ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

May 2009

BUDGET ACTIVITY	PE NUMBER AND TITLE
7 - Operational system development	**0307207A - Aerial Common Sensor (ACS)**

COST (In Thousands)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	Cost to Complete	Total Cost
024 AERIAL COMMON SENSOR (MIP)			210035	Continuing	Continuing

A. Mission Description and Budget Item Justification: Aerial Common Sensor (ACS) is an Airborne Reconnaissance, Surveillance and Target Acquisition (RSTA)/Intelligence, Surveillance, and Reconnaissance (ISR) capability directly supporting Battlespace Awareness for tactical commanders in irregular warfare scenarios. Specifically, ACS will provide real-time, persistent, precision, networked, wide-area, high-capacity, multi-sensor intelligence collection capability throughout the joint battlespace. ACS will quickly produce actionable intelligence that provides commanders and soldiers critical shared situational understanding delivered with the speed, accuracy, and timeliness necessary to conduct successful and when necessary, lethal joint operations. ACS will support focused Intelligence Preparation of the Battlespace (IPB), Indications and Warnings (I&W), precision targeting, Battle Damage Assessment (BDA), situational development, battle command, and Force Protection. Each of these will be synchronized with operations in order to develop and maintain situational awareness and reduce clutter in the maneuver environment. ACS will be a manned, fixed-wing aircraft capable of worldwide deployment carrying multiple sensor payloads and intelligence processing, appropriate air/ground/satellite data links, and air crew (i.e., pilots and intelligence systems operators). The RSTA/ISR payload will consist of a suite of modular, scaleable Signals Intelligence (SIGINT), Imagery Intelligence (IMINT), Ground Moving Target Indicator (GMTI) and Measurement and Signature Intelligence (MASINT) sensors and processors that can operate alone or simultaneously in combination with each other (e.g., automated cross-cueing). The intelligence processing suite onboard ACS and in the ground station, provided by the Distributed Common Ground System-Army (DCGS-A), will integrate the products from all ACS Sensor payloads as well as the sensor feeds from other joint force sensors, including manned/unmanned (MUM) teaming with Army Unmanned Aircraft Systems (UAS), to provide a correlated near-real-time picture of the tactical operational environment with the greatest degree of granularity possible. Onboard communications will consist of a robust set of line-of-sight (LOS) and satellite communications (SATCOM) datalinks that will enable direct linkage to Brigade Combat Teams, Manned-Unmanned teaming with Army UAS, wideband/worldwide connectivity to DCGS and the Global Information Grid, and interoperability with other Army, Joint and National RSTA/ISR assets. ACS will be a critical and integral component of the future force.

The National Security Agency's Military Intelligence Program (MIP) provides funding to support enhanced SIGINT capabilities.

Project 024: This is not a new start. Previous years were funded through PE 0203744A - Aircraft Modifications/Product Improvement Programs Project 028

FY10 funds continued Increment 1 Technology Development (TD) efforts, oversight of two (2) TD contracts, purchase of two (2) prototype aircraft and PME, support for Government Furnished Equipment (GFE), sensor data server software development, DCGS on-board processing System Integration Lab (SIL), Test Support, Program Management Office (PMO) support.

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B. Program Change Summary	FY 2008	FY 2009	FY 2010
Previous President's Budget (FY 2009)			
Current BES/President's Budget (FY 2010)			210035
Total Adjustments			210035
Congressional Program Reductions			
Congressional Recissions			
Congressional Increases			
Reprogrammings			
SBIR/STTR Transfer			
Adjustments to Budget Years			210035

Project 024: This is not a new start. Previous years were funded through PE 0203744A - Aircraft Modifications/Product Improvement Programs Project 028. OSD directed that this MIP program be moved to it's own separate program element, 0307207A.

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

May 2009

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
7 - Operational system development	**0307207A - Aerial Common Sensor (ACS)**	**024**

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The National Security Agency's Military Intelligence Program (MIP) provides funding to support enhanced SIGINT capabilities.

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FY10 funds continued Increment 1 Technology Development (TD) efforts, oversight of two (2) TD contracts, purchase of two (2) prototype aircraft and PME, support for Government Furnished Equipment (GFE), Sensor Data Server software development, DCGS on-board processing System Integration Lab (SIL), Test Support, and Program Management Office (PMO) support.

Accomplishments/Planned Program:	FY 2008	FY 2009	FY 2010
Continued Increment 1 Technology Development (TD) contracts, purchase of two (2) prototype aircraft and PME, Government Furnished Equipment (GFE) support, continues sensor data server software development and DCGS on-board processing SIL			180997
Oversight of TD contracts, and test support and PMO support.			29038

Total			210035

B. Other Program Funding Summary	FY 2008	FY 2009	FY 2010	To Compl	Total Cost
ACS NSA MIP			2094	Continuing	Continuing
CHALS NSA MIP			1777	Continuing	Continuing
GRCS NSA MIP			2885	Continuing	Continuing
Army PE 0203744A Project 028	12581	170960			183541

Comment: FY10 National Security Agency (NSA) Military Intelligence Program (MIP) funding provides for the development of ACS core SIGINT technologies.

C. Acquisition Strategy The Aerial Common Sensor (ACS) Capabilities Development Document (CDD) was approved by the Joint Requirements Oversight Council (JROC) on 25 November 2008. ACS development will be achieved on an incremental basis. A competitive award of two (2) Cost Plus Fixed Fee (CPFF) contracts is planned for the Increment 1 Technology Development (TD) phase in FY09. The TD phase will reduce risk through demonstration of system prototype flight demonstrations. Following the TD phase a single contractor will continue through EMD. As the development program evolves, future competitive opportunities will be assessed.

ARMY RDT&E COST ANALYSIS (R3)

May 2009

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0307207A - Aerial Common Sensor (ACS)

PROJECT
024

I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Increment 1 TD efforts	CPFF	TBD						149397	4Q		149397	
DCGS on-board processing SIL	TBD	TBD						27000	1-2Q		27000	
Multi-Role-Tactical Common Data Link (Support)	SS	L-3 Communications, Salt Lake City, UT						600	1Q		600	
Subtotal:								176997			176997	

Remarks: This is not a new start. Previous were years funded through PE 0203744A - Aircraft Modifications/Product Improvement Programs Project 028

II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Sensor Data Server Software Development	TBD	I2WD Ft. Monmouth, NJ						4000	1-2Q		4000	
Subtotal:								4000			4000	

III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Test Support	MIPR	Gov't/various						5400	1-2Q		5400	
Subtotal:								5400			5400	

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost To Complete	Total Cost	Target Value of Contract
PMO Staff/travel/O/H expenses	In-House	PM, AC Sensors: Ft. Monmouth, NJ;						6550	1-4Q	Cont.	Cont.	Cont.

ARMY RDT&E COST ANALYSIS (R3)

May 2009

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		Aberdeen, MD										
Program SETA Support	C-T&M	CACI NJ/ DC						3200	1-2Q	Cont.	Cont.	Cont.
SETA Mgmt Support	Kr, Various	Multiple						3188	1-3Q	Cont.	Cont.	Cont.
Engineering SETA Support	Kr; various	Multiple						4100	1-2Q	Cont.	Cont.	Cont.
Gov't Matrix Support	MIPR	Ft. Monmouth, NJ						3400	1-2Q	Cont.	Cont.	Cont.
Govt Matrix Support	MIPR/CPFF	Multiple						3200	1-2Q	Cont.	Cont.	Cont.
Subtotal:								23638		Cont.	Cont.	Cont.
Project Total Cost:								**210035**		**Cont.**	**Cont.**	**Cont.**

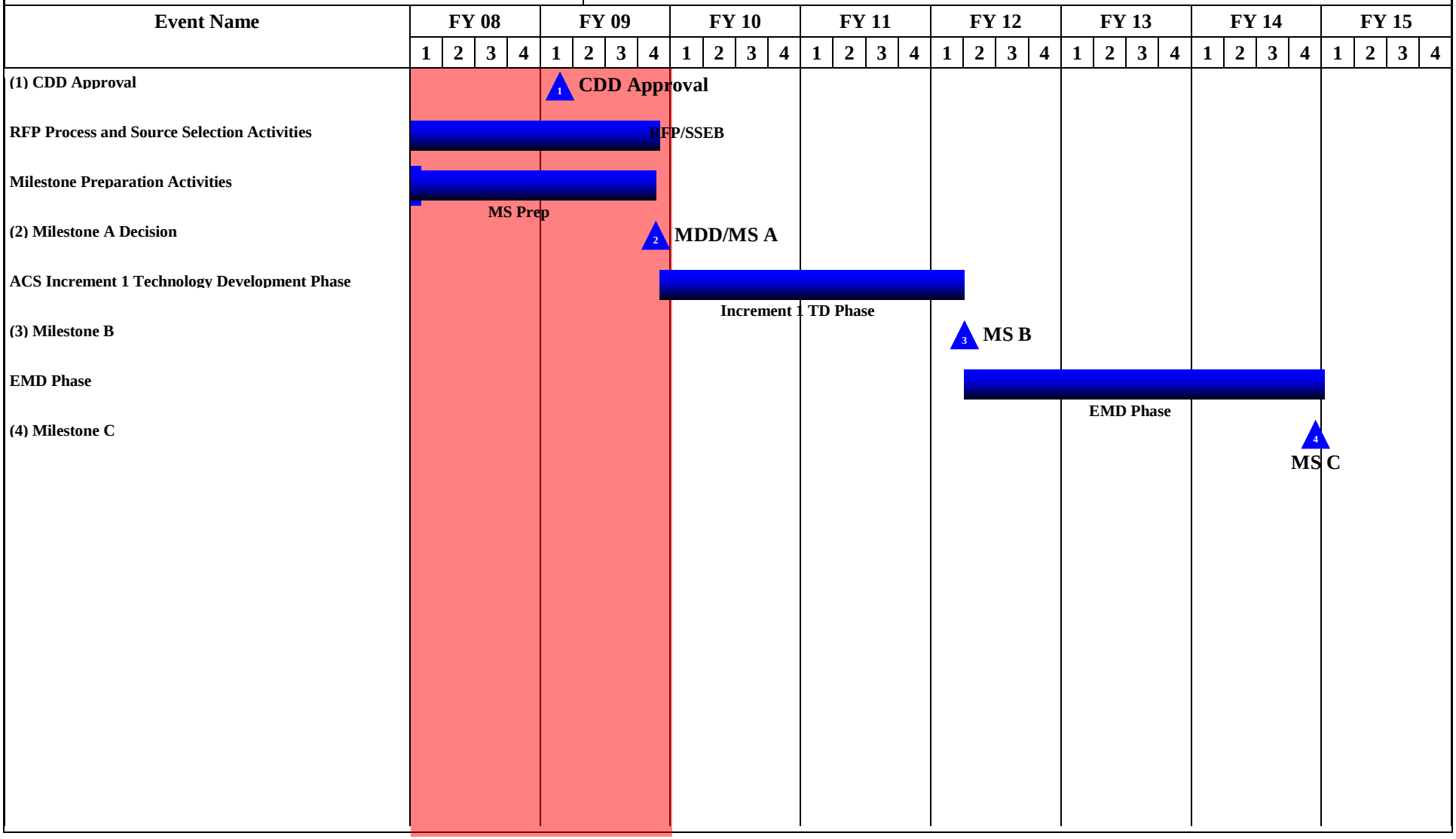
Schedule Profile (R4 Exhibit)

May 2009

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0307207A - Aerial Common Sensor (ACS)

PROJECT
024



Schedule Detail (R4a Exhibit)

May 2009

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
7 - Operational system development	**0307207A - Aerial Common Sensor (ACS)**	**024**

Schedule Detail	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
CDD Approval		1Q						
RFP Process and Source Selection Activities	1Q - 4Q	1Q - 4Q						
Milestone Preparation Activities	1Q - 4Q	1Q - 4Q						
Milestone A Decision		4Q						
ACS Increment 1 Technology Development Phase		4Q	1Q - 4Q	1Q - 4Q	1Q			
Milestone B					1Q			
EMD Phase					1Q - 4Q	1Q - 4Q	1Q - 4Q	
Milestone C							4Q	

This is not a new start. Previous years were funded with PE 0203744A - Aircraft Modifications/Product Improvement Programs Project 028 Aerial Common Sensor (ACS).