

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)								DATE February 2002	
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604602F Armament/Ordnance Development					
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	9,422	3,800	9,160	19,306	3,703	7,150	6,732	Continuing	TBD
3133 Bombs & Fuzes	8,109	2,450	7,766	17,889	2,261	5,681	5,234	Continuing	TBD
4696 Armament Standardization Program	1,183	1,217	1,258	1,277	1,298	1,320	1,343	Continuing	TBD
5613 Containers	130	133	136	140	144	149	155	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	Continuing	TBD

In FY02, Hard Target Smart Fuze (HTSF) received \$3.0M as part of the Defense Emergency Relief Fund (DERF). Funding was used to support the engineering and manufacturing development effort of the HTSF program in support of OPERATION ENDURING FREEDOM. This funding is not reflected in the FY02 program total.

(U) **A. Mission Description**
 The Armament Ordnance Development program provides for initial and continuing development of munition equipment for support and operational use.

Bombs and Fuzes: This project develops and improves conventional bombs and fuzes. It currently includes the development of the Hard Target Smart Fuze (HTSF). Miniaturized Munitions Capability (MMC) continues the Concept Exploration phase in this project. Initial MMC funding was used to explore concepts to meet CAF MNS 304-97, Miniaturized Munitions Capability'. The Insensitive Munitions (IM) new start effort will initiate the development of an explosive fill to make conventional weapons insensitive to unplanned stimuli for MK-80 series bombs.

Armament Standardization/Control/Munitions Material Handling Equipment (MMHE): This continuing project develops and improves the standardization and commonality of munitions handling and armament equipment to preclude duplication. This project's efforts are limited to the study, design, and development, of MMHE and armament control systems. Procurement will be performed and funded by the applicable weapons system project.

Containers: This project funds the operation of the tri-service Container Design Retrieval System (CDRS). This maintains a container database to preclude

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<p>(U) <u>A. Mission Description Continued</u> proliferation and duplication of munitions containers. It also supports organic container design, acquisition transportation, prototyping, testing capabilities, as well as the Joint Ordnance Commander's Working Group (JOCG) for Packaging, Handling, and Loading.</p> <p>(U) <u>B. Budget Activity Justification</u> This program is in budget activity 5 - Engineering and Manufacturing Development because the projects support the EMD phase of several munitions related items and functions.</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;"><u>FY 2001</u></th> <th style="text-align: right;"><u>FY 2002</u></th> <th style="text-align: right;"><u>FY 2003</u></th> <th style="text-align: right;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>(U) Previous President's Budget</td> <td style="text-align: right;">9,786</td> <td style="text-align: right;">3,838</td> <td style="text-align: right;">6,952</td> <td style="text-align: right;">TBD</td> </tr> <tr> <td>(U) Appropriated Value</td> <td style="text-align: right;">21,876</td> <td style="text-align: right;">3,838</td> <td></td> <td style="text-align: right;">TBD</td> </tr> <tr> <td>(U) Adjustments to Appropriated Value</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> a. Congressional/General Reductions</td> <td style="text-align: right;">-153</td> <td style="text-align: right;">-38</td> <td></td> <td style="text-align: right;">TBD</td> </tr> <tr> <td> b. Small Business Innovative Research</td> <td style="text-align: right;">-348</td> <td></td> <td></td> <td style="text-align: right;">TBD</td> </tr> <tr> <td> c. Omnibus or Other Above Threshold Reprogram</td> <td style="text-align: right;">-11,889</td> <td></td> <td></td> <td style="text-align: right;">TBD</td> </tr> <tr> <td> d. Below Threshold Reprogram</td> <td style="text-align: right;">-16</td> <td></td> <td></td> <td style="text-align: right;">TBD</td> </tr> <tr> <td> e. Rescissions</td> <td style="text-align: right;">-48</td> <td></td> <td></td> <td style="text-align: right;">TBD</td> </tr> <tr> <td>(U) Adjustments to Budget Years Since FY 2002 PBR</td> <td></td> <td></td> <td style="text-align: right;">2,208</td> <td></td> </tr> <tr> <td>(U) Current Budget Submit/FY 2003 PBR</td> <td style="text-align: right;">9,422</td> <td style="text-align: right;">3,800</td> <td style="text-align: right;">9,160</td> <td style="text-align: right;">TBD</td> </tr> </tbody> </table> <p>(U) <u>Significant Program Changes:</u> FY03: \$2.2M funding was increased to continue development of the Hard Target Smart Fuze and Insensitive Munitions.</p>					<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Total Cost</u>	(U) Previous President's Budget	9,786	3,838	6,952	TBD	(U) Appropriated Value	21,876	3,838		TBD	(U) Adjustments to Appropriated Value					a. Congressional/General Reductions	-153	-38		TBD	b. Small Business Innovative Research	-348			TBD	c. Omnibus or Other Above Threshold Reprogram	-11,889			TBD	d. Below Threshold Reprogram	-16			TBD	e. Rescissions	-48			TBD	(U) Adjustments to Budget Years Since FY 2002 PBR			2,208		(U) Current Budget Submit/FY 2003 PBR	9,422	3,800	9,160	TBD
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Page 2 of 14 Pages		Exhibit R-2 (PE 0604602F)																																																								

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)								DATE February 2002			
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604602F Armament/Ordnance Development				PROJECT 3133			
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	
3133	Bombs & Fuzes	8,109	2,450	7,766	17,889	2,261	5,681	5,234	Continuing	TBD	
<p>In FY02, Hard Target Smart Fuze (HTSF) received \$3.0M as part of the Defense Emergency Relief Fund (DERF). Funding was used to support the engineering and manufacturing development effort of the HTSF program in support of OPERATION ENDURING FREEDOM. This funding is not reflected in the FY02 program total.</p> <p>(U) <u>A. Mission Description</u> Bombs and Fuzes: This project develops and improves conventional bombs and fuzes including the development of the Hard Target Smart Fuze (HTSF). The HTSF is a layer counting and void sensing fuze that will be used with air-to-ground penetrator weapons. Miniaturized Munitions Capability (MMC) continues the Concept Exploration phase in this project. Insensitive Munitions development is a new start effort to initiate development of an insensitive munitions explosive fill to make conventional weapons insensitive to unplanned stimuli as set forth in DoD Regulation 5000.2-R.</p> <p>(U) <u>FY 2001 (\$ in Thousands)</u> (U) \$7,118 Complete Hard Target Smart Fuze (HTSF) detailed design and continue HTSF contractor test and evaluation (CT&E) (U) \$991 Develop a cast ductile bomb (congressional add) (U) \$8,109 Total</p> <p>(U) <u>FY 2002 (\$ in Thousands)</u> (U) \$2,450 Begin Insensitive Munitions (IM) development effort. Activities to include, but not limited to, reformulation development of insensitive explosive fill, small-scale Sensitivity and Qualification Testing and Booster Study Test and small-scale performance testing. (U) \$2,450 Total</p> <p>(U) <u>FY 2003 (\$ in Thousands)</u> (U) \$5,536 Continue Insensitive Munitions (IM) development effort. Activities to include, but not limited to, lab level performance tests, IM transition to EMD, IM and environmental full-scale tests, final qualification tests and prototype booster reliability tests. (U) \$1,930 Complete HTSF developmental test and evaluation (DT&E) (U) \$300 Support HTSF Operational Utility Evaluation (OUE) (U) \$7,766 Total</p> <p>(U) <u>B. Project Change Summary</u> FY03: \$2.2M funding was increased to continue development of the Hard Target Smart Fuze and Insensitive Munitions.</p>											
Project 3133				Page 3 of 14 Pages				Exhibit R-2A (PE 0604602F)			

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)							DATE February 2002			
BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT		
05 - Engineering and Manufacturing Development				0604602F Armament/Ordnance Development				3133		
(U) C. Other Program Funding Summary (\$ in Thousands)										
	<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) Hard Target Smart Fuze (HTSF) procurement funded by Defense Threat Reduction Agency (DTRA)	6,000	3,570	12,000							
(U) D. Acquisition Strategy										
The Hard Target Smart Fuze (HTSF) Acquisition Strategy was full and open competition for the EMD program with production options to meet performance specification requirements for current and future Hard Target munitions. The HTSF will be compatible with GBU-24, GBU-27, GBU-28, GBU-15, AGM-130, AGM-142, JDAM, and future hard target munitions while providing increased reliability and emphasis on life cycle management. The HTSF program was augmented with Defense Threat Reduction Agency (DTRA) funding and requirements for additional HTSF applications and follow-on fuze procurement. Acquisition strategy for MMC activities can be found in the Small Diameter Bomb PE 64329F. Acquisition strategy for Insensitive Munitions activities are TBD.										
(U) E. Schedule Profile										
				<u>FY 2001</u>			<u>FY 2002</u>		<u>FY 2003</u>	
			1	2	3	4	1	2	3	4
(U) Start HTSF CT&E					*					
(U) Complete HTSF Detailed Design							*			
(U) Complete CT&E							*			
(U) Start DT&E							*			
(U) Complete FCA								X		
(U) Complete DT&E										X
(U) Start IM Lethality Feasibility Study				*						
(U) Start IM Fill Development							*			
(U) Start Small-scale Sensitivity/Qual Testing								X		
(U) Start Small-scale Performance Testing									X	
* = Event occurred X = Event planned										
Project 3133			Page 4 of 14 Pages				Exhibit R-2A (PE 0604602F)			

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2002				
BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT			
05 - Engineering and Manufacturing Development				0604602F Armament/Ordnance Development				3133			
(U) A. Project Cost Breakdown (\$ in Thousands)											
						<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>	
(U)	Contractor Total					4,100		0		2,230	
(U)	Government					991		335		770	
(U)	Testing					2,063		1,580		3,681	
(U)	Contractor support					525		260		785	
(U)	Management support					430		275		300	
(U)	Total					8,109		2,450		7,766	
(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>											
	Motorola (JPF)	CPAF	Jul 93	21,357	21,357	21,357					21,357
	Alliant (HTSF)	C/CPIF	Aug 98	16,010	16,010	10,674	4,100		1,000	Continuing	TBD
	Boeing (MMC)	FFP	Jan 99	250	250	1,563				Continuing	TBD
	Lockheed (MMC)	FFP	Jan 99	250	250	1,563				Continuing	TBD
	Raytheon (MMC)	FFP	Jan 99	250	250	1,570				Continuing	TBD
	Northrup (MMC)	FFP	Jan 99	250	250	1,524				Continuing	TBD
	Air Force Research Lab/MN (IM)	In-house	N/A	2,475	2,475	0		335	200		535
	AAC/WMG	In-house	N/A	300	300	0			300		300
	IM Contractor TBD	TBD	TBD	1,230	1,230	0			1,230		1,230

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)								DATE February 2002		
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604602F Armament/Ordnance Development				PROJECT 3133		
(U) Performing Organizations Continued:										
<u>Support and Management Organizations</u>										
HTSF TEAS/ TEAMS	Various	Various	N/A	N/A	2,150	525	200	Continuing	TBD	
MMC TEAS/ TEAMS	Various	Various	N/A	N/A	1,253	0		Continuing	TBD	
JPF TEAS/TEAMS	Various	Various	N/A	N/A	512	0		0	512	
AAC/WG (HTSF)	Various	Various	N/A	N/A	2,554	430	100	Continuing	TBD	
AAC/WMX (MMC)	Various	Various	N/A	N/A	2,678	0		Continuing	TBD	
Other MMC	Various	Various	N/A	N/A	1,050	0		0	1,050	
WL/MN (cast ductile bomb)	Various	Various	N/A	N/A	0	671		Continuing	TBD	
AFRL/MN (IM)	In-house	N/A	N/A	N/A	0	320	535	400	Continuing	TBD
AFRL/MN (TEAS/TAMS)	Various	Various	N/A	N/A	0	0		60	Continuing	TBD
AFRL/WMG (TEAS/TAMS)	Various	Various	N/A	N/A	0	0		595	Continuing	TBD
<u>Test and Evaluation Organizations</u>										
46th Test HTSF	Various	Mar 94	N/A	N/A	1,575	2,063	930	Continuing	TBD	
46th test JPF	Various	Mar 94	N/A	N/A	3,315	0		0	3,315	
MMC Test					1,251	0		0	1,251	
MK-84 IM Tech/AFRL	In-house	N/A	N/A	N/A	0	0	1,580		1,580	
46th Test MK-84	Various	N/A	2,700	2,700	0		2,751		2,751	
					<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 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>	<u>Program</u>
Subtotal Product Development					38,251	4,100	335	2,730	TBD	TBD
Subtotal Support and Management					10,197	1,946	535	1,355	TBD	TBD
Subtotal Test and Evaluation					6,141	2,063	1,580	3,681	TBD	TBD
Total Project					54,589	8,109	2,450	7,766	TBD	TBD

UNCLASSIFIED

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BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604602F Armament/Ordnance Development				PROJECT 4696	
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
4696 Armament Standardization Program	1,183	1,217	1,258	1,277	1,298	1,320	1,343	Continuing	TBD
<p>(U) <u>A. Mission Description</u> Armament Standardization/Control/Munitions Material Handling Equipment (MMHE): This continuing project develops and improves the standardization and commonality of improved munitions handling and armament equipment to preclude duplication and proliferation. This project's efforts are limited to the study, design, and development of MMHE and armament control systems. Procurement will be performed and funded by the applicable weapons system project.</p> <p>(U) <u>FY 2001 (\$ in Thousands)</u> (U) \$1,183 Design, prototype, and test various MMHE projects, i.e., MJ-1 Table Modification, Triple Ejector Rack (TER) Storage Rack, Ammo Loader Replenisher Upgrade, AME Mobility Rack, Chaff/Flare Transport Module, Missile-Munitions Loading Adapter (MMLA) Upgrade, FMU-139 Cable Seating Tool, JASSM Download Adapter, MHU-110 Trailer Upgrade, Storage and Practice Bomb Transport Module. Complete development of Aluminum Rail Set, T-2 Pallet Locking Device, JASSM Loading/Handling Adapters, AGM-84 Fork Adapter, B-52 Loading Adapter, MAC Dolly-Stop Redesign, F-16 Pylon/Launcher Storage Stand, FMU-139 Closure Ring Tool, FMU-139 Cable Seating Tool, MMLA Actuator Redesign, Live Drop BDU-50 Stand, Strake/Lug Alignment Tool, B-1B Swing Arm Tool. Continue development of B-1B Launcher-Module Storage Stand, Next Generation Munitions Handler and Practice Bomb Transport Module. Initiate MAC Upgrade, MAC Torque Retainer, MMLA Upgrade, AIM-9 Assembly Stand Redesign, B-52 Launcher Hydraulic Power Unit, B-52 Mine Loading Adapter, Ammo Loader Replenisher Upgrade and other projects as determined by HQ ACC/LGW and/or Weapon System Program Offices.</p> <p>(U) \$1,183 Total</p> <p>(U) <u>FY 2002 (\$ in Thousands)</u> (U) \$1,217 Design, prototype and test various MMHE projects, i.e., Alternate Mission Equipment (AME) Mobility Rack, LAU-106 Maintenance Stand, Gun Maintenance Stand, T-2 Pallet Locking Device, Aluminum Rail Set. Continue development of B-1B Launcher-Module Storage Stand, AIM-9 Assembly Stand Redesign, Practice Bomb Transport Module and MAC Torque Retainer. Continue development of MAC Dolly-Stop Redesign, MMLA Upgrade, B-52 Launcher Hydraulic Power Unit, B-52 Mine Loading Adapter, F-16 Pylon/Launcher Storage Stand, MMLA Actuator Redesign, Ram Adapter Plate and Next Generation Munitions Handler. Perform MHU-110 Trailer Upgrade, AIM-120 Radome Cover, Ammo Loader Test Fixture, Ammo Loader Replenisher Upgrade, JASSM Download Adapter, Alternate Mission Equipment (AME) Mobility Rack, LAU-106 Maintenance Stand, Triple Ejector Rack (TER) Storage Rack, B-52 Yoke Stand/Lift Beam, Gun Maintenance Stand,</p>									
Project 4696	Page 7 of 14 Pages				Exhibit R-2A (PE 0604602F)				

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)							DATE February 2002		
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604602F Armament/Ordnance Development			PROJECT 4696		
(U) <u>A. Mission Description Continued</u>									
(U) <u>FY 2002 (\$ in Thousands) Continued</u>									
International Service Organization (ISO) Container Stand, ISO Container Forklift Adapter/Ramp, 5000lb Rubber Roller, B-2 Preload Adapter Analysis, and other projects as determined by HQ/ACC/LGW and/or Weapon System Program Offices.									
(U) \$1,217 Total									
(U) <u>FY 2003 (\$ in Thousands)</u>									
(U) \$1,258 Design, prototype and test various MMHE projects, i.e., complete Ammo Loader Test Fixture, AIM-120 Radome Cover, Alternate Mission Equipment (AME) Mobility Rack, LAU-106 Maintenance Stand, Gun Maintenance Stand. Complete development of B-1B Launcher-Module Storage Stand, AIM-9 Assembly Stand Redesign, Practice Bomb Transport Module and MAC Torque Retainer. Continue development of MAC Upgrade, MMLA Upgrade, B-52 Launcher Hydraulic Power Unit, B-52 Mine Loading Adapter, Next Generation Munitions Handler and Ammo Loader Replenisher Upgrade. Perform MHU-110 Trailer Upgrade, Ammo Loader Test Fixture, JASSM Download Adapter, Alternate Mission Equipment (AME) Mobility Rack, LAU-106 Maintenance Stand, Triple Ejector Rack (TER) Storage Rack, B-52 Yoke Stand/Lift Beam, Gun Maintenance Stand, International Service Organization (ISO) Container Stand, ISO Container Forklift Adapter/Ramp, B-2 Preload Adapter Analysis, BRU-57 Stand, 5000lb Rubber Roller, Bomb Roller Redesign and other projects as determined by HQ/ACC/LGW and/or Weapon System Program Offices.									
(U) \$1,258 Total									
(U) <u>B. Project Change Summary</u>									
N/A									
(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) N/A									
(U) <u>D. Acquisition Strategy</u>									
MMHE is a continuing effort program with activities performed organically and/or contracted through Military Interdepartmental Purchase Requests (MIPR). Procurement will be performed and funded by the applicable equipment project.									
(U) <u>E. Schedule Profile</u>									
	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>						
Project 4696	Page 8 of 14 Pages			Exhibit R-2A (PE 0604602F)					

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2002				
BUDGET ACTIVITY					PE NUMBER AND TITLE			PROJECT			
05 - Engineering and Manufacturing Development					0604602F Armament/Ordnance Development			4696			
(U) A. Project Cost Breakdown (\$ in Thousands)											
						<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>	
(U)	Various MMHE Projects					1,183		1,217		1,258	
(U)	Aluminum Rail Set, T-2 Pallet Locking Device, evaluation of Next Generation Munitions Handler										
(U)	Next Generation Munition Handling Trailer										
(U)	B-1B Rotary Launcher Adapter										
(U)	ALE-50 Transport Module										
(U)	JASSM Handling Adapters										
(U)	Total					1,183		1,217		1,258	
(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 Date</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>Product Development Organizations</u>										
	Dept. of Energy/NASA	MIPR			740	964	219			Continuing	TBD
	<u>Support and Management Organizations</u>										
	TEAS/TAMS	MIPR	Oct 99	N/A	N/A	2,159	626	700	720	Continuing	TBD
	AFDTC/FM	MIPR	Oct 99	N/A	N/A	488	123	242	252	Continuing	TBD
	64SSUPS/LGS	MIPR	Cont.	N/A	N/A	186	40	10	10	Continuing	TBD
	WL/MN	MIPR	Cont.	N/A	N/A	130	25	0	0	Continuing	TBD
	EDSC	MIPR	Cont.	N/A	N/A	0	0	25	26	Continuing	TBD
	<u>Test and Evaluation Organizations</u>										
	46th Test Wing	MIPR	Cont.	N/A	N/A	550	150	240	250	Continuing	TBD
Project 4696					Page 10 of 14 Pages			Exhibit R-3 (PE 0604602F)			

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)				DATE		
BUDGET ACTIVITY				PROJECT		
05 - Engineering and Manufacturing Development				0604602F Armament/Ordnance Development		
				4696		
(U) Government Furnished Property:						
	<u>Contract</u>	<u>Award or</u>				
<u>Item</u>	<u>Method/Type</u>	<u>or Funding</u>	<u>Delivery</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>
<u>Description</u>	<u>Vehicle</u>	<u>Date</u>	<u>Date</u>	<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>
<u>Product Development Property</u>						
N/A						
<u>Support and Management Property</u>						
<u>Test and Evaluation Property</u>						
				<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>
				<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>
						<u>Budget</u>
						<u>FY 2003</u>
						<u>Budget to</u>
						<u>Complete</u>
						<u>Total</u>
<u>Subtotals</u>				<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>
Subtotal Product Development				964	219	
Subtotal Support and Management				2,963	814	977
Subtotal Test and Evaluation				550	150	240
Total Project				4,477	1,183	1,217
						1,258
						TBD
						TBD
						TBD
						TBD

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)								DATE February 2002	
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604602F Armament/Ordnance Development				PROJECT 5613	
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
5613 Containers	130	133	136	140	144	149	155	Continuing	TBD
<p>(U) <u>A. Mission Description</u> Containers: This project funds the operation of the tri-service Container Design Retrieval System (CDRS). The CDRS maintains a container database to preclude proliferation and duplication of munitions containers. It also supports the Joint Ordnance Commander's Working Group (JOCG) for packaging, handling and loading. In addition, CDRS supports organic container design, acquisition transportation, prototyping and testing capabilities.</p> <p>(U) <u>FY 2001 (\$ in Thousands)</u> (U) \$5 Initiate/continue/complete design/development of various CDRS projects, including a modular mobility container system, and special projects. (U) \$5 Provide container design expertise, management, and technical support to programs such as CALCM, JASSM, JSOW, AMRAAM, AGM-142, MALD, AGM-130, Fuzes, Chem-Bio, Munitions Material Handling Equipment (MMHE), JDAM and Small Diameter Bomb (SDB). (U) \$120 Manage and operate the CDRS data base and support service. (U) \$130 Total</p> <p>(U) <u>FY 2002 (\$ in Thousands)</u> (U) \$6 Initiate/continue/complete design/development of various CDRS projects, including a modular mobility container system, and special projects. (U) \$5 Provide container design expertise, management, and technical support to programs such as CALCM, JASSM, AMRAAM, AGM-142, MALD, AGM-130, and WCMD. (U) \$122 Manage and operate the CDRS data base and support service. (U) \$133 Total</p> <p>(U) <u>FY 2003 (\$ in Thousands)</u> (U) \$6 Initiate/continue/complete design/development of various CDRS projects. (U) \$6 Provide container design expertise and technical support to programs such as JSOW, JDAM, JASSM, MMHE, Small Diameter Bomb (SDB) and AGM-142. (U) \$124 Manage and operate the CDRS database and support service. (U) \$136 Total</p>									
Project 5613			Page 12 of 14 Pages				Exhibit R-2A (PE 0604602F)		

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)							DATE February 2002																																																																						
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604602F Armament/Ordnance Development				PROJECT 5613																																																																					
<p>(U) <u>B. Project Change Summary</u> No significant program changes.</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 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>FY 2006</u></th> <th style="width: 10%;"><u>FY 2007</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 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) Not Applicable</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>(U) <u>D. Acquisition Strategy</u> Not Applicable</p> <p>(U) <u>E. Schedule Profile</u></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th colspan="4" style="text-align: center;"><u>FY 2001</u></th> <th colspan="4" style="text-align: center;"><u>FY 2002</u></th> <th colspan="3" style="text-align: center;"><u>FY 2003</u></th> </tr> <tr> <td></td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> </tr> </thead> <tbody> <tr> <td>(U) Not Applicable. Not Applicable. The Containers project does not execute in accordance with standard acquisition milestones. Design and support efforts are performed on a continuing basis.</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) Not Applicable											<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) Not Applicable. Not Applicable. The Containers project does not execute in accordance with standard acquisition milestones. Design and support efforts are performed on a continuing basis.												
	<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 5613			Page 13 of 14 Pages				Exhibit R-2A (PE 0604602F)																																																																						

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)								DATE February 2002		
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604602F Armament/Ordnance Development				PROJECT 5613		
(U) A. Project Cost Breakdown (\$ in Thousands)										
					<u>FY 2001</u>		<u>FY 2002</u>			<u>FY 2003</u>
(U)	Travel/Transportation				70		72			72
(U)	Supplies/Equipment				50		50			52
(U)	Mission Support				10		11			12
(U)	Total				130		133			136
(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>										
Not Applicable										
<u>Support and Management Organizations</u>										
Sverdrup (TEAS)	Various	Oct 93	N/A	N/A	1,455	0	0		Continuing	TBD
ASC/YHS	Various	Various	N/A	N/A	598	10	11	12	Continuing	TBD
Other	Various	Various	N/A	N/A	811	120	122	124	Continuing	TBD
<u>Test and Evaluation Organizations</u>										
46th Test Wing	Various	Various	N/A	N/A	190	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 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>	<u>Program</u>
<u>Subtotals</u>										
Subtotal Product Development										
Subtotal Support and Management					2,864	130	133	136	TBD	TBD
Subtotal Test and Evaluation					190	0	0		TBD	TBD
Total Project					3,054	130	133	136	TBD	TBD