

United States General Accounting Office Washington, DC 20548

July 2, 2004

The Honorable Richard C. Shelby Chairman The Honorable Patty Murray Ranking Minority Member Subcommittee on Transportation/Treasury and General Government Committee on Appropriations United States Senate

The Honorable Ernest J. Istook Chairman The Honorable John W. Olver Ranking Minority Member Subcommittee on Transportation and Treasury, and Independent Agencies Committee on Appropriations House of Representatives

Subject: FAA Budget Policies and Practices

In recent years, Congress has raised concerns about cost growth in the Federal Aviation Administration's (FAA) operating budget. Appropriators noted several expenses in FAA's fiscal year 2004 facilities and equipment (F&E) account—the account used by FAA for much of its capital purchases—budget submission that appeared to be ongoing operating expenses. The House and Senate appropriations subcommittee reports on FAA's fiscal year 2004 budget submission highlighted 17 such budget items and recommended that the expenses for these items either be transferred to the operations budget or not receive funding. As a result of these concerns, the Conference Report accompanying the fiscal year 2004 Omnibus Appropriations Act directed us to conduct an audit of FAA's policies and practices for determining whether an expense should be budgeted in its operating accounts or in the capital account.¹

Specifically, this report addresses the following questions: (1) What are FAA's policies for determining whether an expense—including personnel compensation, benefits, travel, and related expenses—belongs in its capital (F&E) or Operations accounts? (2) How did FAA implement its policies for determining whether 17 specific budget line items identified by appropriators belong in its F&E or Operations accounts, including personnel compensation, benefits, travel, and related expenses? (3) How do FAA's budget policies compare with those of other civilian agencies with large acquisition

¹Conference Report 108-401, Div. F. Title I @ 928 FY04 Omnibus Appropriations Act.

budgets, such as the National Aeronautics and Space Administration (NASA) and the Department of Defense (DOD)? To identify FAA's policies for deciding whether an expense belongs in its capital² (F&E) or operations accounts, we reviewed FAA Order 2500.8A³, which contains the agency's policies for making these decisions. We also interviewed FAA officials responsible for preparing FAA's budget submission. To determine how FAA implemented its policies for the 17 budget line items at issue for the appropriators, we compared FAA's policies for assigning budget line items to the F&E and Operations accounts with FAA's implementation of those policies in its fiscal year 2004 budget submission. We also interviewed the FAA officials responsible for preparing each of the 17 budget line items and reviewed the supplemental documentation they provided to explain FAA's placement of the 17 line items in the F&E account. To compare FAA's policies for categorizing budget line items with those of NASA and DOD, we obtained comparable policy documents from NASA and DOD and met with officials of both agencies responsible for preparing budget submissions to clarify their agencies' policies and obtain the information needed to draw accurate comparisons. We then compared the three agencies' policies. We also compared FAA's, NASA's, and DOD's processes for preparing budget estimates and their communication with appropriations committee staff. Our review did not assess any FAA budget line items other than the 17 identified above, nor did it address cost growth issues, the purpose of or funding for any of the 17 budget line items or their subcomponents, the accuracy of FAA's budget estimates, or NASA's and DOD's approach to developing performance-based budgets. We determined that the budget data we reviewed were sufficiently reliable for our purposes. We performed our work from February through June 2004 in accordance with generally accepted government auditing standards. This report summarizes the information we provided to your staff on May 14, 2004. The briefing slides, which provide more details about our analysis, are attached as enclosure I.

Background

For fiscal year 2004, FAA submitted budget requests for four appropriations accounts: F&E; Operations; Research, Engineering, and Development (RE&D); and the Airport Improvement Program (AIP). FAA's budget authority for fiscal year 2004 was \$13.9 billion. In preparing this budget submission, FAA officials used FAA Order 2500.8A (Apr. 9, 1993), which defines three of the appropriations accounts, including the F&E (capital) account, and identifies the costs that are to be budgeted in each. House and Senate appropriations committee staff approved the order before it was implemented.

²While there are accounting definitions for capital expenses, these definitions are used for entirely different purposes than the definitions of capital expenses used by federal agencies in preparing their annual budgets. Specifically, federal accounting standards promulgated by the Federal Accounting Standards Advisory Board define property, plant, and equipment and establish their accounting, including capitalization. For budgeting purposes, capital assets are defined in OMB Circular A-11 and may differ from accounting. For example, capital assets as defined in A-11 may or may not be capitalized (recorded in an entity's balance sheet) under federal accounting standards.

³Federal Aviation Administration, *Funding Criteria for Operations, Facilities and Equipment (F&E), and Research, Engineering and Development (R,E&D) Accounts*, 2500.8A (April 9, 1993).

Summary

In summary, we found the following:

- FAA Order 2500.8A contains the agency's policies for assigning budget expenditures to the F&E, Operations, and RE&D accounts. In reviewing this order, we found that it is outdated and unclear and that the linkages between FAA's policies and the assignment of budget line items to the F&E and Operations accounts are very general. For example, it was not always possible to use this order to distinguish between F&E programs that allow FAA to modernize or add new capabilities and maintenance programs (Operations) that allow FAA to maintain current capabilities (e.g., when a system designed to modernize the national airspace system is deployed at specific locations and the cost for operating systems at these locations is "handed off," or moved, to the Operations account). In addition, the order is not structured by organizational objectives (performance goals), as is part of FAA's fiscal year 2004 budget estimate for F&E. This structural difference makes it difficult to compare the F&E portion of the budget submission with FAA's policies. Additionally, the order lacks the level of detail needed for both FAA officials and appropriators to easily distinguish between F&E (capital) and Operations expenditures. The order also does not reflect FAA's current process for acquiring goods and services (acquisition management), which influences whether an expenditure for a project is categorized as an F&E or an Operations expense. Because FAA contended that some of its problems with modernizing the air traffic control system were caused by federal acquisition regulations, Congress exempted FAA in November 1995 from most federal procurement laws and regulations and directed FAA to develop a new acquisition management system. FAA Order 2500.8A includes an outdated appendix on the agency's process for acquiring major systems, which reflects the process FAA used before implementing its new acquisition management system in 1996.
- According to our analysis, while FAA's policies for categorizing expenses are very broad and give the agency wide latitude, FAA followed the policies outlined in its 1993 order for the majority of the 17 budget line items identified by the appropriators in FAA's fiscal year 2004 budget submission. FAA concurred with the appropriators that 5 of these budget line items should have been categorized as Operations expenses and said that it would restructure the items in its next budget submission; however, the agency maintained that the remaining 12 items were appropriately categorized as F&E expenses and cited specific agency policies to support the items' placement there. Although FAA's policies for assigning budget line items to the F&E and Operations accounts are very general, our analysis generally supported FAA's categorizations.
 - For four of the five budget line items that FAA concurred with appropriators should have been categorized as Operations expenses and would be restructured in its next budget submission, we found that their placement in the F&E account in the 2004 budget submission was generally consistent with

the budget policies set forth in Order 2500.8A. However, we found that FAA's policies were particularly unclear for 1 of these items and determined that this item could be budgeted out of either the F&E or the Operations account.

- FAA's placement of the remaining 12 budget line items in the F&E account appears to be consistent with Order 2500.8A. FAA's budget submission alone did not adequately explain why these line items, which were relatively new requests for funding, should be categorized as F&E rather than Operations expenses. However, after examining additional FAA documents and receiving explanations from agency officials, we found that the placement of these items in the F&E budget account follows FAA's policies. FAA has not requested funding for (has "zeroed out") these 12 budget line items in its fiscal year 2005 budget estimates, pending clarification from appropriations committee staff.
- FAA's budget policies cannot readily be compared with those of NASA and DOD. While the policies of all three agencies use similar budgetary language, the policies cannot be compared in detail because the agencies use different budgetary approaches. Each agency independently developed its own budget format in response to the current administration's direction that federal agencies develop performance-based budgets. NASA adopted a new budget format and revised its budget policies accordingly. While NASA officials noted value in this approach for management purposes, we have found that for some decisionmaking, it could be useful for federal agencies to make meaningful distinctions between capital investments and operating expenses in their budgets. However, under some approaches to performance-based budgeting, this distinction may be lost.
 - Before fiscal year 2003, FAA's F&E budget justification was generally aligned with FAA Order 2500.8A and included activities such as "Procurement and Modernization of Air Traffic Control Facilities and Equipment." In fiscal year 2003, FAA revised its F&E budget justification largely to reflect organizational objectives (performance goals) such as "Improve Efficiency of the Air Traffic Control System." However, FAA did not revise its budget policies to link them to the new objectives. This makes it difficult to determine whether the placement of items in the F&E account is consistent with the budget policies. FAA officials did not discuss this revision with appropriations committee staff before or during their move toward a performance-based budget; however, according to a senior Department of Transportation official, the department has conducted outreach with appropriations staff to gain their acceptance of the principles of performance-based budgeting.
 - NASA submitted a budget request for three appropriations accounts: Science Aeronautics and Exploration, Space Flight Capabilities, and Inspector General, and NASA's budget authority for fiscal year 2004 was \$15.4 billion. NASA

relies on a "full-cost"⁴ budgeting methodology to identify costs associated with programs and developed its first "full-cost" budget for fiscal year 2004. "Full-cost" budgeting led to changes in both NASA's budget policies and presentation of capital costs in its budget justification. This approach does not identify capital costs as a separate or distinct category of costs to be reported within a program area in the budget. NASA rolls up all of its capital costs with other costs to illustrate to appropriators how much it intends to spend in its program areas. NASA integrates its strategic plan and performance information into its budget justifications to illustrate how much it intends to spend to achieve its objectives. Before transitioning to "full-cost" budgeting, NASA met with appropriations committee staff to discuss how "full-cost" budgeting would change its budget justifications. As a result of these discussions, a senior NASA official told us that the agency continues to provide certain kinds of information that appropriations committee staff said they did not want to lose in the transition to "full-cost" budgeting.

DOD has many appropriations accounts, and its budget authority for fiscal year 2004 was \$441.4 billion. Each service has accounts for personnel; operations and maintenance; research, development, test, and evaluation (RDT&E); procurement; military construction, and family housing; and base realignments and closures (BRAC). Certain appropriations accounts report only investments⁵ ("capital expenses"), and others report a mix of both operating and capital investment costs. For example, the procurement and military construction appropriations accounts are used solely for investments ("capital" expenses). The RDT&E and BRAC appropriations accounts are used both for investments ("capital" expenses) and operating expenses. DOD also uses a unit cost dollar threshold of \$250,000 to define operating and capital investment costs. Costs up to \$250,000 are operating expenses, and costs equal to or greater than a unit cost of \$250,000 are investment ("capital") expenses. DOD's effort to link performance with budget resources is ongoing, and DOD is implementing a framework for establishing department-level performance goals and measures and tracking results. DOD has also linked some resources with metrics for tracking results in broad program areas (e.g., air combat, airlift, and basic research) in the fiscal year 2004 budget and plans to expand such linkages over the next few budget cycles. DOD's approach has not affected either its investment ("capital") budget policies or its presentation of investment costs or operating expenses in its budget justification.

Conclusions

The budget policies reflected in FAA's 1993 order have not kept pace with FAA's recent move to a performance-based budget for its F&E account and do not reflect the agency's current (1996) acquisition management system. As a result, the F&E portion of FAA's budget submission is hard to follow because its performance-based format does not

⁴NASA's "full-cost" definition does not include costs that the federal government does not currently include in the budget, such as accruing retiree health benefits.

⁵DOD's capital costs are referred to as investments and are roughly comparable to FAA's F&E expenses.

track with the agency's budget policies, some of which are ambiguous. Without any communication from FAA officials to explain the changes they have made as part of their move toward performance-based budgeting, committee appropriations staff have had difficulty (1) distinguishing clearly between F&E and Operations expenses, (2) determining when a program in a budget line item is intended to modernize an existing capability or maintain it, and (3) tracking budget line items when they are moved from the F&E to the Operations account (e.g., when a system designed to modernize the national airspace system is deployed at specific locations and the cost for operating systems at these locations is "handed off," or moved, to the Operations account). Communicating with appropriations committee staff, as NASA officials did when they shifted to performance-based budgeting, would allow FAA officials to clarify their actions, determine the types of information the committees need to make funding decisions, and help ensure that this information is not lost in the transition to this new budget format.

Recommendations

We recommend that the Secretary of Transportation direct the FAA Administrator to take the following three actions to clarify FAA's rationale for allocating budget expenditures between its F&E and Operations budget accounts:

- Update FAA Order 2500.8A in consultation with appropriations committee staff.
- Clearly distinguish in the revised order between maintenance programs (Operations) that allow FAA to maintain current capabilities and F&E programs that allow FAA to modernize or add new capabilities.
- Revise FAA's budget practices to make it easier for appropriators to track funding when the agency moves funds for individual budget line items from one budget account to another.

Agency Comments

We provided a draft of this report to the Department of Transportation (DOT), FAA, NASA, and DOD for their review and comment. DOT, FAA, and DOD provided oral comments, stating that they had no comments on the report. NASA provided technical comments, which can be found in Enclosure III.

NASA had three comments. First, NASA stated that while the GAO report accurately states that, "NASA relies on a 'full-cost' budgeting methodology to identify costs associated with programs and developed its first 'full-cost' budget for fiscal year 2004," the statement that " 'Full-cost' budgeting led to changes in both NASA's capital budget policies and presentation of capital costs," is potentially misleading and should be changed. NASA has not had a distinct set of separate capital budgeting procedures, therefore, the word 'capital" should be removed when referring to NASA's budget policies. At one time, NASA did have a separate 'mission support' appropriation that covered such institutional infrastructure items as civil service personnel salaries,

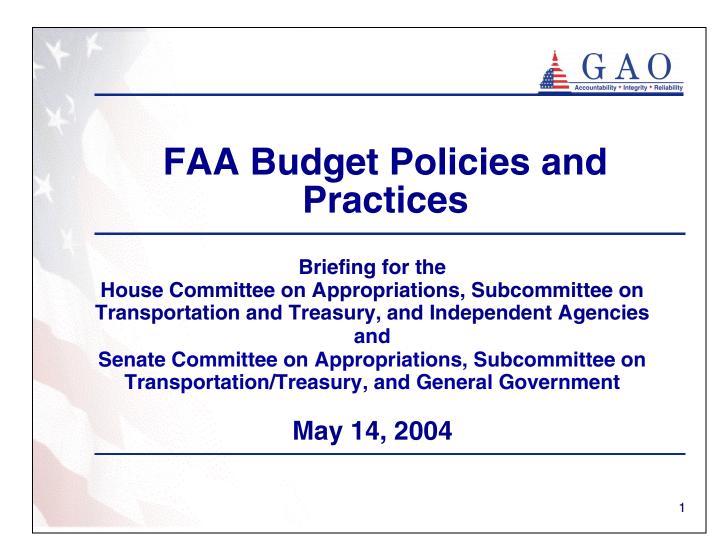
construction of facilities, and research operation support. However, the mission support appropriation still included a mix of institutional resources, some of which supported development efforts and are included presently in the full cost of development programs." As requested, we deleted the term "capital" in reference to NASA's budgeting policies in the final report and placed a note on the corresponding briefing slide in Enclosure I. For the second comment regarding NASA's use of performance-based ("fullcost") budgeting, we acknowledge that NASA has found value in using this approach for management purposes; however, it is GAO's position that it could be useful for federal agencies to make meaningful distinctions between capital investments and operating expenses in their budgets because under some approaches to performance budgeting, this distinction may be lost. We incorporated NASA's position into our letter and placed a note on the corresponding briefing slide in Enclosure I. Finally, we added a note to the appropriate briefing slide in Enclosure I to reflect NASA's third comment that it reviewed its "full-cost" practices and its overall budget formulation process in 2003.

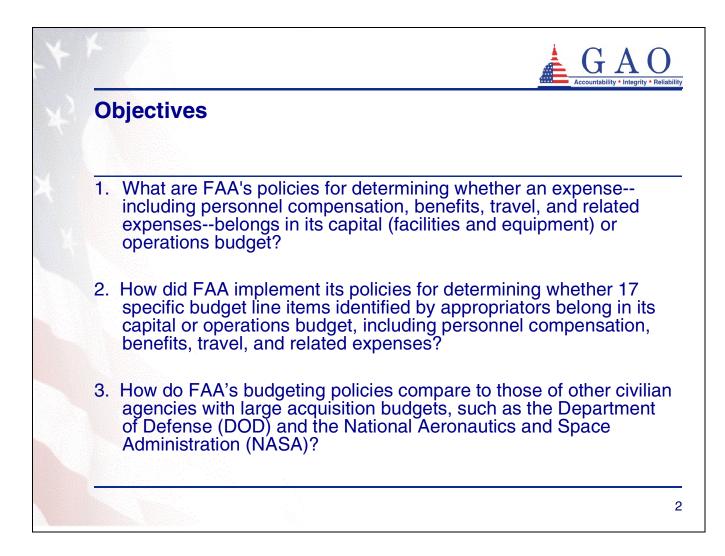
We are sending copies of this report to interested Congressional Committees; the Secretary of Transportation, the FAA Administrator, the Secretary of Defense, and the NASA Administrator. We will also make copies available to others upon request. In addition, the report will be available at no charge on GAO's Web site at http://www.gao.gov.

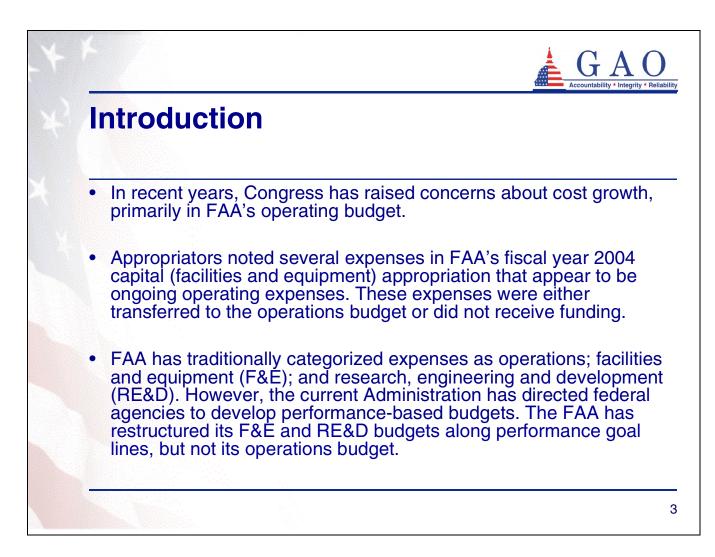
If you or your staff have any questions about this report, please call me at <u>heckerj@gao.gov</u> or at (202) 512-2834. Individuals making key contributions to this report are listed in enclosure IV.

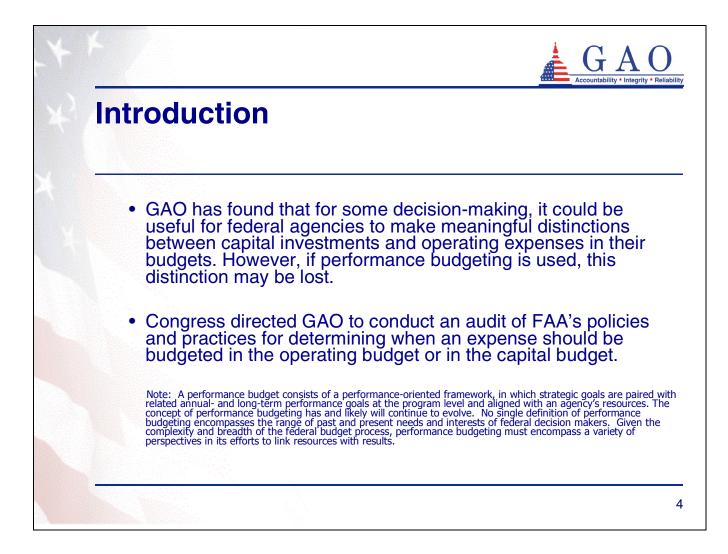
JayEtta Z. Hecker Director, Physical Infrastructure Team

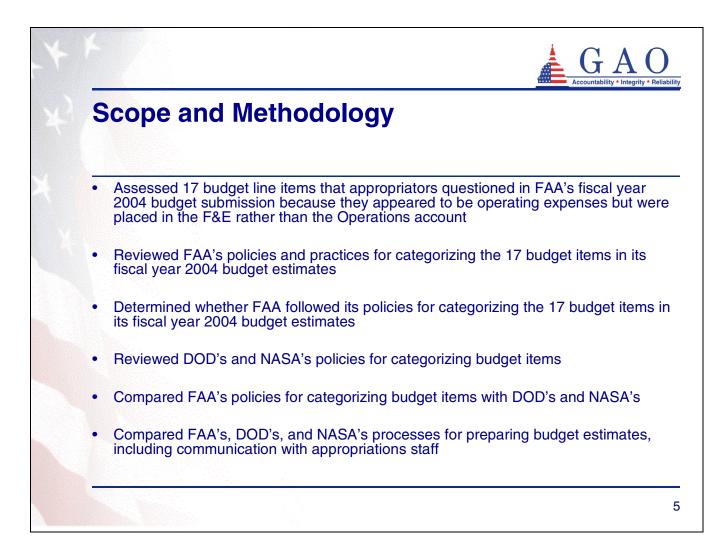
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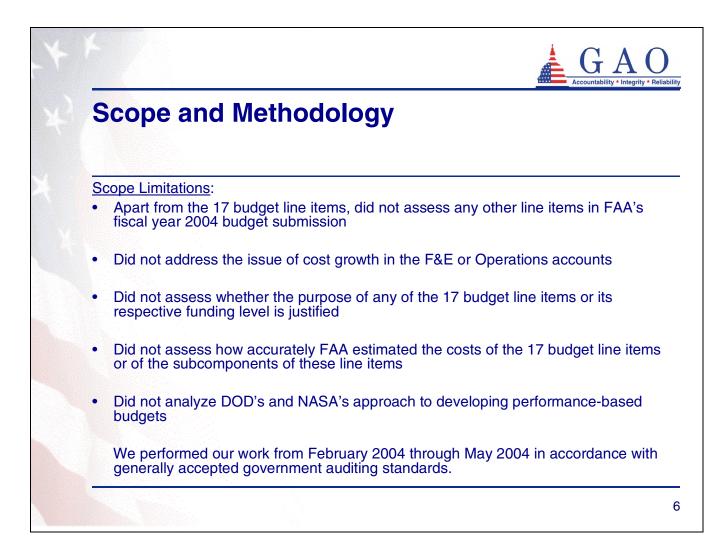


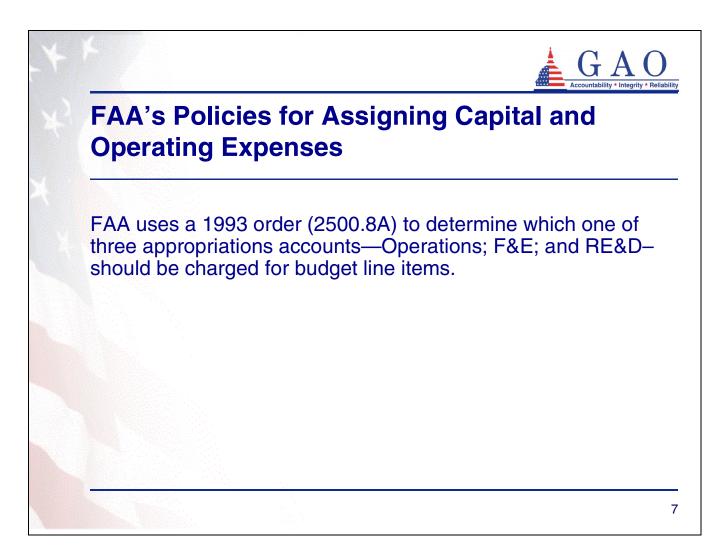




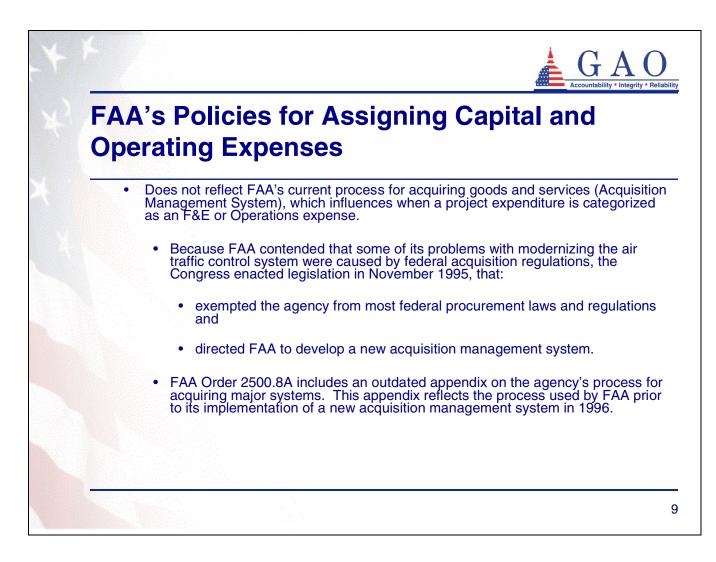














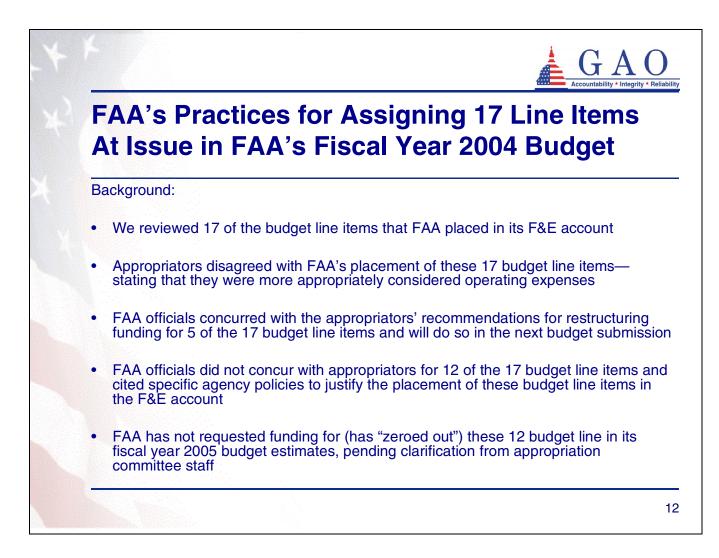


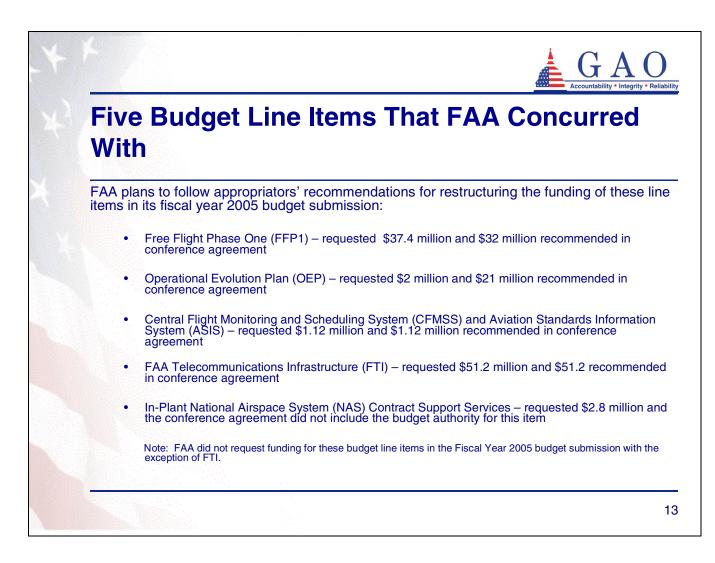
FAA's Policies for Assigning Capital and Operating Expenses

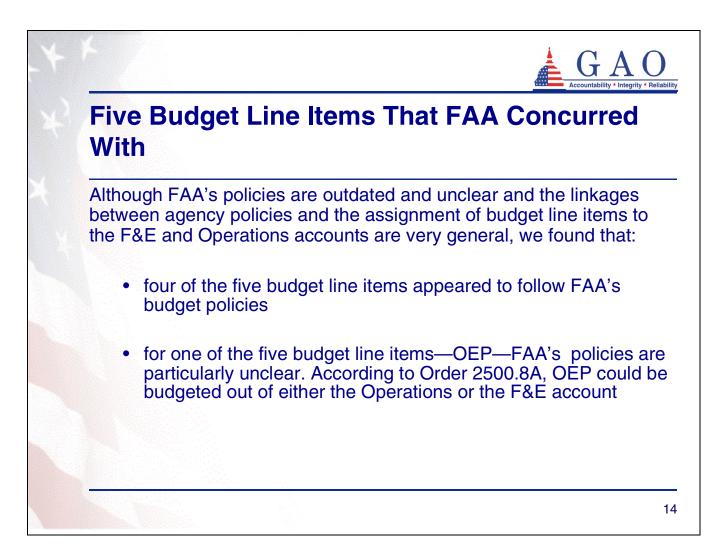
However, according to FAA's budgeting policies (2500.8A) for personnel, compensation, benefits, travel, and related expenses, by exception, certain personnel are funded from the <u>benefiting account</u> (e.g, F&E or Operations).

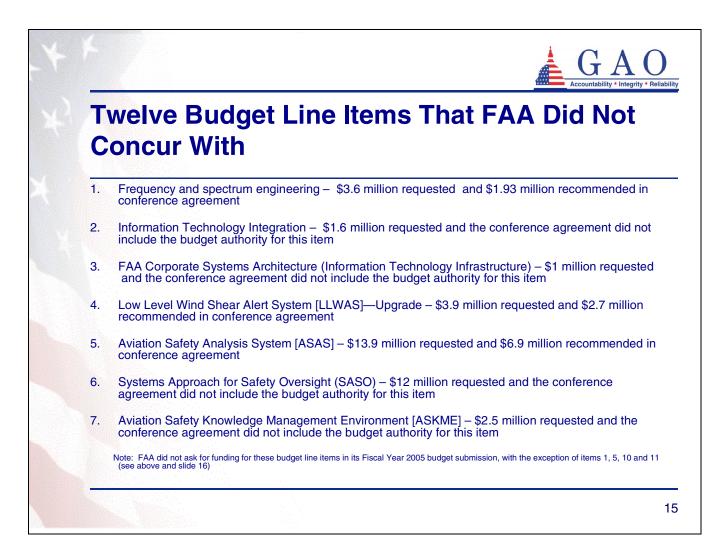
For example, Operations personnel performing direct work on F&E projects and/or F&E personnel performing direct work to satisfy Operations requirements are funded by the benefiting account.

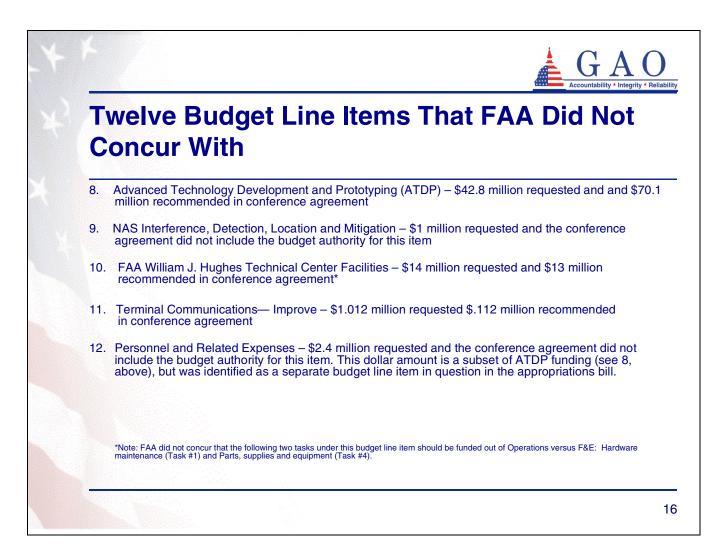
However, as mentioned previously, FAA's policies are out of date, vague, and do not reflect the agency's current process for acquiring goods and services.

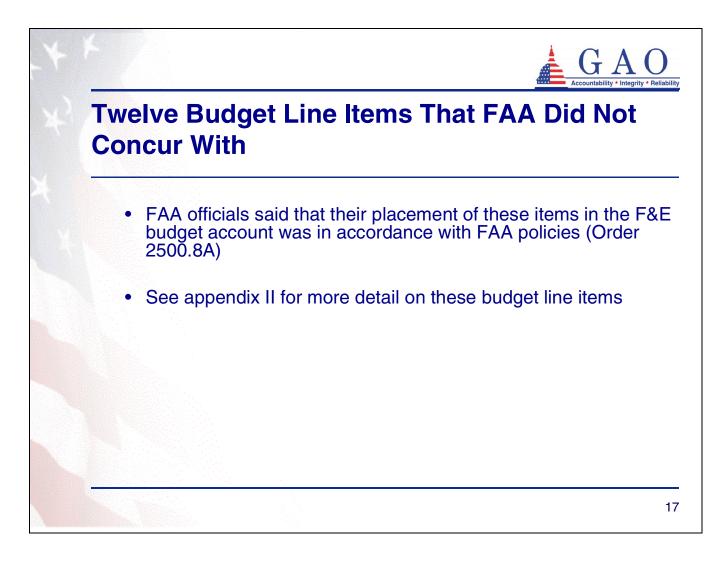


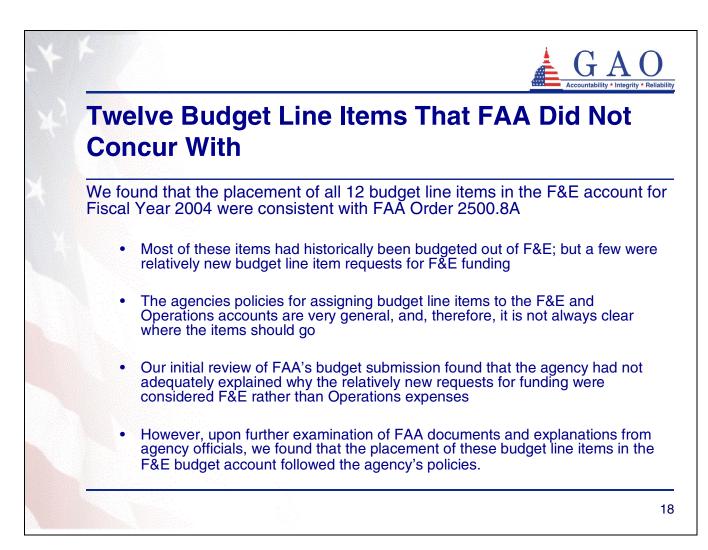


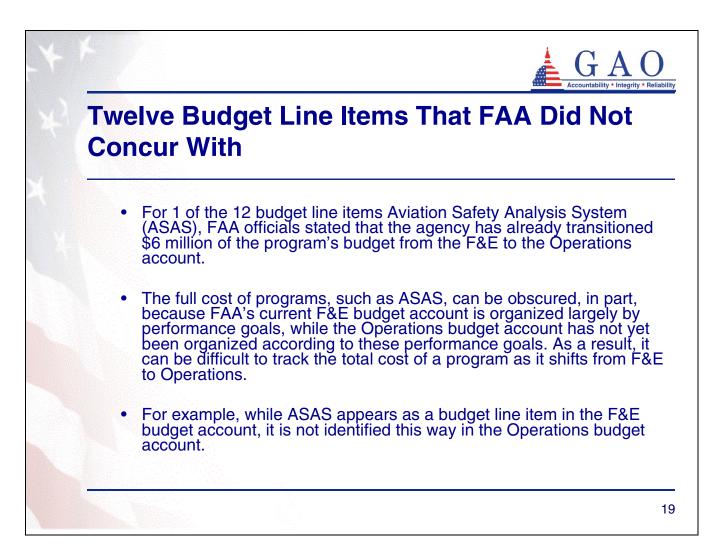


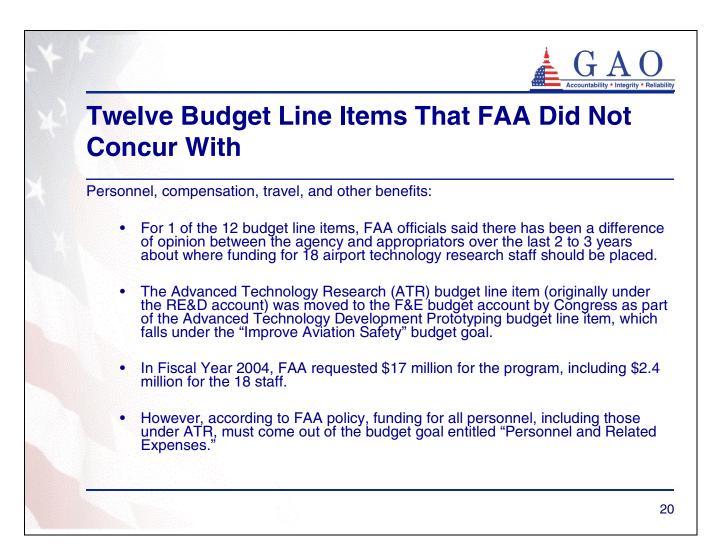


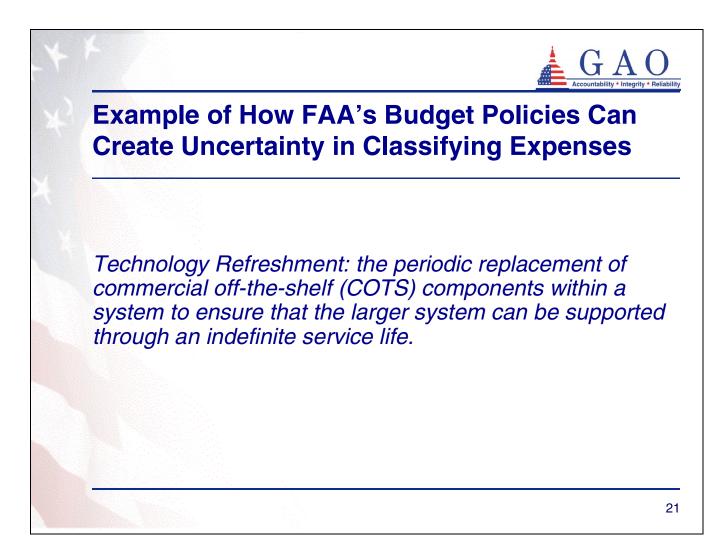


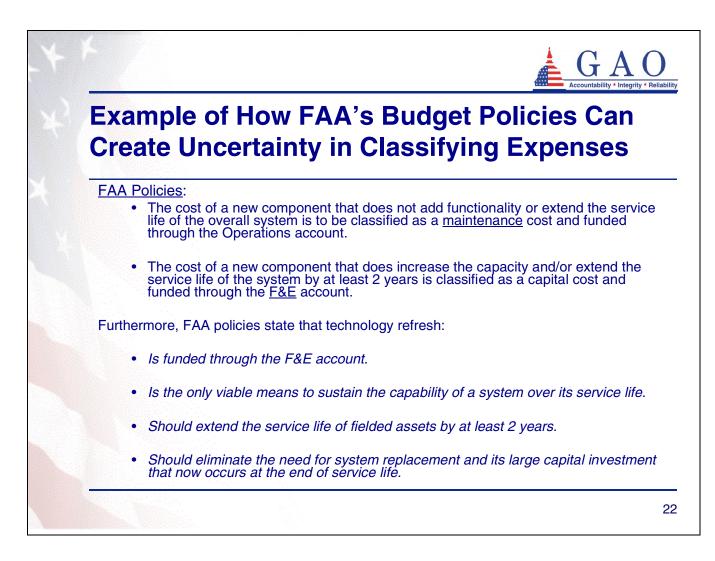


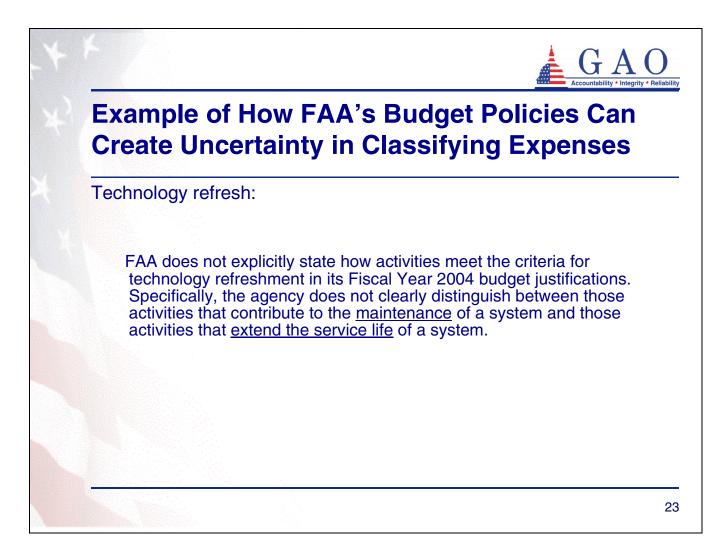


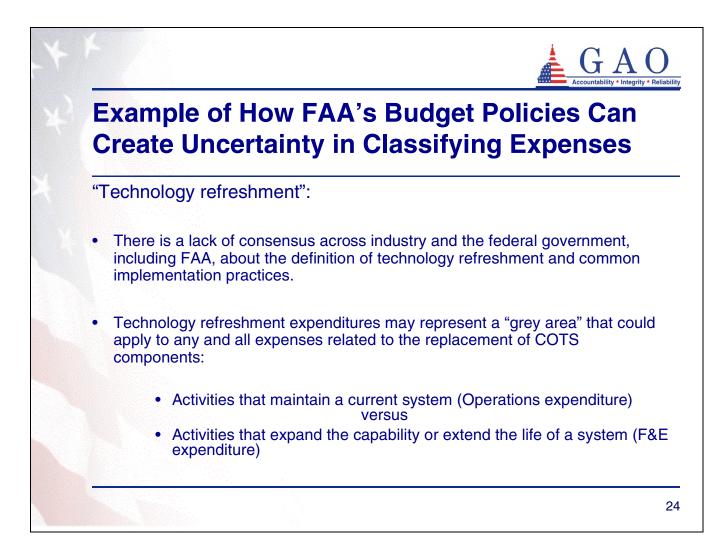


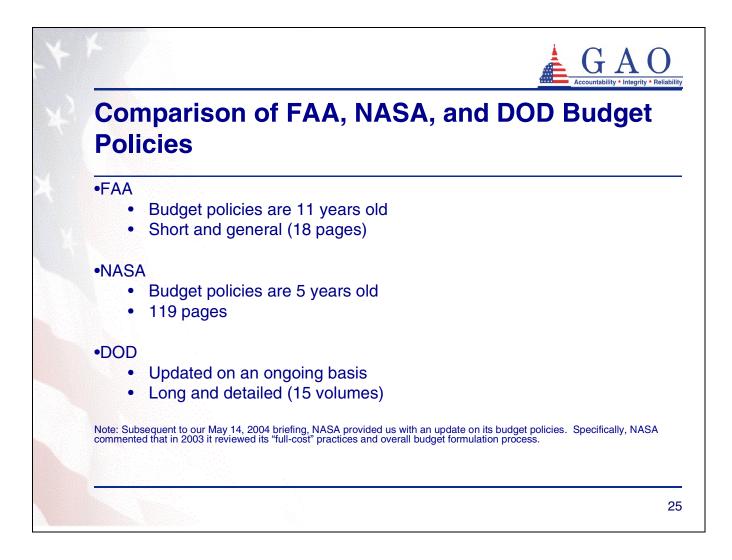


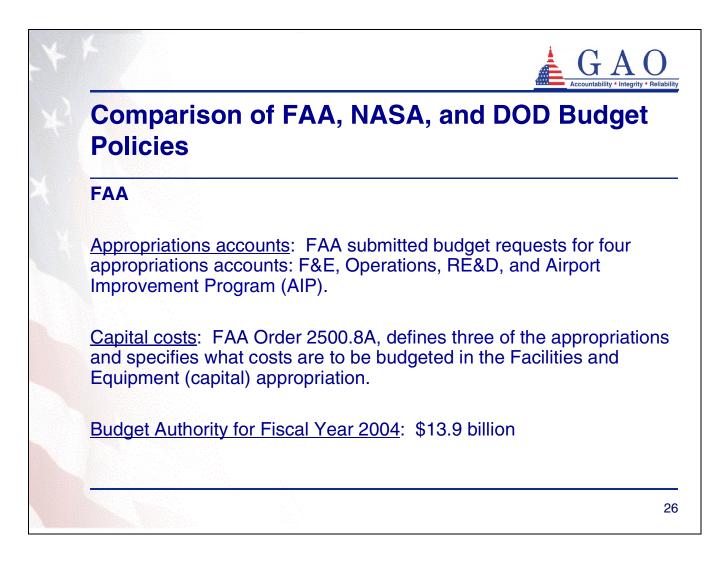














Comparison of FAA, NASA, and DOD Budget Policies

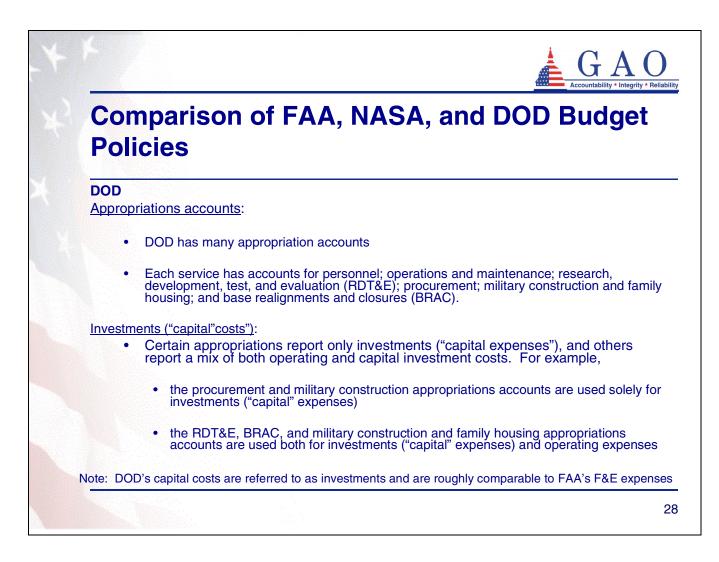
NASA

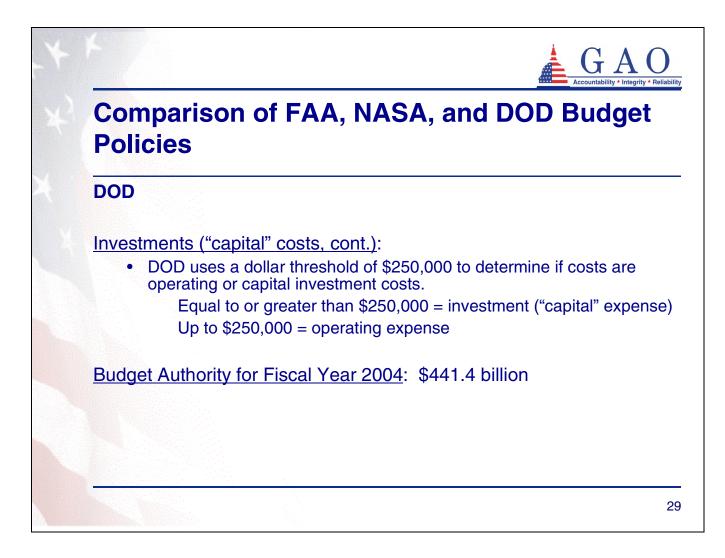
<u>Appropriations accounts</u>: NASA submitted a budget request for three appropriation accounts: Science Aeronautics and Exploration, Space Flight Capabilities, and Inspector General.

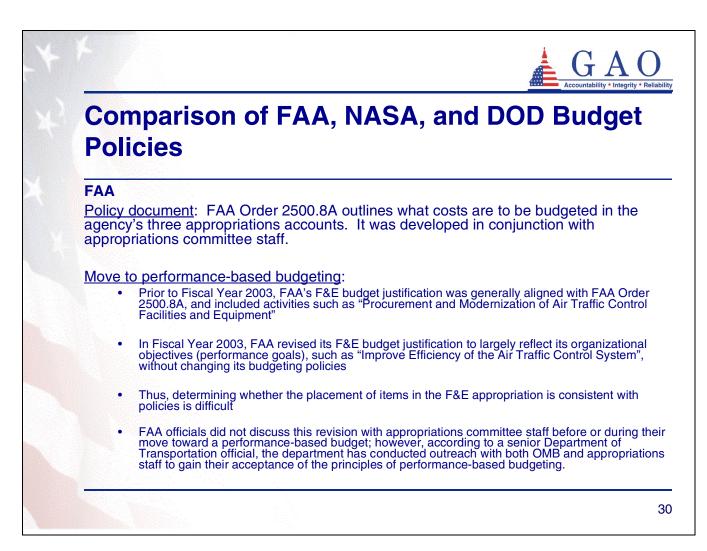
Capital costs:

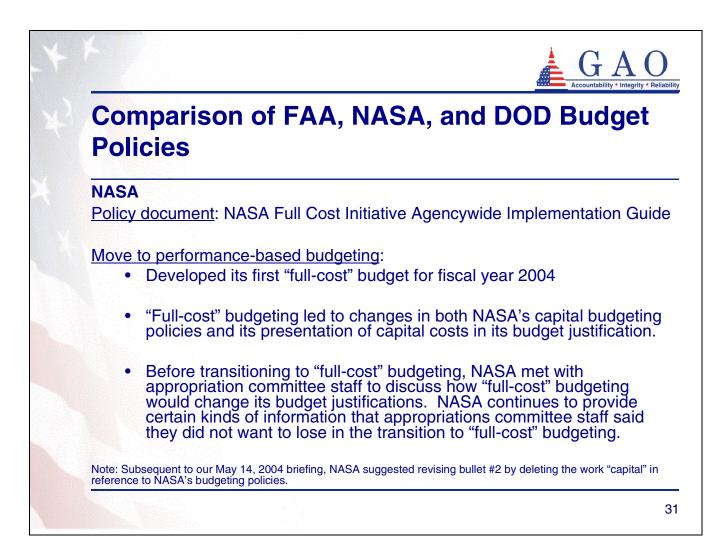
- NASA relies on a "full-cost" budgeting methodology to identify costs associated with programs. This approach does not identify capital costs as a separate or distinct category of costs to be reported within a program area in the budget.
- NASA rolls up all of its capital costs with other costs to illustrate to appropriators how much NASA intends to spend in its program areas.
- NASA integrates its Strategic Plan as well as performance information into its budget justifications to illustrate how much NASA intends to spend to achieve its objectives.
- Budget Authority for Fiscal Year 2004: \$15.4 billion

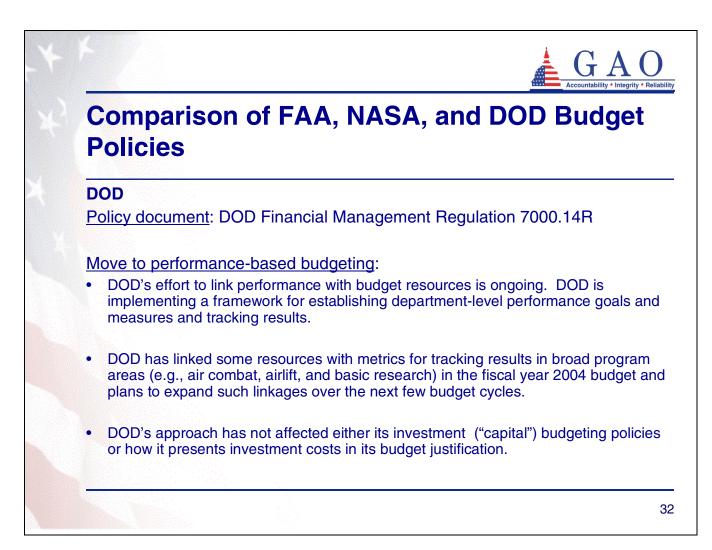
Note: NASA's "full cost" definition does not include costs that the federal government does not currently include in the budget, such as accruing retiree health benefits. Furthermore, subsequent to our May 14, 2004 briefing, NASA requested that we recognize the potential value of its full-cost approach to budgeting. We acknowledge that NASA officials have noted value in this approach for management purposes; however, GAO has found that for some decision-making it could be useful for federal agencies to make meaningful distinctions between capital investments and operating expenses in their budgets. Under some approaches to performance-based budgeting this distinction can be lost.

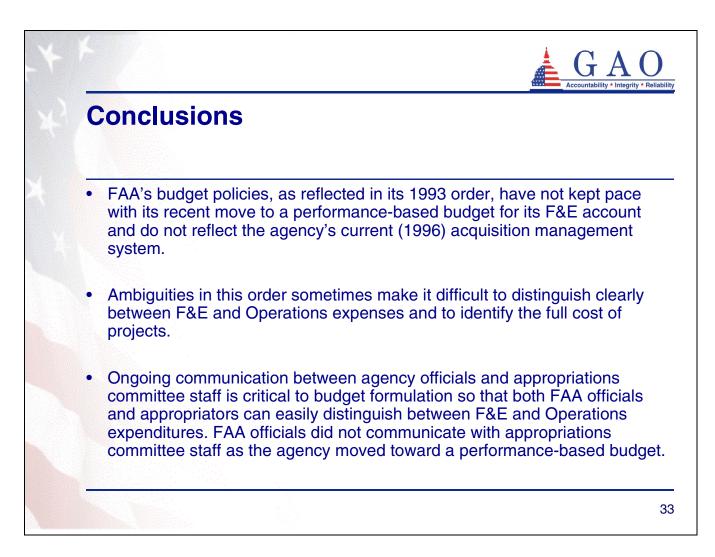


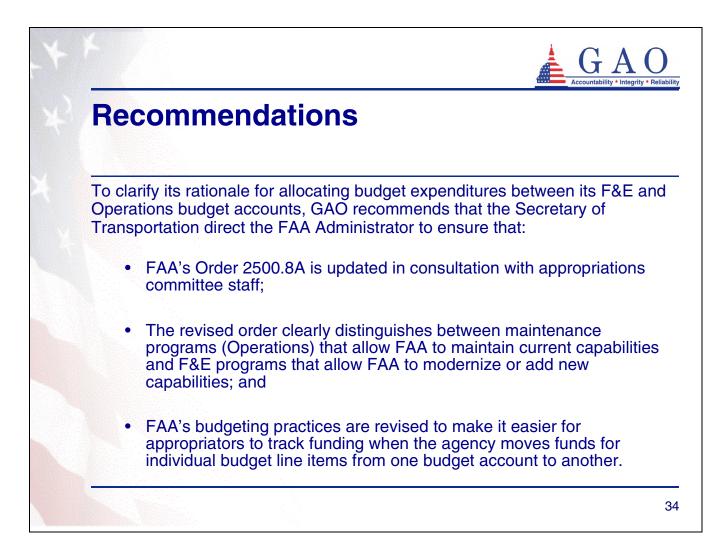






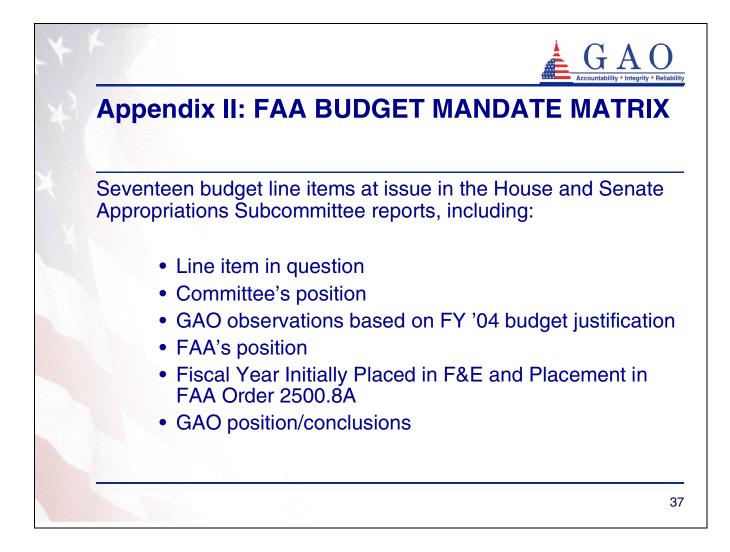












Briefing Appendix II: FAA Budget Mandate Matrix

Note: Items # 1-6 are from the House of Representatives 108-243: Departments of Transportation and Treasury and Independent Agencies Appropriations Bill, 2004 Items #7 – 18^a are from the Senate 108-146: Transportation, Treasury and General Government Appropriations Bill, 2004 [FAA contact: Carol Burrus, Manager, Capital Division, ABU-300 (202) 267-9025]

A. Budget Line Item	B. Committee Position	C. GAO Observations based on the FY04 budget justification	D. FAA'S Position	E. FY Initially placed in F&E and placement in FAA Order 2500.8A (4-9-93)	F. GAO position/ conclusions
(1) Free Flight Phase One	The Committee recommends \$27,000,000, a reduction of \$10,400,000 in the budget estimate. The Committee notes that prior year funding for this program has been excessive, and has been reprogrammed to other projects, indicating that lower rates of funding are required. In addition, the Committee believes it is time for many sustainment activities to transition to the operations budget.	Request went down slightly between FY03 and FY04, from \$39.9 million to \$37.4 million. Administration and sustainment activities are referred to in several instances.	Concur. FAA had already planned to transition Free Flight Phase One (FFP1) to Operations in FY05. FY04 is the last year for F&E funding. Full conversion to Operations from F&E will occur in October 2004. The decision was made following a discussion at the Joint Resources Council (JRC) when the program was approved. The Record of Decision (dated April 7, 1999), and the resulting cost allocation (AAF-1 Memo, dated June 24, 1999). FFP1 had several software tools with a range of Initial Daily Use and Planned Capability Available dates. It is not one item, so it was determined it should transition all at once.	1998 Para 9b(2) ^b	We concur with FAA's previous placement of this line item under 2500.8A; however, its transition to the Operations account is now appropriate.
(2) Frequency and spectrum engineering	The Committee believes that some of these studies are more appropriately performed under the operations account. The recommendation of \$1,930,000 represents a reduction of \$1,670,000 below the budget estimate.	\$2.5 million of the \$3.6 million request is for conducting frequency and spectrum- engineering studies, developing standards and recommended practices, and implementing a transition plan.	Not concur. This is a support program for future national airspace systems (NAS); it does not involve any operations and maintenance (O&M) functions at all. "Frequency engineering" refers to their primary function, which is to ensure that the frequencies of all new systems in the NAS will have a location in the existing frequency spectrum. They must test and establish that there is space in the worldwide spectrum for needed frequencies	1998 Para 9b(4) ^d	We concur with FAA's placement in F&E. The budget line Item has been in F&E for 6 years. This could be an example of a "wording" misinterpretation. The fiscal year 2004 budget justification does not specify that this item is a "support program for future NAS systems" to directly link it to 9b(4). This part of 2500.8 is also very broad and

^a "Controlling FAA's Operating Costs" (#6) was originally pulled from the committee report but is not within the scope of this review. However, we did not want to complicate the numbering system by withdrawing it.

^b 9b(2) Procurement and Modernization of Air Traffic Control Facilities and Equipment (Activity 2, P&M/ATC).

Capital procurement that provides products for or in direct support of ATC facilities, flight service facilities, as well as other navigation and landing aids (i.e., centers, towers, stations, surveillance, navigation, and landing aid facilities and equipment). Projects funded in this activity will have procurement maturity and usually include items for which all development work has been completed or include nondevelopment items such as commercial off-the-shelf equipment. Projects included must be approved for full-scale production before or within the budget year and by which also will have approval at KDP-4 before or within the budget year. Examples of projects funded in this activity include:

^{1.} Long Range Radar

^{2.} Terminal Doppler Weather Radar

^{3.} Flight Service Facilities –Improvements

A. Budget Line Item	B. Committee Position	C. GAO Observations based on the FY04 budget justification	D. FAA'S Position	E. FY Initially placed in F&E and placement in FAA Order 2500.8A (4-9-93)	F. GAO position/ conclusions
			before they can start R&D in any new NAS program.° DOD and FAA are two of the largest users of the spectrum. Two of the major efforts under this program include developing new GPS systems and surveillance broadcasts. The only activity funded in this line item that could be misinterpreted as Operations is using distance-measuring equipment. This is used to guarantee that new GPS systems will not interfere with existing GPS programs. However, this is not truly an O&M function; it merely ensures that the new system will work with the old system that is already in place.		there is also a lack of crosswalk between new budget format and order.
(3a) Information Technology Integration	The Committee deletes funding for this low priority program, a reduction of \$1,600,000 below the budget estimate. This project would finance four items that study potential improvements to FAA's regulatory, information technology, performance management, and acquisition processes. Such management analyses are an important function of any large organization's activities, but they are inappropriate for capital funding through "Facilities and equipment." At the small levels proposed (between \$200,000 and \$550,000), these studies should be absorbed within existing funding levels for those operating activities. The Committee recommendation results in savings of \$1,600,000 below the budget estimate.	Request was for \$1.6 million in both FY03 and FY04 Funding is to develop and sustain FAA's information technology (IT) strategy to improve processes and optimize IT investments.	 Not concur. From 1994 through 2002, this activity was listed as Corporate Systems Architecture. FAA then split the activity into two line items: IT Integration IT Infrastructure In the FY04 Committee Report, Congress raised concerns that "studies" being conducted under this line item would be more appropriately funded in Operations, but FAA notes that it did not, to its knowledge, use the word studies anywhere in its budget request. FAA reported that activities in this area include: Providing process improvement and IT technical support to systems in the NAS Providing ICCM, including software acquisitions, transitioning, operations, 	1994 Para 9b(4) (See note d of table)	We concur with FAA's placement in F&E. There is a 10-year funding history for this budget line item in F&E. It seems reasonable as a primary function to support systems in the NAS. This item is by nature, nonequipment, nonconstruction. We can't comment on whether this is a low-priority program according to Appropriations, but note possible reason for deletion from F&E as well.

°See FAA Order 2500.8A, p.6, 9b(4)(b): "System Engineering, Integration, and Support."

^d Para 9b(4) Facilities and Equipment Mission Support (F&E/MS).

Provides direct systemwide contractual support for implementing capital procurement programs. Includes projects that provide systemwide integration, transition engineering, and technical contractual support (activity is generally for support contracts and is by nature nonequipment, nonconstruction, and nonfederal personnel) for implementation of specific projects contained in F&E activities 1, 2, and 3 and provide for a mission support capability on a system-wide basis.

Examples of projects funded in this activity include:

(1) System engineering, integration, and support; and

(2) National airspace integrated logistics supports.

A. Budget Line Item	B. Committee Position	C. GAO Observations based on the FY04 budget justification	D. FAA'S Position	E. FY Initially placed in F&E and placement in FAA Order 2500.8A (4-9-93)	F. GAO position/ conclusions
			 and deployment activities. FAA further noted that ICCM is a more mature model than DOD's CMMI. Data standardization ensuring that consistent data and naming standards are used by all NAS systems. 		
			Staff noted that because they were applying more mature best practices, using established applications in cooperation with DOD and a variety of international groups, it was not appropriate to fund these activities under Research, Engineering, and Development (RE&D). They extract best practices from industry and international sources, integrate them with CMMI, and then adapt them to FAA's needs. They are the only organization that implements process improvements in IT across all lines of business. Because the group's activities are centered on technical engineering and support services, FAA felt that the activities were most appropriately placed in the F&E budget.		
			Staff noted that they provide some support to the Associate Administrator for Regulation and Certification (AVR)5-10 percent of their activities—but that their primary function is supporting the systems in the NAS. They develop data standards for new ATC systems, applying these standards before a system is initially tested and deployed.		
			Staff pointed out that there were two separate line items in 2002 to account for the split between IT Integration and IT Infrastructure. ^e		
			The program has no funding in FY04 and will be able to proceed with its activities only by using in-house staff. Many of the IT Integration programs will be reduced or stopped until funding is reinstated.		
(3b) FAA Corporate System Architecture (CSA)	The Committee recommendation denies funding for this request. This budget item is more appropriately		Not concur. Note: FAA identifies this program as "FAA CSA-Information Technology Infrastructure."	2000 Para 9b(3) ⁹	We concur with FAA's placement in F&E. However, because of the prevalence of IT systems in the

A. Budget Line Item	B. Committee Position	C. GAO Observations based on the FY04 budget justification	D. FAA'S Position	E. FY Initially placed in F&E and placement in FAA Order 2500.8A (4-9-93)	F. GAO position/ conclusions
	funded in the Operations account.		This program was the other half of the "Corporate Systems Architecture" split mentioned in the previous discussion of the IT Integration line item. This program provides IT security infrastructure and acts as a first line of defense against system security breaches and hackers. Activities include developing firewalls through the use of routers, switches, and other equipment. Staff noted that system architecture is not focused just on the NAS (which may be the reason that Congress felt it belonged in the Operations account). FAA noted that work done under this line item applies to the entire FAA system architecture.' A key piece of this program involves technical refresh activities—that is, regular replacement of equipment to keep up with the most recent technology required to ensure IT security and efficiency at the highest level. The equipment is replaced every 3 years on a rolling basis to keep technical refresh costs and workloads manageable. Because the Committee denied the \$1 million in appropriations requested for the program in FY04, all tech refresh activities have stopped. FAA has not encountered any problems from not replacing the equipment so far. It has primarily relied on spare parts and equipment that it already has on hand to replace equipment as needed. However, because this program's budget was zeroed in FY04 and FY05, FAA anticipates that it will eventually fall behind in the activities needed to keep up with tech refresh requirements when funding is reinstated in FY06.		modern budgeting era, terminology needs to indicate very clearly whether an item is a replacement or an upgrade tech refresh. We agree that this item is placed correctly in F&E however, because it was recently divided within the F&E budget, links may have been lost if this division was not properly explained in the FY03 budget justification.
(4) Operational	The Committee does not believe	The Operational Evolution Plan	Concur.	2003	We concur with FAA's placement

¹See FAA Order 2500.8A, p.5, 9b(3)

⁹ Para 9b(3) Procurement and Modernization of Non-Air Traffic Control Facilities and Equipment (P&M/Non-ATC).

Capital procurement that provides hardware, software, and construction improvements required for NAS facilities and equipment support. This activity includes projects for which the end products are not directly related to or attributable to other F&E projects required by or for air traffic control facilities or navigation and landing aid facilities. Projects in this activity represent FAA's assessment of the various hardware, software, and construction improvements required for NAS supportability. Projects in this activity will have procurement maturity and usually include items for which all development work has been completed or include nondevelopment items such as commercial off-the-shelf equipment. Projects included must be approved for full-scale production before or within the budget year and by which also will have approval at KDP-4 before or within the budget year. Examples of projects funded in this activity include: (b) NAS Management Automation Program.
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GAO-04-841R FAA Budget Policies and Practices

A. Budget Line Item	B. Committee Position	C. GAO Observations based on the FY04 budget justification	D. FAA'S Position	E. FY Initially placed in F&E and placement in FAA Order 2500.8A (4-9-93)	F. GAO position/ conclusions
evolution plan	this is a valid expense for "Facilities and equipment" and should be absorbed within existing resources for "Operations". For example, items in the budget estimate include: web page development and maintenance; briefings, testimony, and marketing; operational evolution plan development; seminars, conferences, and industry forums; performance measurement; monitoring of regional implementation; and contractor support to assess program risk and develop program schedules. The recommendation results in a reduction of \$2,000,000 below the budget estimate.	(OEP) Program Office provides analysis to develop an overall strategy to improve the NAS.	Congress provided funding in Operations for OEP and FAA plans to move it to that account. This initiative was funded in F&E because it directly relates to how F&E investments will affect the OEP goal of increasing capacity. It is covered by paragraph 9b(4) of FAA Order 2500.8A. It can be argued that this item should be funded by all the accounts or solely by Operations, so we have decided to agree with the congressional interpretation and fund it in Operations.	Para 9b(4) (See note d of table)	of this budget line item in F&E. However, it could also be justified as an operational expense based on 2500.8A, 8b(10).
(5) Transfer of funding for CFMSS and ASIS from "Facilities and equipment" to Ops	The Committee believes that the Central Flight Monitoring and Scheduling System (CFMSS) and the Aviation Standards Information System (ASIS) projects are more appropriately funded in the agency's operating budget than under "Facilities and equipment" due to the nature of the work being performed, and funding is therefore transferred here, at the requested level, from that appropriation.		Concur. FY04 Operations funding provided by appropriation. These systems have been considered investments necessary to support procurement programs.	1992 Para 9b(4) (See note d of table)	We concur with FAA's historical placement of this line item, based on 2500.8A; however, a transition to the Operations account is now appropriate.
(6) Controlling FAA's Operating Costs	FAA notes that this discussion relates to growth in the Operations account. It does not relate to whether items should be funded in F&E or the Operations accounts.	N/A	N/A	N/A	N/A. This item was originally pulled from the Committee report, but is not within the scope of this review. However, we did not want to complicate the numbering system by withdrawing it.
(7) Low Level Wind Shear Alert System [LLWAS]—Upgrade	The Committee recommendation provides \$2,700,000, a reduction of \$1,200,000 below the budget request for this project. No funds are provided for activity task 2, which can be accommodated out of	Budget item includes "Sustain" in title, which may suggest that costs should be transferred to the Operations budget.	Not concur. Task 2 specifically refers to decommissioning efforts associated with LLWAS. New systems are responsible for the costs of decommissioning the older systems they are replacing. ^h For example,	1983 Para 6b ⁱ Para 10g(1) ⁱ	We concur with FAA's placement in F&E. This line item has been funded for 11 years in F&E. We found that although the justification said "system replacement of operating

^h See FAA Order 2500.8A, p.2, 6b "...recurring administrative, operations, and maintenance..." and p.10 g(1): "System-wide Rehabilitation." ^l Para 6b. In general, the Operations account funds the recurring administrative, operating, and maintenance costs of doing the agency's business. The F&E account generally provides for the capital investment for the agency by funding the procurement and installation of new equipment, facilities, and construction projects included in the Aviation System Capital Investment Plan (CIP). The RE&D account Page 49 GAO-04-841R FAA Budget Policies and Practices

A. Budget Line Item	B. Committee Position	C. GAO Observations based on the FY04 budget justification	D. FAA'S Position	E. FY Initially placed in F&E and placement in FAA Order 2500.8A (4-9-93)	F. GAO position/ conclusions
	Operations funding.		 when FAA installed a new ATC tower in Minneapolis, the funds needed to tear down the sections of the older tower being replaced were included in the total estimated cost of the new tower under the F&E budget. FAA officials said that for this budget line item "sustain" refers to sustaining the current service that is provided by LLWAS rather than sustaining the capability. 		equipment," FAA intended this to be a decommissioning funding request, which is considered an operating request under F&E.
(8) Aviation Safety Analysis System [ASAS]	The Committee recommendation reduces the request for ASAS by 50 percent. These activities are more appropriately funded out of the Operations account. The Committee expects that these activities will be requested in Operations in subsequent fiscal years.	Budget item relates to modernizing present automation hardware and software used for safety and security data.	Not concur. ASAS is funded under the F&E account in accordance with FAA Order 2500.8A, in which ASAS is listed as a specific line item. ^k F&E activities for ASAS include developing both hardware and software. The hardware infrastructure associated with ASAS provides users with access to safety data. This infrastructure includes telecommunications systems (LAN/WAN), computers, remote access equipment, and servers. Software applications include the development, testing, implementation, and integration of packages that can provide safety data on accidents, risk, surveillance, certifications, and investigations. There are also a number of ongoing technology refresh activities for both the hardware and software components of ASAS. Technology refreshment is considered part of the F&E account in accordance with published FAA budget guidance.	1989 Para 9b(3)(c) ⁱ	We concur with FAA's placement in F&E. The line item is specifically mentioned within the FAA order under F&E. Note: The Operations budget has included \$6 million annually for NAS hand-off for this item, but since Operations expenditures are not specifically outlined, this funding is not apparent.

generally provides for research and development (R&D) programs that improve the National Airspace System (NAS) by increasing its safety, security, productivity, capacity, and environmental compatibility to meet the expected air traffic demands of the future.

¹ Para 10g. <u>Facilities Maintenance and Repairs</u>. All recurring maintenance costs for facilities and equipment are to be budgeted for and paid from the Operations account. These costs include special maintenance projects identified in the Operations budget as "Critical and Emergency Repairs to Structures and Grounds," e.g., structure painting, repairs to access roads and to fencing, replacement of carpeting, and repaying of parking lots. The following exceptions apply:

(1) Systemwide rehabilitation work for operating facilities and equipment is budgeted for and paid from the F&E account (e.g., replacement of equipment shelters,

structural renovations, systemwide replacement of operating equipment, and service-life extension projects).

^k See FAA Order 2500.8A, p.6, 9b(3)(c).

¹ Para 9b(3) Procurement and Modernization of Non-Air Traffic Control Facilities and Equipment (P&M/Non-ATC).

Capital procurement that provides hardware, software, and construction improvements required for NAS facilities and equipment support. This activity includes projects for which the end products are not directly related to or attributable to other F&E projects required by or for air traffic control facilities or navigation and landing aid facilities. Projects in this activity represent the FAA's assessment of the various hardware, software, and construction improvements required for NAS supportability. Projects in this activity will have procurement maturity and usually include items for which all development work has been completed or include nondevelopment items such as commercial off-the-shelf equipment. Projects included must be approved for full-scale production before or within the budget year and by which also will have approval at KDP-4 before or within the budget year. Examples of projects funded in this activity include: (c) Aviation Safety Analysis System. Page 50

A. Budget Line Item	B. Committee Position	C. GAO Observations based on the FY04 budget justification	D. FAA'S Position	E. FY Initially placed in F&E and placement in FAA Order 2500.8A (4-9-93)	F. GAO position/ conclusions
			FAA officials told us that the agency has already transitioned \$6 million of the ASAS budget from the F&E to the Operations account. This \$6 million is the amount FAA spends annually under the Operations account for this budget line item. Those portions of a given program or technology that reach the maintenance stage are attributed to the Operations account under NAS hand-off. This includes activities such as database administration and help desk support. In contrast, any activity that is considered a new function of the system, such as creating a database interface, is attributed to the F&E account. FAA staff stated that, broadly, those activities attributed to the F&E budget provide a new functionality to a system, while those activities attributed to the Operations budget include maintenance, system operations, measuring against success criteria, and recurring training.		
			However, staff agreed that, because the Operations expenditures are not explicitly outlined in the same way that the F&E account is structured, many of the Operations components of ASAS are not identified by system and, therefore, may not be clearly identified to anyone reviewing the budget. It may have appeared to Congress that ASAS was exclusively funded under the F&E account because the Operations expenditures for the program are somewhat obscured. Additionally, FAA may not have clearly stated the connectivity to a planned product that will eventually be delivered to industry. For example, in outlining the expenditures for the WAN, they refer to "upgrading circuits," which could be interpreted as a maintenance activity. FAA staff clarified that this activity involves buying new circuits and adding bandwidth, activities they believe will add new functionality to the system and thus should be funded under the F&E account. Additionally, language in the FY04 budget refers to ASAS as an		
			they believe will add new functionality to the system and thus should be funded under the F&E account. Additionally, language in the		

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			Staff also noted that restructuring the F&E budget according to performance goals may have resulted in some lack of clarity concerning specific F&E activities and their accordance with FAA Order 2500.8A. The Operations budget is not similarly structured according to performance goals, which may also create some confusion about the relationship between the two accounts.		
(9) Systems Approach for Safety Oversight (SASO)	The Committee recommendation denies the requested funding without prejudice and would consider a reprogramming request from within the funding for FAA Operations for this budget item.	This item is being requested for the first time in the FY04 budget. Budget item refers to creating a "proactive system safety approach" that will require developing business models, collecting and sharing quality data, and developing new analytical methodologies. This effort will help determine the software tools and databases required to support the new system safety approach.	Not concur. Both SASO and ASKME support ASAS, which is considered part of the F&E account. Ultimately, the entire system will allow data to be shared among users, incorporating security structures, firewalls, and other features. SASO and ASKME are still, to a large extent, start-ups. FAA hopes they will evolve to a level of technology that will give users of the system regular access to information that can be used to predict potential problems and ultimately prevent accidents. Because these programs are in the development stage, they must be approved by the JRC and go through the full acquisition life-cycle process. (ASAS existed before the JRC process was implemented and therefore is not subject to the approval process). Both programs have gone through JRC-2A; staff from each program regularly meet and confer to ensure that their respective efforts remain coordinated and consistent with one another. This is particularly important for IT requirements.	First time request in FY04 Para 9b(3)(c) (See note I of table)	We concur with FAA's placement in F&E. This program specifically supports ASAS, which is specifically placed under F&E in the FAA order under 9b(3)(c). However, FAA does not use wording in the budget justification that would explicitly link this program to ASAS as a part of "integration of safety data."
(10) Aviation Safety Knowledge Management Environment [ASKME]	The Committee recommendation denies the request for this new initiative as an activity appropriately funded out of the FAA Operations account.	This item is being requested for the first time in the FY04 budget. Budget item requests funding to develop a generic electronic system with four components that (1) store knowledge relevant to the AIR safety mission; (2) classify, assess and share the knowledge; and (3) generate critical safety data in two AIR mission-support process components.	Not concur. Both SASO and ASKME support ASAS, which is considered part of the F&E account. Ultimately, the entire system will allow data to be shared among users, incorporating security structures, firewalls, and other features. SASO and ASKME are still, to a large extent, start-ups. FAA hopes they will evolve to a level of technology that will give users of the system regular access to information that can be used to predict potential problems and ultimately prevent accidents. Because these programs are in the development stage, they must be	First time request in FY 2004 Para 9b(3)(c) (See note I of table)	We concur with FAA's placement in F&E. This program specifically supports ASAS, which is specifically stated under F&E in the FAA order under 9b(3)(c). However, in the budget justification, FAA never used the explicit wording linking this program to ASAS as a part of "integration of safety data."

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			approved by the JRC and go through the full acquisition life-cycle process. (ASAS existed before the JRC process was implemented and therefore is not subject to the approval process). Both programs have gone through JRC-2A; staff from each program regularly meet and confer to ensure that their respective efforts remain coordinated and consistent with one another. This is particularly important for IT requirements.		
(11) Advanced Technology Development and Prototyping	The Committee recommends \$29,600,000 for these research activities. No funding is provided in this budget item for Activity Tasks 4, 7, 10, and 13, which are more appropriately funded out of the Operations account.	 FAA's Advanced Technology Development and Prototyping program develops and validates technology and systems that support air traffic services. Tasks 4, 7, 10, and 13 are described as follows: (4) Airspace Management Laboratory: initiative will enhance and further develop capabilities in airspace management, analysis, data collection, performance measures, and redesign. (7) Software Engineering: funding is required to provide FAA employees with improved software tools and training, which will help them do a better job at estimating costs, developing schedules, etc. (10) Cyber Security for NAS Development: funding will provide trade-off analyses and simulation for balancing information security requirements across complex, large-scale heterogeneous networks, like NAS. (13) Required Navigation Performance: work will include 	 Not concur. This line item is actually a group of items that were in the RE&D budget, but were moved to the F&E budget by the House of Representatives in 1999. FAA still believes the items would be more appropriately funded out of the RE&D account, since the primary activities under this budget item include research, prototyping, modeling, and developing associated standards and guidance." FAA noted that one prototype program under this line item is targeted for transfer to Operations in accordance with NAS hand-off funds, but most will remain under F&E as appropriated by Congress in the past. FAA continues to believe these activities would be more appropriately funded under RE&D, but at least needs the F&E funding to continue the activities if Congress decides that F&E is the most appropriate account. 	See individual entries.	

 $^{^{\}rm m}$ See FAA Order 2500.8A, p.6, 9b(4)(a) "System Engineering, Integration, and Support. Page 53

	C. GAO Observations based on the FY04 budget justification	D. FAA'S Position	E. FY Initially placed in F&E and placement in FAA Order 2500.8A (4-9-93)	F. GAO position/ conclusions
	development of instrument procedures, harmonization of standards, examination of requirements and procedures, and development of a model to improve procedures.			
te: This center is part of the dvanced Technology velopment and Prototyping" dget line item. No funding is poided in this budget item for tivity Tasks 4, 7, 10, and 13, ich are more appropriately aded out of the Operations count.	Improve procedures.	 Not concur. The AT Lab was originally in the RE&D budget. In FY99, Congress moved this along with other Advanced Technology Development and Prototyping (ADTDP) program to the F&E account. In FAA's Aviation System Capital Investment Plan dated January 1999, the Lab is listed under M-08—Continued General Support. In the Capital Improvement Plan (CIP) for FY05-FY09, it is listed under the ATDP Program (M-08.28-02). The Lab is a cross-cutting program that provides analysis, studies, models, and data for F&E, Operations, DOD, TSA, and other offices both inside and outside the agency. The Lab provides data, tools, measures, and analyses for Free Flight, URET, DRVSM, ETMS, and Navigation and Landing Aids (all of which are F&E programs). The data collected and stored are used for conducting analyses, studies, and models requested by F&E and Operations. The Lab also uses focused extracts and analysis to support alternatives for equipment and environmental (noise) impact analysis. The infrastructure (both hardware and software) must be constantly upgraded because of the changing dynamics of the technology. Also, the data collected must be current and accurate to measure the impact of airspace configuration and redesign and provide analyses and results to support executive decisions for FAA. The Lab is an ongoing investment to support the numerous requests of F&E projects. Since this is a cross-cutting program, it is not feasible to prorate the cost of data collection 	2000 Para 9b(4) (See note d of table)	We concur with FAA's placement in F&E. The lab supports other ongoing F&E projects across the board at FAA. Although 9b(4) is extremely broad, it appears to be justified under this reference.
	vanced Technology relopment and Prototyping" get line item. No funding is vided in this budget item for vity Tasks 4, 7, 10, and 13, ch are more appropriately ded out of the Operations	e: This center is part of the vanced Technology relopment and Prototyping" get line item. No funding is vided in this budget item for vity Tasks 4, 7, 10, and 13, ch are more appropriately ded out of the Operations	image:	i (49-93) development of instrument procedures, harmonization of standards, examination of requirements and procedures, and development of a model to improve procedures. Not concur. e: This center is part of the vanced Technology elime item. No funding is rided in this budget item for vity Tasks 4, 7, 10, and 13, ch are more appropriately lad of the Doperations ount. Not concur. 2000 Para 9b(4) (See note d of table) Dudget, 1n FY99, Congress moved this along with other Advanced Technology Development and Protopying (ADTDP) program to the F&E account. In FAA's Aviation System Capital Investment Plan dated January 1999, the Lab is listed under M-08_C-Confinued General Support. In the Capital Improvement Plan (CIP) for FV05- FY09, it is listed under the ATDP Program (M-08.28-02). The Lab is a cross-cutting program that provides analysis, studies, models, and data for F&E, Operations, DOD, TSA, and other offices both inside and outside the agency. The Lab provides data, tools, measures, and analyses of Free Fight, UBET, DRV5M, ETMS, and Navigation and Landing Adds (all of which are F&E programs). The data collected and stored are used for conducting analyses, studies, and models requested by F&EE and Operations. The Lab also uses focused extracts and analysis. The intrastructure (both hardware and software) must be constantly upgraded because of the changing dynamics of the technology, Also, the data collected must be current and accurate to measure the impact of arispace configuration and redesign and provide analyses and results to support executive decisions for FAA.

A. Budget Line Item	B. Committee Position	C. GAO Observations based on the FY04 budget justification	D. FAA'S Position	E. FY Initially placed in F&E and placement in FAA Order 2500.8A (4-9-93)	F. GAO position/ conclusions
			for air traffic data and the subsequent metrics, calculations, and analyses.		
(11b) Software Engineering R&D (Research Center) Task #7	Note: This center is part of the "Advanced Technology Development and Prototyping" budget line item. No funding is provided in this budget item for Activity Tasks 4, 7, 10, and 13, which are more appropriately funded out of the Operations account.		Not concur. The center's activities focus on mission- critical problems; the center frequently works with industry and universities in the course of developing new technologies. FAA provided several examples of the work being conducted in this area. The center is currently developing a prototype for automating the process of Exhibit 300s. It also developed a NAS adaptation services environment, which allowed adaptation data to be sent to a central location and redistributed to appropriate users in a common format. The adaptation work ultimately resulted in a savings of \$5 million per year. The center currently has six full- time equivalent and two part-time staff. FAA emphasized that the work conducted under this line item focuses on improving the process of the life-cycle for a variety of NAS programs. For example, every NAS program that uses adaptation data can benefit from the center's work. FAA noted that the center was originally part of the RE&D budget, but was moved to the F&E account by the House in 1999. FAA still believes the center would be appropriately placed in the RE&D account, but that it is better in the F&E account than in the Operations account.	1999 Para 9b(4) (See note d of table)	We concur with FAA that this item belongs in F&E or RE&D before Operations. Although 9b(4) is extremely broad, placing the item under this reference appears to be justified, but there also appears to be a wording discrepancy, and the budget justification is not clear. FAA stated that it would be sure to add "systemwide" in the definition to stress that this function is more related to capital than to operations. We asked FAA to explain the following reference on its Web page http://www.faa.gov/aio /Serc/index.htm that states: "The SERC is funded through various R&D, Operational and F&E appropriations." FAA answered: The SERC is an FAA-wide resource that performs services, evaluations, prototyping, and consultations for the agency in general. At times, particular FAA organizations specifically request SERC products and services, and when this happens, the requesting FAA organization must pay for these products and services. The funding that these FAA organizations use to pay for their specific requests can come from the RE&D, F&E or Operations account, depending on the types of services or products rendered and purpose for which the funding was appropriated. This funding is in addition to any budget line item funding that the SERC receives from the SERC received funding from the RE&D budget line item,

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					however, in FY99, Congress created a new budget line item, "Advanced Technology Development and Prototyping," shifting designated programs from RE&D into F&E the SERC was one of those programs switched from RE&D to F&E. In FY04, Congress eliminated the F&E funding associated with SERC. This year, the SERC received virtually no F&E funding but was still able to continue work on the Adaptation Improvement Program (AIP) because it received \$1.6 million in NAS plan hand-off (NPHO) dollars specifically to transition the AIP NAS Adaptation Services Environment (NASE) prototype to an operational NAS support program. Additional NPHO money is expected next fiscal year to finalize the NASE transition; however, the Software Engineering appropriation has been deleted from the FY04 and FY05 FAA budget. This means that unless this budget line item is restored, SERC will become wholly dependent on other organizations to fund any new research programs in FY05.
					With modest funding, SERC was able to pilot the NASE prototype to tackle the cost of doing NAS Adaptation (>\$100 million per year) and to reduce this cost by over \$5 million per year. Restoring the F&E budget line item would allow SERC to continue benefiting FAA by improving NAS capability in areas such as adaptation process improvement, continued applications based on the NASE infrastructure, IT security, process re-engineering, IT investments, and best practices.

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(11c) Cyber Security for NAS Development Task #10	Note: This center is part of the "Advanced Technology Development and Prototyping" budget line item. No funding is provided under this budget item for Activity Tasks 4, 7, 10, and 13, which are more appropriately funded out of the Operations account.		Not concur. Task 10 specifically refers to information security efforts for all equipment in the NAS. The Security Capability Assessment Plan (SCAP) protects against hackers and is a pre-engineering requirement for all systems in the NAS. Before a system can begin R&D, FAA must ensure that information security systems are in place. This requirement is similar to one for the Frequency and Spectrum Engineering program outlined in item #2.	Para 9b(4) (See note d of table)	We concur with FAA's placement in F&E. Again, FAA references 9b(4), which is extremely broad, but this program does appear to be under the umbrella of F&E funding for "systemwide" items.
			In light of the questions raised by Congress in FY04 about whether these activities would be more appropriately funded out of Operations, FAA has deleted this line item in its FY05 budget. It could not afford to raise questions about an appropriation in light of the previous congressional questions and agencywide budget cuts. However, FAA will reinstate the funding request in FY06 if Congress resolves its concerns.		
(11d) Required Navigation Performance (RNP) Task #13	Note: This center is part of the "Advanced Technology Development and Prototyping" budget line item. No funding is provided in this budget item for Activity Tasks 4, 7, 10, and 13, which are more appropriately funded out of the Operations account.		Not concur. The RNP effort is funded by both the Operation and F&E accounts. The Operations appropriation will fund flight standards and aircraft certification work, while F&E will fund, development of procedures, environmental impact studies, modification of automation systems, controller training, and equipage of FAA aircraft.	2004 Para 9b(4) (See note d of table)	We concur with FAA's placement in F&E.
(12) FAA Telecommunications Infrastructure [FTI]	The Committee recommendation includes the full request for FTI from Facilities and Equipment funds. However, the Committee notes that as the FTI solution is implemented, this cost, for on- demand service, should come from the Operations account.	FTI replaces existing telecommunications services that support critical air traffic operations.	Concur. The Acquisition Program Baseline provides for Operations funding as the solution is implemented. The agency never funded any operational costs in F&E. The Senate fully funded FTI, but noted that as the FTI solution is implemented, the cost of on-demand service should come from the Operations account. We fully agree with the Senate, and the FTI baseline and subsequent management of the program have always been based on the concept that costs associated with installing equipment and testing service will be funded in F&E while monthly recurring usage charges will be paid	2000 Para 9b(2) (See note b of table)	We concur with FAA's placement in F&E.

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			from the Operations appropriation.		
(13) NAS Interference, Detection, Location and Mitigation	The Committee recommendation does not include funding for this new budget initiative. This activity is more appropriately funded under Research, Engineering, and Development or the FAA Operations account.		Not concur. This program was approved as a mission need by JRC-2A. The program acquires, tests, and integrates equipment based on technologies that already exist in industry in order to upgrade aircraft and equipment to use digital rather than analog systems. There are no Operations or RE&D functions associated with this program; it uses only commercial off-the-shelf equipment ⁿ A primary function of this program is to acquire equipment that can detect signal interference in the NAS and mitigate	2004 Para 9b(3) (See note g of table)	We concur with FAA's placement in F&E. This program only uses commercial off-the-shelf equipment, which is specifically referenced in Para 9b(3). We agree that FAA's budget submission did not explicitly state that FAA is "buying" or "evaluating" prospective equipment, which may be the source of some confusion concerning the FY04 request.
			problems resulting from that interference. For example, in the case of a radar experiencing interference from a pager signal, the equipment acquired under this program locates the source of the interference and "pulls the plug." The equipment acquired and tested under this program serves to "police" the spectrum. It is the acquisition and testing activities that are considered F&E functions. Once the equipment is deployed, the program will move to the Operations account.		
			FAA acknowledged that its budget submission did not explicitly state that it is "buying" or "evaluating" prospective equipment, which may be the source of some confusion concerning the FY04 request.		
(14) FAA William J. Hughes Technical Center Facilities	The Committee recommends \$3,300,000 for Activity Tasks 1 and 4. Activity Tasks 2 and 3 are operations and maintenance activities. The Committee expects these items to be funded in operations.	Budget request is for keeping the Technical Center's buildings in operating order, including reconfiguring the inside of buildings as needed to keep the laboratory infrastructure current.	Not concur. Note: FAA refers to this as "System Support Laboratory Sustained Support." This line item funds the Technical Center laboratories, whose primary function is to test new ATC systems and provide technical support to operational sites. Their first-level priority is research. The center contains an entire set of both existing and new ATC	1992 Para 10I (note small L) [°]	We concur with FAA's placement in F&E, which has a 14-year history and is specifically referred to under FAA Order 2500.8A.

[°]See FAA Order 2500.8A, p.5. 9b(3). [°]See FAA Order 2500.8A, p.11.

^P Para 10l, Technical Center Facilities. The Technical Center provides test and evaluation support to the RE&D-, F&E-, and Operations-funded activities. This support is budgeted on a shared basis, based on facility usage. These facilities and supporting functions will continue to be financed on a shared basis from the RE&D, F&E, and Operations accounts. Page 58

A. Budget Line Item	B. Committee Position	C. GAO Observations based on the FY04 budget justification	D. FAA'S Position	E. FY Initially placed in F&E and placement in FAA Order 2500.8A (4-9-93)	F. GAO position/ conclusions
			systems that have not yet been deployed in nonoperational mode. The center conducts testing, research, and support for both deployed and nondeployed systems. FAA reported that by operating a single lab for both existing and new ATC systems, it has been able to keep costs down.		
			FAA further noted that each account (F&E, Operations, and RE&D) contributes a portion of its appropriations to the lab. ^o Splitting the costs of the center across all three accounts has been a proven way to ensure stable funding, thus keeping the center operating and guaranteeing that the labs are in good working order. Staff further noted that DOT, FAA, OMB, and Congress have all concurred with this funding approach in the past.		
			Tasks highlighted in the Committee report refer to (1) hardware maintenance; (2) software licenses and support; (3) operational and maintenance, engineering and support services; and (4) parts, supplies, and equipment. All of these activities support the lab and its primary functions of conducting research, development, and testing of equipment.		
			 Staff further noted that since the operations budget does not list line items, the portion of the center that is funded from Operations would not be specified in the budget. Within the RE&D budget, it is listed under "Mission Support." Staff estimated the apportionment for funding the center as follows: F&E: 55-60% Operations: 40-45% RE&D: 5%. The FY04 budget is based on historical trends of each account's use of the center. Staff noted that they could only estimate 		
			each account's portion of center funding, since budget requests are made before they know what the exact usage rates will be for the coming fiscal year. For example, they shifted some funding from RE&D to F&E after observing increasing trends in F&E usage of the center.		

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			FAA directed our attention to page 11, paragraph 10-1 of the FAA Order, which states that the Technical Center provides test and evaluation support to RE&D-, F&E-, and Operations-funded activities. The order states that facility and support functions will continue to be financed on a shared basis from the three accounts.		
(15) Terminal Communications— Improve	The Committee recommendation provides the requested funding for Activity Tasks 1 and 2. Activity Task 3 is more appropriately budgeted and requested in the Operations account.	Budgeting is for upgrading terminal communications facilities and equipment. Activity Task 3 is: In-service engineering to improve and maintain the air traffic control communications system.	Not concur.This activity falls under the "Mission Support" section of the budget. Congress specifically questioned the in-service engineering activities associated with this line-item. Congress removed \$900,000 that was slated for the purchase, improvement, and sustaintment of communications equipment such as switches, control frequencies, remote transceivers, and related items. In FAA's FY04 budget request, the words "improve and maintain" are used to refer to the in-service engineering activities. FAA acknowledged that this language may be misleading and that it inappropriately used the word "maintain." It would have been more accurate to use the word "sustain" in this case, since the communications equipment is used to sustain the systems in the NAS. The funding cuts will have little or no impact on the communications program this year, but probably will next year.Staff also noted the role of the Capital Improvement Plan (CIP) in providing a more standardized version and consistent language in describing specific budget line items. In FY03, FAA moved to a new structure, organizing line items according to a performance-based budget framework.	1982 Para 9b(4) (See note d of table)	We concur with FAA's placement in F&E. This line item has been funded from this account for 20 years. FAA said it used the word "maintain" in its JOE when it should have used "sustain." Maintain is to Operations as Sustain is to F&E for budgeting clarification. This is a trend item we found while looking at this mandate. Could be page 5, par 9b(2) but still F&E.
(16) In-Plant NAS Contract Support Services	The Committee recommendation denies funding for this budget item. The contract support services should either be allocated to the individual budget item lines to better reflect the cost of the program or to the Operations		Concur. F&E funding for contract support services will be provided directly by programs. The Senate did not say this activity should be funded in Operations, it said that the contract support services should be allocated to the individual projects that are supported or	1990 Para 9b(4) (See note d of table)	We concur with FAA's placement of this budget line item in F&E.

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	account. The Committee will consider information from the FAA as to the most appropriate funding source for conference committee consideration.		funded in the Operations appropriation. We agree, and we are going to allocate these costs to the specific projects within the F&E appropriation that they support.		
(17) FAA Corporate System Architecture	The Committee recommendation denies funding for this request. This budget item is more appropriately funded in the Operations account.		See Item #3b of this GAO table.	N/A	See Item #3b of this GAO table.
(18) Personnel and Related Expenses	The Committee recommendation provides \$435,480,000 and notes that the reduction from the budget estimate can be accommodated through responsible management of P, C, & B for direct labor costs from other parts of the FAA, travel costs, and within the annualization and inflation allotments. In addition, the Committee recommendation includes \$2,400,000 for the personnel costs associated with the airport advanced technology development and prototyping funding included in Activity 1.		The only issue that relates to personnel in FY '04 is one associated with Airport Technology Research included in the Advanced Technology Development Prototyping (ATDP) line. The FY 2004 budget proposed that Airport Technology Research (ATR) including the 18 staff members involved with this activity be funded from the Airport Improvement Program (AIP). Each year for the last 2-3 years, Congress has zeroed out this figure from the AIP budget and moved the entire program to the ATDP line within Activity 1 of the Facilities and Equipment appropriation, including the personnel costs. The funding level that Congress has provided for Airport Technology Research within the ATDP line of the Facilities and Equipment appropriation has been much less than the \$17 million or so in the agency's AIP request. The FAA has included in its appeals and information to Congress that the personnel costs should not be funded in the ATR portion of the ADTP line since all personnel costs are suppose to be funded in Activity 6. Congress has ignored the FAA's appeals regarding where the personnel costs should be placed if the program is going to be funded within the Facilities and Equipment appropriation. The 2004 Senate report did address the issue and the Senate mark assumed that the personnel costs were in Activity 6 and the remaining Airport Technology Research funds were in the ADTP line under Activity 1. The House report did not make the same assumption, it transferred the program to F&E just like it had done in the past and did not separate the personnel funding from the rest of the program. The Conference Bill accepted the House position for Activity 6, so for 2004, the	2002 Para 9b(5)(a)	We concur with FAA's placement of this budget line item in F&E. Moreover, we agree with FAA that the personnel costs under ADTP shoved be removed from Activity 1 and moved to Activity 6.

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			personnel costs continue to be funded within the ADTP line of Activity 1.		
			Please see paragraph 9b5(a). It says "Funds all direct and related costs of Personnel Compensation, Benefits and Travel (PCB&T) to support the F&E work force" Although one could read that to only apply to the functions that follow, FAA believes the intent was to say that all personnel compensation and benefits funded in the F&E account had to be funded in Activity 6. FAA also believes there is report or bill language that says this. They are still looking at past reports and bills to find it. Agency officials state that if you look at the bill language for F&E, however, you will see that it is really split into two pieces. One part (\$2,489,158,800 is available for three years while the remainder (\$420,841,200) is only available for one year. The one year amount is the Activity 6 amount and it was Congresses intent that non-project type costs that are similar to operations or Salaries and Expenses should only be available for one year.		

Comments from the National Aeronautics and Space Administration

National Aeronautics and Space Administration Office of the Administrator Washington, DC 20546-0001



June 24, 2004

Ms. JayEtta Hecker Director Physical Infrastructure Issues United States General Accounting Office Washington, DC 20548

Dear Ms. Hecker:

Thank you for the opportunity to comment on the draft General Accounting Office (GAO) report entitled, Federal Aviation Administration (FAA) Budget Policies and Practices (Report Number GAO-04-841R). While the focus of the GAO report is on FAA, there is still some information in the report regarding NASA that could be misleading, and I request that it be clarified. The details of those clarifications are provided in the enclosure.

Questions may be forwarded to Dr. Richard Beck, Director, Resources Management Division, Office of the Chief Financial Officer, at (202) 358-2240.

Cordially,

Frederick D. Gregory Deputy Administrator

Enclosure

cc: ADI/Mr. Jennings G/Mr. Pastorek L/Mr. Forsgren O/Mr. Sutton O/Mr. Roberts NASA comments on draft report entitled "FAA Budget Policies and Practices" (GAO Code 540091, Report Number GAO-04-841R)

While the GAO report accurately states that, "NASA relies on a 'full-cost' budgeting methodology to identify costs associated with programs and developed its first 'full-cost' budget for fiscal year 2004," the statement that, "'Full-cost' budgeting led to changes in both NASA's capital budget policies and presentation of capital costs," is potentially misleading and should be changed. NASA has not had a distinct set of separate capital budgeting procedures, therefore, the word "capital" should be removed when referring to NASA's budget policies. At one time, NASA did have a separate "mission support" appropriation that covered such institutional infrastructure items as civil service personnel salaries, construction of facilities, and research operation support. However, the mission support appropriation still included a mix of institutional resources, some of which supported development efforts and are included presently in the full cost of development programs. Therefore, references to NASA having previous separate capital budgeting procedures should be deleted from page 4 in the draft and page 31 in enclosure 1.

In adopting its full-cost budgeting practices, NASA focuses on trying to ensure that the appropriate levels of institutional infrastructure relate directly to the need of each program activity. In this manner, the institutional infrastructure can be planned in direct context of the needs of each program that contributes to achieving the Agency's strategic plan objectives. Budgeting for NASA programs through separate capital and operating accounts would not be compatible with the conduct of NASA's type of program activities and could lead to possible disconnects and/or suboptimized planning for a program when its funds are separated across two appropriation accounts that are treated almost as two distinct entities. Since there are particular benefits to budgeting in this manner for NASA, it would be appreciated if the GAO report recognized the potential value of this full-cost approach in NASA's case instead of implying that NASA's budgeting is simply different and could possibly be benefited by having separate capital and operations appropriations accounts on page 4 and page 27 in enclosure 1.

I would also ask that the reference to NASA's budget policies being 5 years old, on page 25 in enclosure 1, be updated to include the review that we had in 2003 of the Agency's full-cost practices and its overall budget formulation process in 2003.

Enclosure

GAO Contacts and Staff Acknowledgements

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Acknowledgments:	In addition to the individuals named above, Christine Bonham, Donna Byers, Carol Campbell, Carlos Diz, Elizabeth Eisenstadt, Tom Gordon, David Hooper, Laura Durland, Edda Emmanuelli-Perez, Samantha Goodman, Thomas Hopp, Jerry Herley, Eric Mader, Maren McAvoy, and John Warren made key contributions to this report.

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