

NAVY Transition Assistance Program

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NEED & CUSTOMER REQUIREMENT

Need: There is little guidance and no standard tool for determining the appropriate level of fidelity of training simulators to achieve specified training objectives, maintain trainee acceptance, and fit within budgetary constraints.

Value to the Warfighter: PREDICT will assist simulator-based training of warfighters by providing guidance on which skills can be trained in lower- or higher-fidelity simulators, and which require training in the operational environment/system (e.g., aircraft)

Operational Gap: Currently, these decisions are made based on end-user input alone. PREDICT fuses fidelity requirements defined by end-users, existing theory and research on simulator fidelity, and empirical data collected from focused fidelity studies.

Customer Specifications: PREDICT must support more accurate assessment of fidelity requirements so that acquisition professionals can optimize training simulators to achieve the specified training outcomes at the lowest cost.

Technology Description: PREDICT is a model-based tool to support more informed decisions regarding the acquisition and use of training simulators. Specifically, PREDICT helps users:

- (1) Conduct return on investment analyses to determine which simulator to develop or acquire
- (2) Prioritize technology enhancements to improve the effectiveness of existing simulators
- (3) Develop a strategy for employing both high- and low-fidelity simulators to meet training objectives

TECHNOLOGY DEVELOPMENT MILESTONES (SBIR/STTR)

Milestone	TRL	Risk	Measure of Success	TRL Date
User Interface Designed	3	Low	Stakeholder (ONR) review	7/2007
Software Prototype Developed	4	Low	Stakeholder (ONR & PMA-205) review	12/2007
Prototype Testing & Revisions	5	Moderate	End-user evaluation and feedback	6/2010
Integration of Experimental Data	5	Low	Integration of experimental data into the model	10/2010
Tested & Functioning Software	6	Low	Usable software	12/2010

Open contract: N00014-09-C-0079 ending 12/1/2010

N07-099 - Aptima, Inc.

Predicting Requirements for instructional Environment Design to Improve Critical Training (PREDICT)

SPONSORSHIP of original SBIR/STTR Topic

SYSCOM: ONR - SBIR

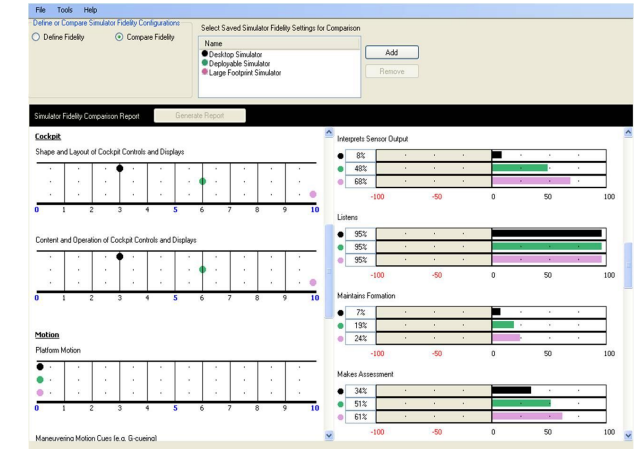
Transition Target: F/A-18

Original Sponsoring Program: Deployable Virtual Training Environment (DVTE)*

TPOC Phone Number:
(703) 696-0407

Note:

* Per guidance from the TPOC, the project direction changed from DVTE to F/A-18



TECHNOLOGY TRANSITION OPPORTUNITIES (PHASE III)

Other Potential Applications:

- (1) Fixed wing aircraft platforms that use simulator-based training (e.g., F/A-18, F-35, F-22)
- (2) Rotary wing aircraft platforms that use simulator-based training (e.g., MH60)
- (3) Non-aviation simulator-based training programs (e.g., Ship Coordination and Navigation Training System (SCANTS))

Business Model:

Our vision is that PREDICT will support a simulator fidelity consulting business for future platforms. Under that model, Aptima will provide a consulting service and refine tool as necessary to address the specific need of that platform.

Objective:

Aptima is currently looking for letters of support and matching funds from large Primes and/or Program Offices who are interested in applying PREDICT to their platform.