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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 / BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0604512N / Shipboard Aviation Systems							
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	788.796	114.327	177.926	9.710	-	9.710	10.636	11.086	11.848	12.212	Continuing	Continuing
2232: CV/CVN Launch and Recover	788.796	110.327	177.926	9.710	-	9.710	10.636	11.086	11.848	12.212	Continuing	Continuing
9999: Congressional Adds	0.000	4.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	4.000

Note

Advanced Arresting Gear (AAG) will be funded under AAG PE 0604530N, PU 2367 in FY 2019 and later.

A. Mission Description and Budget Item Justification

The FY 2019 funding request was reduced by \$.016 million to reflect the Department of Navy's effort to support the Office of Management and Budget directed reforms for Efficiency and Effectiveness that include a lean, accountable, more efficient government.

CV Launch & Recover System - This Navy unique project addresses the System Development and Demonstration (SDD) of systems required to recover and launch Navy/Marine Corps Aircraft (Fixed/Rotary Wing and Vertical/Short Take Off and Landing) operating aboard aircraft carriers, amphibious assault ships and air capable ships. This program element includes the following:

- (1) Advanced Arresting Gear (AAG)
- (2) Aircraft Launch & Recovery Equipment Modernization
- (3) Aircraft Launch and Recovery Equipment Service Life Management program

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 requirement prior to full-rate production decision.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Navy	Date: February 2018
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Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy I BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0604512N / <i>Shipboard Aviation Systems</i>
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B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	112.158	177.926	204.354	-	204.354
Current President's Budget	114.327	177.926	9.710	-	9.710
Total Adjustments	2.169	0.000	-194.644	-	-194.644
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.831	0.000			
• Program Adjustments	0.000	0.000	-194.473	-	-194.473
• Rate/Misc Adjustments	0.000	0.000	-0.171	-	-0.171
• Congressional Add Adjustments	4.000	-	-	-	-

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

Project: 9999: *Congressional Adds*

Congressional Add: *Program Increase*

Congressional Add Subtotals for Project: 9999

Congressional Add Totals for all Projects

FY 2017	FY 2018
4.000	0.000
4.000	0.000
4.000	0.000

Change Summary Explanation

Cost/Summary: AAG funding included under 0604512N is for FY 2018 and prior.

Schedule:

Advanced Arresting Gear (AAG):

Milestone C moved from 4Q FY 2020 to 4Q FY 2021.

Test & Evaluation Jet Car Test Site (JCTS) Test End Date moved from 2Q FY2019 to 4Q FY2020

Test & Evaluation for Runway Arrested landing Site (RALS) Test Start Date moved from 2Q FY2016 to 1Q FY 2017

Test & Evaluation for Runway Arrested landing Site (RALS) Test End Date moved from 1Q FY2020 to 1Q FY2022

Schoolhouse Training Curriculum Development moved from 1Q FY2019 to 4Q FY2019

ALRE Modernization:

Systems Development/Obsolescence Redesign Development and Testing End Date Moved from 4Q FY2022 to 4Q FY 2018.

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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 / BA 5: System Development & Demonstration (SDD)	R-1 Program Element (Number/Name) PE 0604512N / Shipboard Aviation Systems	
Technical: AAG established in its own PE and PU in FY19 and out.		

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy										Date: February 2018		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604512N / Shipboard Aviation Systems				Project (Number/Name) 2232 / CV/CVN Launch and Recover			
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
2232: CV/CVN Launch and Recover	788.796	110.327	177.926	9.710	-	9.710	10.636	11.086	11.848	12.212	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

Note

PY article includes AAG Jet Car Track Site and two IMOVLAS production representative models. Service Life Management Program (SLMP) test articles refer to actual units (there are two units per ship set).

A. Mission Description and Budget Item Justification

This Navy unique project addresses the System Development and Demonstration (SDD) of systems required to recover and launch Navy/Marine Corps Aircraft (Fixed/Rotary Wing and Vertical/Short Take-Off and Landing) operating aboard aircraft carriers (CVN), amphibious assault ships and air capable ships. This program includes the following systems under Project 2232, including the funding of production representative models for:

(1) Advanced Arresting Gear (AAG): The AAG program will design, develop, test and field an aircraft arrestment system to replace the legacy Mark 7 arresting gear. AAG systems will be installed on all new construction aircraft carriers. AAG will provide the U.S. Navy with improved operational capability, while reducing operating and support costs. The AAG system will recover all existing and projected carrier based tail hook-equipped air vehicles well into the 21st century. The AAG Program's SDD phase test article consists of a single wire configured aircraft arresting system, which includes associated hardware and software needed to conduct system integrated testing by arresting both dead-loads and aircraft.

(2) Aircraft Launch & Recovery Equipment (ALRE) Modernization: ALRE Modernization encompasses efforts required to ensure continued functional performance, operational relevance, and cybersecurity accreditation for all product lines across the ALRE program. This includes efforts required to resolve emerging obsolescence issues (both hardware and software), implement fleet driven operational capability upgrades, and comply with cybersecurity requirements and computer task order requirements for security threat mitigation. Effort includes:

(a) Improved Manually Operated Visual Landing Aid System (IMOVLAS): IMOVLAS will be the manual backup for Improved Fresnel Lens Optical Landing System (IFLOLS), which is the primary carrier Visual Landing Aid. IMOVLAS will be used in high sea states or if IFLOLS is inoperable, and will mirror current IFLOLS configuration in size & display.

(3) Aircraft Launch & Recovery Equipment (ALRE) Service Life Management Program (SLMP): The ALRE SLMP for Launcher and Recovery is required to sustain carrier aviation operations of higher energy aircraft launch and recoveries that are increasing loads on the ALRE systems, and that are affecting availability, maintainability and cost. This program will consist of service life assessment and extension initiatives and will establish the design foundation (structural, reliability, and maintainability analyses), permit appropriate assessment, track and focus design changes where most needed. Four SLMP prototypes will be procured in FY 2017 and two in FY 2018.

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy				Date: February 2018		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0604512N / Shipboard Aviation Systems		Project (Number/Name) 2232 / CV/CVN Launch and Recover		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: Advanced Arresting Gear (AAG)		100.402	170.526	0.000	0.000	0.000
Articles:		-	-	-	-	-
Description: The Advanced Arresting Gear (AAG) program is designing, developing, testing and fielding an aircraft arrestment system to replace the legacy Mark 7 arresting gear. Effort moved to PE 0604530N/ PU 2367 in FY19 and later.						
FY 2018 Plans: Continue execution of SDD integrated system performance testing at Jet Car Track Site (JCTS) and Runway Arrested Landing Site (RALS). Conduct manned aircraft arrestment testing on additional fleet type model series aircraft in support of their ARB development. Support engineering being incorporated into the system to improve performance and correct liens/deficiencies. Continue the development of AAG shipboard system/ flight deck certification products (recovery bulletins for F/A-18 variants, and E-2/C-2) and logistics products (e.g. technical manuals and courseware). Continue development of training system for fleet operations and maintenance training. Provide interim training for crews until formal curriculum is completed and approved. Conduct component shock testing and EQT hardware refurbishment to achieve fleet operational requirements.						
FY 2019 Base Plans: N/A						
FY 2019 OCO Plans: N/A						
FY 2018 to FY 2019 Increase/Decrease Statement: The decrease from FY 2018 to FY 2019 is due to the Advanced Arresting Gear (AAG) program moving to PE 0604530N/ PU 2367 in FY 2019.						
Title: Aircraft Launch & Recovery Equipment Modernization		1.722	0.575	0.000	0.000	0.000
Articles:		-	-	-	-	-
Description: Improved Manually Operated Visual Landing Aid System (IMOVLAS) to improve carrier aviation operations.						
FY 2018 Plans: IMOVLAS - Continue and complete Integrated Testing (IT).						
FY 2019 Base Plans:						

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy			Date: February 2018			
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0604512N / Shipboard Aviation Systems		Project (Number/Name) 2232 / CV/CVN Launch and Recover		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
N/A						
FY 2019 OCO Plans:						
N/A						
FY 2018 to FY 2019 Increase/Decrease Statement:						
The decrease from FY 2018 to FY 2019 is due to the completion of the IMOVLAS efforts in FY 2018.						
Title: Aircraft Launch & Recovery Equipment (ALRE) Service Life Management Program (SLMP)		8.203	6.825	9.710	0.000	9.710
Articles:		4	2	-	-	-
Description: ALRE SLMP analyzes launch and recovery equipment to determine feasible fielded equipment improvements.						
FY 2018 Plans:						
Install and test Crosshead and Fixed Sheave prototypes. Award Main Engine Cylinder contract and procure 2 Main Engine Cylinder prototypes. Continue analysis, design, development and testing of Mark 7, C-13 and Recovery Assist, Securing and Traversing (RAST) components and subcomponents.						
FY 2019 Base Plans:						
Conduct land-based testing of Crosshead and Fixed Sheave prototypes. Continue analysis, design, development and testing of Recovery Assist, Securing and Traversing (RAST) components and subcomponents. Includes efforts to remove and install prototypes from the test site as well as execute fleet representative traps to compare engineering models for Crosshead and Fixed Sheaves and Main Engine Cylinders. Conduct developmental testing of Advanced Purchase Cables.						
FY 2019 OCO Plans:						
N/A						
FY 2018 to FY 2019 Increase/Decrease Statement:						
The increase from FY2018 to FY2019 supports the testing of the Recovery Assist, Securing and Traversing (RAST) components and subcomponents as well as the Crosshead, Fixed Sheaves and Main Engine Cylinder prototypes.						
Accomplishments/Planned Programs Subtotals		110.327	177.926	9.710	0.000	9.710

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy Date: February 2018

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604512N / Shipboard Aviation Systems	Project (Number/Name) 2232 / CV/CVN Launch and Recover
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C. Other Program Funding Summary (\$ in Millions)

Line Item	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
• OPN/4213: Aircraft Launch & Recovery Equipment-Aircraft Launch & Recovery Equipment	81.428	63.695	65.459	-	65.459	95.428	72.816	73.371	83.861	Continuing	Continuing
• OPN/4217: Advanced Arresting Gear	0.000	10.900	11.054	-	11.054	4.723	3.137	2.460	2.513	263.528	298.315
• SCN/2001: Carrier Replacement Program	2,626.567	4,461.772	1,598.181	-	1,598.181	2,146.535	3,239.606	2,910.491	3,378.355	10,602.689	52,295.070

Remarks

OPN 4213 includes a portion of line item funding for Aircraft Launch & Recovery Equipment.

D. Acquisition Strategy

Advanced Arresting Gear (AAG): The Navy competitively awarded two Cost Plus Fixed Fee Technical Development phase contracts to develop the AAG system. Upon completion of the Preliminary Design and Integrated Baseline reviews, the Navy awarded a single Cost Plus Award Fee option to General Atomics for the System Development and Demonstration (SDD) phase to develop and demonstrate a production representative AAG at the NAVAIR Lakehurst Jet Car Track Site and Runway Arrested Landing Site. Continuing development on the SDD contract awarded in 2004.

Aircraft Launch & Recovery Equipment Modernization:

Improved Manually Operated Visual Landing Aid System (IMOVLAS): The Navy will develop IMOVLAS using commercial equipment racks, processors and Light Emitting Diodes (LEDs).

Aircraft Launch & Recovery Equipment Service Life Management Program (SLMP): This program will consist of Service Life Assessment and Extension initiatives and will establish the design foundation (structural, reliability and maintainability analyses), permit appropriate assessment, track and focus design changes where most needed.

E. Performance Metrics

Advanced Arresting Gear (AAG) will complete System Development and Demonstration integrated testing at Jet Car Track Site and Runway Arrested Landing Site. AAG will demonstrate its key performance parameters and readiness for operational test.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy **Date:** February 2018

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604512N / <i>Shipboard Aviation Systems</i>	Project (Number/Name) 2232 / <i>CV/CVN Launch and Recover</i>
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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 HW Dev-AAG	C/CPAF	Gen Atomics : San Diego, CA	547.730	72.284	Dec 2016	96.769	Dec 2017	0.000		-		0.000	23.709	740.492	740.492
Primary HW Dev-AAG	WR	NAWCAD : Lakehurst, NJ	46.912	10.963	Nov 2016	32.744	Nov 2017	0.000		-		0.000	Continuing	Continuing	Continuing
Primary HW Dev - AAG	C/CPAF	ESL : Cranston, RI	2.000	1.300	May 2017	3.531	Dec 2017	0.000		-		0.000	2.714	9.545	9.545
System Eng-AAG	WR	NAWCAD : Lakehurst, NJ	26.229	2.430	Nov 2016	8.706	Nov 2017	0.000		-		0.000	Continuing	Continuing	Continuing
Training Development - AAG	WR	NAWCAD : Orlando, FL	0.173	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Primary HW Dev-Modern IMOVLAS	WR	NAWCAD : Lakehurst, NJ	1.990	1.148	Nov 2016	0.211	Nov 2017	0.000		-		0.000	Continuing	Continuing	Continuing
System Eng-Modern IMOVLAS	WR	NAWCAD : Lakehurst, NJ	0.514	0.140	Nov 2016	0.069	Nov 2017	0.000		-		0.000	Continuing	Continuing	Continuing
Primary HW Dev-SLMP	WR	NAWCAD : Lakehurst, NJ	12.605	2.649	Nov 2016	1.173	Nov 2017	1.558	Nov 2018	-		1.558	Continuing	Continuing	Continuing
Prior Year Cost No Longer Funded in FYDP	Various	Various : Various	52.975	0.000		0.000		0.000		-		0.000	0.000	52.975	-
Subtotal			691.128	90.914		143.203		1.558		-		1.558	Continuing	Continuing	N/A

Remarks

Note: The contractor General Atomics, San Diego, CA has waived all remaining Award Fees.

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
ILS-AAG	WR	NAWCAD : Lakehurst, NJ	16.653	2.070	Nov 2016	5.439	Nov 2017	0.000		-		0.000	Continuing	Continuing	Continuing
Government Eng Support - AAG	WR	Various : Various	0.000	0.381	Mar 2017	0.409	Nov 2017	0.000		-		0.000	Continuing	Continuing	Continuing
ILS-Modern IMOVLAS	WR	NAWCAD : Lakehurst, NJ	0.228	0.200	Nov 2016	0.110	Nov 2017	0.000		-		0.000	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy												Date: February 2018			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604512N / Shipboard Aviation Systems				Project (Number/Name) 2232 / CV/CVN Launch and Recover					
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
Studies & Analysis-SLMP	WR	NAWCAD : Lakehurst, NJ	11.089	2.959	Nov 2016	3.684	Nov 2017	2.605	Nov 2018	-		2.605	Continuing	Continuing	Continuing
Prior Year Cost No Longer Funded in FYDP	Various	Various : Various	1.741	0.000		0.000		0.000		-		0.000	0.000	1.741	-
Subtotal			29.711	5.610		9.642		2.605		-		2.605	Continuing	Continuing	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-AAG	WR	NAWCAD : Lakehurst, NJ	49.628	10.242	Nov 2016	22.167	Nov 2017	0.000		-		0.000	Continuing	Continuing	Continuing
Operational T&E-AAG	WR	Various : Various	2.289	0.300	Nov 2016	0.306	Nov 2017	0.000		-		0.000	Continuing	Continuing	Continuing
Integrated Testing-Modern IMOVLAS	WR	NAWCAD : Lakehurst, NJ	0.075	0.234	Nov 2016	0.185	Nov 2017	0.000		-		0.000	Continuing	Continuing	Continuing
Materials/Validation Testing-SLMP	WR	NAWCAD : Lakehurst, NJ	10.049	2.595	Nov 2016	1.968	Nov 2017	5.547	Nov 2018	-		5.547	Continuing	Continuing	Continuing
Prior Year Cost No Longer Funded in FYDP	Various	Various : Various	3.570	0.000		0.000		0.000		-		0.000	0.000	3.570	-
Subtotal			65.611	13.371		24.626		5.547		-		5.547	Continuing	Continuing	N/A
Remarks															
Remarks: Cost growth from FY18 to FY19 (+\$3.579M)in Materials/Validation Testing SLMP includes efforts to remove and install prototypes from the test site as well as execute fleet representative traps to compare engineering models for Crosshead and Fixed Sheaves and Main Engine Cylinders. Growth also includes conducting developmental testing of the Advanced Purchase Cable.															
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
Program Mgmt Support	C/CPFF	Sierra : California, MD	1.743	0.295	Dec 2016	0.300	Dec 2017	0.000		-		0.000	1.003	3.341	3.341

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy												Date: February 2018			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604512N / Shipboard Aviation Systems				Project (Number/Name) 2232 / CV/CVN Launch and Recover					
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
Travel	Reqn	NAVAIR : Patuxent River, MD	0.468	0.037	Oct 2016	0.040	Oct 2017	0.000		-		0.000	Continuing	Continuing	Continuing
Program Mgmt Support	Various	Various : Various	0.000	0.100	Dec 2016	0.115	Nov 2017	0.000		-		0.000	0.000	0.215	-
Prior Year Cost No Longer Funded in FYDP	Various	Various : Various	0.135	0.000		0.000		0.000		-		0.000	0.000	0.135	-
Subtotal			2.346	0.432		0.455		0.000		-		0.000	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			788.796	110.327		177.926		9.710		-		9.710	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

1319 / 5

R-1 Program Element (Number/Name)

PE 0604512N / Shipboard Aviation Systems

Project (Number/Name)

2232 / CV/CVN Launch and Recover

ALRE SLMP Schedule

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

Date: February 2018

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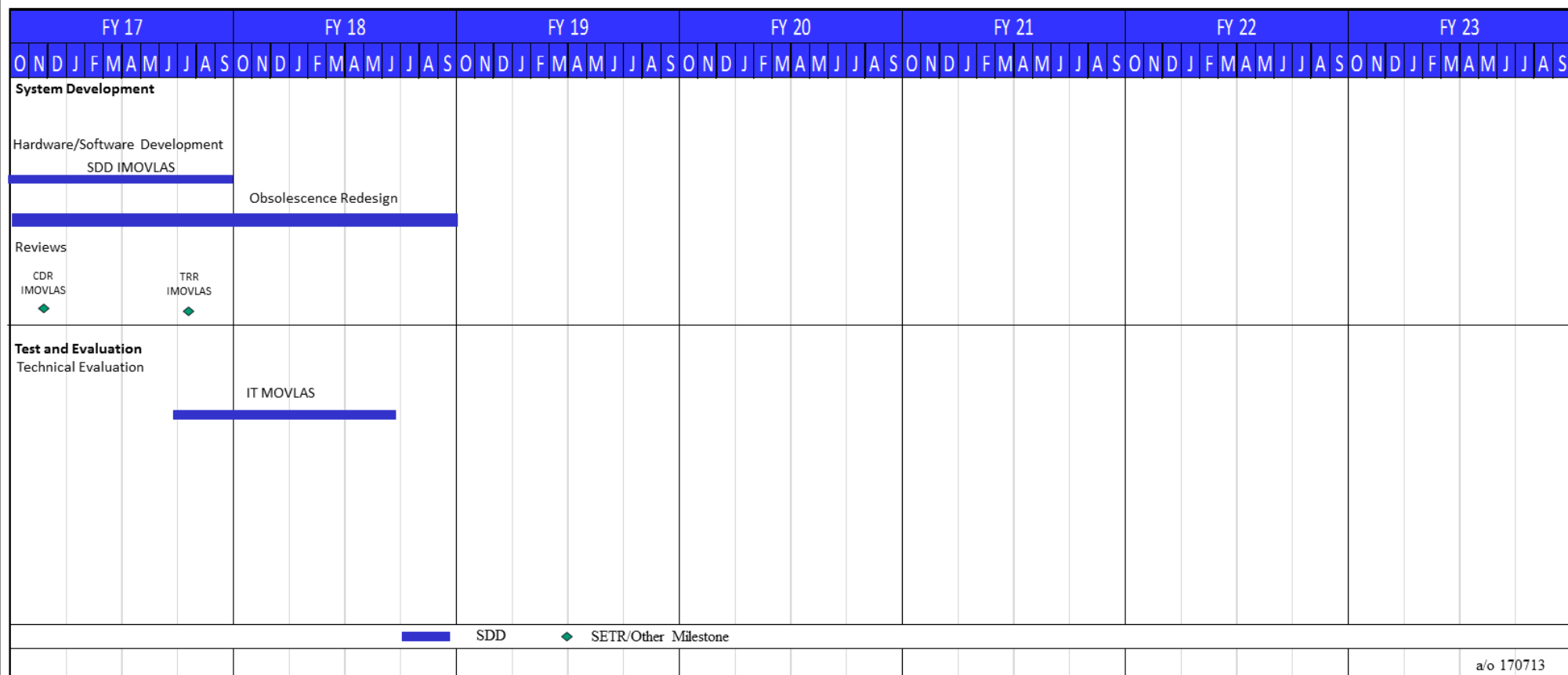
R-1 Program Element (Number/Name)	Program Element Description	Program Element Type	Program Element Status	Program Element Location	Program Element Contact	Program Element Date	Program Element Other

PE 0604512N / Shipboard Aviation Systems

Project (Number/Name)	Start Date	End Date	Duration (Days)	Project Manager	Status	Notes
101	2023-01-01	2023-01-15	14	John Doe	Completed	Project completed successfully.
102	2023-01-16	2023-02-01	16	Jane Smith	In Progress	Project is currently in progress.
103	2023-02-02	2023-02-15	13	John Doe	On Hold	Project is on hold due to resource availability.
104	2023-02-16	2023-03-01	15	Jane Smith	Planned	Project is planned for the future.
105	2023-03-02	2023-03-15	13	John Doe	Completed	Project completed successfully.
106	2023-03-16	2023-03-31	15	Jane Smith	In Progress	Project is currently in progress.
107	2023-04-01	2023-04-15	14	John Doe	On Hold	Project is on hold due to resource availability.
108	2023-04-16	2023-05-01	15	Jane Smith	Planned	Project is planned for the future.
109	2023-05-02	2023-05-15	13	John Doe	Completed	Project completed successfully.
110	2023-05-16	2023-05-31	15	Jane Smith	In Progress	Project is currently in progress.

2232 / CV/CVN Launch and Recover

ALRE Modernization Schedule



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

Date: February 2018

Appropriation/Budget Activity

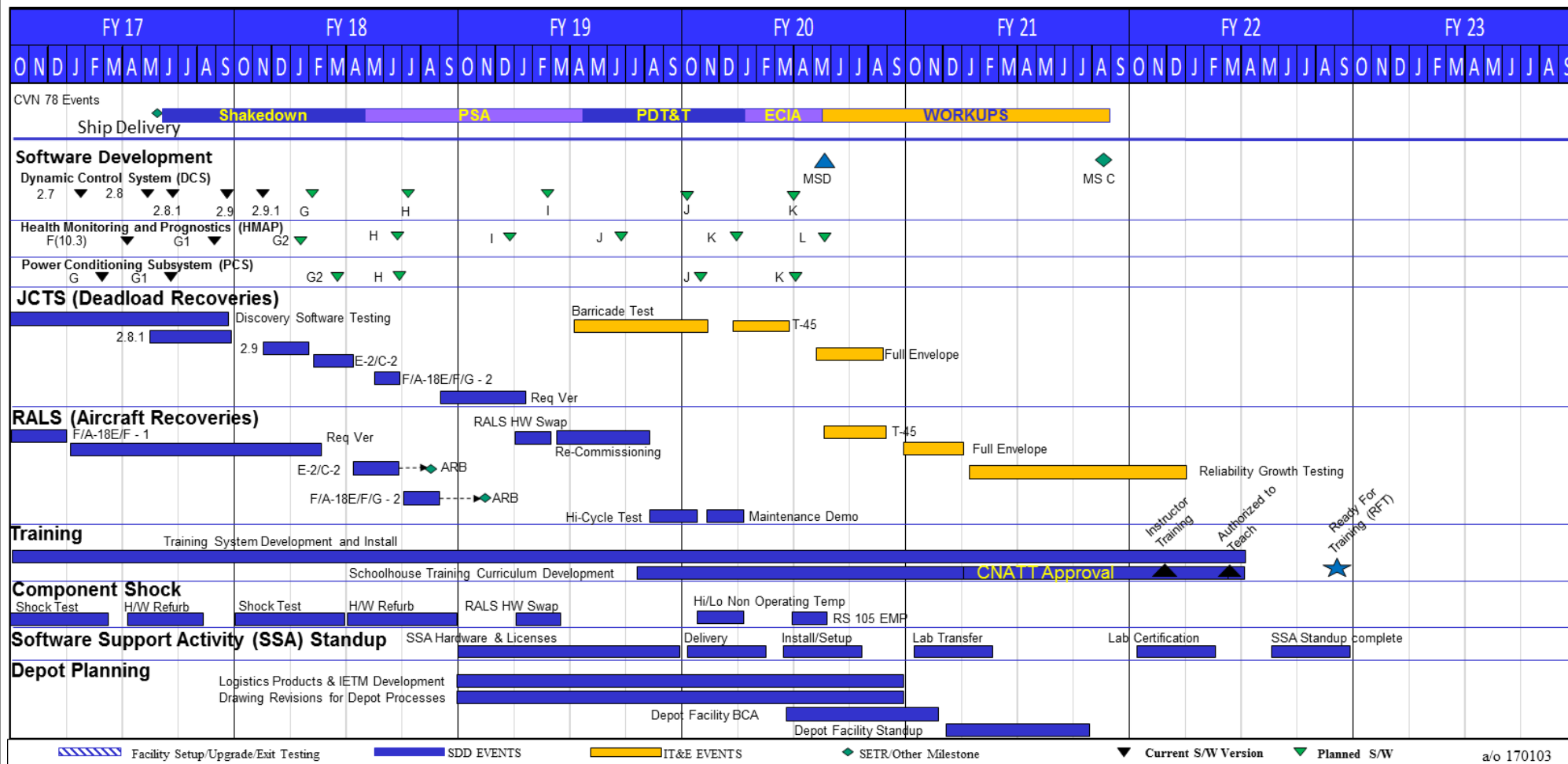
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R-1 Program Element (Number/Name)

PE 0604512N / Shipboard Aviation Systems

Project (Number/Name)

2232 / CV/CVN Launch and Recover



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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 0604512N / Shipboard Aviation Systems	Project (Number/Name) 2232 / CV/CVN Launch and Recover	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
ADVANCED ARRESTING GEAR (AAG)				
Aquisition Milestones: Milestones: Milestone C	4	2021	4	2021
Test & Evaluation: Technical Evaluation: Jet Car Test Site (JCTS) Test	1	2017	4	2020
Test & Evaluation: Technical Evaluation: Runway Arrested Landing Site Test (RALS)	1	2017	1	2022
ALRE SERVICE LIFE MANAGEMENT PROGRAM (SLMP)				
Systems Development: Hardware/Software Development: System Development	1	2017	4	2023
Test & Evaluation: Technical Evaluation: Test & Evaluation	1	2017	4	2023
ALRE MODERNIZATION				
Systems Development: Hardware/Software Development: Obsolescence Redesign Development and Testing	1	2017	4	2018
Test and Evaluation: Technical Evaluation: Integrated Test	4	2017	3	2018

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Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604512N / <i>Shipboard Aviation Systems</i>				Project (Number/Name) 9999 / <i>Congressional Adds</i>			
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
9999: <i>Congressional Adds</i>	0.000	4.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	4.000
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

Note
Congressional Add. Program Increase for ALRE Cyber Test & Operations Range (ACTOR).

A. Mission Description and Budget Item Justification
Congressional Add. Program Increase for ALRE Cyber Test & Operations Range (ACTOR).

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2017	FY 2018
Congressional Add: Program Increase	4.000	0.000
FY 2017 Accomplishments: N/A		
FY 2018 Plans: Develop ALRE Cyber Test & Operation s Range (ACTOR) efforts to include configurator, virtual software environment, operational ALRE software, A-TIC hardware in the loop, interface and test the ACTOR platform (funded with FY17 carry over).		
Congressional Adds Subtotals	4.000	0.000

C. Other Program Funding Summary (\$ in Millions)
N/A

Remarks

D. Acquisition Strategy
Not required for Congressional Add.

E. Performance Metrics
Not required for Congressional Add.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy												Date: February 2018			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604512N / Shipboard Aviation Systems				Project (Number/Name) 9999 / Congressional Adds					
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 HW Dev	TBD	TBD : TBD	0.000	3.750	Nov 2017	0.000		0.000		-		0.000	0.000	3.750	-
Subtotal			0.000	3.750		0.000		0.000		-		0.000	0.000	3.750	N/A
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
Government Eng Support	WR	NAWCAD : Lakehurst, NJ	0.000	0.250	Sep 2017	0.000		0.000		-		0.000	0.000	0.250	-
Subtotal			0.000	0.250		0.000		0.000		-		0.000	0.000	0.250	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			0.000	4.000		0.000		0.000		-		0.000	0.000	4.000	N/A
Remarks															

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PE 0604512N: *Shipboard Aviation Systems*
Navy

R-1 Line #135

Appropriation/Budget Activity										R-1 Program Element (Number/Name)										Project (Number/Name)																	
1319 / 5										PE 0604512N / Shipboard Aviation Systems										9999 / Congressional Adds																	
Proj 9999										FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
										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
Primary HW Dev																																					

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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 0604512N / <i>Shipboard Aviation Systems</i>	Project (Number/Name) 9999 / <i>Congressional Adds</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Proj 9999</i>				
Primary HW Dev: Hardware/Software Development	3	2018	3	2018
Primary HW Dev: Hardware Software Development	3	2018	4	2019
Systems Support: Systems Support	2	2018	4	2018