

Environment & Energy Subcommittee

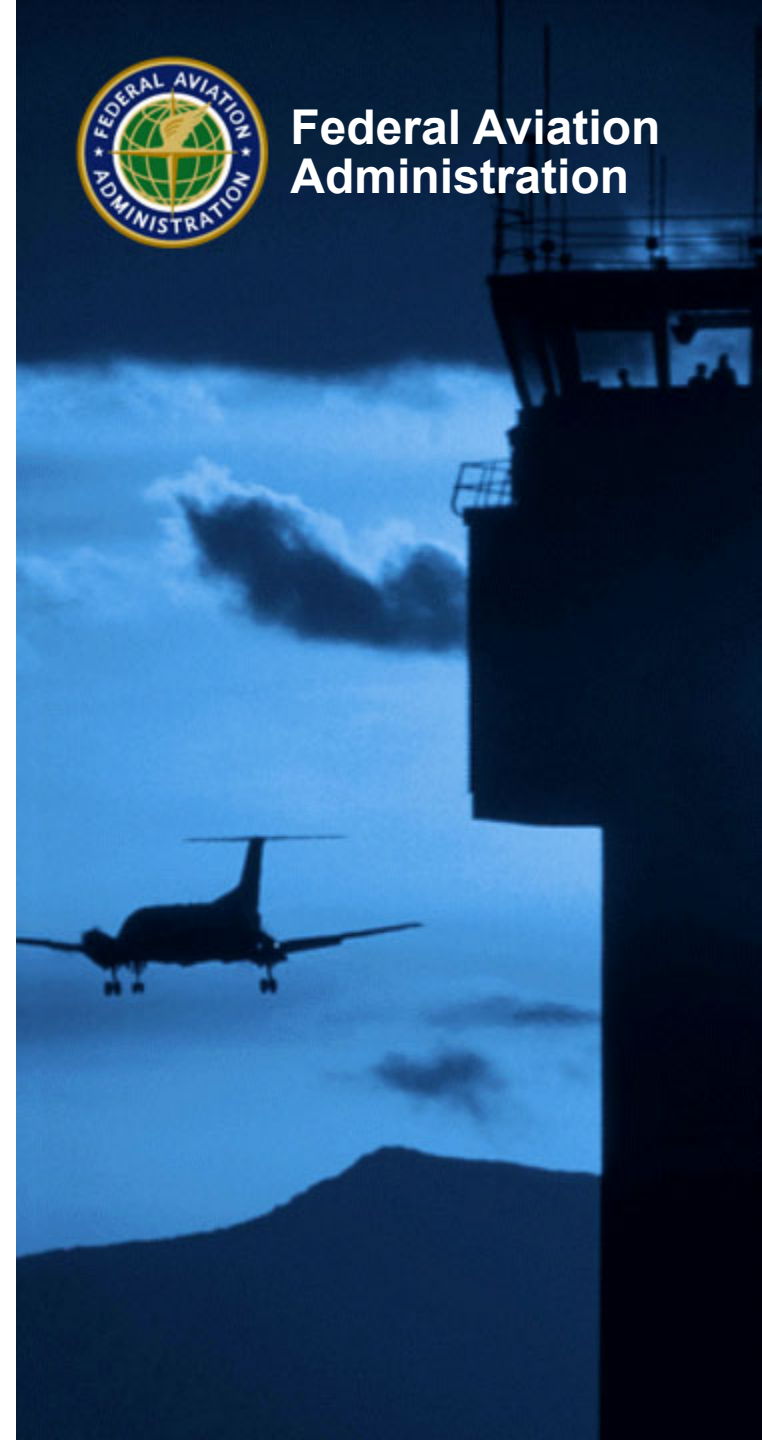
RE&D Budget Status

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March 19, 2019



Federal Aviation
Administration



R,E&D FY 2019 Budget

- **FY 19 R,E&D Request \$74.4M**
 - House Appropriation Committee (full committee)
R,E&D funded at \$180M
 - Senate Appropriation Committee (full committee)
R,E&D funded at \$191M
 - Omnibus funding bill Signed February 15, 2019
R,E&D funded at \$191.1M



FAA FY 2019 Budget

Appropriation	FY 19 Request	House Mark	Difference	Senate Mark	Difference	Conference	Difference
Operations	\$ 9,931,312,000	\$ 10,410,758,000	\$ 479,446,000	\$ 10,410,758,000	\$ 479,446,000	\$ 10,410,758,000	\$ 479,446,000
Facilities & Equipment	\$ 2,766,572,000	\$ 3,250,000,000	\$ 483,428,000	\$ 3,000,000,000	\$ 233,428,000	\$ 3,000,000,000	\$ 233,428,000
Research Engineering & Development	\$ 74,406,000	\$ 180,000,000	\$ 105,594,000	\$ 191,000,000	\$ 116,594,000	\$ 191,100,000	\$ 116,694,000
Grants-in-aid for Airports	\$ 3,350,000,000	\$ 3,850,000,000	\$ 500,000,000	\$ 4,100,000,000	\$ 750,000,000	\$ 3,850,000,000	\$ 500,000,000
Total	\$ 16,122,290,000	\$ 17,690,758,000	\$ 1,568,468,000	\$ 17,701,758,000	\$ 1,579,468,000	\$ 17,451,858,000	\$ 1,329,568,000



FY 2019 R,E&D Enacted

Budget Line Item	Program	FY 2019 Request (\$000)	FY 19 House Mark (\$000)	FY 19 Request/FY 19 House +/-	FY 2019 Senate Mark (\$000)	FY 19 Request/FY 19 Senate +/-	2019 Conference Mark (\$000)	FY 18 Request/FY 18 Conference +/-
A11.a.	Fire Research and Safety	4,867	7,200	2,333	7,200	2,333	7,200	2,333
A11.b.	Propulsion and Fuel Systems	555	3,295	2,740	2,100	1,545	2,100	1,545
A11.c.	Advanced Materials/Structural Safety	2,300	4,824	2,524	10,500	8,200	14,720	12,420
A11.d.	Aircraft Icing /Digital System Safety	7,684	9,673	1,989	9,253	1,569	9,253	1,569
A11.e.	Continued Airworthiness	4,969	11,269	6,300	11,269	6,300	11,269	6,300
A11.f.	Aircraft Catastrophic Failure Prevention Research			-	1,570	1,570	1,570	1,570
A11.g.	Flightdeck/Maintenance/System Integration Human Factors	5,052	7,546	2,494	7,305	2,253	7,305	2,253
A11.h.	System Safety Management	799	6,381	5,582	5,500	4,701	5,500	4,701
A11.i.	Air Traffic Control/Technical Operations Human Factors	1,436	6,091	4,655	5,800	4,364	5,800	4,364
A11.j.	Aeromedical Research	3,875	11,003	7,128	9,080	5,205	9,080	5,205
A11.k.	Weather Program	6,580	15,216	8,636	15,476	8,896	15,476	8,896
A11.l.	Unmanned Aircraft Systems Research	3,318	8,318	5,000	24,035	20,717	24,035	20,717
A11.m.	Alternative Fuels for General Aviation		1,900	1,900	7,000	7,000	1,900	1,900
	Commercial Space	2,500	5,262	2,762	2,500	-	2,500	-
A12.b.	NextGen - Wake Turbulence	3,519	8,019	4,500	6,831	3,312	6,831	3,312
A12.c.	NextGen - Air Ground Integration Human Factors	1,336	7,949	6,613	6,757	5,421	6,757	5,421
A12.e.	NextGen - Weather Technology in the Cockpit	1,525	5,860	4,335	3,644	2,119	3,644	2,119
	NextGen - Information Security	1,232	3,000	1,768	1,232	-	1,232	-
	NextGen - Flight Data Exchange Requirements	1,035	2,628	1,593	1,035	-	1,035	-
A13.a.	Environment and Energy	11,588	18,013	6,425	18,013	6,425	18,013	6,425
A13.b.	NextGen - Environmental Research - Aircraft Technologies, Fuels, and Metrics	7,578	29,174	21,596	29,174	21,596	29,174	21,596
A14.a.	System Planning and Resource Management	1,480	2,808	1,328	2,135	655	2,135	655
A14.b.	William J. Hughes Technical Center Laboratory Facility	1,178	4,571	3,393	3,591	2,413	4,571	3,393
	TOTAL	74,406	180,000	105,594	191,000	116,594	191,100	116,694



FY 2019 Conference Language

- **Advanced material/structural safety.**—The conferees provide \$14,720,000 for advanced material/structural safety, including \$6,000,000 to advance the use of new additive materials (both metallic and non-metallic based additive processes) into the commercial aviation industry, and \$4,000,000 to advance the use of fiber reinforced composite material into the commercial aviation industry through the FAA joint advanced materials and structures center of excellence.
- **Unmanned aircraft systems (UAS) research.**—The conferees provide \$24,035,000 for UAS research, including \$12,035,000 for the UAS center of excellence in UAS research, \$2,000,000 to expand the center's role in transportation disaster preparedness and response, and \$10,000,000 to support UAS research activities at the FAA technical center and other FAA facilities.



FY 2019 Conference Language

- **UAS integration programs.**—The conferees reiterate House and Senate direction regarding the development of an Unmanned Traffic Management (UTM) system, Low Altitude Authorization and Notification Capability (LAANC), and the UTM Pilot Program, and direct the FAA to provide the House and Senate Committees on Appropriations with a report and research plan consistent with House and Senate direction no later than 120 days after enactment of this Act.
- **Environmental sustainability.**—The conferees provide a total of \$47,187,000 for research related to environmental sustainability that supports the CLEEN program, as well as the center of excellence for alternative jet fuels and environment. Within the total provided, the FAA is directed to use \$15,000,000 for the center of excellence.



FY 2020 Budget

- **Budget to be submitted to Congress the Week of March 11**
 - Until then the budget information is embargoed
- **Budget Deal will need to agreed to**
 - With out budget deal will have to go to sequester levels



R,E&D FY 2021 Budget

- **FY 2021 target \$120M**
- **Delivered to OST June 2019**
- **FY 2021 remaining schedule**
 - Submit to OMB mid September
 - Submit Presidents request to Congress Feb 3, 2020



Out Year Targets

- **Targets established Feb. 2019**
 - FY 21 - \$120M
 - FY 22 - \$120M
 - FY 23 - \$120M
 - FY 24 - \$120M
 - FY 25 - \$120M
- **Expect targets to change**



FAA Reauthorization

- **Current Authorization signed by President Oct 5, 2018 which extends authorization thru 2023**



Budget Future - TBD

