

## Space

### **ISSUE: Stable space program funding is vital to our nation's economy, safety and security.**

#### **BACKGROUND**

U.S. space efforts – civil, commercial and national security – drive our nation's competitiveness, economic growth and innovation. Our space industrial base designs, develops, produces and supports our spacecraft, satellites, launch systems and supporting infrastructure. Given the growing U.S. dependence on these systems and their contribution to the global economy, our nation cannot afford to lose its preeminence in space. We need to maintain – and in some cases restore – the vitality of our space programs to prevent irreparable harm to our national economic and security interests.

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 also deeply dependent upon space assets. Effective missile defense requires satellites, sensors and interceptors designed and built by the U.S. space industry.

With the increasing importance of space to our economy, warfighters and national security, U.S. leadership in space faces very serious challenges. Over 60 nations today are engaged in space efforts, and the United States has not been so vigorously contested since the 1960s. Our nation's reliance on Russia for astronaut transportation to the US-led International Space Station (ISS) could not make this clearer. For the first time in thirty years, the United States has no independent capability to put our astronauts into space. Without steady investment in new human spaceflight systems, NASA will continue to pay over \$400M a year to Russia for years to come. Meanwhile, the Chinese continue to make impressive milestones in their human spaceflight program, including the launch of a prototype space station module just this year.

As space becomes more contested and competitive, current U.S. export control policies for space systems are often harming U.S. industry, threatening both our security and our economic strength. Outdated export control policies for commercial satellites and related items make it difficult for American companies to compete in the global satellite market. The current U.S. satellite export environment poses challenges to the United States' ability to lead space partnerships with our allies abroad, weakens our ability to compete and ultimately eats away at our domestic space industrial base and security.

In addition, program cancellations and changes at NASA and the Defense Department risk creating workforce deficiencies that will impact future U.S. space efforts. The number of U.S. space suppliers is threatened; a reduction of the pool of space professionals would endanger our nation's lead in producing preeminent space technologies – especially as other nations graduate thousands more engineers than the United States.

#### **AIA RECOMMENDATIONS**

In order to ensure the leadership of the United States in space and continued development of leading-edge technologies, the government must provide:

- National level leadership that articulates a long-term space investment strategy across all space sectors, as well as multi-system procurement strategies and balanced and stable budgets and funding that will maintain national space programs;
- A modernized export control regime that enables U.S. industry's ability to compete worldwide while preserving national security; and
- Stable funding for technology research and development despite fiscal pressures is essential to assure future leadership.

