Exhibit R-2, **RDT&E Budget Item Justification**: PB 2012 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)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	26.168	17.704	28.800	-	28.800	27.620	24.224	21.349	19.227	Continuing	Continuing
308: Concepts Experimentation	3.084	-	-	-	-	-	-	-	-	Continuing	Continuing
312: Army/Joint Experimentation	11.297	5.907	9.162	-	9.162	8.241	5.794	2.889	0.516	Continuing	Continuing
317: CURRENT FORCE CAPABILITY GAPS	9.814	9.770	17.770	-	17.770	17.487	16.526	16.546	16.770	Continuing	Continuing
33B: SOLDIER-CENTERED ANALYSES FOR THE FUTURE FORCE	1.973	2.027	1.868	-	1.868	1.892	1.904	1.914	1.941	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Army Experimentation mission enables integrated examinations with US Joint Forces Command (USJFCOM), Army Test and Evaluation Command (ATEC), Research, Development, and Experimentation Command (RDECOM), Army battle laboratories, operational units, research labs, materiel 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 acquisition 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 2010-2012, 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 solutions 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 systems by identifying them as a potential Program of Record (POR) or sustain in theater. CONOPS, DOTMLPF-Cost analysis, and assessments assist deployed forces by ensuring they are able to properly employ equipped systems and assist senior Army leadership in determining how best to resource solutions to high priority capability gaps.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Army		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
2040: Research, Development, Test & Evaluation, Army	PE 0605326A: Concepts Experimentation Program	
BA 6: RDT&E Management Support		

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	26.407	17.704	29.576	-	29.576
Current President's Budget	26.168	17.704	28.800	-	28.800
Total Adjustments	-0.239	-	-0.776	-	-0.776
 Congressional General Reductions 		-			
 Congressional Directed Reductions 		-			
 Congressional Rescissions 	-	-			
 Congressional Adds 		-			
 Congressional Directed Transfers 		-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.239	-			
 Adjustments to Budget Years 	-	_	-0.776	-	-0.776

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army								DATE: Feb	ruary 2011		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 6: RDT&E Management Support				R-1 ITEM N PE 0605320 Program		TURE ts Experimer	ntation	PROJECT 308: Concepts Experimentation			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
308: Concepts Experimentation	3.084	-	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											

Note

Not applicable for this item.

A. Mission Description and Budget Item Justification

Automated Communications Support System: This is new functionality to be developed for an existing information extraction software that is applied to live or taped audio. Specifically the software will be enhanced to automatically identify topics in the audio being spoken. The enormous amount of audio that has been recorded is far greater than the ability of the trained human linguist pool to fully exploit. Topic Extraction (and other information extraction tools) are extremely important triage tools in order to fully exploit the intelligence in these materials. This software suite is the information extraction software of choice for National Security Agency (NSA) and the Central Intelligence Agency (CIA).

Technology for Rapid Foreign Language Acquisition for Specialized Military and Intelligence Purposes: This proof of concept takes a new approach targeted to adults learning a second language. The Military Intelligence (MI) Audience is Military Occupational Speciality (MOS) 35M who are interrogators who no longer institutionally learn a foreign language until their first reenlistment. The MI Corps has learned that rudimentary language skills in specific interviews topics is a must for these newly minted interrogators to function. This project will provide training courseware in seven languages.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Title: Automated Communication Support System for Warfighters, Intelligence Community, Linguist, and Analyst (Congressional	1.492	-	_
Add)	0		
Articles:			
Description: This is a new functionality to be developed for an existing information extraction software that is applied to live or			
taped audio. Specifically the software will be enhanced to automatically identify correctly among over 100 languages.			
FY 2010 Accomplishments:			
The enormous amount of audio that has been recorded is far greater than the ability of the trained human linguist pool to fully			
exploit. Language identification (and other information extraction tools) are extremely important triage tools in order to fully			
exploit the intelligence in these materials. This software suite is the information extraction software of choice for National Security			
Agency (NSA) and the Central Intelligence Agency (CIA). This Language Identification capability requirement was articulated by several entities with the Intelligence Community to include NSA.			
·	4 500		
Title: Technology for Rapid Foreign Language Acquisitions for Specialized Military and Intelligence Purposes (Congressional Add)	1.592	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army	DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
2040: Research, Development, Test & Evaluation, Army	PE 0605326A: Concepts Experimentation	308: Concepts Experimentation
BA 6: RDT&E Management Support	Program	

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Articles:	0		
Description: This proof of concept takes a new approach targeted to adults learning a second language. The proposed language learning tool is designed to get an individual with a Defense Language Proficiency Test (DLPT) score of 0/0 to 1+/1+. This project will provide training capabilities in seven languages.			
FY 2010 Accomplishments: The MI Audience is MOS 35M who are interrogators who no longer institutionally learn a foreign language until their first reenlistment. The MI Corps has learned that rudimentary language skills in specific interviews topics is a must for these newly minted interrogators to function. The proposed language learning tool is designed to get an individual with a Defense Language Proficiency Test (DLPT) score of 0/0 to 1+/1+. This project will provide training capabilities in seven languages.			
Accomplishments/Planned Programs Subtotals	3.084	-	-

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

N/A

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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DATE: Cabarram / 2014

Exhibit R-2A, RD1&E Project Justification: PB 2012 Army								DAIE: Feb	ruary 2011		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 6: RDT&E Management Support					IOMENCLA 6A: Concept		tation	PROJECT 312: Army/Joint Experimentation			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
312: Army/Joint Experimentation	11.297	5.907	9.162	-	9.162	8.241	5.794	2.889	0.516	Continuing	Continuing
Quantity of RDT&E Articles											

Note

Not applicable for this item.

A. Mission Description and Budget Item Justification

Exhibit D 24 DDT9 F Drainet Instification, DD 2042 Array

The Army Experimentation mission directly impacts the Army's current and future force. It enables integrated examinations with US Joint Forces Command (USJFCOM), Army Test and Evaluation Command (ATEC), Research, Development, and Experimentation Command (RDECOM), Army battle laboratories, operational units, research labs, materiel 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 inform and validate concepts and inform capability developments for current and future force. This includes supporting the Army's Campaign of Learning by executing assigned experiments for Army Warfighting Challenges (enduring first order capabilities where combat developments has an unacceptable operational risk). In FY 2011 and FY 2012, Research, Development, Test and Evaluation (RDT&E) funding specifically enables the World Class Blue Force (subject matter experts overseeing and coordinating experiment efforts from the Army Capabilities Integration Center (ARCIC) in collaboration with the Schools and Centers), 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.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Title: Experimentation - World Class Blue Force Analysts	3.136	3.524	3.524
Articles:	0	0	
Description: Subject matter experts overseeing and coordinating experiment efforts from the Army Capabilities Integration Center (ARCIC) in collaboration with the Schools and Centers. Provides enhanced credibility to experiments via experienced military commanders.			
FY 2010 Accomplishments: Provides planners and evaluators that are proficient in current Army capstone, operational and functional concepts to provide credible incorporation of concepts into experiments. Supports analysis and coordination for the Army's Campaign of Learning.			
FY 2011 Plans: Provides planners and evaluators that are proficient in current Army capstone, operational and functional concepts to provide credible incorporation of concepts into experiments. Supports analysis and coordination for the Army's Campaign of Learning.			
FY 2012 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army			DATE: Fel	bruary 2011	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 6: RDT&E Management Support	T y/Joint Experi	imentation			
B. Accomplishments/Planned Programs (\$ in Millions, Article C	FY 2010	FY 2011	FY 2012		
Provides planners and evaluators that are proficient in current Arms credible incorporation of concepts into experiments. Supports anal					
Title: Experimentation - Maneuver Brigade Experiments		Articles:	2.403 0	2.383 0	5.638
Description: Maneuver Brigade Experiments will address 1) integral capabilities; 2) integration of Interim Brigade Combat Team (IBCT) Combat Team (FBCT) and H-BCTs with spin out capabilities; 3) de Organization, Training, Materiel, Leader Development, Personnel a solutions; and 4) acceleration and integration of capabilities for current and the second sec	/Stryker Brigade Combat Team (SBCT) with Future velopment of future IBCT, SBCT and HBCT capabilind Facilities (DOTMLPF) requirements and DOTML	Brigade ty Doctrine,			
FY 2010 Accomplishments: Perform maneuver brigade experiments that will address 1) integra out capabilities; 2) integration of Interim Brigade Combat Team (IBC Brigade Combat Team (FBCT) and H-BCTs with spin out capabilitied DOTMLPF requirements and DOTMLPF solutions; and 4) accelerates	CT) /Stryker Brigade Combat Team (SBCT) with Fut es; 3) development of future IBCT, SBCT and HBCT	ure capability			
FY 2011 Plans: Perform maneuver brigade experiments that will address 1) integra out capabilities; 2) integration of Interim Brigade Combat Team (IBC Brigade Combat Team (FBCT) and H-BCTs with spin out capabilitie DOTMLPF requirements and DOTMLPF solutions; and 4) accelerates	CT) /Stryker Brigade Combat Team (SBCT) with Fut es; 3) development of future IBCT, SBCT and HBCT	ure capability			
FY 2012 Plans: Conduct experiments to address learning demands supporting assi inform the Integrated Learning Plan for each AWFC; specifically su Staff of the Army (VCSA) portfolio reviews.					
Title: Capstone Integration		Articles:	5.758 0	-	-
Description: Provides ramp up costs in support of the Army Conce Phase I Capstone Experiment to include modeling and simulation and software upgrades that require approximately 9-12 months of concentrations.	enhancements; scenario environment modifications;	n (ACDEP)	O		
FY 2010 Accomplishments:					

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army	DATE: February 2011	
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 2010	FY 2011	FY 2012
Conduct experiments designed to conclude Phase I of the ACDEP with a major experiment demonstrating initial 2017 Future Force capabilities for the Joint Warfighter; these findings will provide the foundation to support transitioning compelling capabilities to the Current Force, including Current Force capability gaps and spinout of Future Combat Systems (FCS) capabilities to 2010 Modular-Brigade Combat Team (M-BCT).			
Accomplishments/Planned Programs Subtotals	11.297	5.907	9.162

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

N/A

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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	Exhibit R-2A, RDT&E Project Justification: PB 2012 Army							DATE: February 2011				
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 6: RDT&E Management Support				R-1 ITEM N PE 0605326 Program	OMENCLA 6A: Concept	_	tation	PROJECT 317: CURR	URRENT FORCE CAPABILITY GAPS			
	COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
	317: CURRENT FORCE CAPABILITY GAPS	9.814	9.770	17.770	-	17.770	17.487	16.526	16.546	16.770	Continuing	Continuing
	Quantity of RDT&E Articles											

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 2010	FY 2011	FY 2012
Title: Improvised Explosive Device (IED) Integrated Concept Development Team (ICDT)	3.653	4.935	3.100
Articles:	0	0	
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 2010 Accomplishments: Coordinates home-station training programs of IED-Defeat initiatives. Is responsible for coordinating and facilitating the IED-Defeat Council of Colonels and General Officer Steering Committees producing guidance and directives for Army-wide IED-Defeat training, initiative, and systems. Supports various TRADOC Centers of Excellence with Counter-IED subject matter experts.			
FY 2011 Plans: Continues to coordinate home-station training programs of IED-Defeat initiatives. Is responsible for coordinating and facilitating the IED-Defeat Council of Colonels and General Officer Steering Committees producing guidance and directives for Army-wide IED-Defeat training, initiative, and systems. Supports various TRADOC Centers of Excellence with Counter-IED subject matter experts.			
FY 2012 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army			DATE: Fe	bruary 2011	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605326A: Concepts Experimentation Program	PROJECT 317: CURRENT FORCE CAPABILITY GAI			
B. Accomplishments/Planned Programs (\$ in Millions, Article 0	Quantities in Each)		FY 2010	FY 2011	FY 2012
Leads the Adapt the Force efforts under Army Counter-IED (CIED) CIED database and resolution of DOTMLPF issues associated with coordination and facilitating IED-Defeat Council of Colonels and Godirectives for Army-wide IED-Defeat Training initiatives and system all CIED Lines of Effort (DtD, ATN, Robotics).	h integration of various CIED initiatives. Is responsible eneral Officer Steering Committees producing guidan	le for nce and			
Title: Airborne Electronic Attack (AEA), Full Spectrum Effects Platf	form (FSEP), Land Warrior, Robotics	Articles:	-	1.377 0	-
Description: Funding is needed for AEA, FSEP, Land Warrior, and	d Robotics.				
FY 2011 Plans: AEA is a capability to provide organic or direct support airborne elecapability will provide the unit the ability to perform airborne pre-dethe electro-magnetic spectrum in order to enhance freedom of mar	tonation as well as threat communications suppressi	on across			
Title: Sniper Defeat Integrated Concept Development Team (SD-IC	CDT)	Articles:	1.910 0	-	-
Description: Funding is needed for the Sniper Defeat Concept De	evelopment Team.				
FY 2010 Accomplishments: SD-ICDT serves as TRADOC's primary mechanism for executing 0 sniper defeat capabilities for the Army.	Chief of Staff, Army guidance to synchronize and inte	egrate			
Title: Demo/Assess Electronic Warfare - Base Expeditionary Targe	et and Surveillance System Combined (BETSS-C)	Articles:	1.550 0	1.038 0	-
Description: Funding is needed for the Demo/Assess Electronic W Combined.	Varfare - Base Expeditionary Target and Surveillance	e System			
FY 2010 Accomplishments: Supports USCENTCOM Operation Needs Statement to provide recintegrating eight ground-based intelligence-surveillance-reconnaiss sensor system of systems approach to blue force operating location	sance and battle command capabillities through an ir	ntegrated			

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army			DATE: Fel	oruary 2011		
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: CUF	OJECT 7: CURRENT FORCE CAPABILITY GA			
B. Accomplishments/Planned Programs (\$ in Millions, Artic	cle Quantities in Each)		FY 2010	FY 2011	FY 2012	
key transit routes in Operation Enduring Freedom. Persistent s counter threats, provide early warning, increase force protection		essary to				
FY 2011 Plans: Supports USCENTCOM Operation Needs Statement to provide integrating eight ground-based-intelligence-surveillance-reconn sensor system of systems approach to blue force operating local key transit routes in Operation Enduring Freedom. Persistent scounter threats, provide early warning, increase force protection	aissance and battle command capabillities through an in ations (Joint Security Stations/Command Out Posts) and surveillance around blue force operating locations is nec	ntegrated d along				
Title: Demo/Assess Information Operations		Articles:	0.744	-	-	
Description: Funding is needed for Demo/Assess Information (Operations.	Articles:	U			
FY 2010 Accomplishments: TRADOC executes Information Operations/Electronic Warfare/Cresponsibilities. Supports proponents with their responsibilities development and education, personnel, and facilities plus relate Integration and Development System, Science and Technology Transition, and Capability Gap Analysis Army.	relative to doctrine, organization, training, material, leaded matters. Leverages Proponent input to Joint Capabil	ler ites				
Title: Demo/Assess Command and Control, Communications, (C4ISR)- Joint Integration and Non-Lethal Fires	Computers, Intelligence, Surveillance and Reconnaissar	nce Articles:	1.957 0	2.420 0	2.40	
Description: Command, Control, Communications, Computers (C5ISR) Operation Needs Statement (ONS) (classified) is a coperformance gaps in Operation Enduring Freedom (OEF). Phaincreased network bandwidth down to battalion level, network network extension, network extension to mobile user (hand held	impliation of C5ISR capabilities that eliminate critical cap use 1 improvements include higher level network security modem upgrades, increased biometrics and support, aer	onnaissance pability y and				
The transfer of the first of the state of th	•					

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army			DATE: Fe	bruary 2011	
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: CUF	T RRENT FOR	CE CAPABIL	ITY GAPS
B. Accomplishments/Planned Programs (\$ in Millions, Article Qua	antities in Each <u>)</u>		FY 2010	FY 2011	FY 2012
Supported the C4ISR Operational Needs Statement (ONS) consolidat Communications, Computers, Combat Systems, Intelligence, Surveilla C5ISR ONS approved.		1 of			
FY 2011 Plans: C5ISR ONS (classified) is a compliation of C5ISR capabilities that elir 1 improvements include higher level network security and increased nupgrades, increased biometrics and support, aerial layer network extermotion video.	network bandwidth down to battalion level, network	modem			
FY 2012 Plans: C5ISR ONS (classified) is a compliation of C5ISR capabilities that elir 1 improvements include higher level network security and increased nupgrades, increased biometrics and support, aerial layer network extermotion video.	network bandwidth down to battalion level, network	modem			
Title: Aerial Sensor Portfolio			-	-	3.300
Description: Funding is needed to support the Aerial Sensor Portolio					
FY 2012 Plans: Aerial Sensor Portfolio (excluding Task Force Observe, Detect, Indent accelerated developments of directed, ONS-based, quick reaction aer Copperhead II, Black Kite). Supports improved Aerial Intelligence, Suppocessing. Consists of aerial sensor and command control systems environments by integrating collection and analysis of intelligence data planning, sensor cueing, data collection, and communications.	rial sensor capabilities (Desert Owl I and II, Radian irveillance, and Reconnaissance (ISR) Information organized to defeat assigned threats in current op	it Falcon, n System erational			
Title: Communications and Networks Portfolio			-	-	2.693
Description: Funding is needed for Communications and Networks P	Portfolio.				
FY 2012 Plans: Communications and Network Portfolio capabilities include Intelligenc Swarm, Heterogeneous Aerial Reconnaissance Team (HART), Enrou Army Cellular Capability Development and Connecting Soldiers to Dig deployment, and assessment of communications and networking of the	te Mission Planning and Rehearsal System (EMPI gital Applications (CSDA). Task is to support deve	RS), lopment,			

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army	DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0605326A: Concepts Experimentation	317: CURR	RENT FORCE CAPABILITY GAPS
BA 6: RDT&E Management Support	Program		

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
network connectivity with mission command applications. Network will provide single user interface, including aerial tier, capable of assessing all required data applications, and service via the common operating environment. Network will support distributed and small unit operations beyond line-of-sight with focus on Company and below Brigade and Battalion mission command on-themove capabilities. Additionally network will reduce dependence on satellite communications when connectivity is lost.			
Title: Demo/Assess Operational Power and Energy	-	-	2.250
Description: Funding is needed for Operational Power and Energy			
FY 2012 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.			
Title: Integrated Protection Initiative (IPI)	-	-	4.027
Description: Funds are needed for Integrated Protection Initiative.			
FY 2012 Plans: TRADOC Accelerated Capability Developments initiative provides integration and assessment support across DOTMLPF domains to equip, train, and deploy capability support for OEF problem of isolated maneuver elements at Common Operational Pictures (COPs)/Forward Operating Bases (FOBs) which have difficulty locating ground targets and lack timely response to engage these targets in organic, lethal, effects while minimizing collateral damage and exposure of Soldiers to unnecessary risk.			
Accomplishments/Planned Programs Subtotals	9.814	9.770	17.770

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

N/A

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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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army							DATE: February 2011				
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 6: RDT&E Management Support				R-1 ITEM N PE 0605326 Program	OMENCLAT 6A: Concept		tation	PROJECT 33B: SOLDIER-CENTERED ANALYSES FOR THE FUTURE FORCE			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
33B: SOLDIER-CENTERED ANALYSES FOR THE FUTURE FORCE	1.973	2.027	1.868	-	1.868	1.892	1.904	1.914	1.941	Continuing	Continuing
Quantity of RDT&E Articles											

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, workload and skill demands are considered, 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 2010	FY 2011	FY 2012
Title: Manpower and Personnel Integration (MANPRINT)	1.183	1.263	1.104
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 Battle Laboratories, Army Test and Evaluation Command (ATEC) and other service laboratories.			
FY 2010 Accomplishments: In coordination with the Army Evaluation Command (AEC) developed approaches to more clearly define Human Systems Integration (HSI) metrics and methods linked to test and evaluation (T&E) risks.			
FY 2011 Plans: Directly link Human System Integration (HSI) analyses to systems engineering, costs, and design trade study analyses.			
FY 2012 Plans: Will develop method to trace quantified HSI risks from Warfighter and platform performance up to mission execution.			
Title: MANPRINT Manpower, Personnel and Training (MPT)	0.790	0.764	0.764
Articles:	0	0	

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army			DATE: Fe	ebruary 2011	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605326A: Concepts Experimentation Program	l	· =	TERED ANAL E	YSES FOR
B. Accomplishments/Planned Programs (\$ in Millions, Article	e Quantities in Each)		FY 2010	FY 2011	FY 2012

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Description: Provide MANPRINT MPT force requirements determination support to TRADOC on selected systems.			
FY 2010 Accomplishments: Provided MPT analysis support to 21 programs and on five used tools such as the Improved Performance Research Integration Tool (IMPRINT) to quantify risks.			
FY 2011 Plans: Link MPT analyses and risks to other MANPRINT domains (i.e. human engineering, system safety, health hazards).			
FY 2012 Plans: Will leverage Army cost analysis tools to link MPT risks to cost.			
Accomplishments/Planned Programs Subtotals	1.973	2.027	1.868

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

N/A

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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