

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2000			
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE					
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA-05					ENHANCED MODULAR SIGNAL PROCESSOR (EMSP)/ 0604507N					
COST (\$ in Millions)		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Total PE Cost		1.391	0.965	0.875	1.139	1.227	1.388	1.419	CONT.	CONT.
Enhanced Modular Signal Processor/V1440		1.391	0.965	0.875	1.139	1.227	1.388	1.419	CONT.	CONT.
Quantity of RDT&E Articles										
<p>A. Mission Description and Budget Item Justification: This program improves Navy Signal Processing Hardware and Software.</p> <p>PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>1. (U) FY 1999 ACCOMPLISHMENTS:</p> <p>(\$0.673) Completed draft performance specification for a Commercial-Off-The-Shelf (COTS) signal processor applicable to AN/SQQ-89, SH-60 Airborne Low Frequency Sonar (ALFS), and P-3 Special Projects systems platforms. Continued joint program initiatives to develop and implement a Common COTS processing solution.</p> <p>(\$0.718) Completed preliminary version of Vector Signal Imaging Processing (VSIP) Library Specification, VISIP Test Suite (CoreLite) and Message Passing Interface/Real Time (MPI/RT) Specification Version 1.0 for Common Operating Environment (COE)/Tactical Advanced Signal Processor (TASP). COE/TASP will allow common COTS signal processing software applications (which are hardware-independent) to run on multiple platforms (AN/SQQ-89, SH-60 ALFS, and P-3 Special Projects).</p> <p>2. (U) FY 2000 PLAN:</p> <p>(\$0.565) Continue joint program initiatives to develop and implement a Common COTS signal processing solution for AN/SQQ-89, SH-60 Airborne Low Frequency Sonar (ALFS), and P-3 Special Projects systems platforms.</p>										

R-1 SHOPPING LIST - Item No. 103 - 1 of 103 - 6

Exhibit R-2, RDT&E Budget Item Justification
(Exhibit R-2, page 1 of 6)

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification		DATE:																									
		February 2000																									
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE																										
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA-05	ENHANCED MODULAR SIGNAL PROCESSOR(EMSP) / 0604507N																										
<p>(\$0.400) Continue to work with industry to develop and enhance capabilities/functions for Vector Signal Imaging Processing (VSIP) and Message Passing Interface/Real Time (MPI/RT) standards compatible with Common Operating Environment (COE)/Tactical Advanced Signal Processor (TASP).</p> <p>3. (U) FY 2001 PLAN:</p> <p>(\$0.575) Support implementation of a Common COTS signal processing solution for AN/SQQ-89, SH-60 Airborne Low Frequency Sonar (ALFS), and P-3 Special Projects systems platforms.</p> <p>(\$0.300) Continue to work with Industry to develop and enhance capabilities/functions for Vector Signal Imaging Processing (VSIP) and Message Passing Interface/Real Time (MPI/RT) standards compatible with Common Operating Environment (COE)/Tactical Advanced Signal Processor (TASP).</p> <p>B. Program Change Summary:</p> <table border="0"> <thead> <tr> <th></th> <th>FY 1999</th> <th>FY 2000</th> <th>FY 2001</th> </tr> </thead> <tbody> <tr> <td>FY 2000 President's Budget:</td> <td>1.599</td> <td>0.970</td> <td>1.026</td> </tr> <tr> <td>Appropriated Value:</td> <td>1.599</td> <td></td> <td></td> </tr> <tr> <td>Adjustment to FY 1999/2000 Appropriated Value/</td> <td></td> <td></td> <td></td> </tr> <tr> <td>FY 2000 President's Budget:</td> <td>-0.208</td> <td>-0.005</td> <td>-0.151</td> </tr> <tr> <td>FY 2001 PRES Budget Submit:</td> <td>1.391</td> <td>0.965</td> <td>0.875</td> </tr> </tbody> </table> <p>Funding: FY 1999 decrease for Congressional undistributed reductions (-\$0.075), Small Business Innovative Research (SBIR), transfer (-\$0.028) and FY 1999 Midyear Review BTRs (-\$0.105). FY 2000 decrease for minor pricing adjustments (-\$.005). FY 2001 decrease for Low Expenditure Rate (-\$0.141), and minor pricing adjustments (-\$0.010).</p> <p>Schedule: Not applicable. Technical: Not applicable.</p>					FY 1999	FY 2000	FY 2001	FY 2000 President's Budget:	1.599	0.970	1.026	Appropriated Value:	1.599			Adjustment to FY 1999/2000 Appropriated Value/				FY 2000 President's Budget:	-0.208	-0.005	-0.151	FY 2001 PRES Budget Submit:	1.391	0.965	0.875
	FY 1999	FY 2000	FY 2001																								
FY 2000 President's Budget:	1.599	0.970	1.026																								
Appropriated Value:	1.599																										
Adjustment to FY 1999/2000 Appropriated Value/																											
FY 2000 President's Budget:	-0.208	-0.005	-0.151																								
FY 2001 PRES Budget Submit:	1.391	0.965	0.875																								

R-1 SHOPPING LIST - Item No. 103 - 2 of 103 - 6

Exhibit R-2, RDT&E Budget Item Justification
 (Exhibit R-2, page 2 of 6)

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2000		
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA-05							R-1 ITEM NOMENCLATURE ENHANCED MODULAR SIGNAL PROCESSOR(EMSP)/ 0604507N		
C. Other Program Funding Summary									
	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>Complete</u>	<u>Cost</u> _____
OPN P-1 Line Item 95 (B.L. 298000/C2DC)									
(FY 1999 B.L 297500/C2M7)									
	1.1	1.3	1.3	1.3	1.4	2.0	2.2	CONT.	CONT.
D. Acquisition Strategy: a) Complete joint program initiatives to implement COTS signal processing solution for various platforms. b) Assist current EMSP user programs in porting their EMSP-based application software to COTS. c) Seek industry standard middleware products that isolate Navy application software products from future changes in COTS hardware.									

R-1 SHOPPING LIST - Item No. 103 - 3 of 103 - 6

Exhibit R-2, RDT&E Budget Item Justification
(Exhibit R-2, page 3 of 6)

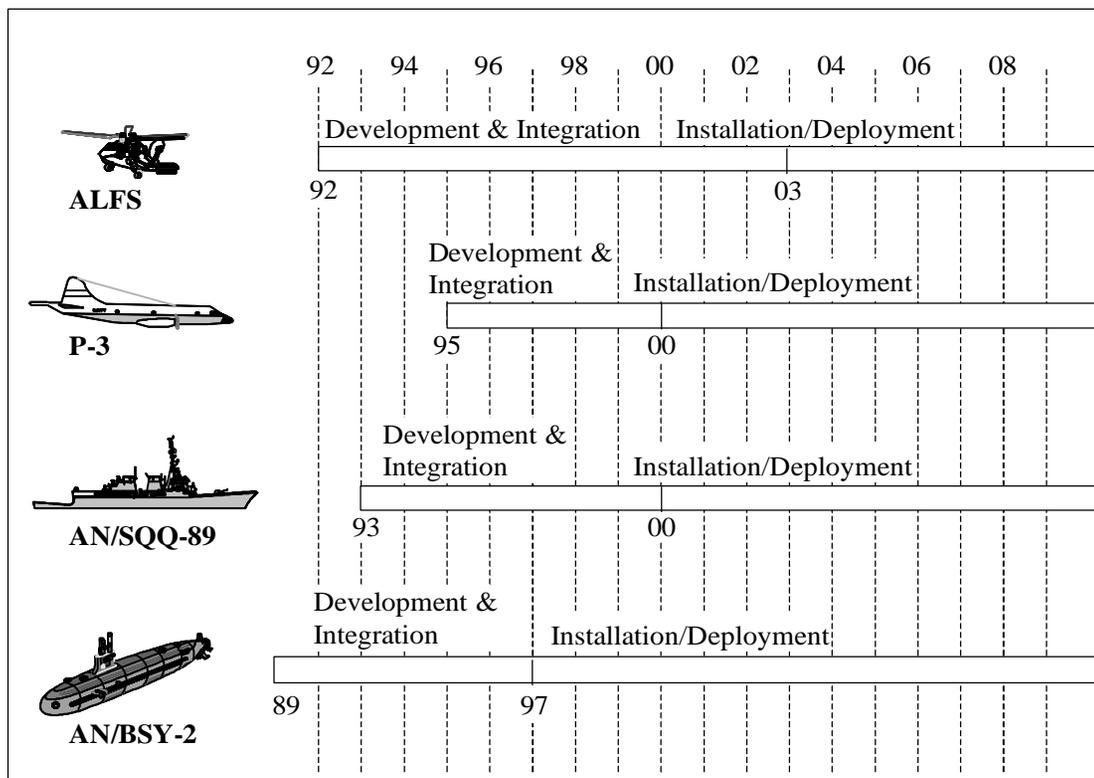
UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification		DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA-05	R-1 ITEM NOMENCLATURE ENHANCED MODULAR SIGNAL PROCESSOR/ 0604507N	

E. Schedule Profile



R-1 SHOPPING LIST - Item No. 103 - 4 of 103 - 6

Exhibit R-2, RDT&E Budget Item Justification
(Exhibit R-2, page 4 of 6)

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

Exhibit R-3 Cost Analysis (page 1)							DATE: February 2000					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E,N BA-05			0604507N			EMSP V1440						
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 99 Cost	FY 99 Award Date	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Signal Processor COTS Technology	WR/MP	MSU/GTRI	1.600	0.718	var.	0.400	12/99	0.400	12/00	CONT.	3.118	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
Subtotal Product Development			1.600	0.718		0.400		0.400		0.000	3.118	
Remarks:												
Development Support Equipment											0.000	
Software Engineering Support	WR	NAWC/AD	2.200	0.464	12/98	0.095	11/99	0.100	11/00	CONT.	2.859	
Common Processing	Var.	Misc.				0.348	Var.	0.225	Var.	CONT.	0.573	
Miscellaneous	PD/Var.	Misc.		0.034	Var.	0.122	Var.	0.100	Var.	CONT.	0.256	
											0.000	
											0.000	
											0.000	
Subtotal Support			2.200	0.498		0.565		0.425		0.000	3.688	
Remarks:												

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2000		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E,N/BA-05			0604507N			EMSP V1440						
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 99 Cost	FY 99 Award Date	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation											0.000	
Operational Test & Evaluation											0.000	
Tooling											0.000	
GFE											0.000	
Subtotal T&E			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Contractor Engineering Support											0.000	
											0.000	
Program Management Support	CPFF	Misc.		0.175		0.000		0.050		CONT.	0.225	
										CONT.	0.000	
											0.000	
											0.000	
Subtotal Management			0.000	0.175		0.000		0.050		0.000	0.225	
Remarks:												
Total Cost			3.800	1.391		0.965		0.875		0.000	7.031	
Remarks:												

UNCLASSIFIED