Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy

**Date:** May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

1319: Research, Development, Test & Evaluation, Navy I BA 5: System

PE 0605212N / CH-53K

Development & Demonstration (SDD)

COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	4,812.294	563.174	404.810	340.758	-	340.758	330.755	300.041	195.506	10.522	0.000	6,957.860
3059: CH-53K Development	4,812.294	563.174	404.810	340.758	-	340.758	330.755	300.041	195.506	10.522	0.000	6,957.860

Program MDAP/MAIS Code:

Project MDAP/MAIS Code(s): 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.

FY18 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 the remaining three 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.

### \*\*\*Note\*\*\*

\$53.000M FY16 RDTE is encumbered in support of JUONS-S0-0010, entitled 'Federated Distributed Aperture Infrared Countermeasures' (DAIRCM) via Rapid Acquisition Authority with a planned contract award in September 2016.

PE 0605212N: CH-53K

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy **Date:** May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name) 1319: Research, Development, Test & Evaluation, Navy I BA 5: System PE 0605212N / CH-53K

Development & Demonstration (SDD)

3. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	592.317	404.810	233.861	-	233.861
Current President's Budget	563.174	404.810	340.758	-	340.758
Total Adjustments	-29.143	0.000	106.897	-	106.897
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-10.017	0.000			
SBIR/STTR Transfer	-19.126	0.000			
<ul> <li>Program Adjustments</li> </ul>	0.000	0.000	106.600	-	106.600
Rate/Misc Adjustments	0.000	0.000	0.297	-	0.297

# **Change Summary Explanation**

Technical: FY 2018 funding level increases by \$106.600M in order to fully-fund to the Navy's CH-53K Milestone C Component Cost Position in support of CH-53K SDD efforts to include flight test and Prime Contractor fabrication and assembly of SDTA 4-6.

#### Schedule:

Full Rate Production (FRP) has moved from 2Q FY2020 to 1Q FY2021 to allow for completion of LFT&E program and receipt of test report. Initial Operational Test & Evaluation (IOT&E) start date moved from 2Q FY2019 to 4Q FY2019 due to discovery during flight test and to incorporate the required corrections.

PE 0605212N: CH-53K

Navy

Exhibit R-2A, RDT&E Project J	ustification:	FY 2018 N	lavy							Date: May	2017	
Appropriation/Budget Activity 1319 / 5		_	am Elemen 12N / CH-53	•	Name)	Project (N 3059 / CH-		•				
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
3059: CH-53K Development	340.758	-	340.758	330.755	300.041	195.506	10.522	0.000	6,957.860			
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-			

Project 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. SDTAs are shown in the year of contract award vice year of delivery. The remaining 194 aircraft will be Aircraft Procurement, Navy funded.

FY18 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 the remaining three SDTA aircraft.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	EV 2046	EV 2047	FY 2018	FY 2018	FY 2018
	FY 2016	FY 2017	Base	000	Total
Title: Air Vehicle Development	482.025	315.126	271.876	0.000	271.876
Articles:	-	-	-	-	-
FY 2016 Accomplishments:  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.					
FY 2017 Plans: 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					

PE 0605212N: CH-53K

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U	NCLASSIFIED					
Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May	2017	
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/ PE 0605212N / CH-53K	Name)		umber/Nan -53K Develo		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities	in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
and implement producability, reliability and capability improvements as fabric Demonstration Test Articles (SDTA) is completed. Government accepts deliv IOT&E.						
FY 2018 Base Plans: Continue ground and flight test of the CH-53K GTV, EDMs and their associat Continue to evaluate and implement producability, reliability and capability im and assembly of System Demonstration Test Articles (SDTA) 4-6. Delivery of Countermeasures (DECM) hardware and software to Prime Contractor for integration.	provements during fabrication Ancillary Defensive Electronic					
FY 2018 OCO Plans: N/A						
Title: Integrated Logistics Support and Test & Evaluation (T&E)	Articles:	44.157 -	56.653	43.971 -	0.000	43.971 -
FY 2016 Accomplishments:  Perform in-house, field activity, and contractor support of Integrated Logistics further component qualification and validation of Supportability Test Plans du to further develop Product Support Packages in preparation for an Integrated for Milestone C decision.	ring ground and flight test. Continue					
FY 2017 Plans: Perform in-house, field activity and contractor support of Integrated Logistic s Support Packages in preparation for IOT&E. Increase Government Test Tear ground and flight test activities, as well as continued component qualification Test Plans.	n in order to support ramp-up of					
FY 2018 Base Plans: Perform in-house, field activity and contractor support of Integrated Logistic s validate Product Support Packages in preparation for IOT&E, as well as Suppromponent qualification, Government ground and flight test activities, as well GTV.	portability Test Plans. Continue					
FY 2018 OCO Plans:						
N/A  Title: Systems Engineering & Project Management		36.992	33.031	24.911	0.000	24.911
The Systems Engineening & Froject Management		30.992	33.031	27.311	0.000	24.31

PE 0605212N: CH-53K

Exhibit R-2A, RDT&E Project Jus	stification: FY	2018 Navy							Date: May	y 2017	
Appropriation/Budget Activity 1319 / 5					rogram Ele 05212N / C	ment (Numbe H-53K	er/Name)	,	Number/Na H-53K Devel	,	
B. Accomplishments/Planned Pr	ograms (\$ in N	<u>lillions, Art</u>	icle Quantit	ies in Each	1		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
						Article	s: -	_	_	-	-
FY 2016 Accomplishments: Perform in-house, field activity, and and certification of equipment and flight test certification, component Test Articles (SDTA's), monitor LR management support, and travel for	avionics for the reliability and pr IP Lot 1 Advan	CH-53K. Erroducability ce Acquisition	fforts include improvemen	Engineering ts in support	g Developm of System	ent Model Demonstratio					
FY 2017 Plans: Perform in-house, field activity and and resources begin to transition to management support, as well as tr	o the CH-53K p	roduction pr	ogram. Effo								
FY 2018 Base Plans: Continue to perform in-house, field as workforce continues to transition Deficiencies identified during companagement and test program transport.	n to the CH-53h conent qualifica	C production	program. M	onitor and p	an for Corre	ection of					
<b>FY 2018 OCO Plans:</b> N/A											
			Accomplish	nments/Plar	nned Progr	ams Subtota	<b>Is</b> 563.174	404.81	0 340.758	0.000	340.75
C. Other Program Funding Sumr	nary (\$ in Milli	ons)	FY 2018	FY 2018	FY 2018					Cost To	
Line Item	FY 2016	FY 2017	Base	000	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total Cos
• APN / 0158 / 0158C: CH-53K (Heavy Lift)	41.300	436.980	714.651	-	714.651				2,180.215		
• APN / 0605: CH-53K - Initial Spares	0.000	91.000	41.656	-	41.656	67.668	117.893	103.757	17.304	391.327	830.60
• APN / 0528: <i>H-53 Series</i>	0.000	0.000	0.000	-	0.000	19.600	31.700	21.500	28.000	Continuing	Continuin
<b>Remarks</b> APN/0158/0158C: CH-53K Advan APN/0605: CH-53K Spares (APN-	•	ar Procurem	ent (APN-1)								

PE 0605212N: CH-53K

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy

Appropriation/Budget Activity

1319 / 5

R-1 Program Element (Number/Name)
PE 0605212N / CH-53K

R-5 PE 0605212N / CH-53K

## C. Other Program Funding Summary (\$ in Millions)

<u>FY 2018</u> <u>FY 2018</u> <u>FY 2018</u> <u>Cost To</u>

Line Item FY 2016 FY 2017 Base OCO Total FY 2019 FY 2020 FY 2021 FY 2022 Complete Total Cost
APN/0528: CH-53K OSIP #s 007-19 Correction of Deficiencies and 008-19 Production Upgrades

# D. Acquisition Strategy

On 31 October 2005, the Defense Acquisition Board (DAB) 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 for 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 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. On 30 March 2017, the DAB reviewed the CH-53K program for a MS C decision allowing entry into Production and the ADM was signed by USD AT&L on 4 April 2017.

### 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.

PE 0605212N: CH-53K

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy

Date: May 2017

Appropriation/Budget Activity R-1 Program Element (Number/Name) Project (Number/Name)

1319 / 5 PE 0605212N / CH-53K 3059 / CH-53K Development

Product Developmen	t (\$ in Mi	illions)		FY 2	2016	FY 2	2017		2018 ise	FY 2	2018 CO	FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Primary Hardware Development: SDD / SDTA Air Vehicle	SS/CPIF	Sikorsky : Stratford, CT	3,848.898	408.340	Jan 2016	265.657	Dec 2016	252.568	Dec 2017	-		252.568	722.997	5,498.460	5,498.460
Ancillary Hardware Development: DECM	SS/CPFF	Northrup Grumman : Falls Church, VA	17.789	0.000	Jan 2016	8.572	Jan 2017	7.679	Jan 2018	-		7.679	0.000	34.040	34.040
GFE: Various	Various	Various : Various	62.162	2.100	Dec 2015	1.955	Dec 2016	1.200	Dec 2017	-		1.200	0.000	67.417	-
GFE: Engines	SS/CPFF	GE : Lynn, MA	87.184	14.924	Jan 2016	27.553	Jan 2017	7.000	Jan 2018	-		7.000	1.150	137.811	137.811
Incentive Fees	SS/CPIF	Sikorsky : Stratford, CT	91.471	3.661	Dec 2015	11.389	Dec 2016	3.429	Jan 2018	-		3.429	10.019	119.969	119.969
RAA: JUONS-S0-0010 (DAIRCM)	TBD	Various : Various	0.000	53.000	Sep 2016	0.000		0.000		-		0.000	0.000	53.000	53.000
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	4,180.904	482.025		315.126		271.876		-		271.876	734.166	5,984.097	-

#### Remarks

Primary Hardware Development Target Value of Contract includes System Demonstration Test Articles (SDTAs).

Ancillary Hardware Development provides funding for Defensive Electronic Countermeasures (DECM) contract.

Government Furnished Equipment/Engines provides funding for SDTA engine contract.

FY16-18 Incentive Fees are a contractual requirement as potential schedule incentives based on continued progress of the SDTA aircraft.

\$53M FY16 RDTE encumbered in support of JUONS-S0-0010, entitled 'Federated Distributed Aperture Infrared Countermeasures' (DAIRCM) via Rapid Acquisition Authority with a planned contract award in September 2016.

Support (\$ in Millions	s)			FY 2	2016	FY 2	2017	FY 2 Ba	2018 ise	FY 2	2018 CO	FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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	5.901	1.828	Dec 2015	1.519	Dec 2016	1.360	Dec 2017	-		1.360	1.900	12.508	-
Integrated Logistics Support	WR	NAWCAD : Lakehurst, NJ	16.489	3.705	Dec 2015	3.428	Dec 2016	1.200	Dec 2017	-		1.200	3.329	28.151	-
Integrated Logistics Support	WR	NADEP : Cherry Point, NC	12.859	3.200	Dec 2015	3.057	Dec 2016	1.458	Dec 2017	-		1.458	2.586	23.160	-

PE 0605212N: CH-53K

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy

Date: May 2017

Appropriation/Budget Activity R-1 Program Element (Number/Name) Project (Number/Name)

1319 / 5 PE 0605212N / CH-53K 3059 / CH-53K Development

Support (\$ in Million	s)			FY 2	2016	FY 2	2017	FY 2 Ba			2018 CO	FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Integrated Logistics Support	C/CPFF	GDIT : Fairfax, VA	14.485	3.282	Apr 2016	2.906	Apr 2017	1.960	Apr 2018	-		1.960	4.567	27.200	27.200
Integrated Logistics Support	WR	Various : Various	36.026	1.319	Dec 2015	2.075	Dec 2016	1.792	Dec 2017	-		1.792	3.632	44.844	-
Government Engineering Support	WR	NAWCTSD : Orlando, FL	4.137	1.800	Dec 2015	3.386	Dec 2016	2.257	Dec 2017	-		2.257	2.400	13.980	-
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	-
		Subtotal	115.524	15.134		16.371		10.027		-		10.027	18.414	175.470	-

#### Remarks

NAWC TSD training systems previously captured under "Integrated Logistic Support - Various" are now contained in the Government Engineering support line.

Test and Evaluation (	(\$ in Milli	ons)		FY 2	2016	FY 2	2017	FY 2 Ba	2018 ise	FY 2	2018 CO	FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	Various : Various	22.793	3.841	Dec 2015	4.250	Dec 2016	1.500	Dec 2017	-		1.500	3.569	35.953	-
Developmental Test & Evaluation	WR	NAWCAD : Pax River, MD	46.348	21.557	Dec 2015	31.443	Dec 2016	27.945	Dec 2017	-		27.945	38.576	165.869	-
Operational Test & Evaluation	WR	COMPTEVFOR : Norfolk, VA	2.925	0.745	Dec 2015	1.157	Dec 2016	1.099	Dec 2017	-		1.099	7.937	13.863	-
Live Fire Test & Evaluation	WR	NAWCWD : China Lake, CA	10.128	2.880	Dec 2015	3.432	Dec 2016	3.400	Dec 2017	-		3.400	4.500	24.340	-
	Subtotal 82.194			29.023		40.282		33.944		-		33.944	54.582	240.025	-

#### Remarks

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

PE 0605212N: CH-53K

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy

Date: May 2017

Appropriation/Budget Activity R-1 Program Element (Number/Name) Project (Number/Name)

Management Service	es (\$ in M	illions)		FY 2	2016	FY 2	2017		2018 ise		2018 CO	FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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	21.567	4.163	Dec 2015	4.197	Dec 2016	3.500	Dec 2017	-		3.500	6.038	39.465	-
Government Engineering Support	WR	NAWCAD : Pax River, MD	297.348	26.720	Dec 2015	23.054	Dec 2016	17.542	Dec 2017	-		17.542	13.367	378.031	-
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	7.528	4.750	Jan 2016	4.451	Jan 2017	2.744	Jan 2018	-		2.744	6.939	26.412	26.412
Program Management Support	Various	Various : Various	59.803	1.159	Dec 2015	1.129	Dec 2016	1.000	Dec 2017	-		1.000	2.918	66.009	-
Travel	WR	NAWCAD : Pax River, MD	3.768	0.200	Dec 2015	0.200	Dec 2016	0.125	Dec 2017	-		0.125	0.400	4.693	-
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 433.6			36.992		33.031		24.911		-		24.911	29.662	558.268	-

#### Remarks

Management Services requirements continue to decrease in FY17 and FY18 as both Government and Contractor support begins transition to the CH-53K Production program.

_													
	Prior					FY 2	2018	FY:	2018	FY 2018	Cost To	Total	Target Value of
	Years	FY 2	2016	FY 2	2017	Ва	ise	0	co	Total	Complete	Cost	Contract
Project Cost Totals	4,812.294	563.174		404.810		340.758		-		340.758	836.824	6,957.860	-

Remarks

Navy

PE 0605212N: *CH-53K* 

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xhibit R-4, RDT&E Schedule Pro ppropriation/Budget Activity				•				R-1 P	rogra	m Ele	emer	nt (Nu	mbe	r/Name	∍)	Pro	ject (N			y 2017 <b>ime)</b>		
319 / 5								PE 06	05212	2N / C	CH-5	3K				3059 I CH-53K Development						
CH-53K Development	1Q		2016 3Q	4Q		Y 2017	14011	FY 2	018  3Q 46	F	FY 20	)19  3Q 4Q	   1Q	FY 202	0 3Ql 4Q	10	FY 202	1 3Q  4Q	1 10 1	FY 20		4Q
Acquisition Milestones Milestones						emonst	1 1	$\neg$		1 1												
		ILA ■				MSC A	П	Т	T	П		П	IOC		-	FRP		İ				İ
System Development Hardware Development Software Development Reviews	FRR (1st FLT)	_		PRR		-																
Development Deliveries		EDM 2 <b>V</b> EDM 4																				
Test & Evaluation	$\vdash$	•				-	++		++	++		┼┼			- -	-		+	+		H	$\dashv$
Developmental Test & Evaluation	<u></u>			Dev	velopme	ental Tes	st/TEC	HEVAL							ļ			-				ļ
Operational Test & Evaluation	1st Flight ▼				OT-B1 ▼							lo	T&E									
Production Milestones	$\vdash$	-		$\vdash$	┸		++	-	++	╁┼		┼┼═	1		$\dashv$	╂─┤		$\dashv$	$\dashv\dashv$		┼┼┼	$\dashv$
Contract Awards			LRIP 1 (APN) AAC			LRIP 1 (APN) Award Qty2 • LRIP 2 (APN) AAC		LRIF 2 (APN Awa Qty • LRIF 3 (APN	I) rd 4	1 6	-RIP 3 APN)											
								AAG	*		ward Qty 7											

PE 0605212N: *CH-53K* Navy **UNCLASSIFIED** 

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Exhibit R-4, RDT&E Schedule Prof	le: FY 20	18 Nav	'y																y 201	7	
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0605212N / CH-53K						Project (Number/Name) 3059 / CH-53K Development									
Deliveries Sys. Dem. Test Articles (RDT&E)					1 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1		E 0609	5212	LRZ (AF	IP N)	i		1 1	FRP 5 (APN) Awar Qty 1 • FRP 6 (APN) AAC	) dd 3	1		FRP 6 (APN) Award (APN) AAC	1   1   1   1   1	1 🔻
2018PB - 0605212N - 3059																					▼   1 ▼

PE 0605212N: CH-53K Navy

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy			Date: May 2017
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
1319 / 5	PE 0605212N / CH-53K	3059 / CH-	-53K Development

# Schedule Details

	Sta	art	End			
Events by Sub Project	Quarter	Year	Quarter	Year		
CH-53K Development						
Acquisition Milestones: Milestones: System Demonstration phase	1	2016	3	2019		
Acquisition Milestones: Milestones: Integrated Logistics Assessment (ILA)	2	2016	2	2016		
Acquisition Milestones: Milestone C	3	2017	3	2017		
Acquisition Milestones: Milestones: Initial Operational Capability	1	2020	1	2020		
Acquisition Milestones: Milestones: Full Rate Production	1	2021	1	2021		
System Development: Reviews: Flight Readiness Review (FRR) - 1st Flight	1	2016	1	2016		
System Development: Reviews: Production Readiness Review (PRR)	4	2016	4	2016		
System Development: Development Deliveries: Engineering Development Model (EDM) #2 delivery	2	2016	2	2016		
System Development: Development Deliveries: Engineering Development Model (EDM) #4 delivery	2	2016	2	2016		
Test & Evaluation: Developmental Test & Evaluation: Developmental Test / TECHEVAL	1	2016	3	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	4	2019	1	2020		
Production Milestones: Contract Awards: LRIP Advance Acquisition Contract (lot 1) - APN	3	2016	3	2016		
Production Milestones: Contract Awards: LRIP 1 Contract Award - APN Qty 2	3	2017	3	2017		
Production Milestones: Contract Awards: LRIP Advance Acquisition Contract (lot 2) - APN	3	2017	3	2017		
Production Milestones: Contract Awards: LRIP 2 Contract Award - APN Qty 4	2	2018	2	2018		

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy

Appropriation/Budget Activity
1319 / 5

R-1 Program Element (Number/Name)
PE 0605212N / CH-53K

R-2 Program Element (Number/Name)
3059 / CH-53K Development

	Sta	art	En	ıd	
Events by Sub Project	Quarter	Year	Quarter	Year	
Production Milestones: Contract Awards: LRIP Advance Acquisition Contract (lot 3) - APN	2	2018	2	2018	
Production Milestones: Contract Awards: LRIP 3 Contract Award - APN Qty 7	2	2019	2	2019	
Production Milestones: Contract Awards: LRIP Advance Acquisition Contract (lot 4) - APN	2	2019	2	2019	
Production Milestones: Contract Awards: LRIP 4 Contract Award - APN Qty 9	2	2020	2	2020	
Production Milestones: Contract Awards: FRP Advance Acquisition Contract (lot 5) - APN	2	2020	2	2020	
Production Milestones: Contract Awards: FRP 5 Contract Award - APN Qty 13	2	2021	2	2021	
Production Milestones: Contract Awards: FRP Advance Acquisition Contract (lot 6) - APN	2	2021	2	2021	
Production Milestones: Contract Awards: FRP 6 Contract Award - APN Qty 18	2	2022	2	2022	
Production Milestones: Contract Awards: FRP Advance Acquisition Contract (lot 7) - APN	2	2022	2	2022	
Deliveries: Sys. Dem. Test Articles (RDT&E): System Demonstration Test Articles (SDTA) #1	3	2017	3	2017	
Deliveries: Sys. Dem. Test Articles (RDT&E): System Demonstration Test Articles (SDTA) #2	3	2017	3	2017	
Deliveries: Sys. Dem. Test Articles (RDT&E): System Demonstration Test Articles (SDTA) #3	4	2017	4	2017	
Deliveries: Sys. Dem. Test Articles (RDT&E): System Demonstration Test Articles (SDTA) #4	1	2018	1	2018	
Deliveries: Sys. Dem. Test Articles (RDT&E): System Demonstration Test Articles (SDTA) #5	1	2020	1	2020	
Deliveries: Sys. Dem. Test Articles (RDT&E): System Demonstration Test Articles (SDTA) #6	1	2020	1	2020	
Deliveries: LRIP (APN): LRIP Lot #1 1st delivery of 2	4	2020	4	2020	
Deliveries: LRIP (APN): LRIP Lot #1 2nd delivery of 2	1	2021	1	2021	
Deliveries: LRIP (APN): LRIP Lot #2 1st delivery of 4	4	2021	4	2021	

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R-1 Line #153

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy			Date: May 2017
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
1319 / 5	PE 0605212N / CH-53K	3059 I CH-	-53K Development

	Sta	Start				
Events by Sub Project	Quarter	Year	Quarter	Year		
Deliveries: LRIP (APN): LRIP Lot #2 2nd delivery of 4	1	2022	1	2022		
Deliveries: LRIP (APN): LRIP Lot #2 3rd delivery of 4	1	2022	1	2022		
Deliveries: LRIP (APN): LRIP Lot #2 4th delivery of 4	2	2022	2	2022		
Deliveries: LRIP (APN): LRIP Lot #3 1st delivery of 7	3	2022	3	2022		
Deliveries: LRIP (APN): LRIP Lot #3 2nd delivery of 7	3	2022	3	2022		
Deliveries: LRIP (APN): LRIP Lot #3 3rd delivery of 7	3	2022	3	2022		
Deliveries: LRIP (APN): LRIP Lot #3 4th delivery of 7	4	2022	4	2022		
Deliveries: LRIP (APN): LRIP Lot #3 5th delivery of 7	4	2022	4	2022		
Deliveries: LRIP (APN): LRIP Lot #3 6th delivery of 7	4	2022	4	2022		

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