.							DATE: February 2008	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-7						R-1 ITEM NOMENCLATURE 0101402N, NAVY STRATEGIC COMMUNICATIONS		
COST ($ in Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
Total PE Cost	36.395	35.777	47.495	44.594	15.083	8.790		
0793 E-6 SERVICE LIFE ASSESSMENT PROGRAM	.900							
3002 NAVY STRATEGIC COMMUNICATIONS BLOCK I	35.495	35.777	47.495	44.594	15.083	8.790		

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

(0793) A Service Life Assessment Program (SLAP) of selected critical components is being performed on the E-6B. The original E-6A service life of this airframe was 27,000 hours based on a prescribed weight and expected operational usage. Current E-6B weight and operational usage exceeds those original values and lessens, by some unknown value, the original 27,000 hours airframe service life. SLAP is a two- phase program. Phase 1 conducts a general study to define the critical locations using data gathered from the fleet and previous test data. Phase 1A will use data gathered during Phase 1 to develop a finite element model. Phase 2 will conduct the detailed analyses of the critical locations. The contractor will analyze fleet aircraft and review onboard recorder data in order to generate an updated loads spectrum. The contractor will update the external/internal loads analysis associated with the updated loads spectrum and operational usage data. Utilizing the data from the first two steps, the contractor will update the existing E-6B Durability and Damage Tolerance Assessments. This data will then allow the contractor to update the Reliability-Centered Maintenance (RCM) analysis, and optimize the E-6B Maintenance Plans. The contractor will perform preliminary high level trade studies of potential modifications to increase the service life.

(3002) The E-6B Block I modification program corrects Airborne National Command Post program FOT&E operational suitability deficiencies and addresses legacy system obsolescence issues. Without the Block I program, legacy system obsolescence will result in several unsupportable mission systems by 2010. Block I designs, develops, integrates, and tests a Multi-level Security (MLS) system, Open Systems Architecture (OSA); replaces the intercommunications (ICS) and mission computer systems (MCS); modifies the cooling, electrical, and Ultra-High Frequency Command, Control and Communications (UHFC3) system; and addresses Internet Protocol Bandwidth Expansion IPBE impacts to pre-Block I baseline aircraft. Block I adds operator workstations throughout the aircraft to reduce workload and improve system interoperability, and provide a foundation for evolutionary upgrades. Other modifications (BLOCK 1A) include: An additional Auxiliary Power Unit (APU) to enhance power and cooling capabilities supporting the additional systems in the MLS OSA, a Very Low Frequency Transmitter (VLF-TX) obsolescence replacement, and a High Power Transmit Set (HPTS) subsystem refurbishment.

B. PROGRAM CHANGE SUMMARY

Funding:	FY 2007	FY 2008	FY 2009
FY2008 President's Budget	37.317	36.531	31.725
FY2009 President's Budget	36.395	35.777	47.495
Total Adjustments	-0.922	-0.754	15.770
Summary of Adjustments			
Congressional Reductions			
Congressional Rescissions			
Congressional Undistributed Reductions	-0.828	-0.247	
Congressional Increases			
Economic Assumptions			-0.244
Reprogrammings	-0.094		
Program Rephasing			16.000
Miscellaneous Adjustments		-0.507	0.014
Subtotal	-0.922	-0.754	15.770

Schedule:

(3002) Changes in the schedule are a result of a contract restructure which resulted in a one-year delay in Low Rate Initial Production (LRIP). This delay allows for the development, integration and test schedules to accommodate Internet Protocol Bandwidth Expansion (IPBE) impacts.

Technical:

Not Applicable

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2008
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0101402N, NAVY STRATEGIC COMMUNICATIONS	PROJECT NUMBER AND NAME 0793, E-6 SERVICE LIFE ASSESSMENT PROGRAM	

COST ($ in Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
0793 E-6 SERVICE LIFE ASSESSMENT PROGRAM	.900						
RDT&E Articles Qty							

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

A Service Life Assessment of selected critical components is being 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 service life. SLAP is a two-phase program. Phase 1 is conducting a general study to define the critical locations using data gathered from the fleet and previous test data. Phase 1A will use data gathered during Phase 1 to develop a finite element model. Phase 2 will conduct the detailed analyses of the critical locations. The contractor will analyze fleet aircraft and review onboard recorder data in order to generate an updated loads spectrum. The contractor will update the external/internal loads analysis associated with the updated loads spectrum and operational usage data. Utilizing the data from the first two steps, the contractor will update the existing E-6B Durability and Damage Tolerance Assessments. This data will then allow the contractor to update the Reliability-Centered Maintenance (RCM) analysis, and optimize the E-6B Maintenance Plans. The

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

Phase 2	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	.900		
RDT&E Articles Qty			

Funding supports the E-6B Service Life Assessment Program, which includes the following efforts: assemble and deliver GFI; assist contractor in developing critical location selection criteria; develop finite element model; perform RCM Analysis; assess scheduled maintenance impacts; perform supportability analysis; attend technical review meetings; review and correct CDRLs; determine the load-to-strain/stress relationships for each critical location; generate a service spectra and calculate critical location fatigue lives that 85 percent of the fleet should exceed; perform damage tolerance analysis to determine critical location inspection techniques and intervals; evaluate life enhancement potential for life-critical locations; modify the LOOPIN fatigue damage algorithms to accept available individual aircraft data (3M, NAVAIR form 13920/1, Structural Data Recording Set (SDRS), and structural configuration) to calculate individual aircraft fatigue life expended (FLE) values for all critical locations; validate SDRS for baseline individual aircraft FLE values; develop damage tolerance algorithms to accept available individual aircraft data (3M, NAVAIR form 13920/1, Structural Data Recording Set (SDRS), and structural configuration) to calculate individual aircraft crack size (growth) values for all critical locations.

C. OTHER PROGRAM FUNDING SUMMARY:	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost
056400 E-6 A/B Series	54.707	84.609	88.894	121.046	125.373	123.604	114.937	184.200	897.370

D. ACQUISITION STRATEGY:

SLAP is a sole source program due to the proprietary nature of the data needed to complete the required studies and analyses. Each phase of SLAP will be awarded a separate cost-reimbursable delivery order under a Basic Ordering Agreement (BOA) with Boeing.

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2008
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0101402N, NAVY STRATEGIC COMMUNICATIONS	PROJECT NUMBER AND NAME 3002, NAVY STRATEGIC COMMUNICATIONS BLOCK I	

COST ($ in Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
I	35.495	35.777	47.495	44.594	15.083	8.790		
RDT&E Articles Qty		1						

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The E-6B Block I modification program corrects Airborne National Command Post program FOT&E operational suitability deficiencies and addresses legacy system obsolescence issues. Without the Block I program, legacy system obsolescence will result in several unsupportable mission systems by 2010. Block I designs, develops, integrates, and tests a Multi-level Security (MLS) system, Open Systems Architecture (OSA); replaces the intercommunications (ICS) and mission computer systems (MCS); modifies the cooling, electrical, and Ultra-High Frequency Command, Control and Communications (UHFC3) system; and addresses Internet Protocol Bandwidth Expansion IPBE impacts to pre-Block I baseline aircraft. Block I adds operator workstations throughout the aircraft to reduce workload and improve system interoperability, and provide a foundation for evolutionary upgrades. Other modifications include: An additional Auxiliary Power Unit (APU) to enhance power and cooling capabilities supporting the additional systems in the MLS OSA, a Very Low Frequency Transmitter (VLF-TX) obsolescence replacement, and a High Power Transmit Set (HPTS) subsystem refurbishment.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

Aircraft Induction Readiness Review (IRR)	FY 07	FY 08	FY 09
Accomplishments / Effort / Sub-total Cost	3.866	6.191	7.248
RDT&E Articles Qty			

Funding supports Government acquisition planning, acquisition strategy adjustment, requirements analysis, industry conferences, DoD 5000 Series document development and revision, program management, technical reviews, oversight, SIL and aircraft modification and test, contract management; design, test readiness, and CDRL reviews; functional and physical configuration audits; technical interchange and program management meetings; development and operational test planning, execution, and reporting in support of government review and design approval of Block I and IA modifications. Development of design changes to accommodate Internet Protocol Bandwidth Expansion (IPBE) impacts and the Block IA increment will begin in FY08.

Aircraft IRR and Sys Integration Lab (SIL)	FY 07	FY 08	FY 09
Accomplishments / Effort / Sub-total Cost	2.728	1.699	2.685
RDT&E Articles Qty			

Funding will be used to buy contract support services to perform engineering, management, trade studies, and analysis to develop acquisition documents; plan logistics and training; develop and monitor schedules and revisions to DoD 5000 series documents; attend industry conferences; perform engineering and architectural studies and analyses; modify and test the SIL and aircraft; conduct functional and physical configuration audits; and review CDRLs for Block I and IA modifications. Development of design changes to accommodate Internet Protocol Bandwidth Expansion (IPBE) impacts and the Block IA increment will begin in FY08.

Aircraft IRR and SIL Install	FY 07	FY 08	FY 09
Accomplishments / Effort / Sub-total Cost	28.901	27.887	34.662
RDT&E Articles Qty			

Funding supports tasks allotted to the prime contract including; program initiation, engineering research, design development, integration and test of Block I and IA systems; preparation and presentation of the Block I and IA designs and test readiness reviews; SIL and aircraft modification, functional and physical configuration audits; contractor developmental test planning, leading to Low Rate Initial Production approval and award. Development of design changes to accommodate Internet Protocol Bandwidth Expansion (IPBE) impacts and the Block IA increment will begin in FY08.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2008
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0101402N, NAVY STRATEGIC COMMUNICATIONS	PROJECT NUMBER AND NAME 3002, NAVY STRATEGIC COMMUNICATIONS BLOCK I

DT/OT Testing	FY 07	FY 08	FY 09
Accomplishments / Effort / Sub-total Cost			2.900
RDT&E Articles Qty			

Funding supports Developmental Testing (DT) and Operational Testing (OT).

C. OTHER PROGRAM FUNDING SUMMARY:	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost
056400 E-6 A/B Series	54.707	84.609	88.894	121.046	125.373	123.604	114.937	184.200	897.370

D. ACQUISITION STRATEGY:

Competitively awarded Cost Plus Award Fee (CPAF) development contract and CPAF/Cost Plus Incentive Fee (CPIF) Low Rate Initial Production (LRIP) option with sole source follow-on Firm Fixed Price (FFP) Full Rate Production (FRP) contract. The current contract was modified on 13 April 2007 to a CPIF contract.

Exhibit R-3 Cost Analysis (page 1)		DATE: February 2008
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7	PROGRAM ELEMENT 0101402N, NAVY STRATEGIC COMMUNICATIONS	PROJECT NUMBER AND NAME 3002, NAVY STRATEGIC COMMUNICATIONS BLOCK I

Cost Categories	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PRODUCT DEVELOPMENT												
Primary Hdw Development	C/CPIF	ROCKWELL COLLINS ,Cedar Rapids, IA	50.482	28.901	Nov 2006	25.621	Nov 2007	13.807	Nov 2008	1.901	120.712	120.712
Award Fee	C/CPAF	ROCKWELL COLLINS ,Cedar Rapids, IA	3.751								3.751	3.751
Primary Hdw Development	C/CPIF	TBD				2.266	VARIOUS	19.655	VARIOUS	47.197	69.118	69.118
Training Development WST	C/CPIF	TBD						1.200	Nov 2008		1.200	1.200
SUBTOTAL PRODUCT DEVELOPMENT			54.233	28.901		27.887		34.662		49.098	194.781	

Remarks: The Rockwell Collins Primary Hardware contract was converted from a C/CPAF a C/CPIF beginning in FY07

SUPPORT												
STUDIES, ANALYSIS & EVAL	RX	VARIOUS	3.476	.028	Dec 2006	.034	Dec 2007	.036	Dec 2008	.108	3.682	
SUBTOTAL SUPPORT			3.476	.028		.034		.036		.108	3.682	

Remarks:

TEST & EVALUATION												
Developmental Test & Eval.	WX	NAWCAD, PATUXENT RIVER MD						2.900	Dec 2008	.581	3.481	
Operational Test & Eval.	WX	NAWCAD, PATUXENT RIVER MD								4.910	4.910	
SUBTOTAL TEST & EVALUATION								2.900		5.491	8.391	

Remarks:

MANAGEMENT												
Contractor Engineering Supt	RX	VARIOUS	8.021	1.537	Dec 2006	1.422	Dec 2007	1.822	Dec 2008	2.389	15.191	
Government Engineering Supt	WX	NAWCAD, PATUXENT RIVER MD	16.832	2.626	Dec 2006	2.655	Dec 2007	2.293	Dec 2008	3.638	28.044	
Government Engineering Supt	RX	VARIOUS	3.819	1.100	Dec 2006	3.236	Dec 2007	4.655	Dec 2008	6.143	18.953	
Program Management Supt	WX	VARIOUS	8.723	1.163	Dec 2006	.243	Dec 2007	.827	Dec 2008	.900	11.856	
Travel	TO	NAVAIR HQ, PATUXENT RIVER, MD	.668	.140	VARIOUS	.300	VARIOUS	.300	VARIOUS	.700	2.108	
SUBTOTAL MANAGEMENT			38.063	6.566		7.856		9.897		13.770	76.152	

Remarks:

Total Cost			95.772	35.495		35.777		47.495		68.467	283.006	

Remarks:

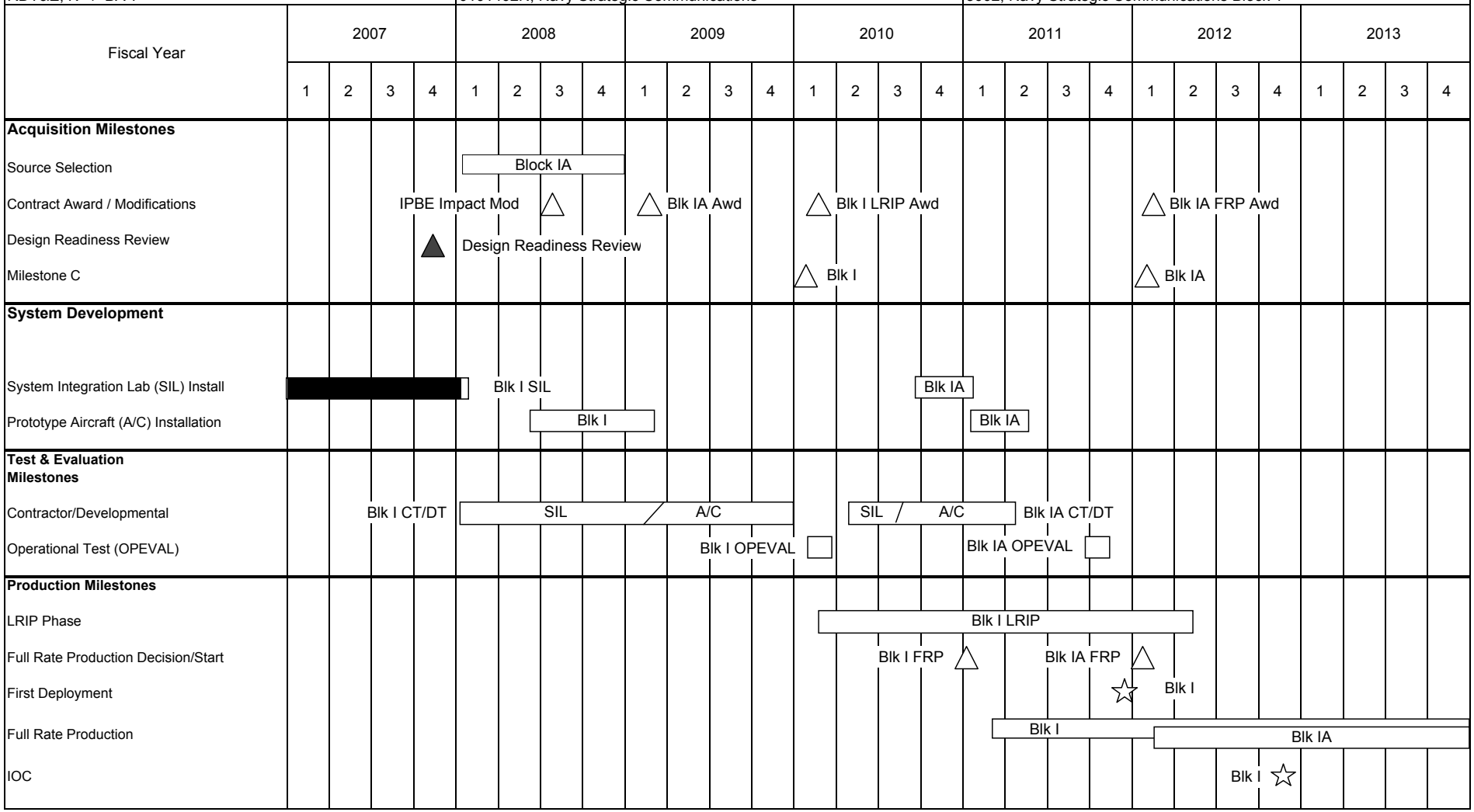
CLASSIFICATION:

EXHIBIT R4, Schedule Profile | DATE: February 2008

APPROPRIATION/BUDGET ACTIVITY: RDT&E, N / BA-7

PROGRAM ELEMENT NUMBER AND NAME: 0101402N, Navy Strategic Communications

PROJECT NUMBER AND NAME: 3002, Navy Strategic Communications Block 1



CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: February 2008	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT 0101402N, Navy Strategic Communications				PROJECT NUMBER AND NAME 3002, Navy Strategic Communications Block 1		
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Systems Integration Lab (Blk I)	1Q-4Q	1Q					
Design Readiness Review	4Q						
Source Selection (Blk IA)		1Q-4Q					
Contractor/Developmental Testing (CT/DT) (Blk I)		1Q-4Q	1Q-4Q				
Prototype Aircraft Installation (Blk I)		2Q-4Q	1Q				
Contract Award (IPBE)		3Q					
Contract Award (Blk IA)			1Q				
Milestone C (MS-C) (Blk I)				1Q			
Contract Award LRIP (Blk I)				1Q			
Operational Testing (OPEVAL) (Blk I)				1Q			
LRIP Phase				1Q-4Q	1Q-4Q	1Q-2Q	
Contractor/Developmental Testing (CT/DT) (Blk IA)				2Q-4Q	1Q-2Q		
Systems Integration Lab (Blk IA)				3Q-4Q	1Q		
Full Rate Production (FRP) Decision/Start (Blk I)					1Q		
Prototype Aircraft Installation (Blk IA)					1Q-2Q		
Full Rate Production (FRP) (Blk I)					1Q-4Q	1Q-4Q	1Q-4Q
Operational Testing (OPEVAL) (Blk IA)					3Q-4Q		
First Deployment					4Q		
Full Rate Production (FRP) Decision/Start (Blk IA)						1Q	
Milestone C (MS-C) (Blk IA)						1Q	
Contract Award FRP (Blk IA)						1Q	
Full Rate Production (FRP) (Blk IA)						1Q-4Q	1Q-4Q
IOC (Blk I)						4Q	