

REDAC

Human Factors Subcommittee

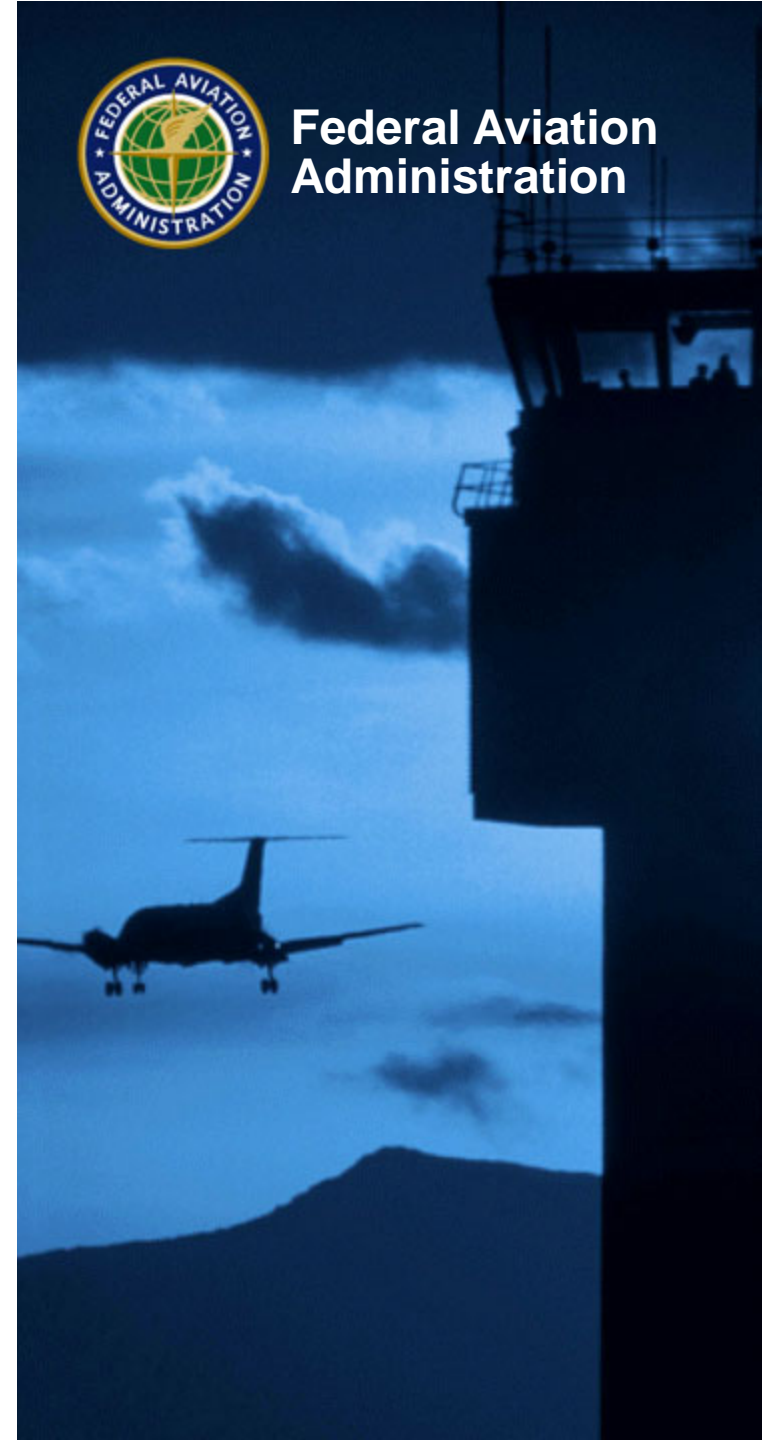
R&D Budget Status

Mike Gallivan

July 30, 2013



Federal Aviation
Administration



R,E&D FY 13 Budget

- **R,E&D FY 13 Budget Request - \$166M**
- **Currently under year long Continuing Resolution**
 - Funding based on FY 12 levels of \$165.7M
 - Rescission of .2%
 - Sequestration of 5.2%
 - FY 13 R,E&D Funding \$158,791,815



FAA FY 2014 Budget Request

Account	FY 14 Request	FY 14 House Mark	Difference (+/-)	Fy 14 Senate Mark	Difference (+/-)
Operations	\$ 9,707,000,000	\$ 9,521,784,000	\$ (185,216,000)	\$ 9,707,000,000	\$ -
Facilities & Equipment	\$ 2,777,798,000	\$ 2,155,000,000	\$ (622,798,000)	\$ 2,730,000,000	\$ (47,798,000)
Research, Engineering & Development	\$ 166,000,000	\$ 145,000,000	\$ (21,000,000)	\$ 160,000,000	\$ (6,000,000)
Airports	\$ 2,900,000,000	\$ 3,350,000,000	\$ 450,000,000	\$ 3,350,000,000	\$ 450,000,000
Total	\$ 15,550,798,000	\$ 15,171,784,000	\$ (379,014,000)	\$ 15,947,000,000	\$ 396,202,000



FY 14 R,E&D Request

	Program	Appropriation Account	FY 2014 Request (\$000)	FY 14 House Mark (\$000)	FY 14 Request/FY 14 House +/-	FY 2014 Senate Mark (\$000)	FY 14 Request/FY 14 Senate +/-	2014 Conference Mark (\$000)	FY 14 Request/FY 14 Conference +/-
A11.a.	Fire Research and Safety	R,E&D	8,313	8,313	-	7,500	(813)		(8,313)
A11.b.	Propulsion and Fuel Systems	R,E&D	1,974	1,974	-	1,800	(174)		(1,974)
A11.c.	Advanced Materials/Structural Safety	R,E&D	2,607	2,607	-	2,600	(7)		(2,607)
A11.d.	Aircraft Icing /Digital System Safety	R,E&D	7,582	7,582	-	7,500	(82)		(7,582)
A11.e.	Continued Airworthiness	R,E&D	8,167	8,167	-	8,000	(167)		(8,167)
A11.f.	Aircraft Catastrophic Failure Prevention Research	R,E&D	1,652	1,652	-	1,500	(152)		(1,652)
A11.g.	Flightdeck/Maintenance/System Integration Human Factors	R,E&D	5,000	5,000	-	5,000	-		(5,000)
A11.h.	System Safety Management	R,E&D	11,583	11,583	-	11,000	(583)		(11,583)
A11.i.	Air Traffic Control/Technical Operations Human Factors	R,E&D	6,000	6,000	-	5,000	(1,000)		(6,000)
A11.j.	Aeromedical Research	R,E&D	8,672	8,672	-	7,000	(1,672)		(8,672)
A11.k.	Weather Program	R,E&D	15,279	15,279	-	13,860	(1,419)		(15,279)
A11.l.	Unmanned Aircraft Systems Research	R,E&D	7,500	7,500	-	7,500	-		(7,500)
A11.m.	NextGen - Alternative Fuels for General Aviation	R,E&D	5,571	5,571	-	7,100	1,529		(5,571)
A11.n.	NextGen - Advanced system and Software Validation	R,E&D	1,021	1,021	-	1,000	(21)		(1,021)
A12.a.	Joint Planning and Development Office	R,E&D	12,057	-	(12,057)	9,000	(3,057)		(12,057)
A12.b.	NextGen - Wake Turbulence	R,E&D	9,267	5,000	(4,267)	9,000	(267)		(9,267)
A12.c.	NextGen - Air Ground Integration Human Factors	R,E&D	10,329	4,558	(5,771)	10,000	(329)		(10,329)
A12.d.	NextGen - Self Separation Human Factors	R,E&D	-	-	-	-	-		-
A12.e.	NextGen - Weather Technology in the Cockpit	R,E&D	4,169	3,000	(1,169)	4,000	(169)		(4,169)
A13.a.	Environment and Energy	R,E&D	14,542	14,542	-	14,600	58		(14,542)
A13.b.	NextGen - Environmental Research - Aircraft Technologies, Fuels, and Metrics	R,E&D	18,979	21,979	3,000	21,400	2,421		(18,979)
A14.a.	System Planning and Resource Management	R,E&D	2,289	2,000	(289)	2,200	(89)		(2,289)
A14.b.	William J. Hughes Technical Center Laboratory Facility	R,E&D	3,447	3,000	(447)	3,440	(7)		(3,447)
	TOTAL	R,E&D	166,000	145,000	(21,000)	160,000	(6,000)	-	(166,000)



FY 14 House Markups

- **House Mark \$145M**

- **Eliminates the Joint Planning and Development Office**
- **NextGen Environmental Research** – Aircraft Technologies, Fuels and Metrics – the increase (\$3M) above the budget request is provided to support additional research and testing of alternative fuels that offer the greatest potential for improving overall fuel efficiency.
- **NextGen Alternative Fuels for General Aviation** – During the complex transition of the general aviation piston fleet to an unleaded fuel, an increase in funding above last year is merited to move from research to a phase focused on coordinating and facilitating the fleet-wide evaluation, certification and deployment of an unleaded fuel and to help overcome any market issues that prevent it from moving forward. The Committee recognizes this is a multi-year effort and looks forward to updates on the continued progress on this initiative as it effectively balances environmental improvement with aviation safety, technical challenges, and economic impact.
- **Centers of Excellence** - ...As the aviation industry develops new technologies to create more energy efficient aircraft, the Committee encourages FAA to explore this area to determine whether additional research is warranted.



FY 14 Senate Markups

- **Senate Mark \$160M**
 - JPDO reduced to \$9M
 - Environment & Energy both Core and NextGen increased by \$2,479,000
 - \$5M for the establishment of a Center of Excellence for alternative jet fuel research in civil aircraft
 - The committee strongly supports the creation of UAS Center of Excellence no additional funding provided



F&E NextGen System Development FY 14 Request

Budget Line Item	<u>Program</u>	Appropriation Account	2014 Request (\$000)	FY 14 House Mark	FY 14 Senate Mark
1A08	NextGen - ATC/Tech Ops Human Factors - Controller Efficiency/Air Ground Integration	F&E	5,000	4,000	
1A08A	NextGen - Environment & Energy - Environmental Management Systems and Advanced Noise and Emissions Reduction	F&E	10,000	8,000	
1A08A	NextGen - New ATM Requirements	F&E	22,000	18,000	
1A08D	NextGen - Operations Concept Development Validation Modeling	F&E	5,000	3,000	
1A08D	NextGen - System Safety Management Transformation	F&E	8,000	6,000	
1A08D	NextGen - Wake Turbulence Re-categorization	F&E	1,500	1,000	
1A08B	NextGen - Operational Assessments	F&E	8,000	6,000	
1A08G	NextGen Staffed NextGen Towers (SNT)	F&E	2,000	2,000	-
	Total NextGen Transportation system - System Development		61,500	48,000	56,500



FY 14 Congressional Issues

- **House working from a \$967B base**
- **Senate working from a \$1,058T base**
 - Difference of \$91B
- **Debt Ceiling still an issue**
- **Sequestration still an issue**



R,E&D FY 15 Budget Status

- **R,E&D FY 15 OST Budget Request \$170M**
- **OMB Submission Sept. 10, 2013**
- **Scheduled date of FY 15 budget presented to Congress February 3, 2014**



Out Year Targets

- **Targets established March 2013**
 - FY 15 - \$170M
 - FY 16 - \$174M
 - FY 17 - \$177M
 - FY 18 - \$181M
 - FY 19 - \$ 185M
- **Expect targets to change**

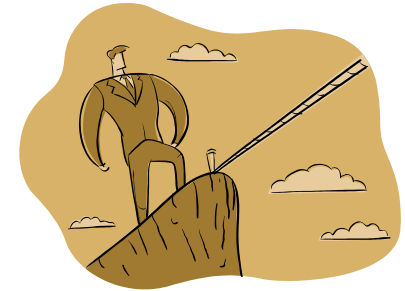


FAA Reauthorization

- **Current Authorization thru FY 2015**



Budget Future



- It is unclear regarding future funding levels

