

# 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 Annual Banquet

With Presentation of the 2006 Engineer of the Year and Doug Ensor Awards

### Engineer of the year



Mr. Ian O. MacConochie is the recipient of the 2006 Peninsula Engineer of the Year Award. He was nominated for this recognition by the Society of Allied Weight Engineers (SAWE).

Ian O. MacConochie received a B.M.E., Bachelors in Mechanical Engineering from the University of Virginia in 1950 and a D.I.C. (Diploma Imperial College) in 1958 from the University of London. He has been a

professor at Duke University in North Carolina and also at the University of South Carolina. From 1962 to 1989 he was employed by the National Aeronautics and Space Administration's (NASA) Langley Research Center in Hampton, Virginia, first in structures and then in engineering and systems analysis. His efforts there helped NASA reach its goals in lunar exploration and manned space access. Upon retirement from federal service with NASA he continued to work in the private sector in his major area of expertise, Space Launch Vehicle design. Mr. MacConochie has numerous publications, patents, and invention disclosures, which describe and disperse his solutions to the technical community. He is active in professional societies and has been a fellow member of the American Institute of Aeronautics and Astronautics (AIAA), and is an Honorary Fellow in the International Society of Allied Weight Engineers (SAWE). "Mac" has led a life which truly shows how a thirst for technical knowledge and the open desire to solve mankind's problems can create a better world. Engineering solutions to him are not limited to his 8-5 work requirements. His research into the effects of exposure to sunlight as means for mitigating various cancers is now being verified through the positive effects noted by the world medical community with respect to vitamin-D production and reduced risk to cancer. His research into the aerodynamics of tractor-trailer design is being studied by major truck manufacturers. Mac MacConochie has used technology and engineering innovation throughout his life to improve life for all of us, truly the highest achievement for the engineering profession.

### Doug Ensor Award



Dr. Phillip A. Williams was named the 2006 Doug Ensor Award recipient for Young Engineer of the Year by the PEC. The American Institute of Aeronautics and Astronautics (AIAA) nominated Dr. Williams, who works for the National Institute of Aerospace (NIA) in the nondestructive evaluation sciences branch (NESB) at NASA Langley Research Center (LaRC). Prior to joining the NIA, he received the National Research Council (NRC) Postdoctoral

Research Associate Award to conduct research at NASA LaRC. Dr. Williams currently is a staff research scientist with the NIA and the NIA principal investigator for collaboration with NESB on nanotechnology research. He leads scientific projects on the processing, fabrication, and characterization of sensors and multifunctional materials for aerospace technology using nanoscale components. With a focus on carbon nanotube based devices for structural health monitoring, Dr. Williams has built professional relationships and collaborations with researchers at other LaRC branches, NASA centers, universities, and industry.

Dr. Williams' research efforts are documented with 10 scientific publications, over 30 invited or contributed conference presentations, and 4 invention disclosures (1 patent pending). Dr. Williams received his Ph.D. in Physics and M.S. in Physics from the University of North Carolina at Chapel Hill. He received a B.S. in Physics with honors from the College of William and Mary. Dr. Williams is an active member of the AIAA, the American Physical Society, and the Materials Research Society. He has received a NASA Space Act Award and NASA LaRC Creativity & Innovation Proposal Award in nanotechnology. Dr. Williams has mentored and directed the research of undergraduate and graduate students through NASA and university educational programs. He also has extended his mentoring to younger students, participating in NASA Career Exploration Day, and actively participating in outreach, teaching, and tutoring elementary, middle, and high school students at local schools and churches.

Virginia Air & Space Center ([www.vasc.org](http://www.vasc.org))



### PEC Banquet Speaker

**Dr. Joel Orr** from Cyon Research Corporation and the topic will be The Golden Age of Engineering: Opportunity, Danger, and Choices. Dr. Orr will share his view of the top seven opportunities, the top seven challenges, and the three main benchmarks we must acknowledge if we are to make the right choices.

**SATURDAY, FEBRUARY 25, 2006 – VIRGINIA AIR AND SPACE CENTER,  
600 SETTLERS LANDING ROAD, HAMPTON, VIRGINIA  
6:00 PM - Social Hour, 7:00 PM – Dinner, 8:00 PM Program**

Menu: Parmesan Crusted Chicken Breast, Proscuitto Ham, Lemon Garlic Basil Sauce and Toasted Pinenuts; London Broil with Wild Mushroom Sauce. Each entrée includes tossed salad, Chef's choice of vegetables, rolls, beverage, and dessert.

Tickets: \$30 per person. To purchase tickets, please contact Matt Long at 688-0521(w), 553-1711(cell), or your society's PEC representative.