



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

**Lunch 'n' Learn
Friday 24 Feb 2012**

***“Validation of Cruise Efficient STOL
Aircraft Technologies for Mobility
Applications”***

***Guest Speaker:
Mr. Cale Zeune, AFRL***



The Air Force Research Laboratory (AFRL) and its partners have validated technology maturation efforts for cruise-efficient short takeoff and landing mobility aircraft under the Speed Agile Concept Demonstration (SACD) program. A series of wind tunnel tests at the Arnold Engineering Development Center (AEDC) National Full Scale Aerodynamics Complex (NFAC) and the NASA Langley National Transonic Facility (NTF) successfully validated aerodynamic characteristics of candidate technologies, and a piloted simulation has recently been completed at the NASA Ames Vertical Motion Simulator (VMS) to evaluate flying qualities and control schemes for an advanced transport.

Cale Zeune is the son of an airline pilot with two grandfathers with small aircraft. He earned his private pilot's license the day before graduating from high school and his IFR ticket soon thereafter. He graduated from Case Western Reserve University in 2002 with a B.S. in aerospace engineering, and has since worked at the Air Force Research Lab in the Air Vehicles Directorate. For the last 5 years he has been program manager of technology development efforts in the mobility arena – specifically in the areas of integrated high lift systems and efficient transonic cruise technologies. In his 'spare' time at work he dabbles in technical work involving vehicle design, analysis environments and frameworks, and high lift aerodynamics. Recent areas of research include hybrid electric distributed propulsion aircraft and technologies and configurations related to air dominance fighter aircraft.

Time: 11:45 am

Location:

*China Garden Buffet
112 Woodman Dr.
Dayton, OH 45431*

Lunch:

*You will be able to
purchase the buffet*

