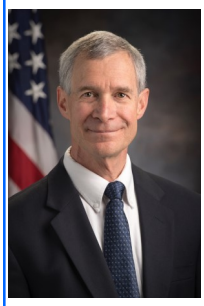
NATIONAL ENGINEERS WEEK

The National Society of Professional Engineers founded National Engineers Week in 1951. It's always celebrated at the time of George Washington's birthday. Our nation's first president was a military engineer and a land surveyor. The mission then, and now, is to increase public awareness and appreciation of the engineering profession.

Peninsula Engineers Council Award Ceremony

Presentation of the 2021 Engineer of the Year and Doug Ensor Awards

Mr. Richard Campbell
Engineer of the Year



Richard Campbell has dedicated the past 45 years to advancing the field of aerospace engineering while working at NASA Langley Research Center. As a member of the Configuration Aerodynamics Branch, he has recently made significant contributions to the areas of both aerodynamic design and laminar flow research.

Mr. Campbell received a BS in Engineering Science & Mechanics from Virginia Tech in 1974 and an MS with a focus on aeronautics from GWU in 1984. At NASA, he conceived and developed a computational tool for aerodynamic design called CDISC in the early 1980s that has sustained its impact on the aerospace industry for nearly four decades. The tool has been widely used by NASA and US industry partners to design configurations that have proved essential to the success of next-generation vehicles. More recently, Mr. Campbell co-developed a design-based method that sustains natural laminar flow while eliminating historic penalties. The groundbreaking new technology, called Crossflow Attenuated Natural Laminar Flow (CAT-NLF), offers the potential to significantly reduce vehicle drag with minimal penalty.

As a leader in the field, Mr. Campbell has served in many capacities, including on international collaborative efforts with both Japanese and German aerospace agencies. He also has served as a mentor to young professionals. Everyone who has had the privilege of working alongside Mr. Campbell speaks of his willingness to share his aerodynamic expertise and his positive impact on the careers of others. Mr. Campbell has distinguished himself as a world-class engineer throughout his career, and his many achievements highlight his continued dedication to the aerospace field.

Dr. Juan "Johnny" Fernandez
Doug Ensor Award

Dr. Juan Fernandez is a research aerospace engineer at NASA Langley in the Structural Dynamics Branch. He received his PhD in Engineering from the University of Surrey, Surrey Space Center in the UK in 2014. He is a critical member of the Advanced Deployable Structures Technology Development Team, and has assumed leadership roles in multiple research areas.

One of Dr. Fernandez's research concentrations is deployable structures that undergo large deformations by utilizing thin-shell composite materials. The use of these materials can enable mechanisms that are lighter, simpler, and less expensive than traditional mechanically-actuated systems. He manages the NASA Small Business Technology Transfer (STTR) subtopic on "Thin-Ply Composite Technology and Applications", working with small businesses and academia on these innovative technology challenges. Dr. Fernandez has developed new theories, test methods, and analysis techniques that characterize and verify the behavior of thin-shell composites under significant deformations and strains. These approaches have been adopted by other researchers in the large, lightweight structures community, and are being used in the development of state-of-the-art space structures.

As a world expert in the field of flexible composites, deployable space structures, and small satellite technology, Dr. Fernandez holds 3 patents, chairs the AIAA High Strain Composites Subtechnical Committee of the larger AIAA Spacecraft Structures TC, and has received numerous distinguished awards. He has led numerous R&D projects with industry and international partners, leading to breakthroughs in the aerospace field. He also serves his field as a technical reviewer of various high-impact journals, by participating in national and local community outreach activities, and by mentoring interns and university student projects.

Note: 2021 banquet was cancelled due to the COVID-19 restrictions on large gatherings, which was in affect during Engineer's week. In lieu of the banquet, the EOY and DEA awardees will be presented with their awards on February 28th, 2021 at a small ceremony at the Virginia Air and Space Museum in Hampton, VA at 2:00 pm. PEC council members will be invited to this ceremony that is not open to the general public. Social distancing and other COVID-19 protocols will be followed for the short awards presentation. The 2021 EOY and DEA awardees will be invited to the banquet planned for 2022 and recognized again in public, with the assumption that normal social gatherings will be possible in February of 2022.