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

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

3600: Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)

PE 0604327F I Hard and Deeply Buried Target Defeat System (HDBTDS) Program

,	, ,	,										
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	324.812	16.626	0.103	-	-	-	-	-	-	-	-	341.541
645341: Direct Strike Penetrator Systems	324.812	16.626	0.103	-	-	-	-	-	-	-	-	341.541
Quantity of RDT&E Articles	21.000	-	-	-	-	-	-	-	-	-		

MDAP/MAIS Code: 475

A. Mission Description and Budget Item Justification

Direct Strike Penetrator Systems project includes the development of a Quick Reaction Capability (QRC) known as Massive Ordnance Penetrator (MOP) and analysis efforts for the follow-on Hard Target Munitions (HTM) program. The Hard and Deeply Buried Target Defeat System (HDBTDS) development activity is based on the Initial Capabilities Document (ICD) for HDBTDS, 1 Aug 2005, and the MOP development is based on the 2007 Urgent Operational Need (UON) document (resubmitted in 2009). The Direct Strike Penetrator System is an advanced precision guided penetrator munition that will provide the Air Force with an improved capability using air-to-surface conventional munitions to attack Hard & Deeply Buried Targets (HDBT), such as bunker and tunnel facilities. This system holds HDBTs at risk using fewer weapons and reducing the number of missions necessary to defeat targets, resulting in an increase to overall mission survivability. The Direct Strike Penetrator provides a critical global strike capability not currently met by inventory conventional weapons. It will hold at risk those highest priority assets essential to the enemy's warfighting ability, which are heavily defended and protected. The Direct Strike Penetrator Systems project is also conducting a HTM analysis-of-alternative (AoA) to determine the best weapons and/or development efforts for addressing the Hard and Deeply Buried Targets (HDBT) mission area. At the completion of the AoA, the Air Force will add funds to start the development, production, modification activities for the HDBT attack weapons identified in the AoA as the most effective and affordable weapons. The AoA will include the performance, operational suitability, and cost of alternative hard target defeat systems. HTM is a pre-MDAP program.

This program is in Budget Activity 4, Advanced Component Development and Prototypes (ACD&P) because effort is necessary to evaluate integrated technologies, representative modes or prototype systems in high fidelity and realistic operating environment.

PE 0604327F: Hard and Deeply Buried Target Defeat System (HDBTD... Air Force

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^{*}The FY 2015 OCO Request will be submitted at a later date.

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

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

Component Development & Prototypes (ACD&P)

3600: Research, Development, Test & Evaluation, Air Force I BA 4: Advanced PE 0604327F I Hard and Deeply Buried Target Defeat System (HDBTDS) Program

Component Bereiepment & Fretelypes (Field &)					
B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	16.711	0.103	-	-	-
Current President's Budget	16.626	0.103	=	-	-
Total Adjustments	-0.085	-	=	-	-
 Congressional General Reductions 	-0.022	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.063	-			
Other Adjustments	-	-	-	-	-

Change Summary Explanation

No Significant Changes

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2013	FY 2014	FY 2015
Title: Massive Ordnance Penetrator (MOP) Weapon Development, Target Construction, and System Test and Evaluation	16.626	0.103	-
Description: MOP Weapon development/redesign and test and integration on the B-2. Develop the Enhanced Threat Response (ETR-1 and ETR-2) capability for the baseline MOP weapon. Construct several hard and deeply buried targets for live weapon testing. Conduct ground and flight tests to verify ETR-1 and ETR-2 design changes, including MOP system test and evaluation, qualification testing, weapon certification on B-2A			
FY 2013 Accomplishments: Complete development of MOP ETR-2 capability. Incorporate ETR-2 changes in three test weapons. Construct test targets and conduct three tests to evaluate the ETR-2 capability			
FY 2014 Plans: Complete AoA efforts.			
FY 2015 Plans: N/A			
Accomplishments/Planned Programs Subtotals	16.626	0.103	-

PE 0604327F: Hard and Deeply Buried Target Defeat System (HDBTD... Air Force

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

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

3600: Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)

PE 0604327F I Hard and Deeply Buried Target Defeat System (HDBTDS) Program

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

D. Other Frogram i unumg Summa	<u>ι </u>	<u>0113)</u>									
			FY 2015	FY 2015	FY 2015					Cost To	
<u>Line Item</u>	FY 2013	FY 2014	Base	OCO	<u>Total</u>	FY 2016	FY 2017	FY 2018	FY 2019	Complete	Total Cost
• RDTE: BA07: PE	-	-	-	-	-	-	-	-	-	-	80.683
0604240F: <i>B-2 Bomber</i>											
• APAF: BA05: Line Item # B01B00:	7.000	-	-	-	-	-	-	-	-	-	75.651
B-2 Squadrons, PE 0101127F											
 PAAF: BA01: Line Item 	4.158	-	-	-	-	-	-	-	-	-	57.484
#353020: WRM-Ammunition											
(General Purpose Bombs)											

Remarks

E. Acquisition Strategy

MOP is a Quick Reaction Capability (QRC) with a sole source cost plus incentive fee contract to a single contractor.

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.

PE 0604327F: Hard and Deeply Buried Target Defeat System (HDBTD... Air Force

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

Appropriation/Budget Activity

3600 / 4

R-1 Program Element (Number/Name)

PE 0604327F I Hard and Deeply Buried Target Defeat System (HDBTDS) Program Project (Number/Name)

645341 I Direct Strike Penetrator Systems

Date: March 2014

Product Developmer	nt (\$ in Mi	illions)		FY 2	2013	FY	2014		2015 ase		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
MOP Weapon Development	SS/CPIF	Boeing : St Louis, MO	190.063	5.709	Mar 2013	-		-		-		-	-	195.772	195.772
Hard Target Munitions (HTM) Capabilities Analysis	Various	Whitney, Bradley & Brown; ARA; Booz Allen: Eglin, FL	3.614	-		-		-		-		-	-	3.614	3.614
HTM Concept/Technology Study	Various	Several Local Companies : Eglin, FL	2.779	-		-		-		-		-	-	2.779	2.779
HTM Weapons Effects/ Target Analysis	RO	Defense Threat Reduction Agency : Eglin AFB, FL	1.087	-		-		-		-		-	-	1.087	1.087
HTM Concept Tech Data	Various	Several Local Conpanies : Eglin AFB, FL	1.811	-		-		-		-		-	-	1.811	1.811
HTM Technical Support	Various	Jacobs Engr. : Eglin, FL	1.751	-		-		-		-		-	-	1.751	1.751
		Subtotal	201.105	5.709		-		-		-		-	-	206.814	206.814

Support (\$ in Millions	s)			FY 2	2013	FY :	2014	FY 2 Ba		FY 2	2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Govt Support	Various	Several Govt Labs and test Centers : Eglin AFB, FL	9.484	0.715		-		-		-		-	-	10.199	10.199
		Subtotal	9.484	0.715		-		-		-		-	-	10.199	10.199

PE 0604327F: Hard and Deeply Buried Target Defeat System (HDBTD... Air Force

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Exhibit R-3, RDT&E	Project C	ost Analysis: PB 2	2015 Air F	orce								Date:	March 20	14				
Appropriation/Budge 3600 / 4	Appropriation/Budget Activity 3600 / 4						R-1 Program Element (Number/Name) PE 0604327F I Hard and Deeply Buried Target Defeat System (HDBTDS) Program						Project (Number/Name) 645341 / Direct Strike Penetrator Systems					
Test and Evaluation	(\$ in Milli	ions)		FY 2013		FY 2014		FY 2015 Base			2015 CO	FY 2015 Total						
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract			
MOP System Test & Evaluation	RO	AAC : Eglin AFB, FL	4.088	2.281		-		-		-		-	-	6.369	6.369			
MOP Flight Test Range Support	Various	White Sands Missile Range : White Sands Missile Range, NM	12.144	1.500	Jan 2014	-		-		-		-	-	13.644	13.644			
Target Construction and Instrumentation (MOP)	Various	Defense Threat Reduction Agency : Albuquerque, NM	79.797	1.730		-		-		-		-	-	81.527	81.527			
MOP Test and Evaluation Activities	Various	AF Flight Test Center : Albuquerque, NM	12.406	0.717		-		-		-		-	-	13.123	13.123			
		Subtotal	108.435	6.228		-		-		-		-	-	114.663	114.663			
Management Service	es (\$ in M	lillions)		FY:	2013	FY 2	2014		2015 ise	FY 2	2015 CO	FY 2015 Total						
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract			
Program Management Administration (PMA) for MOP	Various	AFLCMC/EBD : Eglin AFB, FL	5.402	3.850		-		-		-		-	-	9.252	-			
Program Management Administration (PMA) for Hard Target Munitions	Various	AFLCMC/XR : Eglin AFB, FL	0.386	0.124		0.103		-		-		-	-	0.613	-			
		Subtotal	5.788	3.974		0.103		-		-		-	-	9.865	-			
			Prior Years	FY	2013	FY 2	2014		2015 Ise		2015 CO	FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract			
		Project Cost Totals	324.812	16.626		0.103		-		-		-	-	341.541	-			

Remarks

PE 0604327F: Hard and Deeply Buried Target Defeat System (HDBTD... Air Force

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Air Force

Appropriation/Budget Activity

3600 / 4

R-1 Program Element (Number/Name)

PE 0604327F I Hard and Deeply Buried
Target Defeat System (HDBTDS) Program

Project (Number/Name)

645341 I Direct Strike Penetrator Systems

Date: March 2014



HDBTDS (MOP and HTM AoA) Schedule

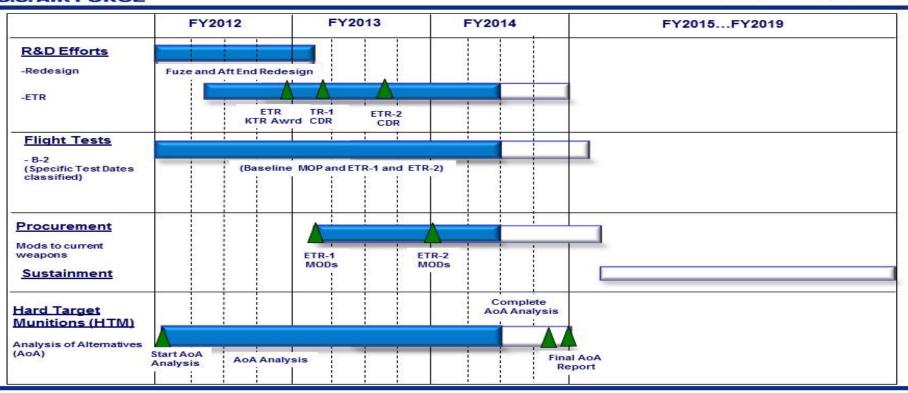


Exhibit R-4A, RDT&E Schedule Details: PB 2015 Air Force			Date: March 2014
Appropriation/Budget Activity 3600 / 4	3	- 3 (umber/Name) Direct Strike Penetrator Systems

Schedule Details

	Sta	art	End		
Events	Quarter	Year	Quarter	Year	
MOP Design Modification & Qualification Testing for ETR-1	1	2013	2	2013	
MOP Design Modification & Qualification Testing for ETR-2	1	2014	1	2015	
MOP ETR-1 Flight Testing	3	2013	3	2013	
MOP ETR-2 Flight Testing	3	2014	1	2015	
Conduct Hard Target Munitions (HTM) Analysis of Alternatives (AoA)	1	2013	3	2014	
Complete Hard Target Munitions (HTM) AoA Report	3	2014	4	2014	