

AFRL SPATIAL DISORIENTATION COUNTERMEASURES PROGRAM

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**Major Todd E. Heinle
Program Manager
Air Force Research Laboratory**



Overview



- **Introductions**
- **Program Outlines**
- **Goals**
- **Future**



Key Players



- **Program Manager** Major Todd E. Heinle
- **AFRL/HEP Lead** Dr. William B. Albery
- **AFRL/HEC Lead** Dr. John Reising
- **AFRL/HEA Lead** Dr. Elizabeth Martin
- **Prime Contractor** Veridian Engineering



Program Outlines



- **Mechanisms of Spatial Orientation**
 - **Basic Research**
- **Technologies to Counter the SD Problem**
 - **Visual, audio, tactile approaches**
- **Training to Counter the SD Problem**
 - **Task Specific materials e.g. NVG's and HMD's**
- **Knowledge Based website**
 - **Information source for all aspects of SD**



Mechanisms



- **Much Existing Research-Potential to Elaborate**
- **Sensory Integration-Interaction of Orientation systems**



Displays



- **Pathway in the Sky/Synthetic Terrain**
- **Helmet Mounted Displays as Primary Flight Reference**
- **Non-Traditional Attitude Indicators**



Training



- **Training Effectiveness of Existing SD Trainers**
- **Overcoming SD associated with NVG use**
- **SD Countermeasures for HMD usage**
- **Online Training Packages**



Knowledge Management



- **Information Accessibility**
 - **Secure Website for use by all parties**
 - **SD Information Conduit**
 - **Forum for Collaboration and Inquiry**

 - **SD website address**
 - **www.SpatialD.org**
 - **Available 15 Jan 2001**



Program Goals



- **Reduce the SD caused loss of personnel and aircraft by a measurable amount within 3 years.**
- **Reduce the SD caused loss of personnel and aircraft by 50% by 2010.**



Future of the Program



- **Research Direction May Change**
- **Funding is not Guaranteed**
- **Concrete Deliverables are a Necessity**



Summary



- **Key Players**
- **Outline of the Program**
- **Goals**
- **Future**

- **QUESTIONS?**