



# AFS-400 Field Update

## Flight Technologies and Procedures Division

*"Improving Safety and NAS Operations through Flight Technologies and Procedures"*

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### A Message from Bruce

Thank you for taking the time to check out the first AFS-400 Field Update of 2015. I hope you all had a restful holiday season. With the start of the New Year, it is always good to take the time to reflect on the past year to help set new goals for the upcoming year.



This year you may have noticed a renewed focus on organizational health both in our projects and communications. You all have heard this message and act on it every day. Our two success stories highlighted in this issue exemplify why critical thinking and interdependency are such necessary attributes for our team. In times like these and with issues like those we tackle, collaboration is the only way we can be successful.

As always, please continue to send your suggestions, ideas, and comments to [AVSNextgen@faa.gov](mailto:AVSNextgen@faa.gov).

Bruce DeCleene

Manager, Flights Technologies and Procedures Division, AFS-400

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ADS-B is one of the most important underlying technologies in [#NextGen](#)

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## Highlighted Stories

### Light Emitting Diode (LED) Symposium

On October 7<sup>th</sup> and 8<sup>th</sup>, the Flight Operations Branch, AFS-410, collaborated with the aviation community to host a two day conference focused on addressing LED aviation lighting issues. Coby Johnson, AFS-410 Manager, set out to achieve five main objectives: focus on approach lighting; identify needed areas of research and testing; achieve collaboration from stakeholders; establish a plan of action and timelines; and fix the problem.

In order to put together achievable action plans, the conference attendees were divided into three sub-groups: the Science Group, the Infrastructure Group, and the Operations & Flight Test Group. Each sub-group met to form their goals and action plans for future work. The Science Group will seek to classify airport lighting status and requirements, identify research and

development needed, and will ultimately report their development recommendations. Goals of the Infrastructure Group included listing existing infrastructure, prioritizing different motivations for changing to LED, and finding areas to respond to stakeholder concerns. The Operations and Flight Test Group will define instrumentation needed, outline ground installation requirements, and set simulator standards.

These sub-groups will continue to work issues to better inform decisions relating to LED lighting. Several sub-group meetings/teleconferences have already taken place and a follow-up meeting to assess the groups' progress will likely happen this spring.

For questions regarding this project, please contact Manny Rios at [Manuel.Rios@faa.gov](mailto:Manuel.Rios@faa.gov)



### Automatic Dependent Surveillance- Broadcast (ADS-B) Out Call to Action

The FAA met with a diverse group of aviation stakeholders for the ADS-B Out Call to Action at Headquarters on October 28<sup>th</sup>. The meeting sought to identify and address barriers to the January 1, 2020 mandate to equip aircraft with ADS-B Out to aid in the transition to NextGen. The event was widely attended by those affected including pilots, operators, installers, manufacturers and suppliers.

During the first part of the event, industry stakeholders gave presentations outlining the barriers that most directly affect them and their ability to reach the mandate. Some of the barriers discussed were avionics cost and availability, privacy concerns, and user awareness and education. Later, attendees broke out into one of the following working groups: Pilot and Operator Education, Common Timeline for Equipment and Metrics for Success, Installation and Approval Procedures, Operational Implementation and Guidance, and Deliver Benefits. Each group collaborated with the FAA to build action plans for finding solutions to the identified barriers and presented their proposals.



The FAA agreed to work with industry to resolve these barriers in a working group formed under the NextGen Institute called Equip 2020. "The FAA laid the ADS-B infrastructure, and now the Equip 2020 group will work together to help ensure the fleet is equipped with this technology so we can utilize the benefits it brings," said FAA Deputy Administrator Mike Whitaker. Equip 2020 has already met twice since the Call to Action and will continue to meet throughout 2015.

For questions regarding this project, please contact Roger Sultan at [Roger.Sultan@faa.gov](mailto:Roger.Sultan@faa.gov)

## Employee Spotlight

### Sheri Baxter



**Q: What do you do, how long have you been with FAA, and where are you based?**

**SB:** *I am an Aviation Safety Inspector in the NextGen Field Program Office Branch (AFS-408) for about a year based out of Washington, DC. My current efforts are working to develop a formalized On-the-Job Training Program for the regional All Weather Operations Specialists.*

**Q: How did you end up with the FAA?**

**SB:** *Before my aviation career, I worked in the public sector in education and social services. Later during my airline career, I served in a management position focused on flight standards and safety. When I realized the impact my work was able to impart on a single airline, I knew I wanted to return to the public sector so I could have a part in improving aviation safety on a national level.*

**Q: What is your favorite part about working here?**

**SB:** *Each morning, I pass the National Mall and look at the memorials and what it symbolizes and those involved in creating our nation's story. I have had this remarkable, historic journey that instills pride and motivates me to be the best I can for our future.*

**Q: Best life lesson?**

**SB:** *The ATC landing clearance of "Cleared for the Option" is a favorite saying in life. Just like the many available landing options, I think of this as being cleared for many options in life: whether it be professional or personal choices, or sometimes if I just want to have ice cream for dinner. I am cleared for the option in life.*

**Q: What is your greatest accomplishment?**

**SB:** *I founded the nonprofit, the "Alaska IN Project" focused on increasing the availability of programs for children with special needs. I published materials for teachers and families, conducted training and, partnered with educational and social services. Countless teachers began to include children with special needs, but were valuing the diversity of children with all abilities.*

### Gary Petty



**Q: What do you do, how long have you been with FAA, and where are you based?**

**GP:** *I assist with writing FAAO 8260.58, the US Standard for Performance Based Navigation (PBN) Instrument Procedure Design in the Flight Procedure Standards Branch, AFS-420. I've been with the FAA for a few months now at the Mike Monroney Aeronautical Center in OKC.*

**Q: How did you end up with the FAA?**

**GP:** *I'm a retired USAF Air Traffic Controller with 20 years of tower, RADAR, and Terminal Instrument Procedures experience. After retirement from the USAF I was a contractor for 5 years with Innovative Solutions International supporting AFS-420 with instrument flight procedure criteria development.*

**Q: What is your favorite part about working here?**

**GP:** *Working with professionals on the challenges of using new technologies to make Instrument Flight Procedures as efficient as possible while maintaining safety of flight.*

**Q: Best life lesson?**

**GP:** *Sight alignment, sight picture, and trigger control (from competitive shooting). The life lesson being: to set goals and stay focused on achieving them.*

**Q: What is your greatest accomplishment?**

**GP:** *Family comes to mind first, my wife of 25 years Teresa, sons Randy (23) and Cody (21), and daughter Lauren (16), but I don't feel as though that is my accomplishment so much as it is me just being a very lucky man. I'd say my greatest accomplishment is my 20 years of military service, especially the instrument procedure design work supporting real world events like the Global War on Terrorism and various humanitarian relief missions.*

## System Safety

Federal Aviation Administration (FAA) Order 8040.4A Safety Risk Management (SRM) Policy was approved April 30, 2012. Associated with this FAA Order was the FAA Safety Management System (SMS) Implementation Plan (also approved April 30, 2012) and a corresponding Aviation Safety Organization (AVS) Safety Management System (SMS) Implementation Plan (approved February 9, 2012). Subsequent to the release of these documents, AFS-400 approved development of the requisite AFS-400 SMS Implementation Plan.

The Operational Safety Assessment (OSA) and Operational Safety Review (OSR) processes provide the cornerstone elements of the AFS-400 SMS Implementation Plan. These processes serve as an introduction to basic System Safety Engineering and Management concepts.

Several related orders require that FAA and AVS make data-driven, risk-based decisions when considering any change to the National Airspace System (NAS) from a safety perspective. AFS may undertake the OSR/OSA process to accomplish these objectives. While Flight Standards (AFS) may use the OSA decision making tool to meet AVS SMS requirements, Air Traffic Organization (ATO), Airports, and operators must meet their specific SMS requirements.

## Flash Questions: GovTrip

### Q: What are GSA City Pairs?

*A: The GSA City Pairs Program offers fares considerably lower than comparable commercial fares which saves the federal government billions of dollars annually. Other benefits of the program include:*

- *No advance purchases required*
- *No minimum or maximum length of stay required*
- *Fully refundable tickets and no airline charge for cancellations or changes*
- *No blackout periods*

### Q: What does a GSA City Pair with capacity limits mean?

*A: GSA City Pair with capacity limits provides all the same benefits as GSA City Pair fares, however, airlines offer a limited number of seats at the GSA Capacity Limit fare while GSA City Pair fares offer last seat availability*

### Q: What fees are associated when creating reservations in GovTrip?

*A: Travelers will be charged travel assistance fees for creating reservations through GovTrip. The fees will appear as Travel Management Center (TMC) fees for the following items:*

- *Online reservations, hotel and/or car rental, airline reservations*
- *Travel Agent assistance, online or by telephone, (can include rail reservations)*
- *Agent assistance for International Reservation, online or by telephone*
- *A standard travel assistance fee is included with all local vouchers*

## AFS-400 Accomplishments

### December 2014 – AWO On-the-Job-Training Module 8

Job Task Analysis (JTA) 5.12 for the All Weather Operations Specialists is Technical Outreach and Information Sharing. This JTA focuses on developing partnerships, conducting facility visits, and participating in internal and external activities to promote and educate FAA offices and the public on emerging NextGen technologies, their implementation, and approval process.

### December 2014 – Develop Environmental Training for Inspectors

The training was developed to fulfill the Environmental Management System (EMS) audit finding reported to AVS-1.

## Division Updates

### ✓ Recent Simulator Collaborations:

In our Summer Newsletter, we highlighted the effective collaboration of the Flight Operations Simulation Branch, AFS-440 and the simulator orientations this branch has established in an effort to demonstrate the various NextGen technologies installed in the Flight Operations Simulation Branch simulators. Since our publication, AFS-440 has expanded its efforts:

- Established on Required Navigational Performance (EoR) testing is underway.
- AFS-440 is currently working with the William J. Hughes Technical Center to establish a connection on the FAA NextGen Prototyping Network (NPN). This initiative will connect the AFS-400 laboratories, which include a high fidelity ATC simulator, two level D full flight simulators, and other tools to other facilities connected to this network. This will leverage geographically separated resources already connected to the NPN to increase research capabilities.
- The Strategic Simulator Upgrade plans are currently being finalized helping to ensure the simulators are not only kept to industry standards, but are also equipped and ready to test all of the flight related NextGen initiatives.

### ✓ Permanent guidance for AFS 8900 on AC 90-114 change published 10/28/14:

In our Fall Newsletter, we highlighted the transition from the work-intensive OpSpec353 to the more user-friendly OpSpec A153. This change was formally incorporated into the AC 90-114A along with the following updates:

- Published a newly updated A153 Application Checklist
- Updated guidance on the use of ADS-B In for situation awareness (SA), CDTI Assisted Visual Separation (CAVS), and FLT ID
- Added a new appendix to provide guidance for aircraft qualification and maintenance requirements for ADS-B In operations

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