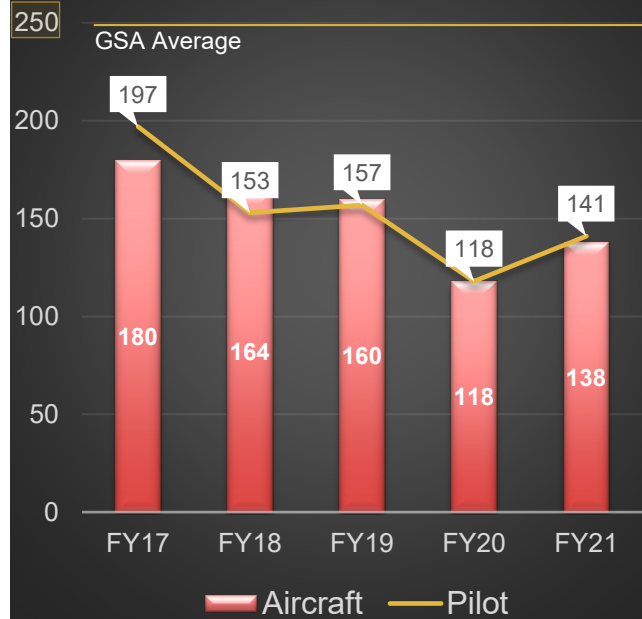
37

Inspectors*

124
Total

*Inspector authorizations: Aircraft, Avionics, Equip, Pilot Airplane, Pilot Helicopter, and Pilot sUAS.

FY 17-21 Average Annual Flight Hours



Fleet pilot and fleet aircraft averages were 19.55% and 16.86% above FY20, respectively.

PILOT INVENTORY

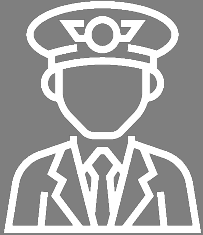


Pilots by Bureau

	BLM	FWS	NPS	OAS	Total
Fixed-wing	9	36	15	12	72
Rotor wing	---	---	7	8	15
Inspectors	---	---	---	37	37
Total	11	36	16	57	124

Pilots by OAS Region

	Alaska	Western	Eastern	HQ	Total
Fixed-wing	40	18	11	3	72
Rotor wing	2	3	9	1	15
Inspectors	11	12	5	10	37
Total	53	34	25	14	124



By the Numbers

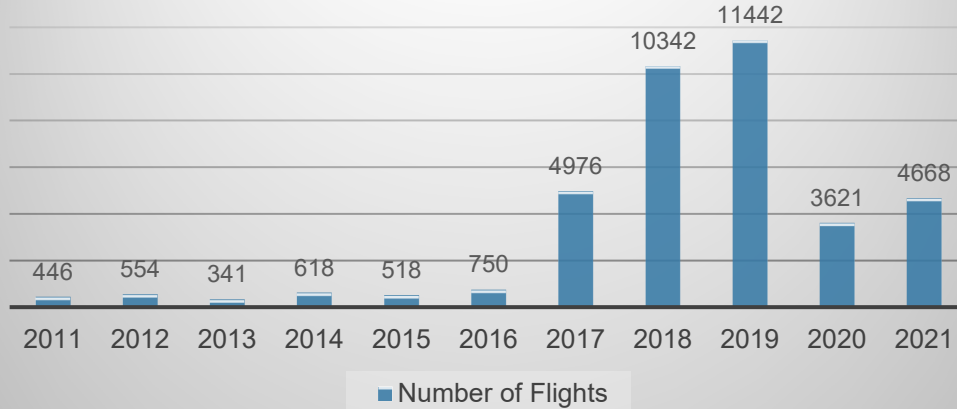
259

sUAS Fleet Pilots

845

sUAS Fleet Aircraft

sUAS Fleet Flights



**FLEET UNCREWED
AIRCRAFT SYSTEMS (sUAS)**



5-year Data Summary

sUAS Mishap Rate



6.85

Total Mishaps

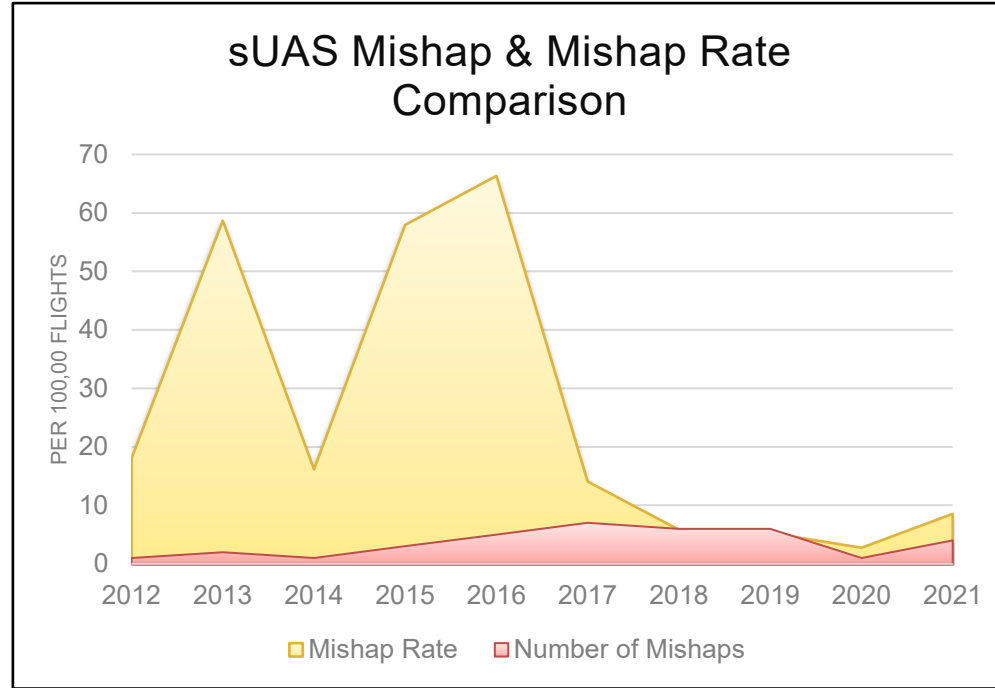


24

Total Flights



35,049

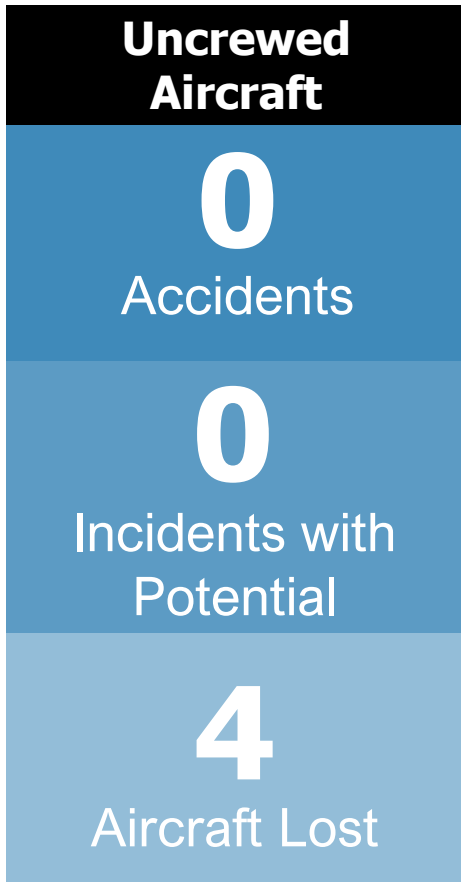


sUAS Mishaps = Accidents + IWPs + Aircraft Losses

SUAS ACCIDENT RATE COMPARISON



FY21 UNCREWED AIRCRAFT ACCIDENT RATE



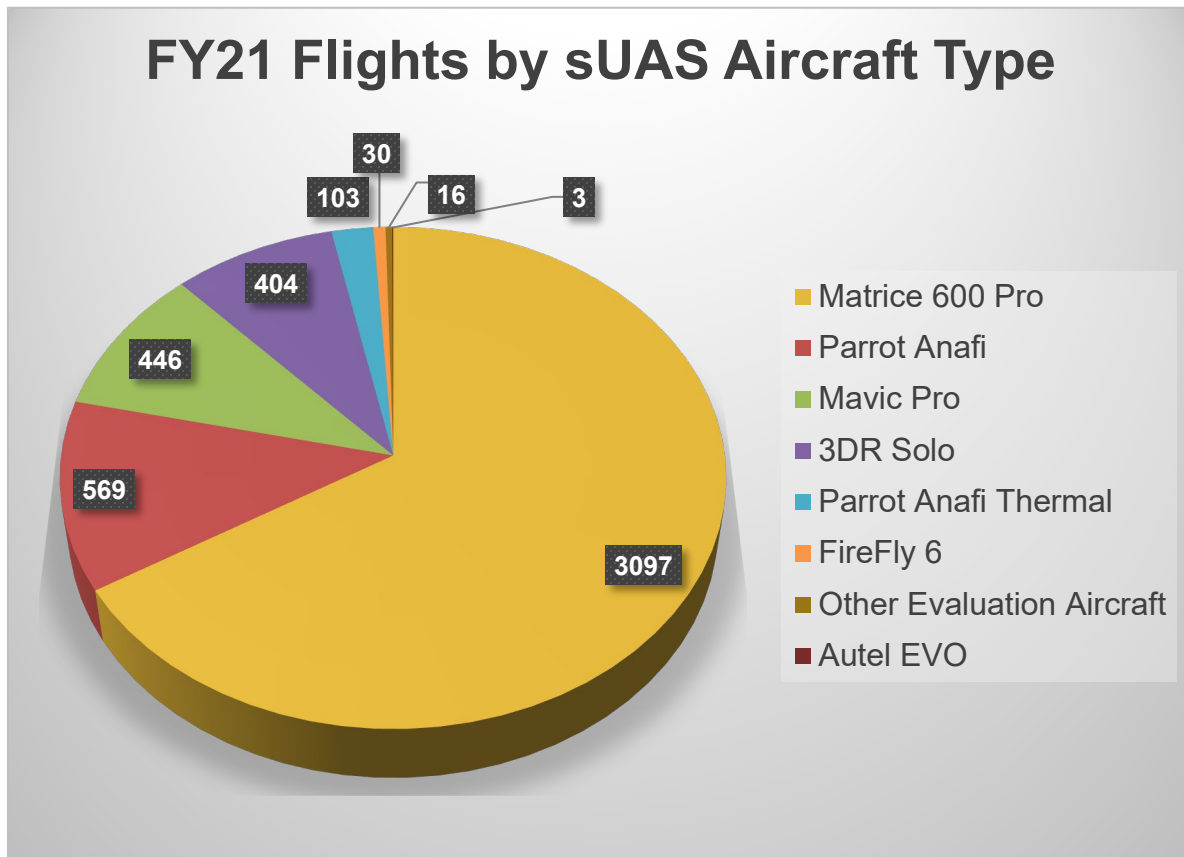
4
Mishaps

Procurement Type	Flight Count	Percentage of Flights
Fleet	4,668	94%
Non-Fleet	258	6%
Total Flight Count		4,926

Approximately 1,233 increase in total flight count from FY20.

8.57 FY21 sUAS Mishap Rate

Aircraft Type	#
Anafi	143
Anafi Thermal	30
Apprentice S 15E	2
EVO	6
FireFly6 Pro	24
H10	1
Loki	2
Matrice 600 Pro	78
Mavic Duel	2
Mavic Pro	80
R1	1
Site Scan	32
3DR Solo	445
SwitchBlade Elite	4
Total	848

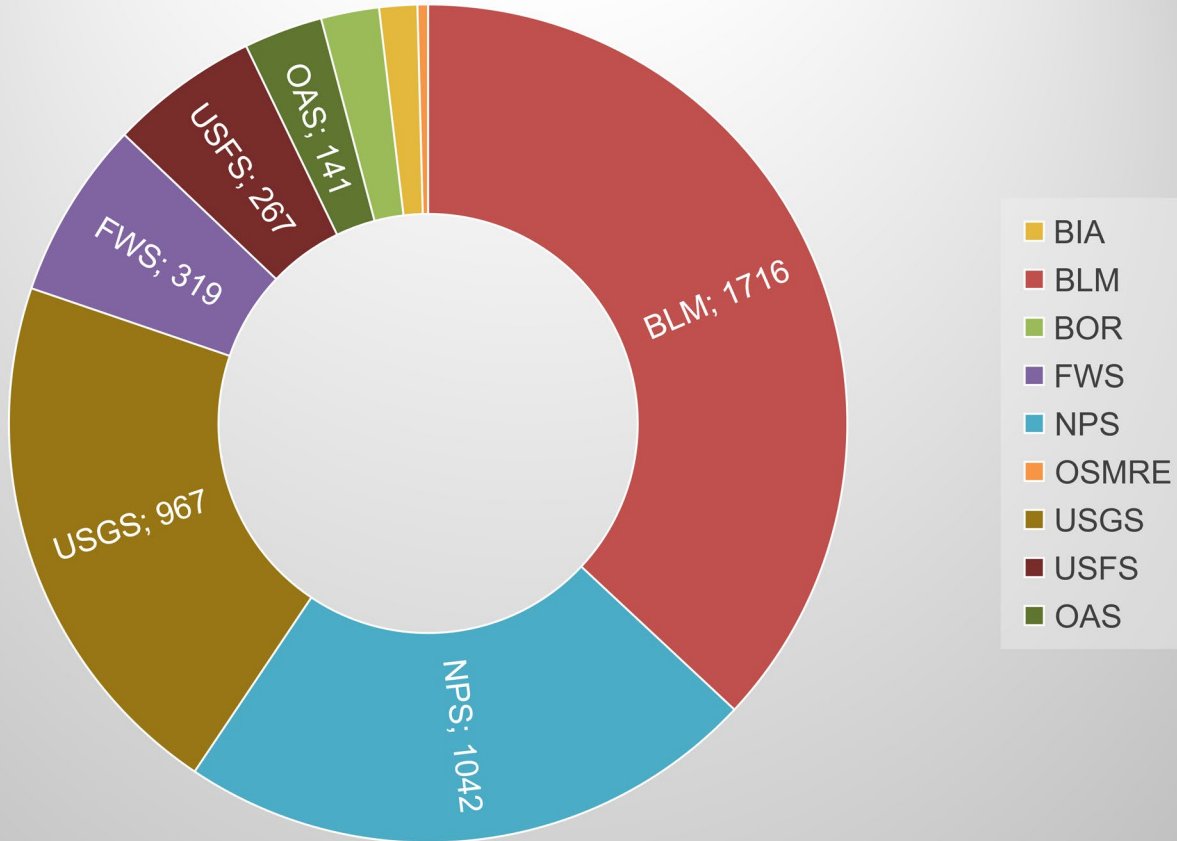


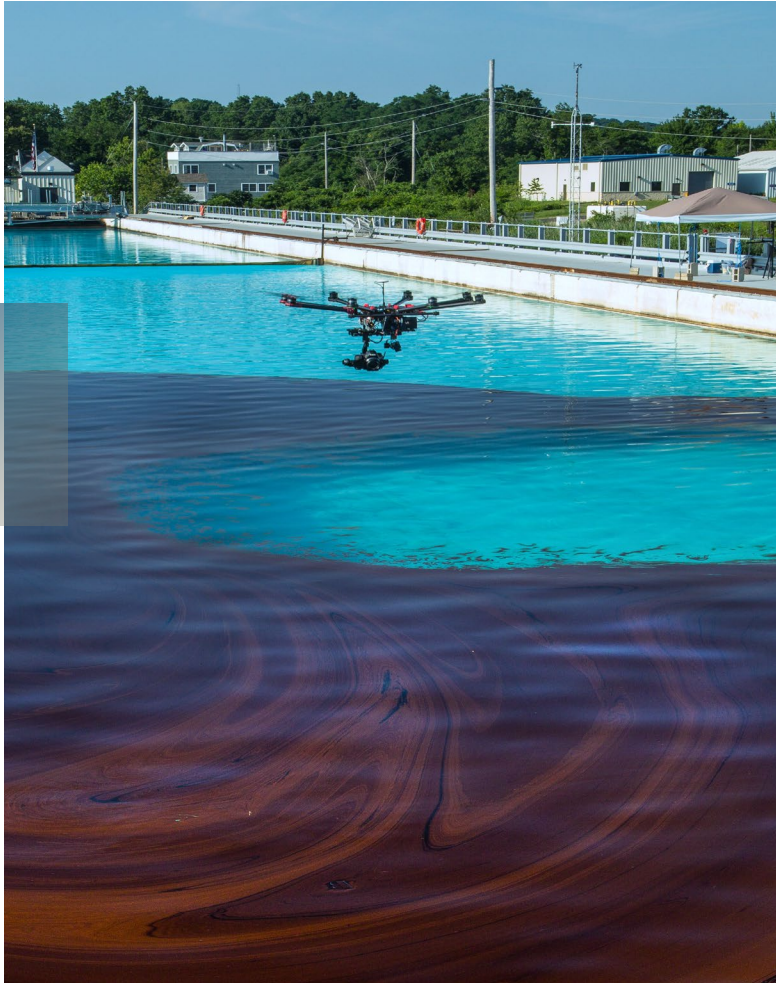
sUAS FLEET INVENTORY



FY 21 sUAS FLEET ACTIVITY

FY 21 sUAS Fleet Flights per Bureau





FY21 Bureau Overview

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





Bureau of Indian Affairs

Crewed Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Non-Fleet	2,576.89	\$4,219,472.12	\$1,637.43
Fleet	---	---	---

0
Fleet Missions

2,005
Non-Fleet Missions



Total Reported	22
Remaining Open	3
Completion Rate	86%

Top 3 Categories: Hazards, Maintenance, and Incident.

Submission Breakdown:
5% sUAS
95% Crewed

Reporting Rates*

*Percent difference FY20 to FY21

Unchanged
Crewed

50%↓
sUAS

Fleet Statistics	#
Crewed Aircraft	0
Pilots	0
Uncrewed Aircraft	9
sUAS Pilots	6

68 sUAS Flights

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

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

FY21 BUREAU OVERVIEW





Bureau of Land Management

Crewed Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Non-Fleet	27,670.265	\$60,900,682.87	\$2,200.94
Fleet	1,243.60	\$1,311,778.00	\$1,054.82

531
Fleet Missions

18,854
Non-Fleet Missions



Total Reported	77
Remaining Open	4
Completion Rate	95%

Top 3 Categories: Hazards, Maintenance, and Incident.

Submission Breakdown:
3% sUAS
97% Crewed

Reporting Rates*

*Percent difference FY20 to FY21

41%↓
Crewed

60%↓
sUAS

Fleet Statistics	#
Crewed Aircraft	7
Pilots	9
Uncrewed Aircraft	282
sUAS Pilots	74

1716 sUAS Flights

Top Categories: Fire Recon, Aerial Ignition, and Training & Proficiency.

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

FY21 BUREAU OVERVIEW



Bureau of Ocean Energy Management

Crewed Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Non-Fleet	36.967	\$63,620.21	\$1,721.00
Fleet	124.2	\$188,403.00	\$1,516.93

40
Fleet Missions

11
Non-Fleet Missions



Top 3 Categories:
N/A.

Submission Breakdown:
0% sUAS
0% Crewed

Total Reported	0
Remaining Open	0
Completion Rate	N/A

Reporting Rates*

*Percent difference FY20 to FY21

Unchanged Crewed

Unchanged sUAS

Fleet Statistics	#
Crewed Aircraft	0
Pilots	0
Uncrewed Aircraft	0
sUAS Pilots	0

0 sUAS Flights

Top Categories: N/A

Aircraft Used: N/A

FY21 BUREAU OVERVIEW





Bureau of Reclamation

Crewed Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Non-Fleet	25.3	\$39,694.30	\$1,568.94
Fleet	---	---	---

0
Fleet Missions

16
Non-Fleet Missions



Top 3 Categories:
N/A.

Submission Breakdown:
0% sUAS
0% Crewed

Total Reported	0
Remaining Open	0
Completion Rate	N/A

Reporting Rates*

*Percent difference FY20 to FY21

Unchanged Crewed

Unchanged sUAS

Fleet Statistics	#
Crewed Aircraft	0
Pilots	0
Uncrewed Aircraft	51
sUAS Pilots	19

104 sUAS Flights

Top Categories: Training & Proficiency, Equip Testing, Infrastructure Inspection.

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

FY21 BUREAU OVERVIEW





Bureau of Safety & Environmental Enforcement

Crewed Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Non-Fleet	5,024.801	\$5,939,973.93	\$1,182.13
Fleet	---	---	---

0
Fleet Missions

3,018
Non-Fleet Missions



Top 3 Categories:
Hazards, Maintenance, and Incident.

Submission Breakdown:
0% sUAS
100% Crewed

Total Reported	47
Remaining Open	0
Completion Rate	100%

Reporting Rates*

*Percent difference FY20 to FY21

41%↓
Crewed

Unchanged
sUAS

Fleet Statistics	#
Crewed Aircraft	0
Pilots	0
Uncrewed Aircraft	0
sUAS Pilots	0

0 sUAS Flights

Top Categories: N/A

Aircraft Used: N/A

FY21 BUREAU OVERVIEW





U.S. Fish and Wildlife Service

Crewed Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Non-Fleet	856.446	\$706,030.62	\$824.37
Fleet	5712.30	\$1,699,631.50	\$297.54

2107
Fleet Missions

479
Non-Fleet Missions



Top 3 Categories: Hazards, UAS, Maintenance, and Incident.

Submission Breakdown:
27% sUAS
73% Crewed

Total Reported	15
Remaining Open	0
Completion Rate	100%

Reporting Rates*

*Percent difference FY20 to FY21

83%↑
Crewed

100%↑
sUAS

Fleet Statistics	#
Crewed Aircraft	49
Pilots	36
Uncrewed Aircraft	159
sUAS Pilots	32

319 sUAS Flights

Top Categories: Training & Proficiency, Fire Recon, and Aerial Ignition.

Aircraft Used: Matrice 600 Pro, Parrot Anafi, Parrot Anafi Thermal.

FY21 BUREAU OVERVIEW





National Park Service

Crewed Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Non-Fleet	5,621.43	\$7,759,624.29	\$1,380.36
Fleet	3,994.00	\$2,419,182.50	\$605.70

1,927
Fleet Missions

5,303
Non-Fleet Missions



Top 3 Categories:
Hazards, Maintenance, and Incident.

Submission Breakdown:
18% sUAS
82% Crewed

Total Reported	51
Remaining Open	12
Completion Rate	76%

Reporting Rates*

*Percent difference FY20 to FY21

9%↓
Crewed

125%↑
sUAS

Fleet Statistics	#
Crewed Aircraft	31
Pilots	22
Uncrewed Aircraft	72
sUAS Pilots	44

1042 sUAS Flights

Top Categories: Aerial Ignition, Fire Recon, and Training & Proficiency.

Aircraft Used: Matrice 600 Pro, Parrot Anafi, Parrot Anafi Thermal.

FY21 BUREAU OVERVIEW





Office of Surface Mining Reclamation & Enforcement

Crewed Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Non-Fleet	23.50	\$73,766.50	\$3,139.00
Fleet	---	---	---

0
Fleet Missions

8
Non-Fleet Missions



Total Reported	1
Remaining Open	0
Completion Rate	100%

Top 3 Categories: Hazards and UAS.

Submission Breakdown:
100% sUAS
0% Crewed

Reporting Rates*

*Percent difference FY20 to FY21

Unchanged Crewed

Unchanged sUAS

Fleet Statistics	#
Crewed Aircraft	0
Pilots	0
Uncrewed Aircraft	34
sUAS Pilots	12

19 sUAS Flights

Top Categories: Non-Fire Mapping and Training & Proficiency.

Aircraft Used: 3DR Solo, FireFly 6, Parrot Anafi.


FY21 BUREAU OVERVIEW



Crewed Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Non-Fleet	1,271.578	\$1,069,028.09	\$840.71
Fleet	40.9	\$10,350.50	\$253.07

11
Fleet Missions

966
Non-Fleet Missions



Total Reported	13
Remaining Open	0
Completion Rate	100%

Top 3 Categories: Incident, Maintenance, and UAS.

Submission Breakdown:
92% sUAS
8% Crewed

Reporting Rates*

*Percent difference FY20 to FY21

50%↓
Crewed

200%↑
sUAS

Fleet Statistics	#
Crewed Aircraft	0
Pilots	0
Uncrewed Aircraft	200
sUAS Pilots	63

967 sUAS Flights

Top Categories: Training & Proficiency, Mapping, and Non-Fire Recon.

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

FY21 BUREAU OVERVIEW





Office of Aviation Services

Crewed Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Non-Fleet	67.7	\$57,526.50	\$849.73
Fleet	533.8	\$284,239.00	\$532.48

367
Fleet Missions

30
Non-Fleet Missions



Top 3 Categories:
Maintenance, Hazard, and Incident.

Submission Breakdown:
0% sUAS
100% Crewed

Total Reported	5
Remaining Open	0
Completion Rate	100%

Reporting Rates*

*Percent difference FY20 to FY21

400%↑
Crewed

Unchanged
sUAS

Fleet Statistics	#
Crewed Aircraft	2
Pilots/Inspectors	20
Uncrewed Aircraft	38
sUAS Pilots	9

141 sUAS Flights

Top Categories:
Interagency Fire Mapping, Aerial Ignition, and Fire Recon.

Aircraft Used: Matrice 600 Pro, UR336, UR309.

FY21 BUREAU OVERVIEW



POLICY & ASSURANCE

03



PERFORMANCE



Performance	Quantity
Commercial Aircraft Inspections	1,096
Commercial Pilot Evaluations	1,413
Cooperator Approvals	93
Elevated SAFECOMs Completed	10
Fuel Service Vehicle Inspections	315
Fleet Aircraft Inspections	80
Fleet Pilot Evaluations	177
Interagency Safety Communications Issued	23

Performance	Quantity
Operational Procedures Memoranda (OPM) Revisions	2
Program Evaluations Completed	0
sUAS Aircraft Inspections Completed (Fleet Only)	11
sUAS Pilot Inspections Completed	24
Point to Point Inspections	209
Student Hours of IAT Training Completed	126,248
Technical Specifications for Procurement Reviewed*	69

*Includes Solicitation Reviews

GENERAL OVERVIEW



At-A-Glance

33,871

Online Courses
Taken

257

Classroom Courses
Offered*

227

Webinars Offered

41,695
Total Courses
Completed

<https://www.iat.gov>

In FY21, COVID-19 continued to impact our ability to provide in-person classes. However, thorough risk analysis and mitigations allowed us to provide select, in-person training from which we are continuing to build back that capability. The OAS Training Branch (OAS TB) continued to fulfil their mission requirements by providing two multiweek distance learning training events that provided multiple courses which ultimately enabled personnel to meet aviation safety training requirements.

Additionally, the OAS TB continued to improve the user experience and functionality of the IAT system through compliance notifications and course registration capabilities.

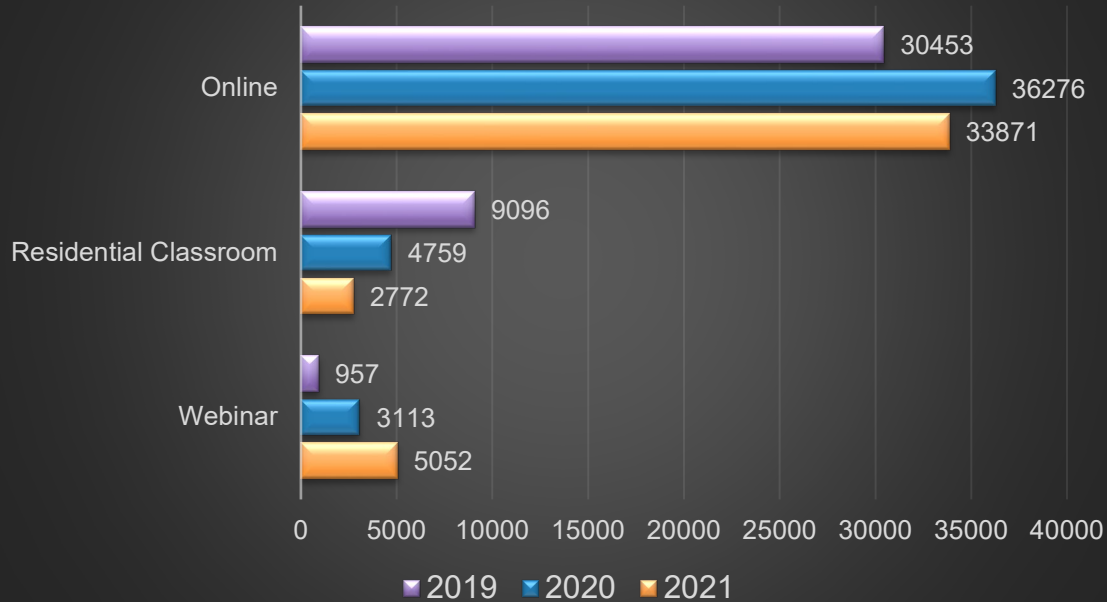
TRAINING BRANCH UPDATE



* Includes RTs and Workshops

TRAINING BRANCH UPDATE

IAT Completions



IAT Spring Webinar*

347 Attendees
723 Completions

Revised Courses

(5) A Courses
(3) SEAT Courses
(3) Aviation Firefighting Courses

* In lieu of an ACE Event

41,695 FY 21
Course
Completions



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.

On-site evaluations were suspended in 2021 however they will commence in 2022.

Top 5 Findings for FY17-21*

- 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.

*Due to Covid-19, onsite Aviation Program Evaluations were suspended in FY21



AVIATION PROGRAM EVALUATION

Top 5 Best Practices for FY17-21

- 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 Non-Fleets to ensure OPM-35 compliance.



AMRB Update

1

AMRB
Conducted

7

AMRB
Recommendations

3

Recommendations
Completed



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.

AVIATION MISHAP REVIEW BOARD



SOURCE SELECTION EVALUATION BOARD (SSEB)



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 Non-Fleetor and the government employees that use their services. Completed SSEBs were an evaluation of offeror's response to an SMS questionnaire.

Safety & Evaluation Changes

Updated Adjectival
Rating Descriptions

Adjusted FAA violation
threshold

Developed SMS
Questionnaire Supplement
(FAQ) and Fillable Form

12
SSEB
Completions

24
Solicitation
Reviews
Completed

RISK MANAGEMENT



04



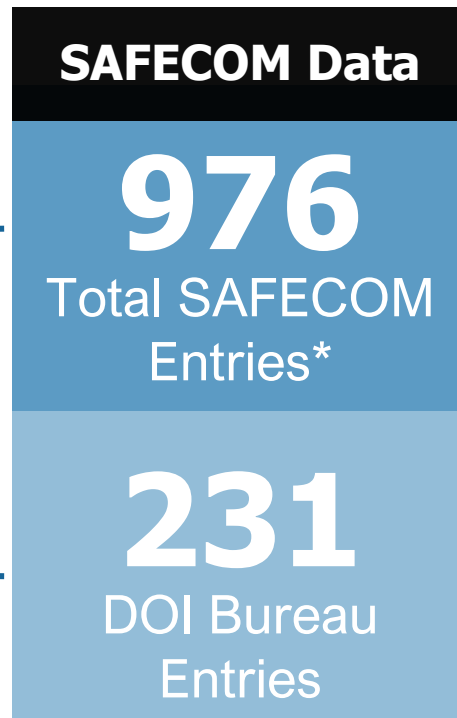


Using the SAFECOM system for punitive action is prohibited (352 DM 3.10B).

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.

24%
Of Total
Submitted by
DOI



*DOI, USFS, States, & Cooperators

SAFECOM OVERVIEW



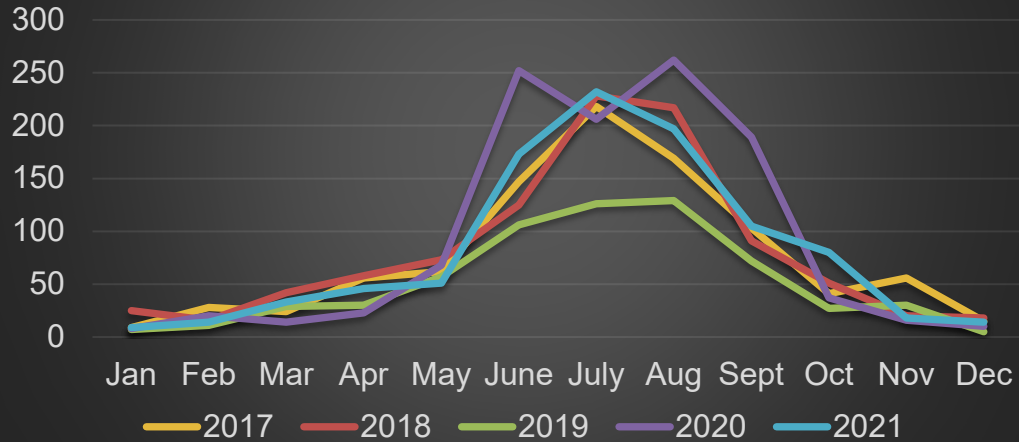


FY 21 Percentage Submission By Bureau*

Bureau	Percent
BIA	9.52%
BLM	33.33%
BOEM	0%
BOR	0%
BSEE	20.34%
FWS	6.49%
NPS	22.07%
OAS	2.16%
OSM	.43%
USGS	5.62%

*Crewed & sUAS

Monthly SAFECOM Submissions FY 17-21



*All Agencies

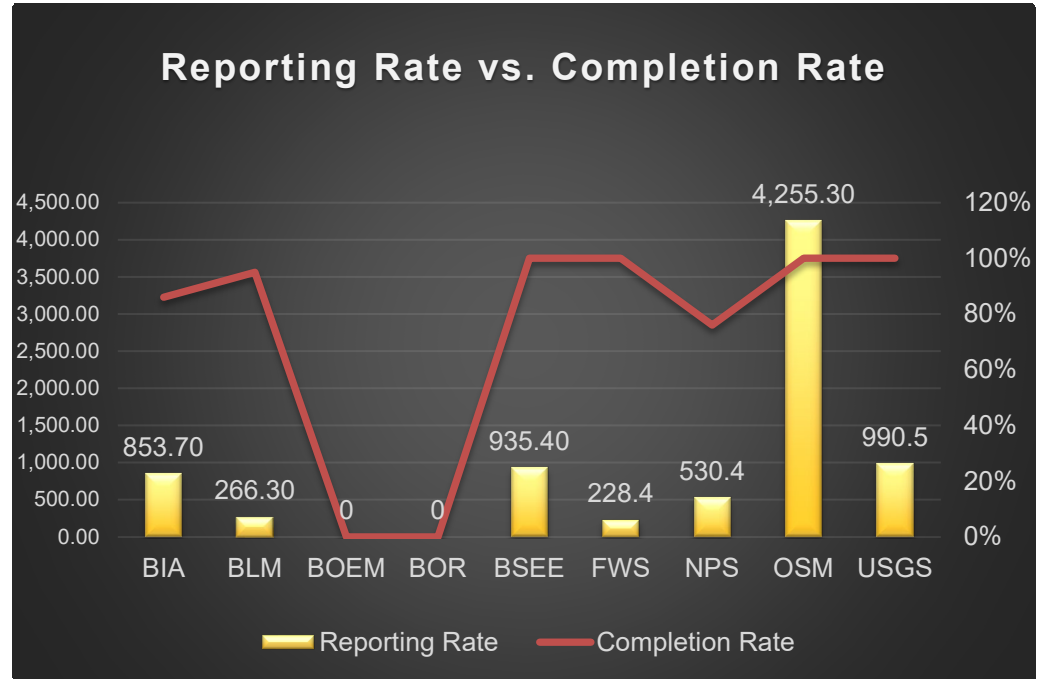
SAFECOM OVERVIEW



FY21 SAFECOM Reporting Rate vs. Completion Rate

Bureau	Reporting Rate*	Completion Rate
BIA	853.7	86%
BLM	266.3	95%
BOEM	0	0%
BOR	0	0%
BSEE	935.4	100%
FWS	228.4	100%
NPS	530.4	76%
OSM	4,255.3	100%
USGS	990.5	100%

*Per 100,000 flight hours

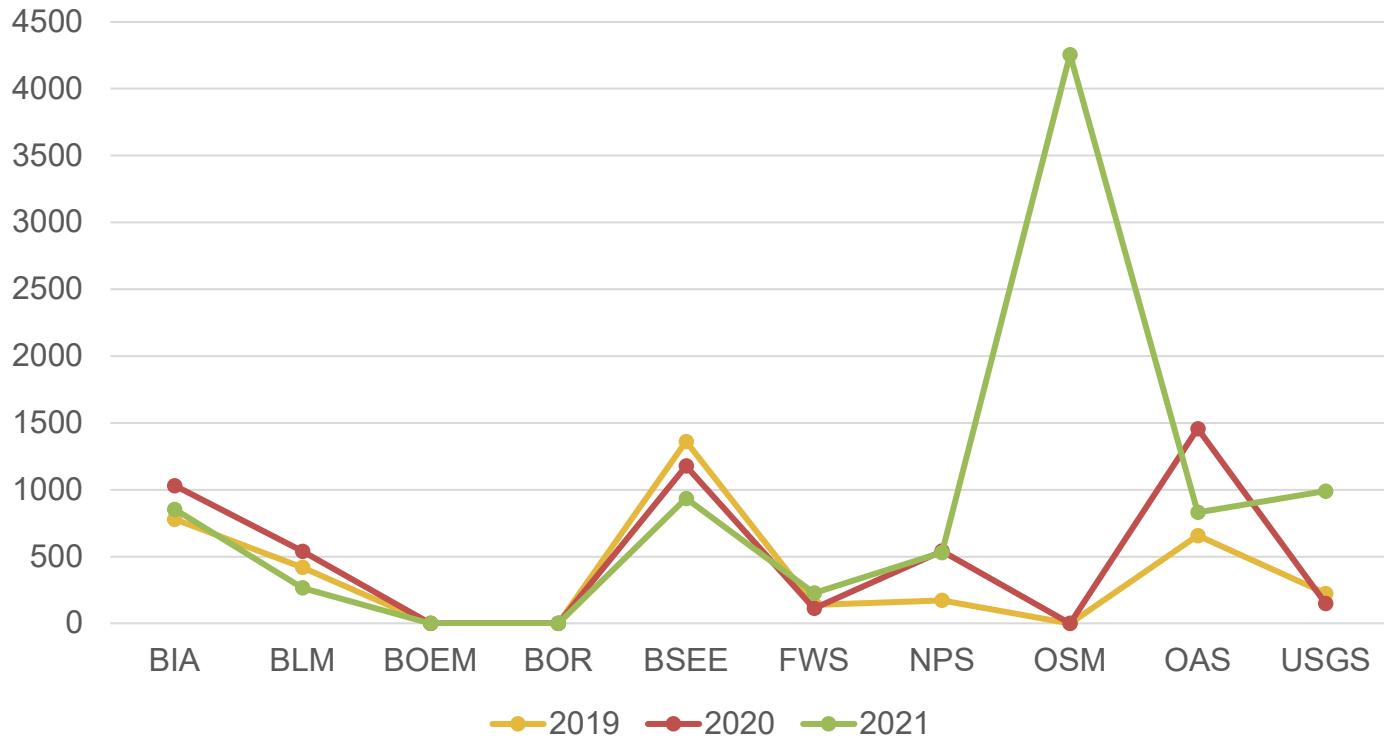


SAFECOM OVERVIEW



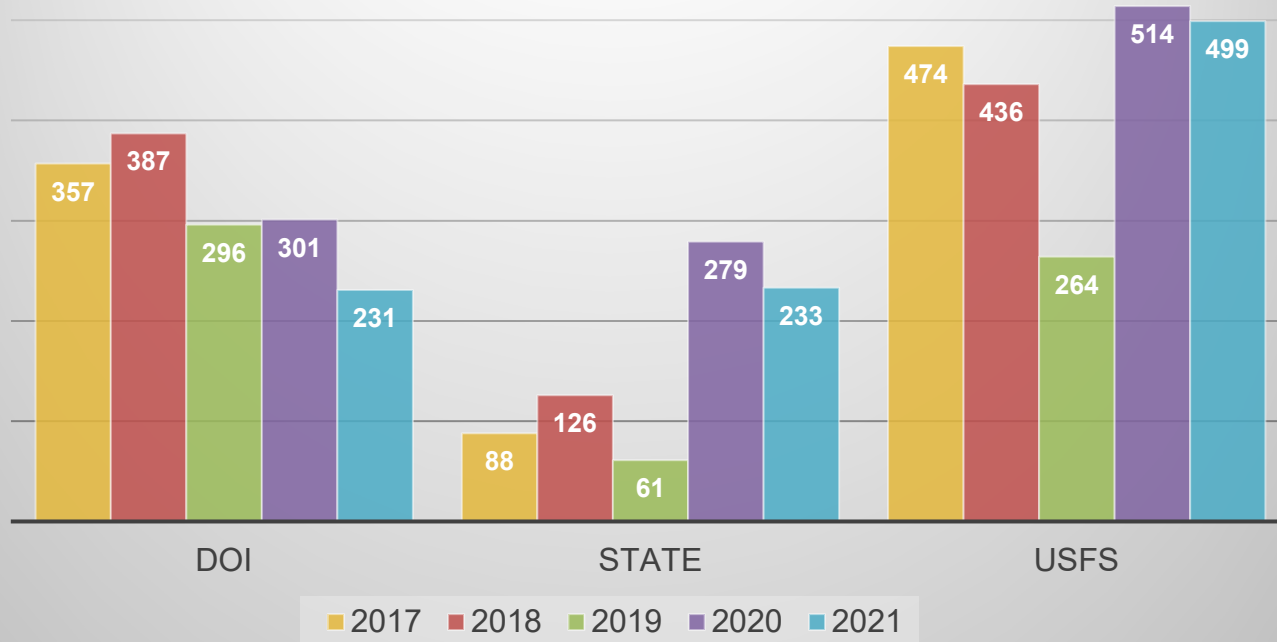
SAFEKOM OVERVIEW

FY19-21 Bureau Reporting Rates



SAFECOM OVERVIEW

FY17-21 SAFECOMs REPORTED





FY21 SAFECOM DISTRIBUTION BY CATEGORY

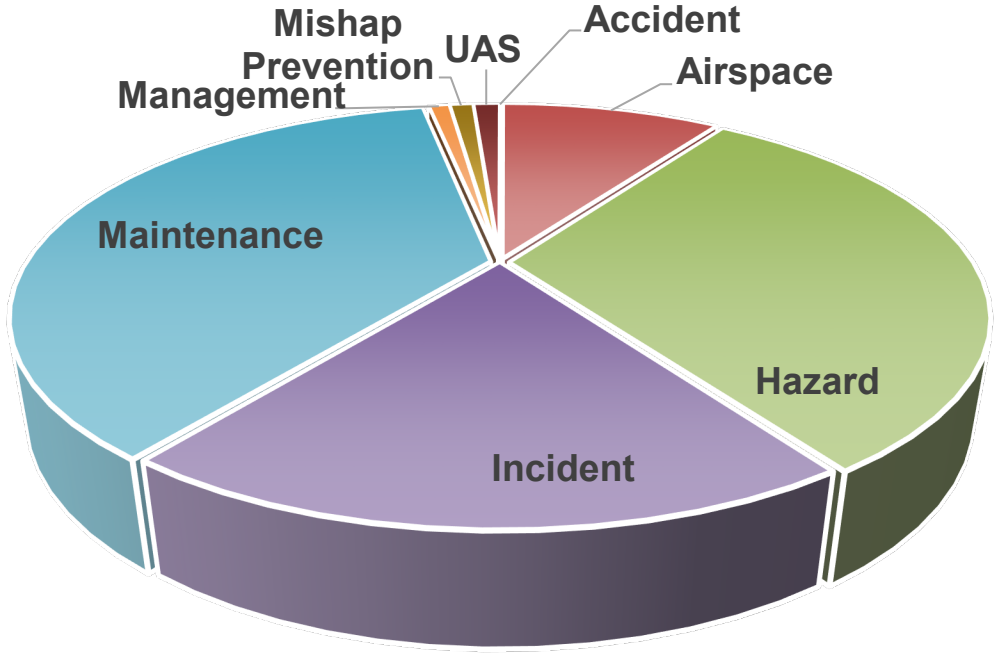
SAFECOM OVERVIEW

Maintenance

- Airframe
- Chip Light
- Electrical
- Engine
- Flight Controls
- Fuel
- Hydraulic
- Mission Equip.
- Other

Hazard

- Communications
- Flight Equip.
- Instructions
- Mission Equip.
- Other
- Pilot Action
- Policy Deviation
- Preflight Action
- Weather



At-A-Glance



2022 ALASKA FLIGHT CLINICS

Flight clinics reinforce procedures and hone the skills of Bureau pilots that fly in the vast wilderness of Alaska. Each clinic focuses on the time of year that requires the use of floats, tundra tires, or skis. The Instructor Pilot clinic is designed for the mentor pilots that teach pilots, new to the area, how to operate safely and efficiently in the extreme operating environment of Alaska. These clinics have made a tremendous impact on aviation safety.

Date	Location	Course Title
March 7-11	Anchorage	Instructor Pilot Clinic
March 21-25	Fairbanks	Ski Clinic
April 25-29	Anchorage	Off Airport Clinic
May 9-13	Anchorage	Off Airport Clinic
May 16-20	Anchorage	Float Clinic
May 23-27	Fairbanks	Float Clinic

Clinics are available for all Bureaus to attend. For more information:



Contact: Jim Wittkop at james_wittkop@ios.doi.gov or 907-227-9515

ENHANCING SAFETY



AWARDS & ACHIEVEMENTS



	Award	Recipient(s)
	Departmental Award for Outstanding Contribution to Aviation Safety	Wild Horse and Burro Aerial Survey Working Group – Paul Griffin, Kate Schoenecker, Michelle Crabb, Jason Ransom, Alan Shepherd, Scott Fleur
	Airward	Samuel Joseph Bellote Justin Holbrook Cody Cooper

Fiscal Year	Award Total	FY21 Percent Difference
2020	9	56% ↓
2019	11	64% ↓
2018	12	67% ↓

In FY21, DOI awards declined by an average of 62% over the last three years.





6 IA SA	5 IA APB	3 IA LL	9 IA IB
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Publication Categories	Description
DOI & Interagency Safety Alert (IA SA)	Significant in nature and categorized as: operations, maintenance, and publications.
DOI & Interagency Accident Prevention Bulletin (IA APB)	General in nature with information regarding aircraft mishap prevention concepts, methods, procedures, and efforts.
DOI & Interagency Lessons Learned (IA LL)	General in nature and used to disseminate lessons learned from mishaps and subsequent investigations.
DOI & Interagency Information Bulletin (IA IB)	General in nature and used to disseminate announcements and information of general interest.

SAFETY PUBLICATIONS



Interagency Aviation Safety Alert

Publication Number	Title
IA SA 21-01	UAS DJI M600 Mishaps
IA SA 21-02	Revision to IA SA 21-01 UAS DJI M600 Mishaps
IA SA 21-03	Preventing Remote Hook Inadvertent Release
IA SA 21-04	Properly Refusing Unnecessary Risk in Aviation
IA SA 21-05	Aircraft Dispatch Form Accuracy
IA SA 21-06	“Klump Pump” or “Smart Pump” External Load

Interagency Accident Prevention Bulletin

Publication Number	Title
IA APB 21-01	Engine Ice Awareness
IA APB 21-02	TAWS, TCAS, & ADS-B Capabilities in WF
IA APB 21-03	Aviation Life Support Equipment
IA APB 21-04	Aircraft Operations in Poor Visibility
IA APB 21-05	Drought Conditions & Increased Risk for Water Scooping Aircraft

PUBLICATION UPDATES





Interagency Aviation Information Bulletin

Publication Number	Title
IA IB 21-01	Reporting Manned & Unmanned TFR Intrusions
IA IB 21-02	Geospatial Portal for Night Watch, FireWatch Cobra, & FireWatch 51
IA IB 21-03	Grand Junction, CO Airport Construction
IA IB 21-04	Helena, MT Airport Construction
IA IB 21-05	Medford & Klamath Falls, OR Airport Construction
IA IB 21-06	TFR Management & Considerations
IA IB 21-07	2021 WF UAS Briefing for Aviation Personnel

Interagency Lessons Learned

Publication Number	Title
IA LL 21-01	Fire Boss Scooping Operations
IA LL 21-02	Firefighting Flight Operations
IA LL 21-03	Single Engine Air Tanker Operations

Operational Procedures Memoranda

Publication Number	Title
OPM-12	Parking of Privately Owned Aircraft and Privately Owned Vehicles stored at the OAS Lake Hood Facility located in Anchorage, Alaska
OPM-29	Special Use Activities for Manned Aircraft



Accident-Free Milestones

Bureau	Years
BIA	4
BOEM	10
BOR	24
BSEE	47
FWS	6
NPS	1
OSM	1
USGS	1

Bureau	National Aviation Manager	Phone
BIA	Joel Kerley	208-387-5371
BLM	Glen Claypool	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 MILESTONES AND BUREAU CONTACTS





U.S. Fish and Wildlife Service

Last Name	First Name
Ahlin	Dana
Anderson	Anna
Barlow	Stephen
Bayless	Shawn
Bosch	Brandon
Daniels	Christopher
Greely	Christopher
Greil	Thomas
Guldager	Nikilinda
Hilwig	Kara
Hurd	Shay
Kadrmass	Niel
Koneff	Mark



U.S. Fish and Wildlife Service

Last Name	First Name
Liddick	Terry
Mallek	Ed
Murdock	Jordan
Nigus	Brett
Olson	Nathan
Pepin	Dan
Pratt	Benjamin
Rayfield	John
Rees	Kurt
Rhodes	Walt
Rippetto	David
Scotton	Brad
Shelden	Stephan



U.S. Fish and Wildlife Service

Last Name	First Name
Sherman	Lee
Spangler	Robert
Sundown	Robert
Thorpe	Philip
Vanhatten	Gareth
Watts	Dominick
Wilkerson	Garrett
Wilson	Heather
Wortham	James
Yates	Sarah

ACCIDENT-FREE PILOTS FY21





National Park Service

Last Name	First Name
Anderson	Paul
Bell	Steven
Bento	Jeremy
Ellis	Darry "Lynn"
Enzfelder	Glen
Evasick	Ryan
Goodwin	Fred
Grenda	Adam
Hamon	Troy
Howell	Galen
Larsen	Amy



National Park Service

Last Name	First Name
Laska	James
Mankus	Andrew
Perkins	Christopher
Richotte	Richard
Sample	Scott
Taylor	Scott
Thompson	Nicholas
Usher	Robert
Warren	Jim
Welty	Donald
Wright	Keaton



Bureau of Land Management

Last Name	First Name
Allen	Lisa
Germann	Hans
Gusee	Walker
Lenmark	Paul
Masheroni	Andre
Mazur	Stephen
McCormick	Robert
McMillan	Seth
Swisher	Christopher



ACCIDENT-FREE PILOTS FY21





Office of Aviation Services

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



Office of Aviation Services

Last Name	First Name
Lindley	Jonathan
Miller	Arlyn
Mitchem	Jacob
Pena	Terry
Shepard	Travis
Wittkop	James



**ACCIDENT-FREE
PILOTS FY21**



EXECUTIVE SUMMARY



05





FY21 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."



DOI EXECUTIVE SUMMARY

Policy
<ul style="list-style-type: none"> 1 – AMRB completed 7 – AMRB recommendations issued 1 – recommendation completed
Assurance
<ul style="list-style-type: none"> 5 – Best Practices Noted FY17-21 5 – Top Findings FY17-21
Risk Management
<p>24% of all SAFECOMs were initiated by DOI Bureaus.</p>
Promotion
<ul style="list-style-type: none"> 3 – Airwards presented by BLM. <p>DOI had a 67% reduction in airwards from FY20.</p>

Procurement Type	FY 21 Rate	FY 20 Rate	FY20 Percent Difference
Crewed Aircraft			
Mishap	5.02	10.95	54.15% ↓
Accident	1.67	7.29	77.09% ↓
5-Year	7.37	11.47	35.75% ↓
Uncrewed Aircraft			
Mishap	4.38	2.71	61.62% ↑
5-Year	6.07	7.39	17.86% ↓

5-Year Data Summary

Type	Total	Mishaps
Crewed	352,939 hours	26
Uncrewed	35,049 flights	20





FY21 DOI Executive Summary

Crewed Aircraft	Annual Flight Hours	Annual Flight Usage Cost	Cost per Flight Hour
Non-Fleet	47,489.95	\$90,781,588.97	\$1911.60
Fleet	12,273.40	\$7,146,736.69	\$582.30

5,258
Fleet Missions

33,399
Non-Fleet Missions



Top 3 Categories:
Maintenance, Hazard, and Incident.

Submission Breakdown:
13% sUAS
87% Crewed

Total Reported	231
Remaining Open	19
Completion Rate	92%

Reporting Rates*

*Percent difference FY20 to FY21

40%↓
Crewed

44%↑
sUAS

Fleet Statistics	Bureau Total
Crewed Aircraft	89
Pilots/Inspectors	126
Uncrewed Aircraft	848
sUAS Pilots	405

4,668 sUAS Flights

Top Categories:

Interagency Fire, Training & Proficiency, and Mapping.

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

DOI EXECUTIVE SUMMARY

