Kevin Reynolds, NASA Ames Research Center

Education
M.S. Mechanical Engineering, Stanford University, June 2012
M.S. Aeronautical Engineering, Stanford University, Jan. 2011
B.S. Physics, Norfolk State University, May 2007.
B.S. Applied Mathematics, Norfolk State University, May 2007.

Professional Experience
Mr. Kevin Reynolds is an aerospace engineer in the Intelligent Systems Division at NASA Ames with prior experience in the aerospace industry. In 2010, he began his career at Ames as a graduate intern from Stanford University supporting a 6-month Innovative Partnerships Program seedling fund under the leadership of senior researcher Nhan Nguyen. Reynolds later graduated from Stanford with a dual M.S degree as a National Science Foundation and Reid Weaver Dennis fellow.

Use of 3D Printing to Optimize Dragon Eye UAS: Mr. Reynolds currently leads a Center of Innovation (CIF) study to use 3D printed parts to optimize stock Dragon Eye UAV components donated to NASA Ames to enable new performance capabilities for science missions. The project involves multidisciplinary modeling and analysis of UAV concepts for design to flight in less than a week. These designs feature 3D printed parts, distributed propulsion, and high aspect ratio wings allowing them to be used as proof-of-concept demonstrators for technologies being developed under ARMD.

Wing Shaping Using Distributed Propulsion Study: Previously, Mr. Reynolds led a Phase I ARMD project to understand wing shaping concepts using distributed propulsion on transport aircraft. The team developed multidisciplinary tools for simulating and analyzing aero-propulsive-elastic interactions to enable the use of lightweight materials on future aircraft concepts while maintaining aero-structural stability. The project was conduced in partnership with Boeing Research and Technology, St. Louis.

Truss-Braced Wing High Speed Performance Study: Under the organization of the NASA Fixed Wing program, Mr. Reynolds has led a team of eight NASA researchers to analyze the high speed performance characteristics of the Boeing Truss-Braced Wing Concept. Currently, the aircraft concept is under development as an N+3 aircraft by Boeing Research and Technology with support from NASA.

Advanced Concepts Configuration Engineer: Mr. Reynolds was employed as a configuration engineer in the product development group for Boeing Commercial Aircraft in Everett, Washington. There, he worked on aero-propulsion trade studies for the NASA N+3 Truss-Braced Wing Concept, 777-200/300ER, and the 747-8. In his role as liaison to Boeing program managers, he also conducted financial and risk analysis based on design decisions for derivative aircraft.