FY10 DOI Aviation Safety Summary

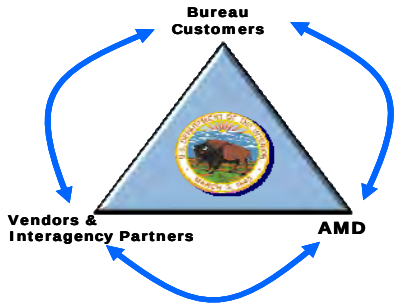
October, 2010

Inside this issue:

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 mishaps is every professional's goal regardless of any barriers**. Improved aviation safety reduces cost, saves lives, drives efficiencies and increases mission accomplishment in the natural resource environment.

Success in aviation safety requires partnership to cultivate a just culture that fairly balances safety and accountability. An organization's safety management culture requires the assembly of characteristics and attitudes establishing safety as an overriding priority and that it receives the attention warranted by its significance.

DOI Aviation Partnership Model



Quality - Service - Efficiency - Safety

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

Policy, Risk Management, Assurance, & Promotion

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

Stephen Rauch—Air Safety Investigator (208) 433-5073

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

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

Les Herman—Aviation Program Evaluation Specialist (208) 433-5074

Jennifer Wees—AMD Aviation Safety Specialist (208) 433-5070

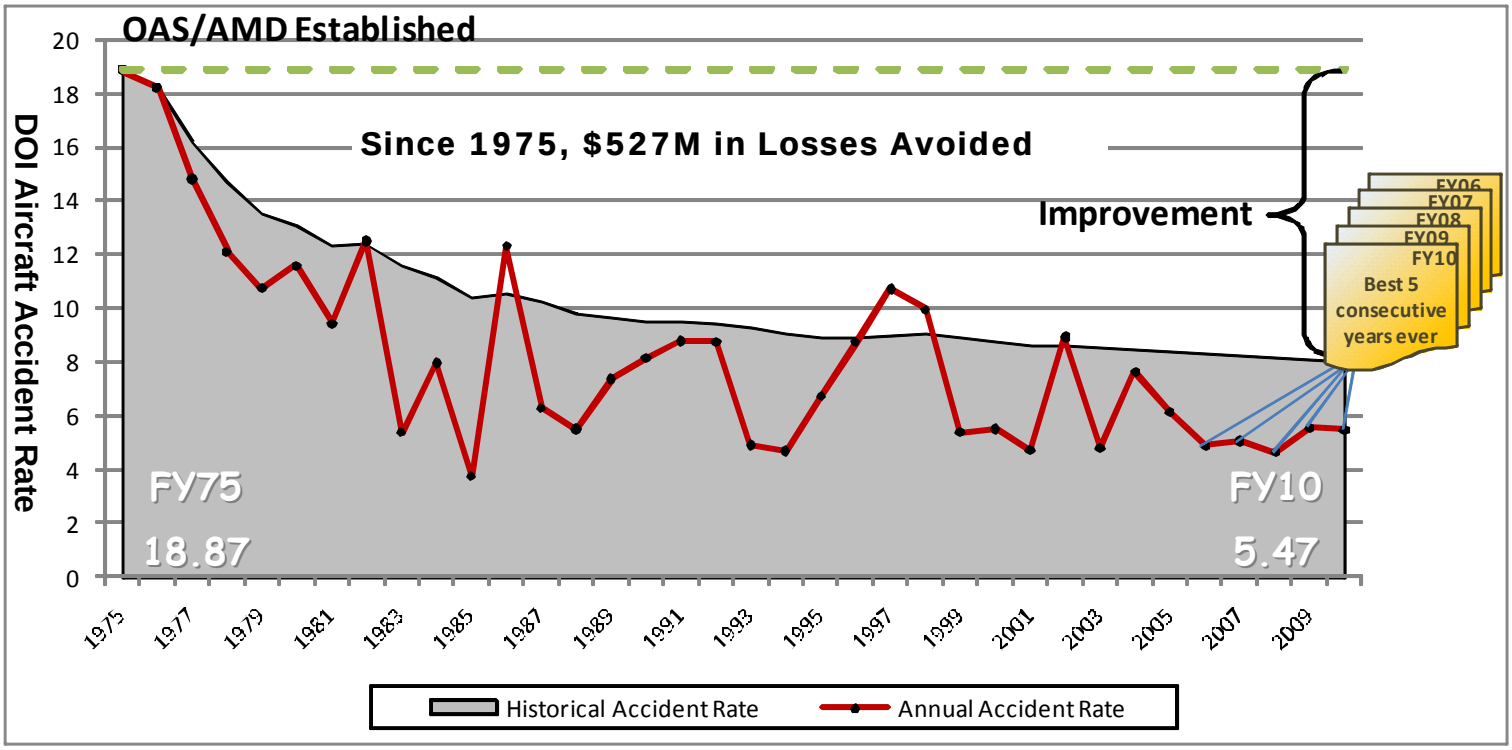
Overview

Aircraft Accident Rate

The good news: In FY10, the U.S. Department of the Interior (DOI) continued to **lower the DOI aircraft accident historical rate**[1] by decreasing it an additional 0.9% to 8.05 accidents per 100K flight hours. Continual improvement processes have matured into sustainable and accepted standard practices as indicated by **the best 5 consecutive years of aviation safety in DOI history** with an accident rate **21% lower than the previous 5 year period**.

The not so good news: Although we should all be very proud of this sustained accomplishment, it's imperative that we achieve additional improvements. **DOI remains at a higher rate than that of many other government and civilian aviation operations.**

DOI Aircraft Accident Rate History



In FY10, the Department achieved an annual aircraft accident rate[2] of 5.47 accidents per 100,000 flight hours, **down 1.4% from** 5.55 in **FY09**. In FY10, the Department flew 73,143.2 total flight hours, 385.5 (0.05%) more than the previous year. These flight hours were supported in part by 579 bureau requested AMD supported aviation contracts and accompanying aircraft inspections, and pilot evaluations.

In FY10, the Department also continued progress toward the Aviation Board of Directors (ABOD) goal of reducing annual accident rate for FY97-FY06 = 6.86 by 50% (to 3.4) for the period of FY07-FY16. This year's progress for fiscal years 2007-2010 = 5.15, a 25% reduction from the FY97-FY06 average.

Since 1975, DOI's aviation safety program has resulted in estimated savings of $527M to the Department and its supporting vendors in reduced losses[3].

Overview

Aircraft Mishap Summary

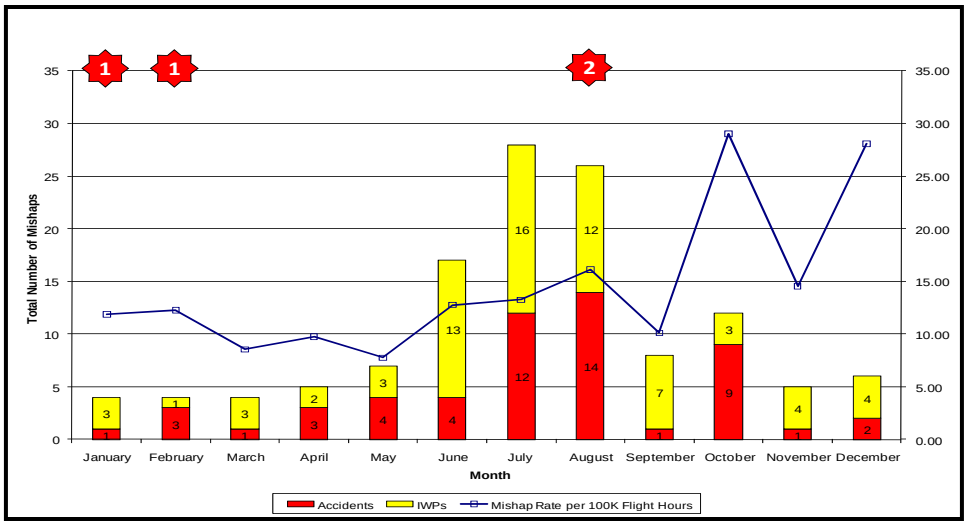
DOI experienced the same number of aircraft accidents (4) in FY10 as in FY09 but suffered a 400% increase in fatalities. Deteriorating weather conditions were present during both fatal accidents and the decision to fly in these conditions in both cases was left to the users, with no requirement for higher management review or approval. Both fatalities occurred on weekends. Additionally, neither aircraft was using DOI/USFS Automated Flight Following (AFF) equipment which significantly hampered rescuers from locating the aircraft.

Two of the FY10 DOI aircraft accidents were consistent with a previously identified high mishap rate/occurrence month of August while the other two occurred in historically low mishap rate/occurrence months of January and February.

FY 2010 DOI Aircraft Mishap Summary

Mishap Bureau, Date	Location	Phase of Flight	Mishap Type	Pilot & Aircraft
FWS January 17, 2010	Oregon	Descent	**Accident** (2 Fatalities)	Fleet
FWS February 11, 2010	Alaska	**Off-Airport** Landing (aircraft damage)	**Accident**	Fleet
FWS April 28, 2010	Alaska	**Off-Airport** Take-Off (aircraft damage)	IWP	Fleet
BLM July 5, 2010	Alaska	**Off-Airport** Landing (rotor blade strike)	IWP	Vendor
BLM August 19, 2010	Oregon	Maneuvering (Helicopter) Bucket	IWP	Vendor
BLM August 20, 2010	Oregon	Landing	IWP	Vendor
NPS August 21, 2010	Alaska	Unknown	**Accident** (4 Fatalities)	Vendor
NPS August 30, 2010	Alaska	**Off-Airport** Landing (aircraft damage)	**Accident**	Fleet

Incidents-With-Potential (IWP) are aircraft mishaps that narrowly avoided being declared an "accidents" by the National Transportation Safety Board and in which the circumstances indicate significant potential for substantial damage or serious injury.



DOI Aircraft Mishaps and Mishap Rate by Month

1999-2010

Key: Number of accidents that occurred in this month

Overview

Aviation Flight Hour & Safety Statistics

DOI Flight Hours

Type	Airplane	Helicopter	Total Hours	Cost
Contract	9,584.0 (+11.0%)	21,440.0 (+3.3%)	31,024.0 (+2.1%)	$ 51,081,566.18 (-31.3%)
Fleet	15,814.7 (-6.6%)	1,893 (+19.0%)	17,707.7 (-4.4%)	$ 5,257,205.00 (-16.6%)
ARA	14,892.8 (-27.1%)	9,518.7 (+178%)	24,411.5 (+2.4%)	$ 22,165,091.84 (+229.0%)
Total	40,291.5 (-12.4%)	32,851.7 (+27.5%)	73,143.2 (+0.5%)	$ 78,503,863.02 (-10.2%)

*Percentages are increases or decreases over FY09

FY 10 Annual accident rate = 4 reportable accidents / 73,143.2 reportable DOI flight hours * 100,000 = **5.47 accidents / 100,000 hours**

Historical accident rate = 253 reportable accidents / 3,139,418.1 reportable DOI flight hours (36 fiscal years) * 100,000 = **8.05 accidents / 100,000 hours**

Accident and IWP Costs Total DOI and related commercial vendor aircraft accident costs for the four accidents experienced in FY10 were $21.1M, up from $4.6M in FY09 (driven by the multiple fatalities). The average FY10 aircraft accident cost was $5.3M. Total cost for the four FY10 DOI Incidents-With-Potential (IWP) was $63,135 ($15,784 per IWP average).

Onsite Investigation Costs AMD's average per aircraft onsite accident investigation costs for the four aircraft accidents in FY10 was $6,058.50, 22% lower than the average FY09 cost for the same number of aircraft accidents. Average AMD onsite investigation costs for the four FY10 IWP's was $703.75, 67% lower than the average FY09 cost for two IWPs. Lessons learned from the investigation of one aircraft accident/IWP can prevent the occurrence of a future accident resulting in a monetary return on accident and IWP investigation costs.

Cumulative Losses Prevented — Since 1975, DOI's aviation safety program has resulted in estimated savings of approximately $527M to the Department and its supporting vendors in reduced losses.

FY10 Accident Prevention Products—AMD collaborated with the bureaus and USFS in producing and distributing the following mishap prevention products:

- **2** - Interagency Aviation Safety Alerts
- **2** - DOI Aviation Safety Alerts
- **4** - Interagency Aviation Lessons Learned
- **3** - DOI Aviation Lessons Learned
- **1** - DOI Accident Prevention Bulletins
- **6** - Interagency Accident Prevention Bulletins

Aircraft Safety Inspections Performed — 2,068[5]
Pilot In-Flight Evaluations Conducted — 3,737[5]
Aviation Safety Training Delivered — 36,306 online modules and **39,632** hours of classroom and hands-on aviation safety training were delivered to DOI and interagency personnel.

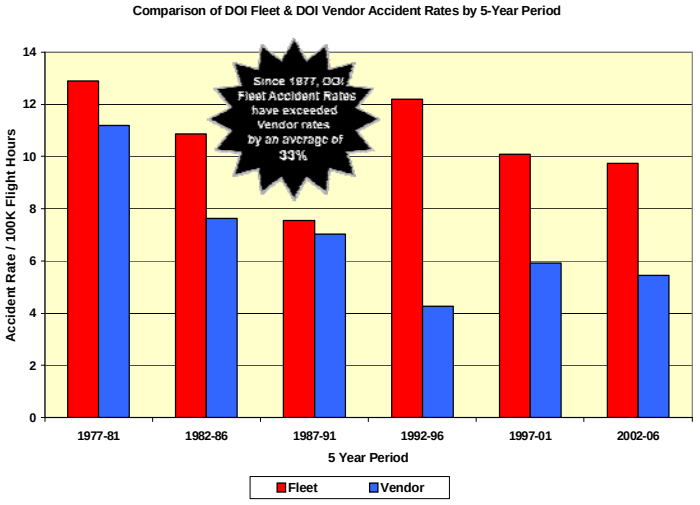
[5]Includes DOI Fleet, Commercial Vendor, and Cooperator aircraft from other agencies. Pilots receive evaluations for each specific special use mission area qualification.

Risk Management
Fleet Accidents

In FY10, the Department experienced three fleet aircraft accidents (75% of FY10 total) and one Incident-With-Potential (IWP). All of these accidents and the IWP occurred in the off-airport environment. Two of the three accidents occurred in Alaska and the other in Oregon.

Total lives lost = 2

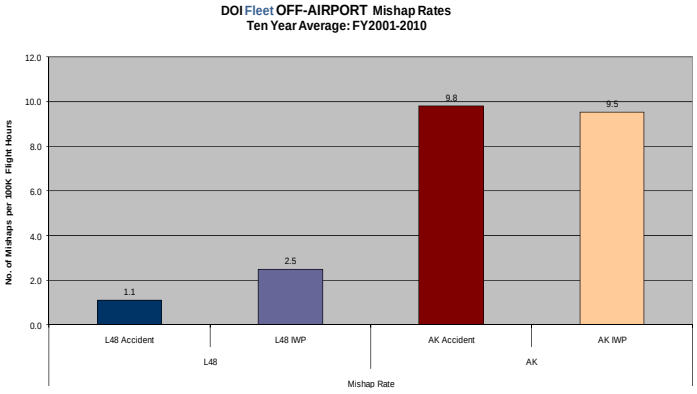
The DOI owned aircraft fleet continues to experience more accidents and higher accident rates than DOI commercial vendors flying the same or similar missions. Similarly, and a cause for concern is the diverging trends between hazard reporting rates (a leading indicator of future mishaps) of DOI fleet vs. contract aviation operators (see discussion on page 6). The Alaska fleet operator's trend remained unfavorable as well.

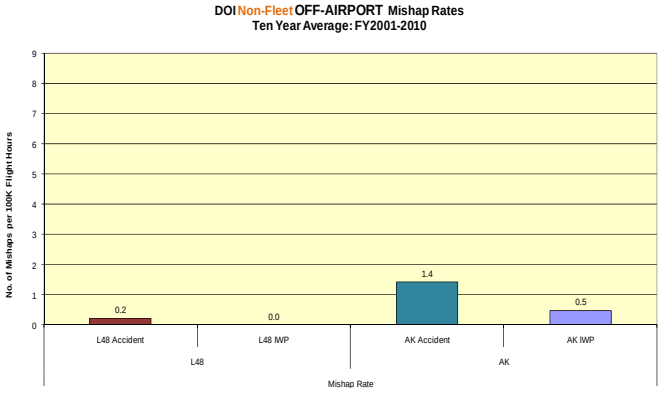


There majority of the factors attributed to these trends has largely remained unchanged and includes (but not limited to): the availability of pilot ground and flight training, workload and competing priorities for bureau scientists/LE officers who also operate fleet aircraft as dual-function pilots. Off-airport airplane operations in Alaska poses a significant risk due to the vast number of dynamics involved with using an airplane in what some would argue as a helicopter environment.

One FY10 fleet accident investigation remains in progress. AMD and bureaus continue to partner in administering risk management in order to proactively reduce fleet accidents:

1. Performed Safety Assessments of various bureau fleet operations that focused on managerial aspects.
2. Continued to support off-airport, float, and ski flight clinics in Alaska with one scheduled in early FY11.
3. Redeveloping critical safety training modules and improving distribution methods to targeted audiences.
4. Developed proposal for third party off-airport study that will identify hazards, risks, and recommend program management improvements.





Risk Management
Vendor Accident

In FY10 the Department experienced one aircraft accident and three IWPs involving commercially procured (vendor) aircraft. The accident occurred in August during a passenger transport mission involving a single-engine fixed wing float plane which tragically claimed the life of the pilot and three National Park Service employees. The investigation of this accident by AMD and the National Transportation Safety Board (NTSB) is ongoing.

Total lives lost = 4

In the past 5 years the Department has experienced 5 SEAT vendor accidents. The SEAT historic and annual accident rates are consistently higher than any other aircraft employed by the Department. As a result of the superb mitigation efforts by BLM, AMD, and the SEAT Association **there were NO SEAT aircraft accidents In FY10!**

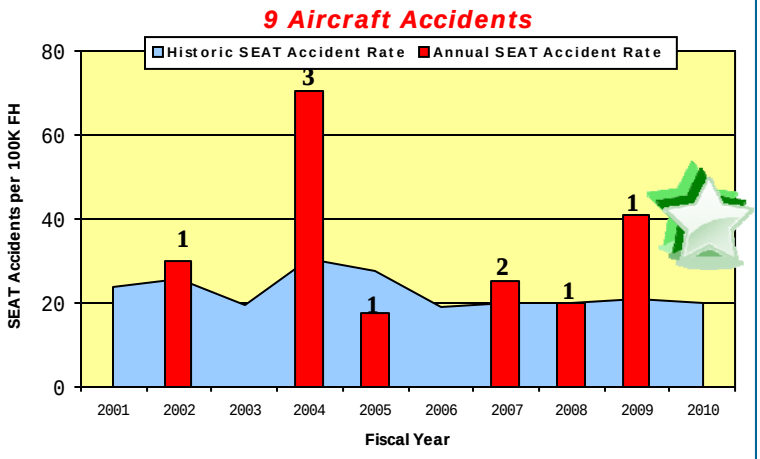
One indicator of a safety culture is the amount of voluntary hazard reporting that occurs. James Reason, a professor of psychology and leading authority on safety culture, has identified a reporting culture, in which people are willing to report errors, as a key characteristic of an organizational culture that makes safety a priority.

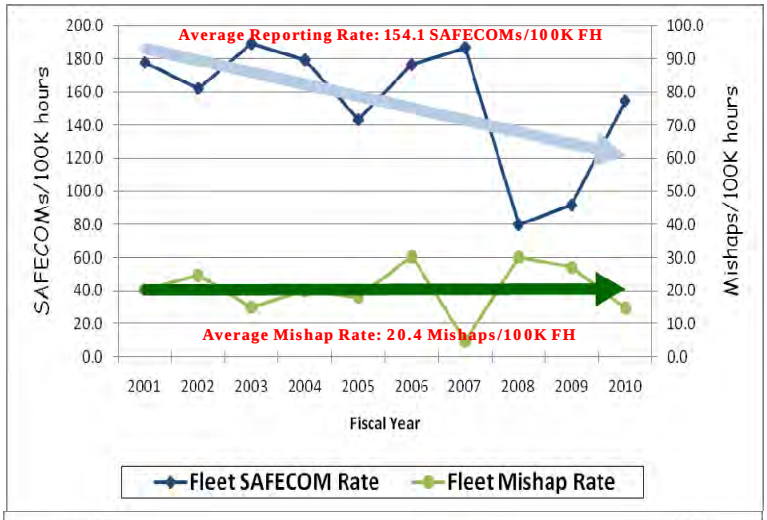
The bottom two charts illustrate trends within in each time series and suggests that among fleet operators, the SAFECOM reporting rate has been decreasing while mishap rates have been slowly increasing. For vendor operators, the trend for reporting is somewhat level but the overall mishap rate trend is decreasing significantly. These charts also indicate that the average reporting rate for vendors is over 3 times higher than it is for fleet operators and the mishap rate for vendors is half the rate for fleet. This clearly demonstrates a significant and concerning difference between the DOI fleet and vendor aviation safety cultures.

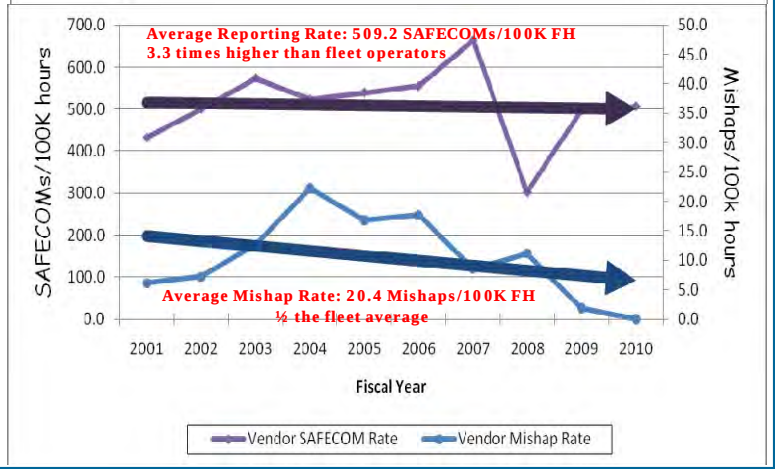
Some of the areas where AMD will continue to cultivate the vendor trend involves a novel approach to quantify the level of safety for a segment of commercial (contracted) vendors. The program will take historical accident data and evaluate respective safety systems in assigning an earned value to their overall program. This evaluation will place a significant value on commercial programs that possess safe and efficient operations and message same to all others desiring to do business with the federal government in this capacity.

Other efforts include partnerships and information sharing with other industry organizations such as HAI.

10 Year DOI SEAT Accident History

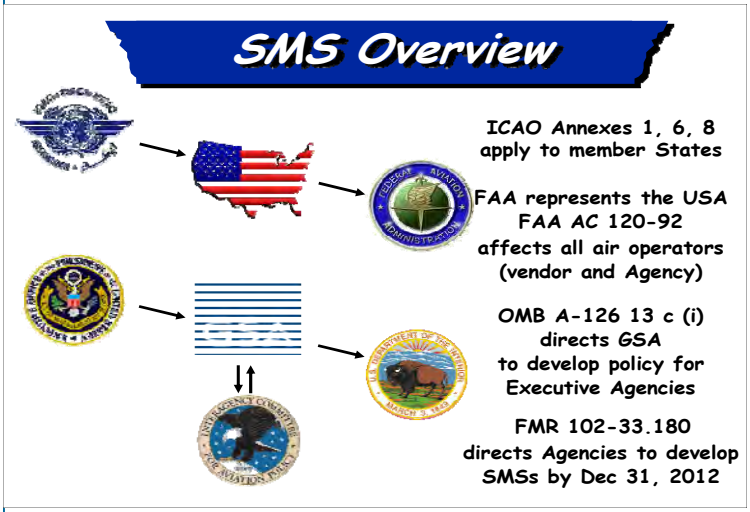


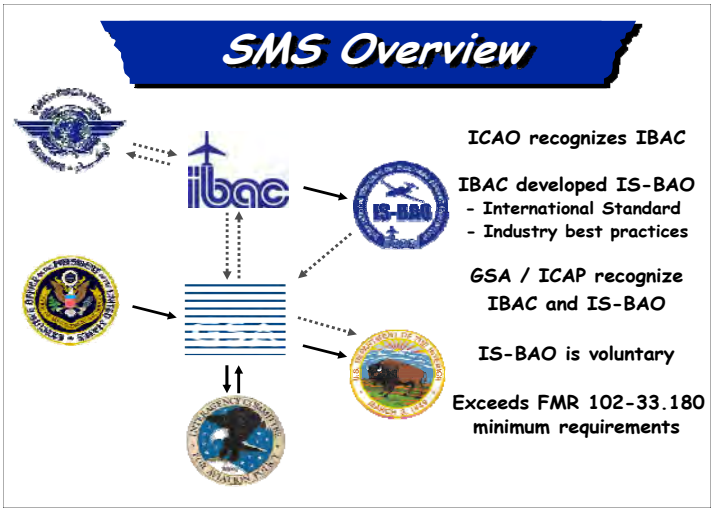




Safety Policy

Safety Management System (SMS) approach is coming to Department of the Interior





In 2010 the Aviation Management Directorate (AMD) began the journey to implementing a fully integrated SMS under the structure of the International Business Aviation Council's (IBAC) International Standard for Business Aviation Operations (IS-BAO).

The concept for a systematic approach to managing an aviation organization's safety programs was published by the International Civil Aviation Organization (ICAO) in Annex 6 which directs member States (i.e. United States of America) to implement an SMS for civil air operators by 2010.

Within the United States, the FAA is responsible for the implementation of those ICAO requirements. In August 2010, the FAA published Advisory Circular (AC) 120-92A, SMS for Aviation Service Providers to provide a framework for SMS development by civil operators or Federal Agencies interested in modernizing their safety program management. FAA Advisory Circulars are not mandatory.

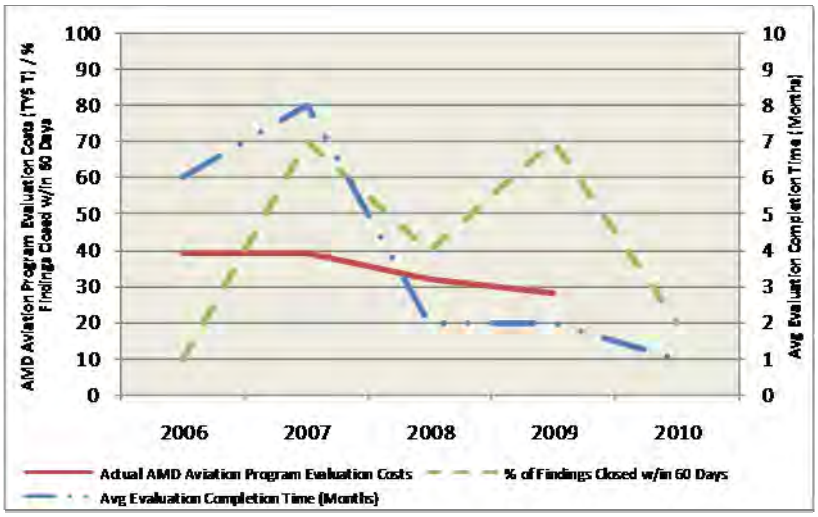
Federal Agencies are also regulated by other additional instruments. The General Services Administration (GSA) is responsible for the oversight of all Federal aviation programs and publishes the Federal Management Regulations (FMRs) that establish standards for all Federal aviation programs. In 2010, GSA will require all Federal aviation programs (DOI and our Bureaus) to implement an SMS conforming to AC 120-92 by December 31, 2012.

SMS concepts and practices (as well as IS-BAO certification) are internationally recognized proven industry best practices that allows organizations to proactively manage safety. IS-BAO certification of DOI's SMS will advance its ability to accomplish missions while protecting resources and personnel. AMD is committed to the higher standard of IS-BAO registration by FY 2013.

SMS is not a Safety Office project; it is the integration of safety and the management of safety within every system and sub-system (region, office, activity, etc.) of the organization. To be successful in our implementation of SMS it will take the personal commitment and involvement of every leader and every employee in our organization.

Program Evaluations

DOI's aviation program evaluation function serves as an integral element of the Department's aviation Safety Management System "Assurance" pillar and a critical piece of the DOI A-123 management controls assurance program. In collaboration with the bureaus, AMD conducted 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 AMD'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
USGS – Western Region	10/09	**9** Findings
FWS – R2 Southwest Region	01/10	**8** Findings
BOR – Lower Colorado	03/10	**5** Findings
FWS – R7 Alaska Region	04/10	**6** Findings
BLM – Alaska	05/10	**4** Findings
NPS – Alaska	06/10	**5** Findings
USGS – Alaska	07/10	**8** Findings
OSM – Western Region	08/10	**4** Findings
BIA – Great Plains Region	09/10	TBD
No Material Weaknesses Found		*Total 49 Findings*

FY10 Results & Performance

In FY10, AMD conducted 9 aviation program evaluations amongst 7 bureaus resulting in a total of 49 findings and **no material weaknesses.** Findings, corrective actions, and aviation program enhancements were collaborated with bureau aviation managers and tracked using AMD's ISO 9001-2008 certified program evaluation process (implemented in 2008). Since FY06, AMD has achieved an 83% reduction in completion time for aviation program evaluations. 100% of all plan of action and milestones (POAM) have been fulfilled for the aviation program evaluations conducted to date in accordance to AMD's ISO 9001-2008 process requirements.

FY10 Analytics

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.

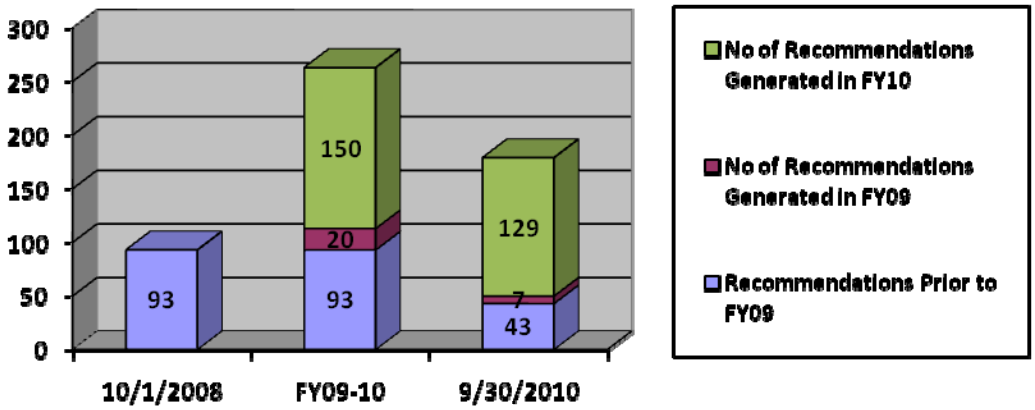
From April 2005 to July 2010, a comprehensive analysis of 265 historical aviation program evaluation findings was completed within 48 evaluations. An analysis of these findings determined four major areas for improvement within the DOI aviation program: aviation plans, MOUs/IAAs, training and safety.

The Top 4 Findings, 2005-2010

- **Incomplete or out of date aviation plans.**
  ⇒ *28 of 48evaluations, or 58.3%*
- **MOUs/IAAs/SLAs are missing or out of date.**
  ⇒ *25 of 48 evaluations, or 52%*
- **Required Line Manager (M2)/ Supervisor (M3) training not conducted or current (per OPM-04)**
  ⇒ *23 of 48 evaluations, or 47.9%*
- **Minimal or no SAFECOMs compared to total amount of bureau flight time.**
  ⇒ *15 of 48 evaluations, or 31.2%*

Aircraft Mishap Review Board (AMRB) Recommendations - In 2008, AMD's Aircraft Accident Investigation process was independently certified to be in compliance with the international quality standard, ISO 9001-2008. In 2010, AMD recertified its ISO 9001-2008 registration. Prior to AMD's incorporation of a Quality Management System (QMS) and subsequent ISO certification in 2008, DOI Aircraft Mishap Review Board (AMRB) recommendations were never tracked to conclusion. AMRB recommendations provide the critical, actionable lessons learned whose completion is a key element of the Department's strategy to eliminate "repeat" aircraft mishaps. When first cataloged in 2008, there were 93 outstanding AMRB recommendations. AMRB's conducted in 2009 and 2010 added 170 additional recommendations. As a result of the ISO 9001-2008 certified processes and related performance tracking measures implemented by AMD, DOI achieved a **31% reduction in the number of outstanding AMRB recommendations** at the conclusion of FY10. Additionally, estimated completion dates were negotiated for the remaining outstanding recommendations resulting from a variety of factors (e.g. lack of available staffing, funding, other service priorities, etc.).

Outstanding DOI Aircraft Mishap Review Board (AMRB) Recommendations



The following actions from past AMRB's are currently incomplete:

Action Office	AMRB Recommendations in progress
Acquisitions Services Directorate – Boise	**2** actions
AMD Technical Services Division	**60** actions
AMD Training Division	**7** actions
AMD Alaska Regional Office	**10** actions
AMD Eastern Regional Office	**14** actions
AMD Western Regional Office	**14** actions
Bureau of Indian Affairs	**4** actions
Bureau of Land Management	**12** actions
Bureau of Reclamation	**8** actions
Fish and Wildlife Service	**24** actions
National Park Service	**16** actions
U.S. Geological Survey	**8** actions

Safety Promotion

Recognizing Safety Excellence

Notable FY10 Bureau Continuous Accident-Free Flying Milestones:

BOEMRE - 36 years.

OSM - 24 years.

BOR - 13 years.

USGS - 4 years.

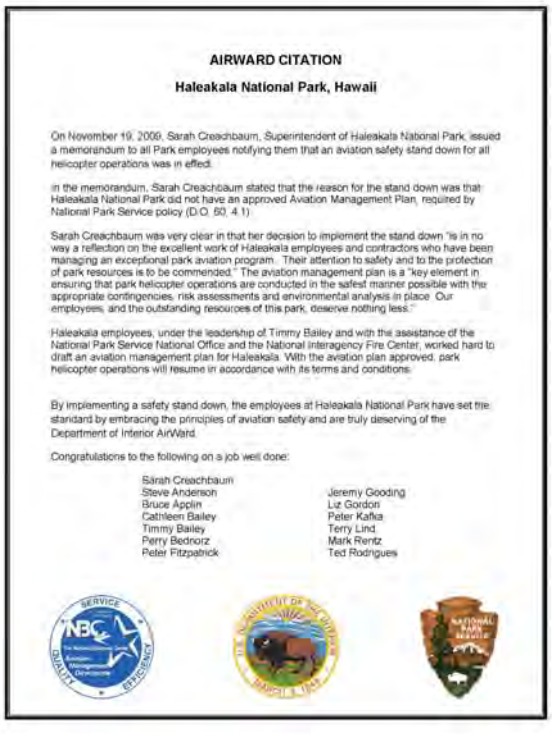
BIA - 3 years.

BLM - 1 year.

AIRWARD

The ***"AIRWARD"*** is an interagency award established to provide timely recognition to any individual who has demonstrated positive behavior or actions promoting Interior aviation safety such as correcting a hazardous situation, submitting a good idea, or just making a difference. Any individual having sufficient knowledge of the individual's action may submit a nomination. Recipients receive an Airward Certificate along with an embroidered *AIRWARD* baseball cap.

From left to right: Ted Rodrigues, Timmy Bailey, and Terry Lind accepting an Airward on behalf of Haleakala NP



AIRWARD CITATION

Haleakala National Park, Hawaii

On November 19, 2009, Sarah Creachbaum, Superintendent of Haleakala National Park, issued a memorandum to all Park employees notifying them that an aviation safety stand down for all helicopter operations was in effect.

In the memorandum, Sarah Creachbaum stated that the reason for the stand down was that Haleakala National Park did not have an approved Aviation Management Plan, required by National Park Service policy (D.O. 60, 4.1).

Sarah Creachbaum was very clear in that her decision to implement the stand down "is in no way a reflection on the excellent work of Haleakala employees and contractors who have been managing an exceptional park aviation program. Their attention to safety and to the protection of park resources is to be commended." The aviation management plan is a "key element in ensuring that park helicopter operations are conducted in the safest manner possible with the appropriate contingencies, risk assessments and environmental analysis in place. Our employees, and the outstanding resources of this park, deserve nothing less."

Haleakala employees, under the leadership of Timmy Bailey and with the assistance of the National Park Service National Office and the National Interagency Fire Center, worked hard to draft an aviation management plan for Haleakala. With the aviation plan approved, park helicopter operations will resume in accordance with its terms and conditions.

By implementing a safety stand down, the employees at Haleakala National Park have set the standard by embracing the principles of aviation safety and are truly deserving of the Department of Interior AirWard.

Congratulations to the following on a job well done:

Sarah Creachbaum
Steve Anderson
Bruce Applin
Cathleen Bailey
Timmy Bailey
Perry Bednorz
Peter Fitzpatrick
Jeremy Gooding
Liz Gordon
Peter Kafka
Terry Lind
Mark Rentz
Ted Rodrigues

In-Flight Award:

The In-Flight Action Award was established to recognize on-board flight crewmembers, aircrew members, and passengers who, through outstanding airmanship, courage, or other action, materially contribute to the successful recovery from an emergency, or who minimize or prevent aircraft damage or injury to personnel during a DOI aviation-related occurrence.

Award for Flying Safely:

This award was established to recognize DOI pilots who have distinguished themselves for safe flying for the period considered.

Award of Honor: 20+ years or 7,500 hours of safe flying

Richard Kemp (NPS)
Tom Monterastelli (NPS)

Secretary's Award of Honor: More than 25 years or more than 10,000 hours of safe flying

Tug Kangus (NPS)

Award for Significant Contribution to Aviation Safety:

This award was established to recognize an individual, group, or organization for a significant contribution to aviation safety or aircraft accident prevention within DOI.

Susie Bates (NPS)
Mike Ebersole (NPS)
Kathleen Harasek (NPS)
Richard Kemp (NPS)
Tom Monterastelli (NPS)

Unit Award for Outstanding Contribution to Aviation Safety:

U.S. Park Police

Secretary's Award for Outstanding Contribution to Aviation Safety:

Renny Jackson (NPS)

Safety Promotion

Recognizing Personal Excellence

DOI Accident Free Fleet Pilots

Aviation Management Directorate

Brennan, Gary	AMD
Castillo, James	AMD
Craig, Walker	AMD
Foster, Edward	AMD
Fowler, K. Dale	AMD
Howell, Gilbert	AMD
James, William	AMD
Kearny, Patrick	AMD
Mancano, Maria	AMD
Miller, Arlyn	AMD
Palmer, Earl Jr.	AMD
Stone, Bart	AMD

Bureau of Land Management

Curl, R. Ryan	BLM
Duhrsen, Jeffrey L.	BLM
Houde, Chip	BLM
House, Greg	BLM
Lynn, Michael	BLM
McCormick, Robert	BLM
Softich, John	BLM
Stright, John	BLM
Warbis, Rusty	BLM

Bureau of Reclamation

Norton, Michael	BOR
Phelps, Randy	BOR

Bureau of Indian Affairs

Amicarella, Michael	BIA

Fish and Wildlife Service

Anderson, Paul	FWS
Barnett, Heather	FWS
Bayless, Shawn	FWS
Bedingfield, Isaac J.	FWS
Beyer, Duston	FWS
Bollinger, Karen	FWS
Bredy, James	FWS
Clark, Stephen	FWS
Dobson, Garland	FWS
Doolittle, Tom	FWS
Ellis, James (Jim) F.	FWS
Ernst, Richard	FWS
Floyd, Jerry	FWS
Fox, Kevin	FWS
Guldager, Nikolina	FWS
Hink, Mike	FWS
Hinkes, Michael	FWS
Hurd, Shay	FWS
Koneff, Mark	FWS
Larned, William	FWS
Liddick, Terry	FWS
Liedberg, Paul	FWS
Lubinski, Brian	FWS
Mallek, Ed	FWS
Moore, Charles	FWS
Oates, Russ	FWS

Fish and Wildlife Service (cont'd)

Olson, Nathan	FWS
Powell, Doug	FWS
Rayfield, John	FWS
Rhodes, Walt	FWS
Richardson, James Ken	FWS
Rippeto, Dave	FWS
Roetker, Fred	FWS
Scotton, Brad	FWS
Sieh, Eric	FWS
Solberg, John	FWS
Spindler, Michael (Mike)	FWS
Stark, Rory	FWS
Sundown, Robert	FWS
Thorpe, Philip	FWS
VanHatten, G. Kevin	FWS
Wade, Mike	FWS
Walters, George	FWS
Ward, James	FWS
Wilson, Heather	FWS
Wittkop, Jim	FWS
Wortham, James	FWS

National Park Service

Alsworth, Leon	NPS
Cebulski, Curtis	NPS
Evans, William	NPS
Fink, Leon F.	NPS
Gilliland, Allen	NPS
Herring, J. Nick	NPS
Howell, Galen	NPS
Kangus, W.B. "Tug"	NPS
Kimmel, John	NPS
Lenon, Bruce	NPS
Loach, James	NPS
Mazur, Stephen	NPS
Milone, Colin B	NPS
Richotte, Richard	NPS
Sample, Scott	NPS
Shults, Brad	NPS
Stevenson, Dan	NPS
Taylor, Scott	NPS
Traub, James	NPS
Unruh, James	NPS

National Park Service - U.S. Park Police

Bohn, Keith	USPP
Burchell, Kenneth	USPP
Chittick, Kevin	USPP
Davis, Craig	USPP
Duckworth, Kevin	USPP
Haapapuro, Eric	USPP
Hertel, Jeffery	USPP
Perkins, Christopher	USPP
Varanelli, Mark	USPP
Wright, Keaton	USPP

U.S. Geological Survey

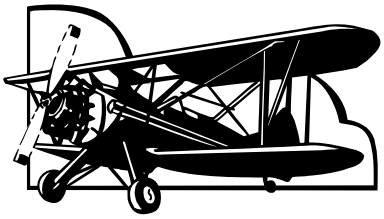
Christiansen, William	USGS
Heywood, Charles	USGS
Wright, C. Wayne	USGS

Safety Promotion

Interagency Accident Prevention Bulletins

Interagency Lessons Learned

Interagency Safety Alert



DOI Accident Prevention Bulletin

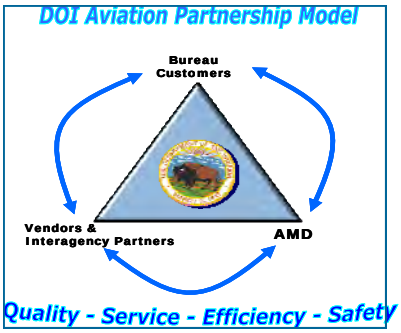
DOI Safety Alert

DOI Lessons Learned

FY11 Outlook & Initiatives

FY11 Outlook and Initiatives:

The outlook for FY11 is to commence our journey towards trending our accident rate downwards even further. Despite having the best 5 consecutive years in DOI aviation safety history, it's time we set a higher standard in achieving a rate more consistent with our federal peers. Even some programs within our own organization have demonstrated that **zero aircraft mishaps is an attainable goal.** Additional Aviation Safety initiatives will be added this coming year to include SMS certification and Unmanned Aerial Systems (UAS). FY11 initiatives are based on the four pillars of the Department's Aviation Management System and will utilize the *DOI Aviation Partnership Model* to achieve desired results.



Policy

- Implement a fully integrated SMS under the structure of the International Business Aviation Council's (IBAC) International Standard for Business Aviation Operations (IS-BAO).
- Update aviation Operational Procedures Memoranda (OPM) to compliment new programs and associated requirements.
- Improve Program Evaluation criteria to ensure critical aviation program components receive the necessary oversight and attention it deserves.
- Continue collaboration among AMD, bureaus, and outside agencies to continue policy development for safe employment of Unmanned Aerial Systems (UAS).

Risk Management

- Strengthen AMD and USFWS partnership to ensure field level personnel and management are actively engaged in managing critical aviation components and exercising risk mitigation strategies. Ensure safe and efficient fielding of new technologically advanced Kodiak DOI fleet airplane.
- Ensure proper disposal of USFWS overweight aircraft as per the OIG and DAS requirements.
- Continue to emphasize and support the use of Operational Risk Management techniques during all AMD conducted bureau aviation program evaluations.
- Continue collaboration on development of revised pilot training requirements, pilot and inspector standardization program and examine annual flight hour requirements.
- Continue emphasis of human factors courses for employees, supervisors, managers, and senior executives (human factors are a contributing factor in >80% of all DOI aircraft mishaps)
- Continue to assess off-airport requirements, assets, risk decision processes, training, and pilot qualification criteria. Review off-airport study recommendations when complete.

Assurance

- Initiate the AMRB Recommendation Reconciliation Project that will employ ISO 9001-2008 processes to update status of open AMRB recommendations and associated plans towards implementation.
- Continue to leverage the Interagency Aircraft Accident Database (IAAD) in developing actionable recommendations backed by analysis with accident trends and human factors related data.

- Leverage Program Evaluation Findings to assist bureau managers identify organizational risks and proactively manage safety.
- Partner with USFS to examine synergies in leveraging resources to drive efficiencies and improve readiness.
- Improve utilization of SAFECOM data and develop program enhancements to promote reporting amongst both vendor and fleet activities.

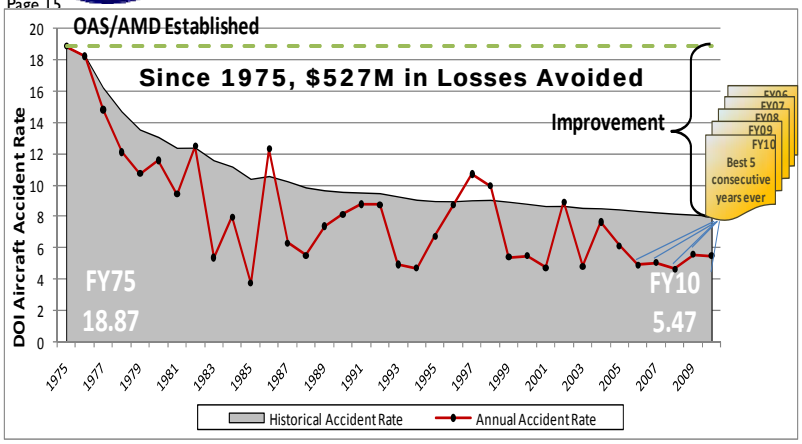
Promotion

- Partner with acquisition and bureaus to incentivize commercial vendors to become SMS compliant and improve accident rate via DOI contracts.
- Provide end users with FY 10 SAFECOM survey data and analysis to both vendor and fleet operators.
- Continue to progress towards ABOD goal of reducing annual accident rate for FY97-FY06 = 6.86 by 50% (to 3.4). This year's progress for fiscal years 2007-2010 = 5.15 (25% reduction).

FY10 DOI Aviation Safety Summary

Executive Summary

(Take Away Sheet)



DOI Aviation Accident Rate

FY06-10 = Best 5 Consecutive Years Ever

4 Accidents
- **3 Accidents (4 Fatalities)—Alaska**
- **1 Accident (2 Fatalities) - Oregon**
- **4 Incidents w/Potential**

FY 10 Annual accident rate = 4 reportable accidents / 73,143.2 reportable DOI flight hours * 100,000 = **5.47 accidents / 100,000 hours**

Historical accident rate = (36 fiscal years) 253 reportable accidents / 3,139,418.1 reportable DOI flight hours * 100,000 = **8.05 accidents / 100,000 hours**

Risk Management

Although the investigations of some FY10 aircraft accidents remain ongoing, AMD and the bureaus have previously taken steps to address historic fleet accident rate issues including:

- Performed Safety Assessments of various bureau fleet operations that focused on managerial aspects.
- Continued to support off-airport, float, and ski flight clinics in Alaska with one scheduled in early FY11.
- Redeveloping critical safety training modules and improving distribution methods to targeted audiences.
- Developed proposal for third party off-airport study that will identify hazards, risks, and recommend program management improvements.
- Emphasized Operational Risk Management (ORM) techniques/controls throughout in order to empower line personnel with tools to process decision making with the appropriate level of management.

Policy

Notable FY10 AMD/bureau aviation policy achievements:

- Formalized an Automatic Flight Following program requirements—will develop standardized procedures in acquisition and utilization in FY11.
- Lead natural resource UAS policy development and program implementation. Coordinated training that qualified bureau users in UAS filed deployment.

Assurance

DOI Aviation Program Evaluation (APE) safety assurance function FY10 accomplishments:

- Assessed 9 bureau units for compliance with DOI policy, Federal regulation; supported DOI A-123 program.
- Identified areas of potential improvement (49), best practices, and additional support needs for each unit.
- Analysis of 48 historic evaluations & 265 findings revealed "Top-4." AMD collaborating with bureaus to correct.
- Since FY06, APE has achieved 28% reduction in cost, 83% lower cycle time, & 600% increase in findings closed.
- FY11 AMRB Recommendation Reconciliation Project will continue to reduce outstanding AMRB recommendations.

Promotion

- AMD recertified as GSA "Gold Program" for continuing to meet higher performance standards of the federal government.
- **NOTEABLE FY10 Bureau Continuous Accident-Free Flying Milestones:** BOEMRE—36 years; OSM—24 years; BOR—13 years; USGS—4 years, majority of DOI fleet pilots remain accident free throughout careers.
- 36,306 online modules and 39,632 hours of classroom and hands-on aviation safety training were delivered to DOI and interagency personnel.

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