GAO Highlights

Highlights of GAO-16-471T, a statement for the record to the Subcommittee on Strategic Forces, Committee on Armed Services, U.S. Senate

Why GAO Did This Study

DOD is shifting its traditional approach to space acquisitions, bolstering its protection of space systems, and engaging with more commercial providers. Given the time and resource demands of DOD's space systems and today's budget environment, challenges that hinder these transitions must be addressed.

This statement focuses on (1) the current status and cost of major DOD space system acquisitions, and (2) challenges and barriers DOD faces in addressing future space-based mission needs. This statement highlights the results of GAO's work on space acquisitions over the past year and presents preliminary observations from ongoing work. We obtained comments from DOD on a draft of preliminary findings contained in this statement.

What GAO Recommends

Past GAO reports have generally recommended that DOD adopt best practices. DOD has generally agreed and taken actions to address these recommendations. Consequently, GAO is not making any recommendations in this statement.

View GAO-16-471T. For more information, contact Cristina Chaplain at (202) 512-4841 or chaplainc@gao.gov.

SPACE ACQUISITIONS

Challenges Facing DOD as it Changes Approaches to Space Acquisitions

What GAO Found

Most major space programs have experienced significant cost and schedule increases. For instance, program costs for the Advanced Extremely High Frequency satellite program, a protected satellite communications system, have grown 116 percent as of our latest review, and its first satellite was launched more than 3 years late. For the Space Based Infrared System High, a missile warning satellite program, costs grew almost 300 percent and its first satellite was launched roughly 9 years late. Last year, we reported that contract costs for the Global Positioning System (GPS) ground system, designed to control on-orbit GPS satellites, had more than doubled and the program had experienced a 4-year delay. The delivery of that ground system is now estimated to be delayed another 2 years, for a cumulative 6-year delay. Some DOD officials say even that is an optimistic timeline. Though steps have been taken to improve acquisition management in space, problems with GPS show that much more work is needed, especially since DOD is considering going in new directions for space programs.

Right now, DOD is at a crossroads for space. Fiscal constraints and increasing threats—both environmental and adversarial—to space systems have led DOD to consider alternatives for acquiring and launching space-based capabilities, such as: disaggregating large satellites into multiple, smaller satellites or payloads; relying on commercial satellites to host government payloads; and procuring certain capabilities, such as bandwidth and ground control, as services instead of developing and deploying government-owned networks or spacecraft.

This year, GAO's work on space acquisitions continued to show that DOD faces several major challenges as it undertakes efforts to change its approaches to space acquisitions. Our work assessed a range of issues including DOD's analysis supporting its decisions on future weather satellites, space leadership, and the introduction of competition into space launch acquisitions. These and other studies surfaced several challenges:

- First, though DOD is conducting analyses of alternatives to support decisions about the future of space programs, there are gaps in cost and other data needed to weigh the pros and cons of changes to space systems.
- Second, most changes being considered today will impact ground systems and user equipment, but these systems continue to be troubled by management and development issues.
- Third, leadership for space acquisitions is still fragmented, which will likely hamper the implementation of new acquisition approaches, especially those that stretch across satellites, ground systems and user equipment.