



Press Release

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ACME's True Q® Dynamic Motion Seat Facilitates First-of-its-Kind Simulation Application

ACME Worldwide Enterprises, Inc. today announced the use of its True Q® Dynamic Motion Seat to facilitate unprecedented research by the Dynamic Interface Virtual Environment (DIVE) program. DIVE is an ONR funded program, being conducted at NAVAIR, Pax River, aimed at developing an accreditation process by which a Wind Over Deck (WOD) conditions can be modeled based on simulation data.

The conditions within which aircraft are permitted to function for ship-based flight operations are defined by WOD envelopes. These envelopes are determined from data produced from testing with physical aircraft landing on physical ships. The suitability for a Vertical Take-Off and Lift (VTOL) aircraft aboard a ship is currently dependent on the data produced from these testing demonstrations. This method of testing incurs significant expensive due to the man-hours, in-ship time, and aircraft flight time, and ancillary resources needed to support testing.

To generate reliable WOD envelope data from a collaborative simulation and test process, the simulation technology must be validated and integrated to support the effort. Working with DIVE, Systems Technology Inc. found ACME's MV-22 True Q® Dynamic Motion Seat to be a solution for the program's simulation need. Dr. Amanda Lampton, Principal Research Engineer for Systems Technology, Inc. commented, "We envision the dynamic seat providing key proprioceptive cues to the pilot during simulation training and testing of critical tasks, such as the dynamic interface task, thereby increasing transfer of training compared to that from a solely fixed-base simulator."

ACME's seat generates superior cues providing an immersive user experience. The testing will use simulator model outputs to drive the seat which provides realistic kinesthetic cues and haptic conditions directly and physically to the crew. "We are excited to see ACME's patented technology used in support of the DIVE program to produce a collaborative simulation and test process, for modeling launch and recovery envelopes," says Randy Gurulé, ACME's President and CEO. The program hopes to influence how the US Navy certifies a ship-aircraft pair for fleet acceptance in the future.



MV-22 True Q®
Dynamic Motion Seat

Patent #8827709

