CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification	DATE: **February 2002**
APPROPRIATION/BUDGET ACTIVITY **RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-7**	R-1 ITEM NOMENCLATURE 0101402N Navy Strategic Communications

COST ($ in Millions)	Prior Years Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Total PE Cost				**4.168**	**21.452**	**46.681**	**42.566**	**24.634**	**10.713**	**1.588**	**151.802**
H0793 E-6 Service Life Assessment					**2.899**	**3.200**	**1.000**				**7.099**
H3002 Navy Strategic Communications Project				**4.168**	**18.553**	**43.481**	**41.566**	**24.634**	**10.713**	**1.588**	**144.703**
Quantity of RDT&E Articles Not Applicable											

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:
(H0793) In FY2003 a Service Life Assessment of selected critical components will be performed on the E-6B. The original service life of this airframe was 27,000 hours based on a prescribed weight and expected operational usage. Current weight and operational usage exceed those original values and lessen, by some unknown value, the original 27,000 hour airframe fatigue life. The contractor will analyze fleet aircraft and review onboard recorder data in order to generate an updated repeated loads spectrum. The contractor will then update the external/internal loads analysis associated with the additional weight and operational usage data. Utilizing the data from the first two steps, the contractor will update the existing E-6 Durability and Damage Tolerance Assessments. This data will then allow the contractor to update the Reliability-Centered Maintenance (RCM) analysis, individual aircraft tracking, and optimize the E-6 Maintenance Plans.

(H3002) This funding replaces the existing Digital Airborne Intercommunications Switching System (DAISS), Very Low Frequency (VLF) transmit terminal, Mission Computer System (MCS), Ultra-High Frequency Command, Control and Communications (UHF C3) system, STU-III/Crypto, High Power Transmit Set (HPTS), and adds Open Systems Architecture (OSA), High Frequency (HF) Rebroadcast, Low Frequency Simultaneous Operations (LF SIMOP) and other battlestaff and mission system capabilities to the E-6 Aircraft.

(U) JUSTIFICATION FOR BUDGET ACTIVITY:
This program is funded under OPERATIONAL SYSTEMS DEVELOPMENT because it encompasses engineering and manufacturing development for upgrade of existing, operational systems.

R-1 SHOPPING LIST - Item No. 177

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: **February 2002**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**	PROGRAM ELEMENT NUMBER AND NAME 0101402N Navy Strategic Communications					PROJECT NUMBER AND NAME H0793 E-6 Service Life Assessment					
COST ($ in Millions)	Prior Years Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost					**2.899**	**3.200**	**1.000**				**7.099**
RDT&E Articles Qty											

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:
(H0793) In FY2003 a Service Life Assessment selected critical components will be performed on the E-6B. The original service life of this airframe was 27,000 hours based on a prescribed weight and expected operational usage. Current weight and operational usage exceed those original values and lessen, by some unknown value, the original 27,000 hour airframe fatigue life. The contractor will analyze fleet aircraft and review onboard recorder data in order to generate an updated repeated loads spectrum. The contractor will then update the external/internal loads analysis associated with the additional weight and operational usage data. Utilizing the data from the first two steps, the contractor will update the existing E-6 Durability and Damage Tolerance Assessments. This data will then allow the contractor to update the Reliability-Centered Maintenance (RCM) analysis, individual aircraft tracking, and optimize the E-6 Maintenance Plans.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2001 ACCOMPLISHMENTS: - Not Applicable

2. FY 2002 PLANS: - Not Applicable

3. FY 2003 PLANS:

(U) ($ .491) Naval Air Warfare Center (NAWC) Field Support
(U) ($ .130) Travel
(U) ($ 2.278) Engineering Support - Define the operational usage and loads for the E-6B configuration, thereby defining service spectra. Identify life-critical locations, determine load-to-stress relationships for those locations, and calculate critical fatigue lives.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**	PROGRAM ELEMENT NUMBER AND NAME 0101402N Navy Strategic Communications	PROJECT NUMBER AND NAME H0793 E-6 Service Life Assessment

(U) B. PROGRAM CHANGE SUMMARY:

	FY2001	FY2002	FY2003
(U) FY 2002 President's Budget:			
(U) Adjustments from the President's Budget:			
(U) FY 2003 President's Budget Submit:			2.899

CHANGE SUMMARY EXPLANATION:

(U) Funding: Not Applicable

(U) Schedule: Not Applicable

(U) Technical: Not Applicable

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete
056400 E-6A Series	60.029	73.876	57.099	30.272	20.761	39.440	51.437	211.080

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**	PROGRAM ELEMENT NUMBER AND NAME 0101402N Navy Strategic Communications	PROJECT NUMBER AND NAME H0793 E-6 Service Life Assessment

(U) D. ACQUISITION STRATEGY: SLAP will be a sole source program due to the proprietary nature of the data. This will be a Firm Fixed Price (FFP) Contract. Contract Award is expected in 1st quarter FY03. SLAP analysis is the precursor to an effective SLEP program, needed to keep this aircraft a viable Strategic Asset.

(U) E. SCHEDULE PROFILE:

	FY 2001	FY 2002	FY2003	TO COMPLETE
(U) Program Milestones				
(U) Engineering Milestones				Initial Report (3Q 05) Final Report (4Q 05)
(U) T&E Milestones				
(U) Contract Milestones			Contract Award (1Q 03)	

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: **February 2002**			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**			PROGRAM ELEMENT 0101402N Navy Strategic Communications				PROJECT NUMBER AND NAME H0793 E-6 Service Life Assessment						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract	
Subtotal T&E													
Remarks:													
Contractor Engineering Support	FFP	Boeing Seattle, WA						2.278	12/02	3.301	5.579	5.579	
Government Engineering Support	WX	NAWCAD PAX RIVER, MD						0.491	10/02	0.710	1.201		
Travel								0.130	Various	0.189	0.319		
Subtotal Management								2.899		4.200	7.099		
Remarks:													
Total Cost								2.899		4.200	7.099		
Remarks: There is no Product Development or Support related to this program.													

R-1 SHOPPING LIST - Item No. 177

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2002					
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**	PROGRAM ELEMENT NUMBER AND NAME 0101402N Navy Strategic Communications				PROJECT NUMBER AND NAME H3002 Navy Strategic Communications Project						
COST ($ in Millions)	Prior Years Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost				**4.168**	**18.553**	**43.481**	**41.566**	**24.634**	**10.713**	**1.588**	**144.703**
RDT&E Articles Qty											

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:
(H3002) This funding replaces the existing Digital Airborne Intercommunications Switching System (DAISS), Very Low Frequency (VLF) transmit terminal, Mission Computer System (MCS), Ultra-High Frequency Command, Control and Communications (UHF C3) system, STU-III/Crypto, High Power Transmit Set (HPTS), and adds Open Systems Architecture (OSA), High Frequency (HF) Rebroadcast, Low Frequency Simultaneous Operations (LF SIMOP) and other battlestaff and mission system capabilities to the E-6 Aircraft.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2001 ACCOMPLISHMENTS: - Not Applicable

2. FY 2002 PLANS:

(U) ($ 2.093) Funding supports the replacement of DAISS, VLF, MCS, UHF C3 System, STU-III/Crypto and HPTS, and the addition of OSA, HF Rebroadcast, LF SIMOP and other capabilities to the E-6.

(U) ($ 1.849) Contract support services for replacement of DAISS, VLF, MCS, UHF C3 System, STU-III/Crypto and HPTS, and the addition of OSA, HF Rebroadcast, LF SIMOP and other capabilities to the E-6.

(U) ($ .100) Travel requirements to support Program and NAWC personnel.

(U) ($ .126) Portion of extramural program reserved for Small Business Innovation Research assessment.

3. FY 2003 PLANS:

(U) ($ 9.234) Funding supports the replacement of DAISS, VLF, MCS, UHF C3 System, STU-III/Crypto and HPTS, and the addition of OSA, HF Rebroadcast, LF SIMOP and other capabilities to the E-6.

(U) ($ 8.745) Contract support services for replacement of DAISS, VLF, MCS, UHF C3 System, STU-III/Crypto and HPTS, and the addition of OSA, HF Rebroadcast, LF SIMOP and other capabilities to the E-6.

(U) ($ .574) Travel requirements to support Program and NAWC personnel.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**	PROGRAM ELEMENT NUMBER AND NAME 0101402N Navy Strategic Communications	PROJECT NUMBER AND NAME H3002 Navy Strategic Communications Project

(U) B. PROGRAM CHANGE SUMMARY:

	FY2001	FY2002	FY2003
(U) FY 2002 President's Budget:		4.205	
(U) Adjustments from the President's Budget:		-0.037	
(U) FY 2003 PRESIDENT'S Budget Submit:		4.168	18.553

CHANGE SUMMARY EXPLANATION:

(U) Funding: FY-2002 net decrease of $.037 million is for an undistributed Congressional reduction.

(U) Schedule: N/A

(U) Technical: N/A

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete
056400 E-6A Series	60.029	73.876	57.099	30.272	20.761	39.440	51.437	211.080

R-1 SHOPPING LIST - Item No. 177

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**	PROGRAM ELEMENT NUMBER AND NAME 0101402N Navy Strategic Communications	PROJECT NUMBER AND NAME H3002 Navy Strategic Communications Project

(U) D. ACQUISITION STRATEGY: Competitively Award Cost Plus Development Contract with follow on FFP Production Contract. VLF Transmitter will be designed, developed and tested by SPAWAR (SSC San Diego) under a separate effort. Funds will be sent via Project Directive (PD) to SPAWAR.

(U) E. SCHEDULE PROFILE:

	FY 2001	FY 2002	FY2003	TO COMPLETE
(U) Program Milestones				MSII (1Q 05) LRIP (4Q 05) MSIII (2Q 06)
(U) Engineering Milestones				Prelim. Design Review (3Q 04) Critical Design Review (3Q 04) Prototype Install (2Q 05)
(U) T&E Milestones				Contract Test/Dev Test (2Q 05) Operational Test (3Q 05)
(U) Contract Milestones				Contract Award (1Q 04) Design, Develop, Integration Prod. Contract Award (2Q 06)

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)										DATE: February 2002		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**			PROGRAM ELEMENT 0101402N Navy Strategic Communications				PROJECT NUMBER AND NAME H3002 Navy Strategic Communications Project					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development	C/CPIF	TBD								88.041	88.041	88.041
Primary Hardware Dev. (VLF)	TBD	TBD									0.000	
Subtotal Product Development								0.000		88.041	88.041	88.041

Remarks:

Subtotal Support												

Remarks:

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2002		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**			PROGRAM ELEMENT 0101402N Navy Strategic Communications				PROJECT NUMBER AND NAME H3002 Navy Strategic Communications Project					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Subtotal T&E												
Remarks:												
Government Engineering Support	WX	NAWCAD PAX RIVER, MD				2.093	02/02	9.234	10/02	13.864	25.191	
Engineering Technical Services	TBD	TBD				1.849	02/02	8.745	10/02	17.566	28.160	28.160
Travel						0.100	Various	0.574	10/02	2.511	3.185	
SBIR Assessment						0.126					0.126	
Subtotal Management						4.168		18.553		33.941	56.662	
Remarks:												
Total Cost						4.168		18.553		121.982	144.703	
Remarks:												

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