



BRIAN YUTKO PH.D.

Vice President, Research

Dr. Yutko was promoted to the head of Aurora's Research and Development Center in Cambridge, MA, in 2017 and now serves as the company's Vice President of Research. Prior to this appointment, Dr. Yutko was the Principal Investigator and Program Manager of the D8 Program. In this capacity he was responsible for a growing engineering team whose focus was designing and executing flight and ground test demonstrations of an unconventional, ultra-efficient commercial aircraft concept. The D8 program originated during NASA's N+3 study and is now focused on performing a series of risk-reduction and technology-transition activities. The eventual goal of the program is the introduction of ultra-efficient D8-related technologies into the National Airspace System.

In addition to managing the D8 Program, Dr. Yutko was also Aurora Flight Sciences' Aircraft Systems Research Lead. He also holds a partial appointment as a Research Engineer in the Department of Aeronautics and Astronautics at MIT.

Dr. Yutko's aviation research career has focused on the simultaneous design and optimization of aircraft and the complex systems in which they operate. He has created a variety of robust, fast methods for predicting aircraft performance in large-scale simulations – particularly using machine learning methods for real air transportation networks – and is now focused on applying these methods to aircraft community noise impacts related to performance based navigation. From 2009 to 2016, Dr. Yutko contributed significantly to the ICAO/CAEP commercial aviation fuel efficiency certification standard by providing independent analysis that spanned the aircraft component-level to the system-level. Dr. Yutko led the United States' Cost Benefit Analysis (CBA) of the fuel efficiency standard, which was signed in February 2016 and was the first-ever global aviation emissions standard.

Prior to his roles at Aurora and MIT, Dr. Yutko worked as a Mechanical Design Engineer at NASA's Kennedy Space Center where he led the design, fabrication, and deployment of multiple pieces of hardware and test equipment for the Space Shuttle, expendable launch vehicles, and ground support equipment. Dr. Yutko earned a Ph.D. and M.S. in Aeronautics and Astronautics from Massachusetts Institute of Technology, and a B.Sc. in Aerospace Engineering from The Pennsylvania State University.