



**AIAA/IEEE(AES)  
Joint Section Meeting**

**Tuesday, January 14, 2020**

**Mr. Daniel L. Dumbacher**

**Executive Director of the American Institute of Aeronautics and Astronautics  
Former Purdue University Professor**

**“The Future Starts With you – Now!”**

**Location: Bethpage Public Library  
47 Powell Avenue  
Bethpage, NY 11714**

**RESERVATIONS REQUESTED  
RSVP BY Jan. 13, 2020  
to: [davidsparis@twc.com](mailto:davidsparis@twc.com)  
or 516-458-8593**

**Time: 6:00 PM Social Time  
6:30 PM Pizza  
7:00 PM Presentation**

**Cost for Pizza: \$7 Members and Guests  
Free for Students**

Expanding the human neighborhood beyond our planet and flying faster and more efficiently here on Earth, means there’s lots of life-changing work to do. AIAA’s three priorities are air mobility/autonomy, transformative flight, and the space economy. In the air mobility sphere, the opportunities are in automation and control/safety, public acceptance, design challenges, and defense applications. Hypersonics and defense applications are major areas of transformative flight. The space economy includes not only space exploration but also national security and potential economic growth from cislunar resources. We estimate there are 17,000 near Earth objects with a potential of 2 trillion kg of industrial metals and 150 metric tons of precious metals. Between the commitment to put humans on the moon by 2024 and a 4.7 percent increase in the 2020 \$750 billion Budget Request for Defense, the aerospace industry has jobs but not enough people to fill them. Employment is expected to grow 6 percent by 2026 while the unemployment rate of recent grads has hit 2.5 percent.

We have work to do to address these exciting challenges. Join me in learning more about how we can work together to solve aerospace challenges that have the promise to transform our society for the better.

Dan has agreed to speak about the status of the Aviation and Space Industry through his lens based upon his experience and what he is seeing. He will include a discussion of the future of Uncrewed Aircraft, and the balance between Robotic and Human spacecraft in future missions.

AIAA is the world’s largest technical society dedicated to aerospace. Before joining the AIAA staff in January 2018, Daniel Dumbacher was a Professor of Engineering Practice in the School of Aeronautics and Astronautics at Purdue University, where he taught courses in systems thinking, systems engineering, and space policy. Prior to Purdue, he served as the Deputy Associate Administrator, Exploration Systems Development Division, Human Exploration and Operations Mission Directorate at NASA Headquarters. In that capacity, he provided leadership and management as the Program Director for Exploration Systems Development, which included: the Space Launch System; Orion; and Ground Systems Development and Operations development and integration efforts. He led a national team of over 5,000, spanning all NASA centers and industry, and was responsible for a \$3 billion annual budget. He has received numerous awards and honors including the coveted Silver Snoopy Award and the NASA Distinguished Service Medal. He earned a mechanical engineering BS and business administration MA.

**Directions:** The library is west of Route 135 in Bethpage. Take Route 135 to Exit 8, then West on Powell Ave. for about 0.25 miles. The library is on the south side of the street. Park across Powell Ave., opposite the library.