CBO Publication

SUMMARY

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REINVENTING NASA

The National Aeronautics and Space Administration (NASA) is confronting the difficult task of squeezing a program that it anticipated would cost about $95 billion for five years into a budget plan that allows just over $70 billion. The Congressional Budget Office (CBO) study *Reinventing NASA* evaluates NASA's strategy for coping with lower budgets and develops a set of illustrative alternatives that would reduce the scope of the agency's program.

Since the mid-1980s, NASA has planned a broad program to achieve major objectives in the areas of piloted spaceflight, space science, and technology necessary for new space and aeronautical activities. That program has required and continues to require substantial growth in NASA's budget. But with the budget requests for 1994 and 1995, the agency was forced to begin reconciling its program to the prospect of diminished future funding. NASA has adopted a two-pronged strategy to meet this challenge: maintaining the broad structure of its program while marginally adjusting content by stretching out, scaling down, and canceling some of its projects; and buying more with its appropriation by doing business more efficiently.

The CBO study finds that improving the way NASA conducts its business--buying more for less--is unlikely to produce significant budgetary savings in the next five years. This conclusion is based on a review of six types of proposals that range from changing procurement policy in small ways to altering NASA's basic philosophy by increasing its reliance on the private sector and the space agencies of other nations. Neither NASA's own experience nor that of the Department of Defense (an agency with similar problems that has pursued similar solutions)--nor, in more limited circumstances, the experience of the private sector--provides a basis for optimism that reforms will be put into place quickly and produce near-term budgetary savings.

Regarding many of NASA's proposed improvements, the CBO study concludes that their greatest benefits could lie in reducing the cost of new rather than current activities. Moreover, significant managerial improvements will be necessary just to contain the cost of current NASA projects within the boundaries established in its old budget plans.

Without large budgetary savings from improving the way the agency does business, a disproportionate share of the burden of living with lower budgets is likely to fall on the second prong of NASA's strategy: adjusting the content of the agency's program while maintaining its breadth. If so, the distinguishing characteristics of that program (high fixed costs and long operational lives), coupled with the agency's tendency to underestimate the costs of its projects, increase the risk that NASA's strategy will lead to greatly reduced productivity in the form of deferred, diminished, or even lost benefits.

An alternative to NASA's plan for adjusting to lower future budgets is to move beyond the hope of efficiency gains and small adjustments in content to a radical restructuring of the agency's program. If the agency's problem is trying to do too much with too few dollars, then a solution is to do less. CBO's report outlines three illustrative alternatives that do less by focusing resources on either piloted exploration of space, robotic science missions, or development of new space and aeronautical technologies---the three major objectives that NASA has historically pursued. The annual budgetary cost of the alternatives spans a wide range: from a high of $14.3 billion for a program that emphasizes piloted spaceflight, to $12 billion for an alternative that emphasizes scientific objectives and to that end employs a limited amount of piloted spaceflight, to $7 billion for an alternative that emphasizes developing new technologies for space and aeronautics and conducting scientific missions with significant applications value.

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