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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Navy										Date: February 2018		
Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy I BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0605504N I (U)Multi-Mission Maritime (MMA) Increment III							
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	90.101	109.827	181.731	160.389	-	160.389	149.138	150.803	129.001	131.556	Continuing	Continuing
3218: P-8A Spiral 2 Development	90.101	109.827	181.731	160.389	-	160.389	149.138	150.803	129.001	131.556	Continuing	Continuing
Program MDAP/MAIS Code: Project MDAP/MAIS Code(s): 334												
A. Mission Description and Budget Item Justification The P-8A Increment 3 program consists of incremental enhancement Engineering Change Proposals (ECPs) to system capabilities that will retain cost-wise effectiveness for major combat operations. Increment 3 will incorporate improvements to aircraft systems including significant war-altering Anti-Submarine Warfare (ASW) capabilities of Enhanced Multi-Static Active Coherent (MAC) and ASW Signal Intelligence (SIGINT) which are enabled by the incorporation of Combat System hardware and architecture improvements, ASW and Anti-Surface Warfare (ASuW) sensor improvements, communication capability upgrades, ASuW Net Enabled Weapon (NEW), and Higher-Than-Secret (HTS) security capability. These capabilities will be developed as a series of ECPs for the P-8A and are as follows: - ECP 4 - Software upgrades to Narrowband SATCOM and Radar Targeting. (FIELDDED) - ECP 5 - Net Enabled Weapon Data Link, High Frequency radio Internet Protocol (HF-IP), Integrated Broadcast Service (IBS) filtering, IBS receiver, and Harpoon II+. - ECP 6 - ASW SIGINT, Anti-Submarine Warfare (ASW) capability, Wide Band SATCOM, Higher Than Secret (HTS) processing, Enhanced track management (Minotaur), Applications Based Architecture (ABA) and Combat System. - ECP 7 - Enhanced Multi-Static Active Coherent (MAC). To expedite fielding capability to the P-8A Fleet, ECPs 4, 5, and 6 are executed concurrently as these capabilities are independent of one another. However, Enhanced MAC (ECP 7) is reliant on ECP 6's Combat System hardware and architecture to operate on the P-8A. Both ECP 6 and ECP 7 are integrated via the Platform Integration contract planned to be awarded in FY2018. Enhanced MAC (ECP 7) is developed within Program Element (PE) 0604261N and integrated via the Platform Integration contract within this PE. Note: This PE has been re-phased due to Congressional adjustments through FY2017.												

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Appropriation/Budget Activity		R-1 Program Element (Number/Name)			
1319: Research, Development, Test & Evaluation, Navy I BA 5: System Development & Demonstration (SDD)		PE 0605504N I (U)Multi-Mission Maritime (MMA) Increment III			
B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	182.220	181.731	193.405	-	193.405
Current President's Budget	109.827	181.731	160.389	-	160.389
Total Adjustments	-72.393	0.000	-33.016	-	-33.016
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-2.489	0.000			
• Program Adjustments	0.000	0.000	-30.800	-	-30.800
• Rate/Misc Adjustments	0.000	0.000	-2.216	-	-2.216
• Congressional General Reductions Adjustments	-0.004	-	-	-	-
• Congressional Directed Reductions Adjustments	-69.900	-	-	-	-
Change Summary Explanation					
Technical: Not applicable.					
Schedule: Schedule has been updated to reflect the program's re-phased budget due to Congressional adjustments through FY2017.					

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Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0605504N I (U)Multi-Mission Maritime (MMA) Increment III				Project (Number/Name) 3218 I P-8A Spiral 2 Development			
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
3218: P-8A Spiral 2 Development	90.101	109.827	181.731	160.389	-	160.389	149.138	150.803	129.001	131.556	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
Project MDAP/MAIS Code: 334												
A. Mission Description and Budget Item Justification												
The P-8A Increment 3 program consists of incremental enhancement Engineering Change Proposals (ECPs) to system capabilities that will retain cost-wise effectiveness for major combat operations. Increment 3 will incorporate improvements to aircraft systems including significant war-altering Anti-Submarine Warfare (ASW) capabilities of Enhanced Multi-Static Active Coherent (MAC) and ASW Signal Intelligence (SIGINT) which are enabled by the incorporation of Combat System hardware and architecture improvements, ASW and Anti-Surface Warfare (ASuW) sensor improvements, communication capability upgrades, ASuW Net Enabled Weapon (NEW), and Higher-Than-Secret (HTS) security capability.												
These capabilities will be developed as a series of ECPs for the P-8A and are as follows:												
- ECP 4 - Software upgrades to Narrowband SATCOM and Radar Targeting. (FIELDDED)												
- ECP 5 - Net Enabled Weapon Data Link, High Frequency radio Internet Protocol (HF-IP), Integrated Broadcast Service (IBS) filtering, IBS receiver, and Harpoon II+.												
- ECP 6 - ASW SIGINT, Anti-Submarine Warfare (ASW) capability, Wide Band SATCOM, Higher Than Secret (HTS) processing, Enhanced track management (Minotaur), Applications Based Architecture (ABA) and Combat System.												
- ECP 7 - Enhanced Multi-Static Active Coherent (MAC).												
To expedite fielding capability to the P-8A Fleet, ECPs 4, 5, and 6 are executed concurrently as these capabilities are independent of one another. However, Enhanced MAC (ECP 7) is reliant on ECP 6's Combat System hardware and architecture to operate on the P-8A. Both ECP 6 and ECP 7 are integrated via the Platform Integration contract planned to be awarded in FY2018. Enhanced MAC (ECP 7) is developed within Program Element (PE) 0604261N and integrated via the Platform Integration contract within this PE.												
Note: This PE has been re-phased due to Congressional reductions imposed through FY2017 and pending in FY2018.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: Product Development								99.148	167.290	137.099	0.000	137.099
								Articles: -	-	-	-	-
FY 2018 Plans:												

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Complete ECP 4 integration, test, and fielding. Continue ECP-5 integration and test efforts, and its initial fielding. Complete ECP 6 development efforts and initiation of its integration into P-8 test platforms via the Platform Integration (PI) contract with Boeing. Continue Government-led Lead Capability Integrator (LCI) efforts. Continue associated ground support, Tactical Operations Center (TOC), and training systems upgrades. FY 2019 Base Plans: Complete ECP-5 integration and test efforts, and its fielding. Continue ECP 6 integration activities. Note: ECP 6 enables most of the warfighting capability improvements that Increment 3 brings to the P-8. Continue P-8 LCI efforts. Continue TOC and training systems upgrades. FY 2019 OCO Plans: N/A FY 2018 to FY 2019 Increase/Decrease Statement: FY2019 was decreased due to a re-phasing of the program as a result of the Congressional reductions imposed through FY2017 and pending in FY2018.								
Title: Support/Test & Evaluation/Management Services Articles:				10.679 -	14.441 -	23.290 -	0.000 -	23.290 -
FY 2018 Plans: Continue associated in-house government Lead Capability Integrator (LCI)/T&E/management activities. FY 2019 Base Plans: Continue associated in-house government Lead Capability Integrator (LCI)/T&E/management activities. FY 2019 OCO Plans: N/A FY 2018 to FY 2019 Increase/Decrease Statement: The increase between FY2018 and FY2019 is due to a significant increase in Operational Test (OT) requirements driven by the Harpoon II+ (ECP5) test events plus supporting GFE/test assets.								
Accomplishments/Planned Programs Subtotals				109.827	181.731	160.389	0.000	160.389

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C. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2019</u>	<u>FY 2019</u>	<u>FY 2019</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Complete</u>	<u>Total Cost</u>
• APN/0586: P-8 Series	17.946	18.665	71.251	-	71.251	127.479	230.685	273.973	337.256	1,894.800	3,042.428
Remarks BLI0586 reflects the P-8A total program funding not just Increment 3.											
D. Acquisition Strategy In 2016 USD AT&L directed Increment 3 efforts to be merged into the P-8 MDAP with capabilities delivered as a series of Engineering Change Proposals (ECPs). Increment 3 capabilities were broken into ECPs 4-7 to expedite delivery to the Fleet. P-8A is an ACAT IC program under the MDA oversight of ASN (RDA). As part of that program Increment 3 is subject to all of the same statutory and regulatory reporting requirements as it would be as a separate MDAP. P-8A completed its most recent annual MDAP Gate 6 review in November 2017. Each Increment 3 ECP is a separate effort with its own development, integration, fielding, and sustainment activities. To explain the separate efforts funding requirements, the Navy provided comprehensive Increment 3 briefing materials to Congressional staffers during the PB18 budget cycle. This information can be updated to reflect PB19 as requested.											
E. Performance Metrics Continue development of capability ECPs.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy												Date: February 2018			
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Product Development (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Primary Hdw Dev - RR Interface	C/CPIF	Boeing : Seattle, WA	5.803	0.000		0.000		0.000		-		0.000	0.000	5.803	5.803
Primary HW Dev - Capability Analysis	C/CPFF	Boeing : Seattle, WA	8.917	0.000		0.000		0.000		-		0.000	0.000	8.917	8.917
Primary HW Dev - Capability Dev & Integration	C/CPFF	Boeing : Seattle, WA	14.225	36.401	Oct 2016	58.589	Oct 2017	18.418	Oct 2018	-		18.418	0.000	127.633	127.633
Primary HW Dev - Trainer Dev & Integration	TBD	Boeing : St. Louis, MO	0.000	0.000		2.000	Nov 2017	5.000	Nov 2018	-		5.000	83.413	90.413	-
Primary HW Dev - ABA SW Dev Vendor A	C/CPIF	Raytheon : Dallas, TX	5.870	0.116	Dec 2017	0.000		0.000		-		0.000	0.000	5.986	5.986
Primary HW Dev - ABA SW Dev Vendor B	C/CPIF	Lockheed Martin : Manassas, VA	6.442	3.644	Oct 2016	0.000		0.000		-		0.000	0.000	10.086	10.086
Primary HW Dev - Combat Systems Hardware Effort	Various	NSWC : Crane, IN	0.000	5.450	Jun 2017	23.594	Oct 2017	23.803	Oct 2018	-		23.803	20.000	72.847	-
Primary HW Dev - Platform Integration	C/CPFF	Boeing : Seattle, WA	0.000	0.000		45.212	Jun 2018	45.330	Oct 2018	-		45.330	251.861	342.403	342.403
Primary HW Dev - Wideband SATCOM Terminal	C/CPFF	AMEWAS : California, MD	3.942	2.830	Oct 2016	0.000		0.000		-		0.000	0.000	6.772	6.772
RCI2 - ECP3	C/CPFF	Boeing : Seattle, WA	14.317	3.000	Oct 2016	0.000		0.000		-		0.000	0.000	17.317	17.317
LCI Development & Integration	Various	Various : Various	15.851	28.972	Oct 2016	23.240	Oct 2017	27.284	Oct 2018	-		27.284	98.889	194.236	-
Sys Eng (gov)	WR	NAWC AD : Pax River, MD	7.484	18.735	Nov 2016	14.655	Nov 2017	17.264	Nov 2018	-		17.264	69.291	127.429	-
Subtotal			82.851	99.148		167.290		137.099		-		137.099	523.454	1,009.842	N/A

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Support (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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 Sup	WR	NAWC AD : Pax River, MD	0.605	1.095	Nov 2016	0.356	Nov 2017	0.918	Nov 2018	-		0.918	3.672	6.646	-
Studies & Analysis	C/CPFF	JHU : Pax River, MD	3.345	3.372	Nov 2016	2.232	Nov 2017	2.250	Nov 2018	-		2.250	0.000	11.199	11.199
Subtotal			3.950	4.467		2.588		3.168		-		3.168	3.672	17.845	N/A
Test and Evaluation (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Dev Test & Eval	WR	NAWC AD : Pax River, MD	1.266	3.768	Nov 2016	8.738	Nov 2017	8.879	Nov 2018	-		8.879	65.080	87.731	-
GFE/GFI/GFP	WR	NAWC AD : Pax River, MD	0.022	1.193	Nov 2016	1.753	Nov 2017	5.590	Nov 2018	-		5.590	32.764	41.322	-
Oper Test & Eval	WR	NAWC AD : Pax River, MD	0.000	0.000		0.000		1.574	Nov 2018	-		1.574	26.533	28.107	-
Test Assets	WR	NAWC AD : Pax River, MD	0.000	0.000		0.000		1.137	Nov 2018	-		1.137	22.478	23.615	-
Subtotal			1.288	4.961		10.491		17.180		-		17.180	146.855	180.775	N/A
Management Services (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Eng Tech Serv (NON- FFRDC)	C/CPFF	Various : Various	0.118	0.000	Nov 2016	0.072	Nov 2017	0.000	Nov 2018	-		0.000	Continuing	Continuing	Continuing
Mgmt Suppt Serv (NON- FFRDC)	C/CPFF	RBC : Alexandria, VA	1.199	0.797	Nov 2016	0.590	Nov 2017	2.134	Nov 2018	-		2.134	6.208	10.928	10.928
Program Mgmt Support	WR	NAWC AD : Pax River, MD	0.688	0.437	Nov 2016	0.600	Nov 2017	0.708	Nov 2018	-		0.708	2.657	5.090	-
Travel	Allot	NAWC AD : Pax River, MD	0.007	0.017	Nov 2016	0.100	Nov 2017	0.100	Nov 2018	-		0.100	0.500	0.724	-

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Management Services (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Subtotal			2.012	1.251		1.362		2.942		-		2.942	Continuing	Continuing	N/A

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	90.101	109.827	181.731	160.389	-	160.389	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Navy

Date: February 2018

Appropriation/Budget Activity

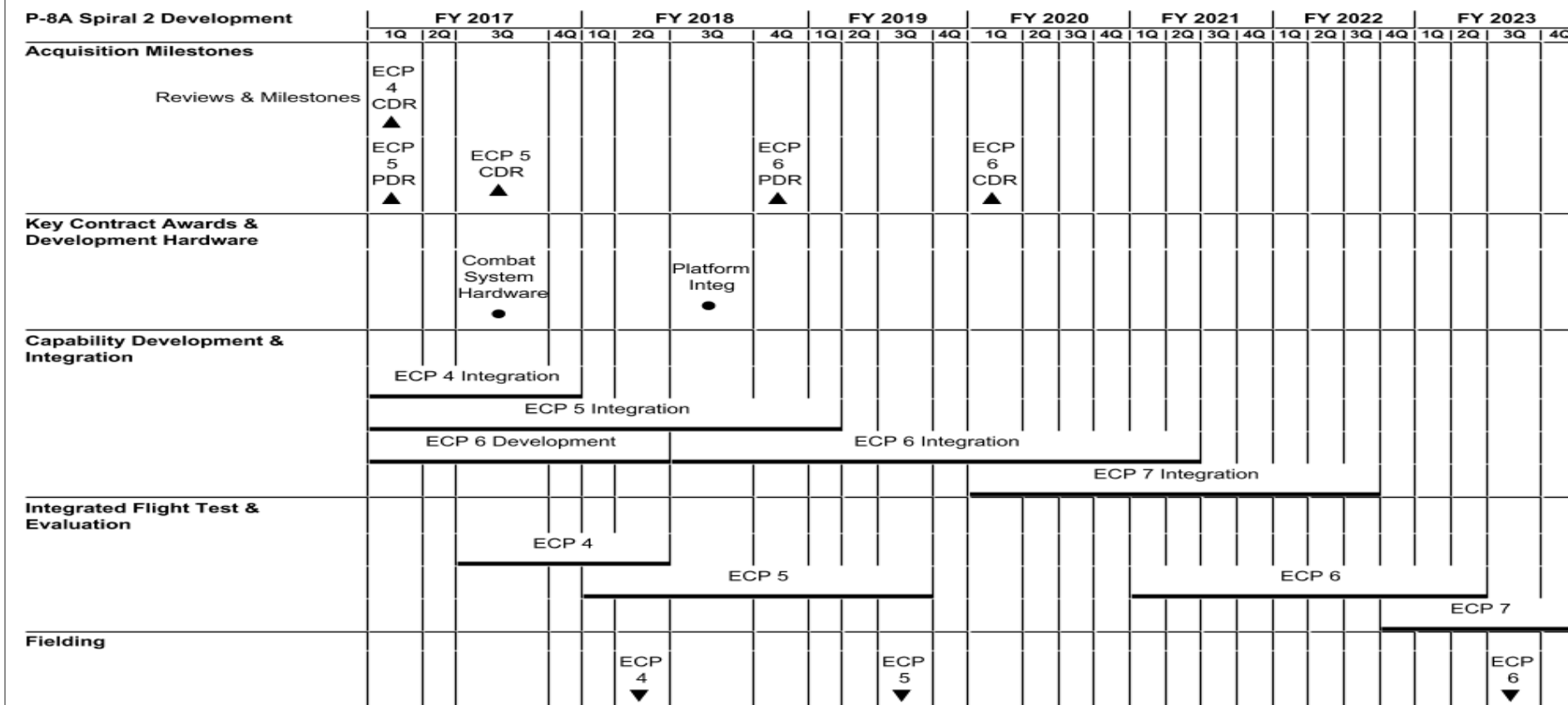
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R-1 Program Element (Number/Name)

PE 0605504N / (U)Multi-Mission Maritime
(MMA) Increment III

Project (Number/Name)

3218 / P-8A Spiral 2 Development



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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy			Date: February 2018
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605504N / (U)Multi-Mission Maritime (MMA) Increment III	Project (Number/Name) 3218 / P-8A Spiral 2 Development	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>P-8A Spiral 2 Development</i>				
Acquisition Milestones: Reviews & Milestones: ECP 4 Critical Design Review (CDR)	1	2017	1	2017
Acquisition Milestones: Reviews & Milestones: ECP 5 Preliminary Desgin Review (PDR)	1	2017	1	2017
Acquisition Milestones: Reviews & Milestones: ECP 5 Critical Design Review (CDR)	3	2017	3	2017
Acquisition Milestones: Reviews & Milestones: ECP 6 Preliminary Design Review (PDR)	4	2018	4	2018
Acquisition Milestones: Reviews & Milestones: ECP 6 Critical Design Review (CDR)	1	2020	1	2020
Key Contract Awards & Development Hardware: Combat System Hardware	3	2017	3	2017
Key Contract Awards & Development Hardware: Platform Integration	3	2018	3	2018
Capability Development & Integration: ECP 4 Integration	1	2017	4	2017
Capability Development & Integration: ECP 5 Integration	1	2017	1	2019
Capability Development & Integration: ECP 6 Development	1	2017	2	2018
Capability Development & Integration: ECP 6 Integration	3	2018	2	2021
Capability Development & Integration: ECP 7 Integration	1	2020	3	2022
Integrated Flight Test & Evaluation: ECP 4	3	2017	2	2018
Integrated Flight Test & Evaluation: ECP 5	1	2018	3	2019
Integrated Flight Test & Evaluation: ECP 6	1	2021	2	2023
Integrated Flight Test & Evaluation: ECP 7	4	2022	4	2023
Fielding: ECP 4	2	2018	2	2018
Fielding: ECP 5	3	2019	3	2019
Fielding: ECP 6	3	2023	3	2023