

Highlights of [GAO-11-590T](#), a testimony before the Subcommittee on Strategic Forces, Committee on Armed Services, U.S. Senate

## Why GAO Did This Study

Despite decades of significant investment, most of the Department of Defense's (DOD) large space acquisition programs have collectively experienced billions of dollars in cost increases, stretched schedules, and increased technical risks. Significant schedule delays of as much as 9 years have resulted in potential capability gaps in missile warning, military communications, and weather monitoring. These problems persist, with other space acquisition programs still facing challenges in meeting their targets and aligning the delivery of assets with appropriate ground and user systems.

To address cost increases, DOD reduced the number of satellites it would buy, reduced satellite capabilities, or terminated major space system acquisitions. Broad actions have also been taken to prevent their occurrence in new programs, including better management of the acquisition process and oversight of its contractors and resolution of technical and other obstacles to DOD's ability to deliver capability.

This testimony will focus on the (1) status of space system acquisitions, (2) results of GAO's space-related reviews over the past year and the challenges they signify, (3) efforts DOD has taken to address causes of problems and increase credibility and success in its space system acquisitions as well as efforts currently underway, and (4) what remains to be done.

View [GAO-11-590T](#) or key components. For more information, contact Cristina Chaplain at (202) 512-4841 or [chaplainc@gao.gov](mailto:chaplainc@gao.gov).

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## SPACE ACQUISITIONS

### DOD Delivering New Generations of Satellites, but Space System Acquisition Challenges Remain

## What GAO Found

Over the past two decades, DOD has had difficulties with nearly every space acquisition program, with years of cost and schedule growth, technical and design problems, and oversight and management weaknesses. However, to its credit, DOD continues to make progress on several of its programs—such as the Space Based Infrared System High and Advanced Extremely High Frequency programs—and is expecting to deliver significant advances in capability as a result. But other programs continue to be susceptible to cost and schedule challenges. For example, the Global Positioning System (GPS) IIIA program's total cost has increased by about 10 percent over its original estimate, and delays in the Mobile User Objective System continue the risk of a capability gap in ultra high frequency satellite communications.

In 2010, GAO assessed DOD's efforts to (1) upgrade and sustain GPS capabilities and (2) commercialize or incorporate into its space acquisition program the space technologies developed by small businesses. These reviews underscore the varied challenges that still face the DOD space community as it seeks to complete problematic legacy efforts and deliver modernized capabilities—for instance, the need for more focused coordination and leadership for space activities—and highlight the substantial barriers and challenges that small businesses must overcome to gain entry into the government space arena.

DOD continues to work to ensure that its space programs are more executable and produce a better return on investment. Many of the actions it has been taking address root causes of problems, though it will take time to determine whether these actions are successful. For example, DOD is working to ensure that critical technologies are matured before large-scale acquisition programs begin and requirements are defined early in the process and are stable throughout. Additionally, DOD and the Air Force are working to streamline management and oversight of the national security space enterprise.

While DOD actions to date have been good, more changes to processes, policies, and support may be needed—along with sustained leadership and attention—to help ensure that these reforms can take hold, including addressing the diffuse leadership for space programs. While some changes to the leadership structure have recently been made and others are being studied, it is too early to tell how effective they will be in streamlining management and oversight of space system acquisitions. Finally, while space system acquisition workforce capacity is essential if new weapon programs are to be successful, DOD continues to face gaps in technical and programmatic expertise for space.