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Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)					R-1 ITEM NOMENCLATURE PE 0605212N: CH-53K							
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	2,691.079	606.255	606.204	503.180	-	503.180	597.407	478.226	368.928	184.823	261.766	6,297.868
3059: CH-53K Development	2,691.079	606.255	606.204	503.180	-	503.180	597.407	478.226	368.928	184.823	261.766	6,297.868
MDAP/MAIS Code(s): 390												
[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
^{##} The FY 2014 OCO Request will be submitted at a later date												
A. Mission Description and Budget Item Justification												
The CH-53 is the only marinized heavy-lift helicopter in the world and is the Marine Corps only heavy-lift helicopter. The CH-53 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. An improved CH-53 is needed to support Marine Air-Ground Task Force heavy-lift requirements in the 21st century joint environment. The CH-53K will provide improvements in range and payload, performance, cargo handling, 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).												
Total aircraft quantities for the CH-53K program are 205 helicopters. This includes one Ground Test Vehicle (GTV) and four Engineering Development Models (EDMs) for System Development and Demonstration (SDD), to be purchased with Research, Development, Test & Evaluation (RDT&E) funds. Of the remaining 200 aircraft, four (4) will be System Demonstration Test Articles (SDTA's) and will be incrementally funded using RDT&E funds. The SDTA's will be used to prove out production and integration processes for airworthy helicopters on a pilot production line, and to provide aircraft for Initial Operational Test and Evaluation. The remaining 196 aircraft will be Aircraft Procurement, Navy funded.												
FY14 RDT&E efforts focus on CH-53K SDD activities that includes EDM fabrication and assembly, ground and flight test of GTV and EDMs, and continued fabrication of SDTAs and associated components.												
JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under SYSTEM DEVELOPMENT AND DEMONSTRATION because it includes those projects that have passed Milestone B approval and are conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production decision.												

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B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	624.461	606.204	534.767	-	534.767
Current President's Budget	606.255	606.204	503.180	-	503.180
Total Adjustments	-18.206	0.000	-31.587	-	-31.587
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.062	0.000			
• SBIR/STTR Transfer	-18.144	0.000			
• Program Adjustments	0.000	0.000	-0.657	-	-0.657
• Rate/Misc Adjustments	0.000	0.000	-30.930	-	-30.930

Change Summary Explanation

Technical: Not applicable.

Schedule: Government Test Vehicle Light Off (GTV) delivery occurred one quarter later than depicted and GTV Light Off moved to 1Q14. This delayed delivery of the GTV was due to late component qualification across the aircraft build. The Delay in delivery of the GTV further delayed the Flight Readiness Review - First Flight and the Production Readiness review, First flight has slid to the right for the same reasons that moved the GTV. The Developmental Test/TECHEVAL period moved to properly align with first flight and the formal commencement of the flight test period.

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APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)					R-1 ITEM NOMENCLATURE PE 0605212N: CH-53K				PROJECT 3059: CH-53K Development			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
3059: CH-53K Development	2,691.079	606.255	606.204	503.180	-	503.180	597.407	478.226	368.928	184.823	261.766	6,297.868
Quantity of RDT&E Articles	0	0	4	0		0	0	0	0	0		
# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
## The FY 2014 OCO Request will be submitted at a later date												
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FY14 RDT&E efforts focus on CH-53K SDD activities that includes EDM fabrication and assembly, ground and flight test of GTV and EDMs, and continued fabrication of SDTAs and associated components.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2012	FY 2013	FY 2014	
Title: Air Vehicle Development									541.317	501.187	405.508	
									0	4	0	
FY 2012 Accomplishments:												
Perform SDD fabrication and assembly activities for the CH-53K air vehicles and its associated subsystems and components, Government Furnished Equipment (GFE) and CH-53K ancillary systems.												
FY 2013 Plans:												

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				
		FY 2012	FY 2013	FY 2014
Perform Systems Design and Development fabrication and assembly activities for the CH-53K EDM air vehicles and its associated subsystems and components, GFE and CH-53K ancillary systems. Initiate System Demonstration Test Articles procurement and start aircraft systems ground testing and flight test preparation.				
FY 2014 Plans: Perform Systems Design and Development fabrication and assembly activities for the CH-53K Engineering Development Models (EDMs) air vehicles and their associated subsystems and components, Government Furnished Equipment and CH-53K ancillary systems. Focus on ground and flight test of Ground Test Vehicle (GTV) and EDMs and continued fabrication of System Demonstration Test Articles and associated components.				
Title: Integrated Logistics Support and Test & Evaluation (T&E) Articles:		20.704 0	39.265 0	34.831 0
FY 2012 Accomplishments: Perform in-house, field activity, and contractor support of Integrated Logistic support and T&E activities, including but not limited to planning, preparations, and management of data, support equipment, Studies & Analysis, training elements of CH-53K development, and program T&E efforts.				
FY 2013 Plans: Perform in-house, field activity, and contractor support of Integrated Logistic support. T&E activities include further component qualifications and initial GTV testing. Continue to increase staffing of Integrated Test Team in preparation for flight test.				
FY 2014 Plans: Perform in-house, field activity, and contractor support of Integrated Logistic support. T&E activities include further component qualifications and ground and flight testing. Continue to increase staffing of Integrated Test Team for flight test.				
Title: Systems Engineering & Project Management Articles:		44.234 0	65.752 0	62.841 0
FY 2012 Accomplishments: In-house, field activitiy, and contractor 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.				
FY 2013 Plans: In-house, field activitiy, and contractor support of IPTs to allow for the examination and certification of equipment and avionics for the CH-53K. Efforts include continued component qualification, preparation for Engineering Development Model flight				

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)							FY 2012	FY 2013	FY 2014		
certification, government development support, engineering support, program management support, systems engineering support, and travel for the CH-53K program.											
FY 2014 Plans: In-house, field activity, and contractor support of Integrated Product Teams to allow for the examination and certification of equipment and avionics for the CH-53K. Efforts include continued component qualification, preparation for Engineering Development Model flight certification, government development support, engineering support, program management support, systems engineering support, and travel for the CH-53K program.											
Accomplishments/Planned Programs Subtotals							606.255	606.204	503.180		
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• APN/0158: <i>CH-53K (Heavy Lift)</i>	0.000	0.000	0.000		0.000	47.253	452.300	705.000	1,072.000	19,056.563	21,333.116
• APN//0605: <i>CH-53K Initial Spares</i>	0.000	0.000	0.000		0.000	0.000	27.661	44.138	80.970	692.750	845.519
Remarks											
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 Systems Design and Development (SDD). The Under Secretary of the Defense (Acquisition, Technology and Logistics) signed the Acquisition Decision Memorandum allowing the program to proceed with SDD on 22 December 2005. The CH-53K program was initiated as an Acquisition Category 1D program, based on total estimated costs for Research, Development, Test and Evaluation and Aircraft Procurement, Navy. The SDD prime contract was awarded sole-source contract to Sikorsky Aircraft Corporation on 5 April, 2006, following the MS B decision. SDD efforts will develop and document technology maturations, selections, and integration into CH-53E design modifications for a new CH-53K variant; produce one CH-53K Ground Test Vehicle and four CH-53K Engineering Developmental Models; and conduct and support Test and Evaluation activities fulfilling milestone exit criteria. In FY13, the SDD contract will be modified to include four System Demonstration Test Articles. Engines will be procured in support of test assets which have been converted from Contractor Furnished Equipment to Government Furnished Equipment.											
E. Performance Metrics											
Since MS B, the program team has followed a disciplined, event-driven, design and development process. The program completed Preliminary Design Review in September 2008 and conducted Critical Design Review in July 2010. System meets or exceeds all Key Performance Parameters.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE				PROJECT					
1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)						PE 0605212N: CH-53K				3059: CH-53K Development					
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All 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 Hardware Development	SS/CPIF	Sikorsky:Stratford, CT	2,231.295	507.233	Dec 2011	445.023	Dec 2012	373.069	Dec 2013	-		373.069	1,363.339	4,919.959	4,919.959
Government Furnished Equipment	Various	Various:Various	30.072	11.300	Dec 2011	30.000	Dec 2012	2.000	Dec 2013	-		2.000	7.000	80.372	
Government Furnished Equipment	C/CPIF	GE:Lynn, MA	0.000	0.000		8.000	Apr 2013	8.000	Dec 2013	-		8.000	77.895	93.895	93.895
Incentive Fees	SS/CPIF	Sikorsky:Stratford, CT	11.286	22.784	Sep 2012	18.164	Dec 2012	22.439	Dec 2013	-		22.439	23.030	97.703	97.703
Prior year Prod Dev cost no longer funded in the FYDP	Various	Various:Various	73.400	0.000		0.000		0.000		-		0.000	0.000	73.400	
Subtotal			2,346.053	541.317		501.187		405.508		0.000		405.508	1,471.264	5,265.329	
Remarks															
Award Fee earned prior to contract conversion was fifty-five percent of the available award fee pool. Cost Plus Award Fee (CPAF) to Cost Plus Incentive Fee (CPIF) contract conversion awarded 31 Mar 11. Primary Hardware Development Target Value of Contract includes System Demonstration Test Articles (SDTA's).															
Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Support	Various	NAWCAD:Lakehurst, NJ	0.000	0.000		4.552	Dec 2012	4.737	Dec 2013	-		4.737	24.384	33.673	
Integrated Logistics Support	WR	NAWCAD:Lakehurst, NJ	4.000	3.100	Dec 2011	4.800	Dec 2012	5.100	Dec 2013	-		5.100	21.700	38.700	
Integrated Logistics Support	WR	NADEP:Cherry Point, NC	2.000	2.200	Dec 2011	2.950	Dec 2012	3.000	Dec 2013	-		3.000	15.300	25.450	
Integrated Logistics Support	WR	Various:Various	34.904	5.835	Dec 2011	2.750	Dec 2012	2.294	Dec 2013	-		2.294	26.538	72.321	
Studies & Analyses	WR	NSWC:Crane, IN	2.000	0.500	Dec 2011	5.000	Dec 2012	1.000	Dec 2013	-		1.000	0.000	8.500	
Studies & Analyses	Various	Various:Various	21.627	0.000	Dec 2011	1.300	Dec 2012	0.500	Dec 2013	-		0.500	3.500	26.927	

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Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			64.531	11.635		21.352		16.631		0.000		16.631	91.422	205.571	
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	Various:Various	10.382	1.464	Dec 2011	6.213	Dec 2012	6.700	Dec 2013	-		6.700	32.656	57.415	
Developmental Test & Evaluation	WR	NAWCAD:Pax River, MD	0.000	6.234	Dec 2011	6.180	Dec 2012	6.500	Dec 2013	-		6.500	8.000	26.914	
Operational Test & Evaluation	WR	COMPTEVFOR:Norfolk, VA	1.095	0.524	Dec 2011	4.000	Dec 2012	2.000	Dec 2013	-		2.000	35.000	42.619	
Live Fire Test & Evaluation	WR	NAWCWD:China Lake, CA	2.549	0.847	Dec 2011	1.520	Dec 2012	3.000	Dec 2013	-		3.000	18.100	26.016	
Subtotal			14.026	9.069		17.913		18.200		0.000		18.200	93.756	152.964	
Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Engineering Support	Various	Various:Various	12.075	1.850	Dec 2011	2.930	Dec 2012	2.537	Dec 2013	-		2.537	9.500	28.892	
Government Engineering Support	WR	NAWCAD:Pax River, MD	180.420	30.392	Dec 2011	46.101	Dec 2012	44.483	Dec 2013	-		44.483	162.155	463.551	
Program Management Support	C/CPFF	Camber:MD	11.000	11.000	Dec 2011	11.500	Dec 2012	11.000	Dec 2013	-		11.000	20.500	65.000	65.000
Program Management Support	Various	Various:Various	58.102	0.752	Dec 2011	4.844	Dec 2012	4.535	Dec 2013	-		4.535	40.051	108.284	
Travel	WR	NAWCAD:Pax River, MD	2.922	0.240	Dec 2011	0.377	Dec 2012	0.286	Dec 2013	-		0.286	2.500	6.325	

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Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Prior year Mgmt cost no longer funded in the FYDP	Various	Various:Various	1.950	0.000		0.000		0.000		-		0.000	0.000	1.950	
Subtotal			266.469	44.234		65.752		62.841		0.000		62.841	234.706	674.002	

	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	2,691.079	606.255	606.204	503.180	0.000	503.180	1,891.148	6,297.866	

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

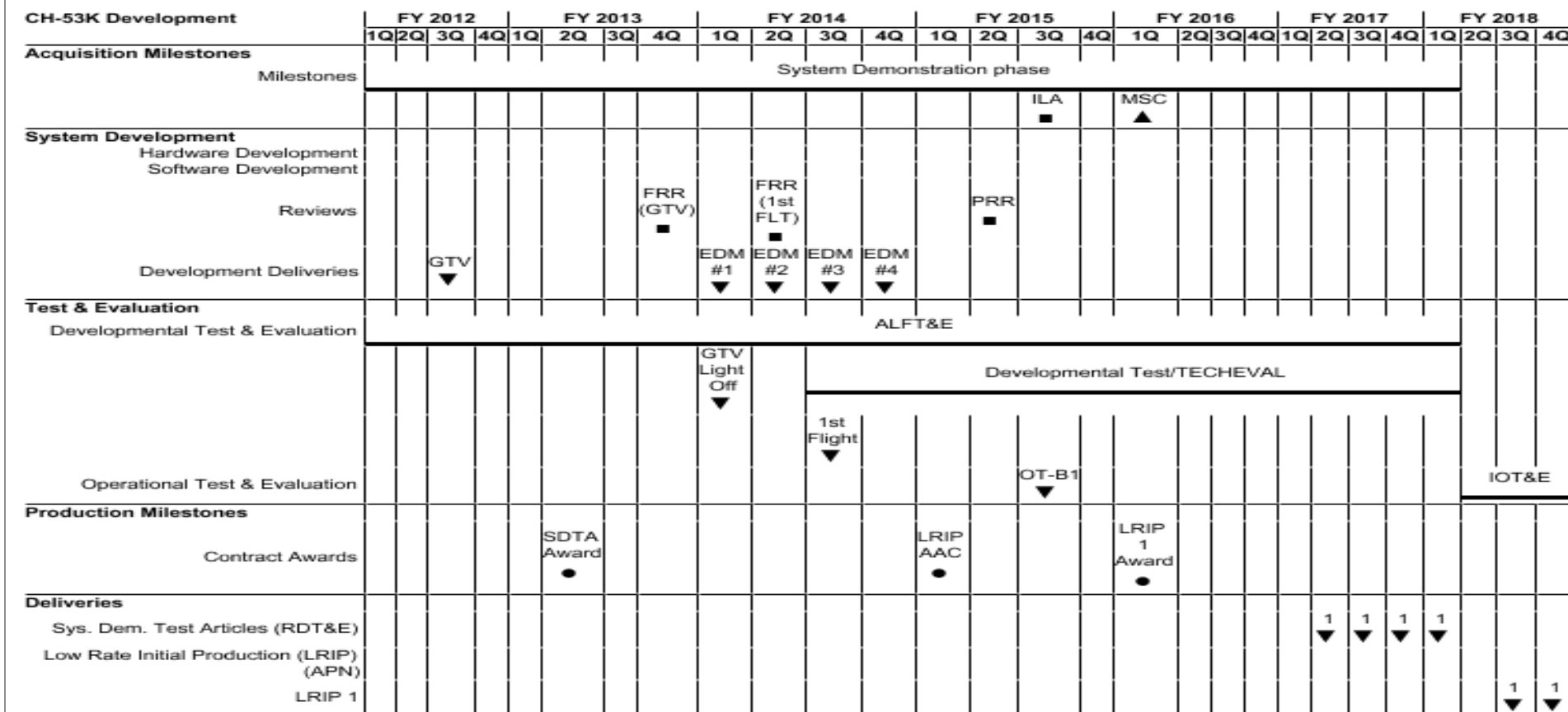
1319: Research, Development, Test & Evaluation, Navy
BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0605212N: CH-53K

PROJECT

3059: CH-53K Development



2014PB - 0605212N - 3059

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy			DATE: April 2013
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>CH-53K Development</i>				
Acquisition Milestones: Milestones: System Demonstration phase	1	2012	1	2018
Acquisition Milestones: Milestones: Integrated Logistics Assessment (ILA)	3	2015	3	2015
Acquisition Milestones: Milestones: Milestone C	1	2016	1	2016
System Development: Reviews: Flight Readiness Review (FRR) - Ground Test Vehicle (GTV)	4	2013	4	2013
System Development: Reviews: Flight Readiness Review (FRR) - 1st Flight	2	2014	2	2014
System Development: Reviews: Production Readiness Review (PRR)	2	2015	2	2015
System Development: Development Deliveries: Ground Test Vehicle (GTV) Delivery	3	2012	3	2012
System Development: Development Deliveries: Engineering Development Model (EDM) #1 delivery	1	2014	1	2014
System Development: Development Deliveries: Engineering Development Model (EDM) #2 delivery	2	2014	2	2014
System Development: Development Deliveries: Engineering Development Model (EDM) #3 delivery	3	2014	3	2014
System Development: Development Deliveries: Engineering Development Model (EDM) #4 delivery	4	2014	4	2014
Test & Evaluation: Developmental Test & Evaluation: Alternative Live Fire T&E (ALFT&E) (Comp.)	1	2012	1	2018
Test & Evaluation: Developmental Test & Evaluation: Developmental Test / TECHEVAL	3	2014	1	2018
Test & Evaluation: Developmental Test & Evaluation: GTV Light Off	1	2014	1	2014
Test & Evaluation: Developmental Test & Evaluation: First Flight	3	2014	3	2014

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy			DATE: April 2013	
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		Start		End
Events by Sub Project		Quarter	Year	Quarter
Test & Evaluation: Operational Test & Evaluation: Operational Test & Evaluation (OT) B1 (OT-B1)		3	2015	3
Test & Evaluation: Operational Test & Evaluation: IOT&E		2	2018	4
Production Milestones: Contract Awards: System Demonstration Test Articles (SDTA) Award		2	2013	2
Production Milestones: Contract Awards: LRIP Advance Acquisition Contract		1	2015	1
Production Milestones: Contract Awards: LRIP 1 Contract Award		1	2016	1
Deliveries: Sys. Dem. Test Articles (RDT&E): System Demonstration Test Articles (SDTA) *1		2	2017	2
Deliveries: Sys. Dem. Test Articles (RDT&E): System Demonstration Test Articles (SDTA) *2		3	2017	3
Deliveries: Sys. Dem. Test Articles (RDT&E): System Demonstration Test Articles (SDTA) *3		4	2017	4
Deliveries: Sys. Dem. Test Articles (RDT&E): System Demonstration Test Articles (SDTA) #4		1	2018	1
Deliveries: LRIP 1: LRIP Aircraft (APN) 3Q 2018		3	2018	3
Deliveries: LRIP 1: LRIP Aircraft (APN) 4Q 2018		4	2018	4