



Highlights of [GAO-05-6](#), a report to the Chairman, Subcommittee on Tactical Air and Land Forces, Committee on Armed Services, House of Representatives

### Why GAO Did This Study

Global Hawk offers significant military capabilities to capture and quickly transmit high-quality images of targets and terrain, day or night, and in adverse weather—without risk to an onboard pilot. Global Hawk first flew in the late 1990s as a demonstrator and supported recent combat operations in Afghanistan and Iraq. In 2001, the Air Force began an acquisition program to develop and produce improved Global Hawks. In 2002, the Department of Defense (DOD) restructured and accelerated the program to include a new, larger and more capable air vehicle. GAO was asked to review the program and discuss (1) the restructuring’s effect on the Air Force’s ability to deliver new capabilities to the warfighter and (2) whether its current business case and management approach is knowledge-based and can help forestall future risks.

### What GAO Recommends

GAO recommends the Air Force revisit the decision to concurrently develop and produce the newer Global Hawk and create a new business case that defines warfighter needs and available resources. GAO also recommends that production be delayed (other than those units needed for testing) until the new business case is approved. DOD disagrees that these actions are needed because it believes risks are being managed effectively and GAO’s approach would require more time and money to implement the program.

[www.gao.gov/cgi-bin/getrpt?GAO-05-6](http://www.gao.gov/cgi-bin/getrpt?GAO-05-6).

To view the full product, including the scope and methodology, click on the link above. For more information, contact Michael J. Sullivan at (202) 512-4163 or [sullivanm@gao.gov](mailto:sullivanm@gao.gov).

## UNMANNED AERIAL VEHICLES

### Changes in Global Hawk’s Acquisition Strategy Are Needed to Reduce Program Risks

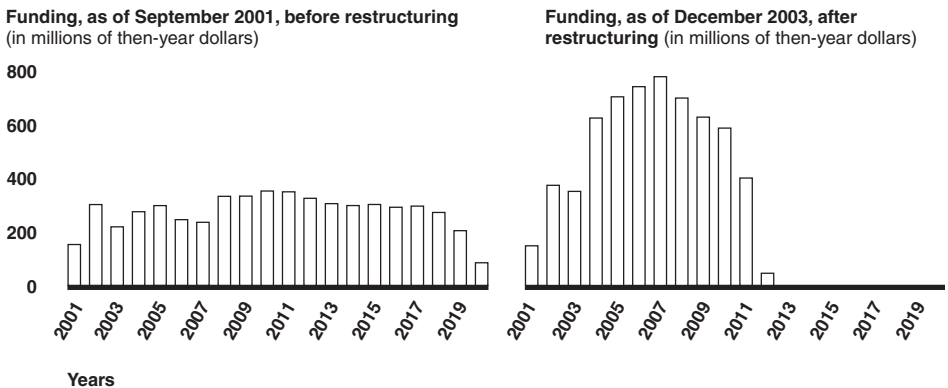
#### What GAO Found

The restructuring of the Global Hawk program impacts the acquisition program in multiple ways.

- **More and accelerated funding:** Funding, which previously spanned 20 years, now is compressed in about half the time. The restructured plan requires \$6.3 billion through fiscal year 2012; the original plan would have needed \$3.4 billion by that time. The budget request is now three times higher for some years (see figure below).
- **Immature technologies:** Several critical technologies needed to provide the advanced capabilities are immature and will not be tested on the new air vehicle until late in the program, after which most of the air vehicles will already have been bought.
- **New requirements, new costs:** DOD’s desire to add additional Global Hawk capabilities tripled development costs. The program acquisition unit cost increased 44 percent since program start, yet fewer vehicles are to be produced than originally planned.
- **Challenges, trade-offs, and delays:** The addition of new capabilities has led to space, weight, and power constraints for the advanced Global Hawk model. These limitations may result in deferring some capabilities. Some key events and activities—many related to testing issues—have been delayed.

Global Hawk’s highly concurrent development and production strategy is risky and runs counter in important ways to a knowledge-based approach and to DOD’s acquisition guidance. The restructuring caused gaps in product knowledge, increasing the likelihood of unsuccessful cost, schedule, quality, and performance outcomes. Because the restructured program is dramatically different from the initial plan for the basic model, the business case now seems out of sync with the realities of the acquisition program.

**Global Hawk’s Annual Funding Requirements**



Sources: Air Force (data); GAO (analysis).