

UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification						DATE:	
APPROPRIATION/BUDGET ACTIVITY						February 2008	
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5						R-1 ITEM NOMENCLATURE	
COST (\$ in Millions)						0604212N, OTHER HELO DEVELOPMENT	
	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Total PE Cost	96.809	40.862	58.210	10.936	8.392	8.553	8.732
1109 CH/MH-53	15.357	2.736	2.901	3.003	3.065	3.119	3.179
2415 CH-60 DEVELOPMENT	81.453	38.126	47.268	7.933	5.327	5.434	5.553
2460 VH-3/VH-60			8.041				

* Totals may not add due to rounding

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

1109 - 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 FY2013, 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. 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. A one-time supplemental add in FY07 of \$13M funded laser warning development and integration on the AAR-54 Missile Warning system (MWS). The AAR-54 is the MWS of the Directed Infrared Countermeasures (DIRCM) System. DIRCM fielding was accelerated in the FY07 supplemental due to in theater survivability requirements. The laser warning development upgrades the DIRCM system to current laser warning requirements. Modeling and simulation will be used to the maximum practical extent throughout this effort. Manned Flight Simulator (MFS) 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 electromagnetic vulnerability (EMV) assessment will be required for the affected and/or modified systems.

2415 - The Helicopter Combat Support (HC) mission is to 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 (VERTREP), 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 (VOD); airhead operations, and day/night search and rescue (SAR); Organic Airborne Mine Countermeasures (OAMCM) and Armed Helo. The MH-60S Operational Requirements Document (ORD) was modified in May 2000 to add Organic Airborne Mine Countermeasures (OAMCM) as a capability. The Armed Helo will provide Combat Search and Rescue (CSAR), Surface Warfare (SUW) and Maritime Interdiction Operations (MIO) to include Link 16. The aircraft secondary roles include torpedo and drone recovery, noncombatant evacuation operations (NEO), Sea Air Land (SEAL) and Explosive Ordnance Disposal (EOD) support.

2460 - 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 (WHMO). Currently two Type, Model, Series (TMS) aircraft are used by HMX-1 for the Presidential support mission - the VH-3D and the VH-60N. Project Unit 2460 represents a new start in Fiscal Year 2009. This project will fund a Service Life Assessment Program (SLAP) for both the VH-3D and the VH-60N and will also upgrade the safety of the fuel system on the VH-3D only.

in GWOT supplemental.

B. PROGRAM CHANGE SUMMARY

Funding:	FY 2007	FY 2008	FY 2009
FY 2008 President's Budget:	85.872	46.815	36.759
FY 2009 President's Budget:	96.809	40.862	58.210
Total Adjustments	10.937	-5.953	21.451
Summary of Adjustments			
Congressional Reductions		-5.000	
Congressional Undistributed Reductions	-1.693	-0.266	
Congressional Increases	13.000		
Economic Assumptions			-0.263
Miscellaneous Adjustments	-0.369	-0.687	21.714
Subtotal	10.938	-5.953	21.451

EXHIBIT R-2, RDT&E Budget Item Justification		DATE: February 2008
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5	R-1 ITEM NOMENCLATURE 0604212N, OTHER HELO DEVELOPMENT	

Schedule:

1109 - Added Safety Upgrades to schedule.

2415 AMCM - Full Operational Capability (FOC) moved from FY10 to FY14 to align with the current Multi Mission Helicopter (MMH) ORD. AMCM 2B Ground Test for RAMICS with Common Console and CSTRS was delayed from 4th quarter FY07 to 2nd quarter FY08 due to technical issues experienced during sensor development. With the addition of Correction of Deficiencies (COD) testing, Developmental Testing (DT) for Block 2A has slipped, extending DT completion through 4th quarter FY07. Operational Testing (OT) will now be completed in 2nd quarter FY08. Initial Operating Capability (IOC), Interim Program Review (IPR) IV and Full Rate Production (FRP) have slipped from 4th quarter FY07 to 3rd quarter FY08 as a result. Block 2B Airborne Mine Neutralization System (AMNS) and Airborne Laser Mine Detection System (ALMDS) sensor/integration schedules have been separated due to individual sensor schedules. Sensor development schedules have driven changes/delays to the integration schedules as reflected. Organic Airborne & Surface Influence Sweep (OASIS) is realigned with Rapid Airborne Mine Clearance System (RAMICS) testing due to technical issues experienced by PMS-495/EDO during the development of the OASIS tow cable which has delayed integration testing.

2415 Link 16 - IPR2 has been removed from the schedule because it relates to Armed Helo Block 3A acquisition milestones, not Block 3B Link 16. Aircraft Block 3B Mod Delivery slipped from 4th quarter FY07 into the 1st quarter FY08 because of delays in aircraft integration efforts. Prioritized testing for CSG-3 resulted in delays of Contractor Testing (CT-IIJ) completion from 2nd quarter to 3rd quarter FY07 and Developmental Testing (DT-IIJ) from 1st quarter FY07 to 3rd quarter FY07. Operational Test Readiness Review (OTRR) moves to 3rd quarter FY08 and Operational Testing (OT-IIJ) is delayed from 4th quarter FY07 to 3rd quarter FY08 due to development and integration time increases and source lines of code.

2415 Fixed Forward Weapons/Rockets - Operational Testing (OT-IJK) will complete in 4th quarter instead of 3rd quarter FY09 due to NRE/design and integration beginning in the 2nd quarter versus the 1st quarter FY08.

Technical: N/A

EXHIBIT R-2a, RDT&E Project Justification						DATE:						
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5						PROGRAM ELEMENT NUMBER AND NAME 0604212N, OTHER HELO DEVELOPMENT		PROJECT NUMBER AND NAME 1109, CH/MH-53				
COST (\$ in Millions)						FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
1109 CH/MH-53						15.357	2.736	2.901	3.003	3.065	3.119	3.179
RDT&E Articles Qty												

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 FY2013, 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. 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. Modeling and simulation will be used to the maximum practical extent throughout this effort. MFS 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 EMV assessment will be required for the affected and/or modified systems.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	.339	.383	.392
RDT&E Articles Qty			

H-53 Avionics: Trade studies, risk reduction, design, development, model, integration and test activities for cockpit and avionics improvements for the H-53 avionics systems and associated subsystems. Integrate software applique for cockpit and avionics improvements, to include the development of new sensors and the impact in flight control computers. Conduct Business Case Analyses to determine impact of high Operation and Support (O&S) cost drivers and address alternatives for obsolescence issues.

	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	12.181	.193	.198
RDT&E Articles Qty			

H-53 Survivability: 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.

	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	1.206	1.317	1.451
RDT&E Articles Qty			

H-53 Propulsion: Trade studies, risk reduction, design, development, integration and test activities for H-53 T64 engine and related systems.

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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	0604212N, OTHER HELO DEVELOPMENT	1109, CH/MH-53

	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	1.156	.629	.642
RDT&E Articles Qty			

Project Management Support: In-house, field activities, 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 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.

	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	.475	.214	.218
RDT&E Articles Qty			

H-53 Airframe: Trade studies, risk reduction, design, development, integration and test activities for the H-53 airframe to include, but not limited to, main rotorhead, cowings, aircraft structure, drive train, and various dynamic components.

C. OTHER PROGRAM FUNDING SUMMARY:	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost
0528000 APN-5 H-53 Series	236.969	51.651	56.381	36.326	45.434	46.497	46.626	217.597	737.481

D. ACQUISITION STRATEGY: This is a non-ACAT program with no specific acquisition strategies.

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Exhibit R-3 Cost Analysis (page 1)										DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT				PROJECT NUMBER AND NAME						
RDT&E,N / BA-5		0604212N, OTHER HELO DEVELOPMENT				1109, CH/MH-53						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PRODUCT DEVELOPMENT												
AHD (Avionics - Design & Analy	VARIOUS	TBD	1.284			.076	Various	.077	Various	Cont.	Cont.	
PHD (Avionics - Design & Analy	VARIOUS	VARIOUS	1.157	.058	Sep 2007	.257	Various	.264	Various	Cont.	Cont.	
SE (Engine - Design & Analysis	WX	NAWCAD, PATUXENT RIVER MD				.516	Nov 2007	.554	Nov 2008	Cont.	Cont.	
AI (Surviv - Design & Analysis	T&M	NORTHOP GRUMMAN, CHICAGO IL		12.010	Aug 2007						12.010	12.010
SUBTOTAL PRODUCT DEVELOPMENT			2.441	12.068		.849		.895		Cont.	Cont.	

Remarks:

SUPPORT												
GFE (Avionics - Design&Analysis	VARIOUS	NAWCAD, PATUXENT RIVER MD	.125			.381	Nov 2007	.378	Nov 2008	Cont.	Cont.	
SD (Avionics - Design & Analy	VARIOUS	TBD	.327	.786	Jul 2007	.194	Various	.199	Various	Cont.	Cont.	
SUBTOTAL SUPPORT			.452	.786		.575		.577		Cont.	Cont.	

Remarks:

TEST & EVALUATION												
DT&E (Survivability - Design &	VARIOUS	TBD	2.033	.025	Various	.682	Various	.787	Various	Cont.	Cont.	
SUBTOTAL TEST & EVALUATION			2.033	.025		.682		.787		Cont.	Cont.	

Remarks:

MANAGEMENT												
Contractor Eng Sup	BOA, T&M	SIKORSKY, STRATFORD, CT	2.213	.712	Nov 2006						2.925	2.925
Govt Supt (Survivability - Des	WX	NAWCAD, PATUXENT RIVER MD	1.226	.975	Oct 2006	.160	Nov 2007	.163	Nov 2008	Cont.	Cont.	
Program Management Support	VARIOUS	VARIOUS	.380	.010	Various	.359	Various	.366	Various	Cont.	Cont.	
Contract Management	MP	CECOM, FT MONMOUTH NJ		.600	Jul 2007						.600	
Travel	TO	TRAVEL VENDOR, LEXINGTON PARK, MD	.878	.182	Various	.111	Various	.113	Various	Cont.	Cont.	
SUBTOTAL MANAGEMENT			4.697	2.479		.630		.642		Cont.	Cont.	

Remarks:

Total Cost			9.623	15.357		2.736		2.901		Cont.	Cont.	.000
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Remarks:Dollars may not add due to rounding.

EXHIBIT R-2a, RDT&E Project Justification							DATE:	
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME			
RDT&E,N / BA-5		0604212N, OTHER HELO DEVELOPMENT			2415, CH-60 DEVELOPMENT			
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
2415 CH-60 DEVELOPMENT		81.453	38.126	47.268	7.933	5.327	5.434	5.553
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

2415 - The Helicopter Combat Support (HC) mission is to 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 (VERTREP), 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 (VOD); airhead operations, and day/night search and rescue (SAR), Organic Airborne Mine Countermeasures (OAMCM) and Armed Helo. The MH-60S ORD was modified in May 2000 to add Organic Airborne Mine Countermeasures (OAMCM) as a primary mission for the MH-60S. The Airborne Mine Countermeasures (AMCM) mission will provide Carrier Strike Groups (CSGs) and Expeditionary Strike Groups (ESGs) with an OAMCM capability. The Armed Helo will provide Combat Search and Rescue (CSAR), Surface Warfare (SUW) and Maritime Interdiction Operations (MIO) to include Link 16. The aircraft secondary roles include torpedo and drone recovery, noncombatant evacuation operations (NEO), Sea Air Land (SEAL) and Explosive Ordnance Disposal (EOD) support.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

MH-60S Airframe Development and Integration	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	31.900	12.150	12.259
RDT&E Articles Qty			

The design, development, integration, and support of the AMCM unique items into the MH-60S airframe. Design, develop, integrate and support the interoperability of Automatic Flight Control System (AFCS). T&E on AMCM Mission Kits as each weapon system is introduced to the MH-60S. AMCM training situation analysis and instructional system development (ISD) documentation. Design, develop, integrate and support the Link 16 development. Integrate Link 16 training situation analysis, instructional system development (ISD) document. RTOC initiative: weight reduction. Conduct trade studies and analysis, develop and qualify components in order to replace obsolete system components on the MH-60S. Environmental Data Recorder effort for OAMCM. Design, integrate, test (CT, DT, OT), and support Fixed Forward Weapons/Rockets.

MH-60S Avionics Development and Integration	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	29.928	11.817	17.256
RDT&E Articles Qty			

Developmental efforts on the avionics architecture and systems of the MH-60S helicopter. Development of the operator consoles, as well as software modifications, to support AMCM systems. Continue AMCM training situational analysis, and instructional system development (ISD) documentation. Design, develop, integrate and support the Link 16 software development. Integrate Link 16 training situation analysis, instructional system development (ISD)document. Develop capability for MH-60S Joint Mission Planning System (JMPS) networking. Design, integrate, test (CT, DT, OT), and support Fixed Forward Weapons/Rockets.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2008
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604212N, OTHER HELO DEVELOPMENT	PROJECT NUMBER AND NAME 2415, CH-60 DEVELOPMENT

MH-60S Engineering, Logistics , Mgt Support	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	19.625	14.159	17.753
RDT&E Articles Qty			

Navy field activity systems engineering, logistics support, management and travel for the AMCM MH-60S Weapons System Integration Team (WSIT) for airframe and avionics, Fixed Forward Weapons/Rockets integration, and Link 16 development effort. Support/conduct MH-60S aircraft integration testing for AMCM sensor systems and Link 16, Rockets. Engineering and integration effort to incorporate AMCM requirements into the ship C4I structure. Provide JMPS networking requirements and validate software updates.

C. OTHER PROGRAM FUNDING SUMMARY:			FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost
017900	APN-1	MH-60S	546.254	500.173	549.670	494.204	543.007	492.188	459.509	758.955	4,343.960
060510	APN-6	MH-60S	7.939	8.256	2.005	1.973	1.277				21.450
053000	APN-5	H-60 Mods	10.153	28.357	36.963	37.681	35.648	30.292	19.621	40.718	239.433
(OSIPs 016-04, 009-07, 009-09)											

D. ACQUISITION STRATEGY:

Airborne Mine Countermeasures (AMCM) and Armed Helo are elements of the existing MH-60S ACAT IC Program. MH-60S will employ an evolutionary acquisition approach via the MH-60S Block Upgrades. This allows for future modification for systems still in early development. The block upgrades will maximize commonality across all MH-60S missions and all AMCM/Armed Helo weapon systems, including logistics, training and maintenance. The MH-60S block upgrades are as follows.

- Block 1 - Combat Support Helicopter
- Block 2 - Airborne Mine Countermeasures
- Block 3 - Armed Helo

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Exhibit R-3 Cost Analysis (page 1)										DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT				PROJECT NUMBER AND NAME						
RDT&E,N / BA-5		0604212N, OTHER HELO DEVELOPMENT				2415, CH-60 DEVELOPMENT						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PRODUCT DEVELOPMENT												
GFE - Rockets	TBD	TBD				.500	Mar 2008	.250	Dec 2008		.750	0.750
Primary Hdw Dev - Airframe	*SS/CPIF	SIKORSKY A/C CORP, STRATFORD, CT	126.062	27.100	Dec 2006	3.900	Jan 2008	9.796	Dec 2008	4.385	171.243	171.243
Primary Hdw Dev - Airframe Rkt	TBD	SIKORSKY A/C CORP, STRATFORD, CT				3.000	Mar 2008	2.213	Dec 2008		5.213	5.213
Primary Hdw Dev - Avionics	*SS/CPIF	LOCKHEED MARTIN CORP, OWEGO, NY	132.095	29.928	Dec 2006	9.817	Jan 2008	15.256	Dec 2008	4.252	191.348	191.348
Primary Hdw Dev - Avionics Rkt	TBD	LOCKHEED MARTIN CORP, OWEGO, NY				2.000	Mar 2008	2.000	Dec 2008		4.000	4.000
Primary Hdw Dev - CSTRS	**SS/CPFF	VARIOUS	37.668								37.668	37.668
Primary Hdw Dev - CSTRS	RX	NSWC, PANAMA CITY FL	6.480	4.800	Dec 2006	4.750	Jan 2008				16.030	
All Product Dev Cost from FY97-FY06	VARIOUS	VARIOUS	11.128								11.128	
SUBTOTAL PRODUCT DEVELOPMENT			313.433	61.827		23.967		29.515		8.637	437.380	

Remarks: * PYs SS/CPAF - \$2,88
 FY05-FY07 SS/CPIF
 ** PYs SS/CPAF, FY05-FY06 CPFF

SUPPORT												
ILS - MSS (NON-FFRDC)	VARIOUS	VARIOUS	.559	.394	Jan 2007	.255	Jan 2008	.260	Dec 2008		1.468	
ILS - Rockets	WX	VARIOUS				.475	Mar 2008	.500	Dec 2008		.975	
Integrated Logistics Sup	WX	VARIOUS	2.301	1.427	Nov 2006	.610	Nov 2007	.424	Nov 2008	.191	4.953	
Integrated Logistics Sup	VARIOUS	VARIOUS	4.417								4.417	
All Support Cost from FY97-FY06	VARIOUS	VARIOUS	4.172								4.172	
SUBTOTAL SUPPORT			11.449	1.822		1.340		1.184		.191	15.986	

TEST & EVALUATION												
Dev Test & Eval	WX	NAWCAD, PATUXENT RIVER MD	6.920	6.805	Nov 2006	5.595	Dec 2007	7.198	Nov 2008	3.500	30.018	
Dev Test & Eval	WX	VARIOUS	13.681	.081	VARIOUS						13.762	
Dev Test & Eval - Rockets	WX	NAWCAD, PATUXENT RIVER MD				.500	Mar 2008	1.500	Dec 2008		2.000	
Oper Test & Eval	WX	OPER T & E FOR CD 30, NORFOLK VA		1.000	Feb 2007			2.000	Nov 2008	2.315	5.315	
Oper Test & Eval	WX	VARIOUS	.776								.776	
All Test & Eval Costs from FY97-FY06	VARIOUS	VARIOUS	5.383								5.383	
SUBTOTAL TEST & EVALUATION			26.760	7.886		6.095		10.698		5.815	57.254	

Remarks: Totals may not add due to rounding.

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Exhibit R-3 Cost Analysis (page 1)									DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5			PROGRAM ELEMENT 0604212N, OTHER HELO DEVELOPMENT			PROJECT NUMBER AND NAME 2415, CH-60 DEVELOPMENT					

MANAGEMENT												
Eng & Tech Srvc (NON-FFRDC)	VARIOUS	VARIOUS	8.088	.875	VARIOUS	.499	VARIOUS	.520	VARIOUS	1.425	11.407	
Government Eng Sup	WX	NAWCAD, PATUXENT RIVER MD	3.510	1.765	Nov 2006	1.200	Dec 2007	1.200	Nov 2008	3.240	10.914	
Government Eng Sup	WX	NSWC, PANAMA CITY FL	11.863	5.050	Nov 2006	3.400	Nov 2007	2.500	Nov 2008	2.475	25.287	
Government Eng Sup	WX	VARIOUS	23.173	.403	VARIOUS	.375	VARIOUS	.375	VARIOUS		24.325	
Program Mgmt CSS	VARIOUS	VARIOUS	3.166	.633	VARIOUS	.550	VARIOUS	.554	VARIOUS	1.207	6.110	
Program Mgmt Govt Sup	WX	VARIOUS	10.899	.727	VARIOUS	.500	VARIOUS	.522	VARIOUS	.858	13.506	
Travel	WX	VARIOUS	1.639	.450	Nov 2006	.200	Dec 2007	.200	Nov 2008	.400	2.889	
Travel	WX	OPER T & E FOR CD 30, NORFOLK VA		.015	Dec 2006						.015	
All Mgmt Costs from FY97-FY06	VARIOUS	VARIOUS	.984								.984	
SUBTOTAL MANAGEMENT			63.320	9.918		6.724		5.871		9.604	95.438	

Total Cost			414.963	81.453		38.126		47.268		24.247	606.057	
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Remarks: Totals may not add due to rounding.

CLASSIFICATION:																																
Profile																								DATE:								
APPROPRIATION/BUDGET ACTIVITY																								PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME				
RDT&E, N / BA-5																								0604212N, OTHER HELO DEVELOPMENT				2415, CH-60 DEVELOPMENT				
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					IOC BLOCK 2A																											
MH-60S AMCM Aircraft Development					IPR IV Block 2A																											
AMCM Mission Kits CSTRS & Common Console	2B Grn Tst (ALMDS, OASIS, AMNS)				2B Grn Tst (RAMICS)																											
Test & Evaluation Milestones	DT-IIC				OT-IIC																											
MH-60S AMCM Block 2A																																
MH-60S AMCM (Note 1) Block 2B (AMNS)		CT			DT-IID				OT-IID																							
MH-60S AMCM (Note 1) Block 2B (ALMDS) (OASIS, RAMICS)									CT	DT-IID	OT-IID						CT			DT-IID					OT-IID							
Production Milestones																																
AMCM Mission Kits									FRP																							
Contract Award																																
Deliveries (Note 2) CSTRS									Production Deliveries																							
Common Console									Production Deliveries																							

Notes:
 1. Block 2B timebar uses slant lines to depict the overlap of CT/DT and DT/OT test periods for the three separate systems (OASIS, ALMDS, AMNS).
 2. Nine initial production CSTRS and Common Consoles were procured in FY02, FY03 and FY04. All nine CSTRS were delivered in FY04 and FY05, six Common Consoles were delivered in FY04 and FY05. The remaining 3 were delivered in the 4th QTR of FY06. Two Low Rate Production CSTRS and Common Consoles were procured in third quarter FY06 and delivered in FY07/FY08.

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CLASSIFICATION:								
Exhibit R-4a, Schedule Detail					DATE: February 2008			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5		PROGRAM ELEMENT 0604212N Other Helo Development			PROJECT NUMBER AND NAME 2415, CH-60 DEVELOPMENT			
Schedule Profile		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Block 2A								
Developmental Testing (DT-IIC)		1Q-4Q						
Operational Testing (OT-IIC)			2Q					
Initial Operational Capability-Block 2A			3Q					
Block 2B								
Ground Testing (ALMDS, OASIS, AMNS)		1Q-3Q						
RAMICS Ground Testing			2Q-3Q					
Contractor Test (AMNS)		1Q-4Q						
Contractor Test (ALMDS)			3Q-4Q					
Developmental Testing (DT-IID)(AMNS)			2Q-4Q					
Developmental Testing (DT-IID)(ALMDS)			4Q	1Q				
Operational Testing (OT-IID)(AMNS)				1Q-3Q				
Operational Testing (OT-IID)(ALMDS)				1Q-3Q				
Contractor Test (OASIS, RAMICS)			2Q-4Q	1Q-2Q				
Developmental Testing (DT-IID) (OASIS, RAMICS)				1Q-4Q	1Q-2Q			
Operational Testing (OT-IID)(OASIS, RAMICS)					1Q-4Q			
Full Rate Production (FRP) Decision / IPR IV			3Q					
Contract Award - Production			3Q					
Full Rate Production Delivery (Common Consoles & CSTRS)			4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
Full Operational Capability - Block 2B (FY14)								

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CLASSIFICATION:																												
EXHIBIT R4, Schedule Profile														DATE: February 2008														
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5 0604212N, OTHER HELO DEVELOPMENT														PROJECT NUMBER AND NAME 2415, CH-60 DEVELOPMENT														
Fiscal Year	FY 2007				FY 2008				FY 2009				FY 2010				FY 2011				2012				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 (Block 3B Link-16)								★ IOC																				
Design/Build/Integration Block 3B Link-16	Design & Int																											
Fixed Forward Weapon/Rockets								△ IPR 3																				
MH-60S Block 3B Development Milestones	PDR																											
Aircraft Block 3B Mod Delivery							△																					
Test & Evaluation Milestones Block 3B Link-16	▲ DTRR							△ OTRR																				
Fixed Forward Weapon/Rockets	CT-IJ / DT-IJ / OT-IJ								CT-IJK / DT-IJK / OT-IJK																			

CLASSIFICATION:								
Exhibit R-4a, Schedule Detail					DATE: February 2008			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5		PROGRAM ELEMENT 0604212N Other Helo Development			PROJECT NUMBER AND NAME 2415 CH-60 Development			
Schedule Profile		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
BLOCK 3B - Link 16								
System Design, Build, and Integration		1Q-3Q						
Aircraft Block 3B Mod Delivery			1Q					
Contractor Test (CT-IIJ)		1Q-3Q						
Developmental Test Readiness Review (DTRR)		1Q						
Developmental Testing (DT-IIJ)		3Q-4Q	1Q-3Q					
Operational Test Readiness Review (OTRR)			3Q					
Operational Testing (OT-IIJ)			3Q-4Q					
IPR 3			4Q					
IOC			4Q					
Fixed Forward Weapon / Rockets								
System Design, Build, and Integration			2Q-4Q					
Contractor Test (CT-IIK)			3Q-4Q	1Q				
Developmental Testing (DT-IIK)			4Q	1Q-3Q				
Operational Testing (OT-IIK)				2Q-4Q				

EXHIBIT R-2a, RDT&E Project Justification							DATE:		
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME				
RDT&E,N / BA-5		0604212N, Other Helo Development			2460 VH-3/VH-60				
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
2460 VH-3/VH-60				8.041					
RDT&E Articles Qty									

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

2460 - 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 (WHMO). Currently two Type, Model, Series (TMS) aircraft are used by HMX-1 for the Presidential support mission – the VH-3D and the VH-60N. Project Unit 2460 represents a new start in Fiscal Year 2009. This project will fund a Service Life Assessment Program for both the VH-3D and the VH-60N and will also upgrade the safety of the fuel system on the VH-3D only.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

	FY 2007	FY 2008	FY 2009
Begin VH-3D / VH-60N service life assessment			4.000
RDT&E Articles Qty			

In-house, field activity, and contractor support of the Service Life Assessment (SLAP) for the both the VH-3D and VH-60N.

	FY 2007	FY 2008	FY 2009
Begin safety upgrade to VH-3D fuel system			4.041
RDT&E Articles Qty			

In-house, field activity, and contractor support to upgrade the safety of the fuel system on the VH-3D.

C. OTHER PROGRAM FUNDING SUMMARY:	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Complete</u>	<u>Total Cost</u>
056600; Exec Helo Series	40.470	46.904	31.819	43.381	45.577	18.777	11.551	11.600	250.079

D. ACQUISITION STRATEGY: Not Applicable.

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Exhibit R-3 Cost Analysis (page 1)										DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5		PROGRAM ELEMENT 0604212N, Other Helo Development				PROJECT NUMBER AND NAME 2460 VH-3/VH-60						
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												
Systems Eng	VARIOUS	VARIOUS						5.250	Nov 2008	Continuing	Continuing	
SUBTOTAL PRODUCT DEVELOPMENT								5.250				

Remarks:

SUPPORT												
Studies & Analyses	VARIOUS	VARIOUS						0.400	Nov 2008	Continuing	Continuing	
SUBTOTAL SUPPORT								0.400				

Remarks:

TEST & EVALUATION												
Dev Test & Eval	VARIOUS	VARIOUS						1.488	Mar 2009	Continuing	Continuing	
SUBTOTAL TEST & EVALUATION								1.488				

Remarks:

MANAGEMENT												
Contractor Eng Sup	VARIOUS	VARIOUS						0.378	Dec 2008	Continuing	Continuing	
Government Eng Sup	TBD	TBD						0.320	Nov 2008	Continuing	Continuing	
Program Mgmt Sup	VARIOUS	VARIOUS						0.155	Nov 2008	Continuing	Continuing	
Travel	VARIOUS	NAVAIR, PAXTUXENT RIVER MD						0.050	Oct 2008	Continuing	Continuing	
SUBTOTAL MANAGEMENT								0.903				

Remarks:

Total Cost								8.041		Continuing	Continuing	
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Remarks:

CLASSIFICATION:																													
EXHIBIT R4, Schedule Profile																								DATE:					
																								February 2008					
APPROPRIATION/BUDGET ACTIVITY								PROGRAM ELEMENT NUMBER AND NAME												PROJECT NUMBER AND NAME									
RDT&E, N / BA-5								0604212N, Other Helo Development												2460 VH-3/VH-60									
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																													
Development of FSU																													
Qualification LFT																													
VH-3D & VH-60N SLAP																													

CLASSIFICATION:

Exhibit R-4a, Schedule Detail					DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT 0604212N, Other Helo Development			PROJECT NUMBER AND NAME 2460 VH-3/VH-60			
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Development of Fuel Safety Upgrade (FSU)			1Q-4Q	1Q-2Q			
Qualification LFT			3Q-4Q	1Q-3Q			
VH-3D & VH-60N Service Life Assessment Program (SLAP)			1Q-4Q				