



American Institute of
Aeronautics and Astronautics
Dayton-Cincinnati Section

Lunch 'n' Learn
Integrated Vehicle Energy Technology Program
"The Energy Optimized Aircraft"
Guest Speaker: Dr. Richard Fingers
Friday 13 Nov 2009

Current and emerging USAF platforms are facing thermal management challenges that can limit operational capabilities (such as overheating the fuel while waiting for take-off in hot environments). Additionally, the electrical power demands and waste heat for these aircraft continue to grow to support more electric aircraft actuation and subsystem power needs. This presentation will provide a review and update of the INVENT program which will provide power and thermal technologies sufficient to meet the needs of future global attack, rapid global mobility, and agile combat support platforms. The INVENT plan consists of four technology areas: a robust electrical power system, high performance electric actuators, an adaptable thermal management system, and modeling and simulation tools. INVENT will provide S&T solutions for the complex challenges of compact thermal control strategies, power dense electrical actuation, and high temperature power devices. Additional INVENT benefits include development of a comprehensive virtual modeling and simulation prototyping capability to decrease future development costs.

Dr. Rick Fingers is the Chief of the Energy/Power/Thermal Division, Propulsion Directorate, Air Force Research Laboratory. As chief, Rick leads a 180 person division and is responsible for the development of energy (fuels), electrical power, and thermal technologies for USAF aircraft, directed energy weapons, and special purpose power systems. Rick has over 20 years experience with the AFRL. Rick is an Associate Fellow of AIAA and the winner of the sections Outstanding Management Contribution Award for 2008.

Time

11:45 AM

Location

China Garden Buffet
112 Woodman Dr.
Dayton, OH 45431

Lunch

You will be able to
purchase the buffet

