

UNCLASSIFIED

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)							DATE February 2000																																																		
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604649A Engineer Mobility Equipment Development																																																					
COST (In Thousands)	FY1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY2004 Estimate	FY2005 Estimate	Cost to Complete	Total Cost																																																
Total Program Element (PE) Cost	69044	57880	0	0	0	0	0	0	293731																																																
DG25 M1 Breacher	57710	57719	0	0	0	0	0	0	194104																																																
DG26 Heavy Assault Bridge	11334	161	0	0	0	0	0	0	99627																																																
<p>A. Mission Description and Budget Item Justification: This Program Element (PE) supports the development of new, advanced combat engineer systems that will have mobility characteristics comparable to the maneuver forces supported. The programs included in this PE are the Grizzly (M1 Breacher) and the Wolverine (Heavy Assault Bridge). The Grizzly base vehicle is an M1 Abrams Tank chassis whereas the Wolverine base vehicle is the M1A2 SEP Abrams Tank chassis. The Grizzly will integrate a versatile/survivable full-width mine clearing blade with automatic depth control, a power driven arm, and an armored commander's control station on the chassis. The Wolverine integrates a Military Load Class (MLC) 70 bridge that spans a 24 meter gap (26 meter bridge) with computer controlled launching mechanism.</p> <p>Project G25, M1 Breacher, was terminated to support the New Army Transformation.</p>																																																									
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">B. Program Change Summary</th> <th style="text-align: center;"><u>FY 1999</u></th> <th style="text-align: center;"><u>FY 2000</u></th> <th style="text-align: center;"><u>FY 2001</u></th> </tr> </thead> <tbody> <tr> <td>Previous President's Budget (FY 2000/2001 PB)</td> <td style="text-align: right;">70590</td> <td style="text-align: right;">58321</td> <td style="text-align: right;">37741</td> </tr> <tr> <td>Appropriated Value</td> <td style="text-align: right;">71069</td> <td style="text-align: right;">58321</td> <td></td> </tr> <tr> <td>Adjustments to Appropriated Value</td> <td></td> <td></td> <td></td> </tr> <tr> <td>a. Congressional General Reductions</td> <td style="text-align: right;">-479</td> <td></td> <td></td> </tr> <tr> <td>b. SBIR / STTR</td> <td style="text-align: right;">-1809</td> <td></td> <td></td> </tr> <tr> <td>c. Omnibus or Other Above Threshold Reductions</td> <td></td> <td style="text-align: right;">-239</td> <td></td> </tr> <tr> <td>d. Below Threshold Reprogramming</td> <td style="text-align: right;">+545</td> <td></td> <td></td> </tr> <tr> <td>e. Rescissions</td> <td style="text-align: right;">-282</td> <td style="text-align: right;">-202</td> <td></td> </tr> <tr> <td>Adjustments to Budget Years Since FY 2000/2001 PB</td> <td></td> <td></td> <td style="text-align: right;">+21910</td> </tr> <tr> <td>New Army Transformation Adjustments</td> <td></td> <td style="text-align: center;">TBD</td> <td style="text-align: right;">-59651</td> </tr> <tr> <td>Current Budget Submit (FY 2001 PB)</td> <td style="text-align: right;">69044</td> <td style="text-align: right;">57880</td> <td style="text-align: right;">0</td> </tr> </tbody> </table>										B. Program Change Summary	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	Previous President's Budget (FY 2000/2001 PB)	70590	58321	37741	Appropriated Value	71069	58321		Adjustments to Appropriated Value				a. Congressional General Reductions	-479			b. SBIR / STTR	-1809			c. Omnibus or Other Above Threshold Reductions		-239		d. Below Threshold Reprogramming	+545			e. Rescissions	-282	-202		Adjustments to Budget Years Since FY 2000/2001 PB			+21910	New Army Transformation Adjustments		TBD	-59651	Current Budget Submit (FY 2001 PB)	69044	57880	0
B. Program Change Summary	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>																																																						
Previous President's Budget (FY 2000/2001 PB)	70590	58321	37741																																																						
Appropriated Value	71069	58321																																																							
Adjustments to Appropriated Value																																																									
a. Congressional General Reductions	-479																																																								
b. SBIR / STTR	-1809																																																								
c. Omnibus or Other Above Threshold Reductions		-239																																																							
d. Below Threshold Reprogramming	+545																																																								
e. Rescissions	-282	-202																																																							
Adjustments to Budget Years Since FY 2000/2001 PB			+21910																																																						
New Army Transformation Adjustments		TBD	-59651																																																						
Current Budget Submit (FY 2001 PB)	69044	57880	0																																																						
<p>Change Summary Explanation: Funding – FY 2001: Increase (+21910) to project DG25 was in support of the M1 Breacher program; later reduction of 59651 was in support of the New Army Transformation, resulting in the termination of this program.</p>																																																									

UNCLASSIFIED

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)							DATE February 2000			
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604649A Engineer Mobility Equipment Development				PROJECT DG25		
COST (In Thousands)	FY1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY2004 Estimate	FY2005 Estimate	Cost to Complete	Total Cost	
DG25 M1 Breacher	57710	57719	0	0	0	0	0	0	194104	
<p>A. <u>Mission Description and Justification:</u> The Grizzly (M1 Breacher) provides the Combat Engineer with significantly improved mission effectiveness and crew/vehicle survivability while clearing minefields and removing complex natural and man-made obstacles at the forward edge of the battlefield. The Grizzly is capable of moving with, and would be as survivable as, the maneuver force. The system provides a critical resource for executing in stride breaches, supporting the Force XXI maneuver commander's goals of information and maneuver dominance on the battlefield. The current method of breaching obstacles is to coordinate the employment of line charges, bridges, plows, rollers and even soldiers on the ground in a very dangerous and complex mission. The Grizzly replaces all of this with a single, survivable breach platform that gives the Combat Engineer a capability that does not currently exist in today's complex obstacle breaching operations, and will facilitate successful execution of ground combat mission requirements by maneuver forces.</p> <p>FY 1999 Accomplishments:</p> <ul style="list-style-type: none"> • 36844 Continued Refinement of Design to Support Vehicle Production Configuration and Complete Fabrication of 2 Prototypes • 662 Procured Chassis Government Furnished Material (GFM) for Prototype Vehicles • 17352 Performed Component Testing and Simulation, Production Planning, and Accomplish Program Logistics Requirements • 2852 Provided Program Management <p>Total 57710</p> <p>FY 2000 Planned Program:</p> <ul style="list-style-type: none"> • 28100 Complete Vehicle Integration, Shakedown & Delivery to Government of 2 Prototypes in Mar 00 • 21568 Perform Test Fix Implementation, Production Planning, Contractor Test Support and Accomplish Program Logistics Requirements • 6497 Contract Termination • 1554 Small Business Innovative Research/Small Business Technology Transfer Programs (SBIR/STTR) <p>Total 57719</p> <p>FY 2001 Planned Program: Project not funded in FY 2001.</p>										
B. <u>Other Program Funding Summary</u>	<u>FY 1998</u>	<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>	To Compl	Total Cost

UNCLASSIFIED

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)								DATE February 2000		
BUDGET ACTIVITY 5 - Engineering and Manufacturing Development				PE NUMBER AND TITLE 0604649A Engineer Mobility Equipment Development				PROJECT DG25		
B. Other Program Funding Summary	<u>FY 1998</u>	<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>	To Compl	Total Cost
PA, WTCV, GZ3200, Breacher MOD	0	0	19513	0	0	0	0	0	0	19513
<p>C. Acquisition Strategy: Research and development efforts have leveraged the accomplishments of the Combat Mobility Vehicle Advanced Technology Transition Demonstrator (CMV-ATTD) contract. Design modifications were written into the Advanced Development contract for the powertrain and other chassis components/systems necessary to insure that the Grizzly meets the mission profile required by the Operational Requirements Document. Modeling and Simulation was an essential aspect of the program and was being used to avoid costs in all areas of the design, training, testing, and production of this system. Through the production buy the vehicle was to be sole sourced to United Defense Limited Partnership (UDLP), Ground Systems Division, York, PA. The contracts for training devices development and production was to be awarded by STRICOM with maximum use of existing commercial off-the-shelf hardware and software.</p>										
D. Schedule Profile	<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>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>
Complete Prototype Rebuild and Assess Performance		2 nd Qtr								
Complete Program Termination Activity		4 th Qtr								
Project DG25			Page 3 of 5 Pages			Exhibit R-2A (PE 0604649A)				

UNCLASSIFIED

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)	DATE February 2000
--	------------------------------

BUDGET ACTIVITY 5 - Engineering and Manufacturing Development	PE NUMBER AND TITLE 0604649A Engineer Mobility Equipment Development	PROJECT DG26
--	---	-------------------------------

COST (In Thousands)	FY1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY2004 Estimate	FY2005 Estimate	Cost to Complete	Total Cost
DG26 Heavy Assault Bridge	11334	161	0	0	0	0	0	0	99627

A. Mission Description and Justification: The Wolverine provides Military Load Class (MLC) 70 capability spanning 24-meter gaps (26-meter bridge). The Wolverine mobility characteristics are comparable to the supported maneuver forces. The Wolverine is an M1A2 SEP Abrams Tank chassis supporting a horizontally launched bridge. The bridge launches in five minutes or less; and can be retrieved in ten minutes or less (inclusive of five minute engagement and five minute placement times).

FY 1999 Accomplishments:

- 3605 Contractor Test Support, Developmental Contract and Refurbishment of Test Vehicles
 - 593 Program Management
 - 7136 Live Fire Test Execution, Production Verification Test Execution, and System Support Package Build and Placement
- Total 11334

FY 2000 Planned Program:

- 157 Program Management
 - 4 Small Business Innovative Research
- Total 161

FY 2001 Planned Program: Project not funded in FY 2001.

B. <u>Other Program Funding Summary</u>	<u>FY 1998</u>	<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>To Compl</u>	<u>Total Cost</u>
PA, WTCV, GZ3250, HAB MOD	40372	49978	81901	0	0	0	0	0	0	172251
PA, WTCV, GE0177, HAB Spares	893	858	1337	0	0	0	0	0	0	3088
PA, WTCV, G84600 HAB Training Devices	0	385	14844	0	0	0	0	0	0	15229

UNCLASSIFIED

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)	DATE February 2000
--	------------------------------

BUDGET ACTIVITY 5 - Engineering and Manufacturing Development	PE NUMBER AND TITLE 0604649A Engineer Mobility Equipment Development	PROJECT DG26
---	--	------------------------

C. Acquisition Strategy: Side-by-side Comparison Testing was completed in FY 1993 on three different prototype bridges and launchers for Phase I of Engineering and Manufacturing Development (EMD). As a result of the testing and submission of proposals, one contractor, General Dynamics Land Systems Division (GDLS), was selected to complete Phase II of EMD with a Cost-Plus-Award-Fee contract. A contract was awarded in FY 1996 for two Wolverine systems, with an option for four additional systems exercised in December 1996 that will complete combined developmental and operational testing. A Fixed Price three year multiyear contract was awarded in April 98 for LRIP and initial fielding requirements.

The termination strategy is to be determined.

D. Schedule Profile	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Begin DT	4 th Qtr									
Complete Live Fire/Vulnerability Test		3 rd Qtr								
Complete DT		3 rd Qtr								