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Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY
 2040: *Research, Development, Test & Evaluation, Army*
 BA 7: *Operational Systems Development*

R-1 ITEM NOMENCLATURE
 PE 0305232A: *RQ-11 Raven*

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	-	1.935	4.039	2.321	-	2.321	3.335	3.263	3.077	3.200	Continuing	Continuing
RA7: <i>RQ-11 RAVEN (MIP)</i>	-	1.935	4.039	2.321	-	2.321	3.335	3.263	3.077	3.200	Continuing	Continuing

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

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

A. Mission Description and Budget Item Justification

The Small Unmanned Aircraft Systems (SUAS) provides the battalion and below ground maneuver elements critical situational awareness and enhances force protection. The system provides the small unit commander an organic and responsive tactical Reconnaissance, Surveillance, and Target Acquisition capability through the ability to view real-time Full Motion Video and sensor data via the system ground control station. Other compatible receivers, such as the One System Remove Video Terminal and appropriately equipped manned platforms may also receive the SUAS products.

A SUAS includes three hand-launched aircraft that do not require an improved launch/recovery location. In addition to the aircraft, the system contains ground control equipment, which includes an interoperable hand controller. This equipment is fully transportable in or on rucksack type packs that are organic to the unit.

The SUAS RDT&E budget line includes funding for studies and incremental development/upgrade of current SUAS capabilities that will capitalize on new technology insertions based on identified user requirements. Past improvements include a Digital Data Link capability, introduced in 2010, which provided data link security, increased the number of communications channels allowing more aircraft to operate in close proximity, extended range through data link relay capability, and integrated gimbaled payloads. Future enhancements will follow the natural progression of technology and exploitation of improved payloads to meet Warfighter needs. FY 2014 and future improvements will address enhancements to the system to support Army modernization initiatives and the service emphasis on Squad- Foundation of the Decisive Force. Development of a government purpose rights control device compatible with current and future SUAS platforms and integrated into tactical networks is required. Compatibility with Nett Warrior elements will support seamless transmission of data between squad members and adjacent and higher commands. A communications relay capability for SUAS will extend the operational connectivity of the squad when ground based communications cannot support the ranges due terrain or atmospheric. The relay capability supports the Aerial Layer Network Transport Initial Capabilities Document for low altitude requirements. Development of a sensor to shooter capability will link forward edge combatants to organic and supporting fires networks with rapid dissemination of target information and imagery. Efforts to reduce the workload required to operate the SUAS will free the soldiers to perform their primary mission while retaining the advantages afforded by the SUAS. Improved autonomy, to include GPS and comms denied environments will be sought through leverage of software, processor, and communications enhancements.

Justification: FY2014 funds of \$2.321 million will provide engineering services efforts and continue to focus on communication link encryption, network integration, interoperability, system vulnerability, and improved flight duration.

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2040: Research, Development, Test & Evaluation, Army		PE 0305232A: RQ-11 Raven			
BA 7: Operational Systems Development					
B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	1.935	4.039	2.917	-	2.917
Current President's Budget	1.935	4.039	2.321	-	2.321
Total Adjustments	0.000	0.000	-0.596	-	-0.596
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	-0.596	-	-0.596

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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 7: Operational Systems Development					R-1 ITEM NOMENCLATURE PE 0305232A: RQ-11 Raven				PROJECT RA7: RQ-11 RAVEN (MIP)			
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
RA7: RQ-11 RAVEN (MIP)	-	1.935	4.039	2.321	-	2.321	3.335	3.263	3.077	3.200	Continuing	Continuing
Quantity of RDT&E Articles												
# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
## The FY 2014 OCO Request will be submitted at a later date												
A. Mission Description and Budget Item Justification												
The Small Unmanned Aircraft Systems (SUAS) provides the battalion and below ground maneuver elements critical situational awareness and enhances force protection. The system provides the small unit commander an organic and responsive tactical Reconnaissance, Surveillance, and Target Acquisition capability through the ability to view real-time Full Motion Video and sensor data via the system ground control station. Other compatible receivers, such as the One System Remove Video Terminal and appropriately equipped manned platforms may also receive the SUAS products.												
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Justification: FY2014 funds of \$2.321 million will provide engineering services efforts and continue to focus on communication link encryption, network integration, interoperability, system vulnerability, and improved flight duration.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2012	FY 2013	FY 2014	
Title: Base: Product Improvement Studies and Development									1.306	3.805	2.181	

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
Articles: Description: Base: Product Improvement Studies and Development FY 2012 Accomplishments: Base: Product Improvement Studies and Development FY 2013 Plans: Base: Product Improvement Studies and Development FY 2014 Plans: Base: Product Improvement Studies and Development		0	0	
Articles: Title: Base: Program Management Support Description: Program Management Support FY 2012 Accomplishments: Base: Program Management Support FY 2013 Plans: Base: Program Management Support FY 2014 Plans: Base: Program Management Support		0.229 0	0.234 0	0.140
Articles: Title: Test and Evaluation Description: Test and Evaluation FY 2012 Accomplishments: Test and Evaluation		0.400 0	0.000	0.000
Accomplishments/Planned Programs Subtotals		1.935	4.039	2.321

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APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 7: <i>Operational Systems Development</i>					R-1 ITEM NOMENCLATURE PE 0305232A: <i>RQ-11 Raven</i>			PROJECT RA7: <i>RQ-11 RAVEN (MIP)</i>			
C. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2014</u>	<u>FY 2014</u>	<u>FY 2014</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>Complete</u>	<u>Total Cost</u>
• RQ-11 (RAVEN) - A00010:	86.062	25.798	10.772		10.772	33.359	31.001	26.375	15.000	0.000	228.367
<i>RQ-11 (RAVEN) - A00010</i>											
Remarks											
D. Acquisition Strategy											
SUAS PdO intends to execute a single award best value IDIQ contract utilizing full and open competition. This contract will provide affordable access for a fully staffed Technical, Management, Training, and Logistics organization, over a five-year period of performance (three year base period and two, single year options). Contract award is anticipated during the third quarter of Fiscal Year 2013. The Government will make contract award based upon competitive source selection criteria.											
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 2014 Army												DATE: April 2013			
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Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Personnel	RO	PM UAS:PM UAS	0.030	0.229		0.234		0.741		-		0.741	Continuing	Continuing	0.000
Subtotal			0.030	0.229		0.234		0.741		0.000		0.741			0.000
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Product Improvements Studies and Development	SS/CPFF	Aero Vironment, Simi Valley, CA:Aero Vironment, Simi Valley, CA	1.517	1.306	Aug 2012	3.805	Mar 2013	-		-		-	Continuing	Continuing	0.000
Product Improvement Studies and Development	C/IDIQ	TBD:TBD	0.000	-		-		1.580	Jan 2014	-		1.580	Continuing	Continuing	0.000
Subtotal			1.517	1.306		3.805		1.580		0.000		1.580			0.000
Remarks FY2014 funds will support the Competitive IDIQ Engineering Services Contract. Contractor, to be determined.															
Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Other Government Agencies	MIPR	Various:Various	0.000	-		-		-		-		-	Continuing	Continuing	0.000
Subtotal			0.000	0.000		0.000		0.000		0.000		0.000			0.000

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Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test and Evaluation	MIPR	Various:Various	0.000	0.400		-		-		-		-	Continuing	Continuing	0.000
Subtotal			0.000	0.400		0.000		0.000		0.000		0.000			0.000

	All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	1.547	1.935		4.039		2.321		0.000		2.321			0.000

Remarks