



Seminar Series of the



AFRL/VA and AFOSR

Collaborative Center of Control Science (CCCS)

Reliable Control Technology Development & Integration for Autonomous UAV Operations

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10:30am, February 25, 2003
Rm. 260 Drees Laboratories
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Abstract: Reliable control technology is critical for enabling autonomous operations of unmanned air vehicles (UAV). Lockheed Martin Aeronautics Company is researching and developing innovative integrated reliable control solutions for military applications. Various integrated warfare concepts of operations (CONOPS), including network-centric, interoperable, and systems-of-systems concepts, will be summarized. Autonomous air vehicle concepts that support these CONOPS will also be discussed. Flight Control / Vehicle Management Systems Technology Development and Integration within the Advanced Development Programs, aka Skunkworks, organization at Lockheed Martin Aeronautics Company will be covered with special emphasis on Coordinated Control, Intelligent Control, and Verification and Validation of Emerging Control Systems.

Biography: James M. Buffington received his B.S. and M.S. degrees in Aerospace Engineering from the University of Texas, Austin and his Ph.D. degree in Control Science and Dynamical Systems from the University of Minnesota, Minneapolis. From 1990-1999, he was a Research Engineer and the Control Theory Technical Area Leader in the Air Force Research Laboratory Control Sciences Center of Excellence. Currently he is the Flight Control / Vehicle Management Systems Technology Lead in the Advanced Development Programs organization (aka The Skunk Works) at Lockheed Martin Aeronautics Company.