Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Army

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

2040: Research, Development, Test & Evaluation, Army I BA 3: Advanced

PE 0603006A I Space Application Advanced Technology

Technology Development (ATD)

COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	-	3.702	5.862	6.883	-	6.883	5.592	3.928	4.049	5.194	-	-
592: Space Application Tech	-	3.702	5.862	6.883	-	6.883	5.592	3.928	4.049	5.194	-	-

^{*} The FY 2015 OCO Request will be submitted at a later date.

Note

FY13 decreases attributed to Congressional General Reductions (-6 thousand); SBIR/STTR transfers (-94 thousand); Sequestration reductions (-355 thousand) FY14 adjustments attributed to FFRDC reductions (-4 thousand) and Congressional Add (5.0 million) funding

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 global assured access enabling distributed tactical 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 Command/Army Forces Strategic Command (USASMDC/ARSTRAT) Technical Center in Huntsville, AL.

PE 0603006A: Space Application Advanced Technology Army

UNCLASSIFIED
Page 1 of 4

R-1 Line #34

Date: March 2014

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

2040: Research, Development, Test & Evaluation, Army I BA 3: Advanced Technology Development (ATD)

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Army

PE 0603006A / Space Application Advanced Technology

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	4.157	5.866	6.879	-	6.879
Current President's Budget	3.702	5.862	6.883	-	6.883
Total Adjustments	-0.455	-0.004	0.004	-	0.004
 Congressional General Reductions 	-0.006	-0.004			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.094	-			
 Adjustments to Budget Years 	-	-	0.004	=	0.004
Sequestration	-0.355	-	-	=	-

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army Date: March 2014												
Appropriation/Budget Activity 2040 / 3				,				Project (Number/Name) 592 I Space Application Tech				
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
592: Space Application Tech	-	3.702	5.862	6.883	-	6.883	5.592	3.928	4.049	5.194	-	-

^{*} The FY 2015 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.

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 Command/Army Forces Strategic Command (USASMDC/ARSTRAT) Technical Center in Huntsville, AL. This program is designated as a DoD Space Program.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2013	FY 2014	FY 2015
Title: Payload Technology Development	3.702	5.862	6.883
Description: This effort matures technologies for smaller, Warfighter-responsive sensor and communication payloads for use in space environments.			
FY 2013 Accomplishments: Demonstrated Beyond Line of Sight (BLOS) data communications and data exfiltration with on-orbit technical validation and EO imaging small satellites; integrated propulsion with advanced small satellite deployment capability; matured and demonstrated small satellite tasking and command and control functions in a laptop device.			
FY 2014 Plans: 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.			
FY 2015 Plans:			

UNCLASSIFIED
Page 3 of 4

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: N	/larch 2014	
Appropriation/Budget Activity 2040 / 3	R-1 Program Element (Number/Name) PE 0603006A / Space Application Advanced Technology	 ct (Number/l Space Applic	,	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2013	FY 2014	FY 2015
Will conduct low cost launch vehicle engine and rocket stage performance rocket and supporting range equipment; validate space-based missi				

Accomplishments/Planned Programs Subtotals

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

affordable launch technical control, and affordable launch fire control.

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A

PE 0603006A: Space Application Advanced Technology Army

UNCLASSIFIED
Page 4 of 4

R-1 Line #34

6.883

5.862

3.702