



American Institute of  
Aeronautics and Astronautics  
Dayton-Cincinnati Section

## Lunch 'n' Learn

### *Land Use Compatibility as an Operational Requirement*

**Friday 18 Sept 2009**

***Guest Speaker: Dr. Wayne Lundberg***

Compatible land use planning is done, by current practice, at the end of a weapons system development and its engineering decision-making process. This practice can lead to significant problems with aircraft beddown and required assessments of environmental impacts on community and installation land uses. Both the National Environmental Policy Act and weapons systems engineering processes require well-informed decisions to be made which manage Environmental (Safety and Occupational Health) concerns that affect fielding, operation and support of aircraft. This presentation explores applicable techniques to provide Systems Program Management decision-makers analytical insight into the impacts that their programmatic weapons system full operations could have on base/community compatible uses. Discussion as to how estimates can be made of operational noise spectra during the systems engineering and development process and any known issues with their predictive accuracy will be addressed. Current demonstrable techniques are increasingly accurate as the system's design matures, culminating with first-flight recording of aircraft flight noise spectra.

Dr. Wayne Lundberg was involved for over 6 years in development and testing of NoiseMap, the US DoD model for community noise prediction. He was later selected to serve on the Aeronautical Systems Center Propulsion System Performance Center of Excellence. He contributed to the Joint System's Specification Guide and has many years experience in various environmental and energy programs. He was sought out to participate in Air Force Fleet Viability Board assessment of KC-135 aircraft. He earned a doctor of philosophy in aerospace engineering in 2003 for his research on aeroacoustic propagation modeling in the natural environment. Dr. Lundberg currently serves as the Storage Tank Compliance, EPCRA & EQ reporting, and Environmental training programs' manager in the Asset Management Division of the Air Force Material Command Headquarters.

### **Time**

11:45 AM

### **Location**

China Garden Buffet  
112 Woodman Dr.  
Dayton, OH 45431

### **Lunch**

You will be able to  
purchase the buffet

