Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force

R-1 ITEM NOMENCLATURE

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

PE 0207131F: A-10 SQUADRONS

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	5.485	11.051	13.538	-	13.538	13.410	13.201	13.549	13.574	Continuing	Continuing
674809: A-10 Squadrons	5.485	11.051	13.538	-	13.538	13.410	13.201	13.549	13.574	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

### A. Mission Description and Budget Item Justification

The concept of operations for the A-10 requires an agile and survivable weapon system that provides close-air support, combat search and rescue, and special operations support. The high operations tempo maintained by the Expeditionary Air Force requires that each combat platform exhibit the flexibility to effectively perform in a variety of operational roles. To implement these strategies, Combat Air Forces (CAF) must be able to conduct air operations around-the-clock under various weather conditions against numerous enemy threats employing a full spectrum of air defense systems to include countermeasures. The A-10 is an essential component of successful air operations, and represents a significant percentage of the CAF force structure. FY 2013 RDT&E funds address continuing user requirements that need to be incorporated within the Operational Flight Program (OFP). Every two years user developmental requirements are formally reviewed for incorporation in the OFP release cycle to bring new capability to the A-10 and to fix both hardware and software OFP deficiencies. Final integration of hardware and software requirements into a unified release occurs only after rigorous testing, including validation and verification using software integration laboratories, field representative assets, and production representative assets. Results of previously planned developmental and modernization actions provide the A-10 with new combat capabilities that employ a variety of smart weapons, improved situational awareness, increased service life to the wing and fuselage, and enhanced target identification and designation capability. The funds budgeted in the near term provide updates to the aircraft OFP in Suites 7B, 8, and 9 addressing the future integration of Mode 5, Lightweight Airborne Radio System (LARS) V12, Helmet Mounted Cueing System (HMCS), and Combatant Survivor Evader Locator (CSEL), Anti-Jam Embedded Global Positioning System/Inertial Navigation System (EGI Embedded GPS/INS), weapons, and targeting pods integratio

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.

PE 0207131F: A-10 SQUADRONS

Air Force

**DATE:** February 2012

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B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	<b>FY 2013 Base</b>	FY 2013 OCO	FY 2013 Total
Previous President's Budget	5.661	11.051	13.403	-	13.403
Current President's Budget	5.485	11.051	13.538	-	13.538
Total Adjustments	-0.176	-	0.135	-	0.135
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-0.147	-			
Other Adjustments	-0.029	-	0.135	-	0.135

## **Change Summary Explanation**

FY11 adjustments (Cong General Reductions -\$0.029, Cong Directed Reductions \$0.0, Cong Adds \$0.0, Cong Directed Transfers \$0.0) are reflected in Other Adjustment Row.

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: OFP Development	5.485	11.051	13.538	
<b>Description:</b> A-10C OFP Suite software is updated in an annual release cycle through FY12 and then every two years after FY12 to permit rapid integration of new precision weapons, advanced targeting pods, improved avionics, and enhanced EW capabilities. These efforts are frequently in response to Urgent Operational Needs and evolving mission needs generated by the ever-changing operational environment of close air support				
FY 2011 Accomplishments:  A-10C OFP software is updated in an annual release cycle to permit rapid integration and test of new/updated systems (i.e., precision weapons, targeting pods, avionics, and electronic warfare capabilities). These efforts are in response to Urgent Operational Needs and respond to the evolving operational mission needs for the A-10C close air support role. A significant FY11 addition the test and evaluation of the Lightweight Airborne Radio System (LARS) (AN/ARS-6 V12), called LARSV12, in response to DMSMS issues with LARSv6.				
FY 2012 Plans:  A-10C OFP software is updated in an annual release cycle through FY12 and then every two years after FY12 to permit rapid integration and test of new/updated systems (i.e., precision weapons, targeting pods, avionics, and electronic warfare capabilities). These efforts are often in response to Urgent Operational Needs and respond to the evolving operational mission				

PE 0207131F: A-10 SQUADRONS

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force

R-1 ITEM NOMENCLATURE

APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force

PE 0207131F: A-10 SQUADRONS

BA 7: Operational Systems Development

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
needs for the A-10C close air support role. A significant FY12 addition is the fielding of HMCS and LARSV12 with the integration	n		
of the added Combatant Survivor Evader Locator's (CSEL) with CSEL Integration Module (CIM) into the A-10C OFP.			
FY 2013 Plans: A-10C OFP software is updated every two years after FY12 to permit integration and test of new/updated systems (i.e., precisi weapons, targeting pods, avionics, and electronic warfare capabilities). These efforts are often in response to Urgent Operation Needs and respond to the evolving operational mission needs for the A-10C close air support role. A significant FY13 addition is the initial testing of LARSV12 with the added Combatant Survivor Evader Locator (CSEL) capability, and the test, evaluation,			
and initial integration of the Mode 5 radio Identify Friend or Foe (IFF) capability into the A-10C OFP. This is in response to a Do	D		
mandate for Initial Operational Capability (IOC) capability being fielded in the A-10C by FY14.			
Accomplishments/Planned Programs Subtor	als 5.485	11.051	13.538

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

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	Base	000	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
<ul> <li>PE 0207131F, A-10 Squadrons:</li> </ul>	202.132	54.354	89.919	0.000	89.919	47.850	0.000	0.000	0.000	Continuing	Continuing
APAF											
<ul> <li>PE 0207445F, Fighter Tactical</li> </ul>	0.674	0.674	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Da: <i>APAF</i>											

# E. Acquisition Strategy

Helmet Mounted Cueing System (HMCS) Acquisition Strategy was developed to support Air National Guard (ANG) and Air Force Reserve A-10 funded requirements. The Request for Proposal was released to industry September 2009. Source selection was completed and contract awarded in April 2010 using NGREA (National Guard Reserve Equipment Account) funding. Contracted effort includes the Congressional Add of RDT&E funds for HMCS integration.

Prior to FY 2009, A-10 Operational Flight Program (OFP) development efforts were conducted under the A-10 Prime Contract awarded to Lockheed Martin Systems Integration (LMSI) in December 1997 through a full-and-open competition. The original period of performance/ordering period ended in December 2006. A new Thunderbolt Lifecycle Program Support (TLPS) contract was awarded to three sucessful bidders in 2009.

Suite 8 development efforts will begin in FY12, with SIL development and stand-up begin in FY11 as A-10 OFP suites development and sustainment efforts transition from contractual work by Lockheed Martin to organic work by 309th SMX at Hill AFB. All additional suites beyond 8 will be performed by the 309th SMX until directed otherwise.

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Air Force

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air For	ce	DATE: February 2012								
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	'								
3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development	PE 0207131F: <i>A-10 SQUADRONS</i>									
BA 7: Operational Systems Development  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 Force performance goals and most importantly, how they contribute to our mission.										
Torce performance goals and most importantly, now they contrib	ate to our mission.									

PE 0207131F: *A-10 SQUADRONS* Air Force

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Air Force		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development	<b>R-1 ITEM NOMENCLATURE</b> PE 0207131F: <i>A-10 SQUADRONS</i>	PROJECT 674809: A-10 Squadrons

PE 0207131F: *A-10 SQUADRONS* Air Force

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Air Force

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

3600: Research, Development, Test & Evaluation, Air Force PE 0207131F: A-10 SQUADRONS 674809: A-10 Squadrons

BA 7: Operational Systems Development

## Schedule Details

	St	art	End		
Events	Quarter	Year	Quarter	Year	
Suite 7A OFP System Design, Develoment & Flight Test	1	2011	3	2011	
Suite 7A Fields	3	2011	3	2011	
Suite 7B OFP Design, Development & Flight Test	1	2011	3	2012	
Suite 7B Fields	4	2012	4	2012	
Mode 5 (IFF) Integration	1	2012	1	2013	
Helmet Mounted Cueing System	1	2011	3	2012	
Suite 8 - 12 OFP System Design, Develoment & Flight Test	3	2011	4	2014	
Suite 8 OFP Fields	4	2014	4	2014	
CAD/CAM 3D Modeling	4	2011	4	2013	