



## **Maintain U.S. Global Leadership in Space and Ensure Continued Competitiveness and Innovation**

U.S. space efforts — civil, commercial and national security — drive our nation's competitiveness, economic growth and innovation. To maintain U.S. preeminence in this sector and to allow space to act as a technological driver for current and future industries, our leadership must recognize space as a national priority and robustly fund its programs.

Space technologies and applications are essential in our everyday lives. Banking transactions, business and personal communications as well as emergency responders, airliners and automobiles depend on communications and GPS satellites. Weather and remote sensing satellites provide lifesaving warnings and recurring global measurements of our changing Earth. National security and military operations are deeply dependent upon space assets.

The key to continuing U.S. preeminence is a cohesive coordination body and a national space strategy. Absent this, the myriad government agencies overseeing these critical systems may make decisions based upon narrow agency requirements.

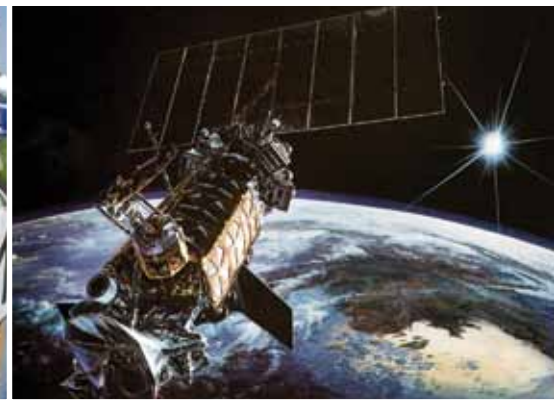
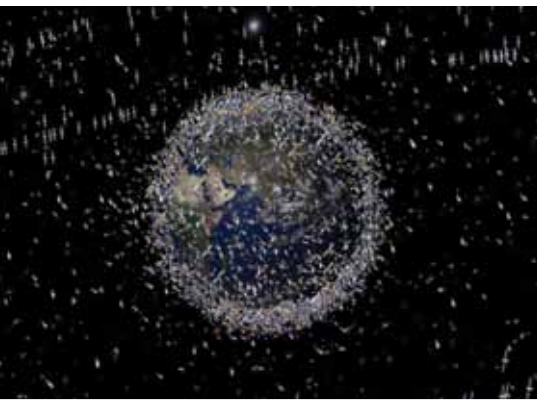
The U.S. space industrial base consists of unique workforce skills and production techniques. The ability of industry to meet the needs of U.S. space programs depends on a healthy industrial base.

U.S. leadership in space cannot be taken for granted. Other nations are learning the value of space systems; the arena is increasingly contested, congested and competitive. Strong government leadership at the highest level is critical to maintaining our lead in space and must be supported by a healthy and innovative industrial sector.

## Robust Space Programs Require National Leadership and Congressional Oversight

Many U.S. agencies play roles in our space programs. An interagency space management body, reporting directly to the White House, will provide efficient oversight and allow for cross-cutting programs. Such leadership is needed to develop and maintain a cohesive national space strategy and establish a national architecture and budgets for meeting requirements. Congress must oversee a sound national space strategy and appropriate sufficient and stable funding to support this critical national resource.

**Interagency coordination at the highest level, a national space strategy and stable funding are all critical to preserving America's global leadership in space.**



## U.S. Preeminence in Space is Perishable

More than 60 nations are investing in space, recognizing that a space presence raises prestige, enhances a global leadership profile and drives technology. Russia regularly flies crew and cargo to the International Space Station; the European Union and Japan also have flown automated cargo vessels to the station. China has orbited *taikonauts*, and India expects human launch within a decade. U.S. launch capabilities face global competition, having provided only four of the 24 worldwide commercial launches in 2009.

**National leadership is vital if the United States is to continue to lead in space.**

**The U.S. once provided the world's only GPS satellite navigation. Now Russia is modernizing its GPS system while the European Union, China and India are developing systems.**

**The aerospace industry supports more than two million middle-class jobs and 30,000 suppliers from all 50 states. With sales of \$214 billion in 2009, the aerospace industry leads all U.S. manufacturing industries with a positive trade balance of \$56 billion.**

## **Current and Next Generation Engineers Depend on Strong National Support**

Aerospace provides more than 600,000 skilled middle-class jobs. Yet space remains dogged by reduced budgets and canceled projects, resulting in the loss of workers who may not return to aerospace. Without a solid job base, the number of U.S. engineering students may also continue to decline. The U.S. annually graduates just 74,000 engineers, a fraction of what India and China graduate. Nearly 20 percent of our graduating engineers are foreign students who return home after graduation. Lack of job opportunities puts our nation at risk of losing our engineering lead to other countries.

**Administration and Congressional support for stable and healthy space programs is key to maintaining and expanding critical and well-paying jobs.**



## **Aerospace Drives Critical Technological Development Vital to Our Nation's Economy, Safety and Security**

Our space industrial base designs, develops, produces and supports our spacecraft, satellites, launch systems and supporting infrastructure. Systems are often produced in small, even single, numbers. Cancellations impact large companies and can be catastrophic to smaller firms — often the only entities producing critical components on which we depend. This industrial base also drives technological development that commonly occurs with the design and production of next-generation systems.

**The space industrial base is a vital resource for our nation's well-being and must be properly prioritized and supported by the Administration and Congress.**

## Summary

Virtually all sectors of our nation's economy and national security depend on the vitality of our space systems. Although this reliance is often matter-of-fact, it is critical and must be considered a national priority. Strong national leadership is crucial to maintaining U.S. global space leadership and the industrial base that supports it.

- Interagency coordination at the highest level, a national space strategy and stable funding are all critical to preserving America's global leadership in space.
- National leadership is vital if the United States is to continue to lead in space.
- Administration and congressional support for stable and healthy space programs is key to maintaining and expanding critical and well-paying jobs.
- The space industrial base is a vital resource for our nation's well-being and must be properly prioritized and supported by the administration and Congress.



The Aerospace Industries Association was founded in 1919, only a few years after the birth of flight. Today, nearly 300 major aerospace and defense companies and suppliers are members of the association, embodying every high-technology manufacturing segment of the U.S. aerospace and defense industry from commercial aviation and avionics, to manned and unmanned defense systems, to space technologies and satellite communications. AIA represents the nation's leading designers, manufacturers and providers of:

- Civil, military and business aircraft
- Helicopters
- Unmanned aerial systems
- Space systems
- Aircraft engines
- Missiles
- Cyber and homeland security systems
- Materiel and related components
- Equipment
- Services
- Information technology

**Photos courtesy**

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