Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

**R-1 ITEM NOMENCLATURE** 

2040: Research, Development, Test & Evaluation, Army

PE 0604664A: FCS Unattended Ground Sensors

BA 5: Development & Demonstration (SDD)

COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	20.135	26.778	7.515	0.000	7.515	1.071	1.071	0.000	0.000	0	64.085
FC5: FCS UNATTENDED GROUND SENSORS	20.135	26.778	7.515	0.000	7.515	1.071	1.071	0.000	0.000	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

The FCS BCT Unattended Ground Sensors (UGS) program is divided into two major configurations of sensing systems: URBAN-UGS (U-UGS), also known as Urban Military Operations in Urban Terrain (MOUT) Advanced Sensor System (UMASS); and TACTICAL-UGS (T-UGS), which includes Intelligence, Surveillance and Reconnaissance (ISR)-UGS and Chemical, Biological, Radiological and Nuclear (CBRN)-UGS. U-UGS - Will provide a low cost, network-enabled reporting system for Situational Awareness (SA) and force protection in an urban setting, as well as residual protection for cleared areas of urban MOUT environments. The U-UGS system can support BCT operations by monitoring urban choke points such as rooms, halls, attics, basements, sewers, culverts, tunnels, caves, and alleyways. They can be hand-emplaced by Soldiers or robotic vehicles either inside or outside buildings and structures. When a platoon or squad clears a building, U-UGS are left behind to perform surveillance that would otherwise require dedicated soldiers. The U-UGS system provides a self-organizing wireless network that consists of three configuration items; personnel detect sensors, imaging sensors, and gateways: 1. Personnel Detect Sensors provide dual mode, passive infrared and RF microwave motion sensing for "trip-wire" detection of intruders. 2. Imaging Sensors provide electro-optical visual imaging with a nearinfrared illuminator for operation in full darkness. 3. Gateways organize and manage the sensor network, and communicate sensor data to FCS C2 Joint Tactical Radio System (JTRS) systems and to the local dismounts. T-UGS - Tactical-UGS (T-UGS) includes Intelligence, Surveillance and Reconnaissance (ISR)-UGS and Chemical, Biological, Radiological and Nuclear (CBRN)-UGS. The UGS (T-UGS) are designed for remote tactical operations in open spaces, at road choke points, avenues of approach, etc, and are designed to be emplaced by hand or by remote deployment methods. T-UGS provides ISR and CBRN awareness to the FCS (BCT) areas not covered by manned/unmanned ground/air vehicles. Packaging the common form factor enables simplified scalability and upgrade paths for future technology insertion, while the distributed sensing capability enhances mission flexibility and system versatility. The T-UGS system consists of five configuration items (nodes), each containing a unique set of sensing capabilities, and sharing a common hardware form factor. 1. The T-UGS ISR sensor node provides for vehicle and personnel detection capabilities via seismic, acoustic and magnetic sensors. Seismic sensors are the primary means of personnel detection. The principal means of vehicle detection and tracking are the acoustic bearing sensors. The ISR-UGS will be modular and composed of tailorable sensor groups using multiple ground-sensing technologies. Multiple sensors support precision location and simultaneous tracking of multiple targets. 2. When confirmed as a valid target of interest, Electro Optical/Infrared (EO/IR) sensor nodes will autonomously capture multiple images of the target. 3. The CBRN node provides for chemical, biological, radiological, and nuclear sensing and reporting capabilities. 4 The final component of the T-UGS system is the Long-Haul gateway node that provides radio communications and integration into the FCS network. T-UGS and U-UGS are both included in Increment 1 and Increment 2. T-UGS and U-UGS meet threshold requirements in increment 1 CPD. Increment 2 requirements are defined as objective requirement in increment 1 CPD.

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army

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APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army

PE 0604664A: FCS Unattended Ground Sensors

BA 5: Development & Demonstration (SDD)

## **B. Program Change Summary (\$ in Millions)**

	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>
Previous President's Budget	17.011	26.919	16.337	0.000	16.337
Current President's Budget	20.135	26.778	7.515	0.000	7.515
Total Adjustments	3.124	-0.141	-8.822	0.000	-8.822
<ul> <li>Congressional General Reductions</li> </ul>		-0.141			
<ul> <li>Congressional Directed Reductions</li> </ul>		0.000			
<ul> <li>Congressional Rescissions</li> </ul>	0.000	0.000			
<ul> <li>Congressional Adds</li> </ul>		0.000			
<ul> <li>Congressional Directed Transfers</li> </ul>		0.000			
<ul> <li>Reprogrammings</li> </ul>	3.600	0.000			
<ul> <li>SBIR/STTR Transfer</li> </ul>	-0.476	0.000			
<ul> <li>Adjustments to Budget Years</li> </ul>	0.000	0.000	-8.822	0.000	-8.822

# **Change Summary Explanation**

Change Summary Explanation: FY09: Congress approved reprogramming request for additional funds to the program's higher priority needsFY10: Congress reduced the program

Exhibit R-2A, RDT&E Project Justif	ication: PB 20	011 Army		1						<b>DATE:</b> February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604664A: FCS Unattended Ground Sensors PROJECT FC5: FCS UI					UNATTENDED GROUND SENSORS			
COST (\$ in Millions)	FY 2009 Actual					FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost		
FC5: FCS UNATTENDED GROUND SENSORS	20.135	26.778	7.515	0.000	7.515	1.071	1.071	0.000	0.000	Continuing	Continuing	
Ouantity of RDT&E Articles												

### A. Mission Description and Budget Item Justification

Not applicable for this item.

## **B.** Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	20.135	0.000	0.000	0.000	0.000
T-UGS/U-UGS FY09:- Design of New Form Factor (NFF) T-UGS, consisted of more producible configuration (Less Production Costs). NFF improved hand emplacement, concealment and increased flexibility in deployed assets. Improved algorithms increase sensitivity and target identification. New Long Haul antenna, New Radio, New Seismic Spike. Integrated New Form Factor into Battle Command Network. Delivered two prototype sets of new form factor hardware. Completed Procurement for Base Engineering Build; Base Configuration Item Engineering Tests; Electro Optical Combat Intelligence Engineering Tests; Engineering Radio Configuration; Improved target classification on Item Engineering Test; Seismic Engineering Tests; Engineering Short Haul Radio Performance System Test; Engineering Long Haul Radio Performance System Test; Hardware/Software Lab Integration Test; T-UGS Endurance Test; Engineering Performance Test-Developmental Performance (DP1); Engineering Long Haul/Short Haul Radio Performance Test; Operations Qualifications Test; T-UGS System Environmental Quality Tests, and Reliability Tests.  FY 2009 Accomplishments: FY 2009					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604664A: FCS Unattended Ground Se	ensors	PROJECT FC5: FCS UNATTENDED GROUND SENSO			
B. Accomplishments/Planned Program (\$ in Millions)			,			
	1	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #2		0.000	25.600	0.000	0.000	0.000
T-UGS/U-UGS Increment 1 FY10: Oversee delivery of 14 prototypes UGS (to include radio, spike, acoustic sensor, etc.) and U-UGS gatewa events. Support RAM-T data generation for MS-C LRIP decision and Quality Test; U-UGS System Environmental Quality Test; U-UGS System Environmental Quality Test; T-UGS System Performance Qua Tests, Reliability Tests. Delivered an additional 18 sets of UGS communications of the prototypes.	sy. Complete robust reliability post test support LUT-10 activities. U-UGS SW stem Performance Quality Test; T-UGS lity DP3; T-UGS Operations Qualification					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604664A: FCS Unattended Ground	d Sensors	ENSORS			
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: FY 2011 OCO						
Program #3  T-UGS/U-UGS Increment 2 FY10: Begin planning efforts to support Increfor the following tasks: Develop and validate product improvements, incluativities and alternative power sources. Refurbishment of systems for AE training. Procure hardware improvements to support technical and operation enhanced software upgrades, sensor node algorithm optimization and improcapability. Includes ruggedization of the range extension relay.  FY 2009 Accomplishments: FY 2010 Plans: FY 2010	des reliability growth, weight reduction TF to continue targeted testing and onal tests. Post test support to include	0.000	0.428	0.000	0.000	0.000
FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO  Program #4		0.000	0.000	7.515	0.000	7.515
T-UGS/U-UGS Increment 2 FY11: Oversee delivery of improved prototyp Tests, and further operational test. Complete engineering upgrade to HW a Extension Relay .Continued reliability growth; improved sensor/software r MOLLE packs.	nd software configuration of the Range					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604664A: FCS Unattended Ground	Sensors	PROJECT FC5: FCS UNATTENDED GROUND SENS				
B. Accomplishments/Planned Program (\$ in Millions)	<u> </u>		I				
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #5		0.000	0.750	0.000	0.000	0.000	
Small Business Innovative Research/Small Business Technology	Transfer Programs						
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
	Accomplishments/Planned Programs Subtotals	20.135	26.778	7.515	0.000	7.515	

Exhibit R-2A, RDT&E Project Justific	Exhibit R-2A, RDT&E Project Justification: PB 2011 Army										
APPROPRIATION/BUDGET ACTIV 2040: Research, Development, Test & Ev BA 5: Development & Demonstration (St	aluation, Arm	ıy		<b>R-1 ITEM N</b> O PE 0604664A			! Sensors	PROJECT FC5: FCS UNATTENDED GROUND SENSORS			
C. Other Program Funding Summary	(\$ in Millions	<u>s)</u>									
			FY 2011	FY 2011	FY 2011					Cost To	
Line Item	FY 2009	FY 2010	Base	<u>OCO</u>	<u>Total</u>	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
• Ord. #1: 0604646A Non-Line of Sight	253.684	91.223	81.247	0.000	81.247	58.718	27.418	0.000	0.000	0	512.290
- Launch System	87.038	47.964	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	135.002
• Ord. #2: 0604647A Non Line of Sight - Cannon	87.038	47.904	0.000	0.000	0.000	0.000	0.000	0.000	0.000	U	135.002
• Ord. #3: 0604660A FCS Manned	760.744	275.116	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	1,035.860
Ground Vehicles & Commmon Grd	700.711	273.110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	o .	1,032.000
Vehicle Components											
• Ord. #4: 0604661A FCS System of	1,022.165	912.399	568.711	0.000	568.711	566.378	582.775	618.755	727.415	Continuing	Continuing
Systems Eng & Program Management											
• Ord. #5: 0604662A FCS	55.923	75.107	50.304	0.000	50.304	12.058	4.180	0.000	0.000	0	197.572
Reconnaissance (UAV) Platforms											
• Ord. #6: 0604663A FCS Unmanned	104.571	124.962	249.948	0.000	249.948	98.737	25.368	0.000	0.000	0	603.586
Ground Vehicles											
• Ord. #7: 0604665A FCS Sustainment	819.721	655.745	610.389	0.000	610.389	523.580	366.647	253.810	258.367	Continuing	Continuing
& Training R&D	100 700	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	122 700
• Ord. #8: 0604666A Spin Out	122.788	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	122.788
Technology/Capability Insertion • Ord. #9: 0605625A - Manned	0.000	79.583	934.366	0.000	934.366	1,882.839	2,242.756	1,375.128	744.771	Continuing	Continuing
Ground Vehicles	0.000	19.363	934.300	0.000	934.300	1,002.039	2,242.730	1,373.126	/44.//1	Continuing	Continuing
• Ord. #10: WTCV G86100 FCS Core	154.127	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	154.127
Program	13127	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	· ·	15127
• Ord. #11: WTCV G86200 FCS Spin	67.268	326.909	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	394.177
Out Program											
• Ord. #12: WTCV G86000 Ground	0.000	0.000	0.000	0.000	0.000	0.000	0.000	98.030	778.220	Continuing	Continuing
Combat Vehicle (GCV)											
• Ord. #13: ACFT A00015 BCT	0.000	0.000	44.206	0.000	44.206	40.216	12.770	3.718	1.850	Continuing	Continuing
Unmanned Aerial Veh (UAVs) Inc 1											_
	0.000	0.000	0.000	0.000	0.000	2.141	85.345	90.245	92.686	Continuing	Continuing

# UNCLASSIFIED

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]	Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			<b>DATE:</b> February 2010
	APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1	2040: Research, Development, Test & Evaluation, Army	PE 0604664A: FCS Unattended Ground Sensors	FC5: FCS U	NATTENDED GROUND SENSORS
]	BA 5: Development & Demonstration (SDD)			
9	C. Other Program Funding Summary (\$ in Millions)			

C. Other Program Funding Summary	(\$ in Millions	<u>s)</u>									
			FY 2011	FY 2011	FY 2011					Cost To	
<u>Line Item</u>	<u>FY 2009</u>	FY 2010	<b>Base</b>	<u>oco</u>	<u>Total</u>	<b>FY 2012</b>	<b>FY 2013</b>	FY 2014	<b>FY 2015</b>	<b>Complete</b>	Total Cost
• Ord. #14: ACFT A00016 BCT											
Unmanned Aerial Veh (UAVs) Inc 2											
• Ord. #15: <i>OPA B00001 BCT</i>	0.000	0.000	29.718	0.000	29.718	60.578	9.582	1.544	1.328	Continuing	Continuing
Unattended Ground Sensor											
• Ord. #16: <i>OPA B00004 BCT</i>	0.000	0.000	0.000	0.000	0.000	19.093	87.478	96.172	86.259	Continuing	Continuing
Unattended Ground Sensor Inc 2											
• Ord. #17: OPA B00002 BCT	0.000	0.000	176.543	0.000	176.543	192.632	20.619	0.317	0.187	Continuing	Continuing
Network											-
• Ord. #18: <i>OPA B00003 BCT</i>	0.000	0.000	0.000	0.000	0.000	81.277	301.864	454.480	431.835	Continuing	Continuing
Network Incr 2											
• Ord. #19: <i>OPA F00001 BCT</i>	0.000	0.000	20.046	0.000	20.046	42.703	6.002	2.288	1.870	Continuing	Continuing
Unmanned Ground Vehicle											
• Ord. #20: <i>OPA F00002 BCT</i>	0.000	0.000	0.000	0.000	0.000	373.193	710.680	676.230	711.940	Continuing	Continuing
Unmanned Ground Vehicle Incr 2											
• Ord. #21: OPA G80001 BCT	0.000	0.000	61.581	0.000	61.581	12.178	94.491	68.033	50.468	Continuing	Continuing
Training/Logistics/Management											
• Ord. #22: <i>OPA G80002 BCT</i>	0.000	0.000	0.000	0.000	0.000	75.069	387.173	396.593	446.806	Continuing	Continuing
Training/Logistics/Managmeent Incr 2											
• Ord. #23: MSLS C64501 BCT NLOS-	0.000	0.000	350.574	0.000	350.574	758.657	112.115	0.000	0.000	0	1,221.346
LS Inc 1											
• Ord. #24: MSLS C64501 BCT NLOS-	0.000	0.000	0.000	0.000	0.000	0.000	605.192	679.078	579.210	Continuing	Continuing
LS Inc 2											

#### **D.** Acquisition Strategy

A 23 June 2009 Acquisition Decision Memorandum (ADM) directed the cancellation of the FCS (BCT) acquisition program. It also instructed the Army to transition to an Army modernization plan consisting of a number of integrated acquisition programs. At that time, the SO E-IBCT was designated a pre-MDAP, with a Milestone C decision scheduled for the first quarter FY 2010. A follow-on ADM was issued 9 July 2009. In it, the Army was directed to continue efforts to improve the brigades beyond the Early Infantry Brigade Combat Team acquisition until a standalone program(s) is defined later in 2010. An Army BCT Modernization Defense Acquisition Board (DAB) was then held on October 16, 2009 to review the Army's plans for the post-Future Combat Systems efforts and confirm the Army brigade modernization acquisition plans were consistent with the Secretary of Defense's guidance.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		<b>DATE:</b> February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
2040: Research, Development, Test & Evaluation, Army	PE 0604664A: FCS Unattended Ground Sensors	FC5: FCS UNATTENDED GROUND SENSORS
BA 5: Development & Demonstration (SDD)		
An ADM issued after this DAB stated: "The approach, for Increment 1 (Early-		
with the Secretary's guidance and each is being positioned for more in-depth re		
December 2009 and was approved in an ADM dated 24 December 2009. The the aforementioned ADMs. This budget justification reflects the Milestone C a		
Army.	ipproved increment 1 (E-IBC1) program and the fono	w-on IBC1 modernization program planned by the
Ailily.		
E. Performance Metrics		
Performance metrics used in the preparation of this justification material may	be found in the FY 2010 Army Performance Budget Ju	ustification Book, dated May 2010.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PROJECT

2040: Research, Development, Test & Evaluation, Army

PE 0604664A: FCS Unattended Ground Sensors

FC5: FCS UNATTENDED GROUND SENSORS

**Product Development (\$ in Millions)** 

				FY	2010	FY 2011 Base		2011 CO	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost Award Da	e Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
T-UGS/U-UGS	С	The Boeing Company - St Louis MO See Remark 1	0.000	26.028		7.515	0.000		7.515	Continuing	Continuing	0
		Subtotal	0.000	26.028		7.515	0.000		7.515			0.000

#### Remarks

1: Subcontractor: Textron Systems, Intelligent Battlefield System Division - Willington, MA

Support (\$ in Millions)

Support (4 m minons	• •												
				ES7.	2010		2011	FY		FY 2011			
				r r .	2010	В	ase	U	CO	Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SBIR/STTR	С	OSD Location could not be determined.	0.000	0.750		0.000		0.000		0.000	Continuing	Continuing	0
		Subtotal	0.000	0.750		0.000		0.000		0.000			0.000

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army		<b>DATE:</b> February 2010
		PROJECT FC5: FCS UNATTENDED GROUND SENSORS
. ,		

	Total Prior Years Cost	FY 2010	FY :	FY:	2011 CO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	26.778	7.515	0.000		7.515			0.000

**Remarks** 

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

**R-1 ITEM NOMENCLATURE** PROJECT 2040: Research, Development, Test & Evaluation, Army

BA 5: Development & Demonstration (SDD)

PE 0604664A: FCS Unattended Ground Sensors FC5: FCS UNATTENDED GROUND SENSORS

	I	<b>TY</b> 2	2009	9	I	Y	201	0	I	Y 2	201	1	F	Y 2	2012	2	I	<b>TY</b> 2	201	3	I	Y	201	4	F	Y 2	2015	;
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Increment 1 Total Program Tasks			#	#	#	#	#	#	#	#	#																	
Incr 1 Limited User Test FY09			#																									
Incr 1 STX / FDT&E / LUT 10						#	#																					
Incr 1 Milestone C				#																								
Incr 1 Production Contract Award					#																							
Incr 1 Production Delivery							#	#	#	#																		
Incr 1 Initial Operational Test & Evaluation											#																	
Incr 1 First Unit Equipped											#																	
Incr 1 Initial Operational Capability													#															
Increment 2 Total Program Tasks										#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#		
Incr 2 CDR										#																		
Incr 2 FDT&E / STX / LUT 13															#	#												
Incr 2 Milestone C																		#										
Incr 2 Initial Operational Capability																										#		
Incr 1 Program Tasks			#	#	#	#	#	#	#	#	#																	
T-UGS New FF PDR (Old date)		#																										
T-UGS New FF CDR (Old date)			#																									
T-UGS New FF Prototypes for FY10 LUT				#																								
U-UGS New FF Prototypes for FY10 LUT2					#																							
Increment 2 T-UGS Deliveries						#																						

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

2040: Research, Development, Test & Evaluation, Army PE 0604664A: FCS Unattended Ground Sensors FC5: FCS UNATTENDED GROUND SENSORS

BA 5: Development & Demonstration (SDD)

	]	FY	200	9	J	FY	201	0	]	FY 2	201	1	I	Y 2	201	2	1	FY 2	01.	3	F	Y	201	4	I	FY 2	201:	5
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Increment 2 U-UGS Gateway Deliveries						#																						

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army
BA 5: Development & Demonstration (SDD)

PROJECT
FC5: FCS UNATTENDED GROUND SENSORS

### Schedule Details

	St	art	F	End
Event	Quarter	Year	Quarter	Year
Increment 1 Total Program Tasks	3	2009	3	2011
Incr 1 Limited User Test FY09	3	2009	3	2009
Incr 1 STX / FDT&E / LUT 10	2	2010	3	2010
Incr 1 Milestone C	4	2009	4	2009
Incr 1 Production Contract Award	1	2010	1	2010
Incr 1 Production Delivery	3	2010	2	2011
Incr 1 Initial Operational Test & Evaluation	3	2011	3	2011
Incr 1 First Unit Equipped	3	2011	3	2011
Incr 1 Initial Operational Capability	1	2012	1	2012
Increment 2 Total Program Tasks	2	2011	2	2015
Incr 2 CDR	2	2011	2	2011
Incr 2 FDT&E / STX / LUT 13	3	2012	4	2012
Incr 2 Milestone C	2	2013	2	2013
Incr 2 Initial Operational Capability	2	2015	2	2015
Incr 1 Program Tasks	3	2009	3	2011
T-UGS New FF PDR (Old date)	2	2009	2	2009
T-UGS New FF CDR (Old date)	3	2009	3	2009
T-UGS New FF Prototypes for FY10 LUT	4	2009	4	2009

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604664A: FCS Unattended Ground Sensors

PROJECT

FC5: FCS UNATTENDED GROUND SENSORS

	St	art	En	ıd
Event	Quarter	Year	Quarter	Year
U-UGS New FF Prototypes for FY10 LUT2	1	2010	1	2010
Increment 2 T-UGS Deliveries	2	2010	2	2010
Increment 2 U-UGS Gateway Deliveries	2	2010	2	2010