



AEROSPACE & DEFENSE BUDGET FUNDING AND PROCUREMENT

Background: The aerospace and defense (A&D) industry is the nation's largest manufacturing exporter. A&D exports of \$118.9 provided the economy with a favorable balance of trade of \$61.2 billion in 2014. Sales in 2014 totaled \$228.4 billion — up from \$219.4 billion in 2013. Continued stability of the A&D industrial base is critical to our economy, national security, infrastructure, and future workforce. As the world's largest aerospace professional society, serving a diverse range of more than 30,000 individual members from 88 countries, and 95 corporate members, the American Institute of Aeronautics and Astronautics (AIAA) urges Congress to enact and sustain policies that will strengthen the long-term viability of the A&D industrial base.

Issue: Funding Instability. The A&D industry is facing one of its greatest challenges in history as Congress and the administration deal with mounting national debt and balancing the federal budget. All federal agencies face significant budget reductions, with the Department of Defense (DoD) potentially bearing the biggest burden. While all areas must be examined to identify unnecessary spending that can be reduced or eliminated, we must ensure that the nation's future is not mortgaged to address today's crises.

The Bipartisan Budget Act of 2015 provides two years of relief from sequestration cuts — increasing the discretionary spending caps set by the 2011 Budget Control Act by \$50 billion for Fiscal Year 2016 and by \$30 billion for Fiscal Year 2017. Under the budget plan, Fiscal Year 2016 defense spending would be raised to \$607 billion. While this is a step forward toward stability, it is \$5 billion less than the top-line figure that authorizers budgeted before the deal. Additionally, it does not address a recurring cause of damage to the A&D industrial base — the uncertainty and instability caused by funding the government for portions of the year on continuing resolutions.

The A&D industrial base possesses unique capabilities and expertise to address the distinctive and diverse missions required by its civilian and military customers. Operating on continuing resolutions prevents companies from adequate resource planning, strategic decision making, and providing sound guidance to investors. This additional uncertainty acts as a "speed brake" on the economy and employment, discouraging companies from ramping up hiring for new programs and creating a dangerous climate of risk aversion. This uncertainty is particularly harmful to the many small businesses providing technological innovation and A&D-unique components and subsystems that depend upon year-to-year contracts to sustain an already fragile industrial base — potentially resulting in single-source suppliers or elimination of domestic suppliers for items on critical development paths. If our supplier base is allowed to erode, the United States could risk losing its technological edge and be unable to address future threats to our national security or economic stability.

For far too long Congress has operated under continuing resolutions without a normal appropriations process. A return to a regular appropriations process is needed immediately so that the nation, including the A&D industrial base, can begin work on initiatives critical to a robust and secure future.

Issue: Reauthorize FAA. The six-month extension of the FAA Modernization and Reform Act (Act) will expire on 31 March 2016. The bill's expiration threatens several projects vital to our nation's future as an aerospace leader: placing unmanned aerial vehicles in the national airspace, meeting the growing demands for expanded commercial air travel, and developing the Next Generation Air Traffic Control System (NextGen).

Issue: Funding for the FAA Office of Commercial Space Transportation. The level of activity for commercial space operators has grown significantly in recent years. Examples include the commercial cargo and commercial crew programs in support of the International Space Station, the emergence of several space tourism companies, the increase in the number of licensed spaceports, and the efforts by a number of firms to develop dedicated smallsat launchers. To ensure that this growth can continue, and that public safety will be protected, it is vitally important that the FAA Office of Commercial Space Transportation has the resources that it needs to keep pace with industry's progress.

Issue: Reauthorize NASA. Since last authorized in 2010, NASA continues to prove why the United States is the world's leader in aerospace innovation. NASA's Mars Science Laboratory Curiosity rover, Kepler mission, and New Horizons probe have shown us a chemically-active Mars, hundreds of new worlds, and a Pluto more strange and majestic than we imagined. Commercial companies are revolutionizing space technology, including the first 3D printer on-orbit, and sustaining cargo resupply missions to the International Space Station (ISS). The ISS National Laboratory hosts a growing community of Fortune 500 companies conducting microgravity research. In December 2014, the Orion spacecraft completed its first successful test, orbiting the Earth twice. The Space Launch System (SLS) and the Orion are the next generation human transportation systems to explore farther into the solar system than ever before. SLS flight hardware is in production, engines and boosters are in testing, and the program is on schedule for its inaugural launch in 2018. In the skies closer to us, NASA tested cleaner aircraft fuels, developed new software for optimizing air traffic, and demonstrated new wing surfaces that can change shape in the air.

While AIAA commends the increased funding levels for NASA in the Consolidated Appropriations Act of 2016, we call on Congress to ensure that it continues to provide adequate funding and authorization going forward, which will make long-term planning and mission execution more predictable and successful. AIAA reminds Congress that uncertainty or instability of future funding, or delayed authorization of NASA, will place our industrial base and workforce at risk. Consequently, the federal government should authorize, appropriate, and manage NASA programs for long-term viability and sustainability.

AIAA Recommendations:

- Appropriate 2017 Defense funding within the caps established by the Bipartisan Budget Act of 2015 no later than 30 September 2016.
- Employ sound budgetary principles for the long-term development and manufacturing of complex aerospace systems and architecture necessary to accomplish strategic national goals.
- Provide long-term reauthorization with adequate funding for the FAA in order to meet program requirements. This is also instrumental in providing certainty and stability for the aviation marketplace and workforce. Reauthorization should include adequate funding to successfully implement NextGen, commercial space transportation operations, safely integrate UAS into the NAS, and complete priority FAA modernization initiatives.

- Provide adequate funding and ample resources for the FAA Office of Commercial Space Transportation in order to keep pace with the continued progress of the commercial space industry.
- Provide long-term reauthorization with adequate funding for NASA in order to meet program requirements and maintain our nation's leadership in space exploration, research, and technology.