## American Institute of Aeronautics and Astronautics Dayton-Cincinnati Section

## Lunch 'n' Learn Friday, 21 June 2013

The National Photonics Initiative and Innovative Optics and Photonics Technologies Guest Speaker:

Dr. Paul McManamon



Optics and photonics technologies are ubiquitous in our daily lives—from laser surgery to high-speed Internet via fiber optics to precision manufacturing of computer chips—and have the potential to enable entirely new innovations that would boost energy independence, improve communications, and save lives, all while creating jobs, growing the economy, and reducing healthcare costs. The promise of optics and photonics can be realized if the United States acts now to cultivate this versatile scientific field through collaborative research and development activities, along with coordinated support from the public, academic, and private sectors working together. That is the conclusion of a report written by the National Research Council of the United States National Academy of Sciences. The report calls for new approaches to partnerships between government, academia, and industry, one version of which might be a National Photonics Initiative (NPI). An NPI would focus attention and funding on photonics research and development and identify key technologies with cross-disciplinary potential and support pre-competitive research. It would not only fund research into such technologies, but actively support collaboration between sub-disciplines.

Dr. Paul F. McManamon is an independent consultant and works part time as the Technical Director of the Ladar and Optical Communications institute, LOCI, at the University of Dayton. He was co-chair of the recent National Academy of Sciences "Optics and Photonics, Essential Technologies for Our Nation" study. Until May of 2008 he was chief scientist for the Sensors Directorate, Air Force Research Laboratory, where he was responsible for the technical aspects of all AFRL sensing technologies, including RF and EO sensing, automatic object recognition, IRCM, electronic warfare, and device technologies. He pioneered a concept called performance based sensing, where you set performance objectives and use whatever sensing modalities and processing is required to achieve those objectives. In 2006 he received the Meritorious Presidential Rank Award. Dr. McManamon is Associate Fellow of the AIAA.

## Time 11:45 AM Location China Garden Buffet 112 Woodman Dr. Dayton, OH 45431 Lunch You will be able to purchase the buffet



