Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Army										DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 3: *Advanced Technology Development (ATD)*					R-1 ITEM NOMENCLATURE PE 0603006A: *Command, Control, Communications Advanced Technology*						
COST ($ in Millions)	**FY 2011**	**FY 2012**	**FY 2013 Base**	**FY 2013 OCO**	**FY 2013 Total**	**FY 2014**	**FY 2015**	**FY 2016**	**FY 2017**	**Cost To Complete**	**Total Cost**
Total Program Element	7.823	5.304	4.157	-	4.157	5.866	5.879	6.086	6.188	Continuing	Continuing
592: *SPACE APPLICATION TECH*	4.292	5.304	4.157	-	4.157	5.866	5.879	6.086	6.188	Continuing	Continuing
DF7: *DF7*	3.531	-	-	-	-	-	-	-	-	Continuing	Continuing

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. Project DF7 supports classified activities. Properly accessed individuals can obtain further information from the Assistant Secretary of the Army for Acquisition Logistics & Technology (ASAALT) Special Programs Office.

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 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	8.102	5.312	4.118	-	4.118
Current President's Budget	7.823	5.304	4.157	-	4.157
Total Adjustments	-0.279	-0.008	0.039	-	0.039
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.225	-			
• Adjustments to Budget Years	-	-	0.039	-	0.039
• Other Adjustments 1	-0.054	-0.008	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2013 Army			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 3: *Advanced Technology Development (ATD)*	R-1 ITEM NOMENCLATURE PE 0603006A: *Command, Control, Communications Advanced Technology*	PROJECT 592: *SPACE APPLICATION TECH*	

COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
592: *SPACE APPLICATION TECH*	4.292	5.304	4.157	-	4.157	5.866	5.879	6.086	6.188	Continuing	Continuing

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, and Communications (C3) 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 2011	FY 2012	FY 2013
Title: Payload Technology Development	2.056	5.304	4.157
Description: This effort matures technologies for smaller, Warfighter-responsive sensor and communication payloads for use in both space and high altitude environments; it also matures and integrates forensic analysis and modeling and simulation tools for evaluation of integrated weapon systems cyber attack risks and vulnerabilities.			
FY 2011 Accomplishments: Matured high speed data relays for use in data links of high altitude and space-based assets; continued the development of a flight- ready Electro-Optical/Infrared (EO/IR) imaging space sensor; prepared, launched, and demonstrated a small satellite with data exfiltration capability for launch integration.			
FY 2012 Plans: Begin 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; conduct systems engineering analysis and			

Exhibit R-2A, RDT&E Project Justification: PB 2013 Army		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 3: *Advanced Technology Development (ATD)*	R-1 ITEM NOMENCLATURE PE 0603006A: *Command, Control, Communications Advanced Technology*	PROJECT 592: *SPACE APPLICATION TECH*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
assessments of enhanced EO/IR imaging satellite technologies and select and mature technologies to support constellation architectures; support launch integration and operational demonstration of EO/IR imaging space senor and data exfiltration small satellites. ***FY 2013 Plans:*** Will 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.			
Title: Vertical/Horizontal Integration of Space Technology and Applications (VISTA) ***Description:*** This effort matures and demonstrates algorithms and intelligent agent based software applications to provide missile threat warning for Warfighters on-the-move. ***FY 2011 Accomplishments:*** Further matured the intelligent agent technology in cooperation with complementary network-centric intelligent agent technology being developed by US Army Communications Electronics Research, Development, and Engineering Center (CERDEC); demonstrated seamless missile warning and situational awareness automated information dissemination for tactical On-the-Move (OTM) forces at the Brigade and below level.	2.236	-	-
Accomplishments/Planned Programs Subtotals	4.292	5.304	4.157

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.

Exhibit R-2A, RDT&E Project Justification: PB 2013 Army			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 3: *Advanced Technology Development (ATD)*	R-1 ITEM NOMENCLATURE PE 0603006A: *Command, Control, Communications Advanced Technology*	PROJECT DF7: *DF7*	

COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
DF7: *DF7*	3.531	-	-	-	-	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program is reported in accordance with Title 10, United States Code, Section 119(1)(1) in the Special Access Program (SAP) Annual Report to Congress.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Title: DF7 Classified efforts	3.531	-	-
Description: Classified efforts ***FY 2011 Accomplishments:*** Classified efforts			
Accomplishments/Planned Programs Subtotals	3.531	-	-

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.