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

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

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

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604851F: *ICBM - EMD* 

COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	0.000	60.010	71.843	0.000	71.843	66.776	67.342	49.220	17.513	Continuing	Continuing
655037: Support Equipment	0.000	41.331	71.843	0.000	71.843	66.776	67.342	49.220	17.513	Continuing	Continuing
655081: ICBM Crypto	0.000	18.679	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	18.679

### A. Mission Description and Budget Item Justification

ICBM Engineering and Manufacturing Development (EMD) efforts will ensure the extension of the operational life of the Minuteman III Intercontinental Ballistic Missile (ICBM) weapon system through 2030.

The Support Equipment program designs, develops, and tests replacement of obsolete/non-serviceable weapon system support equipment. The efforts include design, development, and testing of replacement Electrical-Electronic Equipment Test Sets, Reentry Field Support Equipment, Minuteman Code Media, the Payload Transporter Tractor and Trailer and Higher Authority Command/Rapid Message Processing Element (HAC/RMPE) Message Generator.

The ICBM Cryptography Upgrade Increment II program will complete requirement definition, validation and risk mitigation efforts to expand on the ICBM Cryptography Upgrade Increment 1 program for future design and development needed to incorporate remote key/code change and irreversible transformation of launch/enable codes increasing nuclear weapons security during annual code change cycles.

This program is in Budget Activity 05 as it involves system development, integration and demonstration. Production efforts associated with this program are budgeted in Budget Activity 03 within Program Element 0101213F.

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

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

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

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604851F: *ICBM - EMD* 

## **B. Program Change Summary (\$ in Millions)**

	FY 2009	FY 2010	<b>FY 2011 Base</b>	FY 2011 OCO	FY 2011 Total
Previous President's Budget	0.000	60.010	0.000	0.000	0.000
Current President's Budget	0.000	60.010	71.843	0.000	71.843
Total Adjustments	0.000	0.000	71.843	0.000	71.843
<ul> <li>Congressional General Reductions</li> </ul>		0.000			
<ul> <li>Congressional Directed Reductions</li> </ul>		0.000			
<ul> <li>Congressional Rescissions</li> </ul>	0.000	0.000			
<ul> <li>Congressional Adds</li> </ul>		0.000			
<ul> <li>Congressional Directed Transfers</li> </ul>		0.000			
<ul> <li>Reprogrammings</li> </ul>	0.000	0.000			
<ul> <li>SBIR/STTR Transfer</li> </ul>	0.000	0.000			
<ul> <li>Other Adjustments</li> </ul>	0.000	0.000	71.843	0.000	71.843

# **Change Summary Explanation**

The FY 2010 President's Budget submittal did not reflect FY 2011 through FY 2015 funding. Therefore, explanation of changes between the two budget positions cannot be made in a relevant manner.

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force
BA 5: Development & Demonstration (SDD)

FY 2011

COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
655037: Support Equipment	0.000	41.331	71.843	0.000	71.843	66.776	67.342	49.220	17.513	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

### A. Mission Description and Budget Item Justification

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force

The ongoing Support Equipment program designs, develops and tests support equipment necessary to extend the operational life of the Minuteman (MM) III Weapon System throught 2030. The production phase, MPAF 3020 funding, is budgeted under MMIII Support Equipment Replacement, PE 0101213F,

## B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
MAJOR THRUST: Design and develop the Electrical-Electronic Equipment Test Set (EEETS) necessary for production/pre-launch checkout of MOD 7 wafer required for the ongoing test launch program.	0.000	5.407	8.603	0.000	8.603
FY 2009 Accomplishments: In FY 2009: Not Applicable					
FY 2010 Plans: In FY 2010: The program will replace the current unsupportable test set which consists of a nonstandard processor, proprietary software, and requires Digital-to-Analog Converter (DAC) cards no longer made (no suitable substitute)Begin design, development, fabrication and testing of EEETS. Begin Independent Validation and Verification (IV&V) for the EEETS.					
FY 2011 Base Plans: In FY 2011: Continue design, development, fabrication and testing of EEETS.					
FY 2011 OCO Plans: In FY 2011 OCO: Not Applicable.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force **DATE:** February 2010 **PROJECT** APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE 3600: Research, Development, Test & Evaluation, Air Force PE 0604851F: *ICBM - EMD* 655037: Support Equipment BA 5: Development & Demonstration (SDD) B. Accomplishments/Planned Program (\$ in Millions) FY 2011 FY 2011 FY 2011 **FY 2009 FY 2010** Base OCO Total MAJOR THRUST: Design and develop Reentry Field Support Equipment (RFSE) to replace the current 0.000 18.385 38.089 0.000 38.089 reentry systems test set. FY 2009 Accomplishments: In FY 2009: Not Applicable FY 2010 Plans: In FY 2010: The effort will increase the mean time between failure, eliminate unneeded MK12 functions, and add new MK21 functions. It will provide capability through 2030 to meet DoE mandated Limited Life Component warhead swaps and to test electrical continuity during buildup of MM III Reentry Systems---Begin design, development, fabrication and testing of RFSE. Begin Independent Validation and Verification (IV&V) for the RFSE. FY 2011 Base Plans: In FY 2011: Continue design, development, fabrication and testing of RFSE. Continue IV&V for the RFSE. FY 2011 OCO Plans: In FY 2011 OCO: Not Applicable. MAJOR THRUST: The Minuteman Code System Media (CSM) effort will develop software to support 0.000 17.539 23.312 0.000 23.312 management of data flow and data products to get the Minuteman III weapon system into operational mode. FY 2009 Accomplishments: In FY 2009: Not Applicable FY 2010 Plans: In FY 2010: Current CSM processes utilize DC300 tape cartridges and 9-track tapes. Beginning in FY11, the national Security Agency( NSA) is no longer using DC300 tape cartridges and the shelf life expires in 2013 for the remaining 9-track tapes. The software will be modified to use CD-ROMs as

#### **UNCLASSIFIED**

R-1 Line Item #82 Page 4 of 17

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force **DATE:** February 2010 **PROJECT** APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE 3600: Research, Development, Test & Evaluation, Air Force PE 0604851F: *ICBM - EMD* 655037: Support Equipment BA 5: Development & Demonstration (SDD) B. Accomplishments/Planned Program (\$ in Millions) FY 2011 FY 2011 FY 2011 **FY 2009 FY 2010** Base OCO Total the new media. Ensures capability through 2030 to load codes/software on MM ICBMs--critical to CY12 code change. Begin design, development, fabrication and testing of CSM. Begin Nuclear Surety Cross Check Analysis (NSCCA) for the CSM. FY 2011 Base Plans: In FY 2011: Continue design, development, fabrication and testing of CSM. Continue NSCCA for the CSM. FY 2011 OCO Plans: In FY 2011 OCO: Not Applicable. MAJOR THRUST: Design and develop the capabilities necessary to replace the current Payload 0.000 0.000 0.790 0.000 0.790 Transporter Tractor and Trailer (PT3), mitigating emerging threat technologies and methods. FY 2009 Accomplishments: In FY 2009: Not Applicable FY 2010 Plans: In FY 2010: Not Applicable FY 2011 Base Plans: In FY 2011: The new Weapons Transporter design increases safety and security during transport activities and improves maintenance operations.---Begin design, development, fabrication and testing of HAC/RMPE message generator. FY 2011 OCO Plans: In FY 2011 OCO: Not Applicable. MAJOR THRUST: Design and develop the replacement for the Higher Authority Command/Rapid Message 0.000 0.000 1.049 0.000 1.049

#### **UNCLASSIFIED**

Processing Element (HAC/RMPE) message generator due to obsolescence and unsupportability for repair.

R-1 Line Item #82 Page 5 of 17

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force
BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE
PE 0604851F: ICBM - EMD

655037: Support Equipment

# B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: In FY 2009: Not Applicable					
FY 2010 Plans: In FY 2010: Not Applicable					
FY 2011 Base Plans: In FY 2011: This program will address the replacement of Test Support Equipment (TSE) with a modern, sustainable common platform and standard interfacesBegin design, development, fabrication and testing of HAC/RMPE message generator.					
FY 2011 OCO Plans: In FY 2011 OCO: Not Applicable.					
Accomplishments/Planned Programs Subtotals	0.000	41.331	71.843	0.000	71.843

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

			FY 2011	FY 2011	FY 2011					Cost To	
<u>Line Item</u>	FY 2009	FY 2010	<b>Base</b>	<u>000</u>	<u>Total</u>	FY 2012	FY 2013	FY 2014	FY 2015	<b>Complete</b>	Total Cost
• PE 0101213F: <i>Missile</i>	0.000	0.000	0.000	0.000	0.000	0.000	1.500	0.500	0.000	0.000	0.000
Procurement - AF, Minuteman											
Squadrons, MM III Modifications											
• PE 0101213F (1): Missile	0.000	0.000	0.000	0.000	0.000	0.000	2.000	9.900	80.800	0.000	0.000
Procurement - AF, Minuteman											

**UNCLASSIFIED** 

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE PROJECT

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

PE 0604851F: ICBM - EMD 655037: Support Equipment

BA 5: Development & Demonstration (SDD)

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

<u>FY 2011</u> <u>FY 2011</u> <u>Cost To</u>

Line Item FY 2009 FY 2010 Base OCO Total FY 2012 FY 2013 FY 2014 FY 2015 Complete Total Cost

Squadrons, MM III Support Equipment Replacement

### D. Acquisition Strategy

The support equipment replacement programs will be Cost Plus Award Fee (CPAF) and/or Cost Plus Incentive Fee (CPIF) contract addendums added to the ICBM Prime Integration Contractor (IPIC) for everything but the Nuclear Safety Cross Check Analysis (NSCCA)/Independent Validation and Verification (IV&V) efforts, which will be contracted for separately under a CPAF Contract.

#### **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.

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

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**PROJECT** 

3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)

PE 0604851F: *ICBM - EMD* 

655037: Support Equipment

**Product Development (\$ in Millions)** 

				FY 2	FY 2010		FY 2011 Base		FY 2011 OCO				
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
ICBM Prime Integration Contract	SS/CPAF	Northrop Grumman Mission Systems Clearfield, UT	2.000	33.546	Jul 2010	65.487	Oct 2010	0.000		65.487	113.297	214.330	Continuing
	•	Subtotal	2.000	33.546		65.487		0.000		65.487	113.297	214.330	

#### Remarks

**Support (\$ in Millions)** 

				FY 2	FY 2010		FY 2011 Base		FY 2011 OCO				
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
NSCCA	SS/CPAF	NGIT No text provided	0.000	2.368	Aug 2010	3.148	Oct 2010	0.000		3.148	3.166	8.682	Continuing
SPO/Other Program Support	Various/ Various	ICBM Program Office Hill AFB, UT	0.000	1.189	Jan 2010	1.468	Oct 2010	0.000		1.468	6.336	8.993	Continuing
		Subtotal	0.000	3.557		4.616		0.000		4.616	9.502	17.675	

**Remarks** 

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

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

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

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604851F: *ICBM - EMD* 

**PROJECT** 

655037: Support Equipment

# Test and Evaluation (\$ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
Test & Evaluation	SS/CPAF	Northrop Grumman Mission Systems Clearfield, UT	0.000	1.103	Aug 2010	0.454		0.000		0.454	1.296	2.853	Continuing
Independent Validation and Verification	SS/CPAF	Northrop Grumman IT Clearfield, UT	0.000	3.125	Aug 2010	1.286	Oct 2010	0.000		1.286	10.086	14.497	Continuing
		Subtotal	0.000	4.228		1.740		0.000		1.740	11.382	17.350	

#### Remarks

	Total Prior Years Cost	FY2	2010		2011 Ise	FY 2		Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	2.000	41.331		71.843		0.000	71.8	3 134.181	249.355	

#### **Remarks**

Total Prior Years Cost may include only FY 2009 data.

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

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

BA 5: Development & Demonstration (SDD)

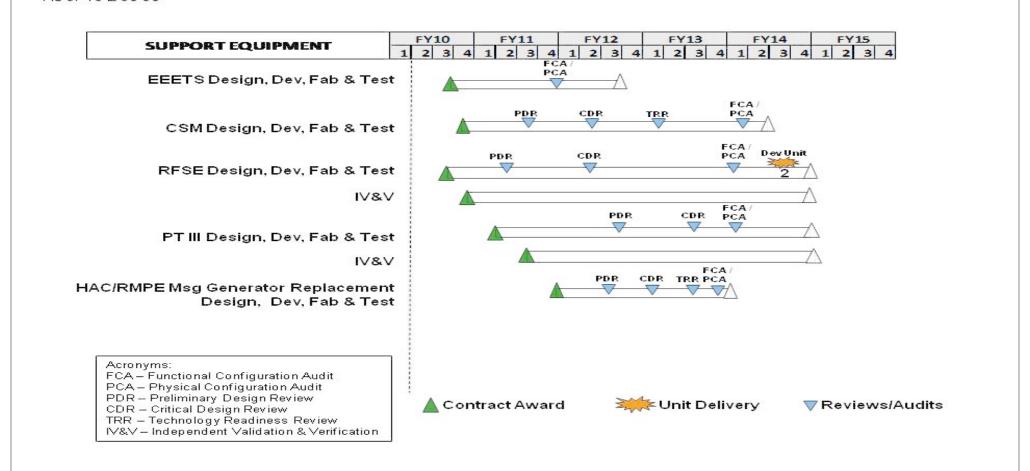
R-1 ITEM NOMENCLATURE

PE 0604851F: ICBM - EMD

**PROJECT** 

655037: Support Equipment

As of 18 Dec 09



### **UNCLASSIFIED**

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Air Force

APPROPRIATION/BUDGET ACTIVITY

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

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604851F: *ICBM - EMD* 

**PROJECT** 

655037: Support Equipment

## Schedule Details

	Sta	ırt	En	d
Event	Quarter	Year	Quarter	Year
Electrical-Electronic Equipment Test Set (EEETS) Development Contract Award	3	2010	3	2010
Reentry Field Support Equipment (RFSE) Development Contract Award	3	2010	3	2010
Codes System Media (CSM) Development Contract Award	4	2010	4	2010
RFSE Independent Validation & Verification (IV&V) Kickoff	4	2010	4	2010
RFSE Preliminary Design Review (PDR)	2	2011	2	2011
Payload Tractor Trailer Transporter (PT3) Development Contract Award	2	2011	2	2011
CSM PDR	3	2011	3	2011
PT3 IV&V Kickoff	3	2011	3	2011
HAC/RMPE Msg Generator Replacement Development Contract Award	4	2011	4	2011
EEETS Functional Configuration Audit (FCA)/Physical Configuration Audit (PCA)	4	2011	4	2011

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

3600: Research, Development, Test & Evaluation, Air Force PE 0604851F: ICBM - EMD 655081: ICBM Crypto

BA 5: Development & Demonstration (SDD)

COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To	Total Cost
655081: ICBM Crypto	0.000	18.679	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	18.679
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

## A. Mission Description and Budget Item Justification

Increment II of the Inter-Continental Ballistic Missile Cryptography Upgrade program executes USSTRATCOM, Air Force Global Strike Command (AFGSC) and Nuclear Weapon Safety Center (NWSC) requirements by implementing the KS-60 capabilities of remote key/code change and irreversible transformation as mandated in the approved Capabilities Development Document (CDD) dated 4 Jan 05 and addresses Nuclear Weapon System Safety Group Operational Safety Review (NWSSG OSR) requirements 98-2, 00-1 and 02-2. These features will greatly increase security during code changes by reducing the frequency of open sites 75 days annually and reduce associated resource costs for 450 launch facilities (LF) and 45 launch control centers (LCC).

This document is for the RDT&E phase of the ICBM Cryptography Program Increment II and is in Budget Activity 05. The Production portion of the program is under PE 0101213F MM III Modification.

## B. Accomplishments/Planned Program (\$ in Millions)

MAJOR THRUST: ICBM cryptography upgrade II requirement definition, validation and risk mitigation for future design & development  FY 2009 Accomplishments: In FY 2019 Plans: In FY 2010: Complete requirement definition, validation and risk mitigation for future design, develop & test of the software upgrades/changes to the Console Operating Program, Launch Facility hardware/ software modification and Wing Code Processing System.  FY 2011 FY 2011 Base OCO 0.000 0.000 0.000 0.000						
future design & development  FY 2009 Accomplishments: In FY 2009: Not Applicable  FY 2010 Plans: In FY 2010: Complete requirement definition, validation and risk mitigation for future design, develop & test of the software upgrades/changes to the Console Operating Program, Launch Facility hardware/		FY 2009	FY 2010			
In FY 2009: Not Applicable  FY 2010 Plans: In FY 2010: Complete requirement definition, validation and risk mitigation for future design, develop & test of the software upgrades/changes to the Console Operating Program, Launch Facility hardware/		0.000	18.679	0.000	0.000	0.000
In FY 2010: Complete requirement definition, validation and risk mitigation for future design, develop & test of the software upgrades/changes to the Console Operating Program, Launch Facility hardware/	·					
	In FY 2010: Complete requirement definition, validation and risk mitigation for future design, develop & test of the software upgrades/changes to the Console Operating Program, Launch Facility hardware/					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

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

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604851F: *ICBM - EMD* 

PROJECT

655081: ICBM Crypto

### B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans:					
In FY 2011: Not Applicable					
FY 2011 OCO Plans:					
In FY 2011 OCO: Not Applicable.					
Accomplishm	ents/Planned Programs Subtotals 0.000	18.679	0.000	0.000	0.000

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

			FY 2011	FY 2011	FY 2011					Cost Io	
<u>Line Item</u>	FY 2009	FY 2010	Base	OCO	<u>Total</u>	FY 2012	FY 2013	FY 2014	FY 2015	<b>Complete</b>	<b>Total Cost</b>
• PE 0101213F: <i>Missile</i>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Procurement - AF, Minuteman Squadrons, Modification

# **D. Acquisition Strategy**

Cost Plus Award Fee contract will be added to the ICBM Prime Integration Contractor (IPIC).

#### **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.

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

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE
PE 0604851F: ICBM - EMD

**PROJECT** 

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

655081: ICBM Crypto

BA 5: Development & Demonstration (SDD)

**Product Development (\$ in Millions)** 

				FY 2	010	FY 2 Ba		FY 2		FY 2011 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
ICBM Prime Integration Contract	SS/CPAF	Northrop Grumman Clearfield, UT	0.000	18.187	Jan 2010	0.000		0.000		0.000	0.000	18.187	0.000
		Subtotal	0.000	18.187		0.000		0.000		0.000	0.000	18.187	0.000

#### **Remarks**

# **Support (\$ in Millions)**

				FY 2	010	FY 2 Ba	-	FY 2		FY 2011 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
SPO/Other Program Support	Various/ Various	ICBM Program Office Hill AFB, UT	0.000	0.492	Oct 2009	0.000		0.000		0.000	0.000	0.492	0.000
	•	Subtotal	0.000	0.492		0.000		0.000		0.000	0.000	0.492	0.000

#### **Remarks**

	Total Prior Years Cost	FY 2010		2011 ise	FY 2	2011 CO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	18.679	0.000		0.000		0.000	0.000	18.679	0.000

# **UNCLASSIFIED**

			UNCL	ASSIFIED					
Exhibit R-3, RDT&E Project Cost Analysis	: PB 2011 Air Forc	е					DATE: Febru	ary 2010	
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evalua BA 5: Development & Demonstration (SDD)	ation, Air Force			<b>NOMENCLATURE</b> 851F: <i>ICBM - EMD</i>		PROJECT 655081: ICBM Crypto			
	Total Prior Years Cost	FY 20	10	FY 2011 Base	FY 2011 OCO	FY 20 Tota		Total Cost	Target Value of Contract
Total Prior Years Cost may include only FY 2009 data									

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force

APPROPRIATION/BUDGET ACTIVITY

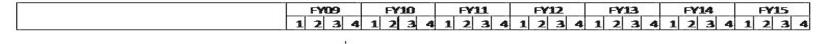
3600: Research, Development, Test & Evaluation, Air Force
BA 5: Development & Demonstration (SDD)

DATE: February 2010

R-1 ITEM NOMENCLATURE
PE 0604851F: ICBM - EMD

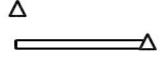
655081: ICBM Crypto

ICBM Cryptography Upgrade (ICU) II



Contract Award

Requirement definition, validation and risk mitigation



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 $\textbf{Exhibit R-4A}, \, \textbf{RDT\&E Schedule Details:} \, \, \textbf{PB 2011 Air Force}$ 

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

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

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604851F: *ICBM - EMD* 

**PROJECT** 

655081: ICBM Crypto

## Schedule Details

	St	art	Eı	nd
Event	Quarter	Year	Quarter	Year
Contract Award	2	2010	2	2010