

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604222F: <i>Nuclear Weapons Support</i>
--	---

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	59.591	18.475	25.713	-	25.713	27.226	27.001	27.512	23.801	Continuing	Continuing
654236: <i>Engineering Analysis</i>	16.425	2.891	3.813	-	3.813	3.243	2.496	2.565	0.512	Continuing	Continuing
654807: <i>Nuclear Weapons & CP Technologies</i>	4.795	6.332	6.717	-	6.717	6.805	6.945	7.138	7.232	Continuing	Continuing
655708: <i>Nuclear Weapons Support</i>	38.371	9.252	15.183	-	15.183	17.178	17.560	17.809	16.057	Continuing	Continuing

Note

In FY2012, Joint Fuze efforts were transferred to PE 0604851F, ICBM-EMD, project number 657006, in order to consolidate service activities as they progress towards deployable products.

In FY2012, B61 Life Extension Program (LEP) efforts were transferred to PE 0101125F, Nuclear Weapon Modernization, in order to support B61 LEP development.

A. Mission Description and Budget Item Justification

The Air Force Nuclear Weapons Center, Kirtland AFB, NM, is the executing agency for this program. The Air Force is tasked with maintaining and providing technical expertise on all AF nuclear weapons and weapon systems and with developing and maintaining counter-chemical, biological, radiological, and nuclear (C-CBRN) capabilities. This program provides resources for technical and programmatic activities which includes performing independent analyses on all AF nuclear weapons systems activities including weapons development and sustainment; interoperability; compatibility; safety, security, and reliability; Air Force legacy nuclear stockpile management/retirement; C-CBRN assessments; and nuclear certification and nuclear certification management.

This program is in Budget Activity 5, System Development and Demonstration (SDD) because it has passed Milestone B approval and is conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force				DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
3600: Research, Development, Test & Evaluation, Air Force		PE 0604222F: Nuclear Weapons Support			
BA 5: Development & Demonstration (SDD)					
B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	60.545	18.538	24.051	-	24.051
Current President's Budget	59.591	18.475	25.713	-	25.713
Total Adjustments	-0.954	-0.063	1.662	-	1.662
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-0.954	-0.063	1.662	-	1.662
Change Summary Explanation					
FY13 adjustments for Air Force priorities.					

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Air Force								DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604222F: Nuclear Weapons Support				PROJECT 654236: Engineering Analysis			
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
654236: Engineering Analysis	16.425	2.891	3.813	-	3.813	3.243	2.496	2.565	0.512	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
Note In FY2012, Joint (Common) Fuze efforts were transferred to PE 0604851F, ICBM - EMD, project number 657006, in order to consolidate service activities as they progress towards deployable products. In FY13, W78 LEP will join Common Fuze in PE 0604933F, ICBM Fuze Modernization, project number 655082.											
A. Mission Description and Budget Item Justification Provide for the technical oversight of all Air Force (AF) nuclear weapons, delivery systems, and support systems to include all phases of acquisition. Provide the engineering and technical management expertise required in critical areas of nuclear weapons safety, security, reliability, operations, modernization, testing, certification, and counter proliferation. Analyze and document nuclear weapons issues related to risk assessment, data collection, model development, model validation, and weapon effectiveness in support of the DoD-DoE Annual Surety Report; DoE Stockpile Stewardship Plan; DoD-DoE Nuclear Weapon Annual Assessment; and DoD-DoE nuclear stockpile planning and requirements assessment. Air Force Legacy Nuclear Stockpile: In accordance with DoDI 5030.55 and AFI 63-103, funding is used for scheduled, planned, and unplanned activities that support current active and inactive stockpile. Activities include stockpile maintenance; exploratory testing associated with significant finding investigations; DoD leadership, management, and oversight of the Air Force-led, joint DoD-DoE Nuclear Project Officer and Life Extension Groups to manage the B61, B83, W78, W87, W80 and W84 nuclear warheads and associated weapons; testing in support of DoE; associated AF components, and independent technical reviews of DoE National Laboratory processes. This program is in Budget Activity 5, System Development and Demonstration (SDD) because it has passed Milestone B approval and is conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production.											
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2011	FY 2012	FY 2013	
Title: Joint Fuze								9.740	-	-	
Description: The AF portion of a joint AF-US Navy (USN)-United Kingdom (UK) Ministry of Defense (MoD) project to evaluate/develop new arming and fuzing technologies and components (to include mature modern safety, security, and use control technologies) for use on ballistic missile warheads. Efforts will assess functional requirements, interfaces, environmental requirements, logistics/CONOPs constraints, and technologies/capabilities relating to arming, fuzing, and firing systems (AF&F) for future Air Force, Navy, and UK reentry systems. The primary goal is the development of a joint arming, fuzing, and firing system											

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Air Force		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604222F: <i>Nuclear Weapons Support</i>	PROJECT 654236: <i>Engineering Analysis</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013
for application to the Air Force Mk12A, Mk21, the Navy Mk5, and a UK reentry system, and a common high-surety warhead for the Mk12A/W78 and Mk5/W88. FY 2011 Accomplishments: Evaluated performance requirements, physical characteristics, logistical and operation concepts, and physical environments with the goal of developing common Military Characteristics (MCs) and Stockpile-to-Target Sequence (STS) requirements. Identify potential concepts and technologies and evaluate Technology Readiness Level/Manufacturing Readiness Level (TRL/MRL). FY 2012 Plans: Effort moved to ICBM EMD PE 0604851F, project number 657006 N/A FY 2013 Plans: Effort moved to ICBM Fuze Modernization PE 0604933F, project number 655082 N/A				
Title: W78 LEP Description: Execute W78 Life Extension Program (LEP), specifically identifying, assessing, and integrating design features, to both extend W78 service life and enhance the nuclear security of Minuteman III (MMIII) and MMIII follow-on missile systems, to include engineering and production development through First Production Unit. FY 2011 Accomplishments: Developed draft Military Characteristics (MCs) and Stockpile to Target Sequences (STs) to support 6.1 and 6.2 studies. Developed finite element model integration for testing. Performed Environmental Ground Testing design and planning. National Nuclear Security Administration (NNSA) & Air Force Finite Element Model (FEM) development, validation, and verification. Created ITT Support draft Risk Management Plan and draft Life Cycle Management Plan. FY 2012 Plans: Provide DoD leadership, management, and oversight of the Air Force-led ICBM Warheads Project Officer's Group (POG) and W78/W87 stockpile. Prepare for the future W78 Life Extension Program via the W78 Joint Life Extension Study (JLES). FY 2013 Plans:		1.022	0.373	-

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Air Force		DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604222F: <i>Nuclear Weapons Support</i>	PROJECT 654236: <i>Engineering Analysis</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012
Effort transferred to PE 0604933F, ICBM Fuze Modernization, project number 655082.			
Title: Air Force Legacy Nuclear Stockpile Description: Air Force Legacy Nuclear Stockpile: In accordance with DoDI 5030.55 and AFI 63-103, funding is used for scheduled, planned, and unplanned activities that support current active and inactive stockpile activities to include, but not limited to, stockpile maintenance, exploratory testing associated with significant finding investigations, DoD leadership, management, and oversight of the Air Force-led, joint DoD-DOE Nuclear Project Officer and Life Extension Groups to manage the B61, B83, W78, W87, W80 and W84 nuclear weapon active and inactive stockpile, conduct ground and flight tests in support of DOE, independent technical reviews of National Laboratory process with stakeholders, and studies and analyses. FY 2011 Accomplishments: Conducted oversight of the Air Force Legacy Nuclear Stockpile in accordance with DoDI 5030.55 and AFI 63-103. Performed activities supporting current active and inactive stockpile including: stockpile maintenance analysis; stockpile logistics planning; DoD leadership management; oversight of the Air Force-led, joint DoD-DOE Nuclear Project Officer and Life Extension Groups to manage the B61, B83, W78, W87, W80 and W84 nuclear weapon active and inactive stockpile; independent technical reviews of National Laboratory process with stakeholders; nuclear data management; and studies and analyses as required to meet stockpile planning needs. FY 2012 Plans: Conduct oversight responsibilities for the Air Force Legacy Nuclear Stockpile in accordance with DoDI 5030.55 and AFI 63-103. Perform activities supporting current active and inactive stockpile including: stockpile maintenance analysis; stockpile logistics planning; providing DoD leadership, management, and oversight of the Air Force-led, joint DoD-DOE Nuclear Project Officer and Life Extension Groups to manage the B61, B83, W78, W87, W80 and W84 nuclear weapon active and inactive stockpile; conducting independent technical reviews of National Laboratory process with stakeholders; performing nuclear data management; and conducting studies and analyses as required to meet stockpile planning needs. FY 2013 Plans: Conduct oversight responsibilities for the Air Force Legacy Nuclear Stockpile in accordance with DoDI 5030.55 and AFI 63-103. Perform activities supporting current active and inactive stockpile including: stockpile maintenance analysis; stockpile logistics planning; providing DoD leadership, management, and oversight of the Air Force-led, joint DoD-DOE Nuclear Project Officer and Life Extension Groups to manage the B61, B83, W78, W87, W80 and W84 nuclear weapon active and inactive stockpile; conducting independent technical reviews of National Laboratory process with stakeholders; performing nuclear data management; and conducting studies and analyses as required to meet stockpile planning needs.		3.100	2.000
Title: Technical Analysis		2.021	0.518
			-

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Air Force		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604222F: Nuclear Weapons Support	PROJECT 654236: Engineering Analysis		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013
<p>Description: Provide leadership to and managment of the AF-led Project Officer's Group (POG) for the Air Force legacy nuclear active and inactive stockpile. Includes technical analysis and studies in support of nuclear sustainment and Life Extension Programs.</p> <p>FY 2011 Accomplishments: Worked with national laboratories to begin recoding legacy software so it will operate on modern computing systems. Developed Nuclear Weapons support tools and models.</p> <p>FY 2012 Plans: Continue to work with national laboratories to recode legacy software so it will operate on modern computing systems. Develop Nuclear Weapons support tools and models.</p> <p>FY 2013 Plans: Effort combined with AF Legacy Nuclear Stockpile in FY13.</p>				
<p>Title: SAP Security</p> <p>Description: Provide Special Access Program and Sensitive Compartmented Information (SAP/SCI) security.</p> <p>FY 2011 Accomplishments: Provided a secure environment to facilitate successful development and execution of programs. Coordinated security matters with all levels of the AF to include subordinate units, MAJCOMS and Air Staff. Provided personnel security, first tier adjudication and coordination with Special Access Program Central Office in personnel matters. Provided information security to include training, safeguarding, development, and implementation of security operation procedures, test plans and inspections. Provided unique hardware protection method in accordance with EO 12598 (Executive Order 12598 (Classified National Security Information)), National Industrial Security Program Operating Manual (NISPOM), NISPOMSUP (NISPOM Supplement), Joint Air Force - Army - Navy (JAFAN), and Director of Central Intelligence Directive (DCID) requirements.</p> <p>FY 2012 Plans: Organic support FY12.</p>		0.042	-	-
<p>Title: C-CBRN</p> <p>Description: Provide technical analysis on nuclear weapon systems design and C-CBRN advanced concepts.</p> <p>FY 2011 Accomplishments:</p>		0.500	-	-

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Air Force							DATE: February 2012				
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>			R-1 ITEM NOMENCLATURE PE 0604222F: <i>Nuclear Weapons Support</i>			PROJECT 654236: <i>Engineering Analysis</i>					
B. Accomplishments/Planned Programs (\$ in Millions)							FY 2011	FY 2012	FY 2013		
Provided technical analysis on nuclear weapon systems design and C-CBRN advanced concepts.											
FY 2012 Plans: Effort moved to Project 654807.											
Accomplishments/Planned Programs Subtotals							16.425	2.891	3.813		
C. Other Program Funding Summary (\$ in Millions)											
Line Item	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
• PE 0604933F, RDT&E: <i>ICBM Fuze Modernization</i>	0.000	0.000	73.512	0.000	73.512	140.511	284.843	389.212	433.741	Continuing	Continuing
D. Acquisition Strategy Cost Plus Award Fee (CPAF) and Military Interdepartmental Purchase Requests (MIPRs) are/will be used to obtain technical analyses and technical support for safety, operations and counterproliferation assessments. Supporting activities are contracted separately using contract strategies deemed most appropriate to the effort. All contracts will be openly competed.											
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.											

UNCLASSIFIED

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 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604222F: Nuclear Weapons Support	PROJECT 654236: Engineering Analysis

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Air Force			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604222F: <i>Nuclear Weapons Support</i>	PROJECT 654236: <i>Engineering Analysis</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
W78 LEP	1	2011	4	2012
AF Legacy Nuclear Stockpile Support	2	2013	4	2017
Technical Analysis	1	2011	4	2012

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Air Force									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604222F: Nuclear Weapons Support				PROJECT 654807: Nuclear Weapons & CP Technologies			
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
654807: Nuclear Weapons & CP Technologies	4.795	6.332	6.717	-	6.717	6.805	6.945	7.138	7.232	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Perform engineering analyses across the counter chemical, biological, radiological, and nuclear (C-CBRN) pillars for countering Weapons of Mass Destruction (WMD) with emphasis on asymmetric threats, specifically C-CBRN, and other difficult to attack targets. Execute technical & operational analysis support for system specific programs, using commands, and leadership as directed.

Develop proposed materiel solutions. Transition selected nuclear and non-nuclear concepts into an acquisition development effort to include identifying funding, and developing technical, schedule, and programmatic content.

Prepare the necessary acquisition-related documentation to support program and/or decision reviews.

Develop, evaluate, and utilize tools required for the employment of current inventory and new concepts for combating WMD weapons to include intelligence, surveillance, and reconnaissance; battle damage assessment; and target defeat and collateral effects predictions for current and future operations.

This program is in Budget Activity 5, System Development and Demonstration (SDD) because it has passed Milestone B approval and is conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2011	FY 2012	FY 2013
Title: Air Delivered Studies	1.100	1.150	1.163
Description: Analyses of warhead and associated Air Delivered system capabilities and vulnerabilities to provide recommendations for system level implementation to maintain the air delivered leg of our nuclear deterrent.			
FY 2011 Accomplishments: Created methodology, and initiated baselining efforts of current Air Delivered platform and standoff capabilities against current and future threat environments. Completed an assessment of one aircraft, cruise missile, warhead, and the integration of these systems in an operation environment that has enabled a more focused review of potential gaps that may exist within current operational system employment and planning scenarios. Additionally, efforts were conducted to assess vulnerabilities			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Air Force		DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604222F: <i>Nuclear Weapons Support</i>	PROJECT 654807: <i>Nuclear Weapons & CP Technologies</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012
in our direct attack weapons. This information has been provided to aid in current weapon sustainment efforts, current weapon acquisitions, and is also helping shape future operational employment considerations.			
FY 2012 Plans: Continuation of FY11 efforts addressing threats to air delivered warhead, platform, gravity weapons and/or support equipment risks and shortfalls in order to assure system viability. Continue evaluation of the gaps that currently exist in our required capabilities, and an analysis of technologies and capabilities to address these gaps. This effort will evaluate, direct, and integrate warhead efforts, platform integration, and operational suitability.			
FY 2013 Plans: Continuation of FY12 efforts addressing threats to air delivered warhead, gravity weapons, platform, and/or support equipment risks and shortfalls in order to assure system viability. Continue evaluation of the gaps that currently exist in our required capabilities, and an analysis of technologies and capabilities to address these gaps. This effort will evaluate, direct, and integrate warhead efforts, platform integration, and operational suitability.			
Title: C-CBRN Description: The Counter Chemical, Biological, Radiological, and Nuclear (C-CBRN) studies and evaluation effort will address capability gaps, and conduct concept studies and technical assessments for countering CBRN threats from state and non-state entities to provide recommendations for system level implementation to maintain the nuclear deterrent. Additionally, the effort will address the evaluation of warhead and associated system capabilities relative to vulnerabilities, weapon effects, and hardness assessments to enable US forces to survive and operate efficiently and effectively. FY 2011 Accomplishments: Initiated a comprehensive review of the C-CB counterforce technologies that are being pursued in order to evaluate their effectiveness and operational value to the warfighter. Spearheaded international collaborations with industry to assess NATO nation capabilities that could be utilized in countering Weapons of Mass Destruction (WMD). Completed the survey of all technologies brought forth by the international community for countering WMD. Continued collaborations with the United Kingdom's Ministry of Defense in establishing capabilities to develop counter WMD capabilities and assess their effectiveness. Provided operational weaponizing assessments to support high level planning efforts against potential adversary's WMD targets.		3.695	5.182
			5.554

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Air Force		DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604222F: <i>Nuclear Weapons Support</i>	PROJECT 654807: <i>Nuclear Weapons & CP Technologies</i>	

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Continued efforts to evaluate WMD decontamination methods & requirements necessary for USAF assets. Integrated GPS-denied technologies with USN efforts to more cost effectively address this mission need.			
<i>FY 2012 Plans:</i> Continue comprehensive review of the C-CB counterforce technologies that are being pursued. Complete the evaluation of their effectiveness and operational value to the warfighter and help develop an incremental investment strategy to achieve counterforce capability goals. Continue update of assessments of current capabilities to counter CBRN threats based on current and future threat environments, evaluation of gaps that currently exist in our required capabilities, and an analysis of technologies and capabilities to address these gaps. Continue collaborations with the United Kingdom's Ministry of Defense in order to address identified gaps and leverage their robust capabilities to evaluate WMD.			
<i>FY 2013 Plans:</i> Continue and update comprehensive review of the C-CB counterforce technologies that are being pursued. Complete the evaluation of their effectiveness and operational value to the warfighter and help develop an incremental investment strategy to achieve counterforce capability goals. Continue update of assessments of current capabilities to counter CBRN threats based on current and future threat environments, evaluation of gaps that currently exist in our required capabilities, and an analysis of technologies and capabilities to address these gaps. Continue collaborations with the United Kingdom's Ministry of Defense in order to address identified gaps and leverage their robust capabilities to evaluate WMD. Continue efforts to upgrade, develop, and manage a comprehensive data base system mission planning tool and associated models, to verify the nuclear air-delivered system safe-escape certification criteria, profiles, and planning tables for effective weapon employment.			
Accomplishments/Planned Programs Subtotals	4.795	6.332	6.717

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u> <u>Base</u>	<u>FY 2013</u> <u>OCO</u>	<u>FY 2013</u> <u>Total</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• None: N/A	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

D. Acquisition Strategy Multiple Cost Plus Award Fee (CPAF) and/or Time and Materials (T&M) contracts (the emphasis is minimal use), and Military Interdepartmental Purchase Requests (MIPRs) are/will be used to obtain technical analyses and technical support for safety, operations and counterproliferation assessments. All contracts will be competed.
--

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.

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Air Force		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604222F: <i>Nuclear Weapons Support</i>	PROJECT 654807: <i>Nuclear Weapons & CP Technologies</i>

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Air Force			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604222F: Nuclear Weapons Support	PROJECT 654807: Nuclear Weapons & CP Technologies	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Air Delivered Studies	1	2011	4	2017
C-CBRN Engineering Analysis	1	2011	4	2017

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Air Force									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604222F: Nuclear Weapons Support				PROJECT 655708: Nuclear Weapons Support			
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
655708: Nuclear Weapons Support	38.371	9.252	15.183	-	15.183	17.178	17.560	17.809	16.057	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
Note In FY2012 B61 Life Extension Program (LEP) efforts were transferred to PE 0101125F, Nuclear Weapon Modernization, in order to support B61 LEP development.											
A. Mission Description and Budget Item Justification (U) Provide direct technical and engineering support for all Air Force (AF) nuclear weapon systems, support systems, facilities, and special procedures. Perform studies and analyses for nuclear capable aircraft and missile systems to include ground and maintenance support equipment required to meet certification, safety, security, reliability, operational, and other requirements; oversee and manage the AF nuclear certification process; interface with the DoD and DoE to include national laboratories, the Air Staff, operational commands, and AF nuclear weapon system program offices to accomplish nuclear weapon sustainment and life extension programs. Provide nuclear surety and certification support. Prepare nuclear surety design criteria, standards, specifications, and related requirements documents for all nuclear capable Air Force ground launched missile systems. Includes nuclear certification program management. (U) Budget Activity Justification: This program is in Budget Activity 5, System Development and Demonstration (SDD), because it has passed Milestone B approval and is conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production.											
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2011	FY 2012	FY 2013	
Title: B61 LEP Description: Perform B61 Life Extension Program (LEP), Option Studies, and associated DoD acquisition. FY 2011 Accomplishments: Provided leadership, management, and oversight of the Air Force-led Nuclear Project Officer Group (NPOG) and B61 LEP active and inactive stockpile. Perform activities in support of associated DoD acquisition, potential competitive prototype analyses, aircraft and weapon integration efforts. FY 2012 Plans: Effort moved to Nuclear Weapon Modernization PE 0101125F, project number 657007								24.111	-	-	
Title: Nuclear Surety and Certification								5.105	0.400	4.462	

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Air Force		DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604222F: <i>Nuclear Weapons Support</i>	PROJECT 655708: <i>Nuclear Weapons Support</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012
<p>Description: Prepare nuclear surety design criteria, standards, specifications, and related requirements documents for all nuclear capable Air Force ground launched missile systems. Includes nuclear certification program management.</p> <p>FY 2011 Accomplishments: Completed scheduled nuclear capable aircraft surveillance testing and bomb rack performance testing. Completed Abbreviated Technical Nuclear Surety Analyses for Minuteman III Remote Visual Assessment system and Strike Fighter Operational Safety Review. Completed Facilities Configuration Certification for Kirtland Munitions Maintenance and Storage Complex (KUMMSC). Determined compatibility of over 30 nuclear weapon system modifications and provided numerous technical reviews, independent safety evaluations, and nuclear surety evaluations. Provided oversight of nuclear certification activities; Updated Master Nuclear Certification List.</p> <p>FY 2012 Plans: Continue to perform the engineering and surety analysis role by continuing studies and analyses. Continue to study issues affecting AFMC and AF nuclear weapons facilities and implement improvements.</p> <p>FY 2013 Plans: Continue to perform the engineering and surety analysis role by continuing studies and analyses. Continue to study issues affecting AFMC and AF nuclear weapons facilities and implement improvements.</p>			
<p>Title: Nuclear Surety Support</p> <p>Description: Provides civilian pay for acquisition professional functional expertise in support of the Air Force Nuclear Surety and Certification effort.</p> <p>FY 2011 Accomplishments: Provided civilian pay for acquisition professional functional expertise in support of the Air Force Nuclear Surety and Certification effort as new systems and items are introduced or existing systems and items were modified.</p> <p>FY 2012 Plans: Provide civilian pay for acquisition professional functional expertise in support of the Air Force Nuclear Surety and Certification effort as new systems and items are introduced or existing systems and items are modified.</p> <p>FY 2013 Plans:</p>		9.005	10.721

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Air Force										DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604222F: Nuclear Weapons Support				PROJECT 655708: Nuclear Weapons Support				
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2011	FY 2012	FY 2013
Provide civilian pay for acquisition professional functional expertise in support of the Air Force Nuclear Surety and Certification effort as new systems and items are introduced or existing systems and items are modified.												
Title: C-CBRN										0.150	-	-
Description: Identify orders of battle and provide mapping and data on sites of interest for Counter-Chemical, Biological, Radiological, and Nuclear (C-CBRN) requirements. Effort moved to Project 654807.												
FY 2011 Accomplishments: Identified orders of battle and provided mapping and data on sites of interest for Counter-Chemical, Biological, Radiological, and Nuclear (C-CBRN).												
FY 2012 Plans: Effort moved to Project 654807.												
N/A												
Accomplishments/Planned Programs Subtotals										38.371	9.252	15.183
C. Other Program Funding Summary (\$ in Millions)												
Line Item	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	
• PE 0101125F, RDT&E: B61 Life Extension Program	0.000	83.941	80.200	0.000	80.200	110.223	185.340	156.500	134.500	Continuing	Continuing	
D. Acquisition Strategy												
Research, Development, Test, and Evaluation (RDT&E) projects performed by AF organizations are direct funded, other DoD and government agencies by Military Interdepartmental Purchase Request (MIPR) or other appropriate means. Contractor efforts are accomplished via cost plus award fee (CPAF) contracts awarded as a result of open competition.												
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.												

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Air Force		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604222F: <i>Nuclear Weapons Support</i>	PROJECT 655708: <i>Nuclear Weapons Support</i>

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Air Force			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604222F: <i>Nuclear Weapons Support</i>	PROJECT 655708: <i>Nuclear Weapons Support</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Nuclear Surety/Certification Support	1	2011	4	2017