

EXHIBIT R-2, RDT&E Budget Item Justification						DATE:		
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE		
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5						0604214N, AV-8B A/C - ENGINEERING DEV.		
COST (\$ in Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
Total PE Cost	20.902	17.011	29.924	18.086	12.313	12.547	12.818	
0652 AV-8B	20.902	17.011	25.915	14.571	12.313	12.547	12.818	
Ejector Rack			4.009	3.515				

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The program provides AV-8B Design, Development, Integration and Test of the following improvements: The Engine Life Management Program (ELMP), Escape System, Joint Mission Planning System (JMPS), Block upgrade H6.0 to various Mission Systems such as Tactical Aircraft Moving Map Capability (TAMMAC), communications system, navigation equipment, H4.0/Weapons carriage expansion and countermeasures, and Aircraft Handling/Readiness Management Plan (RMP). The JMPS/AVJMPS is required as part of the DON directed migration to a common Navy and Marine Corps mission planning system. The TAMMAC is the avionics system that replaced the aging/obsolete AN/ASQ-196 digital map set and the AN/ASQ-194 data storage set presently installed. A/C Handling and performance is all engineering activities for development and design to support aircraft safety flight clearance and concept exploration to support POM objectives. PMA-257's Evolutionary Acquisition Strategy includes Design, Development, Integration and Test activity under the consolidated effort of Block Developments: H4.0, H5.0, H6.0, H7.0 H8.0 and follow-on systems. TAMMAC is planned for incorporation into Block H4.0. H6.0 block upgrade will provide upgrades to the aircraft communications system for interoperability within the Network-centric warfare operational area. Additionally, the program provides weapons carriage expansion by design, development, integration and testing of additional precision guided and linked programmable weapon capabilities, digital close air support improvements, and video and data link improvements. The H5.0 also provides weapons carriage capability of the listening pod on centerline/station 4. This is an upgrade to the standard AV-8B aircraft capability. H7.0 Block upgrade will provide additional communications/data link upgrades and weapon expansion. H8.0 provides the follow-on step toward an integrated air picture within the Battle Space Network via Multifunctional Information Distribution System (MIDS)MIDS/RS-Link-16 participation within the Global Information Grid (GIG). The ELMP is a comprehensive plan to increase safety of flight and operational readiness of the AV-8B F402-RR-408 Engine and accessories. PMA-257 will accomplish this mission by conducting Engineering Project Description (EPD) investigations and performing a series of planned Accelerated Simulated Mission Endurance Test (ASMET) to derive engineering improvements to the engine. The Escape System qualifies an improved ejection seat to reduce the risk of injury to aircrew. The RMP is required to ensure the AV-8B air vehicle's sustained mission availability, and safe and reliable operational readiness until end of service. Air vehicle sustainment requires component and system analyses, technical planning, identification and diagnosis of problems and the development, testing and flight clearance of engineering solutions in the areas of flight and crew safety, structural integrity, obsolescence, systems reliability and maintainability, inventory preservation, or other emergent material or equipment conditions affecting AV-8B systems readiness. Activities include research/analysis for system safety deficiency corrections, fuel system safety improvements, structural analyses, monitoring and integrity analysis, component obsolescence analyses including development of display computer and air data computer replacement, alternatives explorations for aging equipment, reliability improvement analyses and design developments.

FY 2007 Title IX GWOT Supplemental funding was provided for the AV-8B Listening on Centerline Development (\$6.6M) and AV-8B Low Pressure Compressor LPC1 Blade (\$1.2M). FY2008 funding totals do not include \$6.4M previously requested for current FY2008 GWOT requirements. FY2009 and FY2010 funding in the amount of \$4.009 and \$3.515, respectively was realigned from P.E. 0205633N, PU 3189, for Digital Improved Triple Ejector Rack (D-ITER).

B. PROGRAM CHANGE SUMMARY

Funding:	FY 2007	FY 2008	FY 2009
FY 2008 President's Budget:	13.826	17.360	26.277
FY 2009 President's Budget:	20.902	17.011	29.924
Total Adjustments	7.076	-0.349	3.647

Summary of Adjustments

Congressional Reductions			
Congressional Rescissions			
Congressional Undistributed Reductions	-0.454	-0.110	
Congressional Increases	7.856		
Economic Assumptions			-0.157
Miscellaneous Adjustments	-0.326	-0.239	3.804
Subtotal	7.076	-0.349	3.647

Schedule: The H4.0 development schedule had a 2-3 QTR slip due to GPS Software issues and the H5.0 development schedule has a month slip due to ALE-47 Software requirements. The display computer OT, OTRR schedule has slipped approximately 2 months due to leadtime required for display computers to be used in OT. RMP's Air Data Computer (ADC) milestones have been added. Schedule added for Digital I-TER.

Technical: N/A

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5		PROGRAM ELEMENT NUMBER AND NAME 0604214N, AV-8B AIRCRAFT - ENGINEERING DEVELOPMENT			PROJECT NUMBER AND NAME 0652, AV-8B			
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
0652 AV-8B		20.902	17.011	25.915	14.571	12.313	12.547	12.818
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The program provides AV-8B Design, Development, Integration and Test of the following improvements: The Engine Life Management Program (ELMP), Escape System, Tactical Aircraft Moving Map Capability (TAMMAC) and Aircraft Handling/Readiness Management Plan (RMP). The ELMP is a comprehensive plan to increase safety of flight and operational readiness of the AV-8B F402-RR-408 Engine and Gas Turbine Starter (GTS). PMA-257 will accomplish this mission by the Component Improvement Program and conduct Engineering Project Description investigations and performing a series of planned Accelerated Simulated Mission Endurance Tests (ASMET) to derive engineering improvements to the engine. The Escape System qualifies an improved ejection seat to reduce the risk of injury to aircrew. The JMPS/AVJMPS is required as part of the DON directed migration to a common Navy and Marine Corps mission planning system and TAMMAC functionality in H4.0 block development. H5.0 Block Upgrade provides Dual Mode Laser Guided Bombs (DMLGB) H6.0 includes weapons carriage expansion efforts and provides the first step toward Battle Space Networking interoperability within the Netcentric OP-area. PMA-257 is working closely with PMA-209 common avionics and the Allies (Spain, Italy and the UK) on this effort. A/C Handling and performance is all engineering activities for development and design to support aircraft safety flight clearance and concept exploration for resolution of emergent service life and readiness issues.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

Development of RMP ECP's	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	3.836	7.763	12.609
RDT&E Articles Qty			

Conduct system analyses, identification and diagnoses of problems and the development and testing of engineering solutions in the areas of flight and crew safety, structural integrity, obsolescence, systems reliability and maintainability, inventory preservation, or other emergent material or equipment conditions affecting AV-8B systems readiness. Address known and emergent readiness improvements and correction of deficiencies and issues including obsolescence and structural fatigue. Activities include: component obsolescence analyses including development of display computer and air data computer replacement and alternatives explorations for the air data computer and other aging equipment, crew ejection system and other safety deficiency corrections; fuel system safety improvements; structural analyses, monitoring, and integrity modifications; reliability improvement analyses and design developments.

Completion of ASMET IV Testing	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	7.522	7.042	9.449
RDT&E Articles Qty			

Testing, analysis and integration to improve safety of flight and operational readiness of the AV-8B Engine and accessories. Plan and complete ASMET V testing and develop new engine design efforts. Research, analysis, and develop design changes for engine accessories. Formalize Engine design development efforts based off of ASMET IV and incorporate into the engine. Address performance, reliability and obsolescence of F402 Engine Monitoring System by improving operator awareness and troubleshooting capability for maintainers. Conduct flight tests of the F402-RR-408 engine Low Pressure Compressor (LPC1) blade failures to mitigate blade stress. This testing assist is providing an immediate solution to the blade failures to increase safety of flight issues occurring in deployed squadrons in support of GWOT.

Completed Development and DT Testing of H4.0/FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	9.544	3.857
RDT&E Articles Qty		

H4.0 Block Upgrade Development including AV-8B Joint Mission Planning System (AVJMPS) improvements and integration of the Tactical Moving Map Capability (TAMMAC). H5.0 Block Upgrade provides Dual Mode Laser Guided Bombs (DMLGB), Litening Centerline/Station 4 support the movement of the Litening targeting pod to the AV-8B centerline station allowing carriage of both left and right hand configured pods. (Improvement of current weapons carriage capability), Early Variable Message Format (VMF) Communication Development, H4.0/TAMMAC Software Trouble Reports (STRs).

EXHIBIT R-2a, RDT&E Project Justification		DATE:
		February 2008
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E,N / BA-5	0604214N, AV-8B AIRCRAFT - ENGINEERING DEVELOPMENT	0652, AV-8B

C. OTHER PROGRAM FUNDING SUMMARY:	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost
APN BLI 051400, AV-8B Series Modification	67.854	36.004	51.093	36.380	28.403	22.195	21.946	116.100	379.975
RDTE PE 0604215N PU 0572 Joint Services Stand	56.057	90.714	59.142	25.435	19.301	18.942	15.883		285.474

D. ACQUISITION STRATEGY: All efforts under Aircraft Handling/RMP provide investigations and analysis of testing and flight clearance authorization necessary to assess overall system capability and integration of projects. Funding for the Engine Life Management Program (ELMP) will be placed on a cost type contract to Rolls Royce to address safety of flight issues, top readiness degraders, engine removal and mission failure drivers in order to improve Fleet readiness and cost of ownership. It is also developed to assess life management program issues and design fixes for any service revealed deficiencies. PMA-257's Evolutionary Acquisition Strategy includes Design, Development, Integration and Test activity under the consolidated effort of Block Developments: H2.0, H4.0, H5.0, H6.0, H7.0 H8.0 and following systems. The development and integration of JMPS/AVJMPS occurred concurrently with H2.0. Additional improvements are included in H.40 TAMMAC is planned for incorporation into Block H4.0. H6.0 provides weapons carriage expansion efforts and the first step toward Battle Space Networking interoperability within the Netcentric OP-area. H7.0 provides the follow-on step toward an integrated air picture within the Battle Space Network via MIDS/RS-Link-16 participation within the GIG. H5.0 Block Upgrade provides Dual Mode Laser Guided Bombs (DMLGB), Litening Centerline/Station 4 (Improvement of current weapons carriage capability), PMA-257 is working closely with the Allies (Spain, Italy, UK) and PMA-209 Common Avionics on this effort for H6.0 and H8.0.

Exhibit R-3 Cost Analysis (page 1)										DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT				PROJECT NUMBER AND NAME						
RDT&E,N / BA-5		0604214N, AV-8B AIRCRAFT - ENGINEERING DEVELOPMENT				0652, AV-8B						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total P Y s 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-CPFF	MANAGEMENT SCIENCES, INC				.849	Various	3.569	Various	1.482	5.900	
Primary Hdw Development	C-CPFF	ROLLS-ROYCE PLC, BRISTOL GB	10.714	2.590	Jan 2007	3.458	Dec 2007	2.972	Dec 2008	14.353	34.087	34.087
Primary Hdw Development	C-CPFF	MCDONNELL DOUGLAS CORP, SAINT LOUIS, MO	.216	.216	Dec 2006	3.465	Dec 2007	1.807	Dec 2008	1.251	6.955	6.955
Primary Hdw Development	VARIOUS	Goodrich Power Systems, PITSTONE, BU		1.300	Various	.851	Various	1.500	Various	11.978	15.629	15.629
Primary Hdw Development	WX	NAWCWD, CHINA LAKE CA	37.473			.443	Nov 2007	1.205	Nov 2008	.690	39.811	
Primary Hdw Development	VARIOUS	VARIOUS	9.387	.142	Various	.142	Various			11.719	21.390	
Systems Engineering	VARIOUS	MCDONNELL DOUGLAS CORP, SAINT LOUIS, MO	1.781	1.494	Various	1.435	Various	.223	Various		4.933	4.933
Systems Engineering	VARIOUS	VARIOUS	.350	.100	Various	.070	Various	.070	Various	.289	.879	.879
Systems Engineering	VARIOUS	NAWCWD, CHINA LAKE CA		.520	Dec 2006						.520	
SUBTOTAL PRODUCT DEVELOPMENT			59.920	6.362		10.713		11.346		41.762	130.103	

Remarks: Added Managemet Sciences, Inc. Totals may not add due to rounding.

SUPPORT												
Configuration Mgmt	VARIOUS	VARIOUS	.169	.187	Various	.041	Various	.043	Various	.192	.632	
Engineering Technical Services	C-CPFF	EDO PROFESSIONAL SERVICES INC., ARLINGTON, VA	1.018	.719	Apr 2007						1.737	1.737
Integrated Logistics Sup	WX	NAWCAD, PATUXENT RIVER MD	.731	.374	Nov 2006	.261	Nov 2007	.254	Nov 2008	Continuing	Continuing	
Software Development	VARIOUS	DCMA BOEING ST LOUIS, ST LOUIS, MO		1.148	Various		Various	1.474	Various		2.622	2.622
Software Development	WX	NAWCWD, CHINA LAKE CA	.662	3.893	Feb 2007	.307	Nov 2007	1.359	Nov 2008	2.209	8.430	8.430
Software Development	VARIOUS	VARIOUS	17.474	1.401	Various						18.875	18.875
Studies & Analysis	VARIOUS	VARIOUS	.388	.817	Various	.614	Various	.420	Various	Continuing	Continuing	
Support	VARIOUS	DCMA BOEING ST LOUIS, ST LOUIS, MO	5.190	.300	Various						5.490	5.490
Technical Data	C-CPFF	VARIOUS	.823	.460	May 2007	.465	May 2008	.485	May 2009	2.338	4.570	4.570
SUBTOTAL SUPPORT			26.455	9.299		1.688		4.035		Continuing	Continuing	

Remarks: Totals may not add due to rounding.

TEST & EVALUATION												
Developmental Test & Eval	CPFF	MCDONNELL DOUGLAS CORP, SAINT LOUIS, MO						3.112	Various	5.689	8.801	8.801
Developmental Test & Eval	WX	NAWCWD, CHINA LAKE CA	35.488	.377	Various	.355	Various	1.334	Various	2.499	40.053	
Operational Test & Eval	WX	OPER T & E FOR CD 30, NORFOLK VA	19.458	1.294	Feb 2007	1.420	Mar 2008			1.847	24.018	
Operational Test & Eval	WX	NAWCWD, CHINA LAKE CA		.404	May 2007	.095	May 2008				.499	
Test Assets	CPFF	MCDONNELL DOUGLAS CORP, SAINT LOUIS, MO				.972	Jan 2008	3.820	Jan 2009	2.225	7.017	7.017
SUBTOTAL TEST & EVALUATION			54.946	2.075		2.842		8.266		12.260	80.388	

Remarks: Totals may not add due to rounding.

MANAGEMENT												
ENGINEERING & TECH SRVC (NON-H)	C-CPFF	VARIOUS	.625	.701	Nov 2006						1.326	1.326
Government Engineering Support	WX	VARIOUS	3.730	.679	Nov 2006	.385	Nov 2007	.370	Nov 2008	Continuing	Continuing	
MGT & PROF SUPPT SRVC (NON-FF)	C-CPFF	VARIOUS	1.071	1.201	Nov 2006	.619	Nov 2007	1.168	Nov 2008	Continuing	Continuing	
Program Management Support	WX	VARIOUS	1.452	.455	Various	.709	Various	.675	Various	Continuing	Continuing	
Travel	TO	VARIOUS	.352	.130	Various	.055	Various	.055	Various	Continuing	Continuing	
SUBTOTAL MANAGEMENT			7.231	3.166		1.768		2.268		Continuing	Continuing	

Total Cost			148.552	20.902		17.011		25.915		Continuing	Continuing	
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Remarks: Totals may not add due to rounding.

CLASSIFICATION:

EXHIBIT R4, Schedule Profile													DATE: February 2008																									
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5													PROGRAM ELEMENT 0604214N, AV-8B AIRCRAFT - ENG DEV													PROJECT NUMBER AND NAME 0652, AV-8B												
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				H4.0/TAMMAC OTRR	H4.0 IOC			TAMMAC IOC					H7.0 SRR			H7.0 CDR					H7.0 OTRR																	
				H5.0 CDR				H5.0 PDR				H5.0 IOC				H6.0 OTRR																						
					H6.0 SRR			H6.0 CDR																														
					RMP DC SRR			RMP DC PDR				RMP DC CDR									RMP DC OTRR					RMP ADC SRR												
																									RMP ADC PDR													
																									RMP ADC CDR													
																									RMP DC IOC													
System Development	H4.0/TAMMAC				H5.0 DMLGB, Litening Sta 4, Early VMF Comm Dev, TAMMAC								H7.0 Wpns carriage exp, Comm Networking and Other Enhancements																									
	RMP Display Computer (DC)								RMP AirData Comp.																													
	H6.0 Wpns carriage exp, Comm Net and Other Enhancements																																					
Engine Life Management Program Contract Award				ELMP				ELMP				ELMP				ELMP				ELMP				ELMP				ELMP										
Software Deliveries								H4.0/TAMMAC								H5.0 Litening on Centerline/Station 4				H6.0								H7.0										
Test & Evaluation Milestones	RMP Display Computer DT													RMP Display Computer DT																								
Development Test	H4.0 TAMMAC DT				H5.0 LPOD on 4 DT								H6.0 DT				H7.0 DT																					
Operational Test								H4.0 OT				H5.0 OT				H6.0 OT												H7.0 OT										

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CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME						
RDT&E,N / BA-5	0604214N, AV-8B AIRCRAFT - ENG DEV	0652, AV-8B						
Schedule Profile		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
ELMP CONTRACT AWARD		2Q	1Q	1Q	1Q	1Q	1Q	1Q
H4.0 TAMMAC SYSTEM DEVELOPMENT		1Q-2Q						
H 4.0/TAMMAC DT		1Q-2Q						
H4.0/TAMMAC OTRR		2Q						
H4.0/TAMMAC OT		3Q-4Q						
H4.0/TAMMAC S/W DELIVERY		4Q						
H4.0 TAMMAC IOC			4Q					
H5.0 DMLGB,LITSTA4,VMF,STR SYS DEVELOPMENT		1Q-4Q	1Q-3Q					
H5.0 CDR		1Q						
H5.0 DT		1Q-4Q	1Q-2Q					
H5.0 OTRR			3Q					
H5.0 OT			3Q-4Q	1Q				
H5.0 S/W DELIVERY				1Q				
H5.0 IOC				2Q				
H6.0 WPNS CARRIAGE EXP COMM NETWORK SYS DEV		2Q-4Q	1Q-4Q	1Q-4Q				
H6.0 SRR			1Q					
H6.0 PDR			2Q					
H6.0 CDR			3Q					
H6.0 DT			4Q	1Q-4Q				
H6.0 OTRR				4Q				
H6.0 OT				4Q	1Q-2Q			
H6.0 S/W DELIVERY					3Q			
H6.0 IOC					4Q	1Q		
H7.0 WPNS CARRIAGE EXP COMM NETWORK SYS DEV					1Q-4Q	1Q-4Q	1Q-3Q	
H7.0 SRR					2Q			
H7.0 PDR					3Q			
H7.0 CDR					4Q			
H7.0 DT						2Q-4Q	1Q-3Q	
H7.0 OTRR							4Q	
H7.0 OT							4Q	1Q
H7.0 S/W DELIVERY								3Q
RMP DISPLAY COMPUTER SYSTEM DEVELOPMENT			1Q-4Q	1Q-4Q	1Q-4Q	1Q-2Q		
RMP DISPLAY COMPUTER SRR			2Q					
RMP DISPLAY COMPUTER PDR			3Q					
RMP DISPLAY COMPUTER CDR				1Q				
RMP DISPLAY COMPUTER DT				3Q-4Q	1Q-4Q	1Q		
RMP DISPLAY COMPUTER OTRR						2Q		
RMP DISPLAY COMPUTER OT						3Q		
RMP DISPLAY COMPUTER IOC								3Q
RMP AIR DATA COMPUTER SYSTEM DEVELOPMENT							1Q-4Q	1Q-4Q
RMP AIR DATA COMPUTER SRR							1Q-2Q	
RMP AIR DATA COMPUTER PDR							3Q	
RMP AIR DATA COMPUTER CDR								1Q

EXHIBIT R-2a, RDT&E Project Justification							DATE:		
							February 2008		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME			
RDT&E,N / BA-5			0604214N, AV-8B AIRCRAFT - ENGINEERING DEVELOPMENT			2634 AV-8B (OSCAR)/Digital Improved Triple Ejector Rack			
COST (\$ in Millions)			FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
2634 AV-8B (OSCAR)/DITER*					4.009	3.515			
RDT&E Articles Qty									

* Prior years funding was reported under Program Element 0205633N, PU 3189.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

Development of Digital I-TER		FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost				4.009
RDT&E Articles Qty				

The Open Systems Core Avionics Requirements (OSCAR) initiative replacing the Mission Computer and Store Management System with Commercial components and continued development of the common integrated Night Attack/Radar software to include integration of the 1000lb Joint Direct Attack Munitions (JDAM) weapon. The Dig Improved Triple Ejector Rack (I-TER) provides for the increased capability to the existing BRU-42 I-TER for the AV-8B platform. This provides for multiple carriage capability for Smart weapons such as Joint Direct Attack Munition (JDAM).

C. OTHER PROGRAM FUNDING SUMMARY:

	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost
RDTE PE 0205633N Aviation Improvements	97.012	117.805	122.906	105.116	95.090	75.958	77.469		691.356

D. ACQUISITION STRATEGY: PEO(A) ADM Ser DPEO(A)-ACQ2/015-97 dated 6 March 1997 approved the MSII acquisition strategy for OSCAR as an ACAT IVT program. OSCAR avionics CDR was held in January 1998 and completed first flight 29 May 1998. Using the NAWC-WD CPAF contract, funds will be used for basic design definition, drawing development, and OFP development and test. Twelve Mission System Computers and fourteen Warfare Management Computer engineering models have been procured for laboratory and flight test. The NAWC-WD/Boeing follow-on CPAF Contract was awarded on 16 December 1998. The period of performance will be for five years based on the need to complete Open System Core Avionics Requirement (OSCAR) and begin follow-on software block upgrade H2.0. As directed during 4 September 1998 program restructuring, an ACAT redesignation letter was approved changing the OSCAR program from an ACAT IVT program to an ACAT II program. Acquisition documentation will be updated accordingly to include the funding in FY2009 and FY2010 for the incorporation of Dig I-TER within OSCAR.

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Exhibit R-3 Cost Analysis (page 1)								DATE: February 2008				
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5		PROGRAM ELEMENT 0604214N, AV-8B AIRCRAFT - ENGINEERING DEVELOPMENT			PROJECT NUMBER AND NAME 2634, AV-8B (OSCAR)/Digital Improved Triple Ejector Rack							
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s 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-CPAF	MCDONNELL DOUGLAS CORP, SAINT LOUIS, MO	64.806								64.806	64.806
Primary Hdw Development	C-CPFF	DCMC, Draper Laboratory	.285								.285	.285
Primary Hdw Development	C-FFP	DSC, KMX Norfolk	.406								.406	.406
Systems Engineering	WX	NAWCWD, CHINA LAKE CA	40.893								40.893	
Systems Engineering	WX	NAWCAD, PATUXENT RIVER MD	3.239								3.239	
Systems Engineering	VARIOUS	PMA-209	4.448								4.448	
Award Fees	C-CPAF	MCDONNELL DOUGLAS CORP, SAINT LOUIS, MO	8.967								8.967	8.967
SUBTOTAL PRODUCT DEVELOPMENT			123.044								123.044	

Remarks: Totals may not add due to rounding.

SUPPORT												
Development Support Equipment	VARIOUS	VARIOUS	.284								.284	
Integrated Logistics Sup	VARIOUS	VARIOUS	.323								.323	
Configuration Mgmt	VARIOUS	VARIOUS	.143								.143	
Software Development	WX	NAWCWD, CHINA LAKE CA						1.666	Nov 2008		1.666	
Other Support	WX	VARIOUS						.775	Nov 2008		.775	
SUBTOTAL SUPPORT			.750					2.441			3.191	

Remarks: Totals may not add due to rounding.

TEST & EVALUATION												
Developmental Test & Eval	WX	NAWCWD, CHINA LAKE CA	17.554					1.568	Nov 2008		19.122	
Developmental Test & Eval	WX	OPER T & E FOR CD 30, NORFOLK VA	2.813								2.813	
SUBTOTAL TEST & EVALUATION			20.367					1.568			21.935	

Remarks: Totals may not add due to rounding.

MANAGEMENT												
Contractor Engineering Support	C-CPFF	NAWCAD, PATUXENT RIVER MD	.402								.402	.402
Travel	WX	NAWCAD, PATUXENT RIVER MD	.031								.031	
SBIR Assessment			.165								.165	
SUBTOTAL MANAGEMENT			.598								.598	

Remarks: Totals may not add due to rounding.

Total Cost			144.759					4.009			148.768	
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CLASSIFICATION:

EXHIBIT R4, Schedule Profile										DATE: February 2008																										
APPROPRIATION/BUDGET ACTIVITY										PROGRAM ELEMENT										PROJECT NUMBER AND NAME																
RDT&E, N / BA-5										0604214N, AV-8B AIRCRAFT - ENG DEV										2634, AV-8B (OSCAR) / Digital Improved Triple Ejector Rack																
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	1	2	3	4				
Acquisition Milestones																																				
System Development																																				
Engine Life Management Program Contract Award																																				
Software Deliveries																																				
Test & Evaluation Milestones																																				
Development Test																																				
Operational Test																																				

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NUMBER AND NAME			
RDT&E,N / BA-5		0604214N, AV-8B AIRCRAFT - ENG DEV			2634, AV-8B (OSCAR)/Digital Improved Triple Ejector Rack			
Schedule Profile		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Dig I-TER WPNS CARRIAGE EXP COMM NETWORK SYS DEV		2Q-4Q	1Q-4Q	1Q-4Q				
Dig I-TER SRR			1Q					
Dig I-TER PDR			2Q					
Dig I-TER CDR			3Q					
Dig I-TER DT			4Q	1Q-4Q				
Dig I-TER OTRR				4Q				
Dig I-TER OT					1Q-2Q			
Dig I-TER SW DELIVERY					3Q			
Dig I-TER IOC					4Q	1Q		