



Highlights of [GAO-07-96](#), a report to Subcommittee on Strategic Forces, Committee on Armed Services, House of Representatives

Why GAO Did This Study

Estimated costs for the Department of Defense's (DOD) major space acquisition programs have increased by about \$12.2 billion from initial estimates for fiscal years 2006 through 2011. Cost growth for ongoing Air Force programs above initial estimates accounts for a substantial portion of this 44 percent increase. In light of the role that optimistic estimating is believed to have played in exacerbating space acquisition cost growth, you requested that we examine (1) in what areas space system acquisition cost estimates have been unrealistic and (2) what incentives and pressures have contributed to the quality and usefulness of cost estimates for space system acquisitions.

What GAO Recommends

GAO recommends that DOD take a number of actions to increase the likelihood that independent, more realistic cost estimates will be developed and utilized.

DOD concurred with the overall findings of this report and provided information on the specific actions it was already taking to improve the Air Force's cost-estimating capability.

www.gao.gov/cgi-bin/getrpt?GAO-07-96.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Cristina T. Chaplain at (202) 512-4841 or chaplainc@gao.gov.

SPACE ACQUISITIONS

DOD Needs to Take More Action to Address Unrealistic Initial Cost Estimates of Space Systems

What GAO Found

Costs for DOD space acquisitions over the past several decades have consistently been underestimated—sometimes by billions of dollars. For example, Space Based Infrared System High program costs were originally estimated at \$4 billion, but the program is now estimated to cost over \$10 billion. Estimated costs for the National Polar-orbiting Operational Satellite System program have grown from almost \$6 billion at program start to over \$11 billion.

For the most part, cost growth has not been caused by poor cost estimating, but rather the tendency to start programs before knowing whether requirements can be achieved within available resources—largely because of pressures to secure funding. At the same time, however, unrealistic program office cost estimates have exacerbated space acquisition problems. Specifically, with budgets originally set at unrealistic amounts, DOD has had to resort to continually shifting funds to and from programs, and such shifts have had costly, reverberating effects.

Our analyses of six ongoing space programs found that original cost estimates were particularly unrealistic about the promise of savings from increased contractor program management responsibilities, the constancy and availability of the industrial base, savings that could be accrued from heritage systems, the amount of weight growth that would occur during a program, the availability of mature technology, the stability of funding, the stability of requirements, and the achievability of planned schedules. At times, estimates that were more realistic in these areas were available to the Air Force, but they were not used.

Cost-estimating and program officials we spoke with identified a number of factors that have contributed to this condition, in addition to larger pressures to produce low estimates that are more likely to win support for funding.

- Although the National Security Space Acquisition policy requires that independent cost estimates be prepared by bodies outside the acquisition chain of command, it does not require that they be relied upon to develop program budgets.
- While the policy requires that cost estimates be updated at major acquisition milestones, significant events, such as changes in the industrial base or funding, have occurred between milestones.
- Within space system acquisitions, cost-estimating officials believe that their roles and responsibilities are not clear and the cost-estimating function is fragmented.
- Cost-estimating resources have atrophied over the years because of previous downsizing of the workforce, making resources such as staff and data inadequate and the Air Force more dependent on support contractors for the estimating function.