Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Office of Secretary Of Defense

Appropriation/Budget Activity

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 Program Element (Number/Name) PE 0603920D8Z I Humanitarian De-mining Date: March 2014

COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	14.540	11.741	11.688	10.194	-	10.194	9.192	9.548	10.080	10.712	Continuing	Continuing
920: Humanitarian De-mining	14.540	11.741	11.688	10.194	-	10.194	9.192	9.548	10.080	10.712	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

[#] The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

The Humanitarian Demining Research and Development (HD R&D) program element rapidly develops, demonstrates and validates new technologies for DoDsupported nations to detect and clear landmines and unexploded ordnance (UXO), and to contribute to US military countermine R&D. The HD R&D Program focuses on development of new technologies to improve the efficiency and safety of indigenous nation-conducted, post-conflict clearance of residual mines and UXO, which pose a serious threat to US forces conducting stability operations, and to the host nation's population and economy.

Evaluations of HD R&D Program-developed technologies in actual minefields are conducted by host nation demining partners (foreign military, non-governmental organizations and mine action centers) and provide valuable data for US military countermine R&D and next generation HD technology developments while directly contributing to world-wide mine and UXO clearance. Since 1995 the program has fielded technologies for 163 evaluations in 36 countries, including Iraq and Afghanistan. The program's technologies have cleared 21+ million sq meters of the world's toughest minefields; found or destroyed 101,000+ mines and UXO; and provided 306,000 mine/UXO disposal charges with 36 tons of explosive recovered from stockpiles and abandoned munitions in PACOM.

Under the Office of the Assistant Secretary of Defense for Special Operations and Low-Intensity Conflict (OASD SO/LIC), the HD R&D Program works closely with the COCOMS and the Humanitarian Demining Training Center (HDTC) to support the Warfighter by developing and implementing mine/UXO detection and clearance technologies; speeding improvements to technologies used by U.S. forces in support of USG operations; reducing the threat to host nation population and US forces; reducing insurgent access to explosives (landmines and UXO); enhancing mine action capacity of non-governmental organizations and mine action centers in mineaffected countries; and providing engagement opportunities for DoD personnel in mine-affected countries.

Areas of emphasis are identified and validated at a biennial Requirements Workshop held by OASD SO/LIC. The Requirements Workshop involves representatives from Department of State (DoS), U.S. combatant commands (COCOMS) and mine-affected nations.

The program element's work is consistent with the Department of Defense's strategic guidance to address instability and reduce the demand for significant US force commitments to stability operations; with DODI 3000.05 to foster security, economic security and development, and build indigenous capacity; and with § 407 and CJCSI 3207.01C to reduce the social, economic and environmental impact of landmines, unexploded ordnance and small arms ammunition.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Office of Secretary Of Defense

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 4:

PE 0603920D8Z I Humanitarian De-mining

Date: March 2014

EV 2042

EV 2044

Advanced Component Development & Prototypes (ACD&P)

Appropriation/Budget Activity

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	13.231	11.704	11.607	-	11.607
Current President's Budget	11.741	11.688	10.194	-	10.194
Total Adjustments	-1.490	-0.016	-1.413	-	-1.413
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-1.490	-0.016			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
Strategic Efficiency Reduction	-	-	-1.413	-	-1.413

Change Summary Explanation

C Accomplishments/Planned Programs (\$ in Millions)

The FY 2015 budget was reduced due to fiscal constraints and higher priorities within the Department .

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2013	FY 2014	FY 2015
Title: 0603920D8Z - SO/LIC Humanitarian De-mining	11.741	11.688	10.194
Description: The HD R&D Program adapts commercial-off-the-shelf equipment, integrates mature technologies, and leverages R&D activity within DoD, particularly in the Army's Night Vision and Electronic Sensors Directorate (NVESD) Tactical Countermine mission area. The program aims to improve existing technologies for: mine/UXO detection, technical survey/area reduction, mechanical mine/UXO clearance, vegetation clearance, mine neutralization, and post-clearance quality assurance (QA).			
FY 2013 Accomplishments: In FY13 the HD R&D Program's technologies cleared 3.3 million square meters of the world's toughest minefields, removing or destroying 7,529 mines and 13,764 UXO. The HD R&D Program completed ongoing equipment developments/modifications and continued operational evaluations from FY2012. The HD R&D program also continued to support 50 on-going operational field evaluations in 12 countries. New evaluations included the Mini MineWolf technical survey system Thailand; HSTAMIDS mine detection system in Mozambique and Sri Lanka; the Minehound mine detection system in Afghanistan, Angola and Cambodia; Scout mine/UXO detection system in Cambodia; and excavator mine sifting attachments in Iraq; and the Mine Stalker vehicle-mounted AT mine detection system in Angola. The HD R&D Program supported the combatant commands and Embassy staffs by conducting site surveys and country assessments. The program continued development, test and evaluation of prototype technologies in the following areas: individual mine/UXO and minefield detection, mechanical mine/UXO and vegetation clearance, mine neutralization, and post-clearance quality assurance (QA).			
FY 2014 Plans:			

PE 0603920D8Z: Humanitarian De-mining Office of Secretary Of Defense

UNCLASSIFIED Page 2 of 4

R-1 Line #99

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Office of Secretary Of Defense Date: March 2014 R-1 Program Element (Number/Name)

Appropriation/Budget Activity

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 4: PE 0603920D8Z I Humanitarian De-mining Advanced Component Development & Prototypes (ACD&P)

C. Accomplishments/Planned Programs (\$ in Millions)

The HD R&D Program will deploy new technology to several countries, including the Raptor II and Rotary Mine Comb to Afghanistan, the Loader to Chile, the Rebel Crusher to Iraq, and the Piranha and Bearcat to Cambodia. The program element will continue to support ongoing FY2013 operational field evaluations in 12 countries and will support the combatant commands and Embassy staffs by conducting site surveys or country assessments. The program will develop, test and evaluate new prototype technologies in the following areas: individual mine/UXO and minefield detection, mechanical mine/UXO and vegetation clearance, mine neutralization, and post-clearance quality assurance (QA).

FY 2015 Plans:

The HD R&D Program will complete ongoing equipment developments/modifications, and continue operational evaluations from FY2014. The HD R&D will support the combatant commands and Embassy staffs by conducting new site surveys or country assessments. The program will develop, test and evaluate new prototype technologies based on feedback from the field in the following areas: individual mine/UXO and minefield detection, mechanical mine/UXO and vegetation clearance, mine neutralization, and post-clearance quality assurance (QA).

Accomplishments/Planned Programs Subtotals 11.741 11.688 10.194

FY 2013

FY 2014

FY 2015

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

N/A

Remarks

E. Acquisition Strategy

Following a rapid prototyping strategy, the program emphasizes the use/modification of existing, commercially-available items and components to build functional prototype equipment suited for humanitarian demining operations. This approach is required due to the immediate need for new demining technologies in the face of ongoing U.S. forces and host nation citizen casualties in mine-affected countries. The program evaluates prototype equipment by acquiring it off-the-shelf from industry using competition to the extent possible, by leveraging ongoing countermine R&D efforts in other U.S. and foreign R&D activities, and by taking advantage of extensive in-house fabrication capabilities at the Army's Night Vision and Electronic Sensors Division (NVESD).

F. Performance Metrics

Long Term Strategies: Obtain adequate funding to support critical shortfalls; prioritize proposals that are deemed acceptable and allocate funding accordingly; and establish outreach programs to leverage institutional knowledge and expertise.

Performance Indicator and Rating:

FY 2013 Target:

90% of currently funded research technologies are completed on time and within budget

Complete scheduled R&D project tasks

PE 0603920D8Z: Humanitarian De-mining Office of Secretary Of Defense

UNCLASSIFIED Page 3 of 4

R-1 Line #99

· · · · · · · · · · · · · · · · · · ·	UNCLASSIFIED	
Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Office of Secreta	ary Of Defense	Date: March 2014
Appropriation/Budget Activity 0400: Research, Development, Test & Evaluation, Defense-Wide I BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 Program Element (Number/Name) PE 0603920D8Z I Humanitarian De-mining	
Transition field-ready technologies to host nation demining partners		
FY 2014 Target: 90% of currently funded research technologies are completed on time and vice Complete scheduled R&D project tasks Transition field-ready technologies to host nation demining partners Conduct biennial Humanitarian R&D Program Requirements Workshop	within budget	
Basis of FY 2013 to Date Performance Rating: Currently the number of fund	ded research technologies is on track to be completed per	the target.
Verification: The Humanitarian Demining Program performs program review PACOM, SOUTHCOM, AFRICOM, EUCOM) and has oversight from OSD S		V, DSCA, HDTC, CENTCOM,
Validation: Completed R&D products increase the capabilities of the DoD to	effectively perform demining missions.	

PE 0603920D8Z: *Humanitarian De-mining* Office of Secretary Of Defense