



The World's Forum for Aerospace Leadership

Aerospace Issues: 2011

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President**

**American Institute of Aeronautics and
Astronautics**

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What Is AIAA?

- The premiere technical society for Aerospace Engineers and Associated professionals
- An American organization with an international reach
- ~36,000 members including 6,000 students
- Divided into 7 regions across the US and the world.
- Founded in 1963 from the merger of American Rocket Society (1930) and Institute of Aerospace Science (1932).

AIAA's mission is to address the professional needs and interests of the past, current, and future aerospace workforce and to advance the state of aerospace science, engineering, technology, operations, and policy to benefit our global society.

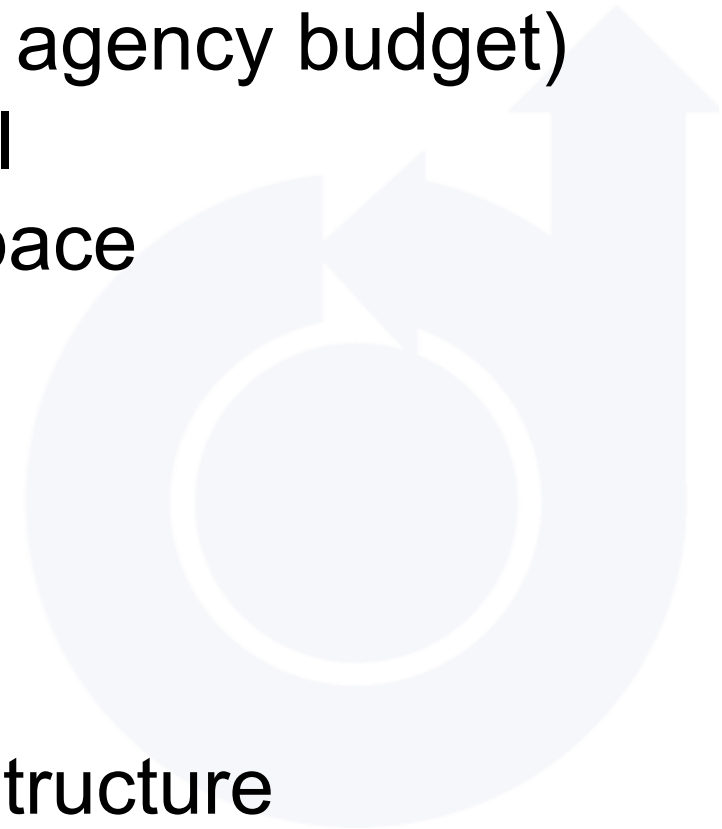
What Do We Do?

- Organize key technical conferences
- Publish top journals
- Publish books
- Publish *Aerospace America*
- AIAA Daily Launch
- Corporate partners
- Administer awards
- Sponsor competitions
- Operate Foundation
- Public policy issues



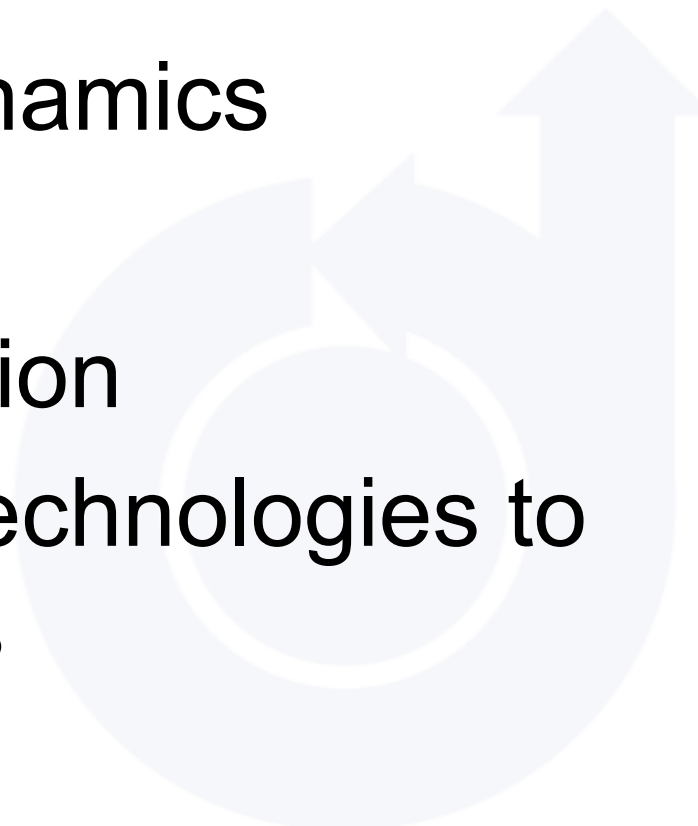
- Dr. Mark J. Lewis, President
 - Professor, University of Maryland
 - Chief Scientist of USAF 2004-2008
- Dr. Brian Dailey, President-elect
 - VP Wash. Operations, Lockheed-Martin (ret.)
 - Executive Sec'y Space Council
- MGen (ret). Robert Dickman, Exec. Director
 - Commander, Eastern Test Range (Canaveral)
 - Senior Military, NRO
 - DoD Space Architect

- Business and General Aviation
- NASA programs (3% total agency budget)
- NextGen Air Traffic control
- UAV's in commercial airspace
- Future programs
 - Subsonic
 - Supersonic
 - Rotorcraft
 - Hypersonic
- Test and Evaluation Infrastructure



- Directions for Space Policy
 - End of Constellation (?)
 - Commercial Space (?)
 - Sustainability
- Orbital Space Debris
 - Growing threat
 - Requires international agreement



- Alternative/Synthetic Fuels
 - More efficient aerodynamics
 - Propulsion
 - Modeling and Simulation
 - Applying aerospace technologies to terrestrial applications
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- Role of Aerospace in Emissions
 - Greenhouse gases
 - NOx, unburned hydrocarons
- Climate Monitoring
 - Space assets
 - Air assets
- Modeling and Simulation
- Information technologies



National Security

- Technology acquisition “valley of death”
- Diminishing investments in future systems
 - Impact to future capabilities
 - Workforce development and opportunities
- National Cybersecurity strategy
- Air Cargo security and screening

Workforce and Education

- Aerospace enrollments continue to be strong
- Recruiting, retaining world-class workforce
- Increased funding for STEM efforts
- Foreign students and visa process, ITAR
- Supply and Demand concerns
- Inspiration for the next generation
- Design experience