

# UNCLASSIFIED

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

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>				PE 0207134F: <i>F-15 PROGRAMS</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
Total Program Element	240.005	222.677	207.531	-	207.531	167.510	151.032	143.761	146.053	Continuing	Continuing
670131: <i>Initial Operational Test and Evaluation</i>	240.005	222.677	90.206	-	90.206	38.420	6.355	-	-	Continuing	Continuing
676020: <i>F-15</i>	-	-	117.325	-	117.325	129.090	144.677	143.761	146.053	Continuing	Continuing

## Note

The F-15 program has two FY 2012 new starts: F-15C/D BLOS will provide Beyond Line of Sight (BLOS)communications for Air Superiority and Air Sovereignty Alert missions. F-15 Radar Enhancements will improve F-15E capabilities with empahsis on Electronic Protection and other radar improvements.

## A. Mission Description and Budget Item Justification

The F-15 is the most versatile fighter in the world today. The F-15A-D continues to provide air superiority with an undefeated and unmatched aerial combat record. The F-15E retains this air superiority capability and adds systems, such as advanced imaging and targeting systems, to meet the requirement for all-weather, deep penetration, and night/under-the-weather, air-to-surface attack. Configured with conformal fuel tanks (CFTs), the F-15E deploys worldwide with minimal tanker support and arrives combat-ready. A mainstay in operations both domestic and abroad, upgrades to the F-15 (avionics, armament, airframe, and engines) are critical to maintaining combat viability (lethality, survivability, and supportability). Projected to remain in service past 2030, avionics modernization is key to long-term weapon system viability. This modernization is built on a foundation of technical studies (both internal to the Air Force and through outside contractors), forestalling obsolescence, exploiting proven technological advances, and leveraging new technology. Major avionics upgrades center around radar modernization (both hardware and software upgrades) and the exploitation of enhanced capability via wideband radome, precision timing, data delivery and processing technology, precision registration systems, cockpit Head Up Display (HUD) and instrumentation digitization and modernization, central computer processing power increases, digital mission event recording systems and an infrared (IR) based fire control system. Funds are also used, as required, to resolve Diminishing Manufacturing Sources and Material Shortage (DMSMS) issues. The proliferation of fourth generation enemy aircraft and sophisticated "double-digit" anti-aircraft missile systems pose a significant threat to F-15 survivability. A fully integrated electronic warfare suite holds the promise of providing survivability as well as expanded electronic attack capability. Nearly all improvements are linked to an aircraft operational flight program update schedule that works to integrate new capabilities with the airframe. These updates are a responsive way to increase the offensive and defensive capability and survivability of the F-15. Given the comprehensiveness of these changes, significant flight test will be required. Incorporation of corresponding spiral and/or phased technology/equipment improvements that include support equipment, mission planning systems, and training device upgrades will improve performance, supportability, and line replaceable unit (LRU) throughput.

This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2012 Air Force	<b>DATE:</b> February 2011
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<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0207134F: <i>F-15 PROGRAMS</i>
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<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012 Base</b>	<b>FY 2012 OCO</b>	<b>FY 2012 Total</b>
Previous President's Budget	319.967	222.677	212.203	-	212.203
Current President's Budget	240.005	222.677	207.531	-	207.531
Total Adjustments	-79.962	-	-4.672	-	-4.672
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-55.182	-			
• SBIR/STTR Transfer	-23.445	-			
• Other Adjustments	-1.335	-	-4.672	-	-4.672

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

**Project:** 670131: *Initial Operational Test and Evaluation*

    Congressional Add: *Capability Demonstration*

    Congressional Add: *Corrosion Detection and Visualization Program*

Congressional Add Subtotals for Project: 670131

Congressional Add Totals for all Projects

<b>FY 2010</b>	<b>FY 2011</b>
7.967	-
0.797	-
8.764	-
8.764	-

**Change Summary Explanation**

FY 2010: funding was available due to delays in the IRST and ADCP II programs

FY 2012: The Total Adjustment of -\$4.672 million was derived from increases for F-15E Radar Enhancement program; terminating the Infrared Search and Track (IRST) program; and adjusting for higher Air Force priorities

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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 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0207134F: F-15 PROGRAMS				PROJECT 670131: Initial Operational Test and Evaluation			
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
670131: Initial Operational Test and Evaluation	240.005	222.677	90.206	-	90.206	38.420	6.355	-	-	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
Note The program funding includes reductions for overhead reduction efficiencies that are not intended to impact program content. The efficiencies reductions total \$40.987M in FY12.											
A. Mission Description and Budget Item Justification The F-15 is the most versatile fighter in the world today. The F-15A-D continues to provide air superiority with an undefeated and unmatched aerial combat record. The F-15E retains this air superiority capability and adds systems, such as advanced imaging and targeting systems, to meet the requirement for all-weather, deep penetration, and night/under-the-weather, air-to-surface attack. Configured with conformal fuel tanks (CFTs), the F-15E deploys worldwide with minimal tanker support and arrives combat-ready. A mainstay in operations both domestic and abroad, upgrades to the F-15 (avionics, armament, airframe, and engines) are critical to maintaining combat viability (lethality, survivability, and supportability). Projected to remain in service past 2030, avionics modernization is key to long-term weapon system viability. This modernization is built on a foundation of technical studies (both internal to the Air Force and through outside contractors), forestalling obsolescence, exploiting proven technological advances, and leveraging new technology. Major avionics upgrades center around radar modernization (both hardware and software upgrades) and the exploitation of enhanced capability via wideband radome, precision timing, data delivery and processing technology, central computer processing power increases. Incorporation of corresponding spiral and/or phased technology/equipment improvements that include support equipment, mission planning systems, and training device upgrades will improve performance, supportability, and line replaceable unit (LRU) throughput.  This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.											
B. Accomplishments/Planned Programs (\$ in Millions)							FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Operational Flight Program (OFP) Development Efforts							49.008	51.703	-	-	-
Description: Provides OFP program software and hardware updates to integrate new capabilities on all F-15 aircraft.											
FY 2010 Accomplishments:											

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APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0207134F: F-15 PROGRAMS	PROJECT 670131: Initial Operational Test and Evaluation				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Complete Suite 7E Test Readiness Review (TRR) and start S7E Electronic System Integration & APG-70 radar risk reduction tests. Begin Suite 8E Phase 1 planning efforts. Continue organic software support and Special Projects development efforts. <b>FY 2011 Plans:</b> Complete Suite 7E System Verification Review (SVR) #1 and #2. Accomplish Suite 7E Flight Test activity for Development Test and Force Development Evaluation. Accomplish S7E Validation/Verification & Aircrew/Maintenance publication and technical orders production. Award Suite 8E Phase 1. Begin Suite 7M development and complete PDR. Continuation of organic software support and Special Projects development efforts. <b>FY 2012 Base Plans:</b> Moved to Project 676020 <b>FY 2012 OCO Plans:</b>						
<b>Title:</b> Flight Test <b>Description:</b> Flight testing of improvements initiated in prior years. Baseline infrastructure and personnel support for F-15 flight test operations. Purchases long-lead test support assets and unique aircraft test instrumentation. <b>FY 2010 Accomplishments:</b> Continuation of flight test activities at Eglin AFB, FL. <b>FY 2011 Plans:</b> Continuation of flight test activities at Eglin AFB, FL. <b>FY 2012 Base Plans:</b> Moved to Project 676020 <b>FY 2012 OCO Plans:</b>		23.637	15.485	-	-	-
<b>Title:</b> Tactical Electronic Warfare System (TEWS) Intermediate Support System (TISS) Technology Insertion Program (TTIP) <b>Description:</b> Development of Tactical Electronic Warfare System (TEWS) Intermediate Support System (TISS) Technology Insertion Program (TTIP).		2.080	1.489	-	-	-

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
<b>FY 2010 Accomplishments:</b> Complete RF Interface Test Module (RITM) integration with TISS TPSs; conduct the formal System Compatibility Test (SCT) on the new RITM. Conduct the third year of TISS Engineering Support. Replaces the TEWS TISS radio frequency interface on 36 stations and provides 4 years of Engineering Support. <b>FY 2011 Plans:</b> Conduct the fourth year of TISS Engineering Support. Replaces the TEWS TISS radio frequency interface on 36 stations and provides 4 years of Engineering Support. <b>FY 2012 Base Plans:</b> <b>FY 2012 OCO Plans:</b>						
<b>Title:</b> F-15E Radar Modernization Program (RMP) APG-82(V)1 <b>Description:</b> New AESA radar replacing legacy APG-70 radars on all 222 F-15E aircraft. <b>FY 2010 Accomplishments:</b> Continued design efforts and completed CDR. Completed Electronic Systems Integration Laboratory (ESIL) TRR. RMP Kit Hardware delivered. Completed Modification Readiness Review. Began modification of 1st DT A/ C. <b>FY 2011 Plans:</b> Complete System Verification Review #1.Complete Production Readiness Review. Complete installation/ modification of 5 DT/OT test aircraft. Complete Flight Test Readiness Review. Begin DT&E. Complete MS C <b>FY 2012 Base Plans:</b> Complete DT&E and SVR#2. Begin IOT&E. <b>FY 2012 OCO Plans:</b>		151.964	81.430	33.352	-	33.352
<b>Title:</b> F-15C/D Infared Search and Track system (IRST) <b>Description:</b> Develops IRST pod for use on F-15C/D with fast scanning air-to-air detection, tracking and ranging capability in the IR spectrum. <b>FY 2010 Accomplishments:</b>		2.154	24.941	-	-	-

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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 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0207134F: F-15 PROGRAMS	PROJECT 670131: Initial Operational Test and Evaluation				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Risk reduction trade studies and proposal prep for pre-MS B development. <b>FY 2011 Plans:</b> Risk reduction tech demo, test hardware development, OFP software maturation, and OGCs associated with concluding pre-MS B development. <b>FY 2012 Base Plans:</b> <b>FY 2012 OCO Plans:</b>						
<b>Title:</b> Advanced Display Core Processor (ADCP) II (formerly known as Computer Processor Modernization Program and Advanced Display Core Processor Plus w/Vertical Situation Display. FY12 combined programs) <b>Description:</b> F-15E and F-15C/D central computer modernization. This program combines previous F-15E CPMP and F-15C/D ADCP + VSD Programs into a single developmental program. Additionally, this program provides a high resolution color display to replace the current F-15C/D VSD  <b>FY 2010 Accomplishments:</b> Continuation of ADCP II risk reduction efforts and begin design work. Provides a central computer upgrade for 222 F-15Es to replace ADCP. For F-15C/D provides modern computer (along with new VSD) for long term fleet of 176 F-15C/D.  <b>FY 2011 Plans:</b> Working toward Technology Readiness Assessment. Build and test prototype hardware. VSD supplier selection and development.  <b>FY 2012 Base Plans:</b> Continuation of FY11 efforts and enter EMD.  <b>FY 2012 OCO Plans:</b>		2.398	47.629	56.854	-	56.854
Accomplishments/Planned Programs Subtotals		231.241	222.677	90.206	-	90.206
		FY 2010	FY 2011			
Congressional Add: Capability Demonstration		7.967	-			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2012 Air Force			<b>DATE:</b> February 2011
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0207134F: <i>F-15 PROGRAMS</i>	<b>PROJECT</b> 670131: <i>Initial Operational Test and Evaluation</i>	

	FY 2010	FY 2011
<b>FY 2010 Accomplishments:</b> Capability Demonstration event.		
<b>FY 2011 Plans:</b>		
<b>Congressional Add:</b> Corrosion Detection and Visualization Program	0.797	-
<b>FY 2010 Accomplishments:</b> Corrosion Detection and Visualization Program. Initiate study to reduce corrosion in airframe structure and LRUs		
<b>FY 2011 Plans:</b>		
<b>Congressional Adds Subtotals</b>	8.764	-

**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 0207130F: <i>Aircraft Modification (F-15A/B/C/D Squadrons, APAF) [BP 11]</i>	66.387	166.209	103.810	0.000	103.810	171.409	161.644	153.790	155.397	Continuing	Continuing
• PE 0207134F: <i>Aircraft Modification (F-15E Squadrons, APAF [BP11])</i>	84.797	134.859	117.825	0.000	117.825	155.213	170.065	193.504	229.020	Continuing	Continuing
• PE 0207445F: <i>Aircraft Modification (Fighter Tactical Data Link, APAF) [BP11]</i>	0.000	0.174	0.000	0.000	0.000	0.000	6.307	6.307	6.367	Continuing	Continuing
• PE 0809731F: <i>Aircraft Modification (Training Support to Units, APAF) [BP11]</i>	0.979	0.993	0.751	0.000	0.751	0.878	1.044	1.065	1.084	Continuing	Continuing
• PE 0207130F (4): <i>Aircraft Support Equipment (O&amp;I) (F-15A/B/C/D Squadrons, APAF) [BP 12]</i>	12.728	4.947	3.621	0.000	3.621	4.076	4.145	3.725	3.739	Continuing	Continuing
• PE 0207134F (5): <i>Aircraft Post Production Support (F-15E Squadrons, APAF) [BP 13]</i>	15.695	21.599	2.076	0.000	2.076	2.363	2.403	2.448	2.492	Continuing	Continuing
	1.680	6.422	0.087	0.000	0.087	0.097	9.137	23.281	23.699	Continuing	Continuing

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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 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0207134F: F-15 PROGRAMS				PROJECT 670131: Initial Operational Test and Evaluation			
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 0207130F (6): Aircraft Initial Spares and Repairs (F-15A/B/C/D Squadrons, APAF) [BP 16]											
• PE 0207134F (7): Aircraft Initial Spares and Repairs (F-15E Squadrons, APAF) [BP 16]	0.013	18.107	18.606	0.000	18.606	23.519	23.249	18.766	19.046	Continuing	Continuing
D. Acquisition Strategy											
Program is a continuation of effort which includes the development of all F-15 models. Funds are executed organically in support of equipment improvement, study, analysis, and test. Acquisition and management strategies for each program are independently developed and use a variety of contract methods and types to accomplish program objectives.											
E. Performance Metrics											
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 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0207134F: <i>F-15 PROGRAMS</i>				PROJECT 670131: <i>Initial Operational Test and Evaluation</i>			

<b>Product Development (\$ in Millions)</b>				<b>FY 2011</b>		<b>FY 2012 Base</b>		<b>FY 2012 OCO</b>		<b>FY 2012 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
OFP Suite 6/7/8 Development and Test	SS/CPIF	Boeing:St Louis, MO	16.325	10.217	Dec 2010	-		-		-	0.000	26.542	0.000
OFP Suite 6/7/8 Development and Test Various	Various	Various:Various,	32.683	42.935	Dec 2010	-		-		-	0.000	75.618	0.000
TISS TTIP	SS/CPFF	Boeing:St Louis, MO	1.954	1.254	Nov 2010	-		-		-	0.000	3.208	0.000
TISS TTIP Various	Various	Various:Various,	0.126	-		-		-		-	0.000	0.126	0.000
F-15C/D APG-63(V)3 Radar Demo	SS/CPFF	Boeing:St Louis, MO	5.810	-		-		-		-	0.000	5.810	0.000
F-15 C/D APG-63(V)3 Radar Demo	Various	TBD:TBD,	2.157	-		-		-		-	0.000	2.157	0.000
F-15E RMP SDD Contract	SS/CPIF	Boeing:St Louis, MO	211.228	33.844	Oct 2010	12.697	Dec 2011	-		12.697	0.000	257.769	257.769
F-15E RMP	Various	Various:Various,	13.618	47.579	Oct 2010	20.656	Dec 2011	-		20.656	Continuing	Continuing	0.000
F-15C/D IRST	Various	Various:Various,	2.154	24.941	Jun 2011	-		-		-	0.000	27.095	0.000
F-15 ADCP II	SS/TBD	Boeing:St Louis, MO	2.398	-		-		-		-	Continuing	Continuing	0.000
F-15 ADCP II Various	Various	Various:Various,	-	47.629	Apr 2011	56.853	Jan 2012	-		56.853	Continuing	Continuing	0.000
F-15 Corrosion Detection and Visualization Program	SS/CPFF	Quest Integrated:Kent, WA	0.797	-		-		-		-	0.000	0.797	0.000
<b>Subtotal</b>			289.250	208.399		90.206		-		90.206			257.769

**Remarks**  
FY12 PB - Project 670131 includes APG-82(V)1 and ADCP II programs only. All other programs funded under Project 676020.

<b>Support (\$ in Millions)</b>				<b>FY 2011</b>		<b>FY 2012 Base</b>		<b>FY 2012 OCO</b>		<b>FY 2012 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			-	-		-		-		-	0.000	0.000	0.000

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

<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0207134F: <i>F-15 PROGRAMS</i>	<b>PROJECT</b> 670131: <i>Initial Operational Test and Evaluation</i>
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<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2011</b>		<b>FY 2012 Base</b>		<b>FY 2012 OCO</b>		<b>FY 2012 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Boeing (Contractor Test Team)	SS/FFP	Boeing:St Louis, Mo	18.848	12.238	Jan 2011	-		-		-	0.000	31.086	0.000
Flight Test Support	Various	Various:Various,	4.789	2.040	Feb 2011	-		-		-	0.000	6.829	0.000
<b>Subtotal</b>			23.637	14.278		-		-		-	0.000	37.915	0.000

<b>Management Services (\$ in Millions)</b>				<b>FY 2011</b>		<b>FY 2012 Base</b>		<b>FY 2012 OCO</b>		<b>FY 2012 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			-	-		-		-		-	0.000	0.000	0.000

			<b>Total Prior Years Cost</b>	<b>FY 2011</b>		<b>FY 2012 Base</b>		<b>FY 2012 OCO</b>		<b>FY 2012 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			312.887	222.677		90.206		-		90.206			257.769

Remarks

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2012 Air Force		<b>DATE:</b> February 2011
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0207134F: <i>F-15 PROGRAMS</i>	<b>PROJECT</b> 670131: <i>Initial Operational Test and Evaluation</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 &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0207134F: <i>F-15 PROGRAMS</i>	PROJECT 670131: <i>Initial Operational Test and Evaluation</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
OFP Continuous Development	1	2010	4	2016
F-15E APG-82(V)1 RMP EMD - Complete	1	2010	4	2013
F-15C/D IRST EMD - Terminated 2012	2	2010	4	2011
ADCP II EMD	4	2010	3	2013

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2012 Air Force								<b>DATE:</b> February 2011			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0207134F: <i>F-15 PROGRAMS</i>				<b>PROJECT</b> 676020: <i>F-15</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012 Base</b>	<b>FY 2012 OCO</b>	<b>FY 2012 Total</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
676020: <i>F-15</i>	-	-	117.325	-	117.325	129.090	144.677	143.761	146.053	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
<b>Note</b> <p>The program funding includes reductions for overhead reduction efficiencies that are not intended to impact program content. The efficiencies reductions total \$.001M in FY12.</p>											
<b>A. Mission Description and Budget Item Justification</b> <p>The F-15 is the most versatile fighter in the world today. The F-15A-D continues to provide air superiority with an undefeated and unmatched aerial combat record. The F-15E retains this air superiority capability and adds systems, such as advanced imaging and targeting systems, to meet the requirement for all-weather, deep penetration, and night/under-the-weather, air-to-surface attack. Configured with conformal fuel tanks (CFTs), the F-15E deploys worldwide with minimal tanker support and arrives combat-ready. A mainstay in operations both domestic and abroad, upgrades to the F-15 (avionics, armament, airframe, and engines) are critical to maintaining combat viability (lethality, survivability, and supportability). Projected to remain in service past 2030, avionics modernization is key to long-term weapon system viability. This modernization is built on a foundation of technical studies (both internal to the Air Force and through outside contractors), forestalling obsolescence, exploiting proven technological advances, and leveraging new technology. Major avionics upgrades center precision timing, data delivery and processing technology, precision registration systems, cockpit Head Up Display (HUD) and instrumentation digitization and modernization, digital mission event recording systems and an infrared (IR) based fire control system. Funds are also used, as required, to resolve Diminishing Manufacturing Sources and Material Shortage (DMSMS) issues. The proliferation of fourth generation enemy aircraft and sophisticated "double-digit" anti-aircraft missile systems pose a significant threat to F-15 survivability. A fully integrated electronic warfare suite holds the promise of providing survivability as well as expanded electronic attack capability. Nearly all improvements are linked to an aircraft operational flight program update schedule that works to integrate new capabilities with the airframe. These updates are a responsive way to increase the offensive and defensive capability and survivability of the F-15. Given the comprehensiveness of these changes, significant flight test will be required. Incorporation of corresponding spiral and/or phased technology/equipment improvements that include support equipment, mission planning systems, and training device upgrades will improve performance, supportability, and line replaceable unit (LRU) throughput.</p> <p>This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.</p>											
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>							<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012 Base</b>	<b>FY 2012 OCO</b>	<b>FY 2012 Total</b>
<b>Title:</b> Operational Flight Program (OFP) Development Efforts							-	-	54.670	-	54.670
<b>Description:</b> Provides OFP program software and hardware updates to integrate new capabilities on all F-15 aircraft.											

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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 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0207134F: F-15 PROGRAMS	PROJECT 676020: F-15			
B. Accomplishments/Planned Programs (\$ in Millions)					
	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
<b>FY 2010 Accomplishments:</b> Funded in Project 670131.  <b>FY 2011 Plans:</b> Funded in Project 670131  <b>FY 2012 Base Plans:</b> Complete Suite 7E program activity and field OFP. Continue Suite 8E Phase 1 contract actions. Initiate S8E Phase 2 planning and contracting actions. Continue Suite 7M development efforts and complete CDR. Continuation of organic software support and Special Projects development efforts.  <b>FY 2012 OCO Plans:</b>					
<b>Title:</b> Flight Test  <b>Description:</b> Flight testing of improvements initiated in prior years. Baseline infrastructure and personnel support for F-15 flight test operations. Purchases long-lead test support assets and unique aircraft test instrumentation.  <b>FY 2010 Accomplishments:</b> Funded in Project 670131  <b>FY 2011 Plans:</b> Funded in Project 670131  <b>FY 2012 Base Plans:</b> Continuation of flight test activities at Eglin AFB, FL.  <b>FY 2012 OCO Plans:</b>	-	-	16.105	-	16.105
<b>Title:</b> F-15C/D BLOS  <b>Description:</b> Provide F-15C/D beyond line of sight (BLOS) communications capability on all long term aircraft.  <b>FY 2010 Accomplishments:</b> Not applicable  <b>FY 2011 Plans:</b>	-	-	6.550	-	6.550

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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 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0207134F: F-15 PROGRAMS				PROJECT 676020: F-15			
B. Accomplishments/Planned Programs (\$ in Millions)							FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Not applicable											
FY 2012 Base Plans: New start FY 2012.											
FY 2012 OCO Plans:											
Title: F-15E Radar Enhancements							-	-	40.000	-	40.000
Description: Improvements to F-15E Electronic Protection and other radar enhancements.											
FY 2010 Accomplishments: Not Applicable											
FY 2011 Plans: Not Applicable											
FY 2012 Base Plans: New start FY 2012											
FY 2012 OCO Plans:											
Accomplishments/Planned Programs Subtotals							-	-	117.325	-	117.325
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 0207130F: Aircraft Modification (F-15A/B/C/D Squadrons, APAF) [BP 11]	66.387	166.209	103.810	0.000	103.810	171.409	161.644	153.790	155.397	Continuing	Continuing
• PE 0207134F: Aircraft Modification (F-15E Squadrons, APAF [BP11]	84.797	134.859	117.825	0.000	117.825	155.213	170.065	193.504	229.020	Continuing	Continuing
• PE 0207445F: Aircraft Modification (Fighter Tactical Data Link, APAF) [BP11]	0.000	0.174	0.000	0.000	0.000	0.000	6.307	6.307	6.367	Continuing	Continuing
	0.979	0.993	0.751	0.000	0.751	0.878	1.044	1.065	1.084	Continuing	Continuing

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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 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0207134F: F-15 PROGRAMS				PROJECT 676020: F-15			
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 0809731F: Aircraft Modification (Training Support to Units, APAF) [BP11]											
• PE 0207130F (4): Aircraft Support Equipment (O&I) (F-15A/B/C/D Squadrons, APAF) [BP 12]	12.728	4.947	3.621	0.000	3.621	4.076	4.145	3.725	3.739	Continuing	Continuing
• PE 0207134F (5): Aircraft Post Production Support (F-15E Squadrons, APAF) [BP 13]	15.695	21.599	2.076	0.000	2.076	2.363	2.403	2.448	2.492	Continuing	Continuing
• PE 0207130F (6): Aircraft Initial Spares and Repairs (F-15A/B/C/D Squadrons, APAF) [BP 16]	1.680	6.422	0.087	0.000	0.087	0.097	9.137	23.281	23.699	Continuing	Continuing
• PE 0207134F (7): Aircraft Initial Spares and Repairs (F-15E Squadrons, APAF) [BP 16]	0.013	18.107	18.606	0.000	18.606	23.519	23.249	18.766	19.046	Continuing	Continuing
D. Acquisition Strategy											
Program is a continuation of effort which includes the development of all F-15 models. Funds are executed organically in support of equipment improvement, study, analysis, and test. Acquisition and management strategies for each program are independently developed and use a variety of contract methods and types to accomplish program objectives.											
E. Performance Metrics											
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 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0207134F: F-15 PROGRAMS				PROJECT 676020: F-15						
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	
OFP Suite 6/7/8 Development and Test	SS/CPIF	Boeing:St Louis, MO	-	-		10.387	Dec 2011	-		10.387	0.000	10.387	0.000	
OFP Suite 6/7/8 Development and Test Various	Various	Various:Various,	-	-		44.283	Mar 2012	-		44.283	0.000	44.283	0.000	
F-15 Beyond Line of Sight (BLOS)	TBD	TBD:,	-	-		6.550	Dec 2011	-		6.550	0.000	6.550	0.000	
F-15 Radar Enhancement	TBD	TBD:,	-	-		40.000	Dec 2011	-		40.000	0.000	40.000	0.000	
Subtotal			-	-		101.220		-		101.220	0.000	101.220	0.000	
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	
Subtotal			-	-		-		-		-	0.000	0.000	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	
Boeing (Contractor Test Team)	SS/CPIF	Boeing:St Louis, MO	-	-		6.002	Nov 2011	-		6.002	0.000	6.002	0.000	
Flight Test Support	Various	Various:,	-	-		10.103	Dec 2011	-		10.103	0.000	10.103	0.000	
Subtotal			-	-		16.105		-		16.105	0.000	16.105	0.000	
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	
Subtotal			-	-		-		-		-	0.000	0.000	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 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0207134F: F-15 PROGRAMS				PROJECT 676020: F-15						
				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				-	-		117.325		-		117.325	0.000	117.325	0.000

**Remarks**

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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 &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0207134F: <i>F-15 PROGRAMS</i>	PROJECT 676020: <i>F-15</i>

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2012 Air Force			<b>DATE:</b> February 2011
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0207134F: <i>F-15 PROGRAMS</i>	<b>PROJECT</b> 676020: <i>F-15</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
OFP Continuous Development	4	2011	4	2016
F-15 C/D BLOS	4	2011	3	2012
Radar Enhancements	4	2011	3	2016