

# UNCLASSIFIED

**CLASSIFICATION:**

EXHIBIT R-2, RDT&E Budget Item Justification				DATE: <b>May 2009</b>				
APPROPRIATION/BUDGET ACTIVITY <b>RESEARCH DEVELOPMENT TEST &amp; EVALUATION (RDT&amp; BA-5)</b>				R-1 ITEM NOMENCLATURE PE0604703N - Manpower, Personnel, Training, Simulation, & Human Factors				
COST (\$ in Millions)	FY 2008	FY 2009	FY 2010					
Total PE Cost	<b>8.561</b>	<b>5.249</b>	<b>5.898</b>					
L1822/Manpower, Personnel, Training, Sim, and HF	<b>8.561</b>	<b>5.249</b>	<b>5.898</b>					

**A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**

This non-acquisition category program provides funds for continued (but less risky) R&D for broader application of advanced technologies to transition successful research proof-of-concept demonstrations into operational use. Development of prototype systems to support and/or improve operational requirements of manpower and personnel sponsors is the primary goal of this Engineering Development Program. The R&D Program features the use of a broad range of technologies from cognitive science, human systems integration, learning management, content management & delivery, learning and ability testing techniques, mathematical modeling and optimization, statistical and econometric forecasting, intelligent systems, data visualization, data mining, simulation, decision support systems, and new services oriented architectures to include applications, databases and communications configuration. This non acquisition category program provides funds for continued R&D for broader application of advanced training technologies and the science of learning to transition successful research proof of concept demonstrations and rapid prototyping of Commercial off the Shelf/Government of the Shelf (COTS/GOTS) technologies into operation use.

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EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>April 2009</b>												
<b>APPROPRIATION/BUDGET ACTIVITY</b>	<b>PROGRAM ELEMENT NUMBER AND NAME</b>	<b>PROJECT NUMBER AND NAME</b>												
<b>RDT&amp;E, N / BA-5</b>	0604703N - Manpower, Personnel, Training, Simulation, and Human Factors	L1822/Manpower, Personnel, Training, Sim, and HF												
<b>B. PROGRAM CHANGE SUMMARY:</b>														
Funding:		<table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="padding: 2px 10px;">FY 2008</th> <th style="padding: 2px 10px;">FY 2009</th> <th style="padding: 2px 10px;">FY 2010</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px 10px;">FY 09 PB Submit</td> <td style="padding: 2px 10px; text-align: right;">8.631</td> <td style="padding: 2px 10px; text-align: right;">5.263</td> </tr> <tr> <td style="padding: 2px 10px;">FY 10 PB Submit</td> <td style="padding: 2px 10px; text-align: right;">8.561</td> <td style="padding: 2px 10px; text-align: right;">5.249</td> </tr> <tr> <td style="padding: 2px 10px;">Total Adjustments</td> <td style="padding: 2px 10px; text-align: right; border-top: 1px solid black;">-0.070</td> <td style="padding: 2px 10px; text-align: right; border-top: 1px solid black;">-0.014</td> </tr> </tbody> </table>	FY 2008	FY 2009	FY 2010	FY 09 PB Submit	8.631	5.263	FY 10 PB Submit	8.561	5.249	Total Adjustments	-0.070	-0.014
FY 2008	FY 2009	FY 2010												
FY 09 PB Submit	8.631	5.263												
FY 10 PB Submit	8.561	5.249												
Total Adjustments	-0.070	-0.014												
Summary of Adjustments		<table style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td style="padding: 2px 10px;">SBIR</td> <td style="padding: 2px 10px; text-align: right;">-0.070</td> <td style="padding: 2px 10px; text-align: right;">0.000</td> </tr> <tr> <td style="padding: 2px 10px;">Rate Adjustments</td> <td style="padding: 2px 10px; text-align: right;">0.000</td> <td style="padding: 2px 10px; text-align: right;">-0.014</td> </tr> <tr> <td style="padding: 2px 10px;">Program adjustments</td> <td style="padding: 2px 10px; text-align: right;">0.000</td> <td style="padding: 2px 10px; text-align: right;">0.000</td> </tr> <tr> <td style="padding: 2px 10px;">Subtotal</td> <td style="padding: 2px 10px; text-align: right; border-top: 1px solid black;">-0.070</td> <td style="padding: 2px 10px; text-align: right; border-top: 1px solid black;">-0.014</td> </tr> </tbody> </table>	SBIR	-0.070	0.000	Rate Adjustments	0.000	-0.014	Program adjustments	0.000	0.000	Subtotal	-0.070	-0.014
SBIR	-0.070	0.000												
Rate Adjustments	0.000	-0.014												
Program adjustments	0.000	0.000												
Subtotal	-0.070	-0.014												
Schedule: Not Applicable														
Technical: Not Applicable														
<b>C. (U) OTHER PROGRAM FUNDING SUMMARY: None</b>														
(U) RELATED RDT&E:														
(U) PE 0601152N, In-House Independent Lab Research														
(U) PE 0601153N, Defense Research Sciences														
(U) PE 0602236N, Mission Support Technology														
(U) PE 0602722A, Personnel and Training														
(U) PE 0603236N, Manpower, Personnel and Training Advanced Technology Development														
(U) PE 0603731A, Manpower and Personnel														
(U) PE 0603704F, Manpower and Personnel Systems Technology														
(U) SCHEDULE PROFILE: Not applicable.														

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APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>	PROGRAM ELEMENT NUMBER AND NAME 0604703N - Manpower, Personnel, Training, Simulation, and Human Factors				PROJECT NUMBER AND NAME L1822/Manpower, Personnel, Training, Sim, and HF			
COST (\$ in Millions)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Project Cost	<b>8.561</b>	<b>5.249</b>	<b>5.898</b>					

**A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**

L1822/Manpower, Personnel, Training, Sim, and Human Factors This non-acquisition category program provides funds for continued (but less risky) R&D for broader application of advanced technologies to transition successful 6.3 research proof-of-concept demonstrations into operational use. Development of prototype systems to support and/or improve operational requirements of manpower and personnel sponsors is the primary goal of this Engineering Development Program. The 6.5 R&D Program features the use of a broad range of technologies from cognitive science and ability testing techniques, mathematical modeling and optimization, statistical and econometric forecasting, intelligent systems, data visualization, data mining, simulation, decision support systems, and new database and communications configuration.

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RDT&E operational systems development because it encompasses engineering and development of new end-items prior to production approval decision and the upgrading and enhancement of existing MPTE decision support systems, tools and models.

1. (U) FY 2008 ACCOMPLISHMENTS:

- (U) Completed prototype development of Non-Cognitive Measures.
- (U) Completed prototype development of Attrition Reduction Technologies.
- (U) Completed prototype development of Enterprise Management System.
- (U) Completed Phases II for downloadable disconnected operations delivery prototype
- (U) Completed Phases I, and II of prototype development for Integrated Skills and Training Data Aggregation and Display (ISTDAS) Prototype
- (U) Completed Learner Assessment Prototype
- (U) Completed Navy War College (NWC) Student Data Base development and transition
- (U) Continued Training and Supply Chain Management Decision Support Systems integration and transition
- (U) Continued updates, upgrades and enhancements to Force Structure and Strength Planning Models
- (U) Continued prototype development of Career Case Manager Technologies.
- (U) Continued prototype development of Distribution Incentives System (DIS).
- (U) Began prototype development of Cultures and Values Selection
- (U) Began Transition of Web-based Marketplace for Sailor / Marine Jobs
- (U) Began Transition of Integrated Whole Person Assessment System
- (U) Began Transition of Integrated Career Management System
- (U) Began Transition of Integrated Comprehensive Optimal Manpower Personnel Analysis Simulation System (COMPASS)
- (U) Began Improved Manpower and Personnel Integration Tool
- (U) Began development of Integrated Human Factors and Flight Deck Sortie Rate Model
- (U) Began development and integration of Integrated Operating Picture Decision Support System and Tool Set

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<b>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b> 2. (U) FY 2009 Accomplishments (U) Continued prototype development of Career Case Manager Technologies. (U) Continued prototype development of Distribution Incentives System (DIS). (U) Continued prototype development of Cultures and Values Selection. (U) Continued Transition of Web-based Marketplace for Sailor / Marine Jobs (U) Continued Transition of Integrated Whole Person Assessment System (U) Continued Transition of Integrated Career Management System (U) Continued Transition of Integrated Comprehensive Optimal Manpower Personnel Analysis Simulation System (COMPASS) (U) Continued updates, upgrades and enhancements to Force Structure and Strength Planning Models (U) Continued Training and Supply Chain Management Decision Support Systems integration and transition (U) Continued Improved Manpower and Personnel Integration Tool (U) Continued development of Integrated Human Factors and Flight Deck Sortie Rate Model (U) Continued development and integration of Integrated Operating Picture Decision Support System and Tool Set (U) Begin Transition of Future Naval Warfighter Capabilities (FNWC) Capable Manpower (CM) Refresh early prototypes		

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<b>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b>  3. (U) FY 2010 PLAN: (U) Continue Transition of Web-based Marketplace for Sailor / Marine Jobs (U) Continue Transition of Integrated Whole Person Assessment System (U) Continue Transition of Integrated Career Management System (U) Continue Transition of Integrated Comprehensive Optimal Manpower Personnel Analysis Simulation System (COMPASS) (U) Continue Training and Supply Chain Management Decision Support Systems integration and transition (U) Continue Improved Manpower and Personnel Integration Tool (U) Continue development of Integrated Human Factors and Flight Deck Sortie Rate Model (U) Continue to Transitioning of Future Naval Warfighter Capabilities (FNWC) Capable Manpower (CM) Refresh early prototypes (U) Begin transition of DARPA Digital Tutor to Center for Information Dominance for IT Training		

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Exhibit R-3 Cost Analysis (page 1)											DATE: <b>April 2009</b>		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME						
<b>RDT&amp;E, N / BA-5</b>			0604703N - Manpower, Personnel, Training, Simulation, and Human Factors				L1822/Manpower, Personnel, Training, Sim, and HF						
Cost Categories	Contract Method & Type	Performing Activity & Location	Prior Years Cost	Prior Years Award Date	FY 09 Cost	FY 09 Award Date	FY 10 Cost	FY 10 Award Date	FY 11 Cost	FY 11 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development													
Ancillary Hardware Development													
Aircraft Integration													
Ship Integration													
Ship Suitability													
Systems Engineering													
Training Development													
Licenses													
Tooling													
GFE													
Award Fees													
Subtotal Product Development			0.000		0.000		0.000						
Remarks:													
Development Support	Allot	NPRST Millington, TN	3.608		2.585		1.640						
Development Support	Allot	CNP Washington DC	3.977		2.664		2.258						
Development Support	Allot	NETPDTC Pensacola FL	0.976										
Development Support	Allot	Naval War College					2.000						
Development Support	Allot												
Software Development													
Software Development													
Studies & Analyses													
Studies & Analyses													
Award Fees													
Subtotal Support			8.561		5.249		5.898						
Remarks: FY10 increase for DARPA Digital Tutor transition													

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Exhibit R-3 Cost Analysis (page 1)										DATE: <b>April 2009</b>			
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME					
<b>RDT&amp;E, N / BA-5</b>			0604703N - Manpower, Personnel, Training, Simulation, and Human Factors					L1822/Manpower, Personnel, Training, Sim, and HF					
Cost Categories	Contract Method & Type	Performing Activity & Location	Prior Years Cost	Prior Years Award Date	FY 09 Cost	FY 09 Award Date	FY 10 Cost	FY 10 Award Date	FY 11 Cost	FY 11 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation													
Operational Test & Evaluation													
Live Fire Test & Evaluation													
Test Assets													
Tooling													
GFE													
Award Fees													
Subtotal T&E			0.000		0.000		0.000						
Remarks:													
Contractor Engineering Support													
Government Engineering Support													
Program Management Support													
Travel													
Transportation													
SBIR Assessment													
Subtotal Management			0.000		0.000		0.000						
Remarks:													
Total Cost			8.561		5.249		5.898						

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EXHIBIT R4, Schedule Profile										DATE: <b>April 2009</b>			
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /BA5</b>		PROGRAM ELEMENT NUMBER AND NAME 0604703N - Manpower, Personnel, Training, Simulation, and Human Fact								PROJECT NUMBER AND NAME L1822/Manpower, Personnel, Training, Sim, and HF			
Fiscal Year	2008				2009				2010				
	1	2	3	4	1	2	3	4	1	2	3	4	
Force Structure & Strength Planning Tools			▲	△			▲	△					
Enterprise Management System		▲		△									
Non-Cognitive Measures			▲	△									
Attrition Reduction Technologies			▲	△									
Distribution Incentive System			▲	△			▲	△					
Career Case Management Technologies			▲	△			▲	△					
Cultures and Values Selection				▲		△	▲	△					
Integrated Whole Person Assessment Sys				△		▲		△	▲			△	
Web Based Marketplace for Sailors/Marines				△	▲		△	▲				△	
Integrated Career Management System				△		▲		△		▲	△		
Integrated Comp. Opt M&P Analytic Sup Sys				△			▲					△	
IMPRINT-N Tool Set Transition				△				△				△	
Learner Assessment Prototype		▲		△									
Disconnected Ops Prototype		▲		△									
Integrated Skills/Training Data Aggregation and Display Prototype		▲		△									
Training/Supply Chain Mgmt Decision Support System integration/transition				▲		▲		△		▲		△	
Integrated Operating Picture Decision Support System and Tool Set				▲	▲			△					
NWC Student Data Base Development				△									
Integrated Human Factors and Flight Deck Sortie Rate Model				▲		▲		△		▲		△	
FNWC CM Refresh early prototypes					▲			△		▲		△	
DARPA Digital Tutor									▲			△	
Demonstration												▲	
Prototype & Documentation												△	

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Exhibit R-4a, Schedule Detail			DATE: <b>April 2009</b>				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME				
<b>RDT&amp;E, N / BA-5</b>	0604703N - Manpower, Personnel, Training, Simulation, and Human Factors		L1822/Manpower, Personnel, Training, Sim, and HF				
<b>Schedule Profile</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>				
Force Structure & Strength Planning Tools		Q1-Q4					
Distribution Incentive System		Q1-Q4					
Career Case Management Technologies		Q1-Q4					
Cultures and Values Selection		Q1-Q4					
Integrated Whole Person Assessment Sys		Q1-Q4	Q1-Q4				
Web Based Marketplace for Sailors/Marines		Q1-Q4	Q1-Q4				
Integrated Career Management System		Q1-Q4	Q1-Q3				
Integrated Comp. Opt M&P Analytic Sup Sys		Q1-Q4	Q1-Q4				
IMPRINT-N Tool Set Transition		Q1-Q4	Q1-Q4				
Integrated Skills/Training Data Aggregation and Display Prototype	Q1-Q4						
Disconnected Ops Prototype	Q1-Q4						
Training/Supply Chain Mgmt Decision Support System integration/transition	Q1-Q4	Q1-Q4	Q1-Q4				
School House/Learning Center Trade-Off and Optimization Decision Support	Q1-Q4	Q1-Q4					
Integrated Operating Picture Decision Support System and Tool Set	Q1-Q4	Q1-Q4					
FNWC CM Refresh early prototypes	Q1-Q4	Q1-Q4	Q1-Q4				
Integrated Human Factors and Flight Deck Sortie Rate Model		Q1-Q4	Q1-Q4				
DARPA Digital Tutor			Q1-Q4				

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**Exhibit R-4a, Schedule Detail**  
(Exhibit R-4a, page 9 of 9)