



AEROSPACE & DEFENSE COMPETITIVENESS AND SECURITY

Background: The aerospace and defense (A&D) industry is the nation's largest manufacturing exporter. Technology drives over half of the U.S. Gross Domestic Product. To keep our technology edge, we must continue to invest in research and development in an effort to compete with the growing investment by other nations. Stability and protection of the A&D industrial base is also 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: FAA Modernization and Reform Act. The six-month extension of the FAA Modernization and Reform Act (Act) will expire on 31 March 2016. AIAA strongly recommends that Congress reauthorize the full Act for a similar four-year period or longer.

Elements of the FAA Modernization and Reform Act will be necessary to create a more nimble and responsive FAA that is better able to work with the A&D industry and leverage the public/private relationships in aircraft certification as new platforms are brought to market. This Act encompasses many provisions to upgrade and reform the certification process and regulatory system for the aerospace industry, such as the Organizational Designation Authorization (ODA). ODA should be fully utilized to manage time and employee technical resources most effectively while maintaining the global standard of FAA safety. This can be achieved by maximizing autonomy for the ODA and creating a built-in continuous process improvement with metrics and guidelines for both the FAA and industry. Ensuring the proper functionality of the ODA would enable a cost-efficient, transparent, and timely certification process. This would result in substantially increasing in-service aircraft supported by the domestic workforce, thus contributing to the U.S. economy through prime contractors, suppliers, customers, maintenance services, etc.

The Act also targets the complete implementation of the Next Generation Air Traffic Control System (NextGen), which is essential to our national security, safety, and competitiveness. Overall, air traffic is ever-increasing with simultaneous activity of more and more commercial, business, general, and unmanned aircraft in the National Airspace System (NAS). Management systems need to be modernized to minimize pilot and air traffic controller workload and error. Reauthorizing this Act would provide funding to complete testing and installation for NextGen and thus establish a modern air traffic management system with the capability to expand and accommodate the growing U.S. traveling public.

Issue: Integration of UAS into NAS. The Association for Unmanned Vehicle Systems International's 2013 report on "The Economic Impact of Unmanned Aircraft Systems Integration in the United States" forecasts that the unmanned aerial systems (UAS) industry will create more than 100,000 jobs providing an economic impact of \$82 billion over the next decade. Sections 331 – 336 of the FAA Modernization and Reform Act focus on the safe and appropriate integration of UAS into the NAS, which is arguably the most immediate regulatory need of the U.S. aerospace industry. AIAA recognizes the progress of the

FAA to initiate a streamlined process for public UAS operators to comply with regulations and operate safely within the NAS

Issue: Space Traffic Management. Given the continuing proliferation of cubesats and the continued growth in orbital debris, the risk of collisions in space is becoming greater by the day. Such collisions not only endanger our astronauts, they also put all of our current assets in space at risk, including those for national security or scientific purposes, or for communications, navigation, or weather forecasting. The Department of Defense, through the Joint Space Operations Center (JSpOC), provides space situational awareness and conjunction analysis as a byproduct of its mission to protect national security assets in space. Currently, however, almost all of these analyses do not involve military spacecraft. The U.S. government must take appropriate action in the current fiscal environment to identify the lead authority for Space Traffic Management and Congress should authorize adequate resources for its implementation.

Issue: Export-Import Bank Board Appointments. While AIAA applauds the reauthorization of the Ex-Im Bank, constraints to the bank fulfilling its role and delivering benefits to the A&D sector and U.S. economy still exist. The bank reopens with three vacant seats on its five-member board resulting in the lack of a working quorum. Consequently, the bank can only approve small export deals. Any export transactions over \$10 million—essentially large orders of aircraft and satellites—cannot be approved. This continues to place U.S. aerospace companies at a competitive disadvantage in the global market. AIAA calls on the U.S. Senate to confirm the President’s three appointments to the Ex-Im Board as quickly as possible to ensure that all U.S. aerospace manufacturers can be considered for new, large export orders.

AIAA Recommendations:

- 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.
- Prioritize FAA Modernization and Reform initiatives to expedite streamlining of the FAA certification process and incorporate continuous improvement processes.
- Take appropriate action in the current fiscal environment to identify the lead authority for Space Traffic Management and Congress should authorize adequate resources for its implementation.
- Quickly confirm the President’s three appointments to the Ex-Im Bank Board so U.S. aerospace companies can remain competitive in the global market.