

Transition Impact

Essential Training For Space Operations Using Distributed Mission Training



- Training for space operations in an integrated air and space scenario is essential
- Intelligent Link Agent (ILA) technology provides new training capability in a simulated space environment
- This new capability offers warfighters training and rehearsal for a mission “the way they will fight it”

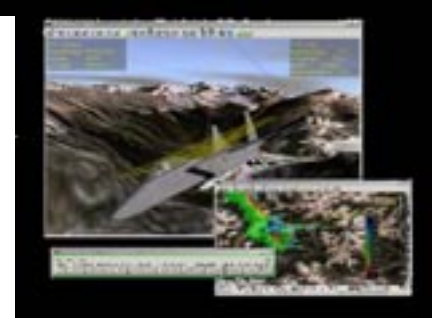
Air Force Requirements

The Air Force requires new ways of conducting mission training and mission rehearsal. The vision to “train the way we will fight” became a reality through Distributed Mission Training (DMT). DMT provides interaction between participants using weapon system simulators at geographically separated locations. DMT has the requirement to operate within the High Level Architecture (HLA) simulation environment. As the air component of DMT developed, the need for including space operations in an integrated air and space DMT became an essential capability.

To cost-effectively create the integrated live, virtual, and constructive modeling and simulation domains to support DMT, technologies were required that would allow the continued use of legacy systems without a complete system redesign.

SBIR Technology

The Sytronics/Ball Aerospace contractor team developed, demonstrated, and commercialized a technology that allows legacy systems to be integrated in the DMT High Level Architecture (HLA) environment. That technology is called Intelligent Link Agent (ILA). ILA provides the capability for Satellite Tool Kit® (STK) to function in the HLA environment as part of a larger DMT event. STK provides simulations of satellites and other space-related objects and the means to visualize these simulations. ILA is a powerful federation management tool that provides innovative networking and data mediation features to meet the needs for STK to integrate into the HLA. ILA's easy-to-use, point-and-click, drag-and-drop graphical user interface enables mapping of Federation Object Models (FOMs) into existing data formats to support HLA mission rehearsals.



Air Force Transition Payoff

ILA is currently being used by defense support contractors CSC and MITRE. It is also being used by AFRL's Integrated Demonstrations and Applications Laboratory, AFRL/SNZW. ILA has generated interest from international defense agencies as well. Additionally, ILA is offered to Satellite Tool Kit's large customer base as a plug and play module.

ILA provides a cost-effective means to integrate legacy systems into the DMT environment thus saving scarce Air Force resources. This will improve unit qualification training, mission readiness, and recurring training. ILA will enable integrated air and space DMT events. This capability allows the warfighter to truly train and rehearse the mission “the way they will fight it.”

SBIR Topic:

AF99-082

Title:Training for Space Operators
Using a Distributed Mission
Training Environment**Contract #:**

F33615-00-C-6005

SBIR Partner:

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Technical Project Management:AFRL/Human Effectiveness
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