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Science and Technology for Tomorrow's Air and Space Force

Success Story

MR. WILLIAM E. AUSTIN RECEIVES AOC MODELING AND SIMULATION AWARD

Mr. William E. Austin, from the Sensors Directorate's Integrated Demonstrations and Applications Laboratory, received the Association of Old Crows (AOC) Modeling and Simulation (M&S) Award for making significant contributions to M&S capabilities required to effectively demonstrate and evaluate electronic warfare (EW) technology through the use of multispectral synthetic battlespace simulation. Mr. Austin's technical expertise and leadership improved the realism of synthetic battlespace environments generated to evolve and evaluate leading-edge EW input/output technology.

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Accomplishment

Mr. Austin, the directorate's program manager for Joint Synthetic Battlespace (JSB) demonstration projects and recent recipient of the AOC M&S Award, recently directed the integration of diverse models (joint modeling and simulation system [JMASS] real-time surface-to-air missile, F-16 cockpit, and an uninhabited air vehicle simulation) into the first JSB prototype federation.

Background

The JSB provides a persistent common framework of simulations and models for operations, training, experimentation, and analysis. It is a crucial warfighter portal for collaborating with engineers and analysts. Mr. Austin's leadership allowed the Air Force to fully demonstrate the JSB prototype at the Interservice/Industry Training, Simulation, and Education Conference in Orlando, Florida.

He applied his experience with EW system analysis laboratories to lead a team who demonstrated that the JMASS architecture could operate in a deterministic real-time mode. His efforts culminated in a chain of successful demonstrations that integrated real-time surface-to-air missile models with a manned cockpit, radio frequency (RF) threat simulator, and operational EW avionics equipment.

Key decisions to the successes achieved during this 18-month project included the selection of a real-time operation methodology (rate monotonic algorithm implemented) and the integration technology used to combine traditional constructive models with a manned aircraft player and RF simulator (an innovative application of Link Agent technology). Mr. Austin also provides key support to the JMASS real-time requirements development group.

Sensors
Awards and Recognition

Additional information

To receive more information about this or other activities in the Air Force Research Laboratory, contact TECH CONNECT, AFRL/XPTC, (800) 203-6451 and you will be directed to the appropriate laboratory expert. (03-SN-14)