

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy	DATE: February 2012
---	----------------------------

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604214N: <i>AV-8B Aircraft - Engine Dev</i>
---	---

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	22.063	30.676	32.789	-	32.789	35.932	15.057	18.772	19.277	Continuing	Continuing
0652: AV-8B	22.063	30.676	32.789	-	32.789	35.932	15.057	18.772	19.277	Continuing	Continuing

A. Mission Description and Budget Item Justification

The program provides for AV-8B Design, Development, Integration and Test of various platform improvements such as: Engine Life Management Program (ELMP), Escape Systems, Joint Mission Planning System (JMPS), and Block upgrades to various mission systems, communications systems, navigation equipment, weapons carriage and countermeasures, and the Aircraft Handling/Readiness Management Plan (RMP). The JMPS is required as part of the DON directed migration to a common Navy and Marine Corps mission planning system. A/C handling and performance represents all engineering activities for development and design to support aircraft safety flight clearance and concept exploration to support POM objectives. The program's Evolutionary Acquisition Strategy includes Design, Development, Integration and Test activities under the consolidated effort of Block Developments: H6.0, H6.1 and follow-on block upgrades. H6.0 block upgrade provides weapons carriage expansion through the Digital Improved Triple Ejector Rack program and will also deliver critical improvements to aircraft survivability equipment. The H6.1 update will provide enhancements and software corrections that improve the AV-8B platform combat effectiveness, survivability, and relevance through avionics processor upgrades, mission planning updates, and Litening Operational Flight Program. A H6.2 update, accomplished by the Common Avionics Program, provides AV-8B a self-contained GPS navigation capability that is required to access preferred airspaces. AV-8B funding supports peculiar flight test requirements. 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 investigations and performing a series of planned Endurance Tests 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, alternative mission development, 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. FY13 continues Flight Control Computer development efforts and associated obsolescence and readiness requirements for ELMP, RMP and Operational Flight Program updates.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy	DATE: February 2012
---	----------------------------

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604214N: <i>AV-8B Aircraft - Engine Dev</i>
---	---

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	22.867	30.676	23.763	-	23.763
Current President's Budget	22.063	30.676	32.789	-	32.789
Total Adjustments	-0.804	-	9.026	-	9.026
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.300	-			
• SBIR/STTR Transfer	-0.388	-			
• Program Adjustments	-	-	8.982	-	8.982
• Rate/Misc Adjustments	-	-	0.044	-	0.044
• Congressional General Reductions Adjustments	-0.116	-	-	-	-

Change Summary Explanation

Technical: H6.2 update is accomplished by the Common Avionics Program.

Schedule:

Acquisition Milestones for H6.0 DT/IT changed due to delay in H6.0 CDR.

Acquisition Milestones for H6.1 CDR, H6.1 DT/IT, H6.1 software delivery, and H6.1 IOC changed due to delay in requirements development.

Airborne Variable Message Format Terminal development was accelerated due to system development successes.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy									DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604214N: AV-8B Aircraft - Engine Dev				PROJECT 0652: AV-8B				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
0652: AV-8B	22.063	30.676	32.789	-	32.789	35.932	15.057	18.772	19.277	Continuing	Continuing	
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0			
A. Mission Description and Budget Item Justification												
This program provides for AV-8B Design, Development, Integration and Test of the following improvements: The Engine Life Management Program (ELMP), Escape System 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), as well as other critical engine components. The Program Office will accomplish this mission through the Component Improvement Program (CIP), which entails Engineering Project Description investigations and a series of planned Endurance Tests to derive safety and reliability improvements to the engine and engine components. The Escape System qualifies an improved ejection seat to reduce the risk of injury to aircrew. The Joint Mission Planning System (JMPS) is required as part of the DON directed migration to a common Navy and Marine Corps mission planning system. H6.0 includes weapons carriage expansion efforts, H6.1 provides enhancements and software corrections, and H6.2 (Common Avionics Program) provides GPS navigation capabilities. Other specific efforts include Airborne Variable Message Format Terminal (AVT), Flight Control Computer (FCC) and Radar Display Computer (RDC). The program is working closely with the Common Avionics program and the Allies (Spain and Italy) on all efforts. A/C handling and performance represents 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 Programs (\$ in Millions, Article Quantities in Each)								FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: Development of RMP Engineering Change Proposals Articles:								7.582	14.291	22.779	-	22.779
								0	0	0		0
Description: Improve structural integrity of the AV-8B aircraft as well as development of an improved RDC and FCC.												
FY 2011 Accomplishments:												
Conducted systems engineering analyses, identification, and diagnosis of problems and the development and testing of engineering solutions in the areas of flight and crew safety, structural integrity, obsolescence, and systems reliability, and other material and equipment conditions affecting AV-8B systems readiness. Conducted studies concerning improvements and correction of deficiencies and issues including obsolescence and structural fatigue for Frame 43, Frame 41 and Bullet Fairing. Conducted component obsolescence analyses including alternatives explorations and development for obsolete aging equipment, to include FCC, aircrew												

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)		R-1 ITEM NOMENCLATURE PE 0604214N: AV-8B Aircraft - Engine Dev		PROJECT 0652: AV-8B		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
systems, and other safety deficiency corrections. Continued development and testing of RDC, with first Flight Readiness Review and Test Readiness Review.						
FY 2012 Plans: Funds provided will allow for the continuation of system analyses, identification, and diagnosis of problems and the development and testing of engineering solutions in the areas of flight and crew safety, structural integrity, obsolescence, and systems reliability, and other material and equipment conditions affecting AV-8B systems readiness. Additionally, the program will conduct studies concerning improvements and correction of deficiencies and issues including obsolescence and structural fatigue as well as conducting component obsolescence analyses including alternatives explorations and development for obsolete aging equipment, to include aircrew and environmental systems, flight controls and other safety deficiency corrections. Other efforts include the continuation of development and testing of Radar Display Computer (RDC) and the initiation of studies for the obsolescence replacement for the Flight Control Computer (FCC).						
FY 2013 Base Plans: Development efforts begin for the obsolescence replacement for the FCC. Efforts are initiated for the Rate Gyro replacement and Fatigue Trackers Users Program. Funds support emergent and ongoing efforts for system analyses, identification, and diagnosis of problems and the development and testing of engineering solutions in the areas of flight and crew safety, structural integrity, obsolescence, and systems reliability, and other material and equipment conditions affecting AV-8B systems readiness. Additionally, the program will conduct studies concerning improvements and correction of deficiencies and issues including obsolescence and structural fatigue as well as conducting component obsolescence analyses including alternatives explorations and development for obsolete aging equipment, to include aircrew and environmental systems, flight controls and other safety deficiency corrections. Other efforts include the continuation of development and testing of RDC.						
Title: F402-RR-408 Engine Safety and Reliability Enhancements		6.610	7.470	7.320	-	7.320
Articles:		0	0	0		0
Description: Improve Safety and Reliability of the F402-RR-408 Engine for the AV-8B Harrier.						
FY 2011 Accomplishments: Conducted research, analysis, and development of design changes and improvements to the engine and engine accessories. Continued the Component Improvement Program to ensure capabilities and performance of the F402-RR-408 and related components. Conducted multiple ECPs for the Gas Turbine Starter and continued						

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)		R-1 ITEM NOMENCLATURE PE 0604214N: AV-8B Aircraft - Engine Dev		PROJECT 0652: AV-8B		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
research into improvements for the Enhanced Variable Inlet Guide Vane Control System and Fuel Metering Unit. Conducted reviews of all engine Test Cells and Support Equipment (SE) that optimized facilities and addressed SE obsolescence. FY 2012 Plans: Funds provided will allow for the continuation of the Component Improvement Program, further ensuring the capabilities and performance of the F402-RR-408, engine accessories and related components. The prototype Enhanced Variable Inlet Control Systems Interrogator will undergo test and evaluation and improvements to the Gas Turbine Starter will continue. Continue Enhanced Variable Inlet Control Systems (EVICS) design. Mitigate Test Cell facilities and Support Equipment obsolescence through Redesign and procurements. FY 2013 Base Plans: Funds provided will allow for the continuation of the F402-RR-408 engine and engine accessories Component Improvement Program. These programs will be utilized to provide engineering solutions to safety, reliability and maintainability deficiencies of the engine and engine accessories that may become future ECPs. Complete EVICS design and start kit procurement. We will continue obsolescence mitigation for Test Cell facilities and Support Equipment through redesign and procurements.						
Title: Operational Flight Program (OFP) and Avionics Weapons Systems Development and Integration Articles:		7.871 0	8.915 0	2.690 0	-	2.690 0
Description: Develop Airborne Variable Message Format Terminal (AVT), formerly Strikelink/A, Aircraft OFP updates, mission planning updates, Litening Pod software updates, and support aircraft avionics development efforts. FY 2011 Accomplishments: AVT development and testing continued, achieved Critical Design Review. Future capability expansion studies and analyses were conducted, and aircraft OFP/Litening Pod software updates began as part of the H6.1 block upgrade. FY 2012 Plans: Funds will provide for completion of AVT development and testing, future capability expansion studies and analyses, and aircraft OFP/Litening Pod software updates and developmental test as part of the H6.1 block upgrade. FY 2013 Base Plans:						

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy							DATE: February 2012				
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)			R-1 ITEM NOMENCLATURE PE 0604214N: AV-8B Aircraft - Engine Dev			PROJECT 0652: AV-8B					
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	
Funds will provide for future capability expansion studies and analyses, peculiar flight test requirements, and aircraft OFP/Litening Pod software updates and developmental test as part of the H6.1 block upgrade.											
Accomplishments/Planned Programs Subtotals						22.063	30.676	32.789	-	32.789	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• APN/0514: AV-8B Series Modification	84.505	82.647	38.703	42.238	80.941	35.563	43.544	20.081	20.476	318.108	1,549.670
D. Acquisition Strategy											
All efforts under Aircraft Handling/Readiness Management Program (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 reduce cost of ownership. It is also developed to assess life management program issues and design fixes for any service revealed deficiencies. The program'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, H6.1, H6.2 (Common Avionics) and following systems. The development and integration of Joint Mission Planning System occurred concurrently with H2.0. H4.0 Block improvements included the Tactical Aircraft Moving Map Capability. H5.0 Block Upgrade provided Dual Mode Laser Guided Bomb, Litening Centerline/Station 4 (improvement of current weapons carriage capability). The program is working closely with the Allies (Spain and Italy) and the Common Avionics program on these efforts for H6.0 and H6.1. H6.0 provides weapons carriage expansion. The H6.1 update will provide enhancements and software corrections that improve the AV-8B platform combat effectiveness, survivability, and relevance through avionics processor upgrades and Litening Common Operational Flight Program. The H6.2 update is being accomplished by the Common Avionics Program and provides a GPS Navigation capability for AV-8B.											
E. Performance Metrics											
Achieve ELMP contract award in 1Q FY2013, complete RMP Display Computer System Development in 4Q FY2012, and initiate Flight Control Computer System Development in 2Q FY2012. Continue systems development for the AVT, developmental test for the RMP Display Computer and support studies to incorporate Tactical Data Link capability.											

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy											DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604214N: AV-8B Aircraft - Engine Dev				PROJECT 0652: AV-8B					
Product Development (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	C/CPFF	Mgmt Sciences:Albuquerque, NM	0.464	-		-		-		-	0.000	0.464	0.464
Primary Hardware Development	C/CPFF	Rolls-Royce PLC:Bristol, GB	22.918	2.235	Dec 2011	1.907	Dec 2012	-		1.907	11.108	38.168	38.168
Primary Hardware Development	C/CPFF	McDonnell Douglas:St. Louis, MO	1.465	-		-		-		-	0.000	1.465	1.465
Primary Hardware Development	C/FFP	Goodrich PS:Pitstone, GB	4.450	0.951	Feb 2012	0.999	Feb 2013	-		0.999	0.000	6.400	6.400
Primary Hardware Development	WR	NAWCWD:China Lake, CA	45.035	3.279	Dec 2011	0.615	Dec 2012	-		0.615	Continuing	Continuing	Continuing
Primary Hardware Development	Various	Various:Various	10.067	-		-		-		-	0.000	10.067	10.067
Primary Hardware Development	C/CPFF	GE Aviation DS:Grand Rapids, MI	16.839	0.300	Feb 2012	-		-		-	3.371	20.510	20.510
Primary Hardware Development	C/CPFF	Stauder:St. Peters, MO	11.099	3.351	Jan 2012	-		-		-	7.580	22.030	22.030
Primary Hardware Development	WR	NAWCAD:Patuxent River, MD	-	0.300	Nov 2011	-		-		-	0.000	0.300	
Primary Hardware Development	C/CPFF	TBD (FCC):TBD	-	7.754	Jan 2012	15.254	Jan 2013	-		15.254	0.000	23.008	23.008
Systems Engineering	Various	McDonnell Douglas:St. Louis, MO	8.400	1.016	Dec 2011	1.057	Dec 2012	-		1.057	0.177	10.650	10.650
Systems Engineering	Various	Various:Various	0.520	-		-		-		-	0.000	0.520	0.520
Systems Engineering	WR	NAWCWD:China Lake, CA	1.073	2.705	Dec 2011	3.978	Dec 2012	-		3.978	Continuing	Continuing	Continuing
Systems Engineering	MIPR	Wright Patterson AFB:Dayton, OH	0.278	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			122.608	21.891		23.810		-		23.810			

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy										DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604214N: AV-8B Aircraft - Engine Dev				PROJECT 0652: AV-8B					
Support (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Configuration Management	Various	Various:Various	0.397	-		-		-		-	0.000	0.397	0.397
Engineering Technical Services (CSS)	C/CPFF	EDO Professional Services, Inc.:Arlington, VA	1.737	-		-		-		-	0.000	1.737	1.737
Integrated Logistics Support	WR	NAWCAD:Patuxent River, MD	1.436	-		-		-		-	0.000	1.436	
Software Development	Various	DCMA Boeing:St. Louis, MO	1.148	-		-		-		-	0.000	1.148	1.148
Software Development	WR	NAWCWD:China Lake, CA	10.889	-		-		-		-	Continuing	Continuing	Continuing
Software Development	Various	Various:Various	18.875	-		-		-		-	0.000	18.875	18.875
Software Development	C/CPFF	Northrup Grumman:Rolling Meadows, IL	2.000	-		-		-		-	0.000	2.000	2.000
Studies and Analysis	Various	Various:Various	2.542	0.137	Jun 2012	0.146	Jun 2013	-		0.146	3.900	6.725	6.709
Support	Various	DCMA Boeing:St. Louis, MO	5.490	-		-		-		-	0.000	5.490	5.490
Technical Data	C/CPFF	Various:Various	2.331	0.245	Nov 2011	0.255	Nov 2012	-		0.255	0.320	3.151	3.151
Subtotal			46.845	0.382		0.401		-		0.401			
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	C/CPFF	McDonnell Douglas:St. Louis, MO	-	-		-		-		-	5.689	5.689	5.689
Developmental Test & Evaluation	WR	NAWCWD:China Lake, CA	41.130	1.700	Jan 2012	1.740	Jan 2013	-		1.740	Continuing	Continuing	Continuing
Operational Test & Evaluation	WR	COMOPTEVFOR:Norfolk, VA	22.923	0.050	Oct 2011	-		-		-	0.000	22.973	

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy											DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604214N: AV-8B Aircraft - Engine Dev				PROJECT 0652: AV-8B						

Test and Evaluation (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Operational Test & Evaluation	WR	NAWCWD:China Lake, CA	2.824	-		-		-		-	Continuing	Continuing	Continuing
Test Assets	C/CPFF	GE Aviation DS:Grand Rapids, MI	0.972	-		-		-		-	0.000	0.972	0.972
Subtotal			67.849	1.750		1.740		-		1.740			

Management Services (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering & Tec SRVC (Non-FFRDC)	C/CPFF	Various:Various	2.924	0.743	Jan 2012	0.664	Jan 2013	-		0.664	7.432	11.763	11.763
Government Engineering Support	WR	Various:Various	8.886	2.071	Nov 2011	2.353	Nov 2012	-		2.353	Continuing	Continuing	Continuing
MGT & PROF SUPPT SRVC (NON-FFRDC)	C/CPFF	Various:Various	6.756	1.256	Nov 2011	1.164	Nov 2012	-		1.164	12.542	21.718	21.718
Program Management Support	WR	Various:Various	8.884	2.426	Nov 2011	2.523	Nov 2012	-		2.523	Continuing	Continuing	Continuing
Travel	WR	Various:Various	0.947	0.157	Oct 2011	0.134	Oct 2012	-		0.134	Continuing	Continuing	Continuing
Subtotal			28.397	6.653		6.838		-		6.838			

	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals		265.699	30.676		32.789		-	32.789			

Remarks

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604214N: <i>AV-8B Aircraft - Engine Dev</i>	PROJECT 0652: <i>AV-8B</i>

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY

1319: *Research, Development, Test & Evaluation, Navy*
BA 5: *Development & Demonstration (SDD)*

R-1 ITEM NOMENCLATURE

PE 0604214N: *AV-8B Aircraft - Engine Dev*

PROJECT

0652: *AV-8B*

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
AV-8B AIRCRAFT - ENGINE DEV				
Acquisition Milestones: H6.0 IOC	4	2011	4	2011
Acquisition Milestones: Readiness Management Program (RMP) Display Computer Initial Operational Capability (IOC)	3	2013	3	2013
Acquisition Milestones: H6.1 IOC	4	2013	4	2013
Acquisition Milestones: Airborne Variable Message Format Terminal (AVT) Initial Operational Capability (IOC)	1	2015	1	2015
Systems Development: Hardware Development: RMP Display Computer System Development (program started in 2010)	1	2011	4	2012
Systems Development: Hardware Development: RMP Flight Control Computer System (FCC) Development	2	2012	4	2015
Systems Development: Hardware Development: AVT Systems Development	1	2011	2	2013
Systems Development: Reviews: AVT CDR	2	2011	2	2011
Systems Development: Reviews: H6.0 Operational Test Readiness Review (OTRR)	2	2011	2	2011
Systems Development: Reviews: H6.1 Development (program started in 2010)	2	2011	1	2013
Systems Development: Reviews: H6.1 CDR	3	2011	3	2011
Systems Development: Reviews: H6.1 Preliminary Design Review (PDR)	1	2011	1	2011
Test & Evaluation: Technical Evaluation: H6.0 Development Test/ Integrated Test (DT/IT) (program started in 2010)	1	2011	2	2011
Test & Evaluation: Technical Evaluation: RMP Display Computer DT (program started in 2010)	4	2011	2	2013
Test & Evaluation: Technical Evaluation: H6.1 DT/IT	3	2012	3	2013
Test & Evaluation: Technical Evaluation: AVT DT	1	2012	1	2013
Test & Evaluation: Operational Evaluation: H6.0 DT/IT	1	2011	2	2011

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy			DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604214N: AV-8B Aircraft - Engine Dev		PROJECT 0652: AV-8B	
	Start		End	
Events by Sub Project	Quarter	Year	Quarter	Year
Test & Evaluation: Operational Evaluation: H6.0 Operational Test (OT)	3	2011	4	2011
Production Milestones: Contract Awards: Engine Life Management Program (ELMP): ELMP Contract Award FY11	1	2011	1	2011
Production Milestones: Contract Awards: Engine Life Management Program (ELMP): ELMP Contract Award FY12	1	2012	1	2012
Production Milestones: Contract Awards: Engine Life Management Program (ELMP): ELMP Contract Award FY13	1	2013	1	2013
Production Milestones: Contract Awards: Engine Life Management Program (ELMP): ELMP Contract Award FY14	1	2014	1	2014
Production Milestones: Contract Awards: Engine Life Management Program (ELMP): ELMP Contract Award FY15	1	2015	1	2015
Production Milestones: Contract Awards: Engine Life Management Program (ELMP): ELMP Contract Award FY16	1	2016	1	2016
Production Milestones: Contract Awards: Engine Life Management Program (ELMP): ELMP Contract Award FY17	1	2017	1	2017
Deliveries: H6.0 Software (S/W) Delivery	4	2011	4	2011
Deliveries: H6.1 S/W Delivery	4	2013	4	2013