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**Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy** **DATE:** February 2010

<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604703N: <i>Personnel, Trng, Sim, &amp; Human Factors</i>
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COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	5.097	6.646	10.759	0.000	10.759	13.252	8.715	8.913	9.096	Continuing	Continuing
1767: <i>Naval War Col Strategic Studies Supt</i>	0.000	0.000	0.234	0.000	0.234	0.238	0.242	0.247	0.252	Continuing	Continuing
1822: <i>Manpower Pers &amp; Human Fact System</i>	5.097	5.849	10.525	0.000	10.525	13.014	8.473	8.666	8.844	Continuing	Continuing
9999: <i>Congressional Adds</i>	0.000	0.797	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.743

**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 off the Shelf (COTS/GOTS) technologies into operational use.

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<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604703N: <i>Personnel, Trng, Sim, &amp; Human Factors</i>
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**B. Program Change Summary (\$ in Millions)**

	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>
Previous President's Budget	5.249	5.898	0.000	0.000	0.000
Current President's Budget	5.097	6.646	10.759	0.000	10.759
Total Adjustments	-0.152	0.748	10.759	0.000	10.759
• Congressional General Reductions		-0.027			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	-0.025			
• Congressional Adds		0.800			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-0.152	0.000			
• Program Adjustments	0.000	0.000	10.759	0.000	10.759

**Congressional Add Details (\$ in Millions, and Includes General Reductions)**

**Project:** 9999: *Congressional Adds*

    Congressional Add: *Workforce Requirements Planning - Team Enhancement*

Congressional Add Subtotals for Project: 9999

Congressional Add Totals for all Projects

	<u>FY 2009</u>	<u>FY 2010</u>
	0.000	0.797
	0.000	0.797
	0.000	0.797

**Change Summary Explanation**

Technical: Not applicable.

Schedule: Not applicable.

FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.

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<b>Exhibit R-2A, RDT&amp;E Project Justification: PB 2011 Navy</b>									<b>DATE:</b> February 2010		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0604703N: <i>Personnel, Trng, Sim, &amp; Human Factors</i>				<b>PROJECT</b> 1767: <i>Naval War Col Strategic Studies Supt</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
1767: <i>Naval War Col Strategic Studies Supt</i>	0.000	0.000	0.234	0.000	0.234	0.238	0.242	0.247	0.252	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
<b>A. Mission Description and Budget Item Justification</b>											
Naval War College (NWC) conducts strategic and operational war gaming and research for Office of the Chief of Naval Operations (OPNAV), the numbered Fleets, Fleet Commanders, and the Combatant Commanders. Each year, 50-60 major war games and associated events provide support to efforts that explore and analyze military, political, informational and economic aspects of differing strategic and operational scenarios and tactical imperatives.											
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>											
							<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>
Naval War College/Center for Naval Warfare Studies <i>FY 2011 Base Plans:</i> N/A							0.000	0.000	0.234	0.000	0.234
Accomplishments/Planned Programs Subtotals							0.000	0.000	0.234	0.000	0.234
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
N/A											
<b>D. Acquisition Strategy</b>											
N/A											
<b>E. Performance Metrics</b>											
War Gaming Metrics: Results of research products and war games are evaluated through customer feedback and the extent to which findings are incorporated into follow-on research and practical applications such as Navy doctrine, operational tactics, and programming decisions made during the Planning, Programming,											

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Navy		<b>DATE:</b> February 2010
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<p>Budgeting &amp; Execution (PPBE), Quadrennial Defense Review (QDR), and Navy Strategic Planning Process (NSPP) processes. Each year Naval War College (NWC) develops and executes 50-60 major war games and associated events to explore and analyze military, political, informational and economic aspects of differing strategic and operational scenarios and tactical imperatives. Naval War College (NWC) conducts strategic and operational war gaming and research in direct support or Office of the Chief of Naval Operations (OPNAV), the numbered Fleets, Fleet Commanders, and the Combatant Commanders. The intent of the research is to provide Navy and DoD leadership with researched and analytical information to make decisions on current and future operational and strategy plans, concepts and force structure.</p>		

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Navy								<b>DATE:</b> February 2010			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>			<b>R-1 ITEM NOMENCLATURE</b> PE 0604703N: <i>Personnel, Trng, Sim, &amp; Human Factors</i>				<b>PROJECT</b> 1822: <i>Manpower Pers &amp; Human Fact System</i>				
<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
1822: <i>Manpower Pers &amp; Human Fact System</i>	5.097	5.849	10.525	0.000	10.525	13.014	8.473	8.666	8.844	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

**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.

**B. Accomplishments/Planned Program (\$ in Millions)**

	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>
Manpower Pers & Human Fact System <i>FY 2009 Accomplishments:</i> Continued prototype development of Career Case Manager Technologies. Continued prototype development of Distribution Incentives System (DIS). Continued prototype development of Cultures and Values Selection. Continued Transition of Web-based Marketplace for Sailor / Marine Jobs Continued Transition of Integrated Whole Person Assessment System Continued Transition of Integrated Career Management System	5.097	5.849	10.525	0.000	10.525

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Navy				<b>DATE:</b> February 2010		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604703N: <i>Personnel, Trng, Sim, &amp; Human Factors</i>	<b>PROJECT</b> 1822: <i>Manpower Pers &amp; Human Fact System</i>				
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>						
		<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>
Continue transition of Future Naval Warfighter Capabilities (FNWC) Capable Manpower (CM) Refresh of early prototypes Continue development of Training Capacity Tradeoff Model Continue enhancement of products delivered via World Class Modeling Begin transition of DARPA Digital Tutor to Center for Information Dominance for IT Training Small Business Innovative Research (SBIR)  <i>FY 2011 Base Plans:</i> Continue transition of FNWC FUTURE and PISCES products from previous year Begin transition of additional FNWC FUTURE and PISCES product deliverables Continue Training and Supply Chain Management Decision Support Systems integration and transition Continue Improved Manpower and Personnel Integration Tool Continue the transitioning of Future Naval Warfighter Capabilities (FNWC) Capable Manpower (CM) Refresh early prototypes Continue the development and enhancement of Training Capacity Tradeoff Model Continue enhancement of products delivered via World Class Modeling Continue transition of DARPA Digital Tutor to Center for Information Dominance for IT Training Small Business Innovative Research (SBIR)						
<b>Accomplishments/Planned Programs Subtotals</b>		5.097	5.849	10.525	0.000	10.525
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A						
<b>D. Acquisition Strategy</b> N/A						

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Navy		<b>DATE:</b> February 2010
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604703N: <i>Personnel, Trng, Sim, &amp; Human Factors</i>	<b>PROJECT</b> 1822: <i>Manpower Pers &amp; Human Fact System</i>

**E. Performance Metrics**

This PE provides funding to support the transition of models and decision support tools from RDT&E funded research, Science and Technology (6.2-6.3), to production and into the hands of analysts and program managers throughout the Manpower, Personnel, Training and Education enterprise. The PE also supports the application of proven industry models, tools and methodologies to Navy MPTE problems where GOTS solutions are non-existent. One goal of this PE is to transition 90% of successful S&T products to production and eventual use within the Navy. An acceptable metric will be to successfully transition 80% of the products. The second goal of the PE is to successfully implement 90% of the industry-standard tools that are attempted to be used in Navy applications.

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy** **DATE:** February 2010

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**Support (\$ in Millions)**

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Development Support	Allot	NPRST Millington, TN	2.430	2.251		4.173		0.000		4.173	Continuing	Continuing	Continuing
Development Support	Allot	CNP Washington DC	2.609	3.598		6.352		0.000		6.352	0.000	12.559	Continuing
<b>Subtotal</b>			5.039	5.849		10.525		0.000		10.525			

**Remarks**

Project Cost Totals	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	5.039	5.849		10.525		0.000		10.525			

**Remarks**

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**Exhibit R-4, RDT&E Schedule Profile: PB 2011 Navy**

**DATE: February 2010**

**APPROPRIATION/BUDGET ACTIVITY**

1319: *Research, Development, Test & Evaluation, Navy*  
BA 5: *Development & Demonstration (SDD)*

**R-1 ITEM NOMENCLATURE**

PE 0604703N: *Personnel, Trng, Sim, & Human Factors*

**PROJECT**

1822: *Manpower Pers & Human Fact System*

Fiscal Year	2009				2010				2011				2012				2013				2014				2015			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Force Structure & Strength Planning Tools			▲	△																								
Enterprise Data Broker				▲				△																				
MAX FIT (FUTURE product)								△																				
INCENTIVES (FUTURE product)								△																				
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		▲		△	▲	△																						
TAXSE (PISCES product)								△																				
IMPRINT-N Tool Set Transition				△				△				△																
Virtual Environment for Ship and Shore Experiential Learning (VESSEL)								△																				
World Class Modeling output product enhancement					▲	△			▲	△			▲	△														
Integrated Skills/Training Data Aggregation and Display Prototype																												
Training/Supply Chain Mgmt Decision Support Systeme integration/transition		▲		△	▲			△	▲			△	▲			△	▲			△	▲			△	▲			△
Integrated Operating Picture Decision Support System and Tool Set	▲			△																								
Training Capacity Tradeoff Model				▲				△																				
Integrated Human Factors and Flight Deck Sortie Rate Model		▲		△	▲			△																				
FNWC CM Refresh early prototypes	▲			△	▲			△	▲			△	▲			△	▲			△	▲			△	▲			△
DARPA Digital Tutor					▲			△	▲			△	▲			△	▲			△	▲			△	▲			△
Demonstration				▲																								
Prototype & Documentation				△																								

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2011 Navy		<b>DATE:</b> February 2010
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Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
Force Structure & Strength Planning Tools	1	2009	4	2009
Enterprise Data Broker	1	2010	4	2010
MAX FIT	1	2010	4	2010
INCENTIVES	1	2010	4	2010
Distribution Incentive System	1	2009	4	2009
Career Case Management Technologies	1	2009	4	2009
Cultures and Values Selection	1	2009	4	2009
Integrated Whole Person Assessment Sys	1	2009	4	2010
Web Based Marketplace for Sailors/Marines	1	2009	4	2010
Integrated Career Management System	1	2009	3	2010
Integrated Comp. Opt M&P Analytic Sup Sys	1	2009	4	2010
TAXSE	1	2010	4	2010
IMPRINT-N Tool Set Transition	1	2009	4	2012
VESSEL	1	2010	4	2011
WCM Enhancements	1	2010	4	2012
Training/Supply Chain Mgmt Decision Support System Integration/Transition	1	2009	4	2015
Integrated Operating Picture Decision Support System and Tool Set	1	2009	4	2009
Training Capacity Tradeoff Model	1	2009	4	2010

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**Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy** **DATE:** February 2010

<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604703N: <i>Personnel, Trng, Sim, &amp; Human Factors</i>	<b>PROJECT</b> 1822: <i>Manpower Pers &amp; Human Fact System</i>
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Event	Start		End	
	Quarter	Year	Quarter	Year
Integrated Human Factors and Flight Deck Sortie Rate Model	1	2009	4	2010
FNWC CM Refresh early prototypes	1	2009	4	2015
DARPA Digital Tutor	1	2010	4	2012

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COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
9999: <i>Congressional Adds</i>	0.000	0.797	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.743
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

**A. Mission Description and Budget Item Justification**

This Advanced Skills Management (ASM) system tracks individual skills, certifications, and training plans in the workforce, enabling the automation of the repetitive and labor intensive job of building and managing functional teams of personnel across commands and defining teams made up of logical groupings of skills which align mission requirements with staffing capabilities.

ASM is currently used by 56,000 Navy Sailors and Marines. Funding allows the Workforce Readiness Planning-Team enhancement to be completed.

**B. Accomplishments/Planned Program (\$ in Millions)**

	FY 2009	FY 2010
Congressional Add: Workforce Requirements Planning - Team Enhancement <i>FY 2010 Plans:</i> N/A	0.000	0.797
Congressional Adds Subtotals	0.000	0.797

**C. Other Program Funding Summary (\$ in Millions)**

N/A

**D. Acquisition Strategy**

N/A

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**E. Performance Metrics**

Congressional Add

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