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 0603774A: Night Vision Systems Advanced Development

BA 4: Advanced Component Development & Prototypes (ACD&P)

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	8.000	-	-	-	-	-	-	-	-	0.000	8.000
131: NIGHT VISION SYS A/DEV	8.000	-	-	-	-	-	-	-	-	0.000	8.000

Note

Change Summary Explanation: FY10 funds reprogrammed for Electro Optical Infgra Red w/Laser Designator (EO/IR/LD) Common Sensor Payload (CSP) High Definition Target Location Accuracy (HD/TLA)efforts supporting Unmanned Aircraft Systems (UAS).

A. Mission Description and Budget Item Justification

This program element addresses initiatives to develop and transition technologies from the laboratories and industry in order to improve fielded equipment in the current force as well as initiation, development, and engineering/program management support of systems for fielding to the warfighter. A major thrust will be to transition technologies to acquisition programs that meet required, advanced sensor capabilities. This includes the ability for sensors to accomplish Advanced Unmanned Aerial Vehicle (UAV) Payload missions.

This program has no FY12 Base or OCO requirement.

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	-	-	-	-	-
Current President's Budget	8.000	-	-	-	-
Total Adjustments	8.000	-	-	-	-
 Congressional General Reductions 		-			
 Congressional Directed Reductions 		-			
 Congressional Rescissions 	-	-			
 Congressional Adds 		-			
 Congressional Directed Transfers 		-			
 Reprogrammings 	8.000	-			
SBIR/STTR Transfer	-	-			

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Exhibit R-2A, RDT&E Project Just	ification: PE	3 2012 Army	1						DATE: Feb	ruary 2011			
APPROPRIATION/BUDGET ACTIV	ITY		-	R-1 ITEM N	OMENCLA	TURE	PROJECT						
2040: Research, Development, Test		•		PE 0603774	4A: Night Vis	sion Systems	T VISION SYS A/DEV						
BA 4: Advanced Component Develo	pment & Pro	totypes (AC	D&P)	Developme	nt								
COST (\$ in Millions)			FY 2012	FY 2012	FY 2012					Cost To			
COST (\$ III WIIIIOIIS)	FY 2010	FY 2011	Base	oco	Total	FY 2013	FY 2014	FY 2015	FY 2016	Complete	Total Cost		
131: NIGHT VISION SYS A/DEV	8.000	-	-	-	-	-	_	-	_	0.000	8.000		
Quantity of RDT&E Articles													

A. Mission Description and Budget Item Justification

This project supports the Army's transformation by developing payloads for brigade combat team, division, and corps Unmanned Aircraft Systems(UAS) and unmanned systems in accordance with Headquarters Department of the Army (HQDA) and Training and Doctrine Command (TRADOC) priorities.

The Electro Optical Infra Red w/Laser Designator (EO/IR/LD) Common Sensor Payload (CSP) High Definition Target Location Accuracy (HD/TLA) is being developed and built at the direction of the Vice Chief of Staff of the Army for the Gray Eagle (formerly known as Extended Range Multi Purpose) program and has potential application to other platforms. The CSP HDTLA system will provide a day/night capability to collect and display continuous high definition imagery with enhanced ability to designate targets of interest for attack by laser guided precision weapons.

This program has no FY12 Base or OCO requirement.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2012	FY 2012	FY 2012
	FY 2010	FY 2011	Base	oco	Total
Title: CSP HD/TLA HD/IR and Laser Technology	8.000	-	_	-	-
Articles	: 0				
Description: HD/IR and Laser Technology Maturity					
FY 2010 Accomplishments:					
HD/IR and Laser Technology Maturity					
Accomplishments/Planned Programs Subtotals	8.000	-	-	-	-
		,	,		,

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

			FY 2012	FY 2012	FY 2012					Cost To	
<u>Line Item</u>	FY 2010	FY 2011	<u>Base</u>	OCO	<u>Total</u>	FY 2013	FY 2014	FY 2015	FY 2016	Complete	Total Cost
RDT&E - 0305204A: Tactical Unmanned Aerial Vehicle (11A)	39.591		16.000		16.000		14.905	15.305	15.763	0.000	107.764
, i	87.154		136.183	10.800	146.983		259.486	234.153	59.707	0.000	1,052.524

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Army

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

Development

DATE: February 2011

R-1 ITEM NOMENCLATURE

PE 0603774A: Night Vision Systems Advanced
Development

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

FY 2012 FY 2012 FY 2012

Line Item FY 2010 FY 2011 Base OCO Total FY 2013 FY 2014 FY 2015 FY 2016 Complete Total Cost

• APA - A00020: MQ-1 Payload - UAS

D. Acquisition Strategy

Acquisition Strategy. The approved acquisition strategy was a sole source task order through the competitively awarded Navy Basic Order Agreement (BOA) with Raytheon to mature the HDIR camera and the Diode Pump laser technology from Technology Readiness Level (TRL) 5 to TRL 6. Once sufficiently matured, the components will be incorporated (integrated) into test systems and transitioned into the Block upgrade program to undergo further system and qualification testing (FY12) as part of RDTE efforts conducted in the HD/TLA Block upgrade under Advanced Payloads (PE 0305204A Project D11A).

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-3, RDT&E Project Cost Analysis: PB 2012 Army

DATE: February 2011 PROJECT

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

R-1 ITEM NOMENCLATURE

PE 0603774A: Night Vision Systems Advanced | 131: NIGHT VISION SYS A/DEV

BA 4: Advanced Component Development & Prototypes (ACD&P)

Development

Product Development (\$ in Millio	ns)		FY	2011		2012 se		2012 CO	FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
HD/IR and Laser technology Maturity	C/BOA	Raytheon:McKinney, TX	-	-		-		-		-	Continuing	Continuing	0.000
		Subtotal	-	-		-		-		-			0.000
			Total Prior Years Cost	FY	2011	FY 2 Ba	2012 se		2012 CO	FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
		Project Cost Totals	-	-		-		-		-			0.000

Remarks

DATE: February 2011

APPROPRIATION/BUDGET ACTIVITY

HD/IR and Laser Technology Maturity

R-1 ITEM NOMENCLATURE

PROJECT

2040: Research, Development, Test & Evaluation, Army

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Army

PE 0603774A: Night Vision Systems Advanced | 131: NIGHT VISION SYS A/DEV

BA 4: Advanced Component Development & Prototypes (ACD&P)

Development

	FY 2	2010			FY 2	2011			FY 2	2012	2		FY 2	2013	}	FY 2014 FY 2015			FY 2016								
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Army **DATE:** February 2011 APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

2040: Research, Development, Test & Evaluation, Army PE 0603774A: Night Vision Systems Advanced | 131: NIGHT VISION SYS A/DEV BA 4: Advanced Component Development & Prototypes (ACD&P) Development

Schedule Details

	St	art	E	nd
Events	Quarter	Year	Quarter	Year
HD/IR and Laser Technology Maturity	3	2010	3	2011