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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604800N: <i>JT Strike Fighter (JSF) - EMD</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	1,886.175	707.791	677.486	-	677.486	744.516	706.512	588.704	462.301	Continuing	Continuing
2261: <i>Joint Strike Fighter EMD</i>	1,641.069	667.915	650.773	-	650.773	725.043	706.512	588.704	462.301	Continuing	Continuing
3194: <i>Joint Reprogramming Center</i>	30.998	39.876	26.713	-	26.713	19.473	-	-	-	0.000	117.060
9999: <i>Congressional Adds</i>	214.108	-	-	-	-	-	-	-	-	0.000	214.108

Note

This Program Element (PE) continues development efforts budgeted in PE 0603800N since FY 02. Effective with the President's Budget FY 11 budget submission, the F-35B United States Marine Corps (USMC) Short Take-off Vertical Landing (STOVL) and F-35C United States Navy (USN) Carrier Variant (CV) budgets are reported against separate budget line items and PEs. Starting in FY 11, the F-35B budget is reported against the newly created PE 0604800M. The F-35C USN budget continues to report under PE 0604800N.

A. Mission Description and Budget Item Justification

The F-35 Lightning II Joint Strike Fighter (JSF) program will develop and field a family of aircraft that meets the needs of the USN, USAF, USMC, and allies, with maximum commonality among the variants, consistent with National Disclosure Policy, to minimize life cycle costs. This is a joint program with no executive service. Navy and Air Force each provide approximately equal shares of annual funding to the program. The United Kingdom, (seven) other International countries, and (four) Foreign Military Sales cases are participants in the JSF Program. The program combines USN, USMC, USAF, and International Partner funding. The top line PE cost (R-2) reflects USN F-35C Carrier Variant (CV) budgetary information only. However, funding at the accomplishment/planned program level (R-2A) is reported in total (all services and partners) as the activities support all aircraft variants. Within the Navy, funding is a roughly equal contribution of annual funding by the USN and USMC.

Funding under this USN program element supports core F-35 System Development and Demonstration (SDD) objectives and aircraft Follow-on Development efforts.

The SDD Budget funds a total quantity of 20 RDT&E test articles to include 6 ground test articles and 14 flight test articles for Navy and Air Force use. The following fiscal year phasing of the test articles reflects the scheduled first flight of each flight test asset or production line roll out of each ground test asset:

- FY07: 1 Conventional Take Off and Landing (CTOL) flight test article
- FY08: 1 Short Take Off and Vertical Landing (STOVL) flight test article, 1 STOVL ground test
- FY09: 1 STOVL flight test article, 2 CTOL ground test articles
- FY10: 6 flight test articles (3 CTOL, 2 STOVL, 1 Carrier Variant (CV)), 3 ground test articles (1 STOVL, 2 CV)
- FY11: 4 flight test articles (1 CTOL, 1 STOVL, 2 CV)
- FY12: 1 flight test article (CV)

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B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	1,948.244	707.791	621.032	-	621.032
Current President's Budget	1,886.175	707.791	677.486	-	677.486
Total Adjustments	-62.069	-	56.454	-	56.454
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-9.998	-			
• SBIR/STTR Transfer	-51.961	-			
• Program Adjustments	-	-	61.486	-	61.486
• Rate/Misc Adjustments	-	-	-5.032	-	-5.032
• Congressional General Reductions Adjustments	-0.110	-	-	-	-

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

Project: 9999: *Congressional Adds*

Congressional Add: *Maintain Dev Of 2nd Source For Engine*

Congressional Add Subtotals for Project: 9999

Congressional Add Totals for all Projects

	FY 2010	FY 2011
	214.108	-
	214.108	-
	214.108	-

Change Summary Explanation

Financial: Financial adjustments reflect increased funding associated with 2-year extension of SDD Program.

Schedule: Significant changes to schedule reflect program restructure resulting from a critical Nunn-McCurdy breach and Acquisition Decision Memorandum guidance (dated 2 June 2010) as well as subsequent two-year extension of program to accommodate completion of Development Testing/Operational Testing. Schedule now includes detail for Test and Evaluation of JSF variants. Specific slips associated with this restructure include: CV 1st flight occurred in 3rd Quarter FY 10, Block 2 Operational Test & Evaluation to conclude in 4th Quarter FY 15, and Block 3 Operational Test & Evaluation to conclude in 2nd Quarter FY 16. Performance Based Logistics (PBL) (increasing scale and fidelity thru MYP), Follow-on Development, and Dual Capability Aircraft Integration have been added to the schedule.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604800N: <i>JT Strike Fighter (JSF) - EMD</i>	PROJECT 2261: <i>Joint Strike Fighter EMD</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
2261: <i>Joint Strike Fighter EMD</i>	1,641.069	667.915	650.773	-	650.773	725.043	706.512	588.704	462.301	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

Note

This Program Element (PE) continues development efforts budgeted in PE 0603800N since FY 02.

Articles are no longer shown in the "Quantity of RDT&E Articles" section of the budget in FY 10, FY 11, & FY 12 as all articles were started in prior years. In the previous budgets the articles have been shown in the budget based on year first flight when they should have been shown based on when work was first commenced on the article. FY 10 flight test articles were started in FY 07. FY11 flight test articles were started in FY 08. FY12 flight test article was started in FY 09.

A. Mission Description and Budget Item Justification

The F-35 Lightning II Joint Strike Fighter (JSF) program will develop and field a family of aircraft that meets the needs of the USN, USAF, USMC, and allies, with maximum commonality among the variants, consistent with National Disclosure Policy, to minimize life cycle costs. This is a joint program with no executive service. Navy and Air Force each provide approximately equal shares of annual funding to the program. The United Kingdom, (seven) other International countries, and (four) Foreign Military Sales cases are participants in the JSF Program. The program combines USN, USMC, USAF, and International Partner funding. The top line PE cost reflects USN F-35C Carrier Variant (CV) budgetary information only. However, funding at the accomplishment/planned program level is reported in total (all services and partners) as the activities support all aircraft variants. Within the Navy, funding is a roughly equal contribution of annual funding by the USN and USMC.

The System Development and Demonstration (SDD) Budget funds a total quantity of 20 RDT&E test articles to include 6 ground test articles and 14 flight test articles for Navy and Air Force use. The following fiscal year phasing of the test articles reflects the scheduled first flight of each flight test asset or production line roll out of each ground test asset:

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- FY11: 4 flight test articles (1 CTOL, 1 STOVL, 2 CV)
- FY12: 1 flight test article (CV)

Funding under this project unit supports core USN SDD objectives as well as costs to support Follow-on Development efforts.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Title: SDD	2,836.180	1,648.472	1,751.553

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011	FY 2012
Articles:		0	0	0
FY 2010 Accomplishments: Continued SDD execution of the Air System, with Lockheed Martin including International Commonality Effort which included airframe, vehicle systems, mission systems, autonomic logistics, systems engineering, and integrated test efforts.				
FY 2011 Plans: Continue SDD execution of the Air System, with Lockheed Martin including International Commonality Effort which includes airframe, vehicle systems, mission systems, autonomic logistics, systems engineering, and integrated test efforts.				
FY 2012 Plans: Continue SDD execution of the Air System, with Lockheed Martin including International Commonality Effort which includes airframe, vehicle systems, mission systems, autonomic logistics, systems engineering, and integrated test efforts.				
Title: F135 Propulsion System		458.329	360.000	360.000
Articles:		0	0	0
FY 2010 Accomplishments: Continued SDD execution of the F135 Propulsion System with Pratt & Whitney that included engine testing, autonomic logistics, integration and performing technology maturation efforts.				
FY 2011 Plans: Continue SDD execution of the F135 Propulsion System with Pratt & Whitney to include engine testing, autonomic logistics, integration and performing technology maturation efforts.				
FY 2012 Plans: Continue SDD execution of the F135 Propulsion System with Pratt & Whitney to include: engine testing, autonomic logistics, integration and performing technology maturation efforts.				
Title: F136 Propulsion System		415.918	-	-
Articles:		0		
FY 2010 Accomplishments: Congressional Add funding for continued F136 Propulsion System development effort (that appears in the PU: 9999 section of the DoN 2012 budget submission for PE 0604800N) by the General Electric/Rolls Royce Fighter Engine team (GE/RR FTE).				
Title: Systems Engineering		28.176	39.264	45.457
Articles:		0	0	0
FY 2010 Accomplishments:				

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011	FY 2012
Continued SDD Systems Engineering that included systems operations requirements analysis, program integration, requirements integration, and interoperability support. FY 2011 Plans: Continue SDD Systems Engineering including systems operations requirements analysis, program integration, requirements integration, and interoperability support. FY 2012 Plans: Continue SDD Systems Engineering including systems operations requirements analysis, program integration, requirements integration, and interoperability support.				
Title: Development Test and Evaluation FY 2010 Accomplishments: Continued government Development Test and Evaluation (DT&E)/Operational Evaluation as the DT fleet of test aircraft received six flight test and three ground assets. FY10 tasks originally supported a Block I and Block II mission systems DT&E but due to a restructured test schedule only Block 0.5 tests were completed and testing to support initial Low Rate Initial Production (LRIP) 1 Training was continued on Block 1 software. Flight sciences testing on CTOL variant was completed to meet initial LRIP air vehicle performance envelope requirements, and envelope expansion testing continued on all three variants to meet their initial LRIP envelope requirements and to support mission systems testing. Elements of DT&E included preparation for flight testing, weapons integration testing, and component capabilities testing. FY 2011 Plans: Continue government DT&E/Operational Evaluation in support of envelope expansion, LRIP aircraft deliveries, and initial service training. Continue flight sciences testing of CTOL, STOV, and CV variants to expand the air vehicle envelope to support mission systems testing. Commence and complete Block 1 Mission Systems flight test, and commence Block 2 flight test. Elements of DT&E included preparation for flight testing, weapons integration testing, and component capabilities testing. FY 2012 Plans: Continue government DT&E/Operational Testing in support of test aircraft. Continue flight sciences testing of CTOL, STOV, and CV variants to expand the air vehicle envelope to support mission systems testing to include initial Block 2B. Elements of DT&E included preparation for flight testing, weapons integration testing, and component capabilities testing.		149.547 0	281.000 0	323.150 0
Title: Development Support FY 2010 Accomplishments:		121.579 0	158.291 0	237.128 0

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2010	FY 2011	FY 2012
Continued SDD Support efforts for airframe, air vehicle systems, mission systems, weapons integration, mission support, and autonomic logistics development activities. FY 2011 Plans: Continue SDD Support efforts for airframe, air vehicle systems, mission systems, weapons integration, mission support, and autonomic logistics development activities. FY 2012 Plans: Continue SDD Support efforts for airframe, air vehicle systems, mission systems, weapons integration, mission support, and autonomic logistics development activities.				
Title: Program Management Support		71.478	75.478	103.447
		Articles: 0	0	0
FY 2010 Accomplishments: Continued management support services, travel, engineering technical services, and studies analyses and evaluations in support of program objectives. FY 2011 Plans: Continue management support services, travel, engineering technical services, and studies analyses and evaluations in support of program objectives. FY 2012 Plans: Continue management support services, travel, engineering technical services, and studies analyses and evaluations in support of program objectives.				
Title: Follow-on Development		-	57.724	37.874
			Articles: 0	0
FY 2011 Plans: Initiate follow-on development Block IV capabilities to include logistics, weapons, security, sensors, survivability, and upgrades required to support F-35 variants. Efforts will support aircraft and engine delivery to services and partner nations commencing in FY 15 and will integrate urgent operationally relevant requirements post-Initial Operational Capability (IOC). FY 2012 Plans:				

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Continue follow-on development Block IV capabilities to include logistics, weapons, security, sensors, survivability, and upgrades required to support F-35 variants. Efforts will support aircraft and engine delivery to services and partner nations commencing in FY 15 and will integrate urgent operationally relevant requirements post-IOC.			
Accomplishments/Planned Programs Subtotals	4,081.207	2,620.229	2,858.609
Air Force	2,033.521	1,043.610	1,387.926
Marine Corps	-	667.916	670.723
International	161.511	200.912	122.474
Congressional Add	214.108	-	-
Navy Project 3194	30.998	39.876	26.713
Navy Subtotals	1,641.069	667.915	650.773

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

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• RDTEF/0604800F: <i>Joint Strike Fighter</i>	2,033.521	1,043.610	1,387.926	0.000	1,387.926	1,198.293	933.452	608.211	361.064	0.000	22,029.126
• International1 : <i>International Partners (SDD/FOD)</i>	161.511	200.912	122.474	0.000	122.474	144.220	2.800	0.000	0.000	0.000	5,108.601
• APAF/0207142F: <i>F-35 Joint Strike Fighter</i>	2,357.949	4,191.142	3,664.092	0.000	3,664.092	3,764.260	5,285.022	5,985.244	7,703.525	147,239.170	181,851.032
• RDTEN/0604800M: <i>Joint Strike Fighter (JSF) - EMD</i>	0.000	667.916	670.723	0.000	670.723	741.600	703.575	585.759	459.571	0.000	3,829.144
• APN/0152: <i>F-35 Joint Strike Fighter STOVL</i>	0.000	2,576.142	1,259.162	0.000	1,259.162	1,296.310	1,379.916	1,865.005	2,709.859	24,536.751	35,623.145
• APN/0605B: <i>F-35 Joint Strike Fighter STOVL Spares</i>	0.000	164.135	66.430	0.000	66.430	33.290	63.484	124.791	224.075	2,143.575	2,819.780
• APN/0147: <i>F-35 Joint Strike Fighter CV</i>	4,449.336	1,886.988	1,720.762	0.000	1,720.762	2,405.858	2,429.364	2,952.444	2,790.723	25,972.535	47,648.943
• APN/0605C: <i>F-35 Joint Strike Fighter CV Spares</i>	248.184	107.030	86.902	0.000	86.902	101.272	331.063	313.699	91.696	1,777.785	3,240.139
	3.017	5.410	5.665	0.000	5.665	3.848	4.895	5.615	5.670	0.000	37.932

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

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• OPN/4265: <i>Other Aviation Support Equipment</i>											
• International2: <i>International Procurement</i>	727.462	733.662	1,372.790	0.000	1,372.790	3,010.270	4,791.820	7,367.040	6,817.100	0.000	24,820.144
• MC/0207142F: <i>USAF MILCON</i>	67.529	139.640	31.050	0.000	31.050	89.000	72.000	69.050	65.000	0.000	533.269
• APAF/0204142F: <i>USAF Modification Funding</i>	0.000	0.000	123.936	0.000	123.936	0.000	0.000	0.000	0.000	25,972.535	26,096.471
• FOD/0207142F: <i>USAF Follow-on Development</i>	0.000	57.724	47.841	0.000	47.841	132.495	131.844	129.164	151.614	0.000	650.682
• 0207142F/USAF : <i>USAF Spares</i>	129.296	263.573	151.469	0.000	151.469	322.076	340.956	508.599	770.495	1,777.785	4,325.345

D. Acquisition Strategy

A summary of the acquisition strategy for the F-35B and the F-35C follows.

Activities in the prior phase of JSF centered around three distinct objectives to provide a sound foundation for the start of SDD in Fall 2001:

- (1) facilitated the Services' development of fully validated, affordable operational requirements.
- (2) lowered risk by investing in and demonstrating key leveraging technologies that lowered the cost of development, production, and ownership.
- (3) demonstrated operational concepts.

Early warfighter and technologist interaction was an essential aspect of the requirements definition process. To an unprecedented degree the JSF Program used cost-performance trades early, as an integral part of the weapon system development process. The Services defined requirements through an iterative process, balancing weapon system capability against life cycle cost at every stage. Each iteration of requirements was provided to industry. They evolved their designs and provided cost data back to the warfighters. The warfighters evaluated trades and made decisions for the next iteration. This iterative process produced iterations of the Services' Joint Interim Requirements Documents in 1995, 1997, 1998 and culminated in the approved joint Operational Requirements Document in FY 00.

A sizable technology maturation effort was conducted to reduce risk and life cycle cost through technology maturation and demonstrations. The primary emphasis was on technologies identified as high payoff contributors to affordability, supportability, survivability, and lethality. Numerous demonstrations were accomplished to validate performance and life cycle cost impact to component, subsystem, and the total system.

In November 1996, contracts were awarded to Boeing and Lockheed Martin for Concept Demonstration Programs. These competing contractors built and flew concept demonstrator aircraft, conducted concept unique ground demonstrations, and refined their respective weapon system concepts. Specifically, Boeing and Lockheed Martin demonstrated commonality and modularity, STOVL hover and transition, and low speed handling qualities of their respective weapon system concepts. Pratt

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy	DATE: February 2011
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APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	PE 0604800N: <i>JT Strike Fighter (JSF) - EMD</i>	2261: <i>Joint Strike Fighter EMD</i>

and Whitney provided propulsion hardware and engineering support. General Electric continued development of a second, interchangeable, engine for competition in production.

Following evaluation of proposals and a favorable Milestone B decision, the JSF Program entered SDD on 26 Oct 2001 with SDD contract awards to Lockheed Martin and Pratt & Whitney. The SDD plan reflects a block approach, based on open systems architecture, for accomplishing aircraft and weapons integration. General Electric continued propulsion development efforts through FY 09 when program funding ended.

Follow-on Development will continue the evolutionary approach of SDD by providing capability enhancements through an incremental methodology. The Joint Capabilities Integration and Development System and Defense Acquisition System shall provide the framework and basis for defining, managing and acquiring the envisioned F-35 enhancements. The plan for each follow-on increment will include all the development, integration and verification testing of those capabilities. Additionally, the non-recurring efforts for cut-in of retrofit, production and sustainment will be included. Retrofit planning will be based on upgrading all previously fielded aircraft to the latest increment in order to limit the number of configurations, thus reducing life cycle cost. Retrofit execution will be in accordance with the stakeholder's direction.

These follow-on development efforts will be procured via cost type contracts. It is anticipated that fee provisions will be used to target and motivate contractor performance. The new configurations will be incorporated into production and, if required by the U.S. Services or SDD International Partners, retrofitted to fielded aircraft under F-35 production and sustainment contracts. Similar to SDD, Basic Ordering Agreement and Indefinite Delivery/Indefinite Quantity contracts may be used for trade studies and analyses to supplement Follow-On requirements development.

The updated JSF Acquisition Strategy and program schedule were approved following the May 05 Defense Acquisition Board (DAB). The April 06 DAB authorized full funding for LRIP I procurement. USAF LRIP I Advance Procurement funding was awarded during FY 06, followed by the USAF Regular Procurement award in FY 07. USAF and DoN Advance Procurement funding for LRIP II was awarded during FY 07. USAF LRIP II full-funding contract award occurred in April 08. DoN LRIP II full funding contract was awarded in July 08, upon successful first flight of the DoN STOVL aircraft. USAF and DoN Advance Procurement funding for LRIP III was awarded in May 08, LRIP III full funding was awarded in June 09. LRIP IV advance procurement was awarded in March 09 and full funding contract award occurred in early 4th Quarter FY 10. LRIP V advance procurement contract was awarded 3rd Quarter FY10. LRIP V full funding contract planned for 4th Quarter FY 11.

The F-35 Program experienced a Nunn-McCurdy breach during FY 10, was restructured for the President's Budget FY 11 budget, and was recertified by Office of the Secretary of Defense Acquisition Decision Memorandum (2 June 2010). Milestone B (granted in October 2001) was rescinded. As a result of a December 2010 Secretary of Defense decision, based on a JSF Technical Baseline Review (TBR), SDD was extended by 2 years and funding increased by \$4.6 billion to accommodate completion of DT/OT.

E. Performance Metrics

Combat Radius	
CTOL	Meets/Exceeds Tripwire Requirement
CV	Meets/Exceeds Tripwire Requirement
STOVL	Meets/Exceeds Tripwire Requirement

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<p>CV Recovery Maximum Approach Speed Meets/Exceeds Requirement In Tripwire Band</p> <p>STOVL Performance Flat Deck (High-High-High Profile Fuel) Meets/Exceeds Requirement In Tripwire Band Ski Jump (High-Medium-Medium-High Profile Fuel) Meets/Exceeds Requirement In Tripwire Band Vertical Landing Bring Back Meets/Exceeds Requirement In Tripwire Band</p> <p>Interoperability Net Ready Criteria- Meets/Exceeds Requirement In Tripwire Band</p> <p>Radio Frequency Signature Meets/Exceeds Tripwire Requirement</p> <p>Mission Reliability CTOL Meets/Exceeds Tripwire Requirement CV Exceeds Ord Objective STOVL USMC Meets/Exceeds Tripwire Requirement STOVL UK Meets/Exceeds Tripwire Requirement</p> <p>Sortie Generation Rate CTOL Meets/Exceeds Tripwire Requirement CV Meets/Exceeds Tripwire Requirement STOVL USMC Meets/Exceeds Tripwire Requirement STOVL UK Meets/Exceeds Tripwire Requirement</p> <p>Logistics Footprints C-17 CTOL Meets/Exceeds Tripwire Requirement STOVL USMC Meets/Exceeds Tripwire Requirement</p> <p>Logistics Footprint- Volume CV Exceeds Ord Objective STOVL USMC Meets/Exceeds Tripwire Requirement STOVL UK Meets/Exceeds Tripwire Requirement</p>		

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Logistics Footprint-Weight CV Exceeds Ord Objective STOVL USMC Exceeds Ord Objective STOVL UK Meets/Exceeds Tripwire Requirement		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy **DATE:** February 2011

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Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary H/W Development - SDD	C/CPAF	Lockheed Martin:Ft Worth, TX	25,935.737	1,643.535	Oct 2010	1,747.553	Oct 2011	-		1,747.553	4,570.645	33,897.470	27,514.470
Primary H/W Development - IDIQ (0022)	C/CPAF	Lockheed Martin:Ft Worth, TX	6.982	4.937	Oct 2010	4.000	Oct 2011	-		4.000	6.500	22.419	17.328
Primary H/W Development - IDIQ (0009)	C/CPAF	Lockheed Martin:Ft Worth, TX	16.759	-	Sep 2011	-	Sep 2012	-		-	0.000	16.759	2,143.850
Primary H/W Development - BOA(3104)	SS/CR	Lockheed Martin:Ft Worth, TX	3.511	-	Oct 2010	-	Oct 2011	-		-	0.000	3.511	6,668.763
Primary H/W Development - SDD (3003)	SS/CPAF	Pratt & Whitney:Hartford, CT	6,530.993	360.000	Dec 2010	360.000	Dec 2011	-		360.000	916.462	8,167.455	642.155
Primary H/W Development (C-0132)	SS/CPAF	Pratt & Whitney:Hartford, CT	1.364	-	Jan 2011	-	Oct 2011	-		-	0.000	1.364	346.694
Primary H/W Development (C-0050)	SS/CPAF	Pratt & Whitney:Hartford, CT	2.211	-	Jan 2011	-	Oct 2011	-		-	0.000	2.211	14.450
Primary H/W Development BOA(G-3053)	SS/CPAF	Pratt & Whitney:Hartford, CT	35.983	-	Oct 2010	-	Oct 2011	-		-	0.000	35.983	
Primary H/W Development IDIQ (D-0077)	SS/CPAF	Pratt & Whitney:Hartford, CT	10.925	-	Oct 2010	-	Oct 2011	-		-	0.000	10.925	
Primary H/W Development GE (C-0093)	SS/CPAF	GE:Cinn, Ohio	2,086.285	-		-		-		-	0.000	2,086.285	2,466.974
Primary H/W Development GE (C-0009)	SS/CPAF	GE:Cinn, Ohio	0.264	-		-		-		-	0.000	0.264	
Primary H/W Development GE (04-D-0074)	SS/CPAF	GE:Cinn, Ohio	4.175	-		-		-		-	0.000	4.175	
Primary H/W Development GE (04-C-0102)	SS/CPAF	GE:Cinn, Ohio	100.400	-		-		-		-	0.000	100.400	
Primary H/W Development GE (02-G-3236)	SS/CPAF	GE:Cinn, Ohio	5.548	-		-		-		-	0.000	5.548	
Primary H/W Development GE (96-C-0176)	SS/CPAF	GE:Cinn, Ohio	382.753	-		-		-		-	0.000	382.753	
Product Development Systems Engineering	Various	Various:Various	253.788	39.264	Oct 2010	45.457	Oct 2011	-		45.457	109.670	448.179	

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604800N: <i>JT Strike Fighter (JSF) - EMD</i>	PROJECT 2261: <i>Joint Strike Fighter EMD</i>
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Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
NAWC CHLK FOD	Various	NAWC:China Lake	-	-	Oct 2010	0.202	Oct 2011	-		0.202	1.653	1.855	
NAWC PAX FOD	Various	NAWC:PAX	-	-		0.142	Oct 2011	-		0.142	1.332	1.474	
PRIME LM FOD	Various	Lockheed Martin:Ft.Worth, TX	-	54.845	Oct 2010	32.712	Oct 2011	-		32.712	234.757	322.314	
PRIME ENGINE P&W FOD	Various	Pratt & Whitney:Hartford, CT	-	2.000	Oct 2010	2.000	Oct 2011	-		2.000	8.000	12.000	
Systems Engineering FOD	Various	Various:Various	-	0.067	Oct 2010	0.344	Oct 2011	-		0.344	2.985	3.396	
Subtotal			35,377.678	2,104.648		2,192.410		-		2,192.410	5,852.004	45,526.740	

Remarks

Note: Target Values of prime contracts differ from Total Cost because (a) Lockheed Martin and Pratt & Whitney Contracts have not been modified to reflect planned funding allocations and (b) no funds are budgeted for F136 (General Electric/Rolls Royce (GE/RR) Fighter Engine Team (FET)) beyond FY10. Cumulative Award Fee Earned in prior years for Lockheed Martin is 82.1%. Cumulative Award Fee Earned in prior years for Pratt & Whitney is 85.2%.

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Support	Various	Eglin AFB:Eglin AFB, FL	90.108	14.873	Oct 2010	14.929	Oct 2011	-		14.929	48.545	168.455	
Development Support	Various	ASC/AFRL:Dayton, Ohio	45.793	3.768	Oct 2010	7.625	Oct 2011	-		7.625	39.553	96.739	
Development Support	Various	ASC/CIVPAY:Dayton, Ohio	-	-		19.554	Oct 2011	-		19.554	126.714	146.268	
Development Support	Various	Bolling AFB:Washington, DC	6.775	-	Oct 2010	-		-		-	0.000	6.775	
Development Support	Various	DEMA:Various	4.112	10.000	Oct 2010	25.500	Oct 2011	-		25.500	0.000	39.612	
Development Support	MIPR	ESC:Hanscom AFB, MA	6.848	0.305	Oct 2010	0.376	Oct 2011	-		0.376	0.480	8.009	
Development Support	Various	AEDC/Fuel:Arnold, TN	131.403	38.063	Oct 2010	58.764	Oct 2011	-		58.764	58.230	286.460	
Development Support	WR		6.323	1.632	Oct 2010	1.985	Oct 2011	-		1.985	6.255	16.195	

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604800N: <i>JT Strike Fighter (JSF) - EMD</i>	PROJECT 2261: <i>Joint Strike Fighter EMD</i>
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Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		NAS Jacksonville: Jacksonville, FL											
Development Support	Various	Various: Various	206.823	21.100	Oct 2010	21.298	Oct 2011	-		21.298	46.457	295.678	
Development Support	Various	NAWC WD: China Lake, CA	93.603	28.874	Oct 2010	33.068	Oct 2011	-		33.068	56.887	212.432	
Development Support	Various	NAWC AD: Patuxent River, MD	267.856	37.606	Oct 2010	51.057	Oct 2011	-		51.057	122.972	479.491	
Development Support	Various	NAWC TSD: Orlando, FL	7.750	1.585	Oct 2010	2.362	Oct 2011	-		2.362	4.854	16.551	
Development Support	WR	NSWC: Indian Head, MD	3.360	0.455	Oct 2010	0.572	Oct 2011	-		0.572	0.190	4.577	
Development Support	Various	SPAWAR: San Diego, CA	6.525	0.030	Oct 2010	0.038	Oct 2011	-		0.038	0.134	6.727	
Prior Years costs no longer funded in FYDP	Various	SIBR Cong ADD: Various	24.187	-		-		-		-	0.000	24.187	
MISC/OTHER FOD	Various	Various: Various	-	-	Oct 2010	0.063	Oct 2011	-		0.063	0.147	0.210	
NAWC CHLK FOD	Various	Various: Various	-	0.327	Oct 2010	0.494	Oct 2011	-		0.494	15.223	16.044	
NAWC PAX FOD	Various	Various: Various	-	0.485	Oct 2010	1.917	Oct 2011	-		1.917	28.279	30.681	
Subtotal			901.466	159.103		239.602		-		239.602	554.920	1,855.091	

Remarks

When Various/Various appears in the Contract Method/Type or Funding Vehicle it is normally because Air Force and Navy and sometimes international funding is going to the same site on various funding document types.

Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Test & Evaluation	Various	NAWCAD: Patuxent River, MD	226.209	121.877	Oct 2010	130.731	Oct 2011	-		130.731	732.191	1,211.008	
	Various		16.220	11.409	Oct 2010	11.637	Oct 2011	-		11.637	23.771	63.037	

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604800N: <i>JT Strike Fighter (JSF) - EMD</i>	PROJECT 2261: <i>Joint Strike Fighter EMD</i>
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Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Test & Evaluation		NAWCWD:China Lake, CA											
Development Test & Evaluation	PO	Edwards AFB:CA	283.450	86.850	Oct 2010	94.841	Oct 2011	-		94.841	256.139	721.280	
Development Test & Evaluation	Various	Various:Various	15.691	19.395	Oct 2010	26.441	Oct 2011	-		26.441	28.050	89.577	
Development Test & Evaluation	MIPR	WEPS:Eglin AFB, FL	20.485	14.150	Oct 2010	2.600	Oct 2011	-		2.600	2.800	40.035	
Development Test & Evaluation	MIPR	OT-AFOTEC/ AFFTC:Eglin AFB, FL	78.482	23.819	Oct 2010	52.200	Oct 2011	-		52.200	382.840	537.341	
Development Test & Evaluation	Various	OT-JITC/ OPTEV:Various	3.841	3.500	Oct 2010	4.700	Oct 2011	-		4.700	35.214	47.255	
Development Test & Evaluation	Various	JITC:Various	0.503	-		-		-		-	0.000	0.503	
Subtotal			644.881	281.000		323.150		-		323.150	1,461.005	2,710.036	

Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management	SS/CPFF	ACT 1:Arlington, VA	2.981	2.833	Oct 2010	3.418	Oct 2011	-		3.418	12.872	22.104	21.072
Program Management - Mantech	C/FP	Mantech:Arlington, VA	42.487	7.015	Oct 2010	8.366	Oct 2011	-		8.366	35.336	93.204	88.233
Program Management - PA Consulting	SS/CPFF	PA Consulting:Arlington, VA	-	-	Oct 2010	-	Oct 2011	-		-	0.000	0.000	15.486
Program Management - DRC	C/CPFF	DRC:Arlington, VA	5.916	3.000	Oct 2010	-		-		-	0.000	8.916	8.676
Program Management	C/CPFF	First Principles:Arlington, VA	1.398	1.523	Oct 2010	1.936	Oct 2011	-		1.936	4.105	8.962	6.871
Program Management	Various	ASC CIVPAY:VARIOUS	-	-		3.500	Oct 2011	-		3.500	21.000	24.500	
Program Management	C/CPFF	Wyle:Arlington, VA	78.871	19.305	Oct 2010	27.418	Oct 2011	-		27.418	93.283	218.877	197.674

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604800N: <i>JT Strike Fighter (JSF) - EMD</i>	PROJECT 2261: <i>Joint Strike Fighter EMD</i>
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Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management	C/CPAF	Saftas:Arlington, VA	77.789	18.200	Oct 2010	26.600	Oct 2011	-		26.600	91.000	213.589	191.562
Program Management	C/CPAF	Stanley:Arlington, VA	131.456	19.800	Oct 2010	27.940	Oct 2011	-		27.940	97.660	276.856	235.299
Program Management	C/CPFF	GE F136-COG Studies:Cinn, Ohio	0.800	-	Sep 2011	-	Sep 2012	-		-	0.000	0.800	21.040
Travel and Miscellaneous	Various	Various:Various	11.740	3.802	Oct 2010	4.269	Oct 2011	-		4.269	17.392	37.203	
Subtotal			353.438	75.478		103.447		-		103.447	372.648	905.011	

Remarks
Cumulative Award Fee Earned in prior years for Stanley is 99%.

	Total Prior Years Cost	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Subtotals	37,277.463	2,620.229	2,858.609	-	2,858.609	8,240.577	50,996.878	
Air Force		1,043.610	1,387.926	-	1,387.926			
Marine Corps		667.916	670.723	-	670.723			
International		200.912	122.474	-	122.474			
Congressional Add		-	-	-	-			
Navy Project 3194		39.876	26.713	-	26.713			
Project Cost Totals	37,277.463	667.915	650.773	-	650.773	8,240.577	50,996.878	

Remarks
Subtotals and totals may not add due to rounding.
Note: Target Values of prime contracts differs from Total Cost because (a) Lockheed Martin and Pratt & Whitney Contracts have not been modified to reflect planned funding allocations and (b) no funds are budgeted for F136 (FET GE/RR) beyond FY10. Total prior year affects actual funds executed.

The following table presents the total dollars distributed in the R2a and R3. This has been done to give a more accurate picture of the total dollars being spent on each task. The Department of the Navy (DoN) funding profile as identified below reflects current execution budget adjustments to include significant Below Threshold Reprogrammings and Small Business Innovation Research reductions.

Name	PE	PU	FY 10	FY 11	FY 12
Navy	0604800N	2261	1,641.069	667.915	650.773
Air Force	0604800F	3831	2,033.521	1,043.610	1,387.926

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604800N: <i>JT Strike Fighter (JSF) - EMD</i>	PROJECT 2261: <i>Joint Strike Fighter EMD</i>
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	Total Prior Years Cost	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Marine Corps 0604800M 2262 0 667.916 670.723								
International (SDD/FOD) 161.511 200.912 122.474								
Cong Add* 0604800N 2261A 214.108 0 0								

Total Funding 4,081.207 2,620.229 2,858.609

*Navy Cong Add Alt Engine funding is included in the PU 2261 Exhibits as well as the Cong Add exhibit.

Name	PU	FY 10	FY 11	FY 12
Navy	3194	30.998	39.876	26.713

Total 0604800N under separate PUs: 30.998 39.876 26.713

Total F-35 funding associated with PEs 0604800N, 0604800F and 0604800M: 3,919.696 2,419.317 2,736.135

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604800N: <i>JT Strike Fighter (JSF) - EMD</i>	PROJECT 2261: <i>Joint Strike Fighter EMD</i>

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604800N: <i>JT Strike Fighter (JSF) - EMD</i>	PROJECT 2261: <i>Joint Strike Fighter EMD</i>

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604800N: <i>JT Strike Fighter (JSF) - EMD</i>	PROJECT 2261: <i>Joint Strike Fighter EMD</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>JSF Variants - CV, STOVL & CTOL</i>				
Acquisition Milestones: Carriver Variant First Flight	3	2010	3	2010
Acquisition Milestones: Services Initial Operating Capability	1	2014	4	2016
Acquisition Milestones: Full Rate Production Decision Review	3	2016	3	2016
Systems Development: Follow-on Development	1	2012	4	2016
Systems Development: Dual Capability Aircraft Integration	1	2012	4	2016
Systems Development: Reviews: Defense Acquisition Board Program Reviews (DPRs) FY10	1	2010	1	2010
Systems Development: Reviews: DPR FY11	1	2011	1	2011
Systems Development: Reviews: DPR FY12	1	2012	1	2012
Systems Development: Reviews: DPR FY13	1	2013	1	2013
Systems Development: Reviews: DPR FY14	1	2014	1	2014
Systems Development: Reviews: DPR FY15	1	2015	1	2015
Systems Development: Reviews: DPR FY16	1	2016	1	2016
Test & Evaluation: Conventional Take Off and Landing (CTOL)	1	2010	2	2016
Test & Evaluation: Short Take Off and Landing (STOVL)	1	2010	4	2016
Test & Evaluation: Carrier Variant (CV)	4	2010	2	2016
Test & Evaluation: Block 2B	3	2012	4	2014
Test & Evaluation: Block 3C	3	2014	2	2016
Test & Evaluation: Operational Evaluation: Initial Operational Test & Evaluation	2	2014	4	2016
Contract Award: Low Rate Initial Production (LRIP) IV Full Funding	4	2010	4	2010
Contract Award: LRIP V Long Lead	3	2010	3	2010
Contract Award: LRIP V Full Funding	4	2011	4	2011

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604800N: <i>JT Strike Fighter (JSF) - EMD</i>	PROJECT 2261: <i>Joint Strike Fighter EMD</i>

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Contract Award: LRIP VI Long Lead	2	2011	2	2011
Contract Award: LRIP VI Full Funding	3	2012	3	2012
Contract Award: LRIP VII Long Lead	2	2012	2	2012
Contract Award: LRIP VII Full Funding	3	2013	3	2013
Contract Award: LRIP VIII Long Lead	2	2013	2	2013
Contract Award: LRIP VIII Full Funding	3	2014	3	2014
Contract Award: LRIP IX Long Lead	2	2014	2	2014
Contract Award: LRIP IX Full Funding	3	2015	3	2015
Production Deliveries: LRIP I (APAF)	2	2011	2	2011
Production Deliveries: LRIP II (APAF & APN)	3	2011	4	2011
Production Deliveries: LRIP III (APAF & APN)	1	2012	4	2012
Production Deliveries: LRIP IV (APAF & APN)	4	2012	2	2013
Production Deliveries: LRIP V (APAF & APN)	3	2013	2	2014
Production Deliveries: LRIP VI (APAF & APN)	2	2014	2	2015
Production Deliveries: LRIP VII (APAF & APN)	2	2015	2	2016
Production Deliveries: LRIP VIII (APAF & APN)	2	2016	4	2016

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604800N: <i>JT Strike Fighter (JSF) - EMD</i>	PROJECT 3194: <i>Joint Reprogramming Center</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
3194: <i>Joint Reprogramming Center</i>	30.998	39.876	26.713	-	26.713	19.473	-	-	-	0.000	117.060
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The United States Research Laboratory (USRL)/Capability Concept project, previously referred to as the JSF Joint Reprogramming Center (JRC)/Capability Concept is required to adequately develop and maintain Operational Sensor Engineering F-35(V) Mission Data to support United States Navy (USN), United States Marine Corps (USMC), and United States Air Force (USAF) multi-mission objectives. USRL will allow rapid operational response to threat changes. Funding for this project unit (PU) (3194) is provided specifically for:

- Aircraft sensor function and combat identification
- Conducting Offensive Identification/Jamming of potential threats
- Providing self defense against surface threats, air, and missile threats
- Detecting and identifying targets, to include moving land, air, and missile targets
- Providing mission planning to ensure aircraft survivability
- Conducting offensive operations against surface threats
- Conducting sensor management and information processing
- Software development for this requirement is funded through the F-35 Joint Strike Fighter SDD baseline

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

	FY 2010	FY 2011	FY 2012
Title: USRL Build Up	25.365	29.876	14.213
Articles:	0	0	0
FY 2010 Accomplishments: Provided funds to Lockheed Martin Aero in support of reprogramming techniques, development and verification capacity required to adjust to emergent threats, and validate system effectiveness to increase survivability of the weapon system.			
FY 2011 Plans: Provide funds to Lockheed Martin Aero in support of reprogramming techniques, development and verification capacity required to adjust to emergent threats, and validate system effectiveness to increase survivability of the weapon system.			
FY 2012 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy	DATE: February 2011
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604800N: <i>JT Strike Fighter (JSF) - EMD</i>	PROJECT 3194: <i>Joint Reprogramming Center</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Provide funds to Lockheed Martin Aero in support of reprogramming techniques, development and verification capacity required to adjust to emergent threats, and validate system effectiveness to increase survivability of the weapon system. Perform USRL Stand-up testing and acceptance tasks.			
Title: Development Support	5.633	10.000	12.500
Articles:	0	0	0
FY 2010 Accomplishments: Continued System Design and Demonstration (SDD) Systems Engineering (SE) including systems operations requirements analysis, program integration, requirements integration, and interoperability support of the USRL (previously called the Joint Reprogramming Center).			
FY 2011 Plans: Continue SDD SE including systems operations requirements analysis, program integration, requirements integration, and interoperability support of the United States Reprogramming Laboratory USRL.			
FY 2012 Plans: Continue SDD SE including systems operations requirements analysis, program integration, requirements integration, and interoperability support of the USRL.			
Accomplishments/Planned Programs Subtotals	30.998	39.876	26.713

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

N/A

D. Acquisition Strategy

The Joint Reprogramming Capability is a subset of the JSF Program and falls within the JSF acquisition strategy. JRC is needed to support scheduled Initial Operational Capability dates (and supporting test activity) for the three JSF variants. To that end, a concept of operations is being developed for JRC to address Mission Data development and verification/validation/testing and to merge service unique requirements into Joint processes/procedures. Previously envisaged as a single facility, JRC now is comprised of two distinct facilities under the JRC concept. The USRL will support U.S. Joint Service reprogramming requirements; the Partner Reprogramming Laboratory will focus on International Partner areas of interest.

Inter-Service collaboration is ongoing to formalize the USRL requirements planning process and will eliminate duplication of effort, will maximize technology to improve configuration control, will employ advance networks, and will ensure the implementation of an enterprise (single shared database) solution. By capitalizing on legacy platform synergy, operational mission data intellect, proven processes, and existing reprogramming center resources, this approach also will improve efficiencies. A Joint Command reprogramming authority will determine/manage reprogramming priorities and implementation authority.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604800N: <i>JT Strike Fighter (JSF) - EMD</i>	PROJECT 3194: <i>Joint Reprogramming Center</i>

USRL Mission data development strategy is based upon an assessment of legacy systems, F-22 data, corporate expertise of Eglin/Pt Mugu personnel, adjusted cost and schedule projections keyed to complexity of multi-variant and multi-mission aircraft, JSF-specific utilization of multiple sources of non-sustained disparate, raw, intelligence data, development of threat assessment - metrics and build-up of real-world scenarios for systems verification and validation. These efforts support JSF operational requirements, interoperability, and fratricide mitigation.

Although the F-35 JSF SDD Program has contracted with Lockheed Martin (LM) and Pratt & Whitney for the SDD of the JSF, LM does not have the laboratory space availability or expertise to perform operational evaluation of lab and flight test data and support field recommendations to the level needed. The complexity and magnitude of JSF mission data loads drives the decision to utilize government and contractor resources to design and develop a joint-Service reprogramming facility at Eglin Air Force Base.

E. Performance Metrics

USRL Stand-up - 3rd Quarter FY 12

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604800N: <i>JT Strike Fighter (JSF) - EMD</i>	PROJECT 3194: <i>Joint Reprogramming Center</i>
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Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary H/W Development	C/CPAF	Lockheed Martin:Ft. Worth, Texas	55.184	28.624	Oct 2010	8.206	Oct 2011	-		8.206	6.423	98.437	50.266
Primary H/W Development Award Fee	C/CPAF	Lockheed Martin:Ft. Worth, Texas	-	1.252	Sep 2011	6.007	Sep 2012	-		6.007	0.250	7.509	7.509
Subtotal			55.184	29.876		14.213		-		14.213	6.673	105.946	57.775

Remarks
Target Value of Contract differs from Total cost because the Lockheed Martin contract has not been modified to reflect planned funding allocation.

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Support	WR	NAWCWD:China Lake California	8.633	10.000	Oct 2010	12.500	Oct 2011	-		12.500	12.800	43.933	
Subtotal			8.633	10.000		12.500		-		12.500	12.800	43.933	

	Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals		63.817	39.876		26.713		-	26.713	19.473	149.879	

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604800N: <i>JT Strike Fighter (JSF) - EMD</i>	PROJECT 3194: <i>Joint Reprogramming Center</i>

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604800N: <i>JT Strike Fighter (JSF) - EMD</i>	PROJECT 3194: <i>Joint Reprogramming Center</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>JSF United States Research Laboratoty (USRL)</i>				
MILCON at Eglin AFB: USRL: Facility Construction	1	2010	3	2010
MILCON at Eglin AFB: USRL: Facility Accreditation	4	2010	4	2010
MILCON at Eglin AFB: USRL: Hardware Installation	1	2011	1	2012
USRL Implementation: USRL Standup: USRL Standup	3	2012	3	2012
USRL Implementation: USRL Standup: USRL Design Verification and Validation Facility (WF) and Reprogramming Facility (RF) Work station development, integration, and ready to standup	1	2010	1	2012
Electronic Warfare Verificatin Station: Development	1	2010	4	2010
Electronic Warfare Verificatin Station: Integration/Install	1	2011	4	2012
Electronic Warfare Verificatin Station: AcceptanceTest Program (ATP)	1	2013	2	2013

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 5: <i>Development & Demonstration (SDD)</i>			R-1 ITEM NOMENCLATURE PE 0604800N: <i>JT Strike Fighter (JSF) - EMD</i>				PROJECT 9999: <i>Congressional Adds</i>				
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
9999: <i>Congressional Adds</i>	214.108	-	-	-	-	-	-	-	-	0.000	214.108
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Congressional Add.

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

	FY 2010	FY 2011
Congressional Add: Maintain Dev Of 2nd Source For Engine	214.108	-
FY 2010 Accomplishments: Continued development of 2nd source by F-35 Lightning II engine General Electric/Fighter Engine Team and Government Team. Funding continued the Fighter Engineering Team (General Electric/Rolls Royce) F136 development for a second, interchangeable, Joint Strike Fighter engine for competition in production (previously begun in associated Program Element 0603800F). Efforts included technical technology maturation, engine testing, autonomic logistics and integration.		
Congressional Adds Subtotals	214.108	-

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

N/A

D. Acquisition Strategy

Not required for Congressional Add.

E. Performance Metrics

Not required for Congressional Add.