Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

3600: Research, Development, Test & Evaluation, Air Force

PE 0207142F: Joint Strike Fighter Squadrons

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	0.000	0.000	217.561	0.000	217.561	102.144	113.811	83.324	54.463	Continuing	Continuing
675346: <i>F-35</i>	0.000	0.000	217.561	0.000	217.561	102.144	113.811	83.324	54.463	0.000	0.000

#### Note

PE0207142F is a new PE for Joint Strike Fighter (JSF) starting in FY11. PE0604800F is the primary USAF RDT&E funding for JSF.

#### A. Mission Description and Budget Item Justification

The Joint Strike Fighter (JSF) program will develop and deploy a family of highly common, affordable next generation, stealthy, multi-role strike fighter 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 and seven other international countries, and three Foreign Military Sales cases are participants in the JSF program. Follow-on Development will continue the evolutionary approach of SDD by providing capability enhancements though a combined incremental and spiral methodology. The Joint Capabilities Integration and Development System (JCIDS) and Defense Acquisition System (DAS) shall provide the framework and basis for defining, managing and acquiring the envisioned F-35 enhancements.

This program is funded under Operational Systems Development because it funds efforts to upgrade systems for full rate production.

Funding in BPAC 675294 for FY12 and beyond has been loaded to PE 0207142F in error, and should be in PE 0604800F.

Due to an inadvertent error the Air Force a technical adjustment transferring \$159,837,000 from R-1 Line No. 135 "F-35 Squadrons" to Line No. 81 "Joint Strike Fighter (JSF)". The following exhibits reflect the requested transfer amounts.

**Exhibit R-2**, **RDT&E Budget Item Justification:** PB 2011 Air Force **DATE:** February 2010

#### APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

3600: Research, Development, Test & Evaluation, Air Force

PE 0207142F: Joint Strike Fighter Squadrons

BA 7: Operational Systems Development

## B. Program Change Summary (\$ in Millions)

	FY 2009	FY 2010	<b>FY 2011 Base</b>	FY 2011 OCO	FY 2011 Total
Previous President's Budget	0.000	0.000	0.000	0.000	0.000
Current President's Budget	0.000	0.000	217.561	0.000	217.561
Total Adjustments	0.000	0.000	217.561	0.000	217.561
<ul> <li>Congressional General Reductions</li> </ul>		0.000			
<ul> <li>Congressional Directed Reductions</li> </ul>		0.000			
<ul> <li>Congressional Rescissions</li> </ul>	0.000	0.000			
<ul> <li>Congressional Adds</li> </ul>		0.000			
<ul> <li>Congressional Directed Transfers</li> </ul>		0.000			
<ul> <li>Reprogrammings</li> </ul>	0.000	0.000			
<ul> <li>SBIR/STTR Transfer</li> </ul>	0.000	0.000			
<ul> <li>Other Adjustments</li> </ul>	0.000	0.000	217.561	0.000	217.561

# **Change Summary Explanation**

The FY 2010 President's Budget submittal did not reflect FY 2011through FY 2015 funding. Therefore, explanation of changes between the two budget positions cannot be made in a relevant manner.

FY11 and beyond funding for Block 4 development in the Follow-on Development phase is contained in BPAC 675346. Funding in BPAC 675294 for FY12 and beyond has been loaded to PE 0207142F in error, and should be in PE 0604800F.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

PROJECT

3600: Research, Development, Test & Evaluation, Air Force PE 0207142F: Joint Strike Fighter Squadrons 675346: F-35

BA 7: Operational Systems Development

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COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
675346: <i>F-35</i>	0.000	0.000	217.561	0.000	217.561	102.144	113.811	83.324	54.463	0.000	0.000
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

#### **Note**

PE0207142F is a new PE for Joint Strike Fighter (JSF) starting in FY11. PE0604800F is the primary RDT&E funding for JSF.

#### A. Mission Description and Budget Item Justification

The Joint Strike Fighter (JSF) program will develop and deploy a family of highly common, affordable next generation, stealthy, multi-role strike fighter 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 and seven other international countries, and three Foreign Military Sales cases are participants in the JSF program. Follow-on Development will continue the evolutionary approach of SDD by providing capability enhancements though a combined incremental and spiral methodology. The Joint Capabilities Integration and Development System (JCIDS) and Defense Acquisition System (DAS) shall provide the framework and basis for defining, managing and acquiring the envisioned F-35 enhancements.

This program is funded under Operational Systems Development because it funds efforts to upgrade systems for full rate production.

# B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
MAJOR THRUST: Follow-on development Block IV capabilities; includes logistics, weapons, security, sensors, survivability, upgrades & urgent operational requirements with 2014 delivery to services &	0.000	0.000	57.724	0.000	57.724
FY 2009 Accomplishments: In FY2009: Not Applicable					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0207142F: Joint Strike Fighter Squadrons

**PROJECT** 

675346: *F-35* 

# B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: In FY2010: Not Applicable					
FY 2011 Base Plans:  FY2011: initiate follow-on development Block IV aircraft capabilities to include logistics, security, and upgrades required to support F-35 engine variants. Efforts will support aircraft delivery to services and partner nations in 2014 and will integrate urgent operationally relevant requirements post-IOC.					
FY 2011 OCO Plans: In FY 2011 OCO: Not Applicable.					
Accomplishments/Planned Programs Subtotals	0.000	0.000	57.724	0.000	57.724

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

			FY 2011	FY 2011	FY 2011					Cost To	
<u>Line Item</u>	FY 2009	FY 2010	<u>Base</u>	000	<u>Total</u>	FY 2012	FY 2013	FY 2014	FY 2015	<b>Complete</b>	<b>Total Cost</b>
• PE 0604800F: <i>USAF RDT&amp;E</i>	1,743.569	2,072.897	1,043.610	0.000	1,043.610	1,028.424	649.759	233.991	47.213	0.000	0.000
• PE 0604800N: <i>USN RDT&amp;E</i>	1,675.776	1,916.431	667.915	0.000	667.915	594.004	529.826	375.897	134.676	0.000	0.000
• PE 0604800M: <i>USMC RDT&amp;E</i>	0.000	0.000	667.916	0.000	667.916	594.004	529.826	375.925	134.707	0.000	0.000
• PE 0604800N (1): USN RDT&E -	28.816	31.813	39.876	0.000	39.876	27.028	19.792	0.000	0.000	0.000	0.000
USRL											
PE not applicable: Int'l Partner	244.584	109.511	91.386	0.000	91.386	19.400	11.620	0.000	0.000	0.000	0.000
RDT&E											
• PE 0207142F: <i>USAF</i>	1,660.628	2,355.345	3,983.242	0.000	3,983.242	4,229.333	4,212.451	6,145.339	6,973.9831	36,362.822	0.000
Procurement											
• PE 0204146N: <i>USN</i>	1,692.965	4,464.251	1,886.988	0.000	1,886.988	2,012.008	2,636.771	2,467.155	2,764.547	27,964.270	0.000
Procurement											
	0.000	0.000	2,576.142	0.000	2,576.142	2,863.025	4,016.672	3,447.547	3,451.525	22,070.323	0.000

# **UNCLASSIFIED**

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force

#### APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development

PE 0207142F: Joint Strike Fighter Squadrons

675346: *F-35* 

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

G. Gallor i rogram i amanig Gallinia	<del>αι <b>y</b> (Ψ ιιι ινιιιι</del>	<u>,</u>									
			FY 2011	FY 2011	FY 2011					Cost To	
<u>Line Item</u>	FY 2009	FY 2010	<u>Base</u>	<u>000</u>	<u>Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Complete</u>	Total Cost
• PE 0204146M: <i>USMC</i>											
Procurement											
• PE not applicable (2): Int'l	874.014	629.965	1,936.600	0.000	1,936.600	4,690.200	5,737.700	7,893.900	7,898.740	0.000	0.000
Partner Procurement											
• PE 426500: USN Other	2.972	3.017	5.398	0.000	5.398	5.728	4.901	4.981	5.713	0.000	0.000
Procurement											
• PE 0207142F (3): USAF Initial	61.096	129.296	263.573	0.000	263.573	260.659	293.707	413.225	444.519	10,876.348	0.000
Spares and Repair Parts											
• PE 0204146N (4): USN Initial	182.508	248.191	107.030	0.000	107.030	92.216	178.496	194.183	192.599	2,049.006	0.000
Spares and Repair Parts											
• PE 0204146M (5): USMC Initial	0.000	0.000	164.135	0.000	164.135	136.957	311.553	325.794	324.437	1,718.297	0.000
Spares and Repair Parts											
• PE 0207142F (6): <i>USAF</i>	21.973	73.360	139.640	0.000	139.640	73.783	82.313	0.000	27.619	0.000	0.000
MILCON											
• PE 0212576N: <i>USN MILCON</i>	0.000	3.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
• PE 0207142F (7): <i>USAF</i>	0.000	0.000	123.936	0.000	123.936	8.319	5.047	3.461	31.472	0.000	0.000
Modifications											

# **D. Acquisition Strategy**

Follow-on Development will continue the evolutionary approach of SDD by providing capability enhancements though an incremental methodology. The Joint Capabilities Integration and Development System (JCIDS) and Defense Acquisition System (DAS) 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 stakeholders direction.

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 U.S. Services or SDD International Partners, retrofitted to fielded

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force	DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force 3A 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0207142F: Joint Strike Fighter Squadrons	<b>PROJECT</b> 675346: <i>F-35</i>
aircraft under F-35 production and sustainment contracts. Similar to Si Follow-On requirements development.	DD, BOAs and ID/IQ contracts may be used for tr	ade studies and analyses to supplement
E. Performance Metrics  Please refer to the Performance Base Budget Overview Book for informance performance goals and most importantly, how they contribute to		d how those resources are contributing to Air

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force

**DATE:** February 2010

**APPROPRIATION/BUDGET ACTIVITY** 

R-1 ITEM NOMENCLATURE

**PROJECT** 

3600: Research, Development, Test & Evaluation, Air Force

PE 0207142F: Joint Strike Fighter Squadrons

675346: *F-35* 

BA 7: Operational Systems Development

**Product Development (\$ in Millions)** 

				FY 2	FY 2010		FY 2011 Base		)11 O	FY 2011 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	C/CPAF	Lockheed Martin Ft Worth TX	0.000	0.000		53.336	Jan 2011	0.000		53.336	335.997	389.333	0.000
Pratt & Whitney	SS/CPAF	Pratt & Whitney Hartford CT	0.000	0.000		4.250	Jan 2011	0.000		4.250	9.000	13.250	0.000
Systems Engineering	Various/ Various	Various Various	0.000	0.000		0.038	Oct 2010	0.000		0.038	0.281	0.319	0.000
		Subtotal	0.000	0.000		57.624		0.000		57.624	345.278	402.902	0.000

#### Remarks

Test and Evaluation (\$ in Millions)

	(* ::::::::::::::::::::::::::::::::::::	,		FY 2	010	FY 2 Ba		FY 2		FY 2011 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
Edward AFB	Various/ Various	Edwards AFB California	0.000	0.000		0.100	Oct 2010	0.000		0.100	1.500	1.600	0.000
		Subtotal	0.000	0.000		0.100		0.000		0.100	1.500	1.600	0.000

#### Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force

**DATE**: February 2010

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0207142F: Joint Strike Fighter Squadrons

**PROJECT** 675346: *F-35* 

**Management Services (\$ in Millions)** 

				FY 2010			FY 2011 Base		011 O	FY 2011 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
Wyle	TBD/TBD	TBD TBD	0.000	0.000		0.000		0.000		0.000	1.347	1.347	5.617
SAFTAS	TBD/TBD	TBD TBD	0.000	0.000		0.000		0.000		0.000	5.617	5.617	0.000
	•	Subtotal	0.000	0.000		0.000		0.000		0.000	6.964	6.964	5.617

#### Remarks

	Total Prior Years Cost	FY 2010		2011 ise	FY 2	-	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000	57.724		0.000		57.724	353.742	411.466	5.617

#### Remarks

Total Prior Years Cost may include only FY 2009 data.

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0207142F: Joint Strike Fighter Squadrons

PROJECT

675346: *F-35* 



# JSF Top-Level Development Program Schedule

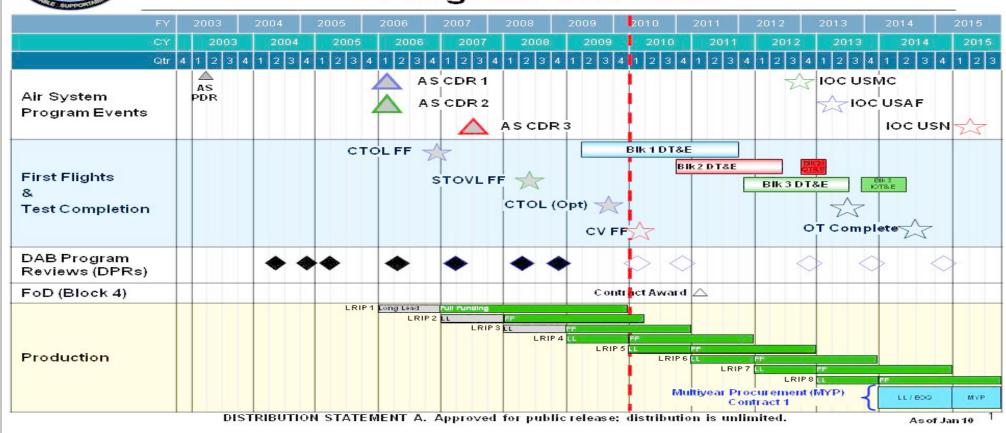


Exhibit R-4A, RDT&E Schedule Details: PB 2011 Air Force

APPROPRIATION/BUDGET ACTIVITY
3600: Research, Development, Test & Evaluation, Air Force
BA 7: Operational Systems Development

BA 7: Operational Systems Development

DATE: February 2010

R-1 ITEM NOMENCLATURE
PE 0207142F: Joint Strike Fighter Squadrons
675346: F-35

# Schedule Details

	Start		End	
Event	Quarter	Year	Quarter	Year
DAB Program Review (DPR)	1	2011	1	2011
Follow-On Development Contract Award	1	2011	1	2011
LRIP 6 Block 4 Long Lead	1	2011	4	2011