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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2021 Navy **Date:** February 2020

<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 0605212M / CH-53K
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COST (\$ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	0.000	383.558	506.955	406.406	-	406.406	361.254	231.851	40.633	18.488	0.000	1,949.145
3059: <i>CH-53K Development</i>	0.000	373.904	506.955	406.406	-	406.406	361.254	231.851	40.633	18.488	0.000	1,939.491
9999: <i>Congressional Adds</i>	0.000	9.654	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	9.654

**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 currently includes one Ground Test Vehicle (GTV) and four Engineering Development Models (EDMs) for System Development and Demonstration (SDD) purchased with Research, Development, Test & Evaluation (RDT&E) funds. Of the remaining 200 aircraft, four are System Demonstration Test Articles and 196 are funded with APN.

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 2019</b>	<b>FY 2020</b>	<b>FY 2021 Base</b>	<b>FY 2021 OCO</b>	<b>FY 2021 Total</b>
Previous President's Budget	336.945	516.955	251.359	-	251.359
Current President's Budget	383.558	506.955	406.406	-	406.406
Total Adjustments	46.613	-10.000	155.047	-	155.047
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-10.000			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	58.000	0.000			
• SBIR/STTR Transfer	-11.387	0.000			
• Program Adjustments	0.000	0.000	156.270	-	156.270
• Rate/Misc Adjustments	0.000	0.000	-1.223	-	-1.223

**Congressional Add Details (\$ in Millions, and Includes General Reductions)**

**Project:** 9999: *Congressional Adds*

Congressional Add: *Wireless Intercom System*

Congressional Add: *Common Lightweight Cargo System*

Congressional Add Subtotals for Project: 9999

Congressional Add Totals for all Projects

	<b>FY 2019</b>	<b>FY 2020</b>
	4.827	0.000
	4.827	0.000
Congressional Add Subtotals for Project: 9999	9.654	0.000
Congressional Add Totals for all Projects	9.654	0.000

**Change Summary Explanation**

Technical issues found during the CH-53K developmental test program have resulted in a lower test event execution rate than planned, impacting test execution, program schedule, and cost. The increase in FY 2021 funding is required in order to execute engineering design work for correction of deficiencies, resolution of technical issues and continuation of developmental flight test

Schedule: Not applicable.

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**Exhibit R-2A, RDT&E Project Justification:** PB 2021 Navy **Date:** February 2020

<b>Appropriation/Budget Activity</b> 1319 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0605212M / CH-53K				<b>Project (Number/Name)</b> 3059 / CH-53K Development			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021 Base</b>	<b>FY 2021 OCO</b>	<b>FY 2021 Total</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
3059: CH-53K Development	0.000	373.904	506.955	406.406	-	406.406	361.254	231.851	40.633	18.488	0.000	1,939.491
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 currently includes one Ground Test Vehicle (GTV) and four Engineering Development Models (EDMs) for System Development and Demonstration (SDD) purchased with Research, Development, Test & Evaluation (RDT&E) funds. Of the remaining 200 aircraft, four are System Demonstration Test Articles and 196 are funded with APN.

FY 2021 RDT&E funds CH-53K SDD activities to include additional ground and flight test of one GTV, four EDMs and four SDTAs, associated subsystems and components.

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

	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021 Base</b>	<b>FY 2021 OCO</b>	<b>FY 2021 Total</b>
<b>Title:</b> Air Vehicle Development	327.504	436.750	340.780	0.000	340.780
<b>Articles:</b>	-	-	-	-	-
<b>FY 2020 Plans:</b>					
Continue additional ground and flight test of the CH-53K GTV, EDMs and their associated subsystems and components in preparation of IOT&E. Continue to evaluate and implement producability, reliability and capability improvements during fabrication and assembly of System Demonstration Test Articles.					
<b>FY 2021 Base Plans:</b>					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2021 Navy			<b>Date:</b> February 2020			
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605212M / CH-53K	<b>Project (Number/Name)</b> 3059 / CH-53K Development				
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>						
		<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021 Base</b>	<b>FY 2021 OCO</b>	<b>FY 2021 Total</b>
Continue additional ground and flight test of the CH-53K GTV, EDMs and their associated subsystems and components in preparation of IOT&E. Continue to evaluate and implement producability, reliability and capability improvements during fabrication and assembly of System Demonstration Test Articles.  <b>FY 2021 OCO Plans:</b> N/A  <b>FY 2020 to FY 2021 Increase/Decrease Statement:</b> The decrease from FY20 to FY21 in the Air Vehicle Development line is a result of two of the remaining SDTA delivering in FY20 and final delivery in Q3 FY21.						
<b>Title:</b> Integrated Logistics Support and Test & Evaluation (T&E)		33.945	56.344	52.427	0.000	52.427
	<b>Articles:</b>	-	-	-	-	-
<b>FY 2020 Plans:</b> Continue to perform in-house, field activity and contractor execution of Integrated Logistic Support and Developmental Test program. Continue to refine and validate Product Support Packages and Supportability Test Plans in preparation of IOT&E. Continue component qualification, Government ground and flight test activities, as well as LFT&E efforts.  <b>FY 2021 Base Plans:</b> Continue to perform in-house, field activity and contractor execution of Integrated Logistic Support and Developmental Test program. Continue to refine and validate Product Support Packages and Supportability Test Plans in preparation of IOT&E. Continue component qualification, Government ground and flight test activities, as well as LFT&E efforts.  <b>FY 2021 OCO Plans:</b> N/A  <b>FY 2020 to FY 2021 Increase/Decrease Statement:</b> The decrease from FY20 to FY21 is due to Integrated Logistics Support ramping down as we approach IOC in FY21.						
<b>Title:</b> Systems Engineering & Project Management		12.455	13.861	13.199	0.000	13.199
	<b>Articles:</b>	-	-	-	-	-
<b>FY 2020 Plans:</b>						

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2021 Navy		<b>Date:</b> February 2020
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605212M / CH-53K	<b>Project (Number/Name)</b> 3059 / CH-53K Development

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021 Base</b>	<b>FY 2021 OCO</b>	<b>FY 2021 Total</b>
Continue to perform in-house, field activity and contractor execution of test program Integrated Product Teams. Continue to plan for, and execute, Correction of Deficiencies identified during component qualification and flight test. Efforts include engineering, program management and test program travel.  <b>FY 2021 Base Plans:</b> Continue to perform in-house, field activity and contractor execution of test program Integrated Product Teams. Continue to plan for, and execute, Correction of Deficiencies identified during component qualification and flight test. Efforts include engineering, program management and test program travel.  <b>FY 2021 OCO Plans:</b> N/A  <b>FY 2020 to FY 2021 Increase/Decrease Statement:</b> The decrease from FY20 to FY21 in the Systems Engineering and Project Management line is due to engineering support ramping down as we approach IOC in FY21.					
<b>Accomplishments/Planned Programs Subtotals</b>	373.904	506.955	406.406	0.000	406.406

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021 Base</b>	<b>FY 2021 OCO</b>	<b>FY 2021 Total</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• APN / 0158 / 0158C: <i>CH-53K (Heavy Lift)</i>	1,114.985	1,062.606	1,014.512	-	1,014.512	1,504.177	1,582.651	2,144.160	2,630.821	12,662.762	25,131.775
• APN / 0605: <i>CH-53K - Initial Spares</i>	63.551	83.824	141.691	-	141.691	1.200	0.900	1.329	32.485	Continuing	Continuing
• APN / 0528: <i>H-53 Series</i>	8.492	25.640	6.026	-	6.026	11.040	19.832	24.526	39.660	Continuing	Continuing

**Remarks**  
 APN/0158/0158C: CH-53K Advanced and Regular Procurement (APN-1)  
 APN/0605: CH-53K Spares (APN-6)  
 APN/0528: CH-53K OSIP #s 007-19 Correction of Deficiencies and 008-19 Production Upgrades

**D. Acquisition Strategy**  
 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 resulting in an ACAT 1C designation.

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Navy** **Date:** February 2020

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605212M / CH-53K	<b>Project (Number/Name)</b> 3059 / CH-53K Development
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<b>Product Development (\$ in Millions)</b>				<b>FY 2019</b>		<b>FY 2020</b>		<b>FY 2021 Base</b>		<b>FY 2021 OCO</b>		<b>FY 2021 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/CPIF	Sikorsky : Stratford, CT	0.000	282.999	Dec 2018	388.433	Dec 2019	306.680	Dec 2020	-		306.680	496.562	1,474.674	1,474.674
GFE: Engines	SS/CPFF	GE : Lynn, MA	0.000	6.123	Jan 2019	6.300	Jan 2020	1.200	Jan 2021	-		1.200	0.000	13.623	13.623
Primary Hardware Development, Capability Improvement	Various	Various : Various	0.000	0.000		0.000		0.000		-		0.000	12.000	12.000	12.000
Primary Hardware Development-Other SAC	TBD	Sikorsky : Stratford, CT	0.000	24.000	Jan 2019	35.300	Jan 2020	29.500	Jan 2021	-		29.500	36.059	124.859	124.859
Primary Hardware Development	Various	Various : Various	0.000	14.382	Apr 2019	6.717	Apr 2020	3.400	Apr 2021	-		3.400	11.487	35.986	35.986
<b>Subtotal</b>			0.000	327.504		436.750		340.780		-		340.780	556.108	1,661.142	N/A

**Remarks**  
 FY21 funding is in direct support of the System Development and Demonstration Aircraft (SDD) test program to prepare for IOT&E and to achieve IOC. Target value increased due to additional funding to complete SDD.  
 Government Furnished Equipment/Engines provides funding for SDTA Engine contract.

<b>Support (\$ in Millions)</b>				<b>FY 2019</b>		<b>FY 2020</b>		<b>FY 2021 Base</b>		<b>FY 2021 OCO</b>		<b>FY 2021 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	0.000	0.535	Dec 2018	1.173	Dec 2019	1.191	Dec 2020	-		1.191	1.550	4.449	-
Integrated Logistics Support	WR	NAWCAD : Lakehurst, NJ	0.000	1.000	Dec 2018	1.223	Dec 2019	1.241	Dec 2020	-		1.241	1.250	4.714	-
Integrated Logistics Support	WR	Various : Various	0.000	4.596	Dec 2018	2.590	Dec 2019	1.713	Dec 2020	-		1.713	0.846	9.745	-
Government Engineering Support	WR	NAWCTSD : Orlando, FL	0.000	0.612	Dec 2018	0.250	Dec 2019	0.250	Dec 2020	-		0.250	0.300	1.412	-
Integrated Logistics Spt-NEW PM CONTRACT	C/CPFF	NSI : Lexington Park, MD	0.000	0.995	Apr 2019	1.738	Apr 2020	1.642	Apr 2021	-		1.642	0.645	5.020	5.020
<b>Subtotal</b>			0.000	7.738		6.974		6.037		-		6.037	4.591	25.340	N/A

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Navy** **Date:** February 2020

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605212M / CH-53K	<b>Project (Number/Name)</b> 3059 / CH-53K Development
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<b>Support (\$ in Millions)</b>				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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			

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

<b>Test and Evaluation (\$ in Millions)</b>				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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	0.000	1.571	Dec 2018	3.400	Dec 2019	3.675	Dec 2020	-		3.675	0.100	8.746	-
Developmental Test & Evaluation	WR	NAWCAD : Pax River, MD	0.000	22.552	Dec 2018	29.400	Nov 2019	28.975	Nov 2020	-		28.975	55.779	136.706	-
Operational Test & Evaluation	WR	COMOPTEVFOR : Norfolk, VA	0.000	0.054	Dec 2018	9.940	Dec 2019	9.940	Dec 2020	-		9.940	11.856	31.790	-
Live Fire Test & Evaluation	WR	NAWCWD : China Lake, CA	0.000	2.030	Dec 2018	6.630	Dec 2019	3.800	Dec 2020	-		3.800	0.800	13.260	-
<b>Subtotal</b>			0.000	26.207		49.370		46.390		-		46.390	68.535	190.502	N/A

**Remarks**  
FY20-21 Live Fire Test and Evaluation funds are in support of the Survivability KPP and required for FRP. FY21 efforts are conducting test article set up and execution of live fire tests. FY21 T&E funding to NAWCAD and WD supports the prime contractor (SDD/SDTA) schedule for flight test/hours and associated assets in support of test activities of IOT&E and to achieve IOC.

<b>Management Services (\$ in Millions)</b>				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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	0.000	1.726	Dec 2018	2.905	Dec 2019	2.500	Dec 2020	-		2.500	3.726	10.857	10.857
Government Engineering Support	WR	NAWCAD : Pax River, MD	0.000	7.331	Dec 2018	8.259	Nov 2019	8.022	Nov 2020	-		8.022	13.225	36.837	-
Program Management Support	C/CPFF	Zenetex : Herndon, VA	0.000	1.483	Jan 2019	0.000		0.000		-		0.000	0.000	1.483	1.483

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Navy** **Date:** February 2020

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605212M / CH-53K	<b>Project (Number/Name)</b> 3059 / CH-53K Development
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<b>Management Services (\$ in Millions)</b>				<b>FY 2019</b>		<b>FY 2020</b>		<b>FY 2021 Base</b>		<b>FY 2021 OCO</b>		<b>FY 2021 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>			
Program Management Support	Various	Various : Various	0.000	1.660	Dec 2018	2.583	Dec 2019	2.567	Dec 2020	-		2.567	5.841	12.651	-
Travel	WR	NAWCAD : Pax River, MD	0.000	0.255	Dec 2018	0.114	Nov 2019	0.110	Nov 2020	-		0.110	0.200	0.679	-
<b>Subtotal</b>			0.000	12.455		13.861		13.199		-		13.199	22.992	62.507	N/A

**Remarks**  
FY21 support is required for in house activities to include program management and engineering support for the Integrated Product teams in preparation of IOT&E and to achieve IOC.

	<b>Prior Years</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021 Base</b>	<b>FY 2021 OCO</b>	<b>FY 2021 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>	0.000	373.904	506.955	406.406	-	406.406	652.226	1,939.491	N/A

**Remarks**

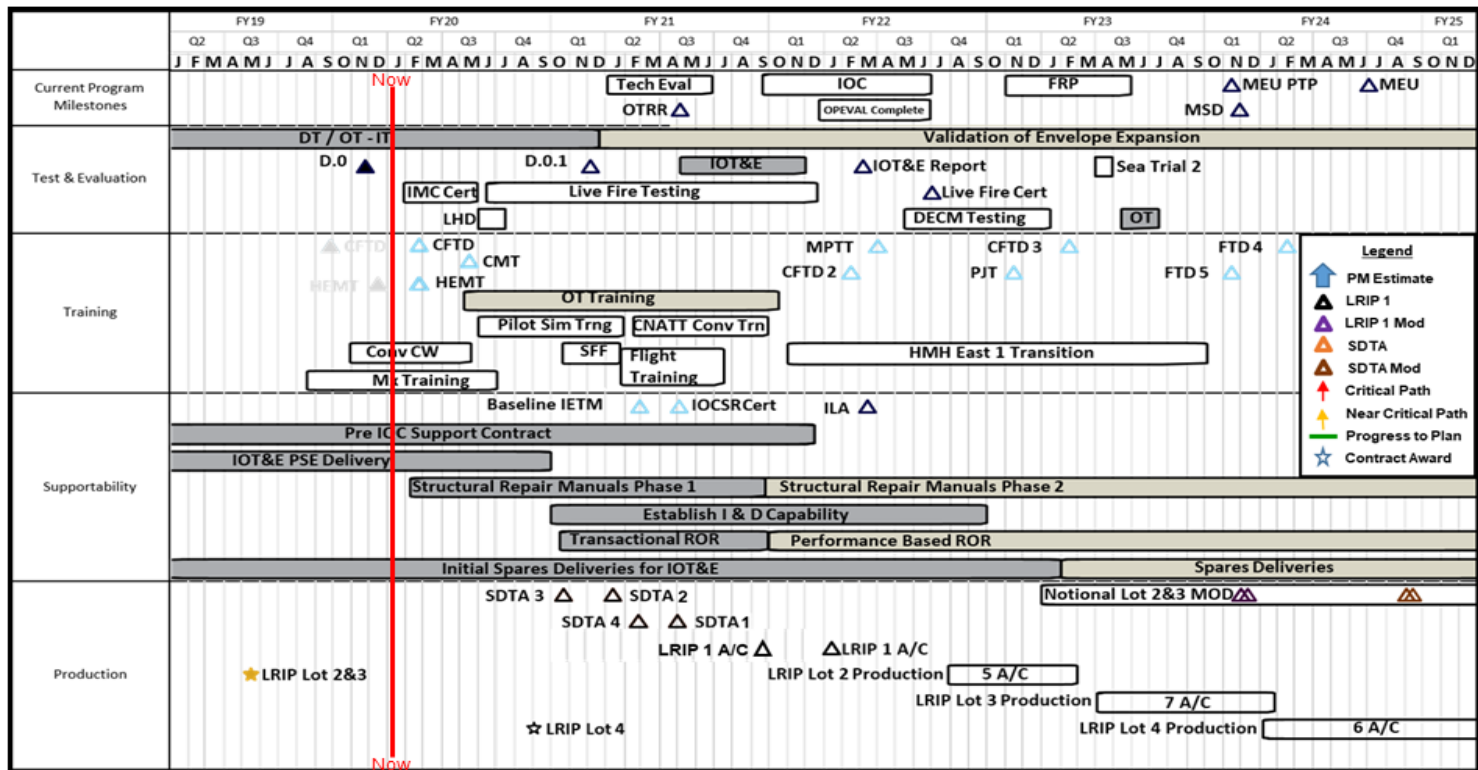
Appropriation/Budget Activity  
1319 / 5

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

Project (Number/Name)  
3059 / CH-53K Development



# CH-53K Program Schedule



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**Exhibit R-4A, RDT&E Schedule Details: PB 2021 Navy** **Date:** February 2020

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605212M / 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	2019	3	2019
Acquisition Milestones: Milestones: Initial Operational Capability	3	2022	3	2022
Acquisition Milestones: Milestones: Full Rate Production	3	2023	3	2023
System Development: Capability Improvements: Capability Improvements	1	2023	4	2024
Test & Evaluation: Developmental Test & Evaluation: Developmental Test / Operational Test - IT	1	2019	3	2021
Test & Evaluation: Operational Test & Evaluation: IOT&E	3	2021	1	2022
Deliveries: Sys. Dem. Test Articles (RDT&E): System Demonstration Test Articles (SDTA) #2	2	2021	2	2021
Deliveries: Sys. Dem. Test Articles (RDT&E): System Demonstration Test Articles (SDTA) #4	2	2021	2	2021
Deliveries: Sys. Dem. Test Articles (RDT&E): System Demonstration Test Articles (SDTA) #1	3	2021	3	2021
Deliveries: Production LRIP Awards: LRIP 4	4	2020	4	2020
Deliveries: Production LRIP Awards: Lot 5	4	2021	4	2021
Deliveries: Production LRIP Awards: Lot 6	2	2022	2	2022
Deliveries: Production LRIP Awards: Lot 7	2	2023	2	2023
Deliveries: Production LRIP Awards: Lot 8	2	2024	2	2024
Deliveries: Production LRIP Awards: Lot 9	2	2025	2	2025

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2021 Navy										<b>Date:</b> February 2020		
<b>Appropriation/Budget Activity</b> 1319 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0605212M / CH-53K				<b>Project (Number/Name)</b> 9999 / Congressional Adds			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021 Base</b>	<b>FY 2021 OCO</b>	<b>FY 2021 Total</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
9999: <i>Congressional Adds</i>	0.000	9.654	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	9.654
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

**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).

The Wireless Intercommunication System (ICS) will enable the CH-53K crew the capability for simultaneous use, highly reliable, jam resistant, secure and non-secure voice communications in an electronic warfare environment.

The Common Lightweight Cargo Floor will provide an integrated flooring system solution which reduces aircraft weight and improves capability of the restraint locking system.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	<b>FY 2019</b>	<b>FY 2020</b>
<b>Congressional Add:</b> Wireless Intercom System	4.827	0.000
<b>FY 2019 Accomplishments:</b> Commence development of a Wireless Intercommunication System (ICS) which will enable crew capability for simultaneous use, highly reliable, jam resistant, secure and non-secure voice communications in an electronic warfare environment.		
<b>FY 2020 Plans:</b> N/A		
<b>Congressional Add:</b> Common Lightweight Cargo System	4.827	0.000
<b>FY 2019 Accomplishments:</b> Commence efforts for the Common Lightweight Cargo system which will provide an integrated flooring system solution which reduces aircraft weight and improves capability of the restraint locking system		
<b>FY 2020 Plans:</b> N/A		
<b>Congressional Adds Subtotals</b>	9.654	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Navy Date: February 2020

Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)
1319 / 5	PE 0605212M / CH-53K	9999 / Congressional Adds

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

N/A

**Remarks**

**D. Acquisition Strategy**

N/A

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Navy** **Date:** February 2020

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605212M / CH-53K	<b>Project (Number/Name)</b> 9999 / Congressional Adds
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Product Development (\$ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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			
Product Development Common Lightweight Cargo	TBD	Sikorsky : Strafford, CT	0.000	4.827	Jan 2020	0.000		0.000		-		0.000	0.000	4.827	4.827
Product Development Wireless Intercom System	TBD	Axnes : TBD	0.000	4.827	Jan 2020	0.000		0.000		-		0.000	0.000	4.827	4.827
<b>Subtotal</b>			0.000	9.654		0.000		0.000		-		0.000	0.000	9.654	N/A

**Remarks**  
FY19 CONGRESSIONAL ADD: The Common Lightweight Cargo System and Wireless Intercom System provides new and improved capability to the CH53-K aircraft that support the overall Heavy-lift mission.

	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	0.000	9.654	0.000	0.000	-	0.000	0.000	9.654	N/A

**Remarks**

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**Exhibit R-4, RDT&E Schedule Profile: PB 2021 Navy** **Date:** February 2020

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605212M / CH-53K	<b>Project (Number/Name)</b> 9999 / Congressional Adds
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Proj 9999	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025											
	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								
Congressional Add																																				
Common Lightweight Cargo System					Contract Award ◆																															
					Requirements / Gap Analysis	System Design & Development																														
Wireless Intercommunicaiton System (ICS)					Contract Award ◆	System Design & Development	Test System Production	Installation & Flight Test																												

2021PB - 0605212M - 9999

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2021 Navy **Date:** February 2020

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605212M / CH-53K	<b>Project (Number/Name)</b> 9999 / Congressional Adds
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>Proj 9999</b>				
Common Lightweight Cargo System: Contract Award	1	2020	1	2020
Common Lightweight Cargo System: Requirements / Gap Analysis	1	2020	2	2020
Common Lightweight Cargo System: System Design & Development	3	2020	2	2021
Common Lightweight Cargo System: Critical Design Review	2	2021	2	2021
Common Lightweight Cargo System: Prototype Production	2	2021	4	2021
Common Lightweight Cargo System: Installation & Fit Check	1	2022	1	2022
Wireless Intercommunication System (ICS): Contract Award	1	2020	1	2020
Wireless Intercommunication System (ICS): System Design & Development	2	2020	3	2020
Wireless Intercommunication System (ICS): Test System Production	4	2020	4	2020
Wireless Intercommunication System (ICS): Installation & Flight Test	1	2021	2	2021