



## Testimony

Before the Subcommittee on National Security,  
International Affairs, and Criminal Justice, Committee on  
Government Reform and Oversight, House of  
Representatives

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## NASA FACILITIES

# Challenges to Achieving Reductions and Efficiencies

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Mr. Chairman and Members of the Subcommittee:

I am pleased to be here today to discuss our observations on the National Aeronautics and Space Administration's (NASA) efforts to reduce key areas of its infrastructure—especially facilities.<sup>1</sup> My testimony focuses on (1) why NASA has to cut its infrastructure, (2) the progress and problems experienced by NASA in achieving reductions and efficiencies, and (3) what further efforts are needed. It is based principally on our recent report on the challenges NASA faces in achieving infrastructure reductions and efficiencies.<sup>2</sup>

NASA's infrastructure—the underlying foundation for agency operations—includes people, facilities, equipment, business processes, and information systems. The NASA of the early 1990s, which was supporting an infrastructure and programs with a projected annual budget of more than \$20 billion by the turn of the century, does not exist anymore. The more recent and significantly lower out-year budget projections will result in a much smaller NASA. Since fiscal year 1993, NASA's planned budget and staffing levels have decreased sharply. For example, planned budgets for fiscal years 1993 through fiscal year 2000 have been lowered from \$122 billion to \$82 billion.<sup>3</sup> In response, major programs, such as the Space Station and the Earth Observing System, have been reduced and restructured, some projects have lost their funding and have been canceled, and infrastructure reductions are underway and further reductions are planned.

A NASA with fewer personnel, fewer missions, and reduced funding needs to work in a more integrated manner with fewer facilities and should be able to consolidate or close some of them. NASA knows it has excess capacity in its facilities, and it plans to eliminate \$4 billion worth of its facilities by the end of fiscal year 2000.<sup>4</sup> NASA has made some progress in downsizing its facilities and personnel infrastructure, but its actions to date and barriers to further progress indicate that (1) NASA still has a long

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<sup>1</sup>NASA defines facilities as land, buildings, structures, permanently located trailers, and other real property improvements, including utility systems and collateral equipment that is essentially integrated into the facility.

<sup>2</sup>NASA Infrastructure: Challenges to Achieving Reductions and Efficiencies (GAO/NSIAD-96-187, Sept. 9, 1996).

<sup>3</sup>As indicated in the Administration's fiscal year 1996 budget request.

<sup>4</sup>The \$4 billion represents the current replacement value, which is the acquisition cost of facilities, excluding land, plus the cost of collateral equipment and incremental book value changes escalated to the current year using a 20-city average cost index for buildings.

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way to go and (2) it may not be able to successfully downsize infrastructure, especially facilities, on its own. Currently planned facilities reductions will not meet NASA's reduction goal nor yield substantial cost reductions. In addition, NASA has had problems in evaluating some cost-reduction opportunities; environmental cleanup costs could affect future facility disposition efforts; and its recent efforts to share facilities with the Department of Defense (DOD) have not yet been very productive. Finally, closing facilities, relocating activities, and consolidating operations in fewer locations with fewer employees have been slowed by parochial concerns about the effects of such actions on missions, personnel, and local communities. These concerns have been exacerbated by perceptions of the lack of fairness and impartiality in the decision-making process.

NASA also faces another set of challenges before it can decrease the size of its planned workforce to about 17,500 by fiscal year 2000. As we reported to Senator John Glenn last month,<sup>5</sup> NASA needs to effectively plan for major workforce uncertainties, including the potential for a possible reduction-in-force, plans to shift program management from the Washington, D.C., headquarters, and the management of the space shuttle at Kennedy Space Center by a single contractor.

Because of the controversy that surrounds any major decision, NASA should make objective and well-supported closure and consolidation decisions after fairly and thoroughly considering reasonable alternatives. However, NASA has not always done so. NASA personnel have (1) not thoroughly evaluated potential larger cost-reduction options, (2) limited the scope of consideration for consolidation, (3) performed questionable initial cost-reduction studies, (4) made inappropriate closure recommendations, and (5) substantially overstated cost-reduction estimates.

In the past, we have expressed concerns about NASA's ability to accurately and independently develop cost estimates to support its decisions on new and ongoing programs and projects.<sup>6</sup> Just recently, the NASA Inspector General<sup>7</sup> and management have been discussing the structure needed to

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<sup>5</sup>NASA Personnel: Challenges to Achieving Workforce Reductions (GAO/NSIAD-96-176, Aug. 2, 1996).

<sup>6</sup>Space Programs: NASA's Independent Cost Estimating Capability Needs Improvement (GAO/NSIAD-93-73, Nov. 5, 1992).

<sup>7</sup>Assessment of the Relocation of NASA Independent Program Evaluation and Assessment Activities to Langley Research Center, NASA Office of Inspector General, Inspections and Assessments (July 8, 1996).

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conduct independent, impartial, and technically credible systems analysis and program evaluation.

NASA decided to consolidate its wide area telecommunications networks at one field center without thoroughly evaluating other cost-reduction options, and it initially excluded about 40 percent of its supercomputers from its consolidation study. Moreover, the NASA Inspector General questioned the scope and quality of NASA's analyses supporting its plan to consolidate aircraft operations. In other cases, NASA projected hundreds of millions of dollars in cost-reduction opportunities that ultimately proved to be invalid because the underlying figures and assumptions were unrealistic or insupportable.

We should also note that NASA's progress in reducing its facilities infrastructure will be affected by its ongoing actions to identify the extent of the costs for cleaning up environmental contamination at many of its facilities and by its success in identifying and pursuing cost-sharing opportunities in the future. We were encouraged to recently learn that NASA intends to complete a policy statement by the end of 1996 to address the issue of potential responsible parties at NASA facilities requiring environmental remediation.

Last year, NASA extended its search for infrastructure efficiencies outside the agency. It teamed with DOD to study how the two agencies could significantly reduce their operation costs and improve mission effectiveness and efficiency through increased cooperation and sharing. Study teams, referred to as integrated product teams, began work in September 1995 in seven areas. We monitored three teams: major facilities, space launch activities, and base/center support and services. However, the recently completed studies of space launch and other major facilities did not recommend specific facility consolidations or closures or identify cost reductions. They did reconfirm there are cost-reduction opportunities and identified barriers to accomplishing consolidations and closures, including differences in each agency's cost accounting systems, practices, and standards.

NASA and DOD officials also identified another, more generic factor that potentially limits the extent of closures and consolidation: the "old paradigm"—that is, each NASA and DOD center or laboratory wants to protect its ability to maintain technical expertise and competence. Some personnel have realized the need for greater sharing or dependence on the other organization's technical capabilities. However, recommending

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facility consolidations or closures was still difficult since such actions were “too politically sensitive” and could result in near-term costs increases, rather than cost reductions.

According to NASA and DOD officials, a process similar to the one used by the Defense Base Closure and Realignment Commission may ultimately be needed to overcome the sensitivity and cost issues. Given NASA’s limited progress to date, further opportunities to reduce facilities infrastructure, and the agency’s lack of control over some barriers to further reductions, we would endorse the idea of having such a process if continuing efforts fail to show significant progress soon.

The base/center support and services team, which was responsible for recommending ways to increase cooperation in base/center support and services, found over 500 existing support arrangements and identified additional cooperative opportunities. It identified changes to activities at several NASA locations, and it expects such changes to lower the agencies’ costs by millions of dollars. However, the team cited specific barriers, such as different negotiated wage rates for support service contractors, which could require paying the higher rate, thereby substantially or totally offsetting consolidation cost reductions. In other cases, merging certain activities could complicate procurements in small and disadvantaged business set-aside programs. However, the team said that many more sharing arrangements are possible and should be included in follow-on studies.

Overall, about a dozen studies related to NASA’s facilities’ infrastructure have been conducted over the last 6 years, and many recommended ways to improve the effectiveness of the nation’s aeronautics and space facilities. We reviewed the status of over 100 of the recommendations to determine to what extent they had been implemented and found that most had been fully or partially implemented or were scheduled to be implemented. However, it was difficult for us to ascertain the implementation status for the recommendations we reviewed because NASA did not have a formal system to track and report on the status of most recommendations related to infrastructure reductions. While NASA has essentially been responsive to past studies, projected decentralization and downsizing of program management will require a more systematic means of monitoring the results of ongoing and future studies. Such studies are likely to be in more detail and thus require more time to complete than those undertaken to date, and they will include joint efforts with other agencies, such as DOD. Under such circumstances, a monitoring and

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tracking system would help NASA management measure the progress of closure and consolidation studies, ensure timely implementation of their recommendations, and demonstrate its continuing interest in achieving efficiencies.

In conclusion, despite some progress in reducing its infrastructure, NASA faces formidable challenges to successfully reaching its budget goals through fiscal year 2000. Ultimately, if NASA cannot find sufficient infrastructure cost reductions to meet these goals, the agency will likely have to once again adjust its programs—stretching out, reducing the scope, terminating existing efforts, and/or postponing new initiatives. Even with NASA's management commitment to meeting goals without making such adjustments, the environment confronting the agency will not allow it to readily overcome the many barriers it faces. This is why we believe that NASA should submit a plan to Congress on how to meet the fiscal year 2000 infrastructure targets. Based on that plan and any further progress by NASA, Congress could consider establishing an independent process to facilitate closure and consolidation of NASA facilities.

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This concludes my prepared statement, Mr. Chairman. I would be happy to respond to any questions you or the Members of the Subcommittee may have at this time.

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