

**UNCLASSIFIED**

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE			
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5						0604212N, OTHER HELO DEVELOPMENT			
COST (\$ in Millions)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
Total PE Cost	82.139	85.872	46.815	36.759	8.644	8.576	8.682	8.819	
1109 CH/MH-53	2.411	2.505	2.781	2.944	3.033	3.094	3.135	3.186	
2415 CH-60 DEVELOPMENT	78.770	83.367	44.034	33.815	5.611	5.482	5.547	5.633	
9999 CONGRESSIONAL ADDS	.958								

**(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. 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 ORD was modified in May 2000 to add Organic Airborne Mine Countermeasures (OAMCM) as a primary mission for the MH-60S. The 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.

9055 - The Sea Target Laser Aim Scoring System (STLASS) provides real-time, quantitative feedback on critical aspects of laser guided weapon employment not currently available from existing Navy laser scoring systems. This feedback has been proven to significantly improve flight crew weapon delivery capabilities during nearly a decade of use by the U.S. Army. The system consists of three major components: A Base Station, Target Kit and Aircraft Flight Data Unit. STLASS will be adapted to existing Navy seaborne targets to support Navy H-60 armed helicopter training and readiness events requiring laser-scoring capability.

**B. PROGRAM CHANGE SUMMARY**

Funding:	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget:	79.894	86.197	44.853	25.576
Current BES:	82.139	85.872	46.815	36.759
Total Adjustments	2.245	-0.325	1.962	11.183

**Summary of Adjustments**

Congressional Reductions				
Congressional Rescissions				
Congressional Undistributed Reductions	-1.756	-0.325		
Congressional Increases	1.032			
Economic Assumptions			-0.100	0.193
Miscellaneous Adjustments	2.969		2.062	10.990
Subtotal	2.245	-0.325	1.962	11.183

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EXHIBIT R-2, RDT&E Budget Item Justification		DATE: February 2007
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5	R-1 ITEM NOMENCLATURE 0604212N, OTHER HELO DEVELOPMENT	

Schedule:  
2415 AMCM - Block 2A Contractor Test (CT) has been delayed by one quarter due to testing difficulties. Developmental Testing (DT) and Operational Testing (OT) have been rescheduled accordingly as a result of the CT delays. Block 2B testing has been delayed due to sensor/weapon systems developmental issues. Major milestones for Block 2A IOC and AMCM FOC are still on schedule. The Functional Configuration Audit (FCA) and Physical Configuration Audit (PCA) have been removed from the schedule since they are not major acquisition milestones.

2415 Link 16 - IPR 2 and IPR 3 have moved to align with Armed Helo Block 3 test schedules. Critical Design Review (CDR), previously scheduled in 2nd Quarter of FY06, was completed in 3rd Quarter of FY06. CDR was delayed a quarter due to previously unresolved design issues from Preliminary Design Review (PDR) and some late deliverables from the contractor. Test periods have grown to reflect combined CT/DT/OT, inclusion of P3I and better definition of test requirements. Link 16 Block 3B design and integration extended into the third quarter of FY07 to align with CT and allow for corrections, if required, prior to DT.

Technical: N/A.

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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2007			
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 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
1109 CH/MH-53			2.411	2.505	2.781	2.944	3.033	3.094	3.135	3.186
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. 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.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

	FY 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	.357	.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 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	.168	.171	.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 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	1.198	1.250	1.362	1.494
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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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

	FY 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	.539	.556	.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 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	.149	.189	.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, cowlings, aircraft structure, drive train, and various dynamic components.

C. OTHER PROGRAM FUNDING SUMMARY:                      FY 2006      FY 2007      FY 2008      FY 2009      FY 2010      FY 2011      FY 2012      FY 2013      To Complete      Total Cost

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 2007		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5		PROGRAM ELEMENT 0604212N, OTHER HELO DEVELOPMENT				PROJECT NUMBER AND NAME 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 & Analysis)	VARIOUS	TBD	1.284	.067	Various	.076	Various	.077	Various	Continuing	Continuing	
PHD (Avionics - Design & Analysis)	VARIOUS	VARIOUS	1.157	.228	Various	.257	Various	.264	Various	Continuing	Continuing	
SE (Engine - Design & Analysis)	WX	NAWCAD, PATUXENT RIVER MD		.531	Nov 2006	.561	Nov 2007	.586	Nov 2008	Continuing	Continuing	
SUBTOTAL PRODUCT DEVELOPMENT			2.441	.826		.894		.927		Continuing	Continuing	

Remarks:

SUPPORT												
Dev Suppt (Avionics - Design & Analy	VARIOUS	VARIOUS	1.416							Continuing	Continuing	
GE (Avionics - Design&Analysis)	WX	NAWCAD, PATUXENT RIVER MD	.125	.337	Nov 2006	.381	Nov 2007	.389	Nov 2008	Continuing	Continuing	
SD (Avionics - Design & Analysis)	VARIOUS	TBD	.327	.172	Various	.194	Various	.199	Various	Continuing	Continuing	
STUDIES, ANALYSIS & EVAL (NON-FFRDC)	VARIOUS	VARIOUS	6.008							Continuing	Continuing	
SUBTOTAL SUPPORT			7.876	.509		.575		.588		Continuing	Continuing	

Remarks:

TEST & EVALUATION												
DT&E (Survivability - Design & Analy	VARIOUS	VARIOUS	2.033							Continuing	Continuing	
DT&E (Survivability - Design & Analy	VARIOUS	TBD		.614	Various	.682	Various	.787	Various	Continuing	Continuing	
SUBTOTAL TEST & EVALUATION			2.033	.614		.682		.787		Continuing	Continuing	

Remarks:

MANAGEMENT												
Contractor Eng Sup	SS/T&M	SIKORSKY AIRCRAFT CORPORATION, STRA	1.530							1.530	1.530	1.530
Govt Supt (Survivability - Des&Analy	WX	NAWCAD, PATUXENT RIVER MD	1.226	.141	Nov 2006	.160	Nov 2007	.163	Nov 2008	Continuing	Continuing	
Program Management Support	VARIOUS	TBD	.380	.317	Various	.359	Various	.366	Various	Continuing	Continuing	
Travel	TO	NAVAIR HQ PATUXENT RIVER MD	.878	.098	Various	.111	Various	.113	Various	Continuing	Continuing	
SUBTOTAL MANAGEMENT			4.014	.556		.630		.642		Continuing	Continuing	

Remarks:

Total Cost			16.364	2.505		2.781		2.944		Continuing	Continuing	
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Remarks:



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Exhibit R-4a, Schedule Detail					DATE: February 2007			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT				PROJECT NUMBER AND NAME			
RDT&E,N / BA-5	0604212N, OTHER HELO DEVELOPMENT				1109, CH/MH-53			
Schedule Profile	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Aircraft Survivability Assmt	1Q-4Q							
Armor Threat Assessment & Selection Test	1Q-4Q							
Engine Armor Package	1Q-4Q							
Cockpit Upgrade Architecture Selection	1Q-4Q							
Baseline Vulnerability Study	1Q-4Q							
AFCS Computer	1Q-4Q							
Obsolescence Issues/Studies	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
Survivability Analysis	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
Legacy P3I Efforts	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q

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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 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
2415 CH-60 DEVELOPMENT						78.770	83.367	44.034	33.815	5.611	5.482	5.547	5.633
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. Addition of Forward Fixed Weapons/Rockets, and Joint Mission Planning Systems (JMPS) integration.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

MH-60S Airframe Development and Integration	FY 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	33.291	24.004	12.497	5.616
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. 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 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	27.168	30.730	16.210	15.276
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 2007

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
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MH-60S Engineering, Logistics, Management Support	FY 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	18.312	28.633	15.327	12.923
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 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost
017900 APN-1 MH-60S	534.562	546.355	503.577	585.814	514.967	565.508	518.817	481.191	692.852	4,943.643
060510 APN-6 MH-60S	14.568	11.860	8.256	1.789	1.489	1.460				39.422
053000 APN-5 H-60 Modifications	3.136	9.977	28.803	34.099	33.856	31.677	25.930	20.075	34.060	221.613

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:		
APPROPRIATION/BUDGET ACTIVITY										February 2007		
RDT&E,N / BA-5		PROGRAM ELEMENT				PROJECT NUMBER AND NAME						
		0604212N, OTHER HELO DEVELOPMENT				2415, CH-60 DEVELOPMENT						
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												
GFE - Rockets	TBD	TBD				.500	Dec 2007	.250	Dec 2008		.750	.750
Primary Hdw Dev - Airframe	*SS/CPIF	SIKORSKY A/C CORP, STRATFORD, CT	126.325	20.607	Dec 2006	8.900	Dec 2007	3.116	Dec 2008	3.335	162.283	165.332
Primary Hdw Dev - Airframe Rkts	TBD	SIKORSKY A/C CORP, STRATFORD, CT				3.000	Jan 2008	2.250	Dec 2008		5.250	5.250
Primary Hdw Dev - Avionics	*SS/CPIF	LOCKHEED MARTIN CORP, OWEGO, NY	133.445	30.730	Dec 2006	14.210	Dec 2007	13.276	Dec 2008	3.145	194.806	198.382
Primary Hdw Dev - Avionics Rkts	TBD	LOCKHEED MARTIN CORP, OWEGO, NY				2.000	Jan 2008	2.000	Dec 2008		4.000	4.000
Primary Hdw Dev - CSTRS	RX	NSWC, PANAMA CITY FL	4.500	3.397	Dec 2006						7.897	
Primary Hdw Dev - CSTRS	**SS/CPFF	VARIOUS	37.668								37.668	37.668
Training Development	WX/RX	NAWCAD, PATUXENT RIVER MD	2.233	.500	Dec 2006						2.733	
All Product Dev Cost from FY97-FY04	VARIOUS	VARIOUS	8.993								8.993	8.993
SUBTOTAL PRODUCT DEVELOPMENT			313.164	55.234		28.610		20.892		6.480	424.380	420.375

Remarks:

SUPPORT												
ILS - MSS (NON-FFRDC)	VARIOUS	ANTEON CORPORATION, CHERRY HILL, NJ	.559	.250	Jan 2007	.255	Jan 2008	.125	Dec 2008		1.189	
ILS - Rockets	WX	VARIOUS				.475	Jan 2008	.500	Dec 2008		.975	
Integrated Logistics Sup	WX	VARIOUS	2.568	1.447	Nov 2006	.610	Nov 2007	.380	Nov 2008	.191	5.196	
Integrated Logistics Sup	VARIOUS	VARIOUS	4.477	.654	VARIOUS						5.131	
All Support Cost from FY97-FY04	VARIOUS	VARIOUS	4.172								4.172	
SUBTOTAL SUPPORT			11.776	2.351		1.340		1.005		.191	16.663	

Remarks:

TEST & EVALUATION												
Dev Test & Eval	WX	NAWCAD, PATUXENT RIVER MD	7.359	5.940	Nov 2006	6.110	Nov 2007	4.230	Nov 2008	4.310	27.949	
Dev Test & Eval	WX	VARIOUS	13.346	1.126	VARIOUS						14.472	
Dev Test & Eval - Rockets	WX	NAWCAD, PATUXENT RIVER MD				.500	Jan 2008	1.500	Dec 2008		2.000	
Live Fire Test & Eval	WX	VARIOUS	1.893								1.893	
Oper Test & Eval	WX	OPER T & E FOR CD 30, NORFOLK VA		1.200	Feb 2007	.750	Nov 2007	1.000	Nov 2008	2.000	4.950	
Oper Test & Eval	WX	VARIOUS	.776	4.153	VARIOUS						4.929	
All Test & Eval Costs from FY97-FY04	VARIOUS	VARIOUS	3.496								3.496	
SUBTOTAL TEST & EVALUATION			26.870	12.419		7.360		6.730		6.310	59.689	

Remarks:

MANAGEMENT												
Contractor Eng Sup	VARIOUS	VARIOUS	9.073	1.074	VARIOUS	.499	VARIOUS	.210	VARIOUS	.440	11.296	
Government Eng Sup	WX	NAWCAD, PATUXENT RIVER MD	3.420	2.296	Nov 2006	1.200	Nov 2007	1.200	Nov 2008	3.825	11.940	
Government Eng Sup	WX	NSWC, PANAMA CITY FL	12.029	7.000	Nov 2006	3.400	Nov 2007	2.500	Nov 2008	2.475	27.404	
Government Eng Sup	WX	VARIOUS	23.157	.954	VARIOUS						24.111	
Government Eng Sup - Rockets	WX	VARIOUS				.375	VARIOUS	.375	VARIOUS		.750	
Program Mgmt CSS	VARIOUS	VARIOUS	3.091	.618	VARIOUS	.550	VARIOUS	.460	VARIOUS	1.211	5.930	
Program Mgmt Govt Sup	WX	VARIOUS	10.745	1.171	VARIOUS	.375	VARIOUS	.218	VARIOUS	.942	13.451	
Program Mgmt Sup - Rockets	WX	NAWCAD, PATUXENT RIVER MD				.125	Nov 2007	.125	Nov 2008		.250	
Travel	WX	NAVAIR HQ, PATUXENT RIVER MD	1.639	.250	Nov 2006	.200	Nov 2007	.100	Nov 2008	.400	2.589	
SUBTOTAL MANAGEMENT			63.153	13.363		6.724		5.188		9.292	97.720	

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Exhibit R-3 Cost Analysis (page 1)			DATE:		February 2007	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME				
RDT&E,N / BA-5	0604212N, OTHER HELO DEVELOPMENT	2415, CH-60 DEVELOPMENT				

Remarks:

Total Cost			414.963	83.367		44.034		33.815		22.273	598.452
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<b>CLASSIFICATION:</b>								
Exhibit R-4a, Schedule Detail						DATE: <b>February 2007</b>		
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp; BA-5</b>				PROGRAM ELEMENT 0604212N Other Helo Developm		PROJECT NUMBER AND NAME 2415, CH-60 DEVELOPMENT		
Schedule Profile	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Block 2A								
Contractor Test	1Q-3Q							
Initial Production Delivery (Common Consoles)	4Q							
Developmental Testing (DT-IIC)	3Q-4Q	1Q-2Q						
Operational Testing (OT-IIC)		3Q						
Initial Operational Capability-Block 2A		4Q						
Block 2B								
Ground Testing (ALMDS, OASIS, AMNS)	3Q-4Q	1Q-3Q						
RAMICS Ground Testing		4Q	1Q					
CDR	1Q							
Contractor Test (ALMDS, OASIS, AMNS)	1Q-4Q	1Q-4Q	1Q-2Q					
Developmental Testing (DT-IID)			1Q-4Q	1Q				
Operational Testing (OT-IID)				1Q-3Q				
RAMICS Contractor Test			2Q-4Q	1Q-2Q				
RAMICS Developmental Testing (DT-IID)				2Q-4Q	1Q			
RAMICS Operational Testing (OT-IID)					1Q-2Q			
Full Rate Production (FRP) Decision / IPR IV		4Q						
Contract Award - Low Rate Production	3Q							
Contract Award - Production		4Q						
Full Rate Production Delivery (Common Consoles & CSTRS)			4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-3Q	
Full Operational Capability - Block 2B					4Q			

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EXHIBIT R4, Schedule Profile																	DATE: <b>February 2007</b>																
APPROPRIATION/BUDGET ACTIVITY: <b>RDT&amp;E, N /5</b>														PROGRAM ELEMENT NUMBER AND NAME: <b>0604212N, OTHER HELO DEVELOPMENT</b>																			
														PROJECT NUMBER AND NAME: <b>2415, CH-60 DEVELOPMENT</b>																			
Fiscal Year	FY 2006				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	1	2	3	4	
<b>Acquisition Milestones</b>													★ IOC																				
<b>(Block 3B Link-16)</b>						△ IPR 2							△ IPR 3																				
Design/Build/Integration	Design & Integration								Design & Int																								
Block 3B Link-16	Design & Integration								Design & Int																								
Fixed Forward Weapon/Rockets	Design & Integration								Design & Int																								
MH-60S Block 3B Development Milestones	▲ PDR	▲ CDR																															
Aircraft Block 3B Mod Delivery									△																								
<b>Test &amp; Evaluation Milestones</b>					△ DTRR					△ OTRR																							
Block 3B Link-16					CT-IJ / DT-IJ / OT-IJ																												
Fixed Forward Weapon/Rockets					CT-IJ / DT-IJ / OT-IJ																												

# UNCLASSIFIED

<b>CLASSIFICATION:</b>								
Exhibit R-4a, Schedule Detail						DATE: <b>February 2007</b>		
<b>APPROPRIATION/BUDGET ACTIVITY</b> RDT&E, N / BA-5			<b>PROGRAM ELEMENT</b> 0604212N ASW and Other Helo Development			<b>PROJECT NUMBER AND NAME</b> 2415 MH-60S Development		
<b>Schedule Profile</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>
BLOCK 3B - Link 16								
IPR 1								
System Design, Build, and Integration	1Q-4Q	1Q-3Q						
Systems Requirements Review (SRR)								
System Design Review (SDR)								
Preliminary Design Review (PDR)	1Q							
Software Readiness Review (SRR)								
Critical Design Review (CDR)	3Q							
Aircraft Block 3B Mod Delivery		4Q						
Contractor Test (CT-IIJ)	3Q-4Q	1Q-2Q						
IPR 2		2Q						
Developmental Test Readiness Review (DTRR)		1Q						
Developmental Testing (DT-IIJ)		1Q-4Q	1Q					
Operational Test Readiness Review (OTRR)		4Q						
Operational Testing (OT-IIJ)		4Q	1Q-3Q					
IPR 3			4Q					
IOC			4Q					
Fixed Forward Weapon / Rockets								
System Design, Build, and Integration			2Q-4Q					
Contractor Test (CT-IIJ)			3Q-4Q	1Q				
Developmental Testing (DT-IIJ)			4Q	1Q-3Q				
Operational Testing (OT-IIJ)				2Q-3Q				

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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2007			
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7			PROGRAM ELEMENT NUMBER AND NAME 0604212N, OTHER HELO DEVELOPMENT			PROJECT NUMBER AND NAME 9055, SH-GOB SEA TARGET LASER AIM SCORING SYSTEM (STLASS				
COST (\$ in Millions)			FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
SYSTEM (STLASS)			.958							
RDT&E Articles Qty										

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The Sea Target Laser Aim Scoring System (STLASS) provides real-time, quantitative feedback on critical aspects of laser guided weapon employment not currently available from existing Navy laser scoring systems. This feedback has been proven to significantly improve flight crew weapon delivery capabilities during nearly a decade of use by the U. S. Army. The system consists of three major components: A Base Station, Target Kit and Aircraft Flight Data Unit. STLASS will be adapted to existing Navy seaborne targets to support Navy H-60 armed helicopter training and readiness events requiring laser-scoring capability.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

	FY 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	.958			
RDT&E Articles Qty				

Continue the design and development efforts required for adaptation of a STLASS base station, target and flight data unit to Navy H-60 configuration requirements.