

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE

February 2000

BUDGET ACTIVITY

PE NUMBER AND TITLE

05 - Engineering and Manufacturing Development

0604708F Civil, Fire, Environmental, Shelter

COST (\$ in Thousands)	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	2,599	2,682	2,746	2,782	2,828	2,886	2,942	Continuing	TBD
652505 Aircraft Firefighting Suppression And Rescue	2,484	2,503	2,561	2,596	2,639	2,693	2,746	Continuing	TBD
652674 Tactical Shelters	115	179	185	186	189	193	196	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0

The Air Force is in the process of consolidating three small dollar Civil Engineer (CE) readiness R&D programs (PE64617f - Agile Combat Support; PE64708f - Civil , Fire, Environmental, Shelters; and the 3600 portion of PE28031f - War Reserve Material) under PE 64617. This will meet the intent of the House action to eliminate smaller PEs and provide a more cohesive, manageable CE Readiness modernization effort.

(U) A. Mission Description

This program funds the development, testing and evaluation of materials, equipment and procedures in the following areas:

(1) Aircraft Fire Fighting, Suppression and Rescue and Civil Engineer (CE) Readiness/Force Protection (FP). CE readiness is supported by multimedia training systems for Fire Fighting, CE Readiness/FP, including Explosive Ordnance Disposal (EOD) by developing interactive training scenarios which simulate hazardous situations, allows both training and testing of response capabilities, and complements field training while reducing time, cost and direct exposure to hazards. Develops, tests and evaluates new concepts and technology applications for fire fighting, suppression and rescue and CE Readiness/FP to improve rapid deployment capabilities in support of bare base/Air Expeditionary Forces (AEF), contingency operating areas and main operating bases.

(2) Tactical Shelters is the USAF portion of a tri-service effort to develop standardized, low maintenance, highly survivable shelters and shelter accessories that are easily mobilized and compatible with air, sea and land transport systems. These products will effectively support high mobility aircraft support, command and control, communications, medical, and data processing units for the tactical and strategic forces. These shelters also optimize the latest enhancements of force protection technology.

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(U)	<u>B. Budget Activity Justification</u>				
	This program is in budget activity five, Engineering and Manufacturing Development, because it takes emerging technologies and concepts and develops them for Air Force use.				
(U)	<u>C. Program Change Summary (\$ in Thousands)</u>				
		<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Total Cost</u>
(U)	Previous President's Budget (FY 2000 PBR)	2,715	2,768	2,824	
(U)	Appropriated Value	2,715	2,719		
(U)	Adjustments to Appropriated Value				
	a. Congressional/General Reductions	-33	-2		
	b. Small Business Innovative Research	-68			
	c. Omnibus or Other Above Threshold Reprogram		-18		
	d. Below Threshold Reprogram				
	e. Rescissions	-15	-17		
	f. Other				
(U)	Adjustments to Budget Years Since FY 2000 PBR			-78	
(U)	Current Budget Submit/FY 2001 PBR	2,599	2,682	2,746	TBD
(U)	<u>Significant Program Changes:</u>				

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)								DATE February 2000	
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604708F Civil, Fire, Environmental, Shelter				PROJECT 652505	
COST (\$ in Thousands)	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
652505 Aircraft Firefighting Suppression And Rescue	2,484	2,503	2,561	2,596	2,639	2,693	2,746	Continuing	TBD
<p>(U) <u>A. Mission Description</u> Aircraft Fire Fighting, Suppression and Rescue and Civil Engineer (CE) Readiness/Force Protection (FP). CE readiness is supported by multimedia training systems for Fire Fighting, CE Readiness/FP, including(Explosive Ordnance Disposal (EOD) by developing interactive training scenarios which simulate hazardous situations, allows both training and testing of response capabilities, and complements field training while reducing time, cost and direct exposure to hazards. Develops, tests and evaluates new concepts and technology applications for fire fighting, suppression and rescueand CE Readiness/FP to improve rapid deployment capabilities in support of bare base/Air Expeditionary Force (AEF), contingency operating areas and main operating bases.</p> <p>(U) <u>FY 1999 (\$ in Thousands)</u> (U) \$1,962 Continued courseware development of CE/MTS. (U) \$160 Continued commercial technology exploitation. (U) \$362 Other technical support. (U) \$2,484 Total</p> <p>(U) <u>FY 2000 (\$ in Thousands)</u> (U) \$1,974 Continued courseware development of CE/MTS. (U) \$156 Continued commercial technology exploitation. (U) \$373 Other technical support. (U) \$2,503 Total</p> <p>(U) <u>FY 2001 (\$ in Thousands)</u> (U) \$2,004 Continued courseware development of CE/MTS (Civil Engineer/Multimedia Training Systems). (U) \$150 Continued commercial technology exploitation. (U) \$407 Other technical support. (U) \$2,561 Total</p> <p>(U) <u>B. Project Change Summary</u> N/A</p>									
Project 652505			Page 3 of 8 Pages				Exhibit R-2A (PE 0604708F)		

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)										DATE February 2000		
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development					PE NUMBER AND TITLE 0604708F Civil, Fire, Environmental, Shelter					PROJECT 652505		
(U) C. Other Program Funding Summary (\$ in Thousands)												
	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</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) N/A												
(U) D. Acquisition Strategy												
Multimedia courseware materials and commercial technology items will continue to be developed, tested, modified and readied for production and procurement by field units. Commercial technology exploitation provides extremely low cost, yet high value suitability testing of low dollar commercial equipment with potential for military application. Items are proposed each year by field units and published test reports provide recommendations about whether or not to procure items.												
(U) E. Schedule Profile												
		<u>FY 1999</u>				<u>FY 2000</u>			<u>FY 2001</u>			
	1	2	3	4	1	2	3	4	1	2	3	4
(U)	CE Multimedia Training Systems											
(U)	Complete HAZMAT Technician											
(U)	Complete Emerg Response to Terrorism											
(U)	Complete T.O. 00105E-9											
(U)	Complete CRAF/F-22/HAZMAT											
(U)	Complete FY00 Priority List											
(U)	Complete FY01 Priority List											
(U)	Fire Commercial Technology											
(U)	Complete Mobile Fire Training System											
(U)	Complete AIM Safety Detectors											
(U)	Complete Help Mate Telephone System											
(U)	Complete FD On-Scene											
(U)	Complete FY00 AFOTEC Evaluation											
(U)	Complete FY01 AFOTEC Evaluation											
	* = Completed Milestone											
	X = Planned Milestone											
<div style="display: flex; justify-content: space-between;"> Project 652505 Page 4 of 8 Pages Exhibit R-2A (PE 0604708F) </div>												

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)										DATE	
BUDGET ACTIVITY										PROJECT	
05 - Engineering and Manufacturing Development										652505	
PE NUMBER AND TITLE											
0604708F Civil, Fire, Environmental, Shelter											
DATE										February 2000	
(U) <u>A. Project Cost Breakdown (\$ in Thousands)</u>											
						<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>			
(U)	Contracts					1,450	1,402	1,462			
(U)	A&AS Support					271	302	303			
(U)	Other Government Agencies					401	411	375			
(U)	Materials/Equipment					0	15	14			
(U)	Other Technical Support					362	373	407			
(U)	Total					2,484	2,503	2,561			
(U) <u>B. Budget Acquisition History and Planning Information (\$ in Thousands)</u>											
(U) <u>Performing Organizations:</u>											
	<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>Activity</u>	<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>	<u>to FY 1999</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Complete</u>	
										<u>Total</u>	
										<u>Program</u>	
	<u>Product Development Organizations</u>										
	Multimedia Training Sys	Mult	Cont	14,500	14,500	2,597	1,962	1,974	2,004	Continuing	TBD
	Fire Commercial Technology	Mult	Cont	1,500	1,500	250	160	156	150	Continuing	TBD
	<u>Exploitation</u>										
	<u>Support and Management Organizations</u>										
	Various			1,950	1,950	442	362	373	407	Continuing	TBD
	<u>Test and Evaluation Organizations</u>										
	Various			750	750	70	0	0	0	Continuing	TBD
						<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
						<u>to FY 1999</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Complete</u>	<u>Program</u>
	<u>Subtotals</u>										
	Subtotal Product Development					2,847	2,122	2,130	2,154	TBD	TBD
	Subtotal Support and Management					442	362	373	407	TBD	TBD
	Subtotal Test and Evaluation					70	0	0	0	TBD	TBD
	Total Project					3,359	2,484	2,503	2,561	TBD	TBD

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BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604708F Civil, Fire, Environmental, Shelter				PROJECT 652674																															
COST (\$ in Thousands)	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost																														
652674 Tactical Shelters	115	179	185	186	189	193	196	Continuing	TBD																														
<p>(U) <u>A. Mission Description</u> Provides reliable, cost effective tactical shelters required to ensure the success of Air Force missions, provides Air Force membership in the DOD Tactical Shelter Program, and provides technology insertion for shelter development.</p> <p>(U) <u>FY 1999 (\$ in Thousands)</u> (U) \$40 Continue research, development and acquisition of the Modular Extendible Ridged Wall Shelter (MERWS) (U) \$65 Establish capability to evaluate shelter design and performance and perform system integration analysis (U) \$10 Provide direct feedback and ensure Air Force requirements identified to JOCOTAS and ASTM (U) \$115 Total</p> <p>(U) <u>FY 2000 (\$ in Thousands)</u> (U) \$66 Continue research, development and acquisition of composite tactical shelter. (U) \$102 Establish capability to evaluate shelter design and performance and perform shelter integration analysis. (U) \$11 Provide direct feedback and ensure Air Force requirements are identified to JOCOTAS and ASTM. (U) \$179 Total</p> <p>(U) <u>FY 2001 (\$ in Thousands)</u> (U) \$73 Continue research, development and acquisition of composite tactical shelter. (U) \$102 Establish capability to evaluate shelter design and performance and perform shelter integration analysis. (U) \$10 Provide direct feedback and ensure Air Force requirements are identified to JOCOTAS and ASTM. (U) \$185 Total</p> <p>(U) <u>B. Project Change Summary</u> N/A</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%;"><u>FY 1999</u></th> <th style="width:10%;"><u>FY 2000</u></th> <th style="width:10%;"><u>FY 2001</u></th> <th style="width:10%;"><u>FY 2002</u></th> <th style="width:10%;"><u>FY 2003</u></th> <th style="width:10%;"><u>FY 2004</u></th> <th style="width:10%;"><u>FY 2005</u></th> <th style="width:10%;"><u>Cost to</u></th> <th style="width:10%;"><u>Total Cost</u></th> </tr> <tr> <td></td> <td align="center"><u>Actual</u></td> <td align="center"><u>Estimate</u></td> <td align="center"><u>Estimate</u></td> <td align="center"><u>Estimate</u></td> <td align="center"><u>Estimate</u></td> <td align="center"><u>Estimate</u></td> <td align="center"><u>Estimate</u></td> <td align="center"><u>Complete</u></td> <td></td> </tr> </thead> <tbody> <tr> <td>(U) N/A</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>											<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</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) N/A									
	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</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) N/A																																							
<p>Project 652674</p>																																							

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BUDGET ACTIVITY 05 - Engineering and Manufacturing Development	PE NUMBER AND TITLE 0604708F Civil, Fire, Environmental, Shelter	PROJECT 652674
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(U) **D. Acquisition Strategy**
 Tactical shelters development will continue to support Initial Deployable Kitchen (IDK) Program

(U) **E. Schedule Profile**

	<u>FY 1999</u>				<u>FY 2000</u>				<u>FY 2001</u>			
	1	2	3	4	1	2	3	4	1	2	3	4
(U) N/A												

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2000			
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604708F Civil, Fire, Environmental, Shelter				PROJECT 652674		
(U) <u>A. Project Cost Breakdown (\$ in Thousands)</u>										
						<u>FY 1999</u>		<u>FY 2000</u>		<u>FY 2001</u>
(U)	MERWS (modular extendible ridged wall shelter) program					40				
(U)	Composite Shelter Development					0		66		73
(U)	Shelter design, performance and analysis					65		102		102
(U)	JOCOTAS program					10		11		10
(U)	Total					115		179		185
(U) <u>B. Budget Acquisition History and Planning Information (\$ in Thousands)</u>										
(U) <u>Performing Organizations:</u>										
<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 1999</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Complete</u>	<u>Program</u>
<u>Product Development Organizations</u>										
MERWS Pgm	Multiple	Multiple				40	0	0		40
Composite Shelter Dev	Multiple	Multiple				0	66	73	Continuing	TBD
Shelter design, performance, and analysis	Multiple	Multiple				65	102	102	Continuing	TBD
JOCOTAS Pgm	Multiple	Multiple				10	11	10	Continuing	TBD
<u>Support and Management Organizations</u>										
N/A						0	0	0		0
<u>Test and Evaluation Organizations</u>										
N/A						0	0	0		0
					<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Subtotals</u>					<u>to FY 1999</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Complete</u>	<u>Program</u>
Subtotal Product Development						115	179	185	TBD	TBD
Subtotal Support and Management						0	0	0		0
Subtotal Test and Evaluation						0	0	0		0
Total Project						115	179	185	TBD	TBD