#### **CLASSIFICATION:**

EXHIBIT R-2, RDT&E Budget Item Justificatio	n							DATE:			
									Febru	uary 2004	
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NO	MENCLATURE			•	
<b>RESEARCH DEVELOPMENT TEST &amp; EVALU</b>	JATION, NAVY /		BA-5			PE 0604721N	SHIPBOARD	INFORMATIO	N WARFARE I	EXPLOIT SYSTEM	
	Prior										Total
COST (\$ in Millions)	Years Cost		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Program
Total PE Cost	39.279	0.000	16.849	16.743	17.981	18.730	16.044	16.369	16.701	Continuing	Continuing
2134/SHIPBOARD IW EXPLOIT	39.279	0.000	13.611	16.743	17.981	18.730	16.044	16.369	16.701	Continuing	Continuing
9242/COBLU DIGITAL UPGRADE	0.000	0.000	3.238	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.238
											0.000
											0.000
											0.000
											0.000
Quantity of RDT&E Articles											0

Note: Received Congressional Plus Up in FY03 of \$3,238K for the COBLU program.

#### U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Shipboard Information Warfare line includes the following programs: Ships Signal Exploitation Equipment (SSEE), the Program of Record that executes the Maritime Cryptologic Systems for the 21st Century (MCS 21) and Common Data Link – Navy (CDL-N) the Program of Record that implements the DoD mandated use of the Common Data Link waveform to downlink un-processed SIGINT/COMINT and imagery. FY 03 Congressional Plus-up supports the Cooperative Outboard Logistics Update (COBLU), the Program of Record provides Comprehensive Surface Tactical (CESM) capability. These systems provide the Battle Group with real time Indications and Warnings (I&W) by acquisition and localization of signals of interest (SOI). This program's funding is required to incorporate new commercial off-the-shelf (COTS) based technologies and software into the existing systems. The funding will focus on merging the current IW sensor systems into a scalable sensor package that can be tailored to different ship types and be compliant with the Maritime Cryptologic Architecture.

#### (U) JUSTIFICATION FOR BUDGET ACTIVITY:

This program is funded under BA-5, ENGINEERING & MANUFACTURING DEVELOPMENT because it encompasses engineering and manufacturing development of new end-items prior to production approval decision.

R-1 SHOPPING LIST - Item No. 125

#### **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification								DATE:			
									Febru	uary 2004	
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME PROJECT NUMBER AND NAME					AME						
RDT&E, N / BA-5	0604721N/ SH	0604721N/ SHIPBOARD IW EXPLOIT SYSTEM 2134 / SHIPBOARD IW E			DARD IW EXPI	LOIT					
	Prior										Total
COST (\$ in Millions)	Years Cost		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Program
Project Cost	39,279	0.000	13.611	16.743	17.981	18.730	16.044	16.369	16.701	Continuing	Continuing
										J	
RDT&E Articles Qty											0

Note: Received Congressional Plus Up in FY02 of \$2,478K for the CDL-N program. Project X2135 has been incorporated into Project X2134 beginning in FY 02.

#### (U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Shipboard Information Warfare line includes the following programs: Ships Signal Exploitation Equipment (SSEE), the Program of Record that executes the Maritime Cryptologic Systems for the 21st Century (MCS 21) and Common Data Link – Navy (CDL-N) the Program of Record that implements the DoD mandated use of the Common Data Link waveform to downlink un-processed SIGINT/COMINT and imagery. FY 03 Congressional Plus-up supports the Cooperative Outboard Logistics Update (COBLU), the Program of Record provides Comprehensive Surface Tactical (CESM) capability. These systems provide the Battle Group with real time Indications and Warnings (I & W) by acquisition and localization of signals of interest (SOI). This program's funding is required to incorporate new commercial off-the-shelf (COTS) based technologies and software into the existing systems. The funding will focus on merging the current IW sensor systems into a scalable sensor package that can be tailored to different ship types and be compliant with the Maritime Cryptologic Architecture.

#### CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE:	
				February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND N	IAME	
RDT&E, N / BA 5	0604721N / SHIPBOARD IW EXPLOIT SYSTEM	2134 / SHIPBOARD IW EXF	PLOIT	

#### (U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	2.472	4.000	4.000
RDT&E Articles Quantity			

Common Data Link- Navy (CDL-N)

FY03 - Continued development and integration of advanced technology CDL modem, design and development of CDL-N Block 1 integrated operator station and development efforts for interoperability and integration with emerging Navy sensor systems such as VTUAV, F/A-18 SHARP and EP-3E Multi-int systems.

FY04 - Integrate advanced technology CDL modem. Continue design and development of CDL-N Block 1 integrated operator station, development efforts for interoperability and integration with emerging Navy sensor systems such as BAMS, F/A-18 SHARP and EP-3E Multi-int systems.

FY05 - Integrate and Test Cooperative Antenna Program EDM Panels. Design and development of CDL-N Block 2 Advanced Technology Insertion and development efforts for interoperability and integration with emerging Navy sensor systems such as BAMS, F/A-18 SHARP and EP-3E Multi-int systems.

R-1 SHOPPING LIST - Item No.

125

#### CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE:	
				February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND N	IAME	
RDT&E, N / BA 5	0604721N / SHIPBOARD IW EXPLOIT SYSTEM	2134 / SHIPBOARD IW EXP	PLOIT	
	<del>-</del>	•		

#### (U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.500	1.500	1.500
RDT&E Articles Quantity			

#### Cryptologic On-Line Trainer (COLT)

FY03 - Continued to expand and modify the COLT server for Shipboard IW programs and integration with CUB 4.X software releases. Upgraded COLT client application functionality (SSEE Inc E, COBLU Phase 1, and CDF) to include additional SOI's and other emergent requirements.

FY04 - Modify COLT server in support of integration with CUB 5.X software releases. Upgrade COLT client application functionality (SSEE Inc E, COBLU Phase 1, and CDF) to include additional SOI's and other emergent requirements. Begin COLT integration with Battle Force Tactical Training (BFTT) system.

FY05 - Continue modifications and improvements to COLT server in support of CUB 5.X integration. Upgrade existing COLT client applications (SSEE Inc E, COBLU Phase 1, and CDF). Continue COLT BFTT integration development. Begin COLT automated performance monitoring/assessment functionality development.

	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	1.750	1.000	1.000
RDT&E Articles Quantity			

#### Cryptologic Unified Build (CUB)

FY03 - Continued development of CUB software to incorporate latest DII COE releases/updates for interoperability of Shipboard IW programs. CUB software is utilized on all Shipboard IW programs and is the DII COE 4.X baseline effort. Continued development of CUB on-line tutorial software, CUBOLT, software. Initiated development of Blue Forces IW database. FY04 - Initiate development of CUB software to incorporate latest DII COE. CUB ensures interoperability between Sensor Systems and C4I systems. This development effort targets the DII COE 5.X baseline.

FY05 - Continue development and integration of CUB software to incorporate DII COE 5.X baseline. This development effort completes the DII COE 5.X baseline. Continue development of CUB On-Line Tutorial, CUBOLT, software.

R-1 SHOPPING LIST - Item No.

125

#### **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification			DATE:	
				February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND N	IAME	
RDT&E, N /BA 5	0604721N / SHIPBOARD IW EXPLOIT SYSTEM	2134 / SHIPBOARD IW EXF	PLOIT	

#### (U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.000	5.000	3.063
RDT&E Articles Quantity			

#### Multi-Mission Payload (MMP)

FY04 - Initiate System Development Phase of the remotely controlled platform independent MMP, intended for use as a pod on ship based aircraft. Award contracts for research and development of Engineering Development Models, EDMs. Conduct design review and perform end-to-end system engineering analysis. Perform aircraft data analysis and perform integration planning to develop the appropriate engineering design of the payload and its mechanical, electrical and environmental interface components. Determine design and interfaces of the data link equipment, which will be part of or co-located with the MMP to carry the command, control, and data exchange signals.

FY05 - Complete development of the EDMs pod and conduct laboratory acceptance tests. Develop Test Plan. Perform planning for, and make arrangements for, flight certification tests and evaluations. Plan for and obtain the Office of Naval Intelligence, ONI, certification and accreditation for Interim Authority To Operate, IATO.

	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	5.050	2.000	5.300
RDT&E Articles Quantity			

#### Ship Signal Exploitation Equipment

FY03 - Initiated P3I development and testing of SSEE Increment E upgrades. Upgrade includes incorporation of latest CUB release and expansion of Signal of Interest, SOI, database. Initiated special/modern signal collection and processing development.

FY04 - Initiate P3I development of Command and Control software portion of the Hostile force Integrated Targeting Sub-system, HITS, and Time/Frequency Difference of Arrival functions into SSEE Incr E.

FY05 - Continue with effort to improve Command and Control software portion of the HITS in SSEE Incre E. Continue to expand SOI processing capability to priority signal sets. Fully test improved software. Initiate acquisition development for follow-on increments.

R-1 SHOPPING LIST - Item No.

125

#### CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE:	
				February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND N	IAME	
RDT&E, N /BA 5	0604721N / SHIPBOARD IW EXPLOIT SYSTEM	2134/SHIPBOARD IW EXPL	_OIT	

#### (U) B. Accomplishments/Planned Program

	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	1.980	1.792	1.618
RDT&E Articles Quantity			

#### Specific Emitter Identification (SEI)

FY03 - Initiated development of improved Specific Emitter Identification, SEI, software by independent test and evaluation, and begin retooling existing prototypes into a single platform. Conducted testing with SEI collection hardware and software. Initiated expansion of Navy's SEI data dissemination and management architecture. Facilitated the tactical employment of Navy SEI by addressing various operational issues. Continued development, testing, and documentation of SEI software enhancements in GCCS-M (CORRUS), GALE-LITE (SEI-GALE), and other fielded systems.

FY04 - Conduct independent test and evaluation and compatibility testing of SEI software and begin retooling existing prototypes into a single platform, Phase II. Formalize Navy SEI data standards for improved collection and dissemination. Begin integration of SEI capabilities into the Naval single platform distributed surface EW system. Continue to expand SEI database access, dissemination, and integration within the Theater Correlation Functions, TCFs, and tactical users. Continue to address SEI software operational issues to facilitate SEI tactical employment. Continue SEI software enhancements in GCCS-M (CORRUS), GALE-LITE, and other fielded systems.

FY05 - Continue to improve SEI software Phase III to support additional tactical installations, surface combatants, and airborne platforms. Enhance the exchange of Navy SEI data. Begin incorporation of future SEI algorithms corresponding to the next generation of multi-mission combatants and changing target sets. Continue incorporation of SEI into the overall Navy EW architecture for enhanced correlation and integration into Navy single platform distributed EW systems, to include surface, subsurface, and airborne.

	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	2.000	1.650	1.500
RDT&E Articles Quantity			

#### Antenna & RF Distribution

FY03 - Completed development of the High Frequency Non-Line-of-Sight capability. Initiated development of low signature Direction Finding, DF, and Acquisition antenna sub-system. Initiated development of improved Radio Frequency, RF, distribution sub-system. Both antenna and distribution systems will support existing and future ship classes for Shipboard IW programs, handle modern Signals of Interest, SOI, and increase both shipboard and operational environment interference.

FY04 - Implement design goals and objectives for existing antenna and future antenna efforts via requirements analysis. Complete development of existing antenna upgrades for enhanced capability. Initiate prototype demonstration effort for future antenna design for low signature DF and acquisition/enhanced capability and initiation of shipboard EDM plans.

FY05 - Update requirements analysis to maintain growing Signals of Interest, SOI, threat capability support via system RFD unit and future antenna upgrades. Continue development of future antenna for low signature DF and acquisition/enhanced performance.

### CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification					DATE:	
·					F	ebruary 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER	AND NAME		PROJECT NUMBER AND N	AME	
RDT&E, N / BA-5	0604721N / SHIPBOARD IW EXF	LOIT SYSTEM		2134 / SHIPBOARD IW EXP	LOIT	
(U) C. PROGRAM CHANGE SUMMARY:						
(b) of the original original community.						
(U) Funding:	FY 2003	FY 2004	FY 2005			
President's Budget:	14.070	16.942	18.078			
Current BES/President's Budget	13.752	16.743	17.981	_		
Total Adjustments	-0.318	-0.199	-0.097			
Summary of Adjustments						
Management Improvements (Sec. 8094)		-0.045				
Efficiencies/Revised Econ. Assumptions (Se	ec. 8126)	-0.144				
Economic Assumptions (Sec. 8135)	-0.079					
Busniess Process Reform (Sec. 8100)	-0.056					
WCF R&D SPAWAR PBD 430			-0.005			
IT Growth (Sec. 8109)	-0.026					
FFRDC Reduction (Sec. 8029)	-0.008					
Inflatin Savings	-0.149					
PBD 604 Inflation			-0.058			
PBD 426 Rates SSC		0.040	0.012			
Misc. Navy Adjustments		-0.010	-0.046			
Subtotal	-0.318	-0.199	-0.097	-		
(U) Schedule:						
Not Applicable						
(U) Technical:						
Not Applicable						
	D 4 CHODD	INC LIST It	ana Nia	125		

R-1 SHOPPING LIST - Item No.

125

#### CLASSIFICATION:

									Februa	ary 2004
PRIATION/BUDGET ACTIVITY		PROGRAM EI	LEMENT NUM	BER AND NAM	E	PROJECT NU	IMBER AND N	AME		
E, N / BA-5		0604721N / S	HIPBOARD IW	EXPLOIT SYS	TEM	2134 / SHIPB	OARD IW EXF	LOIT		
(U) D. OTHER PROGRAM FUNDING SUMM	IARY:								To	Total
Line Item No. & Name OPN Line 2360 OMN 1C2C PE 0702827N	<u>FY 2003</u> 82.147 9.567	FY 2004 122.206 10.609	FY 2005 69.194 12.127	FY 2006 35.930 13.737	<u>FY 2007</u> 112.948 15.085	<u>FY 2008</u> 78.100 15.463	<u>FY 2009</u> 79.691 15.865	Complete Continuing Continuing	To <u>Cost</u> Continuing Continuing	Total
(U) E. ACQUISITION STRATEGY:									•	
Acquisition, management and contracting str	rategies are to supp	ort engineering	and manufact	uring developm	ent by provid	ling funds to SS	C-Charleston	SSC-San Died	o and miscellane	eous
		ort engineering	g and manufact	uring developm	ent by provid	ling funds to SS	C-Charleston,	SSC-San Dieg	o and miscellane	eous
Acquisition, management and contracting str contractors, with management oversight by \$		ort engineering	g and manufact	uring developm	ent by provid	ling funds to SS	C-Charleston,	SSC-San Dieg	o and miscellane	eous
		ort engineering	g and manufact	uring developm	ent by provid	ling funds to SS	C-Charleston,	SSC-San Dieg	o and miscellane	eous
		ort engineering	g and manufact	uring developm	ent by provid	ling funds to SS	C-Charleston,	SSC-San Dieg	o and miscellane	eous
		ort engineerinç	g and manufact	uring developm	ent by provid	ling funds to SS	C-Charleston,	SSC-San Dieg	o and miscellane	eous
		ort engineering	g and manufact	uring developm	ent by provid	ling funds to SS	C-Charleston,	SSC-San Dieg	o and miscellane	eous
		ort engineerinç	g and manufact	uring developm	ent by provid	ling funds to SS	C-Charleston,	SSC-San Dieg	o and miscelland	eous
		ort engineerinç	g and manufact	uring developm	ent by provid	ling funds to SS	C-Charleston,	SSC-San Dieg	o and miscelland	eous
		ort engineering	g and manufact	uring developm	ent by provid	ling funds to SS	C-Charleston,	SSC-San Dieg	o and miscelland	eous
		ort engineering	g and manufact	uring developm	ent by provid	ling funds to SS	C-Charleston,	SSC-San Dieg	o and miscelland	eous
		ort engineering	g and manufact	uring developm	ent by provid	ling funds to SS	C-Charleston,	SSC-San Dieg	o and miscellane	eous
		ort engineering	g and manufact	uring developm	ent by provid	ling funds to SS	C-Charleston,	SSC-San Dieg	o and miscellane	eous
		ort engineering	g and manufact	uring developm	ent by provid	ling funds to SS	C-Charleston,	SSC-San Dieg	o and miscellane	eous
		ort engineering	g and manufact	uring developm	ent by provid	ling funds to SS	C-Charleston,	SSC-San Dieg	o and miscellane	eous
		ort engineering	g and manufact	uring developm	ent by provid	ling funds to SS	C-Charleston,	SSC-San Dieg	o and miscellane	eous
		ort engineering	g and manufact	uring developm	ent by provid	ling funds to SS	C-Charleston,	SSC-San Dieg	o and miscellane	eous
		ort engineering	g and manufact	uring developm	ent by provid	ling funds to SS	C-Charleston,	SSC-San Dieg	o and miscellane	eous

#### CLASSIFICATION:

									DATE:				
Exhibit R-3 Cost Analysis	(page 1)										February 200	)4	
APPROPRIATION/BUDGET A	CTIVITY		PROGRAM E	LEMENT			PROJECT NU	JMBER AND N	IAME				
RDT&E, N / BA5			0604721N / S	hipboard IW Ex	ploit System		2134 / Shipbo	ard IW Exploit					
Cost Categories	Contract	Performing		Total		FY 03		FY 04		FY 05			
	Method	Activity &		PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Target Value
	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Primary Hardware Developmen	nt Various	Various		35.726	1.912	12/02	2.356	12/03	2.514	12/04	Continuing	Continuing	Continuing
Ancillary Hardware Developme	nt											0.000	
Aircraft Integration												0.000	
Ship Integration												0.000	
Ship Suitability												0.000	
Systems Engineering	Various	Various			2.988		3.681		3.927		Continuing	Continuing	Continuing
Training Development	Various	Various			0.075		0.093		0.100		Continuing	Continuing	
Licenses												0.000	
Tooling												0.000	
GFE												0.000	
Award Fees												0.000	
Subtotal Product Development				35.726	4.975		6.130		6.541		Continuing	Continuing	Continuing

#### Remarks

Development Support								0.000	
Software Development	Various	Various		4.738	5.811	6.316	Continuing	Continuing	Continuing
Integrated Logistics Support	Various	Various	0.254	0.104	0.127	0.136	Continuing	Continuing	
Configuration Management	Various	Various		0.089	0.110	0.117	Continuing	Continuing	
Technical Data								0.000	
Studies & Analyses								0.000	
GFE								0.000	
Award Fees								0.000	
Subtotal Support			0.254	4.931	6.048	6.569	Continuing	Continuing	Continuing

Remarks:

<sup>1. &</sup>quot;Total PYs Cost" is shown as Primary Hardware Development was taken from the previous budget submit which combined Hardware, Software development and integration into one number.

### CLASSIFICATION:

									DATE:				
Exhibit R-3 Cost Analysis (pag	e 2)										February 200	)4	
APPROPRIATION/BUDGET ACTIVI	TY		PROGRAM E	LEMENT			PROJECT NU						
RDT&E, N / BA5			0604721N / S		xploit System		2134 / Shipbo						
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	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	Various	Various		2.354			0.868		0.927	12/04	Continuing		
Operational Test & Evaluation	Various	Various			0.32		0.395		0.421		Continuing	Continuing	
Live Fire Test & Evaluation												0.000	
Test Assets	Various	Various			0.334	1	0.412		0.439		Continuing	Continuing	
Tooling												0.000	
GFE												0.000	
Award Fees												0.000	
Subtotal T&E				2.354	1.360	)	1.675		1.787		Continuing	Continuing	
Contractor Engineering Support												0.000	
Government Engineering Support												0.000	
Program Management Support	Various	Various		0.945	2.23	D	2.748		2.932		Continuing	Continuing	Continuing
Travel	Various	Various			0.11	5	0.142		0.152		Continuing	Continuing	Continuing
Transportation												0.000	
												0.000	
Subtotal Management				0.945	2.34	5	2.890		3.084		Continuing	Continuing	
Remarks:													
Total Cost				39.279	13.61	1	16.743		17.981		Continuing	Continuing	
Remarks:													

## CLASSIFICATION:

EXHIBIT R4, Schedule																					DATE		F	ebru	ary 20	004		
APPROPRIATION/BUDGET	ACTIV	ITY			PRO	GRAM					D NAN						PROJ											
RDT&E, N / BA5								060472	21N / \$	Shipbo	ard IW	Expo	it Syste	em			2134	SHIPB	OARD	IW E	XPLOI T	IT/CON	MON	DATA	LINK-	NAVY	(CDL-	N)
Fiscal Year		20	003			20	004			20	05			20	006			20	07			20	80			20	009	
	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
Acquisition Milestones												E	3lk 1 M	SD	F	oc _												
ECP Block 1 Specification																												
Award Block 1 Contract	Awa	ard																										
Test & Evaluation Milestones  Development Test							Block	1 DT-0		Block	1 OA	C																
Operational Test Interoperability Testing			SHA	ARP				]		Diocr																		
Production Milestones FRP FY03																												
FRP FY04																												
Deliveries	6				7																							
		l		l	l	l		R-1	SHC	PPIN	IG LIS	ST - I	tem N	0.	125	l					l	<u> </u>	<u> </u>	<u> </u>	L			1

<sup>\*</sup> Not required for Budget Activities 1, 2, 3, and 6

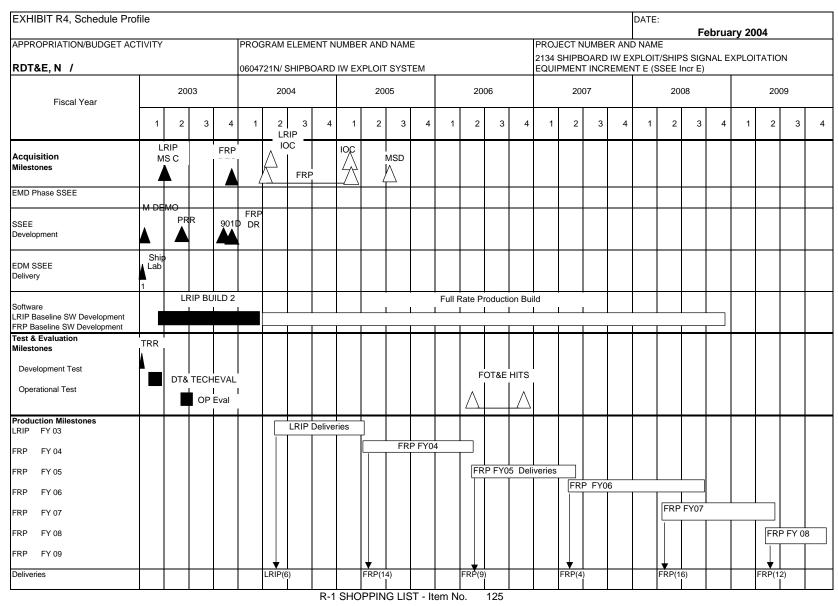
### CLASSIFICATION:

EXHIBIT R4, Schedule I	Profile									м	ulti-Mi	ssion	Pavlo	ad (MN	IP)						DATE	:	F	ebrua	rv 20	004		
APPROPRIATION/BUDGET	ACTIVI	TY			PROC	SRAM	ELEM	ENT N	UMBE				ayıo	aca (IVIIV	·· <i>)</i>		PROJ	ECT N	UMBE	R ANI	D NAM	E	- 1 (	, DI UC	y 20	, <del>,,,</del>		
RDT&E, N /	1				06047	721N /	SHIPE	BOARD	IW E	XPLOI	T SYS	TEM	ı				2134	SHIPB	OARD	IW EX	(PLOIT	r/MUL	TI-MIS	SION I	PAYLO	DAD (N	IMP)	
Fiscal Year		20	03			20	04			20	05			20	06			200	07			200	08			20	09	
	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
Acquisition Milestones					EDM Award											j	FRP De Blk 1											
System Development					А	S.E.	6	DR $\triangle$																				
							A/C alysis	A/C I	ntegra	tion Pl	anning I/	\TO																
EDM Delivery										De	EDM eliverie	s																
Test & Evaluation Milestones  Development Test  Operational Test										Plan Flight erts	Lab Tests ———————————————————————————————————		Tech Eval Sts d test		Op Eva													

<sup>\*</sup> Not required for Budget Activities 1, 2, 3, and 6 UNCLASSIFIED

125

#### CLASSIFICATION:



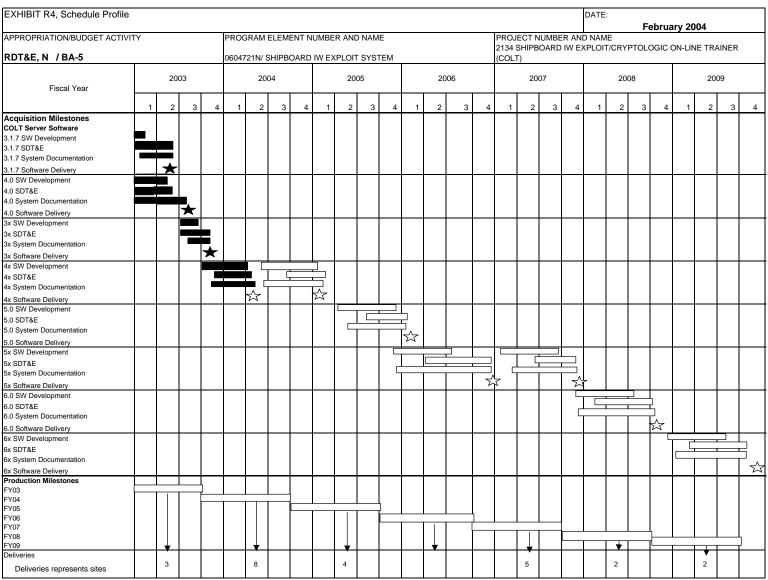
<sup>\*</sup> Not required for Budget Activities 1, 2, 3, and 6

SSEE Inc X is a spiral development program. Current migration plan for Increment E includes Cryptologic Unified Build (CUB) and Cyrptologic On-Line Trainer (COLT) as shown in succeeding pages. FY08 will introduce Increment F with new antenna design and P3I.

EXHIBIT R4, Schedule P	Profile				_																DATE	: -	F	ebrua	ry 20	04		
APPROPRIATION/BUDGET A	CTIVIT	Υ			PRO	GRAM	ELEME	ENT N	JMBEI	R AND	NAME						PROJ	ECT N	UMBEI	R AND	NAMI	E			•			
RDT&E, N / BA-5	,				0604	721N/ S	SHIPBO	DARD	IW EX	PLOIT	SYSTI	EM					2134 \$	SHIPB	OARD	IW EXI	PLOIT	/CRYP	TOLO	GIC U	NIFIED	BUILD	(CUE	3)
1		200	03			20	04			20	05			20	06			200	07			200	08			200	9	
Fiscal Year						1		1			1			1												1		
	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
Software																												
3.1.6 SW Development																												
3.1.6 SDT&E																												
3.1.6 System Documentation		$\rightarrow$																										
3.1.6 Software Delivery		X																										
3.1.7 SW Development																												
3.1.7 SDT&E																												
3.1.7 System Documentation																												
3.1.7 Software Delivery				★	1																							
4.0 SW Development																										İ		
1.0 SDT&E																												
1.0 System Documentation																												
4.0 Software Delivery				$\bigstar$																								
3x SW Development																												
3x SDT&E																												
3x System Documentation																												
3x Software Delivery				1	-																							
4x SW Development																												
4x SDT&E							Г																					
4x System Documentation						_ , [	_		Ħ,																			
4x Software Delivery							1		TZ'\	7																		
5.0 SW Development						<i>V</i> \			- ·																			
5.0 SDT&E													Ь .															
5.0 System Documentation											L		ട്.															
5.0 Software Delivery													<b>₹</b> .\~															
												$\vdash$ $\vdash$	$\sim$	<del></del>	7													
5x SW Development 5x SDT&E																		Г		$\neg$								
												Г		<u> </u>														
5x System Documentation																7	\ \ \			-7,1	7							
5x Software Delivery								-	-		-			-		ν	7			<u> </u>			$\vdash$					
6.0 SW Development																				Ч				ς .				
3.0 SDT&E																				لم _				ፈ				
6.0 System Documentation																				4				۲٫۲				
6.0 Software Delivery						-		-	-		-			-										$\mathcal{M}_{\Gamma}$			$\dashv$	
6x SW Development																								L				_
6x SDT&E																									ᆚ			_
6x System Documentation																									۱ــــا	- 1	- 1	Ψ٧
6x Software Delivery								SHO							125													M

<sup>\*</sup> Not required for Budget Activities 1, 2, 3, and 6

#### CLASSIFICATION:



<sup>\*</sup> Not required for Budget Activities 1, 2, 3, and 6

R-1 SHOPPING LIST - Item No. 125

#### **CLASSIFICATION:**

## **UNCLASSIFIED**

EXHIBIT R4, Schedule	Profile																				DATE	:	F	ehrua	ary 20	004		
APPROPRIATION/BUDGET	ACTIVI	TY			PRO	GRAM	ELEM	ENT N	IUMBE	R AND	NAM	E					PRO	JECT N	NUMBE	R AN	D NAM	1E		obi ac	41 <b>y 2</b> 0			
RDT&E, N / BA5					0604	721N/	SHIPB	OARD	IW EX	(PLOIT	r sys	ТЕМ					2134	SHIPE	OARD	IW E	XPLOI	T/ANT	ENNA	RF DI	STRIB	UTION	l (ARF	D)
Fiscal Year		20	03			20	04			20	05			20	06			20	07			20	08			20	09	
	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
Acquisition Milestones	Award Contra	act						Aw	ard Co	ntract																		
Prototype Phase																												
System Development												SDR				FDR												
EDM Delivery							ED	М										EDM										
Software 1XXSW Delivery 2XXSW Delivery																												
Test & Evaluation Milestones																												
FAT LBTF																				$\triangle$								
Production Milestones FRP FY07																					Proc	duction	Rolled	into S	SEE			
Deliveries																												

 $<sup>^{\</sup>star}$  Not required for Budget Activities 1, 2, 3, and 6

#### **CLASSIFICATION:**

## **UNCLASSIFIED**

EXHIBIT R4, Schedule Pr	ofile																				DATE	<u>:</u>	Fe	brua	ry 20	04		
APPROPRIATION/BUDGET A	CTIVIT	Υ			PROC	GRAM	ELEM	ENT N	UMBE	R AND	NAM	E						JECT N SHIPB					CIFIC E				CATIO	ON
RDT&E, N / BA-5					06047	721N/ S	SHIPB	OARD	IW EX	PLOIT	SYS	ГЕМ	ı				(SEI)											
Fiscal Year		20	03			20	004			20	05			20	06			20	007			20	008			20	09	
	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
Software  Version 1 SW Development  Version 1 SDT&E  Version 1 Software Delivery  Version 2 SW Development  Version 2 Software Delivery  Version 3 SW Development  Version 3 Software Delivery								$X_{\uparrow}$			$\Rightarrow$			$\Sigma$														
Test & Evaluation Milestones  Compatibility Testing  Operational Test					Compa	atibility		Operat	tional T	est - Ve	ersion ′		Opera	tional T	est - Ve	ersion :	2 ational 7	Γest - Vo	ersion (	3								
Production Milestones FY03 FY04 FY05 FY06 FY07 FY08 FY09																												
Deliveries							10				10				0				16									

<sup>\*</sup> Not required for Budget Activities 1, 2, 3, and 6

R-1 SHOPPING LIST - Item No.

Exhibit R-4, Schedule Profile (Exhibit R-4, page 17 of 32)

## **CLASSIFICATION:**

Exhibit R-4a, Schedule Detail						DATE:	ebruary 200	4
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	LEMENT			PROJECT NUME	BER AND NAME		
RDT&BA-5	0604721N / S	Shipboard IW Ex	ploit System		2134 SHIPBOARD	IW EXPLOIT/COMMO	ON DATA LINK-NA\	Y (CDL-N)
Schedule Profile		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Contract Award		Q2						
Developmental Testing (DT)			Q3-Q4					
Operational Analysis				Q2-Q3				
Interoperability Testing		Q3-Q4	Q2-Q3		Q1-Q2			
FOC					Q4			
		+						
		1						
		1						
		†						
		†						

## **CLASSIFICATION:**

Exhibit R-4a, Schedule Detail						DATE: <b>February 2004</b>				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	LEMENT			PROJECT NUMBER AND NAME 2134 SHIPBOARD IW EXPLOIT/MULTI-MISSION					
RDT&E, N / BA 5	0604721N / S	hipboard IW Ex	ploit System		PAYLOAD (MMP)					
Schedule Profile		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009		
EDM Award			Q1							
System Engineering Analysis			Q2							
Aircraft Data Analysis			Q3							
Design Review (DR)			Q4							
Aircraft Integration Planning				Q1-Q2						
Develop Test Plan				Q1-Q2						
Arrange/Plan for Flight Certifications				Q1-Q2						
Laboratory Acceptance Tests				Q3						
Eng Dev Model (EDM) Deliveries - Lab				Q3						
Plan & Obtain Interim Authority to Operate (IATO)				Q4						
Flight Certification Tests				Q4						
TECHEVAL					Q1					
OPEVAL					Q3					
Full Rate Production (FRP) Decision Block One						Q1				
				1	1					

R-1 SHOPPING LIST - Item No. 125

### **CLASSIFICATION:**

Critical Design Review (CDR)         Q2           Test Readiness Review (TRR)         Q2           Developmental Testing         Q1           Eng Dev Model (EDM) SSEE Delivery - Lab         Q1           Software Delivery - System LRIP Config S/W         Q2           Preproduction Readiness Review (PRR)         Q2           EDM SSEE Delivery - Ship         Q1           Operational Testing         Q2           Milestone III (MS C)         Q2           Start Low-Rate Initial Production (LRIP)         Q2           Low-Rate Initial Production Delivery         Q2           Technical Evaluation (TECHEVAL)         Q1           M-DEMO         Q1           Operational Evaluation (OPEVAL)         Q2           FOLLOW-ON Operational Evaluation (FOTE)         Q2-Q3           FOLLOW-ON Operational Evaluation (FOTE)         Q2-Q4           IOC         Q2         Q1           Full Rate Production (FRP) Decision         Q4         Q1-Q4           Full Rate Production Start         Q1-Q4         Q1-Q4           Full Rate Production Start         Q1-Q4         Q1-Q4	Exhibit R-4a, Schedule Detail						DATE:					
RDT&E, N / BA 5  Schedule Profile							February 2004					
RDT&E, N / BA 5	APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEME	NT			PROJECT NU	JMBER AND N	AME				
RDT&E, N / BA 5						2134 SHIPBO	134 SHIPBOARD IW EXPLOIT/SHIPS SIGNAL					
Schedule Profile	RDT&E. N / BA 5	0604721N/ SHIPBC	DARD IW EXP	OIT SYSTEM								
Software Specification Review (SSR)								·				
Preliminary Design Review (PDR)				1 1 2001	1 1 2000	1 1 2000	1 1 2007	1 1 2000	1 1 2000			
System Development						+						
Critical Design Review (CDR)				Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4			
Developmental Testing			<u> </u>		~. ~.	<u> </u>	~. ~.	<u> </u>	<u> </u>			
Developmental Testing	Test Readiness Review (TRR)		02									
Eng Dev Model (EDM) SSEE Delivery - Lab   Software Delivery - System LRIP Config S/W   Q2						+						
Software Delivery - System LRIP Config S/W   Q2   Preproduction Readiness Review (PRR)   Q2			Ψ.			+						
Preproduction Readiness Review (PRR)         Q2           EDM SSEE Delivery - Ship         Q1           Operational Testing         Q2           Milestone III (MS C)         Q2           Start Low-Rate Initial Production (LRIP)         Q2           Low-Rate Initial Production Delivery         Q2           Technical Evaluation (TECHEVAL)         Q1           M-DEMO         Q1           Operational Evaluation (OPEVAL)         Q2-Q3           FOLLOW-ON Operational Evaluation (FOTE)         Q2-Q4           IOC         Q2-Q4           Full Rate Production (FRP) Decision         Q4           Full Rate Production Start         Q1-Q4           First Deployment FRP Config         Q4           Pre-Planned Improvements (P3I)         Q1-Q4				Q2								
EDM SSEE Delivery - Ship	Preproduction Readiness Review (PRR)		Q2									
Operational Testing         Q2           Milestone III (MS C)         Q2           Start Low-Rate Initial Production (LRIP)         Q2           Low-Rate Initial Production Delivery         Q2           Technical Evaluation (TECHEVAL)         Q1           M-DEMO         Q1           Operational Evaluation (OPEVAL)         Q2-Q3           FOLLOW-ON Operational Evaluation (FOTE)         Q2-Q4           IOC         Q2           Full Rate Production (FRP) Decision         Q4           Full Rate Production Start         Q1-Q4           First Deployment FRP Config         Q4           Pre-Planned Improvements (P3I)         Q1-Q4         Q1-												
Start Low-Rate Initial Production (LRIP)												
Low-Rate Initial Production Delivery			Q2									
Low-Rate Initial Production Delivery	Start Low-Rate Initial Production (LRIP)		Q2									
Technical Evaluation (TECHEVAL)				Q2								
M-DEMO         Q1         Q2-Q3           Operational Evaluation (OPEVAL)         Q2-Q3         Q2-Q4           FOLLOW-ON Operational Evaluation (FOTE)         Q2 Q1         Q2-Q4           IOC         Q2 Q1         Q2-Q4           Full Rate Production (FRP) Decision         Q4         Q1-Q4           Full Rate Production Start         Q1-Q4         Q1-Q4           First Deployment FRP Config         Q4         Q1-Q4           Pre-Planned Improvements (P3I)         Q1-Q4			Q1									
FÖLLOW-ON Operational Evaluation (FOTE)         Q2-Q4           IOC         Q2         Q1           Full Rate Production (FRP) Decision         Q4         Value of the control of the con			Q1									
FÖLLOW-ON Operational Evaluation (FOTE)         Q2-Q4           IOC         Q2         Q1           Full Rate Production (FRP) Decision         Q4         Value of the control of the con	Operational Evaluation (OPEVAL)		Q2-Q3									
Full Rate Production (FRP) Decision         Q4         Image: Control of the control						Q2-Q4						
Full Rate Production Start         Q1-Q4           First Deployment FRP Config         Q4           Pre-Planned Improvements (P3I)         Q1-Q4	IOC			Q2	Q1							
First Deployment FRP Config         Q4         Q1-Q4         Q1-	Full Rate Production (FRP) Decision		Q4									
Pre-Planned Improvements (P3I)         Q1-Q4         <				Q1-Q4								
					Q4							
Material Support Date Q3			Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4			
	Material Support Date				Q3							
				<u> </u>								

R-1 SHOPPING LIST - Item No. 125

SSEE Inc X is a spiral development program. Current migration plan for Increment E includes Cryptologic Unified Build (CUB) and Cyrptologic On-Line Trainer (COLT) as shown in succeeding pages.

FY07 will introduce Increment F with new antenna design and P3I.

**UNCLASSIFIED** 

Exhibit R-4a, Schedule Detail (Exhibit R-4a, page 20 of 32)

## **CLASSIFICATION:**

# **UNCLASSIFIED**

Exhibit R-4a, Schedule Detail					DATE: <b>February 2004</b>					
APPROPRIATION/BUDGET ACTIVITY	PROGRAM EI	LEMENT				MBER AND NA	AME			
					2134 SHIPBOARD IW EXPLOIT/CRYTOLOGIC UNIFIE					
RDT&BA-5	0604721N/ SH	IPBOARD IW	EXPLOIT SYS				(CUB)			
Schedule Profile		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009		
Software Development v 3.1.6		Q1								
System Developmental Test & Eval v 3.1.6		Q1-Q2								
System Documentation v 3.1.6		Q1-Q2								
Software Delivery v 3.1.6		Q2								
Software Development v 3.1.7		Q2-Q3								
System Developmental Test & Eval v 3.1.7		Q3-Q4								
System Documentation v 3.1.7		Q1-Q3								
Software Delivery v 3.1.7		Q4								
Software Development v 4.0		Q1-Q2								
System Developmental Test & Eval v 4.0		Q1-Q3								
System Documentation v 4.0		Q1-Q3								
Software Delivery v 4.0		Q4								
Software Development v 3x		Q3								
System Developmental Test & Eval v 3x		Q3-Q4								
System Documentation v 3x		Q3-Q4								
Software Delivery v 3x		Q4								
Software Development v 4x		Q4	Q1-Q4	Q1						
System Developmental Test & Eval v 4x		Q4	Q1-Q4	Q1						
System Documentation v 4x		Q4	Q1-Q4	Q1						
Software Delivery v 4x			Q2	Q1						
Software Development v 5.0				Q2-Q4						
System Developmental Test & Eval v 5.0				Q3-Q4	Q1					
System Documentation v 5.0				Q2-Q4	Q1					
Software Delivery v 5.0					Q1					
Software Development v 5x				Q4	Q1-Q3	Q1-Q3				
System Developmental Test & Eval v 5x					Q2-Q4	Q2-Q4				
System Documentation v 5x				Q4	Q1-Q4	Q1-Q4				
Software Delivery v 5x					Q4	Q4				
Software Development v 6.0						Q4	Q1-Q3			
System Developmental Test & Eval v 6.0							Q1-Q4			
System Documentation v 6.0						Q4	Q1-Q4			
Software Delivery v 6.0							Q4			
Software Development v 6x							Q4	Q1-Q3		
System Developmental Test & Eval v 6x							-	Q1-Q4		
System Documentation v 6x								Q1-Q4		
Software Delivery v 6x								Q4		

UNCLASSIFIED

R-1 SHOPPING LIST - Item No. 125

Exhibit R-4a, Schedule Detail

(Exhibit R-4a, page 21 of 32)

## **CLASSIFICATION:**

Exhibit R-4a, Schedule Detail	DATE:									
,						February 2004				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM	ELEMENT			PROJECT NU	MBER AND NA				
					2134 SHIPBO	PBOARD IW EXPLOIT/CRYPTOLOGIC ON-				
RDT&E, N / BA 5	0604721N/ S	SHIPBOARD IW	LINE TRAINE							
Schedule Profile		FY 2003	FY 2006	FY 2007	FY 2008	FY 2009				
COLT Server Software		1 1 2003	FY 2004	FY 2005	1 1 2000	1 1 2007	1 1 2000	1 1 2003		
3.1.7 SW Development		Q1								
3.1.7 SDT&E		Q1-Q2								
3.1.7 Sprace 3.1.7 System Documentation		Q1-Q2								
3.1.7 System Documentation 3.1.7 Software Delivery		Q1-Q2 Q2								
4.0 SW Development		Q1-Q2			-					
4.0 SVV Development 4.0 SDT&E		Q1-Q2 Q1-Q3			-					
4.0 SDT&E 4.0 System Documentation		Q1-Q3								
4.0 System Documentation 4.0 Software Delivery		Q3								
		Q3 Q3								
3x SW Development 3x SDT&E		Q3-Q4								
		Q3-Q4 Q3-Q4								
3x System Documentation										
3x Software Delivery		Q4 Q4	04.04	04						
4x SW Development			Q1-Q4	Q1						
4x SDT&E		Q4 Q4	Q1-Q4	Q1 Q1						
4x System Documentation		Q4	Q1-Q4	Q1						
4x Software Delivery			Q2							
5.0 SW Development				Q2-Q4	0.4					
5.0 SDT&E				Q3-Q4	Q1					
5.0 System Documentation				Q2-Q4	Q1					
5.0 Software Delivery					Q1	04.00				
5x SW Development				Q4	Q1-Q3	Q1-Q3				
5x SDT&E					Q2-Q4	Q2-Q4				
5x System Documentation				Q4	Q1-Q4	Q1-Q4				
5x Software Delivery					Q4	Q4	21.22			
6.0 SW Development						Q4	Q1-Q3			
6.0 SDT&E							Q1-Q4			
6.0 System Documentation						Q4	Q1-Q4			
6.0 Software Delivery							Q4			
6x SW Development							Q4	Q1-Q3		
6x SDT&E								Q1-Q4		
6x System Documentation								Q1-Q4		
6x Software Delivery								Q4		

### **CLASSIFICATION:**

Exhibit R-4a, Schedule Detail		DATE: February 2004							
APPROPRIATION/BUDGET ACTIVITY  RDT&E, N / BA 5	PROGRAM E 0604721N/ SI	LEMENT HIPBOARD IW	EXPLOIT SYS	STEM	PROJECT NUMBER AND NAME 2134 SHIPBOARD IW EXPLOIT/ANTENNA RF DISTRIBUTION (ARFD)				
Schedule Profile		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
Select HF Acquisition MCCP Contract Award									
Optimize SIGINT RF Performance via CBM			4Q						
Ship Demonstration									
Contract Award		1Q	2Q						
Test & Evaluate HF DF Antennas			4Q						
Test, Evaluate, Certify & Validate HF DF & Reference (EDM)			4Q						
Test, Evaluate, Certify & Validate VHF/UHF DF (EDM)			4Q						
Award Contracts for HF DF& Ref & VHF/UHF DF (EDM)				1Q					
Optimzed IW Antennas RFI		4Q							
Draft Optimized IW Antennas Specification		4Q							
Optimized IW Antennas Final Draft			4Q						
EDM Delivery			4Q						
System Design Review (SDR)				4Q					
Final Design Review (FDR)					4Q				
EDM Delivery						2Q			
Factory Acceptance Testing						2Q			
Land Based Test Facility						4Q			
Deliver capability to SSEE							1Q		

## **CLASSIFICATION:**

Exhibit R-4a, Schedule Detail						DATE:				
							February 20	04		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	LEMENT			PROJECT NU	JECT NUMBER AND NAME				
					2134 SHIPBO	HIPBOARD IW EXPLOIT/SPECIFIC EMITTER				
RDT&E, N / BA 5	0604721N/ SH	HIPBOARD IW	EXPLOIT SYS	TFM	IDENTIFICAT					
Schedule Profile	000112111701	FY 2003	FY 2004	FY 2006	,					
Schedule Profile		F1 2003	F1 200 <del>4</del>	FY 2005	F1 2000	F1 2001	F1 2006	F1 2009		
CDAWAD Dave Development										
SPAWAR Pgm Development Additional Requirements										
Contract Award		Q2								
System Requirements		Q1								
Systems Requirements Review		Q2								
Technical Information Meeting		Q2								
Architecture Definition		Q2								
Foreign Comparison Test (FCT) Planning		Q1								
FCT Test		Q3								
FCT Test Analysis		Q4								
Preliminary Design Review		Q4								
Critical Design Review		Q4								
Development Lab Set-up		Q4								
Platform Independent Prototype Development		Q4								
Phase 1 - Software Development		Q1-Q4	Q1-Q3							
Phase 2 - Software Delivery			Q2-Q4	Q4	Q1					
Phase 3 - software development				Q1						
Technical Information Meeting		Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4					
Software Delivery			Q3	Q3	Q3	Q3				
Hardware/software compatibility testing			Q1-Q4	Q1-Q4	Q1-Q2					
Test Readiness Review (TRR)			Q1-Q2		Q1-Q2	Q4				
Developmental Testing (DT-IIA)			Q1-Q2		Q1-Q2	Q4				
Logistics			Q4	Q3	Q2	Q1-Q4				
Phase 1/2/3 delivery			Q2-Q4	Q1-Q2	2Q					
Software only configuration Installation			Q2-Q4		Q1-Q2	Q4				
Hardware only configuration Installation			Q2-Q3	Q1-Q2	Q1-Q2					
Hardware/software configuration Installation			Q2-Q4		Q3					
Operational Testing (OT-IIA)			Q4	Q4	Q3					
Start Low-Rate Initial Production I (LRIP I)			Q3		Q3					
IOC	IOC Q4									

#### **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification								DATE:			
									Febru	uary 2004	
APPROPRIATION/BUDGET ACTIVITY	AME										
RDT&E, N / BA-5	0604721N/SHI	PBOARD IW E	EXPLOIT SYST	ГЕМ		9242 / COOPE	ERATIVE OUT	BOARD LOGIS	TICS UPDATE	E (COBLU)	
	Prior										Total
COST (\$ in Millions)	Years Cost	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Program
Project Cost	0.000	0.000	3.238	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.238
RDT&E Articles Qty											0

#### (U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Cooperative Outboard Logistics Update, COBLU, is a cooperative program between the United States and the United Kingdom. The existing OUTBOARD system (AN/SSQ-108) has been updated to provide comprehensive surface tactical capability. The program maximizes use of already developed military and commercial signal exploitation equipment. The system architecture requires minimal effort to implement future technologies necessary to handle the evolving threat. This effort will develop, integrate and test an engineering prototype of Low Probability of Intercept (LPI) subsystem to detect recognize and process the most current threat signals. Once development effort is completed it will be included as a pre-planned product improvement for COBLU introduced through field change kits.

#### (U) JUSTIFICATION FOR BUDGET ACTIVITY:

This program is funded under BA-5, ENGINEERING & MANUFACTURING DEVELOPMENT because it encompasses engineering and manufacturing development of new end-items prior to production approval decision.

#### **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification			DATE:
			February 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND N	IAME
RDT&E, N / BA-5	0604721N/SHIPBOARD IW EXPLOIT SYSTEM	9242 / COOPERATIVE OUT	FBOARD LOGISTICS UPDATE

## (U) B. Accomplishments/Planned Program

	FY 03	FY 04	
Accomplishments/Effort/Subtotal Cost	3.238	0.000	
RDT&E Articles Quantity			

Cooperative Outboard Logistics Update (COBLU)

FY03 - Developed, integrated and tested an engineering prototype of a Low Probability of Intercept (LPI) subsystem.

#### **CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification					DATE:	
						uary 2004
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER	AND NAME		PROJECT NUMBER AND I	NAME	
RDT&E, N / BA-5	0604721N/SHIPBOARD IW EXPL	OIT SYSTEM		9242 / COOPERATIVE OU	TBOARD LOGISTICS UPDAT	E
(U) C. PROGRAM CHANGE SUMMARY:						
(U) Funding: Previous President's Budget: Current BES/President's Budget Total Adjustments	FY 2002 0.000 0.000 0.000	FY 2003 0.000 3.238 3.238	FY 2004 0.000 0.000 0.000			
Summary of Adjustments Cong. Add for COBLU Upgrade Business Process Reform (Sec. 8100) Economic Assumptions (Sec. 8135) IT Cost Growth (Sec. 8109) Inflation Savings SBIR Assessment Subtotal	0.000	3.400 -0.014 -0.019 -0.006 -0.036 -0.087 3.238	0.000			
(U) Schedule:						
Not Applicable						
(U) Technical:						
Not Applicable						

#### CLASSIFICATION:

EXHIBIT R-2a, RDT&E			DATE:									
			_							Februa	ary 2004	
APPROPRIATION/BUDGET					IBER AND NAI			JMBER AND N				
RDT&E, N /	BA-5		0604721N/SH	IIPBOARD IW	EXPLOIT SYS	TEM	9242 / COOPERATIVE OUTBOARD LOGISTICS UPDATE					
(U) D. OTHER PROC	GRAM FUNDING SUMMARY:									<b>T</b> .	Total	
Line Item No. & Na	ame	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To <u>Complete</u>	<u>Cost</u>	
<u>=                                </u>	<del></del>	1 1 2002	1 1 2000	11 2001	1 1 2000	1 1 2000	112001	112000	112000	<u>complete</u>	<u>000t</u>	
(U) E. ACQUISITION S	STRATEGY:											
Not Applicable												
11017.pp.100010												

#### CLASSIFICATION:

										DATE:				
Exhibit R-3 Cost A	Analysis (pag	ge 1)										February 20	04	
APPROPRIATION/BU		ΊΤΥ		PROGRAM E	LEMENT			PROJECT N						
RDT&E, N /	BA-5			0604721N/SH	IIPBOARD IW	EXPLOIT SYS	STEM	9242/COOPI	ERATIVE OL	UTBOARD LOGI		ATE .		
Cost Categories		Contract	Performing		Total		FY 03		FY 04		FY 05	_		
		Method	Activity &		PY s	FY 03	Award	FY 04	Award	FY 05	Award	Cost to	Total	Target Value
Diament III		& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Primary Hardware De						0.250	02/03						0.250	
Ancillary Hardware Do	evelopment												0.000	
Aircraft Integration											+		0.000	
Ship Integration													0.000	
Ship Suitability						-							0.000	
Systems Engineering						+							0.000	
Training Developmen	nt						ļ						0.000	
Licenses													0.000	
Tooling													0.000	
GFE													0.000	
Award Fees													0.000	
Subtotal Product Deve	elopment				0.000	0.250	0	0.00	0	0.00	00	0.000	0.250	
Development Support													0.000	)
Software Development						2.98	8 02/03						2.988	3
Integrated Logistics Sup	pport												0.000	
Configuration Managem	nent												0.000	
Technical Data													0.000	
Studies & Analyses													0.000	
GFE													0.000	
Award Fees													0.000	
Subtotal Support					0.000	2.98	В	0.00	0	0.00	00	0.000	2.988	3
Remarks:		-				•			•					
					R-1 SHOP	PPING LIST	- Item No.	125						

#### **CLASSIFICATION:**

									DATE:								
Exhibit R-3 Cost Analysis (pag	je 2)		February 2004														
APPROPRIATION/BUDGET ACTIV	ITY		PROGRAM ELEMENT				PROJECT I	IUMBER AND	NAME		•						
RDT&E, N / BA-5			0604721N/SHIPBOARD	IW EXF	PLOIT SYS		9242/COOF	9242/COOPERATIVE OUTBOARD LOGISTICS UPDATE									
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY Co	03 st	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				
Developmental Test & Evaluation	и турс	Location	0031		<u> </u>	Date	0031	Duic	0031	Date	Complete	0.000	or contract				
Operational Test & Evaluation												0.000					
Live Fire Test & Evaluation												0.000					
Test Assets												0.000					
Tooling												0.000					
GFE												0.000					
Award Fees												0.000					
Subtotal T&E			C	.000	0.000		0.0	00	0.00	0	0.000	0.000					
Contractor Engineering Support												0.000					
Government Engineering Support												0.000					
Program Management Support												0.000					
Travel												0.000					
Transportation												0.000					
												0.000					
Subtotal Management			C	.000	0.000	)	0.0	00	0.00	0	0.000	0.000					
Remarks:																	
Total Cost			C	.000	3.238		0.0	00	0.00	0	0.000	3.238					
Remarks:																	

#### CLASSIFICATION:

EXHIBIT R4, Schedule Pro	file																				DATE	:						
APPROPRIATION/BUDGET AC	ΓΙVΙΤΥ	,			PROC	GRAM	ELEMI	ENT N	UMBE	R AND	NAM	E						ECT N					PS SIG	ebrua NAL C			/Ε	
RDT&E, N / BA-5																OUTE	OARD	LOGI	STICS	S UPDATE, COBLU								
Fiscal Year		2003			2004				2005			2006			2007				2008				2009					
	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
Acquisition Milestones				005																								
LPI Subsystem Development		Award	PDR	CDF																								
HW development/selection																												
Software Development		ı																										
System Integration																												
Test & Evaluation Milestones						٨																						
Capability Demonstration						$\triangle$	$\triangle$																					
Regression Test Development Test								$\triangle$																				
Production Milestones																												
Note: Outyear Fielding of this subsys	tem wi	ll be ha	ndled t	hrough	pre-pla	nned p	roduct i	mprove	ment a	nd field	ed usir	g field	change	kits. C	urrentl	y nine (	9) kits	will be p	orocure	d with S	SCN Fu	inding.						
Deliveries																												

<sup>\*</sup> Not required for Budget Activities 1, 2, 3, and 6

#### CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE:				
	February 2004									
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEN	1ENT	PROJECT NU	T NUMBER AND NAME						
RDT&E, N /BA 5	0604721N/ SHIPE	BOARD IW EXP	LOIT SYSTEM	COOPERATIVE OUTBOARD LOGISTICS UPDATE, COB						
Schedule Profile		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009		
Contract Award		Q2								
Preliminary Design Review (PDR) System Design Review (SDR)		Q3								
System Design Review (SDR)		Q2								
System Development		Q2 -Q4	Q1-Q3							
Critical Design Review (CDR)		Q4								
System Integration			Q1-Q4							
Eng Dev Model (EDM) Delivery - Lab			Q3							
Software Delivery -			Q3							
Test Readiness Review (TRR)			Q4							
Developmental Testing			Q4							
Capability Demo			Q4							
EDM Delivery -			Q4							
,										
							1			
							1			
								<del></del>		
							1			
							1			
		+			+			<b>—</b>		
								<del>                                     </del>		
		+			+			<b> </b>		
		+	<del>                                     </del>		+		<del>                                     </del>	<del></del>		