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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force	DATE: February 2011
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APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604800F: <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
Total Program Element	2,033.521	883.773	1,387.926	-	1,387.926	1,198.293	933.452	608.211	361.064	Continuing	Continuing
653831: <i>Joint Strike Fighter</i>	2,033.521	883.773	1,387.926	-	1,387.926	1,198.293	933.452	608.211	361.064	Continuing	Continuing

Note

Totals include funding for PRCP Program Number 198, Joint Strike Fighter.

Funding in FY11 erroneously requested in the FY11PB for PE 0207142F, Joint Strike Fighter Squadrons - Project 675294 Theater Air Control System Improvement - Radar (TACSI-R), is included in total funding spreads in Exhibits R-2A and R-3. A technical adjustment of \$159,837,000 has been requested. Funding has been shifted to this PE in Congressional marks.

The program funding includes reductions for overhead reduction efficiencies that are not intended to impact program content. The efficiencies reduction totals \$.011M in FY12.

A. Mission Description and Budget Item Justification

The F-35 Lightning II Joint Strike Fighter 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 (7) other International countries, and four (4) Foreign Military Sales cases are participants in the JSF program. The top-line Program Element reflects USAF F-35A Conventional Take-Off and Landing (CTOL) 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 contribution is a roughly equal contribution of annual funding by the USN and USMC.

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 flight test aircraft reflects the schedule 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 article
FY09: 1 STOVL flight test article; 2 CTOL ground test articles
FY10: 6 flight test articles: 3 CTOL, 2 STOVL, 1 Carrier Variants (CV); 3 ground test articles: 1 STOVL, 2 CV
FY11: 4 flight test articles: 1 CTOL, 1 STOVL, 2 CV
FY12: 1 CV flight test article

BA5 - This program is in Budget Activity 5, System Development and

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Demonstration (SDD) because it has passed Milestone B approval and is conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production.

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	2,072.897	883.773	1,028.424	-	1,028.424
Current President's Budget	2,033.521	883.773	1,387.926	-	1,387.926
Total Adjustments	-39.376	-	359.502	-	359.502
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-30.727	-			
• Other Adjustments	-8.649	-	359.502	-	359.502

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

Project: 653831: *Joint Strike Fighter*

Congressional Add: *F136 Propulsion System*

Congressional Add Subtotals for Project: 653831

Congressional Add Totals for all Projects

FY 2010	FY 2011
415.918	-
415.918	-
415.918	-

Change Summary Explanation

Significant changes to schedule reflect program restructure resulting from a critical Nunn-McCurdy breach and Acquisition Decision Memorandum guidance (dated 2 Jun 2010).

In FY10, \$8.649M for General Congressional Reduction.

In FY12, \$270.071M was moved from PE 0207142F, "Joint Strike Fighter Squadrons", to PE 0604800F, "Joint Strike Fighter EMD". This funding was erroneously requested in PE 0207142F, "Joint Strike Fighter Squadrons" in the FY11PB. \$89.431M was added to the program due to the Nunn-McCurdy restructure.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force								DATE: February 2011				
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604800F: Joint Strike Fighter EMD				PROJECT 653831: Joint Strike Fighter				
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	
653831: Joint Strike Fighter	2,033.521	883.773	1,387.926	-	1,387.926	1,198.293	933.452	608.211	361.064	Continuing	Continuing	
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0			
Note												
Note: Total cost including USN, International partner contributions and USAF funding are: FY10 \$3,998.209M, FY11 \$2,472.489M and FY12 \$2,612.852M.												
A. Mission Description and Budget Item Justification												
The F-35 Lightning II Joint Strike Fighter 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 (7) other International countries, and four (4) Foreign Military Sales cases are participants in the JSF program. The top-line Program Element reflects USAF F-35A Conventional Take-Off and Landing (CTOL) 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 contribution is a roughly equal contribution of annual funding by the USN and USMC.												
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 flight test aircraft reflects the schedule first flight of each flight test asset or production line roll out of each ground test asset:												
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FY10: 6 flight test articles: 3 CTOL, 2 STOVL, 1 Carrier Variants (CV); 3 ground test articles: 1 STOVL, 2 CV												
FY11: 4 flight test articles: 1 CTOL, 1 STOVL, 2 CV												
FY12: 1 CV flight test article												
BA5 - This program is in Budget Activity 5, System Development and Demonstration (SDD) because it has passed Milestone B approval and is conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production.												
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: System Development and Demonstration								2,836.180	1,648.472	1,751.553	-	1,751.553

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B. Accomplishments/Planned Programs (\$ in Millions)						
		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
<p>Description: SDD execution of the Air System (Lockheed Martin) including International Commonality Effort; includes airframe, vehicle and mission systems, autonomic logistics, systems engineering & test efforts.</p> <p>FY 2010 Accomplishments: Continued System Development and Demonstration (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.</p> <p>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.</p> <p>FY 2012 Base 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.</p> <p>FY 2012 OCO Plans:</p>						
<p>Title: F135 Propulsion System</p> <p>Description: SDD execution of the F135 Propulsion System (Pratt & Whitney) using International Commonality Effort; includes testing, autonomic logistics, integration & performing technology maturation efforts.</p> <p>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.</p> <p>FY 2011 Plans: Continue SDD execution of the F135 Propulsion System with Pratt & Whitney that included engine testing, autonomic logistics, integration and performing technology maturation efforts.</p> <p>FY 2012 Base Plans:</p>		458.329	360.000	360.000	-	360.000

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Continue SDD execution of the F135 Propulsion System with Pratt & Whitney that included engine testing, autonomic logistics, integration and performing technology maturation efforts. FY 2012 OCO Plans:						
Title: Systems Engineering Description: SDD Systems Engineering (SE) including systems operations requirements analysis, program integration, requirements integration, and interoperability support. FY 2010 Accomplishments: Continued SDD Systems Engineering that includes systems operations requirements analysis, program integration, requirements integration, and interoperability support. FY 2011 Plans: Continue SDD Systems Engineering that includes systems operations requirements analysis, program integration, requirements integration, and interoperability support. FY 2012 Base Plans: Continue SDD Systems Engineering that included systems operations requirements analysis, oprogram integration, requirements integration, and interoperability support. FY 2012 OCO Plans:		28.176	39.264	45.457	-	45.457
Title: Development Test & Evaluation Description: Government Development Test and Evaluation (DT&E)/Operational Testing in support of first flight of test aircraft. Elements of DT&E include preparation for flight testing, weapons integration testing. FY 2010 Accomplishments: Continued Government Development Test and Evaluation (DT&E)/Operational Testing in support of flight test aircraft. Elements of DT&E included preparation for flight testing, weapons integration testing. Continued Block I DT&E and commenced Block II DT&E. FY 2011 Plans: Continue government Development Test and Evaluation (DT&E)/Operational Evaluation in support of envelope expansion, low rate initial production aircraft deliveries, and initial service training. Continue flight sciences testing of CTOL, STOVL, and CV variants to expand the air vehicle envelope to support mission systems testing.		149.547	281.000	323.150	-	323.150

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APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)		R-1 ITEM NOMENCLATURE PE 0604800F: Joint Strike Fighter EMD		PROJECT 653831: Joint Strike Fighter	
B. Accomplishments/Planned Programs (\$ in Millions)					
	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
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 Base Plans: Continue government Development Test and Evaluation (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. FY 2012 OCO Plans:					
Title: Development Support Description: SDD Support efforts for airframe, air vehicle systems, mission systems, weapons integration, mission support, and autonomic logistics development activities. FY 2010 Accomplishments: 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 Base Plans: Continue SDD Support efforts for airframe, air vehicle systems, mission systems, weapons integration, mission support, and autonomic logistics development activities. FY 2012 OCO Plans:	121.579	158.291	237.128	-	237.128
Title: Program Management Support Description: Management support services, civilian pay, travel, engineering technical services, and studies analyses and evaluations in support of program objectives. FY 2010 Accomplishments:	71.478	75.478	103.447	-	103.447

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APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604800F: Joint Strike Fighter EMD	PROJECT 653831: Joint Strike Fighter				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
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 Base Plans: Continue management support services, travel, engineering technical services, and studies analyses and evaluations in support of program objectives. Initiate use of RDT&E for civilian pay. FY 2012 OCO Plans:						
Title: Follow-on Development Description: Follow-on Development Block IV capabilities to include logistics, weapons, sensors, survivability, and upgrades required to support F-35 variants. Efforts will support aircraft and engine delivery to services and partner nations commencing in 2015 and will integrate urgent operationally relevant requirements post-Initial Operational Capability (IOC). Funding shown does not include USAF funding which is in RDT&E PE 27142F. FY 2010 Accomplishments: FY 2011 Plans: Initiate follow-on development Block IV capabilities to include logistics, weapons, sensors, survivability, and upgrades required to support F-35 variants. Efforts will support aircraft and engine delivery to services and partner nations commencing in 2015 and will integrate urgent operationally relevant requirements post-Initial Operational Capability (IOC). FY 2012 Base Plans: Continue follow-on development Block IV capabilities to include logistics, weapons, sensors, survivability, and upgrades required to support F-35 variants. Efforts will support aircraft and engine delivery to services and partner nations commencing in 2015 and will integrate urgent operationally relevant requirements post-Initial Operational Capability (IOC). FY 2012 OCO Plans:		-	57.724	37.874	-	37.874
Accomplishments/Planned Programs Subtotals		3,665.289	2,620.229	2,858.609	-	2,858.609

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B. Accomplishments/Planned Programs (\$ in Millions)							FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	
Balancer Line							2,047.686	1,736.456	1,470.681	1,470.681	1,470.681	
Air Force Subtotals							1,617.603	883.773	1,387.928	-1,470.681	1,387.928	
							FY 2010	FY 2011				
Congressional Add: F136 Propulsion System							415.918	-				
FY 2010 Accomplishments: Congressional Add funding for continued F136 Propulsion System development effort.												
FY 2011 Plans:												
Congressional Adds Subtotals							415.918	-				
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	
• PE 0604800N: USN RDT&E	1,855.177	667.915	650.773	0.000	650.773	725.043	706.512	588.704	462.301	Continuing	Continuing	
• PE 0604800M: USMC RDT&E	0.000	667.916	670.723	0.000	670.723	741.600	703.575	585.759	459.571	Continuing	Continuing	
• PE 0604800N (2): USN RDT&E - USRL	30.998	39.876	26.713	0.000	26.713	19.473	0.000	0.000	0.000	Continuing	Continuing	
• PE not applicable: Int'l Partner RDT&E SDD/FoD	161.511	200.912	122.474	0.000	122.474	144.220	2.800	0.000	0.000	Continuing	Continuing	
• PE 0207142F: USAF APAF	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	Continuing	Continuing	
• PE 0204146N: USN APN	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	Continuing	Continuing	
• PE 0204146M: USMC APN	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	Continuing	Continuing	
• PE not applicable (7): Int'l Partner Procurement	727.462	733.662	1,372.792	0.000	1,372.792	3,010.273	4,791.824	7,367.035	6,817.101	Continuing	Continuing	
• PE 426500: USN OPN	3.017	5.410	5.665	0.000	5.665	3.848	4.895	5.615	5.670	Continuing	Continuing	
• PE 0207142F (9): USAF Initial Spares and Repair Parts APAF	129.296	263.573	151.469	0.000	151.469	322.076	340.956	508.599	770.495	Continuing	Continuing	
• PE 0204146N (10): USN Initial Spares and Repair Parts APN	248.165	107.030	28.396	0.000	28.396	76.515	144.405	137.495	56.260	Continuing	Continuing	
• PE 0204146M (11): USMC Initial Spares and Repair Parts APN	0.000	164.135	66.430	0.000	66.430	33.290	63.484	124.794	224.075	Continuing	Continuing	

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APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604800F: Joint Strike Fighter EMD				PROJECT 653831: Joint Strike Fighter			
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
• PE 0207142F (12): USAF MILCON	67.529	139.640	31.050	0.000	31.050	89.000	72.000	69.050	65.000	Continuing	Continuing
• PE 0212576N: USN MILCON	0.000	3.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• PE 0207142F (14): USAF Modifications	0.000	123.936	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• PE 0207142F (15): USAF RDT&E	0.000	57.724	47.841	0.000	47.841	132.495	131.844	129.164	201.765	Continuing	Continuing
D. Acquisition Strategy											
This Program Element continues development efforts budgeted in program element 0603800F prior to FY2002. Effective with the PB11 submission, F-35B (USMC) and F-35C (USN) budgets are reported against separate budget line items and program elements. Starting in FY11, F-35B is reported against the newly created program element 0604800M. The F-35C USN budget continues to report under program element 0604800N and the F-35A USAF budget continues to report under program element 0604800F.											
Activities in the prior phase of JSF centered around three distinct objectives to provide a sound foundation for the start of System Development & Demonstration (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; and											
(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 (LCC) at every stage. Each iteration of the 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 (ORD) in FY2000.											
A sizable technology maturation effort was conducted to reduce risk and life cycle 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.											

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<p>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, Short Take-Off and Vertical Landing (STOVL) hover and transition, and low speed handling qualities of their respective weapon system concepts. Pratt and Whitney provided propulsion hardware and engineering support. General Electric continued development of a second, interchangeable, engine for competition in production.</p> <p>Following evaluation of proposals and a favorable Milestone B decision, the JSF Program entered SDD on 26 October 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 2009 when program funding ended.</p> <p>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.</p> <p>These follow-on development efforts will be procured via cost type contracts. It is anticipated that the fee provisions will be used to target and motivate contractor performance. The new configurations will be incorporated into production, and, if required by the US Services or SDD International Partners, retrofitted to fielded aircraft under F-35 production and sustainment contracts. Similarly 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.</p> <p>The updated JSF Acquisition Strategy and program schedule were approved following the May 05 DAB. The April 2006 DAB authorized full funding for LRIP I procurement. USAF LRIP I Advanced Procurement funding was awarded during FY 2006, followed by the USAF Regular Procurement award in FY 2007. USAF and DoN Advanced Procurement funding for LRIP II was awarded during FY07. USAF LRIP II full-funding contract award occurred in April 08. DoN LRIP II full funding contract was awarded 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 advanced 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 FY 10. LRIP V full funding contract planned for 4th Quarter FY 11.</p> <p>The F-35 Program experienced a Nunn-McCurdy breach during FY10, was restructured for the PB 2011 budget, and was recertified by OSD Acquisition Decision Memorandum (2 June 2010). Milestone B (granted in Oct 2001) was rescinded and a new review will occur in Spring 2011. Program subsequently was extended by 2 years to accommodate completion of DT/OT in FY 18.</p>		
<u>E. Performance Metrics</u>		
Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force											DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT						
3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)				PE 0604800F: Joint Strike Fighter EMD				653831: Joint Strike Fighter						
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	
Lockheed Martin - 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	27,514.657	
Lockheed Martin - IDIQ D0022	SS/Various	Lockheed Martin:Ft. Worth, TX	6.982	4.937	Oct 2010	4.000	Oct 2011	-		4.000	6.500	22.419	0.000	
Lockheed Martin - IDIQ D0009	SS/Various	Lockheed Martin:Ft. Worth, TX	16.759	-		-		-		-	0.000	16.759	0.000	
Lockheed Martin - BOA	SS/Various	Lockheed Martin:Ft. Worth, TX	3.511	-		-		-		-	0.000	3.511	0.000	
Pratt & Whitney - SDD	SS/CPAF	Pratt &Whitney:Hartford, CT	6,530.993	360.000	Oct 2010	360.000	Oct 2011	-		360.000	916.462	8,167.455	6,668.763	
Pratt & Whitney - Close Out Contract C0132	SS/CPFF	Pratt &Whitney:Hartford, CT	1.364	-		-		-		-	0.000	1.364	0.000	
Pratt & Whitney - CDP Close Out Contract C0050	SS/CPFF	Pratt &Whitney:Hartford, CT	2.211	-		-		-		-	0.000	2.211	0.000	
Pratt & Whitney - BOA	SS/Various	Pratt &Whitney:Hartford, CT	35.983	-		-		-		-	0.000	35.983	0.000	
Pratt & Whitney - IDIQ	SS/Various	Pratt &Whitney:Hartford, CT	10.925	-		-		-		-	0.000	10.925	0.000	
General Electric - SDD	SS/CPAF	FET:Cincinnati, OH	2,086.285	-		-		-		-	0.000	2,086.285	2,466.974	
General Electric - IDIQ D0009	SS/Various	FET:Cincinnati, OH	0.264	-		-		-		-	0.000	0.264	0.000	
General Electric - IDIQ D0074	SS/Various	FET:Cincinnati, OH	4.175	-		-		-		-	0.000	4.175	0.000	
General Electric - F136 Transition	SS/Various	FET:Cincinnati, OH	100.400	-		-		-		-	0.000	100.400	0.000	
General Electric - BOA	SS/Various	FET:Cincinnati, OH	5.548	-		-		-		-	0.000	5.548	0.000	
General Electric - Phase IIIb	SS/Various	FET:Cincinnati, OH	382.753	-		-		-		-	0.000	382.753	0.000	
Systems Engineering	Various	Various:Various,	253.788	39.264	Oct 2010	45.457	Oct 2011	-		45.457	109.670	448.180	0.000	
Lockheed Martin - Follow-on Development	SS/CPAF	Lockheed Martin:Ft. Worth, TX	-	54.845	Oct 2010	32.712	Oct 2011	-		32.712	234.757	322.314	0.000	
Pratt & Whitney - Follow-on Development	SS/CPAF	Pratt &Whitney:Hartford, CT	-	2.000	Oct 2010	2.000	Oct 2011	-		2.000	8.000	12.000	0.000	
	Various	Various:Various,	-	0.067	Oct 2010	0.688	Oct 2011	-		0.688	2.985	3.740	0.000	

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force											DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT						
3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)				PE 0604800F: Joint Strike Fighter EMD				653831: Joint Strike Fighter						
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	
Systems Engineering - Follow-on Development														
Subtotal			35,377.678	2,104.648		2,192.410		-		2,192.410	5,849.019	45,523.756	36,650.394	
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	
AFFTC/Eglin	Various	Various:Various,	90.108	14.873	Oct 2010	14.929	Oct 2011	-		14.929	48.545	168.455	0.000	
ASC/AFRL	Various	ASC/AFRL:Wright Patterson AFB, OH	45.793	3.768	Oct 2010	7.625	Oct 2011	-		7.625	39.553	96.739	0.000	
ASC Civ Pay	Various	ASC:Wright Patterson AFB, OH	-	-		19.554	Oct 2011	-		19.554	126.714	146.268	0.000	
Bolling AFB	Various	Bolling AFB:Washington DC,	6.775	-		-		-		-	0.000	6.775	0.000	
DMEA	Various	DMEA:Wright Patterson AFB:Dayton, OH	4.112	10.000	Oct 2010	25.500	Oct 2011	-		25.500	0.000	39.612	0.000	
ESC	Various	ESC:Hanscom AFB, MA	6.848	0.305	Oct 2010	0.376	Oct 2011	-		0.376	0.480	8.009	0.000	
AEDC/Fuel	Various	Various:Various,	131.403	38.063	Oct 2010	58.764	Oct 2011	-		58.764	58.230	286.460	0.000	
NADEP Jacksonville	Various	NADEP:Jacksonville, FL	6.323	1.632	Oct 2010	1.985	Oct 2011	-		1.985	6.255	16.195	0.000	
Miscellaneous	Various	Various:Various,	206.823	21.100	Oct 2010	21.298	Oct 2011	-		21.298	46.457	295.678	0.000	
NAWC China Lake	Various	Various:Ridge Crest, CA	93.603	28.874	Oct 2010	33.068	Oct 2011	-		33.068	56.887	212.432	0.000	
NAWC TSD	Various	Various:Orlando, FL	7.750	1.585	Oct 2010	2.362	Oct 2011	-		2.362	4.854	16.551	0.000	
NAWC Patuxent River	Various	NAWC AD:Patuxent River, MD	267.856	37.606	Oct 2010	51.057	Oct 2011	-		51.057	122.972	479.491	0.000	
NSWC	Various	Various:Various,	3.360	0.455	Oct 2010	0.570	Oct 2011	-		0.570	0.190	4.575	0.000	
SPAWAR	Various	Various:Various,	6.525	0.030	Oct 2010	0.038	Oct 2011	-		0.038	0.134	6.727	0.000	
	Various	Various:Various,	24.187	-		-		-		-	0.000	24.187	0.000	

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force											DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)					R-1 ITEM NOMENCLATURE PE 0604800F: Joint Strike Fighter EMD				PROJECT 653831: Joint Strike Fighter					
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	
SBIR Technology Insertion Congressional Add														
Misc/Other Follow-on Development (FoD)	Various	Various:Various,	-	-		0.063	Oct 2011	-		0.063	0.147	0.210	0.000	
NAWC/China Lake FoD	Various	Various:Various,	-	0.327	Oct 2010	0.494	Oct 2011	-		0.494	15.223	16.044	0.000	
NAWC Patuxent River FoD	Various	Various:Patuxent River,	-	0.485	Oct 2010	1.917	Oct 2011	-		1.917	28.279	30.681	0.000	
Subtotal			901.466	159.103		239.600		-		239.600	554.920	1,855.089	0.000	
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	
NAWC Patuxent	Various	NAWC AD:Patuxent River, MD	226.209	121.877	Oct 2010	130.731	Oct 2011	-		130.731	732.191	1,211.008	0.000	
NAWC China Lake	Various	NAWC WD:Ridgecrest, CA	16.220	11.409	Oct 2010	11.637	Oct 2011	-		11.637	23.771	63.037	0.000	
Edwards AFB	Various	Edwards AFB:Edwards AFB, CA	283.450	86.850	Oct 2010	94.841	Oct 2011	-		94.841	256.139	721.280	0.000	
Other (including Classified PIDs)	Various	Various:Various,	15.691	19.395	Oct 2010	26.441	Oct 2011	-		26.441	28.050	89.577	0.000	
WEPS/Eglin	Various	WEPS:Eglin AFB, FL	20.485	14.150	Oct 2010	2.600	Oct 2011	-		2.600	2.800	40.035	0.000	
JITC	Various	Various:Various,	0.503	-		-		-		-	0.000	0.503	0.000	
OT - AFOTEC/AFFTC	Various	Various:Various,	78.482	23.819	Oct 2010	52.200	Oct 2011	-		52.200	382.840	537.341	0.000	
OT - JITC/OPTEV	Various	Various:Various,	3.841	3.500	Oct 2010	4.700	Oct 2011	-		4.700	35.214	47.255	0.000	
Subtotal			644.881	281.000		323.150		-		323.150	1,461.005	2,710.036	0.000	

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force										DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604800F: Joint Strike Fighter EMD				PROJECT 653831: Joint Strike Fighter					
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
Business Integration - Cost - ACT I	SS/CPFF	ACT I:Arlington, VA	2.981	2.833	Nov 2009	3.418	Oct 2011	-		3.418	12.872	22.104	0.000
Security - Mantech	C/TBD	Mantech:Arlington, VA	42.487	7.015	Nov 2010	8.366	Oct 2011	-		8.366	35.336	93.204	0.000
Autolog - SEIT - DRC	C/CPFF	DRC:Arlington, VA	5.916	3.000	Nov 2010	-		-		-	0.000	8.916	0.000
Chief Engineer - First Principles	C/CPFF	First Principles:Arlington, VA	1.398	1.523	Nov 2010	1.936	Oct 2011	-		1.936	4.105	8.962	0.000
ASC Civilian Pay	Various	ASC:Wright Patterson AFB, OH	-	-		3.500	Oct 2011	-		3.500	21.000	24.500	0.000
Operations - Wyle	C/CPFF	Wyle:Arlington, VA	78.871	19.305	Nov 2010	27.418		-		27.418	93.283	218.877	0.000
Operations - SAFTAS	C/CPAF	SAFTAS:Arlington, VA	77.789	18.200	Nov 2010	26.600	Oct 2011	-		26.600	91.000	213.589	0.000
Operations - Stanley	C/CPAF	Stanley:Arlington, VA	131.456	19.800	Nov 2010	27.940	Oct 2011	-		27.940	97.660	276.856	0.000
GE F136 Congressional Studies	Various	Various:Various,	0.800	-		-		-		-	0.000	0.800	0.000
Travel and Misc	Various	Various:Various,	11.740	3.802	Oct 2010	4.269	Oct 2011	-		4.269	17.392	37.203	0.000
Subtotal			353.438	75.478		103.447		-		103.447	372.648	905.011	0.000
			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		2,858.607		-		2,858.607	8,237.592	50,993.892	36,650.394
Balancer Line				1,736.456		1,470.681		1,470.681		1,470.681			
Project Cost Totals			37,277.463	883.773		1,387.926		-1,470.681		1,387.926	8,237.592	50,993.892	36,650.394
Remarks													
Remarks: Prior Years reflect \$14,463,049 USAF/\$14,381,550 USN/\$4,315,173 International/Total \$33,159,772 FY 2010 reflects \$2,033,521 USAF/\$1,886,175 USN/\$161,511 International/Total \$4,081,207 FY 2011 reflects \$1,043,610 USAF/\$707,791 USN/\$667,916 USMC/\$200,912 International/Total \$2,620,229 (USAF total includes requested technical adjustment from PE 27142F) FY 2012 reflects \$1,387,926 USAF/\$677,486 USN/\$670,723 USMC/\$122,274 International/Total \$2,858,609													
NOTE: Totals may not add correctly due to rounding.													

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604800F: <i>Joint Strike Fighter EMD</i>	PROJECT 653831: <i>Joint Strike Fighter</i>

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Air Force			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604800F: <i>Joint Strike Fighter EMD</i>	PROJECT 653831: <i>Joint Strike Fighter</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Acquisition Milestone: Carrier Variant First Flight	3	2010	3	2010
Acquisition Milestones: Services Initial Operational Capability	1	2014	4	2016
Acquisitional Milestones: Full Rate Production Decision Review	3	2016	3	2016
Acquisition Milestones: Follow-on Development	1	2012	4	2016
Acquisition Milestones: Dual Capability Aircraft Integration	1	2012	4	2016
Contract Award: Low Rate Initial Production (LRIP) 4 Full Funding	4	2010	4	2010
Contract Award: LRIP 5 Long Lead	3	2010	3	2010
Contract Award: LRIP 5 Full Funding	4	2011	4	2011
Contract Award: LRIP 6 Long Lead	2	2011	2	2011
Contract Award: LRIP 6 Full Funding	3	2012	3	2012
Contract Award: LRIP 7 Long Lead	2	2012	2	2012
Contract Award: LRIP 7 Full Funding	3	2013	3	2013
Contract Award: LRIP 8 Long Lead	2	2013	2	2013
Contract Award: LRIP LRIP 8 Full Funding	3	2014	3	2014
Contract Award: LRIP 9 Long Lead	2	2014	2	2014
Contract Award: LRIP 9 Full Funding	3	2015	3	2015
Production Deliveries: LRIP 1 Delivery (APAF)	2	2011	2	2011
Production Deliveries: LRIP 2 Delivery (APAF, APN)	3	2011	4	2011
Production Deliveries: LRIP 3 Delivery (APAF, APN, UK Production)	1	2011	4	2012
Production Deliveries: LRIP 4 Delivery (APAF, APN, UK Production)	4	2012	2	2013
Production Deliveries: LRIP 5 Delivery (APAF, APN, UK Production)	3	2013	2	2014
Production Deliveries: LRIP 6 Delivery (APAF, APN, UK Production)	2	2014	2	2015

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Air Force			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604800F: <i>Joint Strike Fighter EMD</i>	PROJECT 653831: <i>Joint Strike Fighter</i>	

Events	Start		End	
	Quarter	Year	Quarter	Year
Production Deliveries: LRIP 7 Delivery (APAF, APN, UK Production)	2	2015	2	2016
Production Deliveries: LRIP 8 (APAF, APN, UK Production)	2	2016	4	2016
Sustainment: Performance Based Logistics (PBL)	2	2012	4	2016
Test & Evaluation: Conventional Take-off and Landing (CTOL) - AF	1	2010	2	2016
Test & Evaluation: Short Take-off and Landing (STOVL) - BF	1	2010	4	2016
Test & Evaluation: Carrier Variant (CV) - CV	4	2010	2	2016
Test & Evaluation: Block 2B	3	2012	4	2014
Test & Evaluation: Block 3C	3	2014	2	2016
Test & Evaluation: Mission Capability	1	2010	3	2016
Test & Evaluation: Initial Operational Test and Evaluation (IOT&E)	2	2014	4	2016
System Development Reviews: Defense Acquisition Board (DAB) Program Review FY10	1	2010	1	2010
System Development Reviews: DAB Program Review FY11	1	2011	1	2011
System Development Reviews: DAB Program Review FY12	1	2012	1	2012
System Development Reviews: DAB Program Review FY13	1	2013	1	2013
System Development Reviews: DAB Program Review FY14	1	2014	1	2014
System Development Reviews: DAB Program Review FY15	1	2015	1	2015
System Development Reviews: DAB Program Review FY16	1	2016	1	2016

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