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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2017 Navy **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy / BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0605212N / CH-53K
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	4,280.397	538.192	592.317	404.810	-	404.810	233.861	175.668	184.642	188.426	0.000	6,598.313
3059: <i>CH-53K Development</i>	4,280.397	538.192	592.317	404.810	-	404.810	233.861	175.668	184.642	188.426	0.000	6,598.313

**Program MDAP/MAIS Code:** 390

**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 "King Stallion" 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, six will be System Demonstration Test Articles (SDTAs) and will be incrementally funded using RDT&E funds. The SDTAs will be used to prove out production and integration processes on a pilot production line, and to provide aircraft for Initial Operational Test and Evaluation. The remaining 194 aircraft will be Aircraft Procurement, Navy funded.

FY17 RDT&E funds CH-53K SDD activities which include: ground and flight test of GTV, EDMs and SDTAs, associated subsystems and components, and the continued fabrication and assembly of remaining SDTAs. Additionally, the program takes delivery of the first (4) SDTA aircraft.

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>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017 Base</b>	<b>FY 2017 OCO</b>	<b>FY 2017 Total</b>
Previous President's Budget	559.687	632.092	475.087	-	475.087
Current President's Budget	538.192	592.317	404.810	-	404.810
Total Adjustments	-21.495	-39.775	-70.277	-	-70.277
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-39.775			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-5.000	0.000			
• SBIR/STTR Transfer	-16.495	0.000			
• Program Adjustments	0.000	0.000	-1.596	-	-1.596
• Rate/Misc Adjustments	0.000	0.000	-68.681	-	-68.681

**Change Summary Explanation**

The FY 2017 funding request was reduced by \$60.943M to account for the availability of prior year execution balances.

Technical: Not applicable.

Schedule: Driven primarily by component re-design, re-qualification and re-test the Developmental and Initial Operational T&E programs have lengthened, resulting in CH-53K Milestone C moving into 2nd quarter FY2017, and IOC into 1st quarter FY2020.

LRIP 1 Advance Acquisition Contract (AAC) award moved into 2nd quarter FY2016 to align with release of funds for new-start CH-53K production program. This delay does not impact FY2017 LRIP 1 award.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2017 Navy										<b>Date:</b> February 2016		
<b>Appropriation/Budget Activity</b> 1319 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0605212N / CH-53K				<b>Project (Number/Name)</b> 3059 / CH-53K Development			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017 Base</b>	<b>FY 2017 OCO</b>	<b>FY 2017 Total</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
3059: CH-53K Development	4,280.397	538.192	592.317	404.810	-	404.810	233.861	175.668	184.642	188.426	0.000	6,598.313
Quantity of RDT&E Articles		2	-	-	-	-	-	-	-	-		

**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 "King Stallion" 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, six will be System Demonstration Test Articles (SDTAs) and will be incrementally funded using RDT&E funds. The SDTAs will be used to prove out production and integration processes on a pilot production line, and to provide aircraft for Initial Operational Test and Evaluation. SDTAs are shown in the year of contract award vice year of delivery. The remaining 194 aircraft will be Aircraft Procurement, Navy funded.

FY17 RDT&E funds CH-53K SDD activities which include: ground and flight test of GTV, EDMs and SDTAs, associated subsystems and components, and the continued fabrication and assembly of remaining SDTAs. Additionally, the program takes delivery of the first (4) SDTA aircraft.

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017 Base</b>	<b>FY 2017 OCO</b>	<b>FY 2017 Total</b>
<b>Title:</b> Air Vehicle Development	449.801	492.875	315.126	0.000	315.126
<b>Articles:</b>	2	-	-	-	-
<b>FY 2015 Accomplishments:</b> Perform ground and flight test of the CH-53K GTV, EDMs and their associated subsystems and components. Evaluate and implement producibility, reliability and capability improvements. Continued fabrication and assembly of System Demonstration Test Articles.					
<b>FY 2016 Plans:</b>					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2017 Navy				<b>Date:</b> February 2016	
<b>Appropriation/Budget Activity</b> 1319 / 5		<b>R-1 Program Element (Number/Name)</b> PE 0605212N / CH-53K		<b>Project (Number/Name)</b> 3059 / CH-53K Development	
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>					
Perform ground and flight test of the CH-53K GTV, EDMs and their associated subsystems and components. Evaluate and implement producability, reliability and capability improvements. Continued fabrication and assembly of System Demonstration Test Articles.					
<b>FY 2017 Base Plans:</b> Ramp-down of Contractor air vehicle development and ground test activities of the CH-53K GTV, EDMs and associated subsystems and components as developmental test is being conducted. Continue to evaluate and implement producability, reliability and capability improvements as fabrication and assembly of System Demonstration Test Articles (SDTA) is completed. Government accepts delivery of SDTAs 1-4 in preparation for IOT&E.					
<b>FY 2017 OCO Plans:</b> N/A					
<b>Title:</b> Integrated Logistics Support and Test & Evaluation (T&E)					
<b>Articles:</b>					
	41.382	48.797	56.078	0.000	56.078
	-	-	-	-	-
<b>FY 2015 Accomplishments:</b> Perform in-house, field activity, and contractor support of Integrated Logistic support. T&E activities include further component qualification and validation of Supportability Test Plans during ground and flight test. Continue to further develop Product Support Packages in preparation for an Integrated Logistics Assessment as required for Milestone C decision.					
<b>FY 2016 Plans:</b> Perform in-house, field activity, and contractor support of Integrated Logistic support. T&E activities include further component qualification and validation of Supportability Test Plans during ground and flight test. Continue to further develop Product Support Packages in preparation for an Integrated Logistics Assessment as required for Milestone C decision.					
<b>FY 2017 Base Plans:</b> Perform in-house, field activity and contractor support of Integrated Logistic support. Continue to refine Product Support Packages in preparation for IOT&E. Increase Government Test Team in order to support ramp-up of ground and flight test activities, as well as continued component qualification and validation of Supportability Test Plans.					
<b>FY 2017 OCO Plans:</b>					

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**Exhibit R-2A, RDT&E Project Justification:** PB 2017 Navy **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605212N / CH-53K	<b>Project (Number/Name)</b> 3059 / CH-53K Development
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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017 Base</b>	<b>FY 2017 OCO</b>	<b>FY 2017 Total</b>
N/A					
<b>Title:</b> Systems Engineering & Project Management  <div style="text-align: right;"><b>Articles:</b></div>	47.009	50.645	33.606	0.000	33.606
<b>FY 2015 Accomplishments:</b> Perform 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 Engineering Development Model flight test certification, component reliability and producibility improvements in support of System Demonstration Test Articles (SDTA's), engineering support, program management support, and travel for the CH-53K program.	-	-	-	-	-
<b>FY 2016 Plans:</b> Perform 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 Engineering Development Model flight test certification, component reliability and producibility improvements in support of System Demonstration Test Articles (SDTA's), monitor LRIP Lot 1 Advance Acquisition Contract, engineering support, program management support, and travel for the CH-53K program.					
<b>FY 2017 Base Plans:</b> Perform in-house, field activity and contractor support of test program Integrated Product Teams as workforce and resources begin to transition to the CH-53K production program. Efforts include engineering and program management support, as well as travel for the CH-53K program.					
<b>FY 2017 OCO Plans:</b> N/A					
<b>Accomplishments/Planned Programs Subtotals</b>	538.192	592.317	404.810	0.000	404.810

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<u>Line Item</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017 Base</u>	<u>FY 2017 OCO</u>	<u>FY 2017 Total</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• APN / 0158: CH-53K (Heavy Lift)	0.000	41.300	436.980	-	436.980	721.756	1,170.267	1,655.998	1,773.536	16,065.597	21,865.434
• APN / 0605: CH-53K	0.000	0.000	51.000	-	51.000	32.244	51.836	95.525	33.867	433.542	698.014
- Initial Spares											

**Remarks**

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy Date: February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605212N / CH-53K	<b>Project (Number/Name)</b> 3059 / CH-53K Development
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**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 was modified to include four System Demonstration Test Articles (SDTAs). In FY15 the SDD contract was modified to add the long-lead/critical parts for the two additional SDTA aircraft. The T408-GE-400 engines for SDTAs 1-4, which were converted from Contractor Furnished Equipment to Government Furnished Equipment, were placed on contract in FY14. Additionally, a contract option was exercised in FY15 to provide engines for SDTAs 5-6.

**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 2017 Navy** **Date:** February 2016

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<b>Product Development (\$ in Millions)</b>				<b>FY 2015</b>		<b>FY 2016</b>		<b>FY 2017 Base</b>		<b>FY 2017 OCO</b>		<b>FY 2017 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>			
Primary Hardware Development: SDD / SDTA Air Vehicle	SS/CPPIF	Sikorsky : Stratford, CT	3,472.341	376.557	Dec 2014	438.119	Jan 2016	274.229	Dec 2016	-		274.229	563.610	5,124.856	5,124.856
Ancillary Hardware Development: DECM	SS/CPFF	Northrup Grumman : Falls Church, VA	8.925	8.864	Jan 2015	12.048	Jan 2016	0.000		-		0.000	0.000	29.837	29.837
GFE: Various	Various	Various : Various	56.955	5.207	Dec 2014	8.860	Dec 2015	1.955	Dec 2016	-		1.955	5.237	78.214	-
GFE: Engines	SS/CPFF	GE : Lynn, MA	41.603	45.581	Jan 2015	20.448	Jan 2016	27.553	Jan 2017	-		27.553	0.000	135.185	135.185
Incentive Fees	SS/CPPIF	Sikorsky : Stratford, CT	77.879	13.592	Dec 2014	13.400	Dec 2015	11.389	Dec 2016	-		11.389	5.161	121.421	121.421
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	-
<b>Subtotal</b>			3,731.103	449.801		492.875		315.126		-		315.126	574.008	5,562.913	-

**Remarks**  
 Primary Hardware Development Target Value of Contract includes System Demonstration Test Articles (SDTAs).  
 Ancillary Hardware Development: Defensive Electronic Countermeasures (DECM) contract requirements (FY14-FY16) added to R3/Product Development.  
 Government Furnished Equipment/Engines provides funding for SDTA engine contract.  
 FY15 Incentive Fees represent potential Schedule Incentives based on continued progress of the Engineering Development Model (EDM) aircraft.  
 FY16-17 Incentive Fees represent potential Schedule Incentives based on continued progress of the System Demonstration Test Article (SDTA) aircraft.

<b>Support (\$ in Millions)</b>				<b>FY 2015</b>		<b>FY 2016</b>		<b>FY 2017 Base</b>		<b>FY 2017 OCO</b>		<b>FY 2017 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>			
Development Support	Various	NAWCAD : Lakehurst, NJ	5.361	0.540	Dec 2014	1.828	Dec 2015	1.519	Dec 2016	-		1.519	21.233	30.481	-
Integrated Logistics Support	WR	NAWCAD : Lakehurst, NJ	12.376	4.113	Dec 2014	5.409	Dec 2015	4.989	Dec 2016	-		4.989	11.619	38.506	-
Integrated Logistics Support	WR	NADEP : Cherry Point, NC	8.300	4.559	Dec 2014	3.493	Dec 2015	3.057	Dec 2016	-		3.057	5.860	25.269	-
Integrated Logistics Support	C/CPFF	GDIT : Fairfax, VA	11.284	3.201	Apr 2015	3.001	Apr 2016	2.906	Apr 2017	-		2.906	5.449	25.841	25.841

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605212N / CH-53K	<b>Project (Number/Name)</b> 3059 / CH-53K Development
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<b>Support (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Integrated Logistics Support	WR	Various : Various	38.086	2.077	Dec 2014	3.169	Dec 2015	3.325	Dec 2016	-		3.325	6.295	52.952	-
Studies & Analyses	WR	NSWC : Crane, IN	3.500	0.000		0.000		0.000		-		0.000	0.000	3.500	-
Studies & Analyses	Various	Various : Various	22.127	0.000		0.000		0.000		-		0.000	0.000	22.127	-
<b>Subtotal</b>			101.034	14.490		16.900		15.796		-		15.796	50.456	198.676	-

<b>Test and Evaluation (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Developmental Test & Evaluation	WR	Various : Various	19.808	2.985	Dec 2014	2.391	Dec 2015	4.250	Dec 2016	-		4.250	24.879	54.313	-
Developmental Test & Evaluation	WR	NAWCAD : Pax River, MD	27.006	19.342	Dec 2014	24.610	Dec 2015	31.443	Dec 2016	-		31.443	30.476	132.877	-
Operational Test & Evaluation	WR	COMPTEVFOR : Norfolk, VA	2.492	0.433	Dec 2014	0.961	Dec 2015	1.157	Dec 2016	-		1.157	15.499	20.542	-
Live Fire Test & Evaluation	WR	NAWCWD : China Lake, CA	5.996	4.132	Dec 2014	3.935	Dec 2015	3.432	Dec 2016	-		3.432	7.594	25.089	-
<b>Subtotal</b>			55.302	26.892		31.897		40.282		-		40.282	78.448	232.821	-

**Remarks**  
Test and Evaluation requirements increase in FY17 as System Demonstration Test Articles (SDTAs) are delivered to the CH-53K Integrated Test Team (ITT).

<b>Management Services (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Contractor Engineering Support	Various	Various : Various	18.086	3.481	Dec 2014	4.163	Dec 2015	4.197	Dec 2016	-		4.197	4.579	34.506	-
Government Engineering Support	WR	NAWCAD : Pax River, MD	265.860	35.679	Dec 2014	38.720	Dec 2015	23.554	Dec 2016	-		23.554	53.293	417.106	-

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy** **Date:** February 2016

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<b>Management Services (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Program Management Support	C/CPFF	Camber : Huntsville, AL	41.708	0.000		0.000		0.000		-		0.000	0.000	41.708	41.708
Program Management Support	C/CPFF	Zenetix : Herndon, VA	1.000	6.528	Jan 2015	6.328	Jan 2016	4.451	Jan 2017	-		4.451	13.349	31.656	31.656
Program Management Support	Various	Various : Various	60.855	1.052	Dec 2014	1.159	Dec 2015	1.129	Dec 2016	-		1.129	6.789	70.984	-
Travel	WR	NAWCAD : Pax River, MD	3.499	0.269	Dec 2014	0.275	Dec 2015	0.275	Dec 2016	-		0.275	1.675	5.993	-
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	-
<b>Subtotal</b>			392.958	47.009		50.645		33.606		-		33.606	79.685	603.903	-

**Remarks**  
Management Services requirements decrease in FY17 as both Government and Contractor support begin to transition to the CH-53K Production program.

	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	4,280.397	538.192	592.317	404.810	-	404.810	782.597	6,598.313	-

**Remarks**

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**Exhibit R-4, RDT&E Schedule Profile: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605212N / CH-53K	<b>Project (Number/Name)</b> 3059 / CH-53K Development
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CH-53K Development	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
<b>Acquisition Milestones</b>	System Demonstration phase																											
Milestones	<div style="display: flex; justify-content: space-between; width: 100%;"> <span>ILA</span> <span>MSC</span> <span>IOC</span> <span>FRP</span> </div>																											
<b>System Development</b>																												
Hardware Development																												
Software Development																												
Reviews	<div style="display: flex; justify-content: space-between; width: 100%;"> <span>FRR (1st FLT)</span> <span>PRR</span> </div>																											
Development Deliveries	<div style="display: flex; justify-content: space-between; width: 100%;"> <span>EDM 1</span> <span>EDM 3</span> <span>EDM 2</span> <span>EDM 4</span> </div>																											
<b>Test &amp; Evaluation</b>	Developmental Test/TECHEVAL																											
Developmental Test & Evaluation	<div style="display: flex; justify-content: space-between; width: 100%;"> <span>1st Flight</span> <span>OT-B1</span> <span>IOT&amp;E</span> </div>																											
Operational Test & Evaluation																												
<b>Production Milestones</b>																												
Contract Awards	<div style="display: flex; justify-content: space-between; width: 100%;"> <span>SDTA Award (5-6)</span> <span>LRIP 1 (APN) AAC</span> <span>LRIP 1 (APN) Award Qty2</span> <span>LRIP 2 (APN) AAC</span> <span>LRIP 2 (APN) Award Qty 4</span> <span>LRIP 3 (APN) AAC</span> <span>LRIP 3 (APN) Award Qty 7</span> </div>																											



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**Exhibit R-4A, RDT&E Schedule Details: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605212N / CH-53K	<b>Project (Number/Name)</b> 3059 / CH-53K Development
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>CH-53K Development</b>				
Acquisition Milestones: Milestones: System Demonstration phase	1	2015	1	2019
Acquisition Milestones: Milestones: Integrated Logistics Assessment (ILA)	2	2016	2	2016
Acquisition Milestones: Milestones: Milestone C	2	2017	2	2017
Acquisition Milestones: Milestones: Initial Operational Capability	1	2020	1	2020
Acquisition Milestones: Milestones: Full Rate Production	2	2020	2	2020
System Development: Reviews: Flight Readiness Review (FRR) - 1st Flight	1	2016	1	2016
System Development: Reviews: Production Readiness Review (PRR)	3	2016	3	2016
System Development: Development Deliveries: Engineering Development Model (EDM) #1 delivery	1	2015	1	2015
System Development: Development Deliveries: Engineering Development Model (EDM) #2 delivery	2	2016	2	2016
System Development: Development Deliveries: Engineering Development Model (EDM) #3 delivery	3	2015	3	2015
System Development: Development Deliveries: Engineering Development Model (EDM) #4 delivery	2	2016	2	2016
Test & Evaluation: Developmental Test & Evaluation: Developmental Test / TECHEVAL	1	2015	1	2019
Test & Evaluation: Developmental Test & Evaluation: First Flight	1	2016	1	2016
Test & Evaluation: Operational Test & Evaluation: Operational Test & Evaluation (OT) B1 (OT-B1)	1	2017	1	2017
Test & Evaluation: Operational Test & Evaluation: IOT&E	2	2019	4	2019
Production Milestones: Contract Awards: System Demonstration Test Articles (SDTA) Award (5-6)	3	2015	3	2015

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**Exhibit R-4A, RDT&E Schedule Details: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605212N / CH-53K	<b>Project (Number/Name)</b> 3059 / CH-53K Development
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Production Milestones: Contract Awards: LRIP Advance Acquisition Contract (lot 1) - APN	2	2016	2	2016
Production Milestones: Contract Awards: LRIP 1 Contract Award - APN Qty 2	1	2017	1	2017
Production Milestones: Contract Awards: LRIP Advance Acquisition Contract (lot 2) - APN	1	2017	1	2017
Production Milestones: Contract Awards: LRIP 2 Contract Award - APN Qty 4	1	2018	1	2018
Production Milestones: Contract Awards: LRIP Advance Acquisition Contract (lot 3) - APN	1	2018	1	2018
Production Milestones: Contract Awards: LRIP 3 Contract Award - APN Qty 7	1	2019	1	2019
Production Milestones: Contract Awards: LRIP Advance Acquisition Contract (lot 4) - APN	1	2019	1	2019
Production Milestones: Contract Awards: LRIP 4 Contract Award - APN Qty 13	1	2020	1	2020
Production Milestones: Contract Awards: FRP Advance Acquisition Contract (lot 5) - APN	1	2020	1	2020
Production Milestones: Contract Awards: FRP 5 Contract Award - APN Qty 14	1	2021	1	2021
Production Milestones: Contract Awards: FRP Advance Acquisition Contract (lot 6) - APN	1	2021	1	2021
Deliveries: Sys. Dem. Test Articles (RDT&E): System Demonstration Test Articles (SDTA) #1	1	2017	1	2017
Deliveries: Sys. Dem. Test Articles (RDT&E): System Demonstration Test Articles (SDTA) #2	2	2017	2	2017
Deliveries: Sys. Dem. Test Articles (RDT&E): System Demonstration Test Articles (SDTA) #3	3	2017	3	2017
Deliveries: Sys. Dem. Test Articles (RDT&E): System Demonstration Test Articles (SDTA) #4	4	2017	4	2017
Deliveries: Sys. Dem. Test Articles (RDT&E): System Demonstration Test Articles (SDTA) #5	2	2019	2	2019
Deliveries: Sys. Dem. Test Articles (RDT&E): System Demonstration Test Articles (SDTA) #6	3	2019	3	2019

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**Exhibit R-4A, RDT&E Schedule Details: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605212N / CH-53K	<b>Project (Number/Name)</b> 3059 / CH-53K Development
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Deliveries: LRIP (APN): LRIP Lot #1 1st delivery of 2	1	2020	1	2020
Deliveries: LRIP (APN): LRIP Lot #1 2nd delivery of 2	2	2020	2	2020
Deliveries: LRIP (APN): LRIP Lot #2 1st delivery of 4	1	2021	1	2021
Deliveries: LRIP (APN): LRIP Lot #2 2nd delivery of 4	2	2021	2	2021
Deliveries: LRIP (APN): LRIP Lot #2 3rd delivery of 4	3	2021	3	2021
Deliveries: LRIP (APN): LRIP Lot #2 4th delivery of 4	4	2021	4	2021