REDAC Aircraft Safety Subcommittee

Federal Aviation Administration

RE&D Budget Status

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R,E&D FY 2021 Budget

- **FY 21 R,E&D Request $170M**
  - House Appropriation Committee
    - R,E&D funded at $192.6M
  - Senate Appropriation Committee
    - R,E&D funded at $190.1M
  - Funding Bill Enacted December 27, 2020
    - R,E&D funded at $198M

FAA FY 2021 Budget

Appropriation	FY 2021 Request	House Mark	Difference	Senate Mark	Difference	Conference
Operations	$ 11,001,500,000	$ 11,051,500,000	$ 50,000,000	$ 11,001,500,000	$ -	$ 11,001,500,000
Facilities & Equipment	$ 3,000,000,000	$ 3,045,000,000	$ 45,000,000	$ 3,011,980,000	$ 11,980,000	$ 3,015,000,000
Research Engineering & Development	$ 170,000,000	$ 192,665,000	$ 22,665,000	$ 190,097,000	$ 20,097,000	$ 198,000,000
Grants-in-aid for Airports	$ 3,350,000,000	$ 3,850,000,000	$ 500,000,000	$ 3,750,000,000	$ 400,000,000	$ 5,750,000,000
Total	$ 17,521,500,000	$ 18,139,165,000	$ 617,665,000	$ 17,953,577,000	$ 432,077,000	$ 19,964,500,000

FY 2021 R,E&D Enacted

Program	FY 2021 Request ($000)	FY 2021 House Mark ($000)	FY 2021 Request/FY 2021 House +/-	FY 2021 Senate Mark ($000)	FY 2021 Request/FY 2021 Senate +/-	FY 2021 Conference ($000)	FY 2021 Conference Delta with Request +/-
Research, Engineering & Development							
Fire Research and Safety	7,136	7,136	0	7,136	0	7,136	0
Propulsion and Fuel Systems	4,215	4,215	0	4,215	0	4,215	0
Advanced Materials/Structural Safety	1,003	1,191	188	14,720	13,717	14,720	13,717
Aircraft Icing/Digital System Safety/Aircraft Cyber	6,426	7,500	1,074	6,426	0	6,426	0
Continued Air Worthiness	9,642	11,269	1,627	9,642	0	11,269	1,627
Aircraft Catastrophic Failure Prevention Research	0	3,000	3,000	0	0	1,565	1,565
Flightdeck/Maintenance/System Integration Human Factors	7,469	7,469	0	7,469	0	7,469	0
Safety System Management/Terminal Area Safety	5,485	5,485	0	5,485	0	5,485	0
Air Traffic Control Technical Operations Human Factors	5,685	5,685	0	5,685	0	5,685	0
Aeromedical Research	10,235	11,500	1,265	10,235	0	10,235	0
Weather Program	6,236	7,750	1,514	6,236	0	6,236	0
Unmanned Aircraft Systems Research	24,035	24,035	0	24,035	0	24,035	0
Alternative Fuels for General Aviation	2,524	2,524	0	2,524	0	2,524	0
Commercial Space Transportation Safety	5,840	5,840	0	5,840	0	5,840	0
NextGen - Wake Turbulence	3,698	3,698	0	3,698	0	3,698	0
NextGen - Air Ground Integration Human Factors	6,757	6,000	-757	6,757	0	6,000	-757
NextGen - Weather Technology in the Cockpit	1,982	1,982	0	1,982	0	1,982	0
Information/Cyber Security	4,769	4,769	0	4,769	0	4,769	0
NextGen-Flight Deck Data Exchange Requirements	1,000	1,000	0	1,000	0	1,000	0
Environment and Energy	17,911	21,000	3,089	18,013	102	20,303	2,392
NextGen Environmental Research Aircraft Technologies and Fuels	27,009	35,174	8,165	29,174	2,165	31,465	4,456
System Planning and Resource Management	8,022	11,522	3,500	12,135	4,113	13,022	5,000
William J. Hughes Technical Center Laboratory Facilities	2,921	2,921	0	2,921	0	2,921	0
Total	**170,000**	**192,665**	**22,665**	**190,097**	**20,097**	**198,000**	**28,000**

FY 2021 Conference Language

- **Advanced Materials/Structural Safety –** $14,720,000 this includes (1) $6M to advance the use of these new additive materials (both metallic and non-metallic based additive processes) into the commercial aviation industry; (2) $4M to advance the use of fiber reinforced composite materials into the commercial aviation industry through the FAA Joint Advanced Materials and Structures Center of Excellence; and (3) $2M for the FAA to continue its work with existing public-private partnerships that provide leading-edge research, development, and testing of composite materials and structures.

- **Unmanned Aircraft System Research –** $24,035,000 this includes (1) $12,035,000 to support the expanded role of the UAS Center of Excellence (COE) in areas of UAS research, including cybersecurity, agricultural applications, beyond visual line of sight technology, studies of advanced composites and other non-metallic engineering materials not common to manned aircraft but utilized in UAS, the STEM program, and to continue efforts with the UAS safety research facility at the Center to study appropriate safety standards for UAS and to develop and validate certification standards for such systems;

FY 2021 Conference Language

- **UAS Continued:** (2) $2M for the Center's role in transportation disaster preparedness and response, partnering with institutions that have demonstrated experience in damage assessment, collaboration with state transportation agencies, and applied UAS field testing; and (3) $10M to support UAS research activities at the FAA Technical Center and other FAA Facilities.

- **Community and Technical College Centers of Excellence (COE) in Small UAS Technology Training Program –** The FAA should continue working with the UAS Collegiate Training Initiative (CTI) schools and the consortium for small unmanned aircraft system technology training to develop additional benefits and opportunities for engagement as both programs are developed. The FAA should use available funds to assist designated UAS CTIs and include any funding needs permissible under current law for this program in future budget justifications.

FY 2021 Conference Language

- **Environmental sustainability –** The agreement provides $20,303,000 for Environment and Energy, of which up to $3M is additional funding for the FAA to analyze noise at a national level using existing public health surveillance datasets and to conduct field studies in the U.S. The agreement provides $31,465,000 for NextGen Environmental Research Aircraft Technologies and Fuels, of which up to $3M is additional funding to support the Continuous Lower Energy, Emissions and Noise (CLEEN) program and $15M is for the Center of Excellence. The agreement directs the FAA to continue to provide resources to certify fuels for safe use in commercial aviation and their inclusion for meeting compliance obligations under CORSIA, and encourages utilization of the Aviation Sustainability Center (ASCENT) researchers to address the entire sustainable aviation fuels supply chain to identify and enable industry to overcome key barriers to entry such as fuels costs.

FY 2021 House Language

- **Aviation Professionals –** The Committee supports increasing the strength and number of aviation professionals who are well – trained and can be relied upon to make air travel safe and efficient. To that end, the Committee provides $5,000,000 for the aviation maintenance technician development program and $5,000,000 for aviation workforce development program in accordance with section 625 of the FAA Reauthorization Act (P.L. 115-254). Additionally, the Committee directs the FAA to include the section 625 grant program as part of the workforce diversity briefing required under the “Operations” heading.

FY 2022 Budget

- **OMB Passback –?**
- **President's Budget Submission – Date: TBD**

R,E&D FY 2023 Budget

- **FY 2023 target ?**
- **Deliver to OST June 2021?**
- **FY 2023 remaining schedule**
  - Submit to OMB mid September
  - Submit President’s request to Congress Feb. 2022

Out Year Targets

- **Targets established ?**
  - FY 23 - ?
  - FY 24 - ?
  - FY 25 - ?
  - FY 26 - ?
  - FY 27 - ?
- **Expect targets to change**

FAA Reauthorization

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

Budget Future - TBD