

**UNCLASSIFIED**

**Exhibit R-2, RDT&E Budget Item Justification:** PB 2015 Air Force **Date:** March 2014

<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force / BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0207171F / <i>F-15 EPAWSS</i>
--	--

COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	0.000	-	-	68.944	-	68.944	160.521	108.829	78.337	59.557	108.069	584.257
676038: <i>EPAWSS</i>	0.000	-	-	68.944	-	68.944	160.521	108.829	78.337	59.557	108.069	584.257
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-	-	-

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

**Note**

In FY 2015, Project 676038 EPAWSS efforts were transferred from PE 0207134F Project 670131 Initial Operation Test and Evaluation.

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

The F-15 is the most versatile fighter in the world today. The F-15C 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. 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 2035, avionics modernization is key to long-term weapon system viability. This modernization is built on a foundation of technical and acquisition support studies (both internal to the Air Force and through outside contractors). The proliferation of fourth generation enemy aircraft, sophisticated "double-digit" anti-aircraft missile systems and other enemy systems pose a significant threat to F-15 survivability. The F-15 Eagle Passive Active Warning and Survivability System (EPAWSS) will replace the F-15's functionally obsolete self-defense Tactical Electronic Warfare System (TEWS) to enhance weapon system situational awareness and survivability against enemy threats. F-15 EPAWSS will also improve reliability and sustainability. F-15 EPAWSS is linked to an aircraft operational flight program update schedule that works to integrate new capabilities with the airframe. 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 aircrew training.

The F-15 EPAWSS upgrade will significantly improve the F-15's capability to autonomously and automatically detect, identify and locate radio frequency (RF) threats as well as provide the ability to deny, degrade, deceive, disrupt and defeat RF and electro-optical / infrared (EO / IR) threat systems in contested and unplanned operations within highly contested environments through 2035. The F-15 EPAWSS will provide indication, type and position of ground-based RF threats as well as the indication, type and bearing of airborne threats with the situational awareness needed to avoid, engage or negate the threat. The F-15 EPAWSS will prevent RF and IR threat systems from detecting or acquiring accurate targeting information prior to threat engagement to complicate and / or negate an enemy threat targeting solution--and effectively counter enemy missiles / weapons if adversary threat systems engage and employ weapons against friendly forces--through components such as chaff, flares, decoys / angle countermeasures and jamming.

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.

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2015 Air Force	<b>Date:</b> March 2014
--	-------------------------

<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0207171F / F-15 EPAWSS
--	---

<b>B. Program Change Summary (\$ in Millions)</b>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015 Base</u>	<u>FY 2015 OCO</u>	<u>FY 2015 Total</u>
Previous President's Budget	-	-	-	-	-
Current President's Budget	-	-	68.944	-	68.944
Total Adjustments	-	-	68.944	-	68.944
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-	-	68.944	-	68.944

**Change Summary Explanation**

In FY 2015 funds were transferred from PE 0207134F, F-15 Squadrons, Project Number 670131, Initial Operational Test and Evaluation in order to provide ACAT 1 budget transparency of the EPAWSS program.

<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>
<b>Title:</b> Eagle Passive/Active Warning Survivability System (EPAWSS)	-	-	68.944
<b>Description:</b> Planned replacement of the existing F-15 self-protection, Tactical Electronic Warfare System (TEWS). This includes technical and acquisition related studies.			
<b>FY 2013 Accomplishments:</b> Included in PEC 27134F, BPAC 670131.			
<b>FY 2014 Plans:</b> Included in PEC 27134F, BPAC 670131.			
<b>FY 2015 Plans:</b> Award and execute Pre-EMD design contract through PDR and CDR. Develop and release Request for Proposal for EMD contract. Continue acquisition planning for EMD and Milestone B. Technical and acquisition related studies and demonstrations			
<b>Accomplishments/Planned Programs Subtotals</b>	-	-	68.944

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2015 Air Force	<b>Date:</b> March 2014
--	-------------------------

<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0207171F / <i>F-15 EPAWSS</i>
--	--

**D. Other Program Funding Summary (\$ in Millions)**

<u>Line Item</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u> <u>Base</u>	<u>FY 2015</u> <u>OCO</u>	<u>FY 2015</u> <u>Total</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• APAF: BA05: Line Item # F15EWS: <i>Aircraft Modification</i>	-	-	-	-	-	-	-	-	82.984	Continuing	Continuing

**Remarks**

**E. Acquisition Strategy**

N/A

**F. 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.

**UNCLASSIFIED**

**Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Air Force** **Date:** March 2014

<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207171F / F-15 EPAWSS	<b>Project (Number/Name)</b> 676038 / EPAWSS
--	---	---

<b>Product Development (\$ in Millions)</b>				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
F-15 EPAWSS (Pre-EMD Effort)	TBD	TBD : TBD,	0.000	-		-		59.180	Dec 2014	-		59.180	111.230	170.410	170.410
F-15 EPAWSS (EMD Effort)	TBD	TBD : TBD,	0.000	-		-		-		-		-	284.592	284.592	284.592
F-15 EPAWSS	Various	Various : Various,	0.000	-		-		9.764	Dec 2014	-		9.764	119.491	129.255	129.255
<b>Subtotal</b>			0.000	-		-		68.944		-		68.944	515.313	584.257	584.257

**Remarks**  
 The individual program reference to "various" contract methods addresses other government costs for trainers, test, hardware, special studies, etc. that are required to meet F-15 EPAWSS programming objectives. The execution vehicles between these DoD entities vary by effort.

FY13PB - Project 670131 includes EPAWSS.

FY14PB - Project 670131 includes EPAWSS.

FY15PB - PEC 27171F, project 676038 includes EPAWSS only.

<b>Support (\$ in Millions)</b>				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-

<b>Test and Evaluation (\$ in Millions)</b>				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-

**UNCLASSIFIED**

**Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Air Force** **Date:** March 2014

<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207171F / F-15 EPAWSS	<b>Project (Number/Name)</b> 676038 / EPAWSS
--	---	---

<b>Management Services (\$ in Millions)</b>				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Program Management Support Costs	Various	Various : Various,	0.000	-		-		-		-		-	-	-	-
<b>Subtotal</b>			0.000	-		-		-		-		-	-	-	-

**Remarks**  
The individual program reference to "various" contract methods addresses other government costs for trainers, test, hardware, special studies, etc. that are required to meet F-15 EPAWSS programming objectives. The execution vehicles between these DoD entities vary by effort.

	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	0.000	-	-	68.944	-	68.944	515.313	584.257	-

**Remarks**

**UNCLASSIFIED**

**Exhibit R-4, RDT&E Schedule Profile: PB 2015 Air Force** **Date:** March 2014

<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207171F / F-15 EPAWSS	<b>Project (Number/Name)</b> 676038 / EPAWSS
--	---	---

**Modifications – BPAC 676038**

	FY13			FY14			FY15			FY16			FY17			FY18			FY19					
Eagle Passive/Active Warning and Survivability System (C/D/E)	<div style="display: flex; justify-content: space-around; color: red; font-size: small;"> <span>Pre-EMD Award</span> <span>MSB EMD Award</span> <span>MSC</span> </div>																							

**UNCLASSIFIED**

**Exhibit R-4A, RDT&E Schedule Details:** PB 2015 Air Force **Date:** March 2014

<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207171F / F-15 EPAWSS	<b>Project (Number/Name)</b> 676038 / EPAWSS
--	---	---

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
EPAWSS--FY13 New Start	1	2013	1	2013
EPAWSS Pre-EMD Contract Award	1	2015	1	2015
EPAWSS MS B	3	2016	3	2016
EPAWSS EMD contract award	3	2016	3	2016
EPAWSS MS C	2	2019	2	2019