AFRL CALL FOR RESEARCH

1. **Research Title:** "Spatial audio displays for distributed team collaboration"
2. **Individual Sponsor:**
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3. **Academic Area/Field and Education Level:** Electrical Engineering and Computer Science (MS or Ph.D. level)
4. **Objectives:** Develop, integrate, and evaluate spatial audio displays for interactive team communications in distributed simulation environments.
5. **Description:** AFRL/HECB is currently involved in adapting spatial audio technology for easy integration into HLA-based distributed simulation systems. Possible platforms include the Integrated Visualization Platform, a system consisting of two immersive "CAVE" type virtual environments (http://www.evl.uic.edu/EVL/SHOWCASE/cave/vrpaper/enviroment.htm) combined with a data wall that is currently designed to simulate two dismounted soldiers navigating in an urban environment. However, other possible platforms are available, potentially including any current USAF simulation systems based on the HLA standard architecture. Students will have an outstanding opportunity to learn distributed simulation programming in a state of the art facility.
6. **Research Classification/Restrictions:** Restrictions will depend on the type of simulator used for the integration.

7. Interest in Summer USAFA Cadet (Avg Cost for USAF Cadet for 33 days was $4000): Please indicate your interest in sponsoring a USAF Cadet in Summer of 2008

8. **Eligible Research Institutions:** ☐

X Universities (DAGSI) X AFIT (only) USAFA