

**Federal Aviation Administration  
Research, Engineering & Development  
FY 2002 House/Senate Mark**

Budget Request	\$187,781,000	
House Recommendation	<u>\$191,481,000</u>	
Difference (+/- Request)	\$ +3,700,000	(1.97% increase from budget request)
Senate Recommendation	<u>\$195,808,000</u>	
Difference (+/- Request)	\$ +8,027,000	(4.27% increase from budget request)
Conference Mark	\$195,000,000	(3.84% increase from budget request)

**Appropriations and Obligations Limitations  
(\$ in Thousands)**

	FY01 Enacted	FY02 Request	FY02 House	FY02 Senate	FY02 Conf
<b>A1. System Development and Infrastructure</b>	<b>17,414</b>	<b>21,727</b>	<b>13,450</b>	<b>16,584</b>	<b>16,031</b>
a. System Planning and Resource Management	1,164	1,458	1,200	1,458	1,200
b. WJHTC Laboratory Facility	12,250	12,545	12,250	12,545	12,250
c. Center for Advanced Aviation System Development	4,000	5,143	0	0	0
d. Information System Security	0	2,581	0	2,581	2,581
<b>A4. Weather</b>	<b>24,806</b>	<b>28,368</b>	<b>21,668</b>	<b>25,668</b>	<b>23,668</b>
a. Weather Program	24,806	28,368	21,668	25,668	23,668
<b>A6. Aircraft Safety Technology</b>	<b>62,679</b>	<b>53,223</b>	<b>60,223</b>	<b>64,093</b>	<b>63,782</b>
a. Fire Research and Safety	4,750	5,242	5,242	5,242	5,242
b. Advanced Materials/Structural Safety	2,797	2,974	4,974	2,974	2,974
c. Propulsion and Fuel Systems	8,200	5,168	5,168	8,968	8,568
d. Flight Safety/Atmospheric Hazards Research	4,109	4,150	4,150	6,420	6,420
e. Aging Aircraft	33,384	27,111	32,111	31,911	32,000
f. Aircraft Catastrophic Failure Prevention Research	2,782	2,794	2,794	2,794	2,794
g. Aviation Safety Risk Analysis	6,657	5,784	5,784	5,784	5,784
<b>A7. System Security Technology</b>	<b>54,520</b>	<b>50,325</b>	<b>44,511</b>	<b>55,325</b>	<b>44,511</b>
a. Explosives and Weapons Detection	42,606	38,438	32,624	43,438	32,624
b. Airport Security Technology Integration	2,462	2,084	2,084	2,084	2,084
c. Aviation Security Human Factors	5,145	5,163	5,163	5,163	5,163
d. Aircraft Hardening	4,307	4,640	4,640	4,640	4,640
<b>A8. Human Factors (HF) and Aviation Medicine</b>	<b>24,100</b>	<b>25,927</b>	<b>24,027</b>	<b>25,927</b>	<b>24,527</b>
a. Flightdeck/Maintenance/System Integration Human Factors	10,100	9,906	9,906	9,906	9,906
b. Air Traffic Control/Airway Facilities Human Factors	8,000	9,900	8,000	9,900	8,500
c. Aeromedical Research	6,000	6,121	6,121	6,121	6,121
<b>A9. Environment and Energy</b>	<b>3,481</b>	<b>7,602</b>	<b>27,602</b>	<b>7,602</b>	<b>22,081</b>
a. Environment and Energy	3,481	7,602	27,602	7,602	22,081
<b>A10. Strategic Partnerships</b>	<b>0</b>	<b>609</b>	<b>0</b>	<b>609</b>	<b>400</b>
a. Strategic Partnerships	0	609	0	609	400
<b>TOTAL</b>	<b>187,000</b>	<b>187,781</b>	<b>191,481</b>	<b>195,808</b>	<b>195,000</b>

Note: Does not reflect \$411.4 thousand rescission in FY 2001 pursuant to Public Law 106-554.

## FY 2002 Conference Mark

### Major Highlights:

- System Planning and Resource Management reduced by \$-258,000. Funds for North Dakota State University (NDSU) to conduct a study on pricing behavior of airlines operating in small and medium-sized communities provided to OST (Transportation Planning, Research, and Development).
- Technical Laboratory Facilities reduced by \$-295,000.
- Funding for CAASD (\$-5,143,000) and weather-related activities at Juneau, AK (\$-6,700,000) transferred to F&E at the budget request level.
- Wake Turbulence funded at \$4,000,000 (increase of \$+3,000,000); weather research reduced by \$-1,000,000.
- Propulsion and Fuel Systems increased by \$+3,400,000 as follows:
  - \$2,000,000 for Specialty Metals Processing Consortium.
  - \$1,000,000 for research into the use of blended aviation fuels.
  - \$ 400,000 for (GAT-CITEP).
- Flight Safety/Atmospheric Hazards increased by \$+2,270,000 to finance start-up costs for a joint industry-university aviation safety initiative to conduct in-flight simulation research at the Roswell Industrial Air Center for civilian aircraft pilots.
- Aging Aircraft increase by \$+4,889,000 with the following allocations:
  - \$4,200,000 for National Institute for Aviation Research
  - \$3,000,000 for Center for Aviation Systems Reliability (CASR)
  - \$3,000,000 for Aircraft Nondestructive Inspection Validation Center
  - \$3,600,000 for Engine Titanium Consortium (ETC)
  - \$4,600,000 for Airworthiness Assurance Center of Excellence (AACE)
- Explosive/Weapons Detection decreased by \$-5,814,000, recognizing the new security user fee. Of the funds provided, \$5,000,000 is for further development of PFNA technology.
- ATC/AF Human Factors decreased by \$-1,400,000, although \$500,000 above the FY 2001 enacted level.
- Environment and Energy increased by \$+14,479,000 for lower noise aircraft technologies.
- Strategic Partnerships reduced by \$-209,000, but partially funded.
- No additional Congressionally directed items.

### In-House Reductions:

	<u>AAR</u>	<u>ACT</u>	<u>Total</u>
CAASD (to F&E)	\$104K	\$144K	\$248K

## FY 2002 House Mark

### Major Highlights:

- New start for Information Systems Security zeroed (\$-2,581,000). “For the second consecutive year, the Committee recommendation deletes this new initiative due to budget constraints...”
- New start for Strategic Partnerships zeroed (\$-609,000). No rationale provided.
- Funding for CAASD transferred to F&E at the FY 2001 enacted level (\$4,000,000) to “...unify funds for CAASD in a single budget. The Committee’s review of the budget justification leads the Committee to believe that this work is centrally related to activities performed in this appropriation, and not in RE&D...” versus \$5,143,000 requested in the budget.
- Funding for weather-related activities at Juneau, Alaska transferred to F&E at \$5,000,000 versus \$6,700,000 requested in the budget.
- Aircraft noise research increased by \$20,000,000 “...to speed up the introduction of lower noise aircraft technologies. The Committee expects FAA to work directly with [NASA] to advance aircraft engine noise research.”
- Other programmatic increases in aircraft safety (\$+7,000,000).
  - \$+2,000,000 in Advanced Materials/Structural Safety “...to continue activities of the specialty metals processing consortium.”
  - \$+5,000,000 in Aging Aircraft for “...equipment upgrades at the National Institute for Aviation Research...” (Wichita State).
- Other programmatic decreases in system development and infrastructure (\$-553,000), system security (\$-5,814,000) and human factors (\$-1,900,000).
  - \$-258,000 in System Planning and Resource Management “...to fund higher priority activities.”
  - \$-295,000 in Technical Laboratory Facilities which “...holds funding to the fiscal year 2001 level due to budget constraints...”
  - \$-5,814,000 in Explosive/Weapons Detection due to “...Problems with FAA’s management of its civil aviation security program...”
  - \$-1,900,000 in ATC/AF Human Factors which “...holds funding...to the fiscal year 2001 level.”

### Other Congressionally Directed Items:

- No other Congressionally directed items.

Information System Security (zeroed)	\$ 52K	\$ 72K	\$124K
Strategic Partnerships (zeroed)	<u>\$ 13K</u>	<u>\$ 17K</u>	<u>\$ 30K</u>
Total	\$169K	\$233K	\$402K

## FY 2002 Senate Mark

### Major Highlights:

- System Planning and Resource Management funded as requested (\$1,458,000). “The Committee recommendation includes \$150,000 for North Dakota State University (NDSU) to conduct a study on pricing behavior of airlines operating in small and medium-sized communities.”
- Transfers funding for CAASD to F&E at the requested funding level (\$5,143,000).
- Earmarks entire Weather program. Transfers funding for Juneau, Alaska, to F&E at the requested funding level (\$6,700,000). “The Committee recommendation provides \$5,000,000 for Wake turbulence research, an increase of \$+4,000,000.”
- Programmatic increases in Aircraft Safety (\$+10,870,000).
  - \$+3,800,000 in Propulsion and Fuel Systems, “\$2,000,000 is to continue activities of the specialty metals processing consortium. The Committee recommendation includes \$1,000,000 for continued research into the performance and combustion characteristics of blended aviation fuels containing at least 80 percent ethanol. In addition the Committee recommendation includes \$800,000 for the General Aviation Propulsion-Compression Ignition Test and Evaluation Program (GAP-CITEP), a joint NASA and FAA effort to evaluate durability testing of alternative fuels (Jet A and Diesel) to facilitate the transition away from leaded aviation fuels for general aviation.”
  - \$+2,270,000 in Flight Safety/Atmospheric Hazards, “for a joint industry-university aviation safety initiative to conduct in-flight simulation research at the Roswell Industrial Air Center for civilian aircraft pilots.”
  - \$+4,800,000 in Aging Aircraft. “Within the appropriation, the recommendation includes \$3,800,000, an increase of \$2,000,000 from the budget request for the Center for Aviation Systems Reliability (CASR); \$3,000,000 for the Aircraft Nondestructive Inspection Validation Center (AANC); \$4,000,000 for the activities of the Engine Titanium Consortium (ETC) effort, \$1,900,000 more than the budget estimate; and \$5,000,000 for other activities of the Airworthiness Assurance Center of Excellence (AACE), an increase of \$1,900,000 over the budget estimate.”
- Programmatic increases in Explosive and Weapons Detection. “The Committee recommendation includes \$5,000,000 to continue development of the pulsed fast neutron analysis (PFNA) cargo inspection system.”

### Other Congressionally Directed Items:

- “The Committee directs the FAA to include prior year breakout information with the Budget Justification...greater detail on the prior and current fiscal year budget execution would be very useful...”
- “The Committee directs the FAA to work with NASA to conduct a study on aircraft engine noise reduction technology research.”

### Watch Item → In-House Reductions:

	<u>AAR</u>	<u>ACT</u>	<u>Total</u>
CAASD (to F&E)	\$104K	\$144K	\$248K