Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army											DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 3: *Advanced Technology Development (ATD)*					R-1 ITEM NOMENCLATURE PE 0603006A: *Space Application Advanced Technology*							
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	-	4.158	4.157	5.866	-	5.866	6.879	7.086	7.188	7.317	Continuing	Continuing
592: *SPACE APPLICATION TECH*	-	4.158	4.157	5.866	-	5.866	6.879	7.086	7.188	7.317	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

This program element (PE) matures and demonstrates advanced space technologies that support the Army's ability to control and exploit space assets that contribute to current and future military operations as defined in the national, DoD, and Army space policies. This PE provides applications for enhanced intelligence, reconnaissance, surveillance, target acquisition, position/navigation, missile warning, ground-to-space surveillance, and command and control capabilities. Project 592 matures and demonstrates networked and integrated surveillance, communications, and command and control capabilities for high altitude and tactically responsive space payloads to enable information superiority, enhanced situational awareness, and support for distributed operations.

Work in this PE complements the work in PE 0602120A (Sensors and Electronic Survivability) and PE 0603008A (Electronic Warfare Advanced Technology).

The cited work is consistent with the Assistant Secretary of Defense, Research and Engineering Science and Technology priority focus areas and the Army Modernization Strategy.

Work in this PE is performed by the US Army Space and Missile Defense Technical Center in Huntsville, AL.

B. Program Change Summary ($ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	5.304	4.157	5.866	-	5.866
Current President's Budget	4.158	4.157	5.866	-	5.866
Total Adjustments	-1.146	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-1.000	-			
• SBIR/STTR Transfer	-0.146	-			

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 3: *Advanced Technology Development (ATD)*	R-1 ITEM NOMENCLATURE PE 0603006A: *Space Application Advanced Technology*	PROJECT 592: *SPACE APPLICATION TECH*	

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
592: *SPACE APPLICATION TECH*	-	4.158	4.157	5.866	-	5.866	6.879	7.086	7.188	7.317	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

This project matures and demonstrates payloads, sensors, and data down link systems for tactically responsive space and high altitude platforms supporting Army ground forces. This project matures, demonstrates, and integrates light weight materials, hardware components with reduced power consumption, and advanced data collection, processing, and dissemination capabilities. This project also develops algorithms that process space and near space sensor data in real and near real time for integration into battlefield operating systems. These efforts support the Army's ability to control and exploit space assets that contribute to current and future military operations as defined in the national, DoD, and Army space policies.

Efforts in this project support the Army S&T Command, Control, Communications, and Intelligence (C3I) Portfolio.

This project sustains Army science and technology efforts supporting the Command Control and Communications portfolio. Work in this Project is coordinated with PE 0602120A (Sensors and Electronic Survivability) and PE 0603008A (Electronic Warfare Advanced Technology).

The cited work is consistent with the Assistant Secretary of Defense, Research and Engineering Science and Technology priority focus areas and the Army Modernization Strategy.

Work in this PE is performed by the US Army Space and Missile Defense Technical Center in Huntsville, AL. This program is designated as a DoD Space Program.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: Payload Technology Development	4.158	4.157	5.866
Description: This effort matures technologies for smaller, Warfighter-responsive sensor and communication payloads for use in space environments.			
FY 2012 Accomplishments: Began development and building of data exfiltration mission small satellite using a software defined radio for increased communications bands to receive data from Unattended Ground Sensors; conducted systems engineering analysis and assessments of enhanced Electro-optical/Infrared (EO/IR) imaging satellite technologies and selected and matured technologies			

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 3: *Advanced Technology Development (ATD)*	R-1 ITEM NOMENCLATURE PE 0603006A: *Space Application Advanced Technology*	PROJECT 592: *SPACE APPLICATION TECH*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
to support constellation architectures; supported launch integration and operational demonstration of EO/IR imaging space sensor and data exfiltration small satellites. ***FY 2013 Plans:*** Demonstrate data exfiltration and EO/IR imaging small satellites on-orbit; integrate propulsion enhanced imaging small satellite with advanced small satellite deployment capability; mature and demonstrate small satellite tasking and command and control functions in a hand-held device. ***FY 2014 Plans:*** Will mature low cost launch vehicle capable of lifting small satellite class payloads into low earth orbit; mature and demonstrate on-orbit deployment and positioning system for small satellites; evaluate and demonstrate algorithms and software to enable tactical dissemination of space-based digital sensor data.			
Accomplishments/Planned Programs Subtotals	4.158	4.157	5.866

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.