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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy / BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0604212N / Other Helicopter Development							
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	766.262	22.899	25.458	46.154	-	46.154	11.321	5.880	5.795	5.947	Continuing	Continuing
1109: CH/MH-53	44.724	1.699	1.833	2.675	-	2.675	2.682	2.736	2.742	2.799	Continuing	Continuing
2415: H-60 Development	698.993	20.489	21.827	25.885	-	25.885	0.003	-	-	-	-	767.197
2460: VH-3/VH-60	22.545	0.711	1.532	11.539	-	11.539	3.301	1.394	1.403	1.462	Continuing	Continuing
3355: MH-XX Development	0.000	-	0.266	6.055	-	6.055	5.335	1.750	1.650	1.686	Continuing	Continuing
MDAP/MAIS Code: 282												
# The FY 2015 OCO Request will be submitted at a later date.												
Note												
Proj: 3355 MH-XX Development Budget Activity realignment to BA 04 (Advanced Component Development & Prototypes) will take effect with the approval of POM16. This realignment more accurately reflects the current stage of MH-XX development. The verbiage in the Budget Exhibit therefore is written as if this is a BA 04 appropriation.												
A. Mission Description and Budget Item Justification												
This Program Element includes funding for the development support for improvements to current systems for CH/MH-53, MH-60 development, VH-3/VH-60, and MH-XX. The H-53 is the premier heavy lift helicopter for the Marine Corps and only operational airborne mine sweeping platform for the Navy. H-53 RDT&E efforts focus on trade studies and risk reduction measures to identify candidate survivability, safety, avionics, cargo handling, cockpit and other airframe specific improvements to extend the service life. The MH-60S Helicopter has three primary mission areas; Combat Support, Armed Helo which includes the Fast Attack Craft/Fast Inshore Attack Craft (FAC/FIAC) threat response capabilities and Airborne Mine Countermeasures. The VH-3/VH-60 is required to provide safe and timely transportation for the President and Vice President of the United States, heads of state and others as directed by the White House Military Office. The MH-XX Development will provide the Navy's next generation of Anti-Submarine Warfare, Surface Warfare, and Logistics support Helicopters.												

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B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	33.978	40.558	46.130	-	46.130
Current President's Budget	22.899	25.458	46.154	-	46.154
Total Adjustments	-11.079	-15.100	0.024	-	0.024
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-15.100			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.021	-			
• Program Adjustments	-	-	1.371	-	1.371
• Rate/Misc Adjustments	-	-	-1.347	-	-1.347
• Congressional General Reductions	-2.058	-	-	-	-
Adjustments					
• Congressional Directed Reductions	-9.000	-	-	-	-
Adjustments					
Change Summary Explanation					
Cost: Due to the reductions from P.L. 113-6, the Budget Control Act and FY 2014 Appropriations Act, the Airborne Mine Countermeasures (AMCM) Airborne Mine Neutralization System (AMNS) Operational Assessment (OA) funding has been significantly reduced. Funding is required by both the MH-60S AMCM and sensor development program to execute the AMNS OA. The Forward Firing Weapons (FFW), Fast Attack Craft/Fast Inshore Attack Craft (FAC/FIAC) limited hardware/software enhancement (targeting capability) and overall FFW Operational Testing completion delayed into first quarter of FY 2016 as a result of the Budget Control Act and P.L. 113-6 reductions. The scope of the FFW targeting capability has been significantly reduced due to the FY 2014 Budget Appropriations Act reductions.					
2460 FY2015 budget revised the FY2015 funding allocations within the cost categories to more accurately reflect the efforts directly related to those categories.					
Technical:					
2460 VH-3/VH-60: Additional funding in FY's 2014-2016 dedicated to strategic communication Wideband capabilities as mandated and funded by the Department of Defense Chief Information Officer.					
Schedule:					
1109 CH/MH-53: Not Applicable					

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<p>2415 AMCM: The MH-60S AMCM Initial Operational Capability (IOC) milestone is delaying to align with Littoral Combat Ship (LCS) Mine Countermeasures (MCM) Mission Package IOC to 4Q FY 2015. AMNS OA is delayed due to sensor system integration issues. MH-60S IOT&amp;E is being conducted concurrent with AMNS sensor OA. LCS MCM Initial Operational Test and Evaluation (IOT&amp;E) has been removed from this budget schedule. AMCM Spiral Upgrades were cancelled due to the reductions enacted in P.L 113-6. Required correction of deficiencies remain in schedule with no spiral upgrades.</p> <p>2415 Forward Firing Weapon: As a result of reductions enacted in P.L. 113-6 and the Budget Control Act, integration efforts have been delayed resulting in FAC/ FIAC threat response IOC occurring in FY 2016.</p> <p>2460 VH-3/VH-60: The schedule has been updated to reflect the evaluation of a Wideband Line of Sight System for integration, prototype and test for the VH Communications Suite.</p> <p>3355 MH-XX Development: Not Applicable</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604212N / Other Helicopter Development				Project (Number/Name) 1109 / CH/MH-53			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
1109: CH/MH-53	44.724	1.699	1.833	2.675	-	2.675	2.682	2.736	2.742	2.799	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
The H-53 helicopter is the premier heavy lift helicopter for the Marine Corps and the only operational airborne mine sweeping platform for the Navy. Through FY2019, H-53 efforts will continue to develop and qualify components, prior to production and approval decisions, in order to replace obsolete system components. Emphasis will be placed on supportability improvement modifications that will sustain the H-53 aircraft until the transition of the H-53K is complete. These efforts combined, will significantly improve the readiness of the H-53 fleet while reducing long term operational and supportability costs. Modeling and simulation will be used to the maximum practical extent throughout this effort. Manned Flight Simulator will be utilized to develop, install and test interim modifications to existing H-53 legacy avionics, while maintaining the original basic system footprint and functionality. As a part of this effort, a complete Electro Magnetic Vulnerability assessment will be required for the affected and/or modified systems.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: H-53 Avionics  Articles:									0.369	0.392	0.554	
									-	-	-	
FY 2013 Accomplishments: Integrated software applique for cockpit and avionics improvements, to include the development of new sensors. Developed flight control computer and test set design modifications to address anticipated obsolescence issues. Conducted Business Case Analyses and determined impact of high Operation and Support cost drivers and addressed alternatives to mitigate identified issues.												
FY 2014 Plans: Integrate software applique for cockpit and avionics improvements, to include the development of new sensors. Develop flight control computer and test set design modifications to address anticipated obsolescence issues. Conduct Business Case Analyses to determine impact of high Operation and Support cost drivers and address alternatives to mitigate identified issues.												
FY 2015 Plans: Integrate software applique for cockpit and avionics improvements, to include the development of new sensors. Develop flight control computer and test set design modifications to address anticipated obsolescence issues. Conduct Business Case Analyses to determine impact of high Operation and Support cost drivers and address alternatives to mitigate identified issues.												
Title: H-53 Survivability  Articles:									0.298	0.316	0.407	
									-	-		

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Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604212N / Other Helicopter Development	Project (Number/Name) 1109 / CH/MH-53		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2013	FY 2014	FY 2015
<b>FY 2013 Accomplishments:</b> Performed trade studies, risk reduction, design, development, model, integration and test activities for H-53 survivability systems to include effectiveness of the ballistic vulnerability (armor) package.				
<b>FY 2014 Plans:</b> Perform trade studies, risk reduction, design, development, model, integration and test activities for H-53 survivability systems to include effectiveness of the ballistic vulnerability (armor) package.				
<b>FY 2015 Plans:</b> Perform trade studies, risk reduction, design, development, model, integration and test activities for H-53 survivability systems to include effectiveness of the ballistic vulnerability (armor) package.				
<b>Title:</b> H-53 Propulsion		0.283	0.315	0.675
<b>Articles:</b>		-	-	-
<b>FY 2013 Accomplishments:</b> Provided in-house, field activity, and contractor support of Integrated Product Teams (IPTs) to allow for studies and analyses, preparation of acquisition documentation and examination of equipment and avionics for the H-53. Efforts included, but were not limited to, government development support, engineering support, product management support, system engineering and logistics support, and travel for the H-53 program.				
<b>FY 2014 Plans:</b> Provide in-house, field activity, and contractor support of IPTs to allow for studies and analyses, preparation of acquisition documentation and examination of equipment and avionics for the H-53. Efforts include, but are not limited to, government development support, engineering support, product management support, system engineering and logistics support, and travel for the H-53 program.				
<b>FY 2015 Plans:</b> Provide in-house, field activity, and contractor support of IPTs to allow for studies and analyses, preparation of acquisition documentation and examination of equipment and avionics for the H-53. Efforts include, but are not limited to, government development support, engineering support, product management support, system engineering and logistics support, and travel for the H-53 program.				
<b>Title:</b> Project Management Support		0.498	0.508	0.715
<b>Articles:</b>		-	-	-
<b>FY 2013 Accomplishments:</b>				

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Appropriation/Budget Activity 1319 / 5				R-1 Program Element (Number/Name) PE 0604212N / Other Helicopter Development				Project (Number/Name) 1109 / CH/MH-53				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)										FY 2013	FY 2014	FY 2015
Provided in-house, field activity, and contractor support of IPTs to allow for studies and analyses, preparation of acquisition documentation and examination of equipment and avionics for the H-53. Efforts included, but were not limited to, government development support, engineering support, product management support, system engineering and logistics support, and travel for the H-53 program. <b>FY 2014 Plans:</b> Provide in-house, field activity, and contractor support of IPTs to allow for studies and analyses, preparation of acquisition documentation and examination of equipment and avionics for the H-53. Efforts include, but are not limited to, government development support, engineering support, product management support, system engineering and logistics support, and travel for the H-53 program. <b>FY 2015 Plans:</b> Provide in-house, field activity, and contractor support of IPTs to allow for studies and analyses, preparation of acquisition documentation and examination of equipment and avionics for the H-53. Efforts include, but are not limited to, government development support, engineering support, product management support, system engineering and logistics support, and travel for the H-53 program.												
<b>Title:</b> H-53 Airframe  <b>Articles:</b>  <b>FY 2013 Accomplishments:</b> Performed trade studies, risk reduction, design, development, integration and test activities for the H-53 airframe to include, but not limited to, main rotor head, cowlings, aircraft structure, drive train, and various dynamic components. <b>FY 2014 Plans:</b> Perform trade studies, risk reduction, design, development, integration and test activities for the H-53 airframe to include, but not limited to, main rotor head, cowlings, aircraft structure, drive train, and various dynamic components. <b>FY 2015 Plans:</b> Perform trade studies, risk reduction, design, development, integration and test activities for the H-53 airframe to include, but not limited to, main rotor head, cowlings, aircraft structure, drive train, and various dynamic components										0.251 -	0.302 -	0.324 -
Accomplishments/Planned Programs Subtotals										1.699	1.833	2.675
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost	
• APN/0528: H-53 Series	34.736	60.581	38.159	-	38.159	33.569	32.246	24.973	25.810	145.611	1,770.975	

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2015 Navy			<b>Date:</b> March 2014
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604212N / <i>Other Helicopter Development</i>	<b>Project (Number/Name)</b> 1109 / <i>CH/MH-53</i>	

**C. Other Program Funding Summary (\$ in Millions)**

<u>Line Item</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u> <u>Base</u>	<u>FY 2015</u> <u>OCO</u>	<u>FY 2015</u> <u>Total</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
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**Remarks**

**D. Acquisition Strategy**

This is a non-ACAT program. H-53 RDT&E efforts will focus on trade studies and risk reduction measures to identify candidate survivability, safety, avionics, cargo handling, cockpit and other airframe specific improvements to extend the service life.

**E. Performance Metrics**

Successfully perform studies, analysis and develop software to address emergent H-53 issues. Successfully support developmental and operation test activities to qualify aircraft modifications/upgrades.

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy																							Date: March 2014						
Appropriation/Budget Activity 1319 / 5												R-1 Program Element (Number/Name) PE 0604212N / Other Helicopter Development												Project (Number/Name) 1109 / CH/MH-53					
CH/MH-53		FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q				
Acquisition Milestones																													
Engineering Milestones																													
		Obsolescence Issues/Studies																											
		Survivability Analysis																											
		Legacy P3I Efforts																											
		Safety Upgrades																											
Test & Evaluation																													
Production Milestones																													
Deliveries																													
2015DON - 0604212N - 1109																													



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Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604212N / Other Helicopter Development				Project (Number/Name) 2415 / H-60 Development			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
2415: H-60 Development	698.993	20.489	21.827	25.885	-	25.885	0.003	-	-	-	-	767.197
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
The Helicopter Combat Support mission is to provide organic fleet Armed Helo Fast Attack Craft/Fast Inshore Attack Craft (FAC/FIAC) threat response, maintain forward deployed fleet sustainability through rapid airborne delivery of materials and personnel and to support amphibious operations through search and rescue coverage. The primary roles of the aircraft are to conduct vertical replenishment, day/night ship-to-ship, ship-to-shore, and shore-to-ship external transfer of cargo; internal transport of passengers, mail and cargo, vertical on board delivery; airhead operations, and day/night search and rescue. Armed Helo and Airborne Mine Countermeasures (AMCM) were added as primary mission areas for the MH-60S, being completed as block upgrades to the platform. The MH-60S Operational Requirements Document (ORD) was modified in May 2000 to add AMCM as a primary mission for the MH-60S. ORD Change II was validated and approved by the Joint Requirements Oversight Council on 15 February 2008 updating key performance parameters. AMCM provides an organic capability for the Littoral Combat Ship Mine Countermeasures Mission Package. Armed Helo provides Combat Search and Rescue, Surface Warfare and Maritime Interdiction Operations capability with Link 16 and Forward Firing Weapons (FFW) which includes rockets and anti-swarm weapons to address the FAC/FIAC threat. Aircraft secondary roles include torpedo and drone recovery, noncombatant evacuation operations, and SEAL team and Explosive Ordnance Disposal support.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: MH-60S Airframe Development and Integration									2.547	4.031	1.550	
									Articles: -	-	-	
Description: The effort includes analysis, design, integration, test, and support for FFW/Rockets to include Advanced Precision Kill Weapon System (APKWS) and Digital Rocket Launcher with mixed loads and enhancements. FFW training development to include situational analysis and Instructional System Development documentation. Conduct Service Life Assessment Program (SLAP), trade studies and analysis, develop and qualify components in order to replace obsolete system components on the MH-60S. Accomplishments include design, development, integration, correction of deficiencies and support of the AMCM unique items into the MH-60S airframe; Test and Evaluation on AMCM Mission Kits for the sensor/weapon systems integration on the MH-60S; and AMCM training development. Only \$0.3 Million applies to AMCM for FY 2015 for completion of the AMCM sensor/ weapon systems integration.												
FY 2013 Accomplishments: Continued AMCM sensor/weapon system testing. Analyzed, designed, integrated, and supported follow-on FFW/Rockets capability to include training development. Completed FFW 20mm Gun System testing and reporting.												
FY 2014 Plans:												

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Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604212N / Other Helicopter Development	Project (Number/Name) 2415 / H-60 Development		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2013	FY 2014	FY 2015
Continue AMCM sensor/weapon system testing at a significantly de-scoped level due to PL 113.6, Budget Control Act and FY 2014 Appropriations Act . Analyze, design, integrate, and support follow-on FFW/Rockets capability to include APKWS, DRL with mixed loads, FFW enhancements and training development of FFW capability.				
FY 2015 Plans: Continue to analyze, design, integrate, and support follow-on Forward Firing Weapons (FFW)/Rockets capability to include Digital Rocket Launcher with mixed loads and training development of FFW capability. Complete Airborne Mine Countermeasures (AMCM) sensor/weapon system integration. Conduct SLAP and obsolescence trade studies and analysis.				
Title: MH-60S Avionics Development and Integration		7.347	5.602	10.707
Articles:  Description: This effort includes developmental efforts on the avionics architecture and systems of the MH-60S helicopter. Limited software development/improvements for targeting to support FFW/Rockets integration to include Advanced Precision Kill Weapon System (APKWS) and Digital Rocket Launcher (DRL) with mixed loads. Training development to include situational analysis, instructional analysis and training updates for FFW Rockets and various AMCM sensors. Development of the operator consoles, as well as software modifications/improvements, to support AMCM systems. Link 16 software development/upgrades and test for AMCM messages. Only \$1.0 Million of FY 2015 applies to AMCM.		-	-	-
FY 2013 Accomplishments: Continued AMCM test efforts; Supported FFW/Rockets integration.				
FY 2014 Plans: Continue AMCM test efforts at minimal levels; Support FFW/Rockets integration to include APKWS, DRL with mixed loads and limited avionics hardware and associated software improvements to enhance FFW/Rockets effectiveness/targeting. Efforts for AMCM test and FFW/Rockets effectiveness have been de-scoped due to PL 113.6, Budget Control Act and FY14 Appropriations Act.				
FY 2015 Plans: Complete the FFW/Rockets integration of DRL with mixed loads. Continue the limited avionics hardware and software improvements/enhancements for enhancements/targeting. Complete AMCM test efforts.				
Title: MH-60S Test, Engineering, Logistics, Management Support		10.595	12.194	13.628
Articles:  Description: Navy field activity systems engineering, logistics support, management and travel for the FFW/Rockets integration to include Advanced Precision Kill Weapon System (APKWS), Digital Rocket Launcher (DRL) with mixed loads and AMCM MH-60S Sensor/Weapon Systems Integration team for airframe and avionics. Support/conduct MH-60S aircraft integration testing for		-	-	-

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2015 Navy							<b>Date:</b> March 2014				
<b>Appropriation/Budget Activity</b> 1319 / 5				<b>R-1 Program Element (Number/Name)</b> PE 0604212N / <i>Other Helicopter Development</i>			<b>Project (Number/Name)</b> 2415 / <i>H-60 Development</i>				

  

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>
<p>FFW/Rockets and enhancements. AMCM sensor/weapon system integration testing and support. Only \$3.9M of the FY 2015 applies to AMCM.</p> <p><b><i>FY 2013 Accomplishments:</i></b> Continued AMCM test and integration of AMCM 2B sensor/weapon system, continued follow-on FFW/Rockets integration testing and completed 20mm Gun reporting.</p> <p><b><i>FY 2014 Plans:</i></b> Support AMCM test and integration of AMCM 2B sensor/weapon system, follow-on FFW Rockets Integration/testing.</p> <p><b><i>FY 2015 Plans:</i></b> Complete Forward Firing Weapons (FFW)/Rockets integration/testing for DRL with mixed loads, FFW enhancements and Airborne Mine Countermeasures (AMCM) sensor/weapon system integration.</p>			
<b>Accomplishments/Planned Programs Subtotals</b>	20.489	21.827	25.885

  

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<u>Line Item</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u> <u>Base</u>	<u>FY 2015</u> <u>OCO</u>	<u>FY 2015</u> <u>Total</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• APN1/017900: <i>MH-60S</i>	431.566	395.711	210.209	-	210.209	28.273	-	-	-	-	6,809.315
• APN6/060510: <i>MH-60S SPARES</i>	2.970	0.454	-	-	-	-	-	-	-	-	175.971
• APN5/053000: <i>H-60 MODS</i>	19.079	35.120	48.433	-	48.433	43.354	44.186	36.201	24.998	63.659	462.777
<b>Remarks</b>											
<b>D. Acquisition Strategy</b> <p>Armed Helo and AMCM are elements of the existing MH-60S ACAT IC Program. MH-60S employed an evolutionary acquisition approach via the MH-60S Block Upgrades. This allowed for modification of systems still in early development. The block upgrades maximize commonality across all MH-60S missions and all Armed Helo/AMCM weapon systems, including logistics, training and maintenance. The MH-60S block upgrades are as follows:</p> <ul style="list-style-type: none"> <li>-Block 1 - Combat Support Helicopter</li> <li>-Block 2 - Organic Airborne Mine Countermeasures</li> <li>-Block 3 - Armed Helo</li> </ul> <p>Block 2 aircraft are being upgraded to include Armed Helo Capability.</p>											

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604212N / Other Helicopter Development	Project (Number/Name) 2415 / H-60 Development
<b>E. Performance Metrics</b> Successfully complete FFW/ Rockets Developmental/Operational Testing. Successfully achieve Initial Operational Capability for AMCM and Littoral Combat Ship Mine Countermeasures Mission Package.		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy												Date: March 2014			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604212N / Other Helicopter Development				Project (Number/Name) 2415 / H-60 Development					
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hdw Dev - Airframe*	SS/CPIF	Sikorsky : Stratford, CT	170.100	0.715	Mar 2013	0.100	May 2014	0.300	Nov 2014	-		0.300	-	171.215	171.215
Primary Hdw Dev - Airframe FFW	SS/CPFF	Sikorsky : Stratford, CT	10.537	1.528	Nov 2012	2.931	Mar 2014	1.250	Nov 2014	-		1.250	-	16.246	14.246
Primary Hdw Dev - Avionics*	SS/CPIF	Lockheed Martin : Owego, NY	215.738	5.386	Dec 2012	1.302	Mar 2014	1.000	Nov 2014	-		1.000	-	223.426	222.426
Primary Hdw Dev - Avionics*FFW	SS/CPIF	Lockheed Martin : Owego, NY	4.100	2.000	Nov 2012	2.300	Mar 2014	2.500	Nov 2014	-		2.500	-	10.900	10.900
Primary Hdw Dev - Avionics*FFW	TBD	TBD : NSWC Crane	0.000	-		2.000	Apr 2014	3.060	Dec 2014	-		3.060	-	5.060	-
Primary Hdw Dev - Avionics*FFW	TBD	Raytheon : TBD	0.000	-		-		2.622	Mar 2015	-		2.622	-	2.622	2.622
Primary Hdw Dev - CSTRS	WR	NSWC : Panama City, FL	22.430	0.304	Dec 2012	0.500	Feb 2014	-		-		-	-	23.234	-
Primary Hdw Dev - CSTRS	MIPR	CECOM : APG, MD	13.029	0.200	Dec 2012	0.500	Mar 2014	-		-		-	-	13.729	-
Primary Hdw Dev - Training	TBD	TBD : TBD	0.000	-		-		1.150	Feb 2015	-		1.150	-	1.150	-
Primary Hdw Dev - Avionics FFW	Various	Various : China Lake, CA	0.000	-		-		0.375	Nov 2014	-		0.375	-	0.375	-
Prior year Product Dev cost no longer funded in the FYDP	Various	Various : Various	51.554	-		-		-		-		-	-	51.554	-
Subtotal			487.488	10.133		9.633		12.257		-		12.257	-	519.511	-
Remarks															
Remarks: * PY SS/CPAF - 2% FY05-FY12 SS/CPIF FY12-FY14 Primary Hdw Dev- Avionics - Lockheed Martin includes Progress Payments aligned to Fixed Price CLIN only.															

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy												Date: March 2014			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604212N / Other Helicopter Development				Project (Number/Name) 2415 / H-60 Development					
Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
ILS - MSS (Non FFRDC)	Various	Various : Various	2.913	0.118	Dec 2012	0.175	Dec 2013	0.150	Dec 2014	-		0.150	-	3.356	-
Integrated Logistics Support	WR	Various : Various	6.459	0.670	Nov 2012	0.650	Dec 2013	0.450	Dec 2014	-		0.450	-	8.229	-
Prior year Support cost no longer funded in the FYDP	Various	Various : Various	8.589	-		-		-		-		-	-	8.589	-
Subtotal			17.961	0.788		0.825		0.600		-		0.600	-	20.174	-
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Dev Test & Evaluation	WR	NAWCAD : Patuxent River, MD	45.047	2.980	Nov 2012	2.754	Nov 2013	4.000	Dec 2014	-		4.000	-	54.781	-
Dev Test & Evaluation	WR	Various : Various	23.458	2.107	Nov 2012	0.913	Nov 2013	0.200	Nov 2014	-		0.200	-	26.678	-
Operational Test & Evaluation	WR	OPTEVFOR : Norfolk, VA	5.506	0.100	Nov 2012	1.203	Feb 2014	3.725	Dec 2014	-		3.725	-	10.534	-
Prior year T&E cost no longer funded in the FYDP	Various	Various : Various	6.159	-		-		-		-		-	-	6.159	-
Subtotal			80.170	5.187		4.870		7.925		-		7.925	-	98.152	-
Management Services (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Eng & Tech Srvs (Non FFRDC)	Various	Various : Various	18.071	1.352	Jan 2013	2.300	Jan 2014	1.581	Nov 2014	-		1.581	-	23.304	-
Government Engineering Support	WR	NAWCAD : Patuxent River, MD	13.770	1.695	Nov 2012	1.538	Nov 2013	1.374	Nov 2014	-		1.374	-	18.377	-
Government Engineering Support	WR	NSWC : Panama City, FL	31.835	0.243	Nov 2012	0.750	Nov 2013	0.500	Nov 2014	-		0.500	-	33.328	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy												Date: March 2014			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604212N / Other Helicopter Development				Project (Number/Name) 2415 / H-60 Development					
Management Services (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Engineering Support	WR	Various : Various	25.660	-		1.373	Dec 2013	1.118	Nov 2014	-		1.118	-	28.151	-
Program Mgmt Support CSS	WR	Various : Various	5.557	0.680	Jan 2013	0.180	Jan 2014	0.180	Jan 2015	-		0.180	-	6.597	-
Program Mgmt Support	WR	Various : Various	14.371	0.311	Nov 2012	0.290	Nov 2013	0.250	Nov 2014	-		0.250	-	15.222	-
Travel	WR	Various : Various	3.126	0.100	Nov 2012	0.068	Nov 2013	0.100	Oct 2014	-		0.100	-	3.394	-
Prior year Mgmt cost no longer funded in the FYDP	Various	Various : Various	0.984	-		-		-		-		-	-	0.984	-
Subtotal			113.374	4.381		6.499		5.103		-		5.103	-	129.357	-
			Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			698.993	20.489		21.827		25.885		-		25.885	-	767.194	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy

Date: March 2014

Appropriation/Budget Activity

1319 / 5

R-1 Program Element (Number/Name)

PE 0604212N / Other Helicopter  
Development

Project (Number/Name)

2415 / H-60 Development

Airborne Mine Countermeasures	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Acq Milestones																												
Milestones												IOC ▲																
System Development																												
Hardware/Software Development	Correction of Deficiencies																											
Reviews																												
Test & Evaluation																												
AMNS	DT							QA																				
MH-60S AMCM												IOT&E																
Production Milestones																												
Contract Award																												
AMCM Ancillary kits				●			●																					
Deliveries																												
								FY11																				
												FY12																
													FY13															
														FY14														

2015PB - 0604212N - 2415



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**Appropriation/Budget Activity**  
1319 / 5

**R-1 Program Element (Number/Name)**  
PE 0604212N / *Other Helicopter Development*

**Project (Number/Name)**  
2415 / H-60 Development

[illegible]

2015PB - 0604212N - 2415

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2015 Navy			<b>Date:</b> March 2014
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604212N / <i>Other Helicopter Development</i>	<b>Project (Number/Name)</b> 2415 / <i>H-60 Development</i>	

**Schedule Details**

<b>Events by Sub Project</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
<b><i>Airborne Mine Countermeasures</i></b>				
Acq Milestones: Milestones: - Initial Operational Capability-AMCM	4	2015	4	2015
System Development: Hardware/Software Development: AMCM Correction of Deficiencies	1	2013	4	2014
Test & Evaluation: AMNS: - Developmental Testing (DT) (AMNS)	1	2013	3	2013
Test & Evaluation: AMNS: - Operational Assessment (OA) (AMNS)	2	2014	4	2014
Test & Evaluation: MH-60S AMCM: Initial Operational Test and Evaluation (IOT&E)	1	2015	4	2015
Contract Award: AMCM Ancillary kits: - Contract Award - Production (AMCM Ancillary Kits-FY13)	4	2013	4	2013
Contract Award: AMCM Ancillary kits: - Contract Award - Production (AMCM Ancillary Kits-FY14)	3	2014	3	2014
Deliveries: - LRIP Delivery (AMCM Ancillary Kits-FY11)	3	2014	1	2015
Deliveries: - Production Delivery (AMCM Ancillary Kits-FY12)	1	2015	1	2016
Deliveries: - Production Delivery (AMCM Ancillary Kits-FY13)	3	2015	1	2016
Deliveries: - Production Delivery (AMCM Ancillary Kits-FY14)	3	2016	2	2017
<b><i>Forward Firing Weapon</i></b>				
Rockets: System Integration: System Integration	1	2013	3	2015
Test and Evaluation: Developmental Testing (DT) (FFW)	2	2014	3	2015
Test and Evaluation: Operational Testing (OT) (FFW)	4	2015	1	2016

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604212N / Other Helicopter Development				Project (Number/Name) 2460 / VH-3/VH-60			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
2460: VH-3/VH-60	22.545	0.711	1.532	11.539	-	11.539	3.301	1.394	1.403	1.462	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
Marine Helicopter Squadron One (HMX-1) is required to provide safe and timely transportation for the President and Vice President of the United States, heads of state and others as directed by the White House Military Office. Currently two Type, Model, Series aircraft are used by HMX-1 for the Presidential support mission - the VH-3D and the VH-60N. This project currently funds the VH Executive Helicopter's Aircraft Life Management Program.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: VH Executive Helicopter Aircraft Life Management Program  Articles:  Description: VH Executive Helicopter Aircraft Life Management Program: Provides for management and improvement of all Executive Helicopter systems readiness including safety, operational weight, mission availability, structural integrity, component reliability, maintainability, software, and obsolescence issues as they arise.  FY 2013 Accomplishments: Provided government support and contract award for efforts associated with the Aircraft Life Management Program for the VH Executive Helicopters.  FY 2014 Plans: Provide government support and contract awards for efforts associated with the Aircraft Life Management Program for VH Executive Helicopters. Evaluation of a Wideband Line of Sight (WBLoS) system for prototype and test for integration into the VH Communications Suite.  FY 2015 Plans: Provide government support and contract awards for efforts associated with the Aircraft Life Management Program for VH Executive Helicopters. Support design, integration, and test of a WBLoS System for Executive Lift Platforms.The majority of the RDT&E,N WBLoS hardware and software integration work is in FY 2015 using the VH software support activity.									0.711	1.532	11.539	
									-	-	-	
Accomplishments/Planned Programs Subtotals									0.711	1.532	11.539	

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2015 Navy										<b>Date:</b> March 2014	
<b>Appropriation/Budget Activity</b> 1319 / 5				<b>R-1 Program Element (Number/Name)</b> PE 0604212N / <i>Other Helicopter Development</i>				<b>Project (Number/Name)</b> 2460 / <i>VH-3/VH-60</i>			
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
			<u>FY 2015</u>	<u>FY 2015</u>	<u>FY 2015</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>Complete</u>	<u>Total Cost</u>
• APN/056600: <i>Executive Helicopters Series</i>	41.610	80.537	71.328	-	71.328	76.878	71.478	63.945	63.167	28.418	1,017.604
<b>Remarks</b>											
<b>D. Acquisition Strategy</b>											
VH Executive Helicopter Aircraft Life Management Program will include trade studies and risk reduction efforts necessary to address safety, operational weight, mission availability, structural integrity, component reliability, maintainability, software, and obsolescence issues as they arise. Results of these trade studies and risk reduction efforts will lead to modifications to be addressed through the program's Obsolescence Management Program and VH Comm Suite Upgrade Operational Safety and Improvement Programs as directed by the Deputy Secretary of Defense.											
<b>E. Performance Metrics</b>											
Completion of VH Executive Helicopter Aircraft Life Management Program efforts.											

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PE 0604212N: *Other Helicopter Development*  
Navy

R-1 Line #87

**Project (Number/Name)**  
2460 / VH-3/VH-60

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2015OSD - 0604212N - 2460

**UNCLASSIFIED**

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604212N / Other Helicopter Development				Project (Number/Name) 3355 / MH-XX Development			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
3355: MH-XX Development	-	-	0.266	6.055	-	6.055	5.335	1.750	1.650	1.686	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
Note New Start in FY 2014												
A. Mission Description and Budget Item Justification The MH-XX project directs Naval Aviation developmental activities in support of the recapitalization of the Navy H-60 series helicopters in the 2028 timeframe. These aircraft will be used extensively to protect Navy assets from airborne, surface, and sub-surface threats. Other supported mission areas will include Combat Search and Rescue, Naval Special Warfare, Humanitarian Assistance/Disaster Relief, Logistics, and Medical Evacuation. Development activities include: capability gap identification, capability requirement definition, design trades and affordability studies. These activities will lead to the development of an Initial Capabilities Document and other pre-system acquisition documentation. This analysis will enable the development of a system which provides best value to Naval Aviation while maintaining effective and efficient war fighting capability in support of the Navy's 30-year Aviation Plan.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: MH-XX Development Engineering Support  Articles:  Description: Provide research and development support for pre-Milestone A activities to enable recapitalization of the capabilities of the Navy H-60 Type/Model/Series.  FY 2013 Accomplishments: N/A  FY 2014 Plans: Provide support for developmental activities which include modeling and simulation of identified capability gaps and engineering analysis.  FY 2015 Plans: Continue modeling and simulation; provide support for developmental activities which include capability requirements definition and development of the Initial Capabilities Document, Analysis of Alternatives (AOA) Study Guidance and AOA Study Plan.									-	0.266	6.055	
									-	-	-	
Accomplishments/Planned Programs Subtotals									-	0.266	6.055	

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604212N / Other Helicopter Development	Project (Number/Name) 3355 / MH-XX Development
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A		
<b>Remarks</b>		
<b>D. Acquisition Strategy</b> Activities will be predominantly government. The results of these activities will establish the acquisition strategy for the remainder of the program.		
<b>E. Performance Metrics</b> Completion of Capability Requirements and Milestone Documentation.		

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy																Date: March 2014																
Appropriation/Budget Activity 1319 / 5										R-1 Program Element (Number/Name) PE 0604212N / Other Helicopter Development								Project (Number/Name) 3355 / MH-XX Development														
MH-XX Development					FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
					1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q				
Acquisition Milestones																																
Planning									Rqmts Analysis																							
									Design Analysis/Trades																							
																	Prog Plan/Documentation															