CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification						DATE:								
_						FEBRUA	RY 2004							
PPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE														
RESEARCH DEVELOPMENT TEST & EVALUATION	ASW Advanced	Development												
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009							
Total PE Cost	3.108	4.456	17.633	17.701	3.308	3.375	3.439							
ASW Advanced Development/1704	3.108	2.456	17.633	17.701	3.308	3.375	3.439							
ASW Rick Reduction/9352		2.000	•											
			<u> </u>				_							

Defense Emergency Response Funds (DERF) Funds: N/A

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Anti Submarine Warfare (ASW) Advanced Development project provides advanced development demonstration and validation of technology for potential surface sonar and combat system applications. Efforts focus on resolution of technical issues associated with providing capability against the Year 2005 and beyond threat with emphasis on shallow water/littoral area Undersea Warfare (USW) and on demonstration and validation of USW concepts and technology. Key technology areas include active sonar transmissions, advanced signal and data processing, active sonar classification, towed and hull arrays and transducer technology, multi-static sonar, and multi-sensor data fusion including multi-platform data fusion and netcentric undersea warfare concepts. This Program Element, 0603553N, has been designated to support Multi-Static Active ASW (MAASW) efforts associated with the Distant Thunder program and other emerging multi-static technologies, and CNO's Task Force ASW initiative. The Task Force ASW initiative is a focused effort to identify the most promising ASW technologies through a process of discovery assessment and expermentation. TFASW will conduct studies, execute demonstrations and coordinate the development of technologies which move beyond incremental or marginal improvements in ASW effectiveness. The MAASW project conducts advanced development and testing of active multistatic acoustic concepts. The concept development is directed at providing surface ships combat groups with the capability of detection, classification, and localization of quiet threat submarines in difficult acoustic environments associated with Littoral waters. The project concentrates on the development of acoustic processor algorithms, alternative cost-effective active sources and information sharing technologies to develop a coordinated multi-static acoustic picture employing distributed sensors and active sources.

Project Unit 9352 is authorized by Congress to develop ASW Risk Reduction

R-1 SHOPPING LIST - Item No.

UNCLASSIFIED

44

Exhibit R-2, RDTEN Budget Item Justification (Exhibit R-2, page 1 of 8)

CLASSIFICATION:

RD RDT&E N/BA4 PE 0603553N Surface ASW 1704 ASW Advanced Development B. Accomplishments/Planned Program
B. Accomplishments/Planned Program
. Addomptionnonton terminal Fragium
FY 03 FY 04 FY 05
Accomplishments/Effort/Subtotal Cost 3.108 2.456 17.633
RDT&E Articles Quantity

R-1 SHOPPING LIST - Item No.

44

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification				DATE:	FEBRUARY 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND	NAME	I EDITORITI 2004
RDT&E, N / BA4	PE 0603553N Surface ASW		1704 ASW Advanced Dev	velopment	
C. PROGRAM CHANGE SUMMARY:					
Funding:	FY 2003	FY 2004	FY 2005		
President's Budget: (FY 04 Pres Controls) FY05 President's Controls	3.184 3.108	2.506 2.456	2.698 17.633		
Total Adjustments	-0.076	-0.050	14.935		
Summary of Adjustments Programmatic Adjustments			15.000		
Rate Adjustements			-0.007		
Reprogrammings	-0.076	0.050			
Congressional Adjustments Economic Assumptions		-0.050	-0.058		
Economic Assumptions			-0.000		
Subtotal	-0.076	-0.050	14.935		
Schedule:					
N/A					
Technical:					
N/A					
	R-1 SHOPPING LIST - Item No.		44		

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project	Justification			DATE:
ADDRODDIATION DUDOUT ACTIVIT	<u> </u>			FEBRUARY 2004
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND N	
RDT&E, N /	BA4	PE 0603553N SurfaceASW	1704 ASW Advanced Devel	lopment
D. OTHER PROGRAM FUNDI	NG SUMMARY: N/A			
E. ACQUISITION STRATEGY: *				
Competitively awarded cor	itracts from Broad Agency Ann	ouncement (BAA) solicitations.		
F. MAJOR PERFORMERS: **				
Naval Air Warfare Center system in P-3C TYCOM A	Aircraft. <u>Center, Newport, RI –</u> Provide	vo Air Multistatic Active ASW (MAASW(DT)) systems, la		,

R-1 SHOPPING LIST - Item No. 44

CLASSIFICATION:

							•		DATE:				
Exhibit R-3 Cost Analysis (page	ge 1)										FEBRUARY 2	004	
APPROPRIATION/BUDGET ACTIV		PRO	GRAM ELEME	NT			PROJECT N	JMBER AND	NAME				
RDT&E, N / BA4		PE 0	603553N Surfa	ace ASW			1704 ASW A	dvanced Deve	elopment				
Cost Categories	Contract Method & Type	Performing Activity & Location	Tota PY s Cost		FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Multistatic Sonar Development	WR	NUWC Newport		3.339	0.750	12/02	0.500	12/03	0.600	12/04	Continuous	Continuous	3
Multistatic Sonar Development	WR	BATH MIN		0.021								0.021	
Multistatic Sonar Development	WR	PASCAGOULA MS		0.017								0.017	7
Multistatic Sonar Development	WR	NAWC/Key West		0.010								0.010)
Multistatic Sonar Development	WR	NAWC/Pax River		1.213	0.300	12/02	0.100	12/03	0.100	12/04	Continuous	Continuous	8
Multistatic Sonar Development	CPFF	BBN		2.932	0.400	12/02	0.150	12/03	0.150	12/04	Continuous	Continuous	8
Multistatic Sonar Development	CPFF	APL/JHU		0.350								0.350)
Multistatic Sonar Development	RCP	FLT. Industry SUP (Center	0.010								0.010)
Multistatic Sonar Development	RCP	ONR		0.472								0.472	2
Various	Various	Various		0.203	0.339	03/03	0.198	02/04	0.255	01/05	Continuous	Continuous	3
Subtotal Product Development				8.567	1.789	9	0.948	3	1.10	5	Continuous	Continuous	3
Remarks:													
At-Sea Test/Demonstration	C/CPFF	JHU/APL, MD		0.000					4.000	10/04	Continuous	Continuous	S
At-Sea Test/Demonstration	WX	NAVSEA/NEWPORT,	RI	0.000					8.000	10/04	Continuous	Continuous	3
Enchanced Data Collection (SSEMP)	C/CPFF	JHU/APL, MD		0.000					2.000	10/04	Continuous	Continuous	3
Enchanced Data Collection (SSEMP)	Various	Various		0.000					1.000	10/04	Continuous	Continuous	3

Remarks:

Subtotal T&E

R-1 SHOPPING LIST - Item No. 44

0.000

0.000

0.000

15.000

0.000

15.000

CLASSIFICATION:

									DATE:				
Exhibit R-3 Cost Analysis (pag	ge 2)										FEBRUARY 20	004	
APPROPRIATION/BUDGET ACTIV	'ITY		PROGRAM E					UMBER AND					
RDT&E, N / BA4	1	1=	PE 0603553N		<u>'</u>	T=1.4.5.5	1704 ASW A	dvanced Deve	lopment	I=1 / 4=			
Cost Categories	Contract Method & Type	Performing Activity & Location		Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Valu
Developmental Test & Evaluation	WR	NUWC/Npt		2.25		11/02	0.600	11/03	0.655	11/04	Continuous	Continuous	or contract
Developmental Test & Evaluation	WR	NAWC/Pax Ri	iver	0.91		11/02	0.170	11/03	0.170	11/04	Continuous	Continuous	
Developmental Test & Evaluation	CPFF	BBN	ivei	0.22		11/02	0.300	11/03	0.300	11/04	Continuous	Continuous	
Developmental Test & Evaluation	WR	SUPSHIP BA	TH MIN	0.03		11/02	0.000	11700	0.500	11704	Continuous	0.033	
Developmental Test & Evaluation	WR	NUWC/Keypo		0.93								0.933	
Developmental Test & Evaluation	WR	NSWC/Carder		0.69						+		0.695	
Developmental Test & Evaluation	WR	NSWC/Dahlgr	-	0.04						+		0.040	
Developmental Test & Evaluation	CPFF	APL/JHU, MD		1.53						+		1.536	
Developmental Test & Evaluation	CPFF	ARL/UT		1.00	0.124	11/02	0.050	11/03	0.150	11/04	Continuous	Continuous	
Developmental Test & Evaluation	CPFF	Various			0.325	11/02	0.338	11/03	0.203	Various	Continuous	Continuous	
Developmental Test & Evaluation	CPFF	Progeny, Inc.		1.21		11/02	0.000	11700	0.200	Various	Continuous	Continuous	
Developmental Test & Evaluation	CPFF	IPD		0.05									
Developmental Test & Evaluation	MIPR	U.S. ARMY/M	ITRE	0.00									
Developmental Test & Evaluation	WR	SPAWAR Sys		0.55			_						
Subtotal T&E	VVIX	OI AWAIT Oys	sterns Center	8.46	-		1.45	0	1.47	0	Continuous	Continuous	
Remarks:													
Remarks:													
												0.000	
Contractor Engineering Support												0.000	
Contractor Engineering Support SBIR												0.000	
Contractor Engineering Support SBIR Government Engineering Support	CPFF	Stanley Assoc	.	0.49	9 0.040	01/03	0.040	01/04	0.040	01/05	Continuous		
Contractor Engineering Support SBIR Government Engineering Support Program Management Support	CPFF	Stanley Assoc	2.	0.49		01/03	0.040 0.010	01/04	0.040 0.010	01/05 11/04	Continuous Continuous	0.000	
Contractor Engineering Support SBIR Government Engineering Support Program Management Support	CPFF	Stanley Assoc	<u>.</u>									0.000 Continuous	
Contractor Engineering Support SBIR Government Engineering Support Program Management Support Travel Labor (Research Personnel)	CPFF	Stanley Assoc	<u>.</u>									0.000 Continuous Continuous	
Contractor Engineering Support SBIR Government Engineering Support Program Management Support Travel Labor (Research Personnel) Overhead	CPFF	Stanley Assoc).		0 0.010	11/02		11/03		11/04		0.000 Continuous Continuous 0.000	
Contractor Engineering Support SBIR Government Engineering Support Program Management Support Travel Labor (Research Personnel) Overhead Subtotal Management Remarks:	CPFF	Stanley Assoc). 	0.08	0 0.010	11/02	0.010	11/03	0.010	11/04	Continuous	0.000 Continuous Continuous 0.000	
Contractor Engineering Support SBIR Government Engineering Support Program Management Support Travel Labor (Research Personnel) Dverhead Subtotal Management	CPFF	Stanley Assoc). 	0.08	9 0.05	11/02	0.010	11/03	0.010	11/04	Continuous	0.000 Continuous Continuous 0.000	
Contractor Engineering Support SBIR Government Engineering Support Program Management Support Travel Labor (Research Personnel) Overhead Subtotal Management Remarks:	CPFF	Stanley Assoc).	0.00	9 0.05	11/02	0.010	11/03	0.010	11/04	Continuous	0.000 Continuous Continuous 0.000 0.000 Continuous	

CLASSIFICATION:

EXHIBIT R4, Schedule F	Profile																								DATE	: I			LLAD	v 000		
APPROPRIATION/BUDGET	ACTIVI	TY							PROG	RAM	ELEM	ENT N	NUMBE	R ANI	D NAM	E					PROJ	ECT N	UMBE	R AN	I ID NAN	/Е		FEBR	UAK	¥ 200	4	
RDT&E, N /	BA4								PE 060	03553	N Surf	ace A	SW												1704	ASW A	Advan	ced De	velopn	nent		
Fiscal Year	2002				2003				20	04			2005			2006			2007				2008					200	9			
	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	
MULTISTATIC ACTIVE ASW																																
Conduct At Sea Test (MSSAW)												Δ				\triangle				\triangle				\triangle								
At SEA Test Analsis and System Evaluation																										\triangle			Z			
Processor Improvements		4		ı		4								4			\angle				\triangle	4				2			\triangle	١		
TFASW At SEA TEST											\triangle			\triangle			\triangle			\triangle												
			<u> </u>	<u> </u>								D 1	SHO	DDIN	CIIC	T 1+	om N		44						ļ		<u> </u>					Щ

^{*} Not required for Budget Activities 1, 2, 3, and 6

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: FE	BRUARY 20	004			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM EL	EMENT			PROJECT NUMBER AND NAME						
RDT&BA4	PE 0603553N	Surface ASW			1704 ASW Ad	vanced Develop	oment				
Schedule Profile		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009			
Conduct At Sea Test		1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q				
Sea Test Analysis and System Evaluation		1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q			
Processor Improvements		1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q			
					+						
					1						