

**DEPARTMENT OF MECHANICAL AND AEROSPACE ENGINEERING SEMINAR**  
**University of Virginia, Charlottesville, Virginia**

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***Robert McKinley***  
***Technical Coordinator for Program Management***  
***DRS-Unmanned Technologies, Inc.***

*"Unmanned Aircraft System Design: Beyond the Classroom"*

**Time:** Thursday, November 15, 2007

**Place:** MEC 341, Mechanical Engineering Building

**Refreshments at 3:30 PM in MAE Faculty Lounge, MEC 305**

**ABSTRACT:**

I will make a presentation on Unmanned Aircraft Systems (UAS) that emphasizes the aspects of design that are usually not addressed in a university classroom setting. I will address basic design, including some aspects of UAS taxonomy, requirements development, and plan form vs. mission. I will discuss material selection, avionics, data links and antennas, launch and recovery, autonomy, and logistics, and some aspects of development, testing and flight operations related to my UAV experience.

**BIO:**

Robert McKinley is currently the Technical Coordinator for Program Management at DRS-Unmanned Technologies, Inc (DRS-UT). Previously, he served as the Director of Engineering at DRS-UT. From 1990-2005, he served in various capacities at NASA-Langley Research Center, including associate program manager for the Vehicle Systems Program, branch head for the Systems Analysis Branch, and project manager for the Revolutionary Airframe Concepts Research (RACR) Project. Mr. McKinley graduated from the University of Oklahoma with a BS in Aerospace Engineering in 1990, followed by a Masters of Material Science and Engineering from the University of Virginia in 1997. He currently resides in Weatherford, Texas.