Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army PE 0605326A: Concepts Experimentation Program

BA 6: RDT&E Management Support

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	-	27.923	27.902	37.158	-	37.158	53.324	67.112	83.484	85.283	Continuing	Continuing
312: Army/Joint Experimentation	-	8.869	8.330	5.794	-	5.794	2.889	0.516	0.525	0.534	Continuing	Continuing
317: Current Force Capability Gaps	-	17.200	17.677	29.489	-	29.489	48.570	64.720	81.156	82.949	Continuing	Continuing
33B: Soldier-Centered Analyses For Future Force	-	1.854	1.895	1.875	-	1.875	1.865	1.876	1.803	1.800	Continuing	Continuing

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

Note

Army

Provide Contractor Year Equivalent (CME) support to TRADOC Capability Development and Integration Directorates (CDIDs) across TRADOC to develop and integrate the capabilities for which ASA(ALT) community is developing and fielding material solutions. FY14 is the first year of incremental funding until 100% of the requirement is funded in FY 2017 and beyond.

A. Mission Description and Budget Item Justification

Army Experimentation mission enables integrated examinations with US Joint Forces Command (USJFCOM), Army Test and Evaluation Commnad (ATEC), Research, Development and Experimentation Command (RDECOM), Army battle laboratories, operational units, researach labs materiels developers, industry and academia to collaborate in the development, refinement, and assessment of future force concepts. The intended outcome of this integrative effort is to develop concept capability plans that inform the Capabilities Integration Development System (CIDS) process and define future requirements, enabling identification and acquistion of critical Doctrine, Organization, Training, Materiel, Leader Development, Personnel and Facilities (DOTMLPF) capabilities for the future force to provide land power capabilities needed by Joint and Army commanders. In FY 2012-2018, Research, Development, Test and Evaluation (RDT&E) funding specifically enables the World Class Blue Force (subject matter experts overseeing and coordinating experiments efforts from Army Capabilities Integration Center (ARCIC) proper in collaboration with the Schools and Centers), support for Red Cell analysis, and support to Maneuver Brigade Experiments. Experimentation enables enhanced situational awareness, planning requirements, employment and management of accelerated decision cycles in a network-enabled force, and training requirements of new and emerging technologies.

ARCIC, Accelerated Capabilities Division (ACD) (formerly Asymmetric Warfare Division) develops immediate capability solutions in support of the Chief of Staff of the Army (CSA) prioritized Current Force capability gaps (i.e. Force Protection, Networked Battle Command, Logistics and Medical in Counterinsurgency Operations (COIN) and Soldier Protection). ACD conducts Concept of Operations (CONOPS) and DOTMLPF analysis required to ensure capability gap candidate solutions are properly integrated prior to being equipped to deployed forces. Supports pre-deployment and in-theater assessments to ensure candidate solution meet identified requirements, support tactics, techniques and procedures development for use by deployed forces, and ensure equipped systems provide the necessary capability to fill an identified gap. These assessments support determination of a path forward for equipped system by identifying them as a potential Program of Record (POR) or

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^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army

PE 0605326A: Concepts Experimentation Program

BA 6: RDT&E Management Support

sustain in theater. CONOPS, DOTMLPF-Cost analysis and assessment assist deployed forces by ensuring they are able to properly employ equipped systems and assist senior Army leadership in determining how best to resource solution to high priority capability gaps.

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	28.755	27.902	24.458	-	24.458
Current President's Budget	27.923	27.902	37.158	-	37.158
Total Adjustments	-0.832	0.000	12.700	-	12.700
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-0.832	-			
 Adjustments to Budget Years 	-	-	12.700	-	12.700

	Exhibit R-2A, RDT&E Project Ju	stification	: PB 2014 A	rmy							DATE: Apr	il 2013	
	APPROPRIATION/BUDGET ACT	IVITY				R-1 ITEM	NOMENCL	ATURE		PROJECT			
2040: Research, Development, Test & Evaluation, Army					PE 0605326A: Concepts Experimentation 312: Army				312: Army/	/Joint Experimentation			
	BA 6: RDT&E Management Supp	ort				Program							
	COST (\$ in Millions)	All Prior			FY 2014	FY 2014	FY 2014					Cost To	Total
	COST (\$ III WIIIIIOIIS)	Years	FY 2012	FY 2013 [#]	Base	oco##	Total	FY 2015	FY 2016	FY 2017	FY 2018	Complete	Cost
	312: Army/Joint Experimentation	-	8.869	8.330	5.794	-	5.794	2.889	0.516	0.525	0.534	Continuing	Continuing
	Quantity of RDT&E Articles												

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

Note

Army

Not applicable for this item.

A. Mission Description and Budget Item Justification

Army Experimentation is the conduct of experiments involving Soldiers and Leaders within live, virtual, and contructive environments of exploring concepts, capability requirements and solutions across Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities (DOTMLPF) domains in order to learn and mitigate risk for current and future forces. Experiments inform Army future concepts and assess high-risk conceptual assumptions in order to focus required capabilities and represent the user's requirements in the future Army. TRADOC's partnership with ASA(ALT) in connecting Soldiers to the ideas and capabilities earlier rather than later, provides essential user feedback and assists the acquisition community with informing the Army's investment portfolio and decreasing the number of engineering design changes. Army experiments use the combined resources of Army battle laboratories, operational units, research labs, materiel developers, industry and academia to collaborate in the development, refinements, and assessment of future force concepts - to inform capability developments and validate concepts for current and future force. In FY12-18, Research, Development, Test and Evaluation (RDT&E) funding enables World Class Blue Force (WCBLUFOR) to provide technical and tactical expertise in Army experiment efforts, in collaboration and integration with Joint, Interagency, Intergovermental, and Multinational partners. In the near-term, Army experimentation will focus on Prevent, Shape, and Win as foundational elements for this campaign, assessed across all joint campaign phases, with Army level issues across the breadth of a champaign that highlights integration of Army 2020 initiatives.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Experimentation - World Class Blue Force Analysts	3.524	3.524	3.400
Articles:	0	0	
Description: Experimentation with future concepts requires commanders who understand those concepts, but military personnel are generally proficient in current doctrine, not future Army concepts. The WCBLUFOR bridge this gap with experienced commanders who are versed in future Army concepts. These subject matter experts provide technical and tactical expertise, play senior blue roles in experiments, develop orders, train and mentor staff, and provide analytic expertise. Requisite skill sets that are not available on our TDAs.			
FY 2012 Accomplishments:			

PE 0605326A: Concepts Experimentation Program

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^{##} The FY 2014 OCO Request will be submitted at a later date

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE: A	April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605326A: Concepts Experimentation Program	PROJEC 312: Arm	ny/Joint Experimentation FY 2012 FY 2013		1
B. Accomplishments/Planned Programs (\$ in Millions, Article Qu	uantities in Each)	F	Y 2012	FY 2013	FY 2014
WCBLUFOR assisted and mentored planning, execution and evaluat and functional concepts to provide credible incorporation of concepts coordination for the Army's Campaign of Learning - both what we had	into experiments. WCBLUFOR also support analysis a				
FY 2013 Plans: WCBLUFOR assist and mentor planning, execution and evaluation of functional concepts to provide credible incorporation of concepts into coordination for the Army's Campaign of Learning - both what we have	experiments. WCBLUFOR also support analysis and	nd			
FY 2014 Plans: WCBLUFOR will assist and will mentor planning, execution and evaluand functional concepts to provide credible incorporation of concepts and coordination for the Army's Campaign of Learning - both what we	into experiments. WCBLUFOR also will support analy				
Title: Experimentation - Maneuver Brigade Experiments	Δι	ticles:	5.345	0.000	1.200
Description: Perform maneuver brigade experiments that will address of future Infantry Bridgade Combat Team (IBCT), Stryker Bridgade C (ABCT) capability Doctrine, Organization, Training, Materiel, Leaders requirements and DOTMLPF solutions; and 3) acceleration and integrated (BCTs).	ess 1) integration of Army in 2020 initiatives; 2) developed combat Team (SBCT), and Airborne Brigade Comabt Te ship and Education, Personnel and Facilities (DOTMLPF	ment am			
FY 2012 Accomplishments: Conducted experiments to address learning demands supporting ass informed the Integrated Learning Plan for each AWFC; specifically su					
FY 2014 Plans: Will conduct experiments to address learning demands supporting as inform the Integrated Learning Plan for each AWFC; specifically supp		will			
Title: Experimentation - High-Fidelity Live-Virtual-Constructive Exper		ticles:	0.000	4.806 0	1.194
Description: Experiments address concept and capability developmed development of future Doctrine, Organization, Training, Materiel, Lea requirements and solutions; and acceleration and integration of capa above brigade.	dership and Education, Personnel and Facilities (DOT)	(LPF)			

PE 0605326A: Concepts Experimentation Program Army

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army	DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0605326A: Concepts Experimentation	312: Army/	/Joint Experimentation
BA 6: RDT&E Management Support	Program		

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
FY 2013 Plans: Experiments continue to address learning demands supporting critical Army Warfighting Challenges (AWFC); capstone, operational and concepts; and Formation Based Analysis. Experiments support learning in order to mitigate risk to Soldiers and developments providing tangible insurance against acquisition failure as well as a means to win the first battle of the next war.			
FY 2014 Plans: Experiments will continue to address learning demands supporting critical Army Warfighting Challenges (AWFC); capstone, operational and concepts; and Formation Based Analysis. Experiments will support learning in order to mitigate risk to Soldiers and developments providing tangible insurance against acquisition failure as well as a means to win the first battle of the next war.			
Accomplishments/Planned Programs Subtotals	8.869	8.330	5.79

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

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

PE 0605326A: Concepts Experimentation Program

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Exhibit R-2A, RDT&E Project Ju	ustification	: PB 2014 <i>A</i>	∖rmy							DATE : Apr	il 2013		
2040: Research, Development, Te	040: Research, Development, Test & Evaluation, Army										ROJECT 17: Current Force Capability Gaps		
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost	
317: Current Force Capability Gaps	-	17.200	17.677	29.489	-	29.489	48.570	64.720	81.156	82.949	Continuing	Continuing	
Quantity of RDT&E Articles													

^{*}FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

Note

Not applicable for this item.

A. Mission Description and Budget Item Justification

Training and Doctrine Command (TRADOC) lead for Accelerated Capability Developments (ACD) to address current critical operational needs. Enable development and deployment/employment of accelerated capabilities (both materiel and non-materiel) to the current force. Serve as TRADOC central coordinating organization for Headquarters Department of the Army (HQDA) staff support requirements related to accelerated capabilities developments. Integrate ACD activities to ensure unity and priority of effort and synchronization and optimization of resources. Integrate accelerated capabilities development activities between proponent force modernization domains to include Joint/Service coordination.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Counter Improvised Explosive Device Adapt the Force (AtF) (formerly Improvised Explosive Device (IED) Integrated	3.072	3.447	0.800
Concept Development Team (ICDT))	0	0	
Articles:			
Description: The IED ICDT is responsible for conducting Doctrine, Organization, Training, Materiel, Leadership and Education,			
Personnel, and Facilities (DOTMLPF) assessments; performs gap analyses identified by HQDA and Joint Urgent Operational Needs Statement (JUONS).			
FY 2012 Accomplishments: Lead the Adapt the Force efforts under Army Counter-IED (CIED) Strategy supporting development and maintenance of AtF			
CIED database and resolution of DOTMLPF issues associated with integration of various CIED initiatives. Was responsible for			
coordination and facilitating IED-Defeat Council of Colonels and General Officer Steering Committees producing guidance and directives for Army-wide IED-Defeat Training initiatives and systems. Supported TRADOC CoEs with CIED SMEs and products			
for all CIED Lines of Effort (DtD, ATN, Robotics).			
FY 2013 Plans:			

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^{##} The FY 2014 OCO Request will be submitted at a later date

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE: A	pril 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605326A: Concepts Experimentation Program	PROJEC 317: Cur		Capability Ga	aps
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantit	ies in Each)	i	FY 2012	FY 2013	FY 2014
Leads the Adapt the Force efforts under Army Counter-IED (CIED) Strategical CIED database and resolution of DOTMLPF issues associated with integral coordination and faciliating IED-Defeat Council of Colonels and General Odirectives for Army-wide IED-Defeat Training initiative and systems. Suppall CIED Lines of Effort.	ation of various CIED initiatives. Is responsible for officer Steering Committees producing guidance are	nd			
FY 2014 Plans: Will lead the Adapt the Force efforts under Army Counter-IED (CIED) Strate CIED database and resolution of DOTMLPF issues associated with integral coordination and facilitating IED-Defeat Council of Colonels and General Codirectives for Army-wide IED-Defeat Training initiative and systems. Will stor all CIED Lines of Effort.	ation of various CIED initiatives. Will be responsib Officer Steering Committees producing guidance a	le for nd			
Title: Demo/Assess Command and Control, Communications, Computers, (C4ISR)- Joint Integration and Non-Lethal Fires	-	ticles:	2.400	0.000	0.000
Description: Command, Control, Communications, Computers, Combat S (C5ISR) Operation Needs Statement (ONS) (classified) is a compliation of performance gaps in Operation Enduring Freedom (OEF). Phase 1 improvinces and network bandwidth down to battalion level, network modem upg network extension, network extension to mobile user (hand held), and full to the communication of the communications.	f C5ISR capabilities that eliminate critical capability vements include higher level network security and grades, increased biometrics and support, aerial lay	′			
FY 2012 Accomplishments: C5ISR ONS (classified) was a compliance of C5ISR capabilities that eliming Phase 1 improvements included higher level network security and increased modem upgrades, increased biometrics and support, aerial layer network (held), and full motion video.	ed network bandwidth down to battalion level, netw				
Title: Aerial Sensor Portfolio	Ar	ticles:	3.300	0.280	0.000
Description: Funding is needed to support the Aerial Sensor Portolio.	Ar	ucies.	U		
FY 2012 Accomplishments: Aerial Sensor Portfolio (excluding Task Force Observe, Detect, Indentify, a accelerated developments of directed, ONS-based, quick reaction aerial se		lcon,			

PE 0605326A: Concepts Experimentation Program Army

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE: A	April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605326A: Concepts Experimentation Program	PROJE 317: <i>Cι</i>		Capability G	aps
B. Accomplishments/Planned Programs (\$ in Millions, Article Quant	tities in Each)		FY 2012	FY 2013	FY 2014
Copperhead II, Black Kite). Supported improved Aerial Intelligence, Surprocessing. Consisted of aerial sensor and command control systems of environments by integrating collection and analysis of intelligence data, planning, sensor cueing, data collection, and communications.	organized to defeat assigned threats in current opera	tional			
FY 2013 Plans: Aerial Sensor Portfolio (excluding Task Force Observe, Detect, Indentify accelerated developments of directed, ONS-based, quick reaction aerial Copperhead II, Black Kite). Supports improved Aerial Intelligence, Surve processing. Consists of aerial sensor and command control systems or environments by integrating collection and analysis of intelligence data, planning, sensor cueing, data collection, and communications.	I sensor capabilities (Desert Owl I and II, Radiant Fa eillance, and Reconnaissance (ISR) Information Sys ganized to defeat assigned threats in current operati	tem onal			
Title: Communications and Networks Portfolio		4:-1	2.693	0.535	0.000
Description: Funding is needed for Communications and Networks Por		ticles:	0	0	
FY 2012 Accomplishments: Communications and Network Portfolio capabilities included Intelligence Swarm, Heterogeneous Aerial Reconnaissance Team (HART), Enroute Army Cellular Capability Development and Connecting Soldiers to Digital deployment, and assessment of communications and networking of these network connectivity with mission command applications. Network provious of assessing all required data applications, and service via the common and small unit operations beyond line-of-sight with focus on Company at move capabilities. Additionally network reduced dependence on satellites.	Mission Planning and Rehearsal System (EMPRS), al Applications (CSDA). Task supported developments and other directed systems provided the Warfight ided single user interface, including aerial tier, capable operating environment. Network supported distributed below Brigade and Battalion mission command of	nt, er a ble eed			
FY 2013 Plans: Communications and Network Portfolio capabilities include Intelligence, Swarm, Heterogeneous Aerial Reconnaissance Team (HART), Enroute Army Cellular Capability Development and Connecting Soldiers to Digital deployment, and assessment of communications and networking of these network connectivity with mission command applications. Network provides assessing all required data applications, and service via the common open.	Mission Planning and Rehearsal System (EMPRS), al Applications (CSDA). Task is to support developme and other directed systems to provide the Warfightes single user interface, including aerial tier, capable	nent, iter a ble of			

PE 0605326A: Concepts Experimentation Program Army

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Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) 3. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) 3. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) 3. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) 3. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) 3. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) 3. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) 3. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) 4. Articles: 4. Articles: 4. Articles: 4. Articles: 4. Articles: 4. Articles: 5. Articles: 5. Articles: 5. Articles: 5. Articles: 5. Articles: 6. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) 5. Articles: 6. Articles: 6. Articles: 6. Articles: 6. Articles: 6. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) 6. Articles: 6. Articles: 6. Articles: 6. Articles: 6. Articles: 6. Articles: 7. Articles: 8. Arti		
2.2. Articles: PE 0605326A: Concepts Experimentation Program (S in Millions, Article Quantities in Each) Small unit operations beyond line-of-sight with focus on Company and below Brigade and Battalion mission command on-the-move capabilities. Additionally network reduces dependence on satellite communications when connectivity is lost. Title: Operational Energy (formerly Demo/Assess Operational Power and Energy) Articles: Description: Funding is needed for Operational Power and Energy FY 2012 Accomplishments: TRADOC Accelerated Capability Developments supported TRADOC Power and Energy staff management and integration responsibilities. Supported proponents with their responsibilities relative to doctrine, organization, training, material, leader development and education, personnel, and facilities plus related matters. Leveraged Proponent input to Joint Capability Irransition, and Capability Developments supports TRADOC Power and Energy staff management and integration responsibilities. Supports proponents with their responsibilities relative to doctrine, organization, training, material, leader development and education, personnel, and facilities plus related matters. Leverages Proponent input to Joint Capability Development and education, personnel, and facilities plus related matters. Leverages Proponent input to Joint Capabilities integration and Development System, Science and Technology, Concept Development, Capability Development for Rapid Transition, and Capability Gap Analysis Army. FY 2014 Plans: Will continue acceleration of Operational Energy initiative for remote Combat Outposts and Soldier Power initiatives. Operational Energy with increased levels of agility, flexibility, and interoperability when operating in the expeditionary environment. Operational energy to systems within the mission command network, and mitigate forcer isk by reducing energy demand. Phase two of multi-phased approached will support development of integrated operational energy solutions will require a system-of-syst	ATE: April 2013	
small unit operations beyond line-of-sight with focus on Company and below Brigade and Battalion mission command on-themove capabilities. Additionally network reduces dependence on satellite communications when connectivity is lost. **Title:**Operational Energy (formerly Demo/Assess Operational Power and Energy)** **Articles:**Description:**Funding is needed for Operational Power and Energy **FY 2012 Accomplishments:** **TRADOC Accelerated Capability Developments supported TRADOC Power and Energy staff management and integration responsibilities. Supported proponents with their responsibilities relative to doctrine, organization, training, material, leader development and education, personnel, and facilities plus related matters. Leveraged Proponent input to Joint Capabilities Integration and Development System, Science and Technology, Concept Development, Capability Development for Rapid Transition, and Capability Gap Analysis Army. **FY 2013 Plans:** **TRADOC Accelerated Capability Developments supports TRADOC Power and Energy staff management and integration responsibilities. Supports proponents with their responsibilities relative to doctrine, organization, training, material, leader development and education, personnel, and facilities plus related matters. Leverages Proponent input to Joint Capabilities Integration and Development System, Science and Technology, Concept Development, Capability Development for Rapid Transition, and Capability Gap Analysis Army. **FY 2014 Plans:** Will continue acceleration of Operational Energy initiative for remote Combat Outposts and Soldier Power initiatives. Operational Energy will provide the warfighter with increased levels of agility, flexibility, and interoperability when operating in the expeditionary environment. Operational energy solutions will approach extend combat and tactical systems' mission endurance and resilence, ensure uninterrupted and optimal energy to systems within the mission command network, and mitigate force risk by reducing energy deman	Force Capability G	ìaps
Title: Operational Energy (formerly Demol/Assess Operational Power and Energy) Articles: Description: Funding is needed for Operational Power and Energy FY 2012 Accomplishments: TRADOC Accelerated Capability Developments supported TRADOC Power and Energy staff management and integration responsibilities. Supported proponents with their responsibilities relative to doctrine, organization, training, material, leader development and education, personnel, and facilities plus related matters. Leveraged Proponent input to Joint Capabilities Integration and Development System, Science and Technology, Concept Development, Capability Development for Rapid Transition, and Capability Developments supports TRADOC Power and Energy staff management and integration responsibilities. Supports proponents with their responsibilities relative to doctrine, organization, training, material, leader development and education, personnel, and facilities plus related matters. Leverages Proponent input to Joint Capabilities integration and Development System, Science and Technology, Concept Development, Capability Development for Rapid Transition, and Capability Gap Analysis Army. FY 2013 Plans: Will continue acceleration of Operational Energy initiative for remote Combat Outposts and Soldier Power initiatives. Operational Energy will provide the warfighter with increased levels of agility, flexibility, and interoperability when operating in the expeditionary environment. Operational energy solutions will approach extend combat and tactical system's mission endurance and resilence, ensure uninterrupted and optimal energy to systems within the mission command network, and mitigate force risk by reducing energy demand. Phase two of multi-phased approached will support development of integrated operational energy solutions will require a system-of-systems engineering approach. This approach will ensure that designs identify and address effects on the force when delivering solutions provide necessary employment guidance and assess impa	012 FY 2013	FY 2014
Pescription: Funding is needed for Operational Power and Energy FY 2012 Accomplishments: TRADOC Accelerated Capability Developments supported TRADOC Power and Energy staff management and integration responsibilities. Supported proponents with their responsibilities related to doctrine, organization, training, material, leader development and education, personnel, and facilities plus related matters. Leveraged Proponent input to Joint Capabilities Integration and Development System, Science and Technology, Concept Development, Capability Development for Rapid Transition, and Capability Gap Analysis Army. FY 2013 Plans: TRADOC Accelerated Capability Developments supports TRADOC Power and Energy staff management and integration responsibilities. Supports proponents with their responsibilities relative to doctrine, organization, training, material, leader development and education, personnel, and facilities plus related matters. Leverages Proponent input to Joint Capabilities Integration and Development System, Science and Technology, Concept Development, Capability Development for Rapid Transition, and Capability Gap Analysis Army. FY 2014 Plans: Will continue acceleration of Operational Energy initiative for remote Combat Outposts and Soldier Power initiatives. Operational Energy will provide the warfighter with increased levels of agility, flexibility, and interoperability when operating in the expeditionary environment. Operational energy solutions will approach extend combat and tactical systems' mission endurance and resilence, ensure uninterrupted and optimal energy to systems within the mission command network, and mitigate force risk by reducing energy demand. Phase two of multi-phased approached will support development of integrated operational energy solutions will require a system-of-systems engineering approach. This approach will ensure that designs identify and address effects on the force when delivering solutions provide necessary employment guidance and assess impacts on operational effecti		
FY 2012 Accomplishments: TRADOC Accelerated Capability Developments supported TRADOC Power and Energy staff management and integration responsibilities. Supported proponents with their responsibilities relative to doctrine, organization, training, material, leader development and education, personnel, and facilities plus related matters. Leveraged Proponent input to Joint Capabilities Integration and Development System, Science and Technology, Concept Development, Capability Development for Rapid Transition, and Capability Gap Analysis Army. FY 2013 Plans: TRADOC Accelerated Capability Developments supports TRADOC Power and Energy staff management and integration responsibilities. Supports proponents with their responsibilities relative to doctrine, organization, training, material, leader development and education, personnel, and facilities plus related matters. Leverages Proponent input to Joint Capabilities Integration and Development System, Science and Technology, Concept Development, Capability Development for Rapid Transition, and Capability Gap Analysis Army. FY 2014 Plans: Will continue acceleration of Operational Energy initiative for remote Combat Outposts and Soldier Power initiatives. Operational Energy will provide the warfighter with increased levels of agility, flexibility, and interoperability when operating in the expeditionary environment. Operational energy solutions will approach extend combat and tactical systems' mission endurance and resilence, ensure uninterrupted and optimal energy to systems within the mission command network, and mitigate force risk by reducing energy demand. Phase two of multi-phased approached will support development of integrated operational energy solutions will require a system-of-systems engineering approach. This approach will ensure that designs identify and address effects on the force when delivering solutions provide necessary employment guidance and assess impacts on operational effectiveness. Title: Integrated Protection Initiative (IPI) Articles	2.250 1.846 0 0	3.000
TRADOC Accelerated Capability Developments supported TRADOC Power and Energy staff management and integration responsibilities. Supported proponents with their responsibilities relative to doctrine, organization, training, material, leader development and education, personnel, and facilities plus related matters. Leveraged Proponent input to Joint Capabilities Integration and Development System, Science and Technology, Concept Development, Capability Development for Rapid Transition, and Capability Gap Analysis Army. FY 2013 Plans: TRADOC Accelerated Capability Developments supports TRADOC Power and Energy staff management and integration responsibilities. Supports proponents with their responsibilities relative to doctrine, organization, training, material, leader development and education, personnel, and facilities plus related matters. Leverages Proponent input to Joint Capabilities integration and Development System, Science and Technology, Concept Development, Capability Development for Rapid Transition, and Capability Gap Analysis Army. FY 2014 Plans: Will continue acceleration of Operational Energy initiative for remote Combat Outposts and Soldier Power initiatives. Operational Energy will provide the warfighter with increased levels of agility, flexibility, and interoperability when operating in the expeditionary environment. Operational energy solutions will approach extend combat and tactical systems' mission endurance and resilence, ensure uninterrupted and optimal energy to systems within the mission command network, and mitigate force risk by reducing energy demand. Phase two of multi-phased approached will support development of integrated operational energy solutions will require a system-of-systems engineering approach. This approach will ensure that designs identify and address effects on the force when delivering solutions provide necessary employment guidance and assess impacts on operational effectiveness. Title: Integrated Protection Initiative (IPI) Articles: Description: Funds are		
TRADOC Accelerated Capability Developments supports TRADOC Power and Energy staff management and integration responsibilities. Supports proponents with their responsibilities relative to doctrine, organization, training, material, leader development and education, personnel, and facilities plus related matters. Leverages Proponent input to Joint Capabilities Integration and Development System, Science and Technology, Concept Development, Capability Development for Rapid Transition, and Capability Gap Analysis Army. FY 2014 Plans: Will continue acceleration of Operational Energy initiative for remote Combat Outposts and Soldier Power initiatives. Operational Energy will provide the warfighter with increased levels of agility, flexibility, and interoperability when operating in the expeditionary environment. Operational energy solutions will approach extend combat and tactical systems' mission endurance and resilence, ensure uninterrupted and optimal energy to systems within the mission command network, and mitigate force risk by reducing energy demand. Phase two of multi-phased approached will support development of integrated operational energy solutions will require a system-of-systems engineering approach. This approach will ensure that designs identify and address effects on the force when delivering solutions provide necessary employment guidance and assess impacts on operational effectiveness. Title: Integrated Protection Initiative (IPI) Articles: Description: Funds are needed for Integrated Protection Initiative.		
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Articles: Description: Funds are needed for Integrated Protection Initiative.		
Description: Funds are needed for Integrated Protection Initiative.	3.485 2.468	
	0 0	
FY 2012 Accomplishments:		

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE:	April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 6: RDT&E Management Support	PROJECT 317: Current Force Capability Ga			aps	
B. Accomplishments/Planned Programs (\$ in Millions, Article Q	uantities in Each)		FY 2012	FY 2013	FY 2014
TRADOC Accelerated Capability Developments initiative provided in to equip, train, and deploy capability support for OEF problem of iso Forward Operating Bases (FOBs) which had difficulty locating groun organic, lethal, effects while minimizing collateral damage and expositions.	lated maneuver elements at Command Outposts (COPs and targets and lack timely response to engage these targ)/			
FY 2013 Plans: TRADOC Accelerated Capability Developments initiative provides in to equip, train, and deploy capability support for OEF problem of iso Forward Operating Bases (FOBs) which have difficulty locating ground organic, lethal, effects while minimizing collateral damage and expositions.	lated maneuver elements at Command Outposts (COPs and targets and lack timely response to engage these tar)/			
Title: Army Expeditionary Warrior Experiment (formerly Prototype S	,	ticles:	0.000	1.200 0	0.76
Description: Army Expeditionary Warrior Experiment (AEWE) address	esses live, prototype experimentation requirements.				
FY 2013 Plans: AEWE addresses live, prototype experimentation requirements with concepts and capabilities for the current and future force. AEWE prindustry a repeatable, credible, rigorous, and validated operational edevelopment efforts. FY13 focusses on Spiral H and J support.	ovides Capability Developers, the S&T community and				
FY 2014 Plans: This campaign of experiments will be critical at the Maneuver Cente to ensure our future Maneuver Force is prepared and equipped to fig doctrine development, leveraging emerging technology and partneri Maneuver Force. FY14 campaign of experiments, Spiral I, will be fo Cellular Communications, Robotics, Solider Load and Protection, Po	ght and win in a complex operating environment. Through ng with industry, the Maneuver Center in an advocate for ocused on technologies to support five primary study are	gh r the			
Title: Capability Packages (CP)	Ar	ticles:	0.000	0.800	0.00
Description: Capability Packages are a key element of the Army's t strategy.	ransition to a brigade combat team (BCT) modernization	1			
FY 2013 Plans: Capability Packages are the key element of the Army's transition to build a versatile mix of mobile, networked and combat effective BCT		erate			

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE: A	April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army	R-1 ITEM NOMENCLATURE PE 0605326A: Concepts Experimentation	PROJ I 317: <i>C</i>	ECT urrent Force	Capability Ga	арѕ
BA 6: RDT&E Management Support	Program				
B. Accomplishments/Planned Programs (\$ in Millions, Article Qu	·		FY 2012	FY 2013	FY 2014
proven solutions, these packages upgrade our units every few years Soldiers who need them most, based on the continually evolving condoctrine, organization, and training in conjunction with materiel to fill The incremental deliveries are build upon one another as the Army of	nbat environment. These bundles of capabilities include the highest priority shortfalls and mitigate risk for Soldie				
Title: Robotics	Ar	ticles:	0.000	1.325 0	2.650
Description: Testing and demonstration of increased unmanned gro	ound vehicle capabilities.				
FY 2013 Plans: Tests and demonstrates increasingly capable unmanned ground veh transportable, vehicle transportable, and applique) through venues s (MMBL), and Brigade Modernization Command (BMC) events. Succ DOTMLPF assessments for transition decisions.	uch as the Robotics Rodeo, Mounted Maneuver Battle L	₋ab			
FY 2014 Plans: Will support the Army robotics Campaign Plan development, and resvarious Robotics initiatives. Will be responsible for participation as nand in producing guidance and directives for Army-wide Robotic SMI and assessed. Will include initiatives directly related to robotics such Controller and systems linked to the controllers.	nember of Joint Ground Robotics Integration Team mee Es and products for applicable initiative being resourced	tings			
Title: Tunnel Detection (TD)	Ar	ticles:	0.000	1.175 0	0.000
Description: Test and demonstration of sensor technology.					
FY 2013 Plans:					
Test and demonstrate a suite of sensor technology systems capable purpose-built tunnels.	of detecting, exploiting, and remediating, clandestine				
Title: Exploitation	Ar	ticles:	0.000	1.400	0.000
Description: Document and Media Exploitation (DOMEX) is the colle and media.	ection and exploitation of captured equipment, documer	its,			

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 6: RDT&E Management Support B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) FY 2013 Plans: Document and Media Exploitation (DOMEX) Tactical, operational, and strategic leaders are enabled with accurate information about enemy forces through the rapid and accurate extraction, exploitation, and analysis of captured enemy documents, media, and materiel. Tactically, DOMEX is the collection and exploitation of captured equipment, documents, and media to generate actionable intelligence. The DOMEX is a critical part of target exploitation, especially as it relates to actions on the objective during site exploitation activities. Efforts in exploitation also support Special Operations Command (SOCOM) with DOTMLPF assessments of classified solutions supporting technical reconnaissance, and information operations associated with exploitation. Title: Non Standard Training Gap Initiative (formerly Non-Standard Capability Training Gaps) Articles:	ECT	April 2013 Capability G	aps FY 2014
2040: Research, Development, Test & Evaluation, Army BA 6: RDT&E Management Support B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) FY 2013 Plans: Document and Media Exploitation (DOMEX) Tactical, operational, and strategic leaders are enabled with accurate information about enemy forces through the rapid and accurate extraction, exploitation, and analysis of captured enemy documents, media, and materiel. Tactically, DOMEX is the collection and exploitation of captured equipment, documents, and media to generate actionable intelligence. The DOMEX is a critical part of target exploitation, especially as it relates to actions on the objective during site exploitation activities. Efforts in exploitation also support Special Operations Command (SOCOM) with DOTMLPF assessments of classified solutions supporting technical reconnaissance, and information operations associated with exploitation. Title: Non Standard Training Gap Initiative (formerly Non-Standard Capability Training Gaps)	FY 2012	FY 2013	·
FY 2013 Plans: Document and Media Exploitation (DOMEX) Tactical, operational, and strategic leaders are enabled with accurate information about enemy forces through the rapid and accurate extraction, exploitation, and analysis of captured enemy documents, media, and materiel. Tactically, DOMEX is the collection and exploitation of captured equipment, documents, and media to generate actionable intelligence. The DOMEX is a critical part of target exploitation, especially as it relates to actions on the objective during site exploitation activities. Efforts in exploitation also support Special Operations Command (SOCOM) with DOTMLPF assessments of classified solutions supporting technical reconnaissance, and information operations associated with exploitation. Title: Non Standard Training Gap Initiative (formerly Non-Standard Capability Training Gaps)			FY 2014
Document and Media Exploitation (DOMEX) Tactical, operational, and strategic leaders are enabled with accurate information about enemy forces through the rapid and accurate extraction, exploitation, and analysis of captured enemy documents, media, and materiel. Tactically, DOMEX is the collection and exploitation of captured equipment, documents, and media to generate actionable intelligence. The DOMEX is a critical part of target exploitation, especially as it relates to actions on the objective during site exploitation activities. Efforts in exploitation also support Special Operations Command (SOCOM) with DOTMLPF assessments of classified solutions supporting technical reconnaissance, and information operations associated with exploitation. Title: Non Standard Training Gap Initiative (formerly Non-Standard Capability Training Gaps)	0.000		
	0.000		
Ai dicies.		3.201	3.137
Description: Training for accelerated capabilites is accomplished primarily through mandated New Equipment Training (NET) with no process for follow on efforts. This incongruity is detrimental to effective and consistent training for the force.		O	
FY 2013 Plans: The Army has not established an approved mechanism to train non-standard equipment within operational formations or CoEs. This deficiency compels training independent of evaluated/verifiable methods. There is minimal assistance in the development of Training Support Packages (TSP) and varying levels of oversight to validate if the maximum benefit of the training and capability has been attained. This incongruity is detrimental to effective and consisitent training for the force. Training for accelerated capabilities is accomplished primary through mandated New Equipment Training (NET) with no process for follow on efforts. Supports TRADOC CoEs in development of Pilot Training Programs to establish process for the integration on non-standard capability training.			
FY 2014 Plans: Will lead the Non Standard Equipment (NSE) training process initiative supporting the development, execution, evaluation, and maintenance of the 2nd pilot program to develop a standardized and effective NSE training process for deployed units. ARCIC Accelerated Capabilities Division (ACD) will be responsible for facilitating and coordinating stakeholders in the execution, evaluation, and maintenance of Pilot Program 2 on the NSE training process.			
Title: Tower Hawk	0.000	0.000	2.500
Description: Provides support to development, integration, and equiping of solutions to the field for integrated base defense while providing long range pinpoint offensive action.			
FY 2014 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE:	April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 6: RDT&E Management Support	PROJE 317: <i>Cu</i>	OJECT Current Force Capability Gaps			
B. Accomplishments/Planned Programs (\$ in Millions, Article Qua	intities in Each)		FY 2012	FY 2013	FY 2014
Will provide support to development, integration, and equiping of solut long range pinpoint offensive action against insurgents identified in hos DOTMLPF as part of coordination and facilitation efforts between Projection	stile acts. ACD will provide the integration efforts acro				
Title: Small Unit Learder Situational Awareness Tool (SULSAT)			0.000	0.000	1.002
Description: Supports the Army Robotics Campaign Plan initiatives by of emerging Robotics initiatives.	y addressing DOTMLPF issues associated with integr	ation			
FY 2014 Plans: Will provide support to the Army Robotics Campaign Plan initiatives by of emerging Robotics initiatives such as Small Unit Leader Situational edge technology in multiple fields, including high speed graphics comp capability will be able to visualize internal and external structures of but that information to soldiers and small-unit leaders.	Awareness Tools (SULSAT). This will require cutting outing, 3-D imaging, virtual reality, and visualization.	his			
Title: Black Kite			0.000	0.000	0.740
Description: Micro Air Vehicle (MAV) with increased sensor capability	in support of Army Counter-IED (CIED) Strategy.				
FY 2014 Plans: Micro Air Vehicle (MAV) with increased sensor capability in support of integration of various (CIED initiatives. Supports Army-wide IED-Defer integrated with TRADOC CoEs with CIED SMEs and products for all C	at Training initiatives and systems. Coordinated and				
Title: Contractor Year Equivalent (CME) Support to TRADOC Capabili	ity Development and Integration Directorates (CDIDs)		0.000	0.000	14.900
Description: Provides CMEs to CDIDs across TRADOC to develop ar	nd integrate capabilities.				
FY 2014 Plans: Will provide approximately 87 CMEs to CDIDs across TRADOC to dev community is developing and fielding material solutions. FY14 will be requirement is funded in FY 2017 and beyond.		ALT)			
	Accomplishments/Planned Programs Sul	ototals	17.200	17.677	29.489

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

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army	DATE: April 2013						
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 6: RDT&E Management Support	Research, Development, Test & Evaluation, Army PE 0605326A: Concepts Experimentation 317: Current Force Capability G						
C. Other Program Funding Summary (\$ in Millions)							
Remarks							
D. Acquisition Strategy N/A							
E. Performance Metrics Performance metrics used in the preparation of this justification material may	be found in the FY 2010 Army Performance B	udget Justification Book, dated May 2010.					

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army							DATE: Apr	il 2013				
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 6: RDT&E Management Support			R-1 ITEM NOMENCLATURE PE 0605326A: Concepts Experimentation Program Program PROJECT 33B: Soldie Force				eT dier-Centered Analyses For Future					
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
33B: Soldier-Centered Analyses For Future Force	-	1.854	1.895	1.875	-	1.875	1.865	1.876	1.803	1.800	Continuing	Continuing
Quantity of RDT&E Articles												

^{*}FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

This project will provide early application of human performance and human figure modeling tools in the development of Soldier-focused requirements to shape technology for Future Force development. Design analyses, constructive simulations and Soldier-in-the-loop assessments will ensure that manpower requirements and workload and skill demands are considered to avoid information and physical task overloads, and take optimum advantage of aptitudes, individual and collective training, and numbers of Soldiers for an affordable Future Force. The cited work is consistent with the Strategic Planning Guidance, the Army Science and Technology Master Plan (ASTMP), the Army Modernization Plan, and the Defense Technology Area Plan (DTAP). Work in this project is performed by the Army Research Laboratory (ARL).

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Manpower and Personnel Integration (MANPRINT)	1.854	1.895	1.875
Articles:	0	0	
Description: Provide dedicated modeling and analysis cell for early and accurate MANPRINT estimates to Army Materiel Command (AMC), Research, Development, and Engineering Command (RDECOM) and its Research, Development, and Engineering Centers (RDECs), TRADOC Centers, Schools and Centers of Excellence (CoEs), Army Test and Evaluation Command (ATEC) and other service laboratories. FY 2012 Accomplishments: Developed method to trace quantified Human System Integration (HSI) risks from Warfighter and platform performance up to mission execution.			
FY 2013 Plans: Develop analysis methodology to link HSI risk mitigation (i.e. specific system design changes) to manpower and health care cost avoidance.			
FY 2014 Plans:			

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^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0605326A: Concepts Experimentation	33B: Soldie	er-Centered Analyses For Future
BA 6: RDT&E Management Support	Program	Force	

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Will develop and demonstrate model based links between Systems Engineering (SE) and MANPRINT tools and methods to leverage common data elements and resources to better inform acquisition tradeoff decisions.			
Accomplishments/Planned Programs Subtotals	1.854	1.895	1.875

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

N/A

<u>Remarks</u>

D. Acquisition Strategy

N/A

E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

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