

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification								DATE: FEBRUARY 2005	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5					R-1 ITEM NOMENCLATURE 0604507N / Enhanced Modular Signal Processor (EMSP)				
COST (\$ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Total PE Cost		0.991	1.063	1.079	0.000	0.000	0.000	0.000	0.000
1440 Enhanced Modular Signal Processor		0.991	1.063	1.079					
<p>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The objective of this Program Element (PE) is to improve Navy Signal Processing Hardware and Software Capabilities. Efforts include the development of a Portable Digital Signal Processing Operating System (PDOS) , an associated tool set that supports development of reusable signal processing application software, and replacement of obsolete, unreliable and unsupportable AN/UYS-1/2/2A legacy host computer resources.</p>									

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-05		PROGRAM ELEMENT NUMBER AND NAME 0604507N / Enhanced Modular Signal Processor (EMSP)			PROJECT NUMBER AND NAME 1440 / Enhanced Modular Signal Processor			
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	0.991	1.063	1.079	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Qty								
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B. Accomplishments/Planned Program																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th><th style="width: 15%;">FY 06</th><th style="width: 15%;">FY 07</th></tr></thead><tbody><tr><td>PDOS Development</td><td style="text-align: center;">0.230</td><td style="text-align: center;">0.250</td><td style="text-align: center;">0.250</td><td></td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table> <div style="border: 1px solid black; height: 70px; margin-top: 5px;"></div>						FY 04	FY 05	FY 06	FY 07	PDOS Development	0.230	0.250	0.250		RDT&E Articles Quantity				
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C. PROGRAM CHANGE SUMMARY: <table style="width: 100%; border-collapse: collapse;"><thead><tr><th style="text-align: left; width: 45%;"></th><th style="text-align: right; width: 10%;">FY 2004</th><th style="text-align: right; width: 10%;">FY 2005</th><th style="text-align: right; width: 10%;">FY 2006</th><th style="text-align: right; width: 10%;">FY 2007</th></tr></thead><tbody><tr><td>Funding:</td><td></td><td></td><td></td><td></td></tr><tr><td>Previous FY 2005 President's Budget: (FY05 President's Controls)</td><td style="text-align: right;">0.994</td><td style="text-align: right;">1.075</td><td style="text-align: right;">1.088</td><td style="text-align: right;">0.000</td></tr><tr><td>Current FY 2006/2007 President's Budget: (FY06/07 President's Controls)</td><td style="text-align: right;">0.991</td><td style="text-align: right;">1.063</td><td style="text-align: right;">1.079</td><td style="text-align: right;">0.000</td></tr><tr><td>Total Adjustments</td><td style="text-align: right; border-top: 1px solid black;">-0.003</td><td style="text-align: right; border-top: 1px solid black;">-0.012</td><td style="text-align: right; border-top: 1px solid black;">-0.009</td><td style="text-align: right; border-top: 1px solid black;">0.000</td></tr><tr><td colspan="5" style="padding-top: 10px;">Summary of Adjustments</td></tr><tr><td> Congressional program reductions</td><td></td><td></td><td></td><td></td></tr><tr><td> Congressional undistributed reductions</td><td></td><td style="text-align: right;">-0.011</td><td></td><td></td></tr><tr><td> Congressional rescissions</td><td></td><td></td><td></td><td></td></tr><tr><td> SBIR/STTR Transfer</td><td></td><td></td><td></td><td></td></tr><tr><td> Economic Assumptions</td><td></td><td></td><td></td><td></td></tr><tr><td> Reprogrammings</td><td></td><td></td><td></td><td></td></tr><tr><td> Other Navy/OSD Adjustments</td><td style="text-align: right;">-0.003</td><td style="text-align: right;">-0.001</td><td style="text-align: right;">-0.009</td><td></td></tr><tr><td> Congressional increases</td><td></td><td></td><td></td><td></td></tr><tr><td> Subtotal</td><td style="text-align: right; border-top: 1px solid black; border-bottom: 1px solid black;">-0.003</td><td style="text-align: right; border-top: 1px solid black; border-bottom: 1px solid black;">-0.012</td><td style="text-align: right; border-top: 1px solid black; border-bottom: 1px solid black;">-0.009</td><td style="text-align: right; border-top: 1px solid black; border-bottom: 1px solid black;">0.000</td></tr></tbody></table> <div style="margin-top: 20px;">Schedule: None</div> <div style="margin-top: 20px;">Technical: None</div>						FY 2004	FY 2005	FY 2006	FY 2007	Funding:					Previous FY 2005 President's Budget: (FY05 President's Controls)	0.994	1.075	1.088	0.000	Current FY 2006/2007 President's Budget: (FY06/07 President's Controls)	0.991	1.063	1.079	0.000	Total Adjustments	-0.003	-0.012	-0.009	0.000	Summary of Adjustments					Congressional program reductions					Congressional undistributed reductions		-0.011			Congressional rescissions					SBIR/STTR Transfer					Economic Assumptions					Reprogrammings					Other Navy/OSD Adjustments	-0.003	-0.001	-0.009		Congressional increases					Subtotal	-0.003	-0.012	-0.009	0.000
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D. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>Complete</u>	<u>Total Cost</u>
OPN BLI 2980 / Items Less Than \$5M (N61 NSP portion only)	0.3	0.4	0.6	0.0	0.0	0.0	0.0	0.0	0.0	1.3
E. ACQUISITION STRATEGY:										
N/A										
F. MAJOR PERFORMERS:										
Naval Air Warfare Center/Patuxent River (NAWC/Patuxent River): EMSP Computer Program Support Activity (CPSA), Technical Design Agent										
Naval Sea Systems Command (NAVSEA/Crane): EMSP ISEA/Hardware Support Activity										

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Exhibit R-3 Cost Analysis (page 1)											DATE: FEBRUARY 2005				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME									
RDT&E, N / BA-05			0604507N / Enhanced Modular Signal Processor (EMSP)			1440 / Enhanced Modular Signal Processor									
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract	
Signal Processor COTS Technology	Var.	Var.	3.215									0.000	3.215		
Subtotal Product Development			3.215	0.000		0.000		0.000		0.000		0.000	3.215		
Remarks:															
Software Development	WX	NAWC/Pax River, MD	4.049	0.681	12/03	0.652	10/04	0.643	10/05			0.000	6.025		
Hardware Development	WX	NAVSEA/Crane, IN	0.439	0.260	10/03	0.329	10/04	0.389	10/05			0.000	1.417		
S/W, H/W Dev./Common Processing	Var.	Var.	0.050	0.020	01/04	0.054	01/05	0.022	10/05			0.000	0.146		
Common Processing	IP	ARI, CT	0.225									0.000	0.225		
Subtotal Support			4.763	0.961		1.035		1.054		0.000		Continuing	Continuing		
Remarks:															

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Exhibit R-3 Cost Analysis (page 2)											DATE: FEBRUARY 2005				
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Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract	
Subtotal T&E			0.000	0.000		0.000		0.000		0.000		0.000	0.000		
Remarks:															
Program Management Support	IP/CPFF	TWD & Associates, VA	0.353	0.030	01/04							0.000	0.383		
Program Management Support	CPAF	BAE Systems, MD				0.028	12/04	0.025	11/05			0.000	0.053		
Subtotal Management			0.353	0.030		0.028		0.025		0.000		Continuing	Continuing		
Remarks:															
Total Cost			8.331	0.991		1.063		1.079		0.000		0.000	11.464		
Remarks:															

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EXHIBIT R4, Schedule Profile																								DATE:											
APPROPRIATION/BUDGET ACTIVITY												PROGRAM ELEMENT NUMBER AND NAME												PROJECT NUMBER AND NAME											
RDT&E, N / BA-05												0604507N / Enhanced Modular Signal Processor (EMSP)												1440 / Enhanced Modular Signal Processor											
Fiscal Year	2004				2005				2006				2007				2008				2009				2010				2011						
	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							
PDOS and Tools																																			
Acquisition Milestones																																			
PDOS & Tools Development, Research, Investigation																																			
Develop PDOS Specification																																			
Develop Prototype OS, Tools																																			
Develop PDOS test suites																																			
Develop Signal Processing Benchmark																																			
Test & Evaluation Milestones																																			
Demonstrate PDOS																																			
Production Milestones																																			
Work with Industry to Productize PDOS																																			
Deliveries																																			

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EXHIBIT R4, Schedule Profile																								DATE:											
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APPROPRIATION/BUDGET ACTIVITY												PROGRAM ELEMENT NUMBER AND NAME												PROJECT NUMBER AND NAME											
RDT&E, N / BA-05												0604507N / Enhanced Modular Signal Processor (EMSP)												1440 / Enhanced Modular Signal Processor											
Fiscal Year	2004				2005				2006				2007				2008				2009				2010				2011						
	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	1	2	3	4			
Legacy Host Computer Replacement																																			
Acquisition Milestones																																			
AN/UYS-1 Investigated Legacy Computer Replacement																																			
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