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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy / BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 Program Element (Number/Name) PE 0603860N / JT Precision Approach & Ldg Sys							
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	662.723	120.491	156.178	54.896	-	54.896	92.522	76.862	24.925	2.637	Continuing	Continuing
2329: JPALS	607.068	77.287	41.992	54.896	-	54.896	92.522	76.862	24.925	2.637	Continuing	Continuing
3228: JPALS 1B	55.655	43.204	75.424	-	-	-	-	-	-	-	-	174.283
3354: JPALS Inc 2	0.000	-	38.762	-	-	-	-	-	-	-	-	38.762

MDAP/MAIS Code: 238

The FY 2015 OCO Request will be submitted at a later date.

Note

The JPALS Increments (Inc) 1A and 1B programs are being combined into project 2329 beginning in FY15. Increment 1B (Project 3228) will now only contain FY10 - FY14 funds with FY14 being a year of transition to the JPALS re-plan brought about by the Precision Approach Landing Capability (PALC) Roadmap Study, DoN Resources and Requirements Review Board (R3B) decision dated 03Jul13. JPALS Increment 1B funds in FY15 and out have been realigned IAW approved service priorities and, in part, will fund the PALC Roadmap investments in recapitalization and refurbishment of legacy landing systems. Improvements will be made to JPALS software and avionics to provide manned and unmanned aircraft with autoland capabilities. As a result of these PALC changes, JPALS Inc 2 (Project 3354) has been cancelled.

FY 2014 funding in both Project 3228 and 3354 will be used to finance the single increment of JPALS, with FY 2014 funding carrying over to finance FY 2015 requirements on the single increment of JPALS. The FY15-FY19 budget JPALS budget request has been reduced to properly support the FY15-FY19 JPALS requirements.

A. Mission Description and Budget Item Justification

A. Mission Description and Budget Item Justification

The Joint Precision Approach and Landing System (JPALS) is an Acquisition Category 1D program with joint partners for requirements and acquisition including the USAF, USN/ USMC, USA, USCG, and the Federal Aviation Administration (FAA). JPALS is the next generation global positioning system (GPS)-based precision approach and landing system for the DoD and is intended to provide a rapidly deployable, adverse weather, adverse terrain, day/night precision approach and landing capability for fixed and rotary wing manned and unmanned aircraft.

On 16 March 2007, the JROCM approved the JPALS Capability Development Document and designated the Navy as the Lead Service. The Analysis of Alternatives was finalized in 3Q FY07. Milestone B was met 14Jul08. At Milestone B, the Milestone Decision Authority separated Increment (Inc) 1 into Inc 1A and Inc 1B. On 19Jan10, the JROC approved Inc 2 for the Land-Based System and designated the Air Force as the lead component for the Land-Based System.

The DoN PALC Roadmap Study documents direction to re-scope JPALS to a single increment. As a result, JPALS Inc 1B was reduced in scope to support the F-35 Lightning II and Unmanned Carrier Launched Airborne Surveillance and Strike (UCLASS) programs as their primary landing system on aircraft carriers and amphibious

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assault ships. Accordingly, improvements will be made to JPALS to provide autoland capability for manned and unmanned aircraft, therefore, investments in aircraft software and avionics will continue, although retrofit of existing aircraft was removed from program requirements. In addition, JPALS Inc 2 was cancelled. The remaining re-scoped JPALS program efforts provide a strong technology basis for evolution should a requirement for JPALS on existing aircraft, fixed air bases, or expeditionary air fields re-emerge in the future.						
JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under ADVANCED COMPONENT DEVELOPMENT AND PROTOTYPES because it includes all efforts necessary to evaluate integrated technologies, representative models or prototype systems in high fidelity and realistic operating environment.						
B. Program Change Summary (\$ in Millions)		FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget		137.369	205.615	196.665	-	196.665
Current President's Budget		120.491	156.178	54.896	-	54.896
Total Adjustments		-16.878	-49.437	-141.769	-	-141.769
• Congressional General Reductions		-	-			
• Congressional Directed Reductions		-	-49.437			
• Congressional Rescissions		-	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-	-			
• SBIR/STTR Transfer		-1.717	-			
• Program Adjustments		-	-	-141.465	-	-141.465
• Rate/Misc Adjustments		-	-	-0.304	-	-0.304
• Congressional General Reductions Adjustments		-0.161	-	-	-	-
• Congressional Directed Reductions Adjustments		-15.000	-	-	-	-
Change Summary Explanation						
Technical:						
Not applicable.						
Schedule (project 2329):						
Schedule has been revised to update program milestones. MS-C moved from first quarter FY2014 to second quarter FY2017 as a result of the Precision Approach and Landing Capability (PALC) Roadmap restructure of JPALS into a single increment and the inclusion of manned and unmanned autoland capabilities. Engineering and Manufacturing Development (EMD) phase extended to third quarter FY2016. Additional System Development and test events were						

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Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy / BA 4: Advanced Component Development & Prototypes (ACD&P)</i>		R-1 Program Element (Number/Name) PE 0603860N / <i>JT Precision Approach & Ldg Sys</i>
<p>added to support the revised program phasing and additional development for manned and unmanned autoland capabilities. LRIP contract award moved from third quarter FY2014 to third quarter FY2017. Added schedule elements to this project to depict the de-scope of JPALS to a single project for Increment 1.</p> <p>Schedule (projects 3228, 3354): Per above PALC changes, JPALS is now combined into a single project.</p> <p>Cost (project 2329): Per 2329 schedule discussion, all of JPALS will be consolidated into Project 2329. FY15 budget profile has been reduced to account for the re-structured JPALS program, brought on by the PALC Roadmap Study. Existing FY14 funding in projects 3228 and 3354 will carry over into FY15; FY 15 funding request (and \$141.8M reduction from PB 14) reflects this assumed carryover. During FY 14 execution, funding will be realigned from projects 3228 and 3354 to project 2329.</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603860N / JT Precision Approach & Ldg Sys				Project (Number/Name) 2329 / JPALS			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
2329: JPALS	607.068	77.287	41.992	54.896	-	54.896	92.522	76.862	24.925	2.637	Continuing	Continuing
Quantity of RDT&E Articles	8.000	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
Joint Precision Approach and Landing System (JPALS) provides for development, integration, installation, and test of Sea-Based JPALS on CVN/LHA/LHD-class ships in accordance with the JPALS Capability Development Document (CDD). This requirement supports the JPALS Integration on CVN/LHA/LHD-class ships and establishes requirements for air integration, and provides critical enabling technology for Joint Strike Fighter (JSF) F-35B/C, and Unmanned Carrier Launched Airborne Surveillance and Strike (UCLASS).												
JPALS Engineering Development Model (EDM) test articles have been delivered to support system development and demonstration, and JPALS ship systems will be installed on CVN/LHA/LHD-class ships in support of the F-35B/C and UCLASS shipboard testing.												
JPALS will continue to invest in Multi-Platform Avionics (MPA) hardware and software in direct support of autoland capabilities for the F-35B/C and UCLASS.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: JPALS Engineering and Manufacturing Development (EMD) Articles:									77.287	41.992	54.896	
									-	-	-	
Description: JPALS provides for development, integration, installation, and test of Sea-Based JPALS and for software and algorithm development for Multi-Platform Avionics.												
FY 2013 Accomplishments: Conducted shipboard integration testing and continued system development activities.												
FY 2014 Plans: Continue shipboard integration testing, award EMD extension contract, continue MPA related activities and support F-35 Developmental Testing. FY14 funding in Project 3228 (\$75.424M) and Project 3354 (\$38.762M) will also be used to finance these efforts.												
FY 2015 Plans:												

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Appropriation/Budget Activity 1319 / 4				R-1 Program Element (Number/Name) PE 0603860N / JT Precision Approach & Ldg Sys				Project (Number/Name) 2329 / JPALS			
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2013	FY 2014	FY 2015	
Award Engineering and Manufacturing Development (EMD) Phase II Contract. Perform Preliminary Design Review (PDR) and Critical Design Review (CDR). Begin JSF Integration/Flight Test. Continue software and algorithm improvements to avionics systems.											
Accomplishments/Planned Programs Subtotals								77.287	41.992	54.896	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• OPN/2867: Joint Precision Approach and Landing Systems	-	-	-	-	-	-	-	60.316	70.965	Continuing	Continuing
Remarks											
D. Acquisition Strategy											
<p>Technology Development phase was conducted jointly by NAVAIRSYSCOM (PMA213), USAF Electronic Systems Command (Global Air) and multiple industry partners. This effort provided the concept of operations, performance specifications and technology readiness levels necessary to provide the foundation from which to launch the Increment 1 System Development and Demonstration (SDD) phase development. JPALS reached MS-B on 14 July 2008 and the SDD phase development contract was awarded on 17 July 2008. Tasking consists of sea-based JPALS, related ship and airborne reference systems, end-to-end software algorithms, necessary ship installation hardware, test equipment, system simulation software, and other RDT&E deliverable products to the joint team. The SDD contract was decided after full and open competition. JPALS is being developed by the Navy with an open system architecture in order to facilitate the compatible integration of many different aircraft and avionics architectures. The Navy is lead service for the Joint Program and lead component for Increment 1. JPALS Increment 1 provides for development, integration, installation, and test of Sea-Based JPALS to meet Initial Operation Capability (IOC) of CVN/LHA/LHD-class ships in accordance with the JPALS Capability Development Document. Additionally, this requirement provides critical enabling technology for Joint Strike Fighter (JSF) F-35B/C and ship-based Unmanned Carrier Launched Airborne Surveillance and Strike (UCLASS).</p> <p>As a result of the DoN Resource and Requirements Review Board (R3B) approved PALC Roadmap, the JPALS development program has been extended to include design improvements to provide manned and unmanned aircraft with autoland capabilities. As a result, the current Engineering and Manufacturing Development (EMD) contract has been extended to conduct detailed requirements and design trade studies to identify specific system design improvements. This will be followed by a second EMD contract to implement the required autoland system improvements and support F-35B/C and UCLASS shipboard testing prior to conducting a MS-C Low Rate Initial Production (LRIP) review and awarding an LRIP contract.</p>											

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Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603860N / <i>JT Precision Approach & Ldg Sys</i>	Project (Number/Name) 2329 / <i>JPALS</i>
<p><u>E. Performance Metrics</u></p> <p>MS B conducted 17 July 2008 and approval granted for program progression to EMD phase. System design improvements for manned and unmanned autoland capabilities will lead to a Preliminary Design Review (PDR) scheduled for second quarter FY2015 and Critical Design Review (CDR) scheduled for fourth quarter FY2015. Milestone C scheduled for second quarter FY2017.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy												Date: March 2014			
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0603860N / JT Precision Approach & Ldg Sys				Project (Number/Name) 2329 / JPALS					
Product Development (\$ in Millions)															
				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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
Ship Integration	WR	NAWCAD : Pax River, MD	23.341	1.141	Dec 2012	1.777	Dec 2013	0.334	Dec 2014	-		0.334	Continuing	Continuing	Continuing
Primary Hardware Development	C/CPAF	Raytheon : Fullerton, CA	256.976	39.818	Jan 2013	19.100	Jan 2014	17.000	Jun 2015	-		17.000	Continuing	Continuing	Continuing
Award Fee	C/CPAF	Various : Various	10.068	2.000	Dec 2013	-		-		-		-	-	12.068	12.068
Prior Year Prod Dev costs no longer funded in FYDP	Various	Various : Various	130.650	-		-		-		-		-	-	130.650	-
Subtotal			421.035	42.959		20.877		17.334		-		17.334	-	-	-
Remarks															
The Primary Hardware Development contract with Raytheon is a combined CPAF and CPIF contract. Period 4A (21 November 2011 - 20 November 2012) Paid out in December 2012 for 89.3% of potential award. Tech Incentive Demo payout in 2nd or 3rd quarter 2014. JPALS EMD PT II contract award is projected for third quarter FY15.															
Support (\$ in Millions)															
				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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
Systems Engineering Support	WR	NAWCAD : Pax River, MD	91.747	19.021	Dec 2012	6.966	Dec 2013	16.484	Dec 2014	-		16.484	Continuing	Continuing	Continuing
Integrated Logistics Support	WR	NAWCAD : Pax River, MD	14.393	3.980	Dec 2012	2.299	Dec 2013	3.155	Dec 2014	-		3.155	Continuing	Continuing	Continuing
Prior Year Support Costs non longer funded in FYDP	Various	Various : Various	21.514	-		-		-		-		-	-	21.514	-
Subtotal			127.654	23.001		9.265		19.639		-		19.639	-	-	-

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Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0603860N / JT Precision Approach & Ldg Sys				Project (Number/Name) 2329 / JPALS					
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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
Developmental Test & Evaluation	WR	NAWCAD : Pax River, MD	34.174	7.180	Dec 2012	1.852	Dec 2013	4.683	Dec 2014	-		4.683	Continuing	Continuing	Continuing
Operational Test & Evaluation	WR	COMOPTEVFOR : Norfolk, VA	2.099	0.510	Dec 2012	3.666	Dec 2013	3.000	Dec 2014	-		3.000	Continuing	Continuing	Continuing
Subtotal			36.273	7.690		5.518		7.683		-		7.683	-	-	-
Management Services (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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 Management Support	WR	NAWCAD : Pax River, MD	10.209	2.301	Dec 2012	3.982	Dec 2013	6.461	Dec 2014	-		6.461	Continuing	Continuing	Continuing
PM Support-MSS	C/CPFF	Amelex : California, MD	9.189	1.126	Dec 2012	1.955	Dec 2013	2.987	Dec 2014	-		2.987	Continuing	Continuing	Continuing
Travel	WR	NAVAIR : Pax River, MD	2.708	0.210	Dec 2012	0.395	Dec 2013	0.792	Dec 2014	-		0.792	Continuing	Continuing	Continuing
Subtotal			22.106	3.637		6.332		10.240		-		10.240	-	-	-
			Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			607.068	77.287		41.992		54.896		-		54.896	-	-	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy

Date: March 2014

Appropriation/Budget Activity

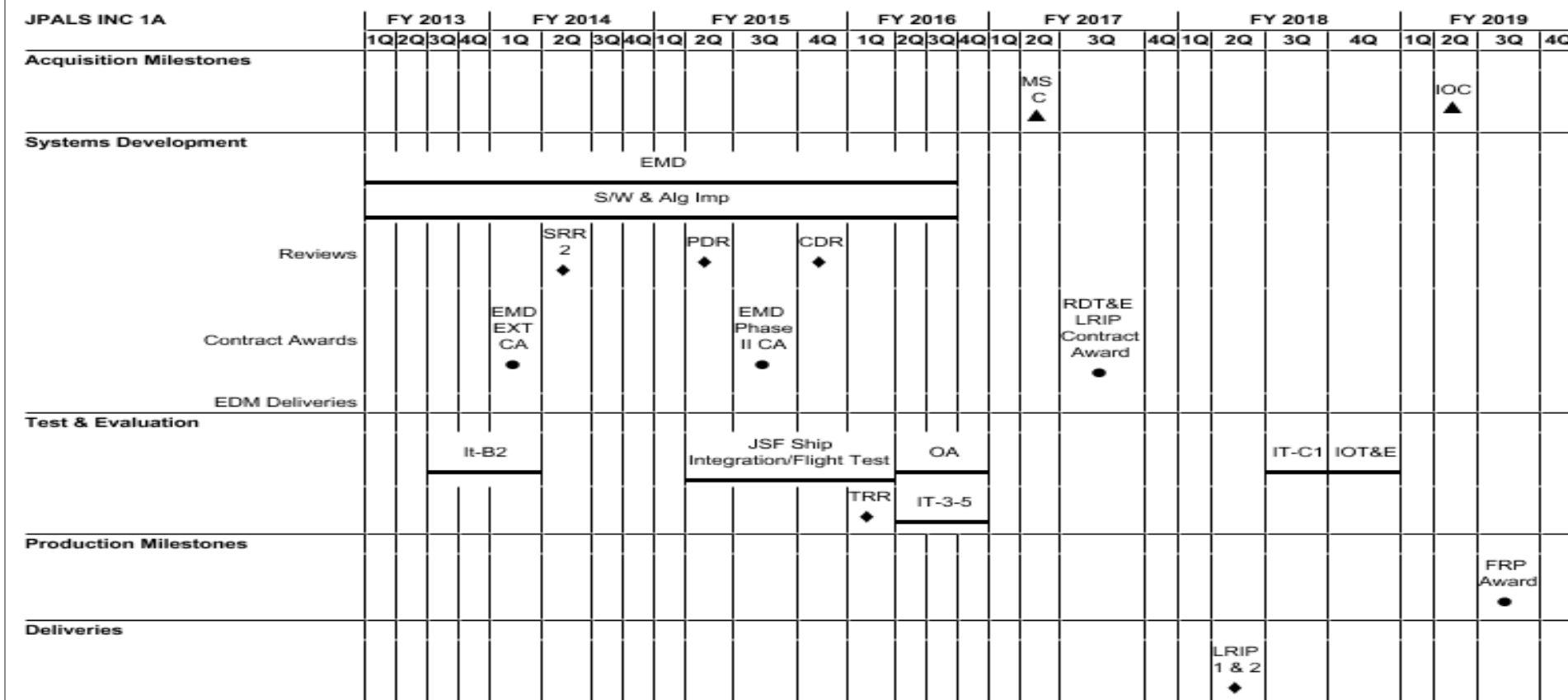
1319 / 4

R-1 Program Element (Number/Name)

PE 0603860N / JT Precision Approach & Ldg Sys

Project (Number/Name)

2329 / JPALS



2015PB - 0603860N - 2329

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603860N / <i>JT Precision Approach & Ldg Sys</i>	Project (Number/Name) 2329 / JPALS	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
JPALS INC 1A				
Acquisition Milestones: MS C	2	2017	2	2017
Acquisition Milestones: IOC	2	2019	2	2019
Systems Development: Engineering and Manufacturing Development	1	2013	3	2016
Systems Development: Software and Algorithm Improvements	1	2013	3	2016
Systems Development: Reviews: Critical Design Review	4	2015	4	2015
Systems Development: Reviews: System Readiness Review 2	2	2014	2	2014
Systems Development: Reviews: Preliminary Design Review	2	2015	2	2015
Systems Development: Contract Awards: RDT&E LRIP Contract Award	3	2017	3	2017
Systems Development: Contract Awards: EMD Extension Contract Award	1	2014	1	2014
Systems Development: Contract Awards: EMD Phase II Contract Award	3	2015	3	2015
Test & Evaluation: JSF Ship Integration / Flight Test F35/JSF	2	2015	1	2016
Test & Evaluation: Operational Assessment (OA)	2	2016	4	2016
Test & Evaluation: IT-B2	3	2013	1	2014
Test & Evaluation: IT-C1	3	2018	3	2018
Test & Evaluation: Initial Operational Test and Evaluation (IOT&E)	4	2018	4	2018
Test & Evaluation: Test Readiness Review	1	2016	1	2016
Test & Evaluation: IT-3-5	2	2016	4	2016
Production Milestones: Full Rate Production (FRP) Contract Award	3	2019	3	2019
Deliveries: LRIP 1 & 2	2	2018	2	2018

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COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost																																
3228: JPALS 1B	55.655	43.204	75.424	-	-	-	-	-	-	-	-	174.283																																
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-																																		
<p># The FY 2015 OCO Request will be submitted at a later date.</p> <p>Note JPALS has been combined into a single increment. This project (3228) will be disestablished beginning FY2015.</p> <p>A. Mission Description and Budget Item Justification Joint Precision Approach and Landing System Increment 1B, beginning in FY10, provides for integration and testing into the avionics of the Carrier (CVN) & LH Air Wings, including but not limited to: C-2A, F/A-18E/F, EA-18G, MH-60R/S, and E-2D. This is the first phase of the air integration of JPALS onto all sea based USN aircraft. Additionally, trade studies and risk reduction activities will be pursued on additional sea based USN/USMC aircraft, to include MV-22, CH-53K, UH-1Y and MQ-8. Beginning in FY 2014, all funding will be used to finance efforts under project 2329.</p> <p>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</p> <table border="1"> <thead> <tr> <th></th> <th>FY 2013</th> <th>FY 2014</th> <th>FY 2015</th> </tr> </thead> <tbody> <tr> <td>Title: Follow-on Platform Integration</td> <td align="center">43.204</td> <td align="center">75.424</td> <td align="center">-</td> </tr> <tr> <td align="right">Articles:</td> <td align="center">-</td> <td align="center">-</td> <td align="center">-</td> </tr> <tr> <td colspan="4"> Description: This effort includes development, integration, testing, and risk reduction activities for F-35 and unmanned air systems. </td> </tr> <tr> <td colspan="4"> FY 2013 Accomplishments: Continued JPALS trade studies, risk reduction, and design activities for applicable CVN aircraft and Multi-Platform Avionics. Conduct F/A-18 E/F and EA-18G SRR-2. </td> </tr> <tr> <td colspan="4"> FY 2014 Plans: Funding used to finance efforts discussed in Project 2329 </td> </tr> <tr> <td colspan="4"> FY 2015 Plans: N/A </td> </tr> <tr> <td align="right">Accomplishments/Planned Programs Subtotals</td> <td align="center">43.204</td> <td align="center">75.424</td> <td align="center">-</td> </tr> </tbody> </table> <p>C. Other Program Funding Summary (\$ in Millions) N/A</p>														FY 2013	FY 2014	FY 2015	Title: Follow-on Platform Integration	43.204	75.424	-	Articles:	-	-	-	Description: This effort includes development, integration, testing, and risk reduction activities for F-35 and unmanned air systems.				FY 2013 Accomplishments: Continued JPALS trade studies, risk reduction, and design activities for applicable CVN aircraft and Multi-Platform Avionics. Conduct F/A-18 E/F and EA-18G SRR-2.				FY 2014 Plans: Funding used to finance efforts discussed in Project 2329				FY 2015 Plans: N/A				Accomplishments/Planned Programs Subtotals	43.204	75.424	-
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C. Other Program Funding Summary (\$ in Millions)		
<u>Remarks</u>		
D. Acquisition Strategy JPALS has been combined into a single increment and this project will be canceled beginning FY15 with FY14 funds used to partially finance FY14 JPALS efforts under project 2329.		
E. Performance Metrics JPALS has been combined into a single increment. This project (3228) will be disestablished beginning FY15.		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy												Date: March 2014			
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0603860N / JT Precision Approach & Ldg Sys				Project (Number/Name) 3228 / JPALS 1B					
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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
Aircraft Integration-Non Specific	Various	Various : Various	1.731	0.201	Mar 2013	-		-		-		-	-	1.932	-
Aircraft Integration-multi-Platform Avionics	Various	Various : Various	11.611	23.646	Jun 2013	54.762	Dec 2013	-		-		-	-	90.019	-
FY-10 thru FY12 Prior Cost Category	Various	Various : Various	18.532	3.980	Mar 2013	-		-		-		-	-	22.512	-
Subtotal			31.874	27.827		54.762		-		-		-	-	114.463	-
Remarks All JPALS funds in this project (3228) will be realigned to project (2329) for execution during FY14.															
Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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	WR	NAWCAD : Pax River, MD	0.971	0.158	Dec 2012	0.169	Dec 2013	-		-		-	-	1.298	-
Engineering Support	WR	NAWCAD : Pax River, MD	13.531	9.549	Dec 2012	13.966	Dec 2013	-		-		-	-	37.046	-
Subtotal			14.502	9.707		14.135		-		-		-	-	38.344	-
Remarks All JPALS funds in this project (3228) will be realigned to project (2329) for execution during FY14.															
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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
Developmental Test & Evaluation	WR	NAWCAD : Pax River, MD	0.671	0.271	Dec 2012	1.325	Dec 2013	-		-		-	-	2.267	-
Subtotal			0.671	0.271		1.325		-		-		-	-	2.267	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy												Date: March 2014			
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0603860N / JT Precision Approach & Ldg Sys						Project (Number/Name) 3228 / JPALS 1B			
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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
Remarks															
All JPALS funds in this project (3228) will be realigned to project (2329) for execution during FY14.															
Management Services (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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 Engineering Support	WR	NAWCAD : Pax River, MD	2.622	2.454	Dec 2012	1.769	Dec 2013	-		-		-	-	6.845	-
PM Support	WR	NAWCAD : Pax River, MD	4.806	2.483	Dec 2012	2.844	Dec 2013	-		-		-	-	10.133	-
PM Support-MSS	C/CPFF	Amelex : California, MD	1.180	0.462	Jan 2013	0.589	Dec 2013	-		-		-	-	2.231	2.231
Subtotal			8.608	5.399		5.202		-		-		-	-	19.209	-
Remarks															
All JPALS funds in this project (3228) will be realigned to project (2329) for execution during FY14.															
			Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			55.655	43.204		75.424		-		-		-	-	174.283	-
Remarks															
**FY2014 cost categories reflect FY 2015 forward financing of project 2329 requirements for product development contracts and government labor.															

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy

Date: March 2014

Appropriation/Budget Activity

1319 / 4

R-1 Program Element (Number/Name)

PE 0603860N / JT Precision Approach & Ldg Sys

Project (Number/Name)

3228 / JPALS 1B

JPALS INC 1B	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	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
Acquisition Milestones																												
Systems Development																												
Lead Platform C-2A	Trade Studies C-2A																											
Reviews			C-2A SRR																									
F/A-18E/F & EA-18G	Trade Studies F/A-18 E/F, EA18G																											
Reviews		F/A18-E/F & EA-18G SRR 2																										
E-2D	E-2D Trade Studies & Risk Reduction																											
Reviews																												
MH-60R/S	MH-60R/S Trade Studies																											
Reviews																												
Multiplatform Avionics, LH & Land Based Aircraft	LH & Land Based Aircraft Trade Studies & Risk Reduction																											
			C-2A Integration Events																									
Test and Evaluation																												
Production Milestones																												

2015PB - 0603860N - 3228 The R4 shedule ends with FY13 and efforts in FY14 and out that were associated with project 3228, have been migrated to display in the JPALS 2329 project.

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603860N / <i>JT Precision Approach & Ldg Sys</i>	Project (Number/Name) 3228 / <i>JPALS 1B</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>JPALS INC 1B</i>				
Systems Development: Lead Platform C-2A: C-2A Trade Studies and Risk Reduction	1	2013	4	2013
Systems Development: Reviews: C-2A SRR 1	3	2013	3	2013
Systems Development: F/A-18E/F & EA-18G: Trade Studies F/A-18E/F, EA-18G	1	2013	4	2013
Systems Development: Reviews: F/A18-E/F & EA-18G SRR 2	2	2013	2	2013
Systems Development: E-2D: E-2D Trade Studies & Risk Reduction	1	2013	4	2013
Systems Development: MH-60R/S: MH-60R/S Trade Studies	1	2013	4	2013
Systems Development: Multiplatform Avionics, LH & Land Based Aircraft: Multiplatform Avionics (MPA), LH & Land Based Aircraft Trade Studies & Risk Reduction	1	2013	4	2013
Systems Development: Multiplatform Avionics, LH & Land Based Aircraft: C-2A Integration Events MPA	3	2013	4	2013

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014																														
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603860N / JT Precision Approach & Ldg Sys				Project (Number/Name) 3354 / JPALS Inc 2																															
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost																												
3354: JPALS Inc 2	-	-	38.762	-	-	-	-	-	-	-	-	38.762																												
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-																														
<p># The FY 2015 OCO Request will be submitted at a later date.</p> <p>A. Mission Description and Budget Item Justification Program is cancelled due to Department's Precision Approach Landing Capability (PALC) changes.</p> <p>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>FY 2013</th> <th>FY 2014</th> <th>FY 2015</th> </tr> </thead> <tbody> <tr> <td>Title: JPALS Increment 2</td> <td align="center">-</td> <td align="right">38.762</td> <td align="center">-</td> </tr> <tr> <td align="right">Articles:</td> <td align="center">-</td> <td align="center">-</td> <td align="center">-</td> </tr> <tr> <td>FY 2013 Accomplishments: N/A</td> <td></td> <td></td> <td></td> </tr> <tr> <td>FY 2014 Plans: Funding used to finance efforts discussed in Project 2329.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>FY 2015 Plans: N/A</td> <td></td> <td></td> <td></td> </tr> <tr> <td align="right">Accomplishments/Planned Programs Subtotals</td> <td align="center">-</td> <td align="right">38.762</td> <td align="center">-</td> </tr> </tbody> </table> <p>C. Other Program Funding Summary (\$ in Millions) N/A</p> <p>Remarks</p> <p>D. Acquisition Strategy N/A- Program is cancelled due to Department's PALC changes.</p> <p>E. Performance Metrics N/A- Program is cancelled due to Department's PALC changes.</p>														FY 2013	FY 2014	FY 2015	Title: JPALS Increment 2	-	38.762	-	Articles:	-	-	-	FY 2013 Accomplishments: N/A				FY 2014 Plans: Funding used to finance efforts discussed in Project 2329.				FY 2015 Plans: N/A				Accomplishments/Planned Programs Subtotals	-	38.762	-
	FY 2013	FY 2014	FY 2015																																					
Title: JPALS Increment 2	-	38.762	-																																					
Articles:	-	-	-																																					
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FY 2014 Plans: Funding used to finance efforts discussed in Project 2329.																																								
FY 2015 Plans: N/A																																								
Accomplishments/Planned Programs Subtotals	-	38.762	-																																					

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy												Date: March 2014			
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0603860N / JT Precision Approach & Ldg Sys				Project (Number/Name) 3354 / JPALS Inc 2					
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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 H/W Development	SS/CPIF	TBD : TBD	0.000	-		9.860	Oct 2013	-		-		-	-	9.860	32.701
Primary H/W Development S/W	SS/CPIF	TBD : TBD	0.000	-		13.997	Oct 2013	-		-		-	-	13.997	55.149
Systems Engineering	WR	NAWCAD : Pax River, MD	0.000	-		4.652	Dec 2013	-		-		-	-	4.652	-
Training Development	WR	NAWCAD : Pax River, MD	0.000	-		0.300	Dec 2013	-		-		-	-	0.300	-
LRIP Contact	SS/CPIF	TBD : TBD	0.000	-		-		-		-		-	-	-	9.633
Subtotal			0.000	-		28.809		-		-		-	-	28.809	-
Remarks															
All JPALS funds in this project (3354) will be realigned to project (2329) for execution during FY14.															
Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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	WR	NAWCAD : Pax River, MD	0.000	-		1.315	Dec 2013	-		-		-	-	1.315	-
Government Engineering Support	WR	NAWCAD : Pax River, MD	0.000	-		1.174	Dec 2013	-		-		-	-	1.174	-
Tech Data	WR	NAWCAD : Pax River, MD	0.000	-		0.850	Dec 2013	-		-		-	-	0.850	-
Studies and Analyses	Various	Various : Various	0.000	-		0.974	Dec 2013	-		-		-	-	0.974	-
Subtotal			0.000	-		4.313		-		-		-	-	4.313	-
Remarks															
All JPALS funds in this project (3354) will be realigned to project (2329) for execution during FY14.															

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy												Date: March 2014			
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0603860N / JT Precision Approach & Ldg Sys						Project (Number/Name) 3354 / JPALS Inc 2			
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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 T&E	WR	NAWCAD : Pax River, MD	0.000	-		-		-		-		-	-	-	-
Operational T&E	WR	COMOPTEVFOR : Norfolk, VA	0.000	-		-		-		-		-	-	-	-
Test Assests	WR	NAWCAD : PAX River, MD	0.000	-		-		-		-		-	-	-	-
LRIP Certification	WR	NAWCAD : Pax River, MD	0.000	-		-		-		-		-	-	-	-
Subtotal			0.000	-		-		-		-		-	-	-	-
Remarks															
FY14 Test and Evaluation category funds removed by congressional reduction of \$7.437 - JPALS Increment 2 Test and Evaluation ahead of need.															
Management Services (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 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 Engineering Support	WR	NAWCAD : Pax River, MD	0.000	-		4.290	Dec 2013	-		-		-	-	4.290	-
PM Support MSS	C/CPFF	CTSI : Lexington Park, MD	0.000	-		1.350	Dec 2013	-		-		-	-	1.350	1.350
Subtotal			0.000	-		5.640		-		-		-	-	5.640	-
Remarks															
All JPALS funds in this project (3354) will be realigned to project (2329) for execution during FY14.															
			Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	-		38.762		-		-		-	-	38.762	-
Remarks															