Policy Pillar: Funding Stability and Competitiveness

NASA Reauthorization

- Authorizes $20.7 billion in FY2018 and $21.2 billion in FY2019 ($1.3 billion more than the administration’s $19.9 billion budget request); directs NASA to prioritize the acquisition and use of space products provided by a United States commercial provider or through a public-private partnership with a domestic commercial provider; report to Congress on the potential development of space facilities for use beyond low Earth orbit; and proceed with its International Space Station Transition Plan that calls for transferring its operations to commercial entities over the next decade.
- Introduced by Rep. Brian Babin (R-TX) on 04/13/18
- Passed the House Committee on Science, Space, and Technology on 04/17/18

- $19.5 authorization that provides stability for the agency to sustain and build upon existing national space investments designed to advance space exploration and science; does not directly address NASA’s Earth science and heliophysics programs.
- Introduced by Sen. Ted Cruz (R-TX) on 02/17/17
- Became Public Law No: 115-10 on 03/21/17

AIAA Position – Applaud Congress for authorizing NASA through Fiscal Year 2017, the space agency’s first authorization bill in nearly seven years. Call on Congress to provide long-term authorization and appropriations with top-line increases in the out years to give NASA the means necessary to meet its program and mission requirements.

FAA Reauthorization

H.R. 302 – Federal Aviation Administration Reauthorization Act of 2018
- Reauthorizes the FAA and related programs through the end of Fiscal Year 2023; streamlines the aircraft certification process; allows the FAA to certify new civil supersonic aircraft with reduced sonic booms; advances low-altitude UAS traffic management systems and furthers regulation of unmanned aircraft operations; and establishes methods aimed at encouraging the younger generation and women to enter the aviation workforce.
- Became Public Law No: 115-2454 on 10/05/18

AIAA Position – Call on Congress to provide long-term authorization for the FAA to successfully implement the Next Generation Air Transportation System, commercial space transportation operations, safely integrate unmanned aerial vehicles into the National Airspace System, and complete other priority FAA modernization initiatives.
UAS Safety and Integration

**S. 1410** — Safe DRONE Act of 2017
- Helps build a trained and professional workforce in the UAS industry; advances work on the development of a low-altitude safe and secure traffic management system; directs robust collaboration to address critical needs such as a comprehensive security policy and a long-term plan for spectrum and communications infrastructure needs; and provides congressional authority for the FAA to continue the registration and marking of small UAS.
- Introduced by Sens. Catherine Cortez Masto (D-NV), Dean Heller (R-NV), John Hoeven (R-ND), and Mark Warner (D-VA) on 06/22/17
- Referred to the Senate Committee on Commerce, Science, and Transportation

**S. 1272** — Drone Federalism Act
- Reaffirms that the federal government will respect private property rights to the airspace immediately above a property, including the first 200 feet; and directs the FAA to partner with a diverse group of jurisdictions to test different tactics, inform the unmanned traffic management pilot program, and report best practices.
- Introduced by Sens. Richard Blumenthal (D-CT), Tom Cotton (R-AR), Dianne Feinstein (D-CA), and Mike Lee (R-UT) on 05/25/17
- Referred to the Senate Committee on Commerce, Science, and Transportation

**AIAA Position** — Call on Congress to provide necessary funding for the development and integration of a UAS Traffic Management System and to implement a “risk-based, technology neutral” regulatory framework that relies on a safety risk management process that assesses the entirety of a UAS operation instead of solely regulating a specific vehicle or system.

Export-Import Bank Board

**H.R. 4007** — To revise the quorum requirement for the Board of Directors of the Export-Import Bank of the United States
- Changes the quorum requirement to allow the bank to authorize deals over $10 million.
- Introduced by Reps. Charlie Dent (R-PA) and Frank Lucas (R-OK) on 10/11/17
- Referred to the House Committee on Financial Services

**AIAA Position** — Either confirm the pending nominees for the board of the U.S. Export Import Bank or allow the bank’s single board member to approve transactions more than $10 million.
Policy Pillar: R&D and Innovation

Research and Development
S. 1293 – Invent and Manufacture in America Act
- Enhances the value of the R&D tax credit by up to 25 percent for companies that perform most of the manufacturing operations in the United States.
- Introduced by Sen. Chris Coons (D-DE) on 06/06/17
- Referred to the Senate Committee on Finance
- Related bill: H.R. 3068 was introduced by Rep. Mike Kelly (R-PA) on 06/27/17 and referred to the House Committee on Ways and Means

AIAA Position – Call on Congress to offer incentives for corporate research and commercialization of that research into new products and services.

Aeronautics Research
H.R. 3033 – Aeronautics Innovation Act
- Authorizes robust funding levels for NASA’s Aeronautics directorate over the next five years; creates a national policy for aeronautics research; establishes a national policy for aeronautics research; a new series of experimental plane programs; and creates the 21st Century Aeronautics Research Capabilities Initiative.
- Introduced by Rep. Steve Knight (R-CA) on 06/23/17
- Referred to the House Committee on Science, Space, and Technology
- Related bill: S. 2977 was introduced by Sen. Mark Warner (D-VA) on 05/24/18 and referred to the Senate Committee on Commerce, Science, and Transportation

Policy Pillar: Workforce Development and Enhancement

Workforce Preparation
S. 2506 – Aviation Maintenance Workforce Development Pilot Program
- Incentivizes businesses, labor organizations, schools, and governmental entities to work together to pursue innovative new strategies to develop technical talent and encourage workers to pursue aviation careers.
- Introduced by Sen. James Inhofe (R-OK) on 03/07/18
- Referred to the Senate Committee on Commerce, Science, and Transportation
- Related bill: H.R. 5701 was introduced by Rep. Sam Graves on 05/08/18 and referred to the House Committee on Transportation and Infrastructure
H.R. 5509 – Innovations in Mentoring, Training, and Apprenticeships Act
- Directs the National Science Foundation to provide grants for innovative approaches to STEM education and related workforce development programs.
- Introduced by Rep. Kevin McCarthy (R-CA) on 04/13/18
- Passed by the House Committee on Science, Space, and Technology on 04/17/18
**H.R. 4508 - Promoting Real Opportunity, Success, and Prosperity through Education Reform (PROSPER) Act**

- A reauthorization of the Higher Education Act of 1965
- Supports partnerships between institutions of higher education and industry, increase opportunities for apprenticeships, restructures loan repayment plans and eliminates Federal Work-Study and public service loan forgiveness for graduate and professional students, and eliminates the Federal Supplemental Educational Opportunity Grant, among other things.
- Introduced by Rep. Virginia Foxx (R-NC) on 12/01/17
- Passed by the House Committee on Education and Workforce on 02/08/18
- Related bill: **H.R. 6543 (Aim Higher Act)** creates targeted programs that allow underrepresented students to enroll in college, strengthens the federal Pell Grant program, simplifies the financial aid application, addresses the rising cost of college, and invests in programs and services like career counseling and campus-based child care.

**H.R. 4375 – STEM Research and Education Effectiveness and Transparency Act**

- Provides for a study and report on broadening participation in certain National Science Foundation research and education programs and requires more data on federal research grant applications.
- Introduced by Rep. Barbara Comstock (R-VA) on 11/15/17
- Passed by the House of Representatives on 12/18/17

**H.R. 3397 – Building Blocks of STEM Act**

- Directs the National Science Foundation to include funding for early childhood education in its Discovery Research PreK-12 program.
- Introduced by Rep. Jacky Rosen (D-NV) on 07/25/17
- Passed by the House of Representatives on 02/13/18

**H.R. 2353 – Strengthening Career and Technical Education for the 21st Century Act**

- A reauthorization of the Carl D. Perkins Career and Technical Education Act of 2006
- Updates federal CTE policies by simplifying the application process for receiving federal funds and providing more flexibility to use federal resources to respond to changing education and economic needs; supporting innovative learning opportunities, building better community partnerships, and encouraging stronger engagement with employers; and streamlining performance measures to ensure CTE programs deliver results.
- Introduced by Rep. Glenn Thompson (R-PA) on 05/04/17
- **Became Public Law No: 115-224 on 07/31/18**

**H.R. 1050 – Youth Access to American Jobs Act**

- Creates a clear pathway for students from their junior year in high school through community college and into a STEM-based apprenticeship
- Introduced by Rep. Rick Larsen (D-WA) on 02/14/17
- Referred to the House Committee on Education and Workforce

**AIAA Position** – Pleased that the House of Representatives has acted on several important bills and encourage the Senate to consider the House-passed legislation. Call
on Congress to continue strengthening the pipeline of STEM-competent workers into the U.S. economy.

Workforce Diversity

**S. 2244** – Promoting Women in the Aviation Workforce Act
- Directs the FAA to create a Women in Aviation Advisory Board, and to submit a report to Congress on the status of women in aviation today and how opportunities for them could be expanded.
- Introduced by Sen. Susan Collins (R-ME) on 12/18/17
- Referred to the Senate Committee on Commerce, Science, and Transportation
- Related bill: **H.R. 4673** was introduced by Rep. Elizabeth Etsy (D-CT) on 12/18/17 and referred to the House Committee on Transportation and Infrastructure

**H.R. 6005** – Minorities in Aviation Act
- Helps diversify the aviation industry by providing grant funds to states, local governments, institutions of higher education and non-profit organizations to increase the exposure and access to aviation-related education and jobs.
- Introduced by Rep. Hank Johnson (D-GA) on 06/05/18
- Referred to the House Committee on Transportation and Infrastructure

**H.R. 4323** – Supporting Veterans in STEM Careers Act
- Requires the National Science Foundation to develop a veteran’s outreach plan and publish data on veterans’ participation in STEM fields in its annual “Indicators” report; updates the Noyce Teacher Scholarship program, fellowship program, and cyber grant programs to include outreach to veterans; tasks the Office of Science and Technology Policy with examining how to increase veteran participation in STEM career fields.
- Introduced by Rep. Neal Dunn (R-FL) on 11/09/17
- Passed by the House of Representatives on 12/19/17
- Passed by the Senate Committee on Commerce, Science, and Transportation on 09/05/18

**H.R. 4254** – Women in Aerospace Education Act
- Encourages universities applying for Robert Noyce Teacher Scholarship grants to incorporate aerospace engineering working and learning experiences at the National Laboratories and NASA Centers into their teacher training experience; directs NASA to strengthen the promotion of NASA internship and fellowship programs to women.
- Introduced by Reps. Elizabeth Etsy (D-CT) and Steve Knight (R-CA) on 11/06/17
- Passed by the House of Representatives on 12/19/17

**H.R. 321** – Inspiring the Next Space Pioneers, Innovators, Researchers, and Explorers (INSPIRE) Women Act
- Directs NASA to encourage women to enter the STEM fields through three existing programs: NASA Girls, Aspire to Inspire, and the Summer Institute in Science, Technology, Engineering, and Research.
- Introduced by Rep. Barbara Comstock (R-VA) on 01/05/17
- Became Public Law No: 115-7 on 02/28/17
**H.R. 255** – Promoting Women in Entrepreneurship Act
- Expands the mission of the National Science Foundation to include supporting entrepreneurial programs for women that extend their focus beyond the laboratory and into the commercial world.
- Introduced by Rep. Elizabeth Etsy (D-CT) on 01/4/17
- **Became Public Law No: 115-6 on 02/28/17**

**H.R. 2653** – STEM Opportunities Act of 2017
- Attempts to systematically address the full suite of issues facing both female and minority STEM researchers, from work-life balance policies, to campus climate, to better data collection, to recruitment and retention practices.
- Reintroduced by Rep. Eddie Bernice-Johnson (D-TX) on 05/22/18
- Referred to the House Committee on Science, Space, and Technology
- Related bill: **S. 1270** was introduced by Sen. Mazie Hirono (D-HI) on 05/25/17 and referred to the Senate Committee on Health, Education, Labor, and Pensions

**H.R. 2709** – Women and Minorities in STEM Booster Act
- Authorizes the National Science Foundation to award competitive grants for outreach, mentoring, and professional development programs that support recruitment and retention of women and minorities in STEM fields.
- Introduced by Rep. Carolyn Maloney (D-NY) on 05/25/17
- Referred to the House Committee on Science, Space, and Technology
- Related bill: **S. 1246** was introduced by Sen. Mazie Hirono (D-HI) on 05/25/17 and referred to the Senate Committee on Committee on Health, Education, Labor, and Pensions

**AIAA Position** – Applaud Congress for passing legislation that leverage existing programs at NASA and NSF to promote the advancement of women in STEM fields. Continue to call on Congress to promote comprehensive initiatives that expand the capacity and diversity of the STEM workforce pipeline.

**Worker Visa Reform**

**S. 2344** – Immigration Innovation (“I-Squared”) Act of 2018
- Increases the number of H-1B visas permitted to as much as 195,000 per year instead of the current 85,000 per year; allows the spouses of H-1B workers to legally work in the U.S.; eliminates the per-country caps for green cards; expands the cap for researchers and those who have advanced degrees; and increases visa fees to provide almost $1 billion toward STEM education and U.S. worker training programs.
- Introduced by Sens. Orrin Hatch (R-UT) and Jeff Flake (R-AZ) on 01/25/18
- Referred to the Senate Committee on the Judiciary

**S. 281** – Fairness for High-Skilled Immigrants Act
- Eliminates the per country numerical limitation for employment-based immigrants and increases the per country numerical limitation for family-based immigrants from 7 percent to 15 percent of the total number of family-sponsored visas.
• Introduced by Sen. Mike Lee (R-UT) on 02/02/17
• Referred to the Senate Committee on the Judiciary
• Related bill: H.R. 392 was introduced by Rep. Kevin Yoder (R-KS) on 01/10/17 and referred to the House Committee on the Judiciary

S. 180 – H-1B and L-1 Visa Reform Act
• Modifies the H-1B and L-1 visa programs by increasing enforcement, modifying wage requirements, and securing protections for both American workers and visa holders. Requires all employers seeking to hire workers on H-1B visas to make a “good faith effort” to hire Americans first. Calls on federal government to prioritize the top foreign students who have studied in the U.S.
• Introduced by Sen. Chuck Grassley (R-IA) on 01/20/17
• Referred to the Senate Committee on the Judiciary
• Related bill: H.R. 1303 was introduced by Rep. Bill Pascrell (D-NJ) on 03/02/17 and referred to the House Committee on the Judiciary, Committee on Education & Workforce

H.R. 670 – High-Skilled Integrity and Fairness Act of 2017
• Prioritizes market-based allocation of visas to those companies willing to pay 200 percent of a wage calculated by survey, eliminates the category of lowest pay, and raises the salary level at which H-1B dependent employer are exempt from non-displacement and recruitment attestation requirements to greater than $130,000.
• Introduced by Rep. Zoe Lofgren (D-CA) on 01/24/17
• Referred to the House Committee on the Judiciary

H.R. 170 – Protect and Grow American Jobs Act
• Makes changes to the eligibility requirements for H1-B Visa exemptions by raising salary requirements for highly-skilled positions to $100,000/year (up from $60,000/year currently) and eliminating the master’s degree exemption.
• Introduced by Rep. Darrell Issa (R-CA) on 01/03/17
• Referred to the House Committee on the Judiciary

Note: The Trump Administration is more closely scrutinizing applications for the high-skilled visa program known as H-1B. U.S. Citizenship and Immigration Services suspended premium processing of H-1B visas earlier in 2017, which allowed for fast-track consideration to those who paid an extra fee. This option was not resumed until October 2017, meaning many workers who qualified for the visa had to wait months for a decision. The administration may make changes to the Optional Practical Training program, which allows foreign graduates from U.S. colleges in science and technology an extra two years of work authorization, giving them time to win an H-1B visa. Officials could kill that benefit or reduce the two-year window.

AIAA Position – Due to the current skills gap, the A&D sector needs foreign-born professionals to work alongside their American colleagues. Collectively this workforce drives economic growth, innovation, and entrepreneurialism. Call on Congress to pass visa legislation that encourages the retention of foreign professional STEM workers in U.S. industry. Previously considered legislation that would have raised H-1B visa caps
and exempted those who hold advanced STEM degrees from counting against the caps represent productive approaches to realizing the needed high-skilled workforce.

Security Clearance Backlog
H.R. 3210 – SECRET Act of 2017
- Requires the National Background Investigations Bureau to report the backlog of executive branch employees waiting for background investigations; encourages agencies to honor each other’s clearances; and implements continuous monitoring.
- Introduced by Rep. Steve Knight (R-CA) on 07/12/17
- Passed the House of Representatives on 07/26/17; passed the Senate Committee on Homeland Security and Governmental Affairs on 11/27/17

AIAA Position – Call on Congress to reform the security review process to expedite clearances and ensure the implementation of an effective system that protects sensitive information and utilizes advanced technology to appropriately manage risk.

Miscellaneous

Privatization of the International Space Station
FY2019 Budget Request – Calls for ending direct federal government support of the ISS by 2025
- Concluding such operations would be tied to transitioning to commercial provision of low Earth orbit capabilities

AIAA Position - The president’s request to end funding for the International Space Station (ISS) in 2025 is a forcing function for outlining a new paradigm for ISS operations. The United States cannot lose the capability of conducting research in low Earth orbit. Development and implementation of a well-thought-out transition plan for the privatization of the ISS, and its research and development capabilities, is critical. The United States experienced a gap in service with the retirement of the Space Shuttle and we cannot allow that to happen again.

Over 50 years of government investment in space has yielded countless societal benefits. Research on the ISS has led to new discoveries in pharmaceuticals, human health and ageing, and fundamental science, as well as numerous advances that have transitioned to the commercial markets. All are necessary for our future on Earth, and our nation’s economic well-being. Such investment has been, and continues to be, critical to lowering the financial and operational risks for private industry to engage in the economic development of low Earth orbit. With a well-reasoned approach to investment in new technologies, public-private partnership models, and legitimate business plans, the government can strategically and efficiently leverage its resources to explore beyond low Earth orbit.
We urge Congress to work closely with the administration, industry partners, and the international community to develop and execute an informed transition plan that will ensure effective use of resources and minimize any negative impacts to ISS operations. We also ask Congress to adequately fund NASA’s space exploration programs.