Nicholas K. Borer, Ph.D.

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Biography: Nick Borer is an Advanced Air Vehicle Configurator Technical Lead with the Aeronautics Systems Analysis Branch at NASA's Langley Research Center. He is the Principal Investigator of NASA's Fostering Ultra-Efficient, Low-Emitting Aviation Power (FUELEAP) project, which is developing and testing a transformative hybrid-electric fuel cell architecture to accelerate aviation's adoption of electric propulsion concepts. In addition, he is the Performance and Sizing Team Lead for NASA's Scalable Convergent Electric Propulsion Technology Operations Research (SCEPTOR) project. Nick's team conducted the tradespace exploration, concept selection, and performance analysis of the X-57 "Maxwell" flight demonstrator for SCEPTOR. Nick is also the Low-Speed Flight Characteristics task group chair for the ASTM International Committee F44 on General Aviation, which is developing consensus standards for the next generation of light aircraft. Prior to NASA, Nick was a Senior Member of the Technical Staff at Draper Laboratory, where he led research into integrated analysis, tradespace exploration, and fault-tolerant design for complex systems. While at Draper, he worked on a broad array of applications including spacecraft, long-endurance aircraft, UAS simulations for operator training, space science instrumentation concepts, and integrated sensing systems. Nick has a Ph.D. and M.S. in Aerospace Engineering from Georgia Tech, and a B.S. in Aerospace Engineering from Syracuse University. He is an active pilot and flight instructor with commercial single-engine landplane, multiengine landplane, and single-engine seaplane privileges.