



Highlights of [GAO-05-155](#), a report to congressional committees

## Why GAO Did This Study

The Department of Defense (DOD) is depending heavily on new space-based technologies to support and transform future military operations. Yet there are concerns that efforts to develop technologies for space systems are not tied to strategic goals for space and are not well planned or coordinated. In the National Defense Authorization Act for 2004, the Congress required DOD to develop a space science and technology (S&T) strategy that sets out goals and a process for achieving those goals. The Congress also required GAO to assess this strategy as well as the required coordination process.

## What GAO Recommends

GAO is making recommendations that focus on assuring DOD has the right tools and measures in place to meet its goals for space S&T and to take steps needed to begin addressing barriers to effectively implementing the new strategic plan. In commenting on the report, DOD agreed with the recommendations.

[www.gao.gov/cgi-bin/getrpt?GAO-05-155](http://www.gao.gov/cgi-bin/getrpt?GAO-05-155).

To view the full product, including the scope and methodology, click on the link above. For more information, contact Mike Sullivan at (937) 258-9715 or [sullivanm@gao.gov](mailto:sullivanm@gao.gov).

## TECHNOLOGY DEVELOPMENT

# New DOD Space Science and Technology Strategy Provides Basis for Optimizing Investments, but Future Versions Need to Be More Robust

## What GAO Found

DOD's new strategy for space S&T met four of the nine requirements set out by the Congress and plans are in place to meet the remaining requirements. These included requirements for setting short- and long-term goals and a process for achieving those goals as well as requirements that focused on ensuring the strategy was developed with laboratories, research components, and other organizations involved in space S&T and ensuring the strategy would be reviewed by appropriate entities and revised periodically. In addition to meeting these requirements, GAO found that development of the strategy itself helped spur collaboration within the DOD space S&T community since it required diverse organizations to come together, share knowledge, and establish agreement on basic goals.

Since the strategy has only recently been issued, it is too early to assess whether the direction and processes outlined in the strategy will be effective in supporting and guiding future space S&T efforts. Moreover, DOD officials are still working out the details of some implementation mechanisms. However, in order to better position DOD for successful implementation, GAO believes that the plan should contain stronger linkages to DOD's requirements setting process, identify additional measures for assessing progress in achieving strategic goals, and explicitly cover all efforts related to space S&T.

Moreover, there are formidable barriers that stand in the way of optimizing DOD's investment in space S&T. For example:

- DOD does not have complete visibility over all spending related to space S&T, including spending occurring within some S&T organizations and acquisition programs. Without a means to see where funding is being targeted, DOD may not be able to assure all spending on technology development is focused on achieving its goals.
- The S&T community itself may not have resources critical to achieving DOD's goals. In recent years, funding and opportunities for testing for the space S&T community have decreased. And, concerns have grown about the adequacy of the space S&T workforce.
- DOD acquisition programs continue to undertake technology development that should be occurring within an S&T environment, which is more forgiving and less costly than a delivery-oriented acquisition program environment. Until this is done, cost increases resulting from technology problems within acquisitions may keep resources away from the S&T community.

By using the strategy as a tool for assessing and addressing these challenges, DOD can better position itself for achieving its goals and also strengthen the S&T base supporting space.