EXHIBIT R-2, RDT&E Budget Item Justification						DATE: February 2008	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5						R-1 ITEM NOMENCLATURE 0604504N, AIR CONTROL	
COST ($ in Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Total PE Cost	4.587	4.072	8.191	6.594	6.554	6.975	7.131
0718 MARINE AIR TRAFFIC (MATCALS)	.714	1.145	2.253	.519	.398	.680	.697
0993 CARRIER ATC	3.466	2.927	5.492	5.631	5.707	5.838	5.966
1657 ATC IMPROVEMENT	.407		.446	.444	.449	.457	.468

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program element provides for the development, integration, and testing of automated Air Traffic Control (ATC) hardware and software required to provide improved flight safety and more reliable all-weather ATC and landing system capabilities at Naval Air Stations (NASs) and Marine Corps Air Stations (MCASs) and Fleet Area Control and Surveillance Facilities (FACSFAC) worldwide. Funded programs are required to upgrade or replace aging ATC and landing system equipment on aircraft, aircraft carriers, amphibious ships, NASs, MCASs and Navy/Marine Corps tactical/expeditionary airfields and remote landing sites.

B. PROGRAM CHANGE SUMMARY

Funding:	FY 2007	FY 2008	FY 2009
Previous President's Budget:	4.586	4.166	8.296
Current BES:	4.587	4.072	8.191
Total Adjustments	0.001	-0.094	-0.105
Summary of Adjustments			
Congressional Reductions			
Congressional Rescissions			
Congressional Undistributed Reductions	-0.089	-0.031	
Congressional Increases			
Economic Assumptions			-0.041
Miscellaneous Adjustments	0.090	-0.063	-0.064
Subtotal	0.001	-0.094	-0.105

SCHEDULE:

0718: The MATCALS Air Surveillance and Precision Approach Radar Control System (ASPARCS) Production Contract Award and Delivery milestones have been modified to reflect the most current program schedule. The MATCALS ATC Common Aviation Command and Control System (CAC2S) schedule has been extended out to FY 2012 due to a budget reduction in FY 2008 and to better align with the CAC2S program element.

0993: The AN/TPX-42 ATC Common Console Field Change 3 development effort was extended six to nine months to accommodate integration and environmental testing issues. The Test Readiness Review (TRR), Operational Assessment (OA) and Production milestones have been modified to reflect the most current program schedule.

TECHNICAL: Not Applicable

EXHIBIT R-2a, RDT&E Project Justification										DATE: February 2008	
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5		PROGRAM ELEMENT NUMBER AND NAME 0604504N, AIR CONTROL					PROJECT NUMBER AND NAME 0718, MARINE AIR TRAFFIC (MATCALS)				
COST ($ in Millions)					FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
0718 MARINE AIR TRAFFIC (MATCALS)					.714	1.145	2.253	.519	.398	.680	.697
RDT&E Articles Qty											

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This program provides for continued development, integration, and testing of hardware and software to meet requirements for all-weather operation and improved flight safety of Air Traffic Control and Landing Systems at Marine Corps expeditionary airfields. Current program includes approved transition to Air Surveillance and Precision Approach Radar Control System (ASPARCS). The ASPARCS will replace the legacy Air Traffic Control (ATC) Precision Approach Radar (PAR), Air Surveillance Radar (ASR), and Communications and Control Subsystem with a High Mobility Multipurpose Wheeled Vehicle (HMMWV) based PAR, ASR, and Command and Control (C2) Subsystem. Efforts will commence for requirements definition, development and engineering for the ASPARCS Preplanned Product Improvements (P3I), in accordance with Marine Corps Requirements Oversight Council (MROC) Decision Memorandum 11-2005 dated Dec 2004. P3I includes the design and development of software code to interface Common Aviation Command and Control System (CAC2S) input/output to existing software, incorporating Radar Range Extension and Mapping functionality, enhanced simulation and training and providing increased operator workstations.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

ASPARCS Improvements		FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost		.714	.637	.668
RDT&E Articles Qty				

Investigate and resolve obsolescence issues. Perform studies and analyses to implement P3I and other evolutionary improvements. Develop criteria for existing ASPARCS software to achieve Defense Information Infrastructure-Common Operating Environment (DII-COE) Level 5 compliance, Information Assurance, Radar Range Extension and Mapping functionality,and enhanced simulation and training into the existing ASPARCS software. Perform studies and analyses.

ATC Interface with CAC2S		FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost			.508	1.585
RDT&E Articles Qty				

Develop the ATC interface increment for the Common Aviation Command and Control System (CAC2S) , which will allow the ATC detachment to exchange radar track data with the Marine Air Command and Control Squadron (MACCS) and joint agencies.

C. OTHER PROGRAM FUNDING SUMMARY:	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost
* 56 - OPN BLI 281500, MATCALS	31.069	19.964	17.409	17.749	18.162	2.627	2.643	Continuing	Continuing

* OPN BLI 281500, MATCALS is not limited to ASPARCS.

D. ACQUISITION STRATEGY:

ASPARCS is an ACAT IVT program. Lockheed Martin was awarded the contract for this effort in June 2000. This effort included First Article development (Fixed Price Incentive) with (Firm Fixed Priced) production options. Schedule delays and technical issues with the Precision Approach Radar (PAR) and Air Surveillance Radar (ASR) and integration with the operation subsystem/communication subsystem resulted in a no-cost close out to the Lockheed Martin contract in November 2004. An Acquisition Decision Memorandum was signed in Jan 2005 approving the procurement of the Army AN/TPN-31 System to fulfill the ASPARCS requirement for July 2006. The Marine Corps Requirements Oversight Council (MROC) Decision Memorandum 11-2005 of December 2004 outlined the evolutionary improvements envisioned by Headquarters Marine Corps (HQMC). This program has joined with the Army to implement Pre-Planned Product Improvements (P3I) and evolutionary product improvements.

Exhibit R-3 Cost Analysis (page 1)									DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5		PROGRAM ELEMENT 0604504N, AIR CONTROL				PROJECT NUMBER AND NAME 0718, MARINE AIR TRAFFIC (MATCALS)					
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
Primary Hardware Development	C/FFP	Raytheon/Marlboro, MA	13.806								13.806	13.806
Primary Hardware Development	WX	NAWCAD S.I., MD				.508	3/08	1.585	12/08	Continuing	Continuing	
Training Development	WX	NAWCAD S.I., MD	0.175								.175	
Systems Engineering	WX	NAWCAD S.I., MD	5.131								5.131	
Ancillary Hardware Development	SS/FFP	Rockwell Collins/Rochester, NY	0.424								.424	.424
Primary Hdw Development (TTLS)	SS/FFP	ANPC/Hood River, OR	2.000								2.000	2.000
GFE	WX	NCCOSC/San Diego, CA	.175								.175	
P3I	SS/FFP	US Army/Redstone Arsenal, AL	6.213								6.213	6.213
SUBTOTAL PRODUCT DEVELOPMENT			27.924			.508		1.585		Continuing	Continuing	

Remarks: The program has joined with the U.S. Army for pre-planned product improvements.

Integrated Logistics Support	SS/FFP	US Army/Redstone Arsenal, AL	0.336								.336	.336
Configuration Management	WX	NAWCAD S.I., MD	0.284								.284	
Technical Data	WX	NAWCAD S.I., MD	0.479								.479	
Development Support MATCALS	WX	NAWCAD S.I, MD.	0.205								.205	
Studies and Analyses	SS/FFP	Raytheon/Largo, FL		.714	02/07	.637	02/08	.668	02/09	Continuing	Continuing	
SUBTOTAL SUPPORT			1.304	.714		.637		.668		Continuing	Continuing	

Remarks:

Developmental Test & Evaluation	WX	NAWCAD S.I., MD	7.261								7.261	
Operational Test & Evaluation	WX	MCOTEA/Quantico, VA	1.072								1.072	
SUBTOTAL TEST & EVALUATION			8.333								8.333	

Remarks:

Travel	TO	NAVAIR HQ, PATUXENT RIVER, MD	0.081								.081	
SUBTOTAL MANAGEMENT			.081								.081	

Remarks:

Total Cost			37.642	.714		1.145		2.253		Continuing	Continuing	

CLASSIFICATION:

EXHIBIT R4, Schedule Profile
ASPARCS

DATE: February 2008

APPROPRIATION/BUDGET ACTIVITY
RDT&E,N / BA-5

PROGRAM ELEMENT NUMBER AND NAME
0604504N, AIR CONTROL

PROJECT NUMBER AND NAME
0718, MARINE AIR TRAFFIC (MATCALS)

Fiscal Year	FY 2007				FY 2008				FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	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																												
ASPARCS System		IOC ▲																										
Pre-Planned Improvements Obsolescence Studies	■	■	■	■	■	■	■	■	System Development																			
Test & Evaluation Milestones																												
Development Test																												
Operational Test																												
Production Milestones																												
Follow on Production FY 06 (2)		▲				△				△				△				△										
Follow on Production FY 07 (2)																												
Follow on Production FY 08 (2)																												
Follow on Production FY 09 (2)																												
Follow on Production FY 10 (2)																												
Follow on Production FY 11 (2)																												
Follow on Production FY 12 (2)																												
Production Deliveries						2	2				2					2							2					

CLASSIFICATION:

Exhibit R-4a, Schedule Detail ASPARCS						DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5	PROGRAM ELEMENT 0604504N, AIR CONTROL				PROJECT NUMBER AND NAME 0718, MARINE AIR TRAFFIC (MATCALS)			
Schedule Profile		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
IOC		2Q						
System Development		1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
Production Contract Award		2Q	2Q	1Q	1Q	1Q		
Production Deliveries			2Q, 3Q	3Q	3Q	3Q	3Q	

CLASSIFICATION:

EXHIBIT R4, Schedule Profile CAC2S																													DATE: February 2008			
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5									PROGRAM ELEMENT NUMBER AND NAME 0604504N, AIR CONTROL												PROJECT NUMBER AND NAME 0718, MARINE AIR TRAFFIC (MATCALS)											
Fiscal Year					FY 2007				FY 2008				FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
					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																																
CAC2S																											IOC △					
ATC Interface Increment Development											System Development																					
Production Milestones CAC2S Systems Follow on Production (FY 10) Follow on Production (FY 11) Follow on Production (FY 12) Follow on Production (FY 13)																											△			△		
Production Deliveries																												1			1	

CLASSIFICATION:

Exhibit R-4a, Schedule Detail CAC2S						DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5	PROGRAM ELEMENT 0604504N, AIR CONTROL				PROJECT NUMBER AND NAME 0718, MARINE AIR TRAFFIC (MATCALS)			
Schedule Profile	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
IOC							3Q	
System Development (ATC Interface)			3Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-2Q	
Production Contract Award							3Q	2Q
Production Deliveries							4Q	3Q

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2008
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604504N, AIR CONTROL	PROJECT NUMBER AND NAME 0993, CARRIER ATC	

COST ($ in Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
0993 CARRIER ATC	3.466	2.927	5.492	5.631	5.707	5.838	5.966
RDT&E Articles Qty							

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Shipboard Air Traffic Control Central systems, interfacing with versions of the AN/TPX-42(V) Direct Altitude and Identity Readout system (DAIR), allow Shipboard Air Traffic Controllers to identify, marshal, and direct aircraft within a 50 Nautical Mile (NM) radius of the ship. At closer range (8NM) a ship's Automatic Carrier Landing System (ACLS) and Independent Landing Monitor (ILM) are operationally required to effect safe landing on the moving decks of ships. The AN/SPN-41 ILM and AN/SPN-46 ACLS provide verification of aircraft approach glideslope position and precise aircraft automatic control respectively during its final approach and landing sequence to an aircraft carrier. Dual efforts are underway to improve the AN/SPN-46 system availability and supportability until at least September 2020. These efforts include various Engineering Change Proposals (ECPs), and the Life Cycle Extension (LCE) program transitional changes include a re-architecture of its radar control group process with COTS technology, replacement of the computer group processing hardware, and conversion of system program software from CMS-2 to the more commonly used 'C' programming language. In recent years, the top 25% of the AN/SPN-43 frequency band has been reallocated to the Fixed Wireless Access community. Because the Navy requires an air traffic control radar, this project unit will include engineering efforts to identify requirements and develop a suitable replacement before the AN/SPN-43 becomes operationally ineffectual. Finally, the AN/TPX-42A(V)14 DAIR underwent several phased upgrades that have resulted in three field changes. System improvements include replacing militarized front-end equipment in the track processor with COTS technology, converting the operational program software to more commonly used and flexible 'C' language, integrating and interface with Mode 5 IFF, and integrating a flat panel monitor into the AN/UYQ-70 console. The development of an Air Traffic Control common console will reduce operational costs, improve reliability, and provide compatible interfaces and commonality for all ATC workstations.

Test Article Descriptions:

For AN/SPN-46 Computer Group, a test article is required to perform a series of tests beginning December 2007 and completing in September 2009. This test article will replace two existing computer racks with a single rack utilizing a set of state-of-the-art Versa Module Eurocard processors and software rewritten in a high order program language ("C").

For AN/TPX-42, Air Traffic Control Common Console a test article is required to perform operational assessment in 4th quarter FY2007. The test article is best described primarily in terms of its functionality. It will combine the existing AN/TPX-42 console's hardware with the functionality to display targets processed by AN/TPX-42, AN/SPN-46 and the Joint Precision Approach and Landing System (JPALS).

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

AN/SPN-46 Computer Group Replacement	FY 2007	FY 2008	FY 2009
Accomplishments/Effort/Subtotal Cost	3.466	2.927	4.618
RDT&E Articles Qty			

This subproject replaces the AN/AYK-14 processor and converts software from CMS to "C" language. Conduct a software requirements review and develop a specification. Develop software and hardware, build a test article, and integrate and test it in a lab environment. Conduct a test readiness review, developmental test and operational test. The test article is required to perform a series of tests in December 2007. This test article will replace two existing computer racks with a single rack utilizing a set of state-of-the-art Versa Module Eurocard processors and software rewritten in a high order program language ("C")

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2008
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604504N, AIR CONTROL	PROJECT NUMBER AND NAME 0993, CARRIER ATC

AN/TPX-42 Improvements	FY 2007	FY 2008	FY 2009
Accomplishments/Effort/Subtotal Cost			.874
RDT&E Articles Qty			

Complete development of a Field Change 3 configuration to integrate Mode 5 capability, using the console from AN/TPX-42A(V)14 with Field Change 2 as the core technology. Conduct requirements and design reviews, and conduct an Operational Assessment. Following successful Full Rate Production approval, the design change will be introduced into the production of 'E', 'F' and 'G' Kits. Begin development of the final Air Traffic Control Console configuration in December 2008 to include JPALS interface and replacement of SPN-35 Operator displays. It is anticipated that this technology insertion will result in a formal nomenclature change for the AN/TPX-42 system, so the identification of the modification kits will change to 'H' Kits.Test article bought in FY2005 are required to perform environmental, shock, and vibration in 4th quarter FY2007.

C. OTHER PROGRAM FUNDING SUMMARY:	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost
57 - OPN BLI 283100 Shipboard Air Traffic Control	7.446	7.667	7.944	8.082	9.343	9.533	11.231	Continuing	Continuing
58 - OPN BLI 283200 Automatic Carrier Landing Systems	17.932	18.279	18.787	19.172	19.415	19.834	20.256	Continuing	Continuing

D. ACQUISITION STRATEGY:

AN/SPN-46 Computer Group replacement subprojects are part of the AN/SPN-46 Life Cycle Extension (LCE) project, which is an Engineering Change Proposal (ECP). Initial contract was awarded in November 2003 for the Rada Control Group, and the contract for the Computer Group was awarded in December 2005.

AN/TPX-42 Common Console is an anticipated Engineer Change Proposal (ECP), with improvements being incorporated into the production of AN/TPX-42 upgrade kits

All other projects are non-ACAT upgrades to existing systems. An evolutionary acquisition approach is being used to introduce these technology advancements that either satisfy user requirements, such as all weather operation, o address supportability and cost of ownership problems.

Exhibit R-3 Cost Analysis (page 1)									DATE: February 2008			
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5		PROGRAM ELEMENT 0604504N, AIR CONTROL				PROJECT NUMBER AND NAME 0993, CARRIER ATC						
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 Develop - SPN-46	WX	NAWCAD, Pax River, MD	11.238	0.310	11/06						11.548	
Primary Hdw Develop - SPN-46	SS/CPIF	SNC, Sierra, NV	6.086	0.270	12/06						6.356	6.356
Primary Hdw Develop - TPX-42	WX	NAWCAD, Pax River, MD	2.623								2.623	
SUBTOTAL PRODUCT DEVELOPMENT			19.947	0.580							20.527	

Remarks: WX is a funding document (2276A) being send to a NAVAIR Field Activity

SUPPORT												
Software Development - SPN-46	WX	NAWCAD, Pax River, MD	4.014	0.332	11/06	2.208	11/07	0.384	12/08	Continuing	Continuing	
Software Development - SPN-46	WX	NAWCAD, Pax River, MD		2.496	12/06	0.623	12/07	3.063	12/08		6.182	
Software Development - TPX-42	WX	NAWCAD, Pax River, MD	2.929					0.874	12/08		3.803	
Integrated Logistics Support - TPX-42	WX	NAWCAD, Pax River, MD	0.632								0.632	
Studies & Analyses - SPN-46	WX	NAWCAD, Pax River, MD	0.273								0.273	
SUBTOTAL SUPPORT			7.848	2.828		2.831		4.321		Continuing	Continuing	

Remarks:
Remarks: WX is a funding document (2276A) being send to a NAVAIR Field Activity

TEST & EVALUATION												
Developmental Test & Eval - SPN-46	WX	NAWCAD, Pax River, MD	0.626					1.117	12/08	Continuing	Continuing	
Developmental Test & Eval - TPX-42	WX	NAWCAD, Pax River, MD	0.748								0.748	
Operational Test & Eval - TPX-42	WX	OPTEVFOR, Norfolk, VA	0.062								0.062	
SUBTOTAL TEST & EVALUATION			1.436			0.000		1.117		Continuing	Continuing	

Remarks: WX is a funding document (2276A) being send to a NAVAIR Field Activity

MANAGEMENT												
Program Management Support	C/CPAF	NTA, Patuxent River, MD	1.296	0.043	12/06	.081	12/07	.039	12/08		1.459	1.459
Travel	TO	NAVAIRHQ, Pax River, MD	0.060	0.015	11/06	.015	11/07	.015	11/08	Continuing	Continuing	
SUBTOTAL MANAGEMENT			1.356	0.058		.096		.054		Continuing	Continuing	

Remarks: TO is a Travel Order

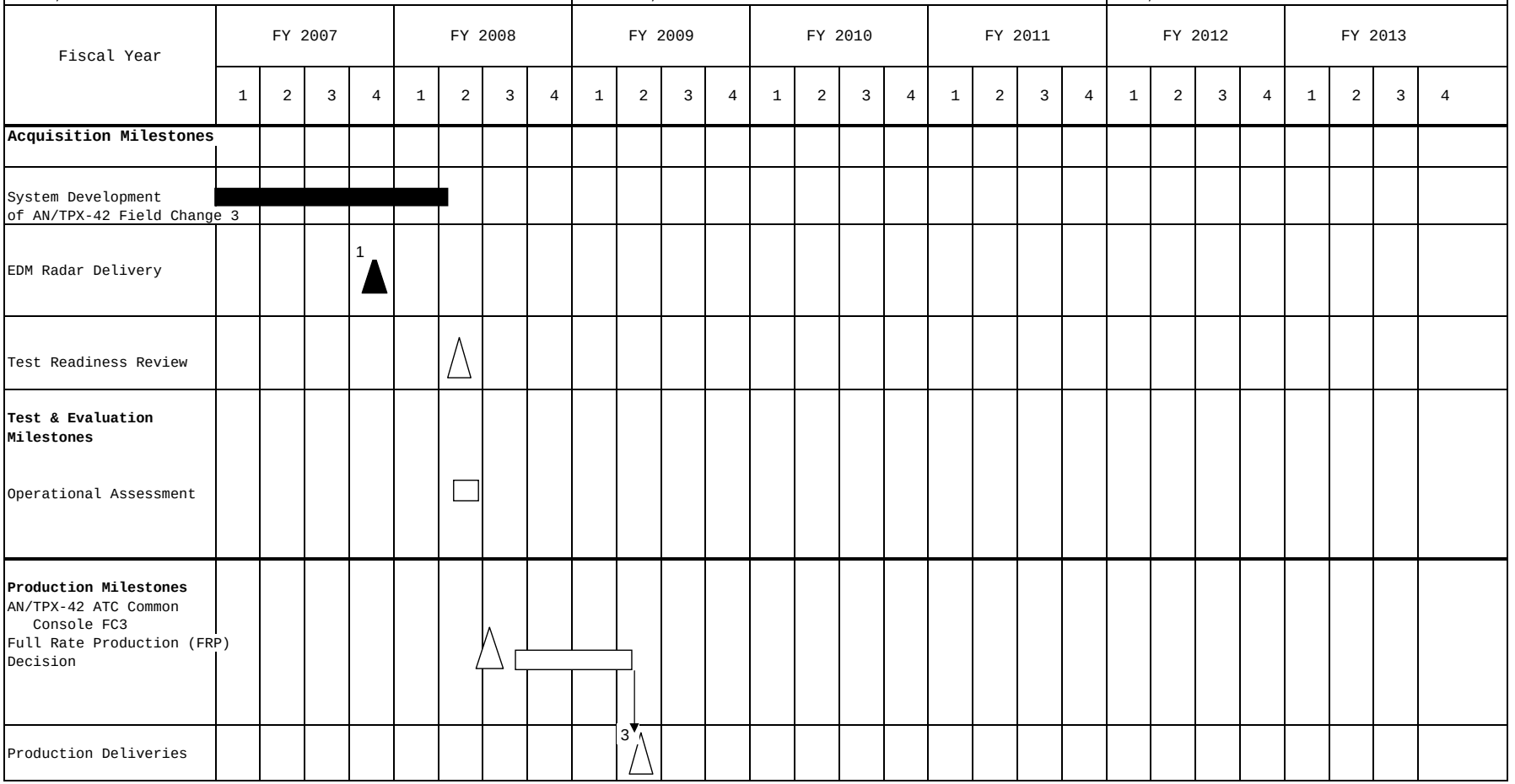
Total Cost			30.587	3.466		2.927		5.492		Continuing	Continuing	

CLASSIFICATION:

EXHIBIT R4, Schedule Profile
AN/TPX-42 Air Traffic Control Common Console Field Change 3

DATE: February 2008

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E,N / BA-5	0604504N, AIR CONTROL	0993, CARRIER ATC



CLASSIFICATION:

Exhibit R-4a, Schedule Detail AN/TPX-42 Air Traffic Control Common Console Field Change 3					DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5	PROGRAM ELEMENT 0604504N, AIR CONTROL				PROJECT NUMBER AND NAME 0993, CARRIER ATC		
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
System Development	1Q-4Q	1Q-2Q					
EDM Radar Delivery	4Q						
Test Readiness Review (TRR)	4Q	2Q					
Operational Assessment		2Q					
Full Rate Production (FRP) Decision		2Q-3Q					
Production Contract		3Q-4Q	1Q-2Q				
Production Deliveries (First Lot)			2Q				

EXHIBIT R4, Schedule Profile
AN/TPX-42B Air Traffic Control Common Console

DATE: February 2008

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E,N / BA-5	0604504N, AIR CONTROL	0993, CARRIER ATC

Fiscal Year	FY 2007				FY 2008				FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	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																												
System Requirements Review of AN/TPX-42B																												
Preliminary Design Review																												
System Development																												
Critical Design Review																												
Quality Design and Build																												
EDM Radar Delivery (Qty 1)																			1									
Test Readiness Review																												
Test & Evaluation Milestones																												
Operational Assessment																												
Production Milestones																												
Full Rate Production (FRP) Decision																												
Production Deliveries																										3		

CLASSIFICATION:

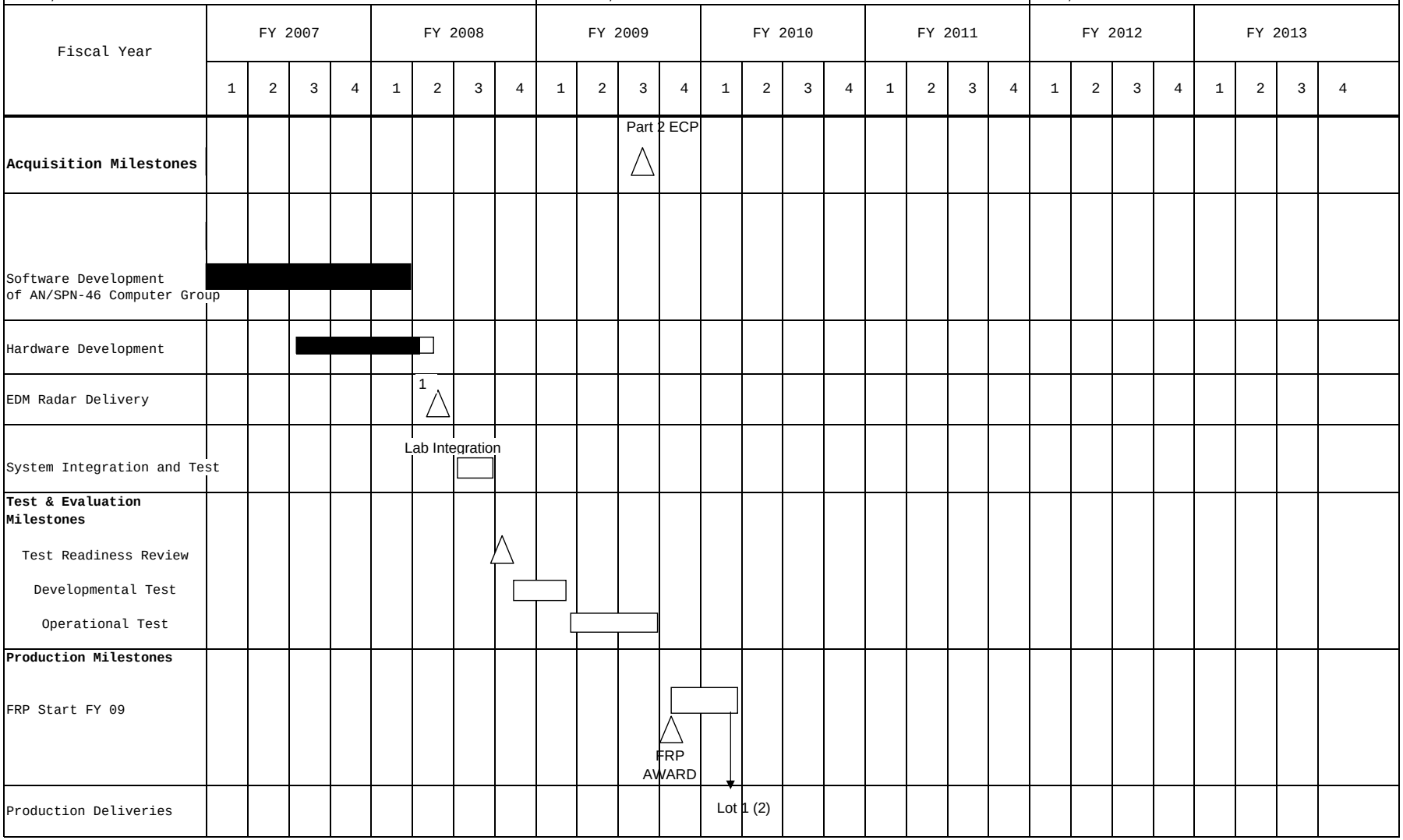
Exhibit R-4a, Schedule Detail AN/TPX-42B Air Traffic Control Common Console				DATE: February 2008			
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5	PROGRAM ELEMENT 0604504N, AIR CONTROL			PROJECT NUMBER AND NAME 0993, CARRIER ATC			
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
System Requirements Review (SRR)			1Q-4Q				
Preliminary Design Review (PDR)				1Q			
System Development				1Q-4Q			
Critical Design Review (CDR)				4Q	1Q		
Quality Design and Build				4Q	1Q-2Q		
EDM Radar Delivery					3Q		
Test Readiness Review (TRR)					3Q		
Operational Assessment					3Q		
Full Rate Production (FRP) Decision					4Q		
Production Contract Award						1Q-4Q	1Q
Production Deliveries (First Lot)							2Q

CLASSIFICATION:

EXHIBIT R4, Schedule Profile
AN/SPN-46 COMPUTER GROUP

DATE: February 2008

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E,N / BA-5	0604504N, AIR CONTROL	0993, CARRIER ATC



CLASSIFICATION:

Exhibit R-4a, Schedule Detail AN/SPN-46 COMPUTER GROUP					DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5	PROGRAM ELEMENT 0604504N, AIR CONTROL				PROJECT NUMBER AND NAME 0993, CARRIER ATC		
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Software Development	1Q-4Q	1Q					
Hardware Development	3Q-4Q	1Q-2Q					
EDM Radar Delivery		2Q					
System Integration and Test (Lab)		3Q					
Test Readiness Review (TRR)		4Q					
Developmental Test		4Q	1Q				
Operational Test			1Q-3Q				
Part 2 ECP			3Q				
Full Rate Production (FRP) Decision			4Q				
Production Contract			4Q	1Q			
Production Deliveries (First Lot)				1Q			

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2008
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604504N, AIR CONTROL	PROJECT NUMBER AND NAME 1657, ATC IMPROVEMENT	

COST ($ in Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
1657 ATC IMPROVEMENT	.407		.446	.444	.449	.457	.468	
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This program provides for engineering, development, integration, adaptation, and testing of new and/or modernized Air Traffic Control (ATC) systems, air navigational aids, landing systems, and ATC communication systems for Naval and Marine Corps Air Stations (NAS/MCAS) and Fleet Air Traffic Control Systems. These systems are critical to Naval Aviation and provide for safe, efficient air operations. Additionally, the Federal Aviation Administration (FAA) is effecting major modernization of the National Airspace System (NAS). The Navy must maintain compatibility with FAA developed ATC systems in order to ensure seamless interoperabilit within the NAS. NAS modernization initiatives in Project 1657 include the Visual Information Display System (VIDS) and follow-on Preplanned Product Improvements, with additional RDT&E efforts required for modifiec commercial-off-the-shelf (COTS) ATC systems and equipment for modernization and recapitalization of these systems at our NAS, MCAS & Fleet Area Control & Surveillance Facilities (FACSFACs) worldwide. Landing Systems initiatives include re-engineering and technology insertion efforts for the Precision Approach Radar (PAR), Tactical Air Navigation System (TACAN), and other landing systems.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

NAS_MOD VIDS	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	.287		.332
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Continue engineering development of pre-planned product improvements for the Visual Information Display Systems (VIDS) and initiate efforts to incorporate VIDS into the FACSFACs. Research display alternatives for Navy ATC systems, and evaluate alternatives for future communication and radar systems.

LANDING SYSTEMS PAR & TACAN	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	.100		.094
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Initiate re-engineering and technology insertion efforts for the Precision Approach Radar, the Tactical Air Navigation System and other Landing Systems and Navigation Aids.

FLEET ATC SYSTEMS	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost			.020
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Research efforts to determine the best technical approach to integrate various data link and communication system upgrades into the FACSFAC System including but not limited to the Digital Airport Surveillance Radar into the FACSFAC FACTS 3200 system. Evaluate alternatives for future processor/display systems.

FACSFAC	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	.020		
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FACSFAC
Research efforts to determine the best technical approach to integrate various data link and communication system upgrades into the FACSFAC System including but not limited to the Digital Airport Surveillance Radar into the FACSFAC FACTS 3200 system. Evaluate alternatives for future processor/display systems.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2008
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604504N, AIR CONTROL	PROJECT NUMBER AND NAME 1657, ATC IMPROVEMENT

C. OTHER PROGRAM FUNDING SUMMARY:	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost
59 - OPN BLI 284000 National Air Space System	27.319	23.786	29.066	29.306	29.760	30.391	31.066	Continuing	Continuing
60 - OPN BLI 284500 Fleet Air Traffic Control Systems	18.053	13.992	8.238	8.304	8.475	8.652	8.845	Continuing	Continuing
61 - OPN BLI 284600 Landing Systems	9.120	9.321	10.799	10.677	10.890	11.120	11.351	Continuing	Continuing
62 - OPN BLI 284700 FACSFAC	2.266	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.266

Note: FACSFAC OPN Budget is being merged with the Fleet Air Traffic Control Systems budget (BLI 284500) effective FY2008

D. ACQUISITION STRATEGY:

All Projects are non-ACAT upgrades to existing systems. An evolutionary acquisition approach is being used to introduce technology advancements that either satisfy emergent requirements or address supportability and cost of ownership problems.