

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)								DATE February 2002	
BUDGET ACTIVITY 07 - Operational System Development				PE NUMBER AND TITLE 0303131F Minimum Essential Emergency Communications Network (MEECN)					
COST (\$ in Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	19,153	5,923	2,423	2,011	49,638	40,604	38,586	Continuing	TBD
2832 VLF/LF System Improvements	2,515	1,413	1,156	1,431	1,468	1,495	1,527	Continuing	TBD
4521 DIRECT	1,146	4,129	877	290	290	306	311	Continuing	TBD
4610 Minuteman MEECN Program (MMP)	15,492	381	390	290	5,942	20,989	31,811	Continuing	TBD
5047 Ground Element MEECN System (GEMS)	0	0	0	0	41,938	17,814	4,937	Continuing	TBD
Quantity of RDT&E Articles	4	0	0	0	0	0	0	0	0

In FY 2003, Project 4610 was renamed to Minuteman MEECN Program (MMP) (formerly MEECN EHF) in order to better depict on-going efforts. This action did not change program content .

(U) **A. Mission Description**
 Minimum Essential Emergency Communications Network (MEECN) systems provide assured communications connectivity between the National Command Authorities (NCA) and the strategic deterrent forces.
 Currently these systems include:
 - Very Low Frequency/Low Frequency (VLF/LF) System Improvement, the Modified Miniature Receive Terminal (MMRT), that provides High Data Rate (HIDAR) capability for E-4B and E-6B aircraft,
 - Defense Improved Emergency Message Automated Transmission System (IEMATS) Replacement Command and Control Terminals (DIRECT),
 - Minuteman MEECN Program (MMP) - is the combination of Minuteman ICBM Launch Control Center (LCC) VLF/LF upgrade efforts with Minuteman ICBM Extremely High Frequency (EHF) band communications capability efforts.

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<p>(U) <u>A. Mission Description Continued</u> Future capability will include Advanced EHF (AEHF) on MMP and Ground Element MEECN Systems (GEMS) which is AEHF at fixed-sites and mobile units.</p> <p>(U) <u>B. Budget Activity Justification</u> This program is in Budget Activity 07 - Operational System Development, because it supports work on currently fielded operating weapon systems.</p> <p>(U) <u>C. Program Change Summary (\$ in Thousands)</u></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;"></th> <th style="text-align: right; border-bottom: 1px solid black;">FY 2001</th> <th style="text-align: right; border-bottom: 1px solid black;">FY 2002</th> <th style="text-align: right; border-bottom: 1px solid black;">FY 2003</th> <th style="text-align: right; border-bottom: 1px solid black;">Total Cost</th> </tr> </thead> <tbody> <tr> <td>(U) Previous President's Budget</td> <td style="text-align: right;">15,161</td> <td style="text-align: right;">5,982</td> <td style="text-align: right;">2,432</td> <td style="text-align: right;">TBD</td> </tr> <tr> <td>(U) Appropriated Value</td> <td style="text-align: right;">15,302</td> <td style="text-align: right;">5,923</td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Appropriated Value</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding-left: 20px;">a. Congressional/General Reductions</td> <td style="text-align: right;">-107</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding-left: 20px;">b. Small Business Innovative Research</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding-left: 20px;">c. Omnibus or Other Above Threshold Reprogram</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding-left: 20px;">d. Below Threshold Reprogram</td> <td style="text-align: right;">3,991</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="padding-left: 20px;">e. Rescissions</td> <td style="text-align: right;">-33</td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Budget Years Since FY 2002 PBR</td> <td></td> <td></td> <td style="text-align: right;">-9</td> <td></td> </tr> <tr> <td>(U) Current Budget Submit/FY 2003 PBR</td> <td style="text-align: right;">19,153</td> <td style="text-align: right;">5,923</td> <td style="text-align: right;">2,423</td> <td style="text-align: right;">TBD</td> </tr> </tbody> </table> <p>(U) <u>Significant Program Changes:</u> FY01 Below Threshold Reprogramming (BTR) funds required for an MMP cost overrun resulting from delayed Engineering Manufacturing Development (EMD) parts purchase needed to complete testing.</p>				FY 2001	FY 2002	FY 2003	Total Cost	(U) Previous President's Budget	15,161	5,982	2,432	TBD	(U) Appropriated Value	15,302	5,923			(U) Adjustments to Appropriated Value					a. Congressional/General Reductions	-107				b. Small Business Innovative Research					c. Omnibus or Other Above Threshold Reprogram					d. Below Threshold Reprogram	3,991				e. Rescissions	-33				(U) Adjustments to Budget Years Since FY 2002 PBR			-9		(U) Current Budget Submit/FY 2003 PBR	19,153	5,923	2,423	TBD
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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
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BUDGET ACTIVITY 07 - Operational System Development	PE NUMBER AND TITLE 0303131F Minimum Essential Emergency Communications Network (MEECN)	PROJECT 2832
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COST (\$ in Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
2832 VLF/LF System Improvements	2,515	1,413	1,156	1,431	1,468	1,495	1,527	Continuing	TBD

(U) A. Mission Description

This project's efforts support the design and development of the Modified Miniature Receive Terminal (MMRT) Program. The program modifies existing Miniature Receive Terminals (MRTs) to provide High Data Rate (HIDAR) - a Joint Staff directed effort to provide a fast and interoperable Minimum Essential Emergency Communications Network (MEECN) mode capability for installation on the following platforms: the E-4B, National Airborne Operations Center (NAOC); and the E-6B, Take Charge and Move Out (TACAMO). The MMRT program renders MRT Very Low Frequency/Low Frequency (VLF/LF) receivers fully interoperable satisfying both Air Force and Navy requirements via a Joint effort with the Air Force Electronics Systems Center (ESC), Hanscom AFB, MA, as the lead agency. The MMRT program also develops and tests HIDAR modifications required to ensure the E-4 and E-6 platforms are interoperable in MEECN.

This project also funds the airborne segment of the Communications Evaluation Program (CEP) for technical analysis of the currently fielded strategic Command, Control, and Communications (C3) systems. CEP is a key factor in determining Assured MEECN Interoperability (AMI). The program implements a detailed test program for emergency action message (EAM) insertion and reception. It conducts multiple evaluations on continual year-round basis. Following test data collection, analysis is performed to ensure the strategic communications systems meet JCS-directed platform connectivity requirements. The purpose of the program is to test the strategic C3 system to establish a quantitative system-wide performance baseline, conduct trend analysis, integrate new systems into the strategic C3 system, identify system deficiencies, recommend solutions and verify the effectiveness of corrective actions, recommend and develop procedures in order to improve overall system performance. Trade-off analysis is also performed to identify benefits and drawbacks of maintaining current systems. Studies are conducted to monitor communications system technology and potential integration complexities into current and future capabilities.

(U) FY 2001 (\$ in Thousands)

- (U) \$1,400** Continued MMRT Airworthiness and Nuclear Certification
- (U) \$1,115** Continued Communications Evaluation Program (CEP)/Studies and Analysis
- (U) \$2,515** Total

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)							DATE February 2002		
BUDGET ACTIVITY 07 - Operational System Development				PE NUMBER AND TITLE 0303131F Minimum Essential Emergency Communications Network (MEECN)			PROJECT 2832		
(U) <u>A. Mission Description Continued</u>									
(U) <u>FY 2002 (\$ in Thousands)</u>									
(U) \$1,413		Continue Communications Evaluation Program (CEP)/Studies and Analysis							
(U) \$1,413		Total							
(U) <u>FY 2003 (\$ in Thousands)</u>									
(U) \$1,156		Continue Communications Evaluation Program (CEP)/Studies and Analysis							
(U) \$1,156		Total							
(U) <u>B. Project Change Summary</u>									
No significant changes.									
(U) <u>C. Other Program Funding Summary (\$ in Thousands)</u>									
	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) Other APPN									
(U) Aircraft Procurement - AF, (MEECN, PE 0303131F, BA-05, P-57)	19,406	7,242	4,655	0	0	0	0	0	31,303
(U) <u>D. Acquisition Strategy</u>									
Modified Miniature Receive Terminal (MMRT) Program. Contract awarded in FY96 for the E-4B, National Airborne Operations Center (NAOC); E-6B, Take Charge and Move Out (TACAMO). CEP is an annual test and evaluation of currently fielded command and control systems.									
(U) <u>E. Schedule Profile</u>									
			<u>FY 2001</u>			<u>FY 2002</u>		<u>FY 2003</u>	

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2002			
BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT		
07 - Operational System Development				0303131F Minimum Essential Emergency Communications Network (MEECN)				2832		
(U) A. Project Cost Breakdown (\$ in Thousands)										
						<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>
(U)	Prime Contract (MMRT)					1,300				
(U)	Program Management Administration (PMA)					100		200		200
(U)	Johns Hopkins University: CEP Studies and Analysis					1,115		1,213		956
(U)	Total					2,515		1,413		1,156
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)										
(U) Performing Organizations:										
<u>Contractor or Government</u>	<u>Contract Method/Type</u>	<u>Award or Obligation</u>	<u>Performing Activity</u>	<u>Project Office</u>	<u>Total Prior to FY 2001</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget FY 2003</u>	<u>Budget to Complete</u>	<u>Total Program</u>
<u>Performing Activity</u>	<u>or Funding Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>						
<u>Product Development Organizations</u>										
Rockwell	SS/CPAF	Aug 92	13,500	13,500	13,500				0	13,500
Rockwell	SS/CPAF	Jul 96	49,238	49,238	48,038	1,300			0	49,338
TRW	SS/CPAF	Mar 99	16,093	16,093	16,093	0			0	16,093
JHU-APL (SPAWAR SysCen)	MIPR	Annual	N/A	N/A	3,711	1,115	1,213	956	Continuing	TBD
<u>Support and Management Organizations</u>										
SE/TA [SRC, ASEC, MCR ATT, SAFTAS]	Various	As Req'd.	2,976	2,976	2,976	0	0	0	0	2,976
MITRE	LOE	As Req'd.	131	131	131	0	0	0	0	131
PMA	Various	Annual	N/A	N/A	1,378	100	200	200	Continuing	TBD
ALCs	MIPR	As Req'd.	355	355	355				0	355
<u>Test and Evaluation Organizations</u>										
NavAir Warfare Center	MIPR	As Req'd.	5,554	5,554	5,554				0	5,554
AFOTEC	MIPR	As Req'd.	204	204	204				0	204
Project 2832				Page 6 of 17 Pages				Exhibit R-3 (PE 0303131F)		

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)				DATE					
BUDGET ACTIVITY				PROJECT					
07 - Operational System Development				0303131F Minimum Essential Emergency Communications Network (MEECN)					
				2832					
(U) Government Furnished Property:									
<u>Item</u>	<u>Contract</u>	<u>Award or</u>	<u>Delivery</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Description</u>	<u>Method/Type</u>	<u>Obligation</u>	<u>Date</u>	<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>	<u>Program</u>
	<u>or Funding</u>	<u>Date</u>	<u>Date</u>						
<u>Vehicle</u>									
<u>Product Development Property</u>									
N/A				342					342
<u>Support and Management Property</u>									
N/A									
<u>Test and Evaluation Property</u>									
N/A									
<u>Subtotals</u>				<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
				<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>	<u>Program</u>
Subtotal Product Development				81,684	2,415	1,213	956	TBD	TBD
Subtotal Support and Management				4,840	100	200	200	TBD	TBD
Subtotal Test and Evaluation				5,758				0	5,758
Total Project				92,282	2,515	1,413	1,156	TBD	TBD

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BUDGET ACTIVITY 07 - Operational System Development	PE NUMBER AND TITLE 0303131F Minimum Essential Emergency Communications Network (MEECN)	PROJECT 4521
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COST (\$ in Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
4521 DIRECT	1,146	4,129	877	290	290	306	311	Continuing	TBD

(U) **A. Mission Description**

The Defense IEMATS Replacement Command and Control Terminals (DIRECT), which is the Improved Emergency Message Automated Transmission System (IEMATS) replacement program, is a Strategic Nuclear Command and Control (C2) system directly supporting the Chairman of the Joint Chiefs of Staff (CJCS) and the National Command Authorities (NCA). DIRECT will provide for all current IEMATS requirements, including the build, release, and transmission of Emergency Action Messages (EAM) to allow the CJCS and warfighters to remain responsive to NCA directives. This program will acquire system hardware for seven unified command centers and a software maintenance facility. DIRECT will be compatible with the Defense Message System (DMS) or the directed DMS alternative and interface with all current and future EAM distribution communications systems. DIRECT will also expand, through DIRECT-to-NOVA/Strategic Command and Control System (SACCS) interface, the user-base for Emergency Action Message (EAM) dissemination due to Automatic Digital Network (AUTODIN) closure.

This project also funds the operational Command and Control Terminals segment of the Communications Evaluation Program (CEP) for technical analysis of the currently fielded strategic Command, Control, and Communications (C3) systems. CEP is a key factor in determining Assured MEECN Interoperability (AMI). The program implements a detailed test program for emergency action message (EAM) insertion and reception. It conducts multiple evaluations on continual year-round basis. Following test data collection, analysis is performed to ensure the strategic communications systems meet JCS-directed platform connectivity requirements. The purpose of the program is to test the strategic C3 system to establish a quantitative system-wide performance baseline, conduct trend analysis, integrate new systems into the strategic C3 system, identify system deficiencies, recommend solutions and verify the effectiveness of corrective actions, recommend and develop procedures in order to improve overall system performance. Trade-off analysis is also performed to identify benefits and drawbacks of maintaining current systems. Studies are conducted to monitor communications system technology and potential integration complexities into current and future capabilities.

(U) **FY 2001 (\$ in Thousands)**

(U) \$977 Began EMD to develop interface between DIRECT and DMS

(U) \$169 Continued Communications Evaluation Program (CEP) Studies and Analysis

(U) \$1,146 Total

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)							DATE February 2002		
BUDGET ACTIVITY 07 - Operational System Development				PE NUMBER AND TITLE 0303131F Minimum Essential Emergency Communications Network (MEECN)			PROJECT 4521		
(U) <u>A. Mission Description Continued</u>									
(U) <u>FY 2002 (\$ in Thousands)</u>									
(U)	\$979	Continued EMD to develop interface between DIRECT and DMS							
(U)	\$3,000	Development of MEECN Emergency Action Message (EAM) Hybrid Solution							
(U)	\$150	Continued Communications Evaluation Program (CEP) Studies and Analysis							
(U)	\$4,129	Total							
(U) <u>FY 2003 (\$ in Thousands)</u>									
(U)	\$699	Continue EMD to develop interface between DIRECT and DMS							
(U)	\$178	Continue Communications Evaluation Program (CEP) Studies and Analysis							
(U)	\$877	Total							
(U) <u>B. Project Change Summary</u>									
No significant changes.									
(U) <u>C. Other Program Funding Summary (\$ in Thousands)</u>									
	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U)	Other APPN								
(U)	Other Procurement - AF, (MEECN, PE 0303131F, BA-03, P-50)	1,494	2,064	1,072	0	0	0	0	4,630
(U) <u>D. Acquisition Strategy</u>									
DIRECT Program. A SS/CPAF contract for EMD was awarded to GTE Government Systems (now General Dynamics-Communications Systems), Needham, MA on 12 Jul 96.									
(U) <u>E. Schedule Profile</u>									
			<u>FY 2001</u>			<u>FY 2002</u>		<u>FY 2003</u>	

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BUDGET ACTIVITY 07 - Operational System Development					PE NUMBER AND TITLE 0303131F Minimum Essential Emergency Communications Network (MEECN)						PROJECT 4521		
(U) E. Schedule Profile Continued													
		<u>FY 2001</u>				<u>FY 2002</u>				<u>FY 2003</u>			
	1	2	3	4	1	2	3	4	1	2	3	4	
(U) CEP Study and Analysis - Annual Report				*				X				X	
(U) Production Start	*												
(U) Initial Operational Test and Evaluation			*										
(U) Begin DMS Interface	*												
* Indicates completed task													
X Indicates planned task													
Project 4521				Page 10 of 17 Pages				Exhibit R-2A (PE 0303131F)					

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2002			
BUDGET ACTIVITY					PE NUMBER AND TITLE			PROJECT		
07 - Operational System Development					0303131F Minimum Essential Emergency Communications Network (MEECN)			4521		
(U) A. Project Cost Breakdown (\$ in Thousands)										
						<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>
(U)	Prime Contract					600		3,724		569
(U)	Program Management Administration (PMA)					168		125		65
(U)	SE/TA					209		130		65
(U)	CEP/Studies and Analysis					169		150		178
(U)	Total					1,146		4,129		877
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)										
(U) Performing Organizations:										
<u>Contractor or</u>	<u>Contract</u>									
<u>Government</u>	<u>Method/Type</u>	<u>Award or</u>	<u>Performing</u>	<u>Project</u>						
<u>Performing</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Activity</u>	<u>Office</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Activity</u>	<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>	<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>	<u>Program</u>
<u>Product Development Organizations</u>										
GTE	SS/CPAF	Jul 96	N/A	N/A	28,585	600	3,724	569	Continuing	TBD
National Security Agency (NSA)	MIPR	Annually	2,300	2,300	2,300				0	2,300
JHU-APL	LOE	Annual	N/A	N/A	180	169	150	178	Continuing	TBD
<u>Support and Management Organizations</u>										
SE/TA [ASEC, ABACUS, MCR, ATT, SAFTAS]	LOE	As Req'd.	N/A	N/A	2,733	209	130	65	Continuing	TBD
MITRE	LOE	As Req'd.	N/A	N/A	2,668	0	0	0	0	2,668
PMA	Various	Annual	N/A	N/A	1,178	168	125	65	Continuing	TBD
<u>Test and Evaluation Organizations</u>										
Various	Various	As Req'd.	N/A	500	471	0	0	0	0	471

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BUDGET ACTIVITY				PROJECT					
07 - Operational System Development				0303131F Minimum Essential Emergency Communications Network (MEECN)					
				4521					
(U) Government Furnished Property:									
<u>Item</u>	<u>Contract</u>	<u>Award or</u>	<u>Delivery</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Description</u>	<u>Method/Type</u>	<u>Obligation</u>	<u>Date</u>	<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>	<u>Program</u>
<u>Vehicle</u>		<u>Date</u>	<u>Date</u>						
<u>Product Development Property</u>									
N/A									
<u>Support and Management Property</u>									
N/A									
<u>Test and Evaluation Property</u>									
N/A									
<u>Subtotals</u>				<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
				<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>	<u>Program</u>
Subtotal Product Development				31,065	769	3,874	747	TBD	TBD
Subtotal Support and Management				6,579	377	255	130	TBD	TBD
Subtotal Test and Evaluation				471	0	0	0	0	471
Total Project				38,115	1,146	4,129	877	TBD	TBD

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BUDGET ACTIVITY 07 - Operational System Development	PE NUMBER AND TITLE 0303131F Minimum Essential Emergency Communications Network (MEECN)	PROJECT 4610
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COST (\$ in Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
4610 Minuteman MEECN Program (MMP)	15,492	381	390	290	5,942	20,989	31,811	Continuing	TBD

In FY 2003, Project 4610 was renamed to Minuteman MEECN Program (MMP) (formerly MEECN EHF). This action did not change program content .

(U) A. Mission Description

This project combines Minuteman ICBM Launch Control Center (LCC) Very Low Frequency/Low Frequency (VLF/LF) efforts with Minuteman ICBM Extremely High Frequency (EHF) band communications capability efforts. This MEECN project will provide reliable, secure, and survivable communications in the Extremely High Frequency (EHF) band. Specifically, this effort is currently focused on replacing the satellite-based, ground communication links with Minuteman ICBM forces. It supplants the ICBM Super High Frequency (SHF) Satellite Terminal (ISST) receipt, providing force direction/execution, and the Ultra High Frequency (UHF) report-back links. ISST relies upon the Single Channel Transponder (SCT) package aboard the Defense Satellite Communications System (DSCS). The SCT will not be flown on the DSCS after 2003. Extending the use of SCT aboard DSCS is not practical. The UHF links depend upon the Air Force Satellite Communications (AFSATCOM) packages hosted aboard the Fleet Satellite Communications (FLTSATCOM) satellites. FLTSATCOM satellites are past their life expectancy. MEECN EHF is required to meet redundancy standards established by national security directives.

This project also funds the operational ICBM Launch Control Center (LCCs) segment of the Communications Evaluation Program (CEP) for technical analysis of the currently fielded strategic Command, Control, and Communications (C3) systems. CEP is a key factor in determining Assured MEECN Interoperability (AMI). The program implements a detailed test program for emergency action message (EAM) insertion and reception. It conducts multiple evaluations on continual year-round basis. Following test data collection, analysis is performed to ensure the strategic communications systems meet JCS-directed platform connectivity requirements. The purpose of the program is to test the strategic C3 system to establish a quantitative system-wide performance baseline, conduct trend analysis, integrate new systems into the strategic C3 system, identify system deficiencies, recommend solutions and verify the effectiveness of corrective actions, recommend and develop procedures in order to improve overall system performance. Trade-off analysis is also performed to identify benefits and drawbacks of maintaining current systems. Studies are conducted to monitor communications system technology and potential integration complexities into current and future capabilities.

Future capability will include upgrading MMP system to be compatible with Advanced EHF (AEHF).

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BUDGET ACTIVITY 07 - Operational System Development	PE NUMBER AND TITLE 0303131F Minimum Essential Emergency Communications Network (MEECN)	PROJECT 4610																																																
<p>(U) <u>A. Mission Description Continued</u></p> <p>(U) <u>FY 2001 (\$ in Thousands)</u></p> <p>(U) \$10,570 Continued EHF and VLF/LF EMD</p> <p>(U) \$4,648 Continued Integration and Testing of the Minuteman MEECN terminals</p> <p>(U) \$274 Continued Communications Evaluation Program (CEP) Studies and Analysis</p> <p>(U) \$15,492 Total</p> <p>(U) <u>FY 2002 (\$ in Thousands)</u></p> <p>(U) \$381 Continued Communications Evaluation Program (CEP) Studies and Analysis</p> <p>(U) \$381 Total</p> <p>(U) <u>FY 2003 (\$ in Thousands)</u></p> <p>(U) \$390 Continue Communications Evaluation Program (CEP)/Studies and Analysis</p> <p>(U) \$390 Total</p> <p>(U) <u>B. Project Change Summary</u> MMP Milestone III was delayed due to contractor development test delays.</p> <p>(U) <u>C. Other Program Funding Summary (\$ in Thousands)</u></p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 10%; text-align: center;"><u>FY 2001</u></th> <th style="width: 10%; text-align: center;"><u>FY 2002</u></th> <th style="width: 10%; text-align: center;"><u>FY 2003</u></th> <th style="width: 10%; text-align: center;"><u>FY 2004</u></th> <th style="width: 10%; text-align: center;"><u>FY 2005</u></th> <th style="width: 10%; text-align: center;"><u>FY 2006</u></th> <th style="width: 10%; text-align: center;"><u>FY 2007</u></th> <th style="width: 10%; text-align: center;"><u>Cost to</u></th> <th style="width: 10%; text-align: center;"><u>Total Cost</u></th> </tr> <tr> <td></td> <td style="text-align: center;"><u>Actual</u></td> <td style="text-align: center;"><u>Estimate</u></td> <td style="text-align: center;"><u>Complete</u></td> <td></td> </tr> </thead> <tbody> <tr> <td>(U) Other APPN</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) MPAF, Missile Modifications (MEECN, PE 0303131F, BA 03, P-011)</td> <td style="text-align: right;">14,278</td> <td style="text-align: right;">43,640</td> <td style="text-align: right;">33,169</td> <td style="text-align: right;">0</td> <td style="text-align: right;">91,087</td> </tr> </tbody> </table> <p>(U) <u>D. Acquisition Strategy</u> The ICBM Prime Integrating Contract (through OO-ALC, Hill AFB, UT) is being used as a contracting vehicle for the Minuteman MEECN Program (MMP).</p> <p>(U) <u>E. Schedule Profile</u></p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"></th> <th style="width: 20%; text-align: center;"><u>FY 2001</u></th> <th style="width: 20%; text-align: center;"><u>FY 2002</u></th> <th style="width: 20%; text-align: center;"><u>FY 2003</u></th> </tr> </thead> <tbody> <tr> <td>Project 4610</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Cost to</u>	<u>Total Cost</u>		<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>		(U) Other APPN										(U) MPAF, Missile Modifications (MEECN, PE 0303131F, BA 03, P-011)	14,278	43,640	33,169	0	0	0	0	0	91,087		<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	Project 4610			
	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Cost to</u>	<u>Total Cost</u>																																									
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Project 4610																																																		
Project 4610	Page 14 of 17 Pages	Exhibit R-2A (PE 0303131F)																																																

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BUDGET ACTIVITY 07 - Operational System Development	PE NUMBER AND TITLE 0303131F Minimum Essential Emergency Communications Network (MEECN)	PROJECT 4610
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(U) **E. Schedule Profile Continued**

	<u>FY 2001</u>				<u>FY 2002</u>				<u>FY 2003</u>			
	1	2	3	4	1	2	3	4	1	2	3	4
(U) CEP Study and Analysis				*				X				X
(U) MMP Milestone III Decision						X						
* Indicates completed task												
X Indicates planned task												

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2002			
BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT		
07 - Operational System Development				0303131F Minimum Essential Emergency Communications Network (MEECN)				4610		
(U) A. Project Cost Breakdown (\$ in Thousands)										
						<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>
(U)	Prime Contract					14,910		0		
(U)	Program Management Administration (PMA)					100		0		
(U)	SE/TA					108		0		
(U)	MITRE					100		0		
(U)	JHU-APL					274		381		390
(U)	Total					15,492		381		390
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)										
(U) Performing Organizations:										
<u>Contractor or</u>	<u>Contract</u>									
<u>Government</u>	<u>Method/Type</u>	<u>Award or</u>	<u>Performing</u>	<u>Project</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Performing</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Activity</u>	<u>Office</u>	<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>	<u>Program</u>
<u>Activity</u>	<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>						
<u>Product Development Organizations</u>										
TRW	SS/CPAF	Mar 99	45,812	45,812	30,902	14,910			0	45,812
JHU-APL	LOE	Annual	N/A	N/A	181	274	381	390	Continuing	TBD
<u>Support and Management Organizations</u>										
SE/TA [SRC, MCR, ATT, SAFTAS]	LOE	As Req'd.	N/A	N/A	718	108				826
MITRE	LOE	As Req'd.	N/A	N/A	595	100				695
PMA	Various	Annual	N/A	N/A	747	100				847
<u>Test and Evaluation Organizations</u>										
Project 4610			Page 16 of 17 Pages				Exhibit R-3 (PE 0303131F)			

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2002		
BUDGET ACTIVITY				PE NUMBER AND TITLE			PROJECT		
07 - Operational System Development				0303131F Minimum Essential Emergency Communications Network (MEECN)			4610		
(U) Government Furnished Property:									
<u>Item</u>	<u>Contract</u> <u>Method/Type</u> <u>or Funding</u>	<u>Award or</u> <u>Obligation</u>	<u>Delivery</u> <u>Date</u>	<u>Total Prior</u> <u>to FY 2001</u>	<u>Budget</u> <u>FY 2001</u>	<u>Budget</u> <u>FY 2002</u>	<u>Budget</u> <u>FY 2003</u>	<u>Budget to</u> <u>Complete</u>	<u>Total</u> <u>Program</u>
<u>Description</u>	<u>Vehicle</u>	<u>Date</u>	<u>Date</u>						
<u>Product Development Property</u>									
N/A									
<u>Support and Management Property</u>									
N/A									
<u>Test and Evaluation Property</u>									
N/A									
<u>Subtotals</u>				<u>Total Prior</u> <u>to FY 2001</u>	<u>Budget</u> <u>FY 2001</u>	<u>Budget</u> <u>FY 2002</u>	<u>Budget</u> <u>FY 2003</u>	<u>Budget to</u> <u>Complete</u>	<u>Total</u> <u>Program</u>
Subtotal Product Development				31,083	15,184	381	390	TBD	TBD
Subtotal Support and Management				2,060	308				2,368
Subtotal Test and Evaluation									
Total Project				33,143	15,492	381	390	TBD	TBD