

MECHANICAL AND AEROSPACE ENGINEERING SEMINAR
University of Virginia, Charlottesville, Virginia

The Personal Air Vehicle (PAV): a Next Generation NASA GA Advanced Concept by
Andrew Hahn, NASA Langley Research Center

Time: October 11

Place: MEC 341, Mechanical Engineering Building

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

Abstract:

Not only is the common dream of frequent personal flight travel going unfulfilled, the current generation of General Aviation (GA) is facing tremendous challenges that threaten to relegate the Single Engine Piston (SEP) aircraft market to a footnote in the history of U.S. aviation. A case is made that this crisis stems from a generally low utility coupled to a high cost that makes the SEP aircraft of relatively low transportation value and beyond the means of many. The roots of this low value are examined in a broad sense, and a Next Generation NASA Advanced GA Concept is presented that attacks those elements addressable by synergistic aircraft design.

Bio:

Andrew Hahn has worked at NASA for over 25 years, all of it in Systems Analysis, which has been mostly conceptual aircraft design, although the current direction of the research is to expand beyond the aircraft into airspace, regulation, and economics.

He has worked on projects that span the full range of aeronautics from heavy lift and ultra high altitude blimps, through vertical takeoff jet fighters, Uninhabited Air Vehicles, Personal Air Vehicles, and Commercial airliners, all the way to a small Mars airplane. He is currently leading a conceptual design study for a Short TakeOff and Landing Regional Jet to help identify what promising technologies should receive research priority.

Andrew has a Master's degree from Stanford and a Bachelor's degree from Embry-Riddle in aeronautical engineering.