

# UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2008	
APPROPRIATION/BUDGET ACTIVITY							R-1 ITEM NOMENCLATURE	
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5							0605212N, CH-53K RDTE	
COST (\$ in Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011		FY 2012	FY 2013
Total PE Cost	338.087	388.380	570.484	590.243	538.025		365.021	459.530
3059 CH-53K Development	338.087	388.380	570.484	590.243	538.025		365.021	459.530

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

The CH-53E is the only maritized heavy-lift helicopter in the world and is the Marine Corps only heavy-lift helicopter. An improved CH-53E is needed to support Marine Air-Ground Task Force heavy-lift requirements in the 21st century joint environment. The CH-53E mission is the conduct of expeditionary heavy-lift assault transport of armored vehicles, equipment and personnel to support distributed operations deep inland from a sea-based center of operations. The CH-53E "Super Stallion" was introduced into operations in 1980 as an upgrade version of the CH-53D. The CH-53E has developed performance degradation, fatigue life, interoperability, maintenance supportability, and other operational concerns. The CH-53K, an upgraded variant of the CH-53E, will provide improvements in range and payload, performance, cargo handling and turn-around times, reliability and maintainability, interoperability, and survivability. The CH-53K program is required to provide full system capability, including shipboard compatibilities, at Initial Operational Capability (IOC) in Fiscal Year (FY) 2015. The CH-53K will replace the CH-53E, with Full Operational Capability (FOC) achieved by FY 2021.

Total aircraft quantities for the CH-53K program are 161 helicopters. This includes one Ground Test Vehicle (GTV) and four Engineering Development Models (EDMs) for SDD, to be purchased with RDT&E funds. Of the remaining 156 Production-representative and Production aircraft, the first six will be procured as Low Rate Initial Production (LRIP) Lot 1 aircraft with RDT&E and APN funds, with the four RDT&E aircraft to be used for Initial Operational Test and Evaluation (IOT&E) and the two APN aircraft establishing the IOC production base.

FY08 and FY09 RDT&E efforts focus on CH-53K System Development and Demonstration (SDD) activities that accomplish a successful FY 2008 Preliminary Design Review (PDR) and promote a successful FY 2009 Critical Design Review (CDR).

## B. PROGRAM CHANGE SUMMARY

Funding:	FY 2007	FY 2008	FY 2009
FY 2008 President's Budget:	350.322	417.161	615.999
FY 2009 President's Budget:	338.087	388.380	570.484
Total Adjustments	-12.235	-28.781	-45.515

Summary of Adjustments			
Congressional Reductions		-20.000	
Congressional Undistributed	-8.236	-8.781	
Economic Assumptions			-3.997
Miscellaneous Adjustments	-3.999		-41.518
Subtotal	-12.235	-28.781	-45.515

Schedule:

Not Applicable

Technical:

Not Applicable

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		0605212N, CH-53K RDTE			3059, CH-53K Development			
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
3059 CH-53K Development		338.087	388.380	570.484	590.243	538.025	365.021	459.530
RDT&E Articles Qty			1	2	2			4

## A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

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## B. ACCOMPLISHMENTS / PLANNED PROGRAM:

AIR VEHICLE DEVELOPMENT		FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost		283.859	339.924	517.019
RDT&E Articles Qty			1	2

System Development and Demonstration (SDD) activities for the CH-53K air vehicle and its associated subsystems and components, and CH-53K ancillary systems.

INTEGRATED LOGISTICS SUPPORT		FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost		16.991	10.320	11.400
RDT&E Articles Qty				

In-house, field activities, and contractors support of Integrated Logistic support, including but not limited to planning, preparations, and management of data, support equipment, Government Furnished Equipment (GFE), Studies & Analysis, and training elements of CH-53K development.

SYSTEMS ENGINEERING & PROJECT MANAGEMENT		FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost		37.237	38.136	42.065
RDT&E Articles Qty				

In-house, field activities, and contractors support of Integrated Product Teams (IPTs) to allow for the preparation of acquisition strategy, examination of equipment and avionics for the CH-53K, and development of acquisition documentation. Efforts include, but are not limited to, government development support, engineering support, program management support, systems engineering support, and travel for the CH-53K program.

## D. ACQUISITION STRATEGY:

On 31 October 2005, the Defense Acquisition Board reviewed the CH-53K program for a Milestone (MS) B decision on entry to System Development and Demonstration (SDD). The Under Secretary of the Defense (Acquisition, Technology and Logistics) (USD(AT&L)) signed the Acquisition Decision Memorandum (ADM) allowing the program to proceed with SDD on 22 December 2005. The CH-53K program was initiated as an Acquisition Category (ACAT) ID program, based on total estimated costs for Research, Development, Test and Evaluation (RDT&E), and Aircraft Procurement, Navy (APN). The CH-53K program will use a single-step acquisition approach to meet an Initial Operational Capability (IOC) of FY 2015.

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Exhibit R-3 Cost Analysis									DATE:			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT				PROJECT NUMBER AND NAME						
RDT&E,N / BA-5		0605212N, CH-53K RDTE				3059, CH-53K 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												
Award Fees	CPAF	SIKORSKY A/C CORP, STRATFORD, CT	7.410	7.998	Dec 2007	25.045	Dec 2008	26.721	Dec 2009	165.005	232.180	246.898
GFE	VARIOUS	TBD	4.521	2.778	VARIOUS	15.149	VARIOUS	3.911	VARIOUS	22.657	49.017	
Primary Hdw Development	CPAF	SIKORSKY A/C CORP, STRATFORD, CT	282.851	273.082	Feb 2007	299.730	Dec 2007	486.387	Dec 2008	2,009.620	3,351.670	3,386.424
SUBTOTAL PRODUCT DEVELOPMENT			294.782	283.859		339.924		517.019		2,197.282	3,632.866	

Remarks: Award Fee obligation occurs 3 months after end of award fee period.

Award Fee earned in FY 2006 by Sikorsky Aircraft Corporation equaled sixty-three percent of available award fee pool.

Award Fee earned in FY 2007 by Sikorsky Aircraft Corporation equaled thirty-five percent of available award fee pool.

Primary Hardware Development Target Value of Contract includes FY13 LRIP 1 RDT&E contract not yet negotiated.

Amounts may not add due to rounding.

SUPPORT												
Develop Support Equip	WX	TBD								48.600	48.600	
Integrated Logistics Sup	WX	VARIOUS	6.474	7.724	VARIOUS	5.750	Dec 2007	6.100	Dec 2008	51.772	77.820	
Studies & Analyses	VARIOUS	VARIOUS	7.130	8.267	VARIOUS	.950	VARIOUS	.700	VARIOUS	.900	17.947	
SUBTOTAL SUPPORT			13.604	15.991		6.700		6.800		101.272	144.367	

Remarks:

TEST & EVALUATION												
Dev Test & Eval	WX	NAWCAD, PATUXENT RIVER MD				2.600	Dec 2007	3.600	Dec 2008	69.250	75.450	
Dev Test & Eval	WX	NAWCWD, PT MUGU CA	.500	1.000	Dec 2006						1.500	
Dev Test & Eval	MP	ARMY, ADELPHI, MD	.097								.097	
Live Fire Test & Eval	WX	NAWCWD, CHINA LAKE CA				1.020	Jan 2007	1.000	TBD	12.450	14.470	
Oper Test & Eval	WX	TBD								25.000	25.000	
SUBTOTAL TEST & EVALUATION			.597	1.000		3.620		4.600		106.700	116.517	

Remarks:

MANAGEMENT												
Contractor Eng Sup	VARIOUS	VARIOUS	2.856	2.569	Dec 2006	1.103	Dec 2007	1.303	Dec 2008	9.198	17.027	
Government Eng Sup	WX	VARIOUS	34.241	25.818	Dec 2006	25.977	Dec 2007	28.673	Dec 2008	177.365	292.074	
Program Mgmt Sup	VARIOUS	VARIOUS	14.094	8.301	Dec 2006	10.477	Dec 2007	11.479	Dec 2008	93.606	137.957	
Travel	WX	NAWCAD, PATUXENT RIVER MD	.543	.550	VARIOUS	.580	VARIOUS	.610	VARIOUS	5.177	7.461	
SUBTOTAL MANAGEMENT			51.734	37.237		38.136		42.065		285.346	454.519	

Remarks: Amounts may not add due to rounding.

Total Cost			360.717	338.087		388.380		570.484		2,690.600	4,348.268	
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Exhibit R-4, Schedule Detail																		DATE:														
APPROPRIATION/BUDGET ACTIVITY										PROGRAM ELEMENT NUMBER AND NAME										PROJECT NUMBER AND NAME												
RDT&E,N / BA-5										0605212N, CH-53K RDTE										3059, CH-53K 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										DRR															MSC							
	System Integration								System Demonstration																LRIP / IOT&E							
RDT&E Contract Awards																									LRIP 1							
Engineering Milestones			SFR			PDR				CDR					FRR								PRR									
Logistics Milestones										ILA													ILA									
Test & Evaluation Milestones																																
																	FIRST FLIGHT				IT-B2				IT-C2							
																	IT-B1				IT-C1				IT-B1							
Production Milestones																																
																	ALFT&E (components)								ALFT&E (system)							
Deliveries																																

Exhibit R-4a, Schedule Detail						DATE:	
						February 2008	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT				PROJECT NUMBER AND NAME		
RDT&E,N / BA-5	0605212N, CH-53K RDTE				3059, CH-53K Development		
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
System Integration phase	1Q-4Q	1Q-4Q	1Q-2Q				
System Functional Review (SFR)	3Q						
Preliminary Design Review (PDR)		3Q					
Critical Design Review (CDR)			2Q				
Independent Logistics Assessment (ILA)			2Q				
USD(AT&L) Design Readiness Review (DRR)			3Q				
System Demonstration phase			3Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q
Alternative Live Fire T&E (ALT&E) (Comp.)				1Q-4Q	1Q-4Q	1Q-4Q	
Ground Test Vehicle (GTV) delivery				4Q			
Flight Readiness Review (FRR)					1Q		
Engineering Dev't Model (EDM) #1 delivery					3Q		
Integrated Test & Eval (IT) B1 (IT-B1)					3Q-4Q	1Q-4Q	1Q
EDM #2 delivery					4Q		
EDM #3 delivery						1Q	
First Flight						1Q	
EDM #4 delivery						2Q	
Production Readiness Review (PRR)						4Q	
Independent Logistics Assessment (ILA)						4Q	
Operational Test & Eval (OT) B1 (OT-B1)							1Q
ALFT&E (System)							1Q-4Q
IT-B2							1Q
MS C							1Q
Low-Rate Initial Production (LRIP) phase							2Q-4Q
LRIP 1 Kt Award							2Q
LRIP 1 production							2Q-4Q
IT-C1							2Q-4Q
IT-C2							4Q
OT-C1							4Q