

Juan J. Alonso Associate Professor

Aeronautics & Astronautics Durand Building, Room 252 Stanford University Stanford, CA 94305

September 6, 2014

Justin S. Gray, Ph. D. OpenMDAO Team Lead NASA Glenn Research Center Cleveland, OH 44135

Dear Dr. Gray,

Stanford University is pleased to participate in support of your proposed NASA Seedling effort entitled 'Coupled Aero-Propulsive-Elastic Design of an Ultra-Light, Highly-Flexible, Human Powered Aircraft' being submitted in response to an internal NASA solicitation.

I understand that this proposal is focused on the development of the necessary design methodologies to design a human-powered aircraft. Our laboratory at Stanford, the Aerospace Design Laboratory, has accumulated years of experience in this area and is the main developer of the SU2 and SUave software environments that will fit nicely in this proposal.

I feel that our experience is a great fit to your needs and capabilities at NASA. Our lab, the Aerospace Design Lab, at Stanford, specializes particularly in design and optimization of aircraft and propulsion systems. Given that these topics are fundamental to this proposal, I believe that our collaboration will be very productive.

I understand that my participation will only occur if you are awarded the Phase I for this project. I also understand that my participation is limited is to a maximum cost of \$125,000 in Phase I. Expenses will be invoiced monthly at the appropriate hourly rates for each of the members of our team, and including any travel and support costs that may be incurred in support of this project.

I understand that if the Phase I is successfully completed and we are awarded a Phase II, I will participate in that effort also.

Sincerely yours,

Juan J. Alonso Associate Professor