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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2014 Air Force **DATE:** April 2013

<b>APPROPRIATION/BUDGET ACTIVITY</b>					<b>R-1 ITEM NOMENCLATURE</b>							
3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>					PE 0305208F: <i>Distributed Common Ground/Surface Systems</i>							
<b>COST (\$ in Millions)</b>	<b>All Prior Years</b>	<b>FY 2012</b>	<b>FY 2013<sup>#</sup></b>	<b>FY 2014 Base</b>	<b>FY 2014 OCO <sup>##</sup></b>	<b>FY 2014 Total</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	-	82.348	63.514	7.498	-	7.498	27.606	24.988	23.410	23.831	Continuing	Continuing
674826: <i>Common Imagery Ground / Surface Systems</i>	-	57.215	26.854	7.471	-	7.471	20.001	20.097	21.918	22.312	Continuing	Continuing
675265: <i>Common Imagery Processor (CIP)</i>	-	10.709	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
676025: <i>Data Compression</i>	-	14.424	29.699	0.027	-	0.027	7.605	4.891	1.492	1.519	Continuing	Continuing
676028: <i>Dynamic Time Critical Warfighting Capability</i>	-	0.000	6.961	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

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

AF Distributed Common Ground Systems (DCGS) is a network-centric weapon system capable of tasking Intelligence, Surveillance and Reconnaissance (ISR) sensors and receiving, processing, exploiting, and disseminating (PED) data, information and intelligence from airborne, national, and commercial platforms and sensors. The weapon system consists of numerous active duty, Air National Guard, and mission partner sites interconnected by a robust communications infrastructure that allows collaborative reach-back operations. Operators correlate collected Geospatial Intelligence (GEOINT), Signals Intelligence (SIGINT), and Measurement and Signature Intelligence (MASINT) data to provide decision-quality information to the Joint Task Force (JTF) and below, including significant support to time-critical targeting. AF DCGS is the primary PED capability for the U-2, Global Hawk, Predator, Reaper and Project Liberty.

AF DCGS is modernizing through sustainment by integrating the necessary technologies and tools to provide increased capabilities and meet emerging and urgent operational needs. These efforts will also integrate commercial and government fact-of-life version upgrades to provide current technologies and achieve necessary application services. The next series of upgrades will meet the operational need to integrate new and/or improved sensor capabilities and enhance interoperability by migrating to service oriented architectures and improving data sharing ability compliance with DoD direction.

DCGS Data Compression provides the warfighter a capability to efficiently compress and decompress airborne ISR sensor data and transmit real/near-real time to tactical users through current and future band-width limited commercial SATCOM or military SATCOM. The effort will develop, test and implement new sensor data compression/decompression algorithms for current and emerging airborne ISR sensors. Correspondingly, the program develops compression/decompression capabilities for manned and unmanned airborne platforms, associated ground stations, and DCGS. Outputs will meet standard certification for use within the DoD Imagery Intelligence (IMINT)/Measurement and Signatures (MASINT) architecture.

Activities include studies and analysis to support both current program planning and execution and future program planning.

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2014 Air Force	<b>DATE:</b> April 2013
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<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0305208F: <i>Distributed Common Ground/Surface Systems</i>
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This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

<b>B. Program Change Summary (\$ in Millions)</b>	<b><u>FY 2012</u></b>	<b><u>FY 2013</u></b>	<b><u>FY 2014 Base</u></b>	<b><u>FY 2014 OCO</u></b>	<b><u>FY 2014 Total</u></b>
Previous President's Budget	82.348	63.514	36.222	-	36.222
Current President's Budget	82.348	63.514	7.498	-	7.498
Total Adjustments	0.000	0.000	-28.724	-	-28.724
• Congressional General Reductions	-	0.000			
• Congressional Directed Reductions	-	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	-	0.000			
• Congressional Directed Transfers	-	0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	-28.724	-	-28.724

**Change Summary Explanation**

FY14 total decrease of \$28.724: \$7.059M for termination of Dynamic Time Critical Warfighter Capability; \$21.665M for higher Department of Defense priorities.

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Air Force										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE				PROJECT			
3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development					PE 0305208F: Distributed Common Ground/ Surface Systems				674826: Common Imagery Ground / Surface Systems			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
674826: Common Imagery Ground / Surface Systems	-	57.215	26.854	7.471	-	7.471	20.001	20.097	21.918	22.312	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

## Note

In FY 2013 Project Number 674826, Common Imagery Ground / Surface Systems, three efforts were transferred to PE 0305240F, Support to Distributed Common Ground System (DCGS) Enterprise, 674826, Common Imagery Ground / Surface Systems, in order to improve visibility into this effort. AF is lead service under the auspices of USD(I). The three efforts transferred are: Distributed Common Ground System (DCGS) Integrated Backbone (DIB); DCGS-Imagery (DCGS-I), and DCGS Enterprise. The amount transferred to PE 0305240F was \$24.5M.

## A. Mission Description and Budget Item Justification

AF Distributed Common Ground Systems (DCGS) is a network-centric weapon system capable of tasking Intelligence, Surveillance and Reconnaissance (ISR) sensors and receiving, processing, exploiting, and disseminating (PED) data, information and intelligence from airborne, national, and commercial platforms and sensors. The weapon system consists of numerous active duty, Air National Guard, and mission partner sites interconnected by a robust communications infrastructure that allows collaborative reach-back operations. Operators correlate collected Geospatial Intelligence (GEOINT), Signals Intelligence (SIGINT), and Measurement and Signature Intelligence (MASINT) data to provide decision-quality information to the Joint Task Force (JTF) and below, including significant support to time-critical targeting. AF DCGS is the primary PED capability for the U-2, Global Hawk, Predator, Reaper and Project Liberty.

AF DCGS is modernizing through sustainment by integrating the necessary technologies and tools to provide increased capabilities and meet emerging and urgent operational needs. These efforts will also integrate commercial and government fact-of-life version upgrades to provide current technologies and achieve necessary application services. The next series of upgrades will meet the operational need to integrate new and/or improved sensor capabilities and enhance interoperability by migrating to service oriented architectures and improving data sharing ability compliance with DoD direction.

Program actions are categorized by four distinct efforts. The GEOINT effort provides the capability for planning, collecting, processing, analysis and dissemination (PCPAD) of imagery intelligence. The Systems Release effort provides the capability for PCPAD of SIGINT. The Data Links effort provides Line-of-Site (LOS) and Satellite Communications (SATCOM) capabilities that allow AF DCGS to send and receive information between airborne Intelligence, Surveillance, and Reconnaissance (ISR) assets and the AF DCGS weapon system. The Network Communications effort involves modernizing AF DCGS infrastructure to improve data ingest, transfer, and storage capabilities while migrating the network toward a cloud architecture.

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Air Force			DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0305208F: Distributed Common Ground/ Surface Systems		PROJECT 674826: Common Imagery Ground / Surface Systems		
AF DCGS also participates in the development, testing, and implementation of international standards (to include NATO standardization agreements) to ensure joint, allied, and coalition interoperability.						
This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.						
B. Accomplishments/Planned Programs (\$ in Millions)				FY 2012	FY 2013	FY 2014
Title: Geospatial Intelligence				25.927	9.014	1.474
Description: Integrate new and improved sensors for exploitation and analysis of imagery and geospatial information.						
FY 2012 Accomplishments: Continued efforts to meet operational need to integrate new and improved sensors, increase capacity and imagery and geospatial data availability, and comply with DoD direction to improve interoperability through migration to a service oriented architecture construct.						
FY 2013 Plans: Continuing efforts to meet operational need to integrate new and improved sensors, increase capacity and imagery and geospatial data availability, and comply with DoD direction to improve interoperability through migration to a service oriented architecture construct.						
FY 2014 Plans: Will continue efforts to meet operational need to integrate new and improved sensors, increase capacity and imagery and geospatial data availability, and comply with DoD direction to improve interoperability through migration to a service oriented architecture construct.						
Title: Systems Release				2.000	3.670	0.000
Description: Continue efforts to meet operational need to integrate new and improved sensors, increase capacity and signals intelligence data availability, and comply with DoD direction to improve interoperability through migration to a service oriented architecture construct.						
FY 2012 Accomplishments: Continued efforts to meet operational need to integrate new and improved sensors, increase capacity and signals intelligence data availability, and comply with DoD direction to improve interoperability through migration to a service oriented architecture construct.						
FY 2013 Plans:						

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Air Force		<b>DATE:</b> April 2013	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0305208F: <i>Distributed Common Ground/Surface Systems</i>	<b>PROJECT</b> 674826: <i>Common Imagery Ground / Surface Systems</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2012</b>	<b>FY 2013</b>
Continuing efforts to meet operational need to integrate new and improved sensors, increase capacity and signals intelligence data availability, and comply with DoD direction to improve interoperability through migration to a service oriented architecture construct.			
<b>Title:</b> Data Links <b>Description:</b> Upgrade the AF DCGS capability to transmit and receive information via data link architecture. <b>FY 2012 Accomplishments:</b> Continued the upgrade of AF DCGS capability to transmit and receive information via data link architecture. <b>FY 2013 Plans:</b> Continuing the upgrade of AF DCGS capability to transmit and receive information via data link architecture.		4.500	3.500
<b>Title:</b> Network Communications <b>Description:</b> Upgrade and evolve the AF DCGS communications network across the various architectures. <b>FY 2012 Accomplishments:</b> Upgraded and evolved the AF DCGS communications network across the various architectures. <b>FY 2013 Plans:</b> Continuing to upgrade and evolve the AF DCGS communications network across the various architectures. <b>FY 2014 Plans:</b> Will continue to upgrade and evolve the AF DCGS communications network across the various architectures.		4.735	5.200
<b>Title:</b> DCGS Integration Backbone <b>Description:</b> Upgrade, improve and manage the DCGS Integration Backbone (DIB). <b>FY 2012 Accomplishments:</b> Upgraded, improved and managed the DCGS Integration Backbone (DIB). <b>FY 2013 Plans:</b> Starting in FY13, effort transferred to PE 0305240F, Support to DCGS Enterprise.		7.170	0.000
<b>Title:</b> DCGS-Imagery Testbed <b>Description:</b> Continues DCGS-I Testbed development and upgrades. <b>FY 2012 Accomplishments:</b>		4.111	0.000

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Air Force			<b>DATE:</b> April 2013		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0305208F: <i>Distributed Common Ground/ Surface Systems</i>		<b>PROJECT</b> 674826: <i>Common Imagery Ground / Surface Systems</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>			<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
Continued DCGS-I Testbed development and upgrades.					
<b>FY 2013 Plans:</b> Starting in FY13, effort transferred to PE 0305240F, Support to DCGS Enterprise.					
<b>Title:</b> DCGS Enterprise <b>Description:</b> Evolve DCGS architectures and standards and manage DCGS IPT efforts for USD(I).			2.552	0.000	0.000
<b>FY 2012 Accomplishments:</b> Evolved DCGS architectures and standards for commonality and interoperability across intelligence disciplines to include NATO interoperability and management of DCGS IPT effort for USD(I).					
<b>FY 2013 Plans:</b> Starting in FY13, effort transferred to PE 0305240F, Support to DCGS Enterprise.					
<b>Title:</b> Geospatial Product Library (GPL) <b>Description:</b> Develop and integrate a greater variety of Imagery Intelligence sources and geospatial visualization capabilities in the GPL.			2.970	2.970	0.000
<b>FY 2012 Accomplishments:</b> Continued to develop and integrate a greater variety of Imagery Intelligence sources and geospatial visualization capabilities in the GPL.					
<b>FY 2013 Plans:</b> Continuing to develop and integrate a greater variety of Imagery Intelligence sources and geospatial visualization capabilities in the GPL.					
<b>Title:</b> PMA <b>Description:</b> Maintain a program management office, including engineering, finance, and acquisition strategy execution			3.250	2.500	1.750
<b>FY 2012 Accomplishments:</b> Maintained a program management office, including engineering, finance, and acquisition strategy execution					
<b>FY 2013 Plans:</b> Maintaining a program management office, including engineering, finance, and acquisition strategy execution					
<b>FY 2014 Plans:</b>					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Air Force										<b>DATE:</b> April 2013		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0305208F: <i>Distributed Common Ground/Surface Systems</i>				<b>PROJECT</b> 674826: <i>Common Imagery Ground / Surface Systems</i>				
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>										<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
Will maintain a program management office, including engineering, finance, and acquisition strategy execution												
<b>Accomplishments/Planned Programs Subtotals</b>										57.215	26.854	7.471
<b>C. Other Program Funding Summary (\$ in Millions)</b>												
<b>Line Item</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014 Base</b>	<b>FY 2014 OCO</b>	<b>FY 2014 Total</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	
• RDT&E: BA07: PE 0305240F: <i>Support to DCSG Enterprise</i>	0.000	24.500	23.016		23.016	25.350	26.026	26.497	26.974	Continuing	Continuing	
• OPAF: BA07: Line Item #: 846080: <i>DCGS-AF</i>	215.146	99.466	115.801		115.801	159.988	116.904	121.748	123.939	Continuing	Continuing	
<b>Remarks</b>												
<b>D. Acquisition Strategy</b>												
The Air Force has changed the AF DCGS acquisition strategy from a single block upgrade to programs that will deliver the following families of capabilities to the fielded baseline while meeting emerging operational requirements and continuing to develop and integrate new/upgraded sensors: GEOINT, Systems Release Upgrades, Data Links, and NetComms.												
<b>E. Performance Metrics</b>												
Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.												

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2014 Air Force</b>												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development						<b>R-1 ITEM NOMENCLATURE</b> PE 0305208F: Distributed Common Ground/ Surface Systems						<b>PROJECT</b> 674826: Common Imagery Ground / Surface Systems			
<b>Product Development (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Capabilities Upgrade	C/Various	Various:Various,	-	1.135	Feb 2012	0.509	Feb 2013	0.000		-		0.000	Continuing	Continuing	TBD
Geospatial Intelligence (GEOINT) Upgrades	C/Various	Various:Various,	-	25.927	Apr 2012	14.114	Apr 2013	1.474	Jan 2014	-		1.474	Continuing	Continuing	TBD
System Release Upgrades	C/Various	Various:Various	-	2.000	Jun 2012	1.428	Jun 2013	0.000		-		0.000	Continuing	Continuing	TBD
Datalink Upgrades	C/Various	Various:Various	-	4.500	Mar 2012	3.213	Mar 2013	0.000		-		0.000	Continuing	Continuing	TBD
Network Communications Upgrade	C/Various	Various:Various,	-	3.600	May 2012	2.570	May 2013	4.247	Dec 2013	-		4.247	Continuing	Continuing	TBD
DCGS IPT for USD(I)	C/Various	Science Applications Int'l:Mclean, VA	-	2.552	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	TBD
Testbed Modernization and Licenses	C/Various	Various:Various,	-	4.111	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	TBD
DIB Management, Migration & Interoperability	C/Various	Various:Various,	-	7.170	Apr 2012	0.000		0.000		-		0.000	Continuing	Continuing	TBD
Geospatial Product Library	C/Various	AR Gov't Systems Group:Thousand Oaks, CA	-	2.970	Mar 2012	2.970	Mar 2013	0.000		-		0.000	Continuing	Continuing	TBD
<b>Subtotal</b>			0.000	53.965		24.804		5.721		0.000		5.721			
<b>Support (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000
<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000



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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Air Force												<b>DATE:</b> April 2013		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0305208F: <i>Distributed Common Ground/Surface Systems</i>				<b>PROJECT</b> 674826: <i>Common Imagery Ground / Surface Systems</i>				

Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
PMA	Various	Various:Various,	-	3.250	Sep 2012	2.050	Sep 2013	1.750	Sep 2014	-		1.750	Continuing	Continuing	TBD
<b>Subtotal</b>			0.000	3.250		2.050		1.750		0.000		1.750			

	All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	0.000	57.215		26.854		7.471		0.000		7.471			

**Remarks**

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Air Force

DATE: April 2013

## APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force  
BA 7: Operational Systems Development

## R-1 ITEM NOMENCLATURE

PE 0305208F: Distributed Common Ground/  
Surface Systems

## PROJECT

674826: Common Imagery Ground / Surface  
Systems



# AF DCGS Schedule

	FY12				FY13				FY14				FY15				FY16				FY17				FY18			
	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
Geospatial Intelligence (GEOINT) Upgrades																												
Systems Release Upgrades																												
Datalinks Upgrades																												
Network Communications																												
DCGS Integration Backbone (DIB)																												
DCGS-I Testbed																												
DCGS Enterprise																												

 Design / development

In FY 2013 efforts moved to PE  
0305240F, Support to DCGS Enterprise

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Air Force			<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0305208F: <i>Distributed Common Ground/ Surface Systems</i>	<b>PROJECT</b> 674826: <i>Common Imagery Ground / Surface Systems</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Geospatial Intelligence (GEOINT) Upgrades	1	2012	4	2018
Systems Release Upgrades	1	2012	4	2018
Datalink Upgrades	1	2012	4	2018
Network Communications upgrades	1	2012	4	2018
DCGS Integration Backbone (DIB)	1	2012	4	2012
DCGS-I Testbed	1	2012	4	2012
DCGS Enterprise	1	2012	4	2012

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Air Force									DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development					R-1 ITEM NOMENCLATURE PE 0305208F: Distributed Common Ground/ Surface Systems				PROJECT 675265: Common Imagery Processor (CIP)			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
675265: Common Imagery Processor (CIP)	-	10.709	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		
# 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												
Note												
In FY 2013, Project Number 675265, Common Imagery Processor (CIP), efforts transferred to PE 0305240F, Support to Distributed Common Ground System (DCGS) Enterprise, 675265, Common Imagery Processor (CIP) in order to improve visibility into this effort. AF is lead service under the auspices of USD(I).												
A. Mission Description and Budget Item Justification												
The Common Imagery Processor (CIP) is a major interoperability initiative to develop a common sensor processing element within the DCGS Imagery architecture. The function of the CIP is to accept imagery data, process it into an exploitable image, and output the image to other elements within DCGS. Efforts are underway to augment the CIP baseline to process data from upgraded/new sensors.												
Activities also include studies and analysis to support both current program planning and execution and future program planning.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2012	FY 2013	FY 2014	
Title: Common Imagery Processor									10.397	0.000	0.000	
Description: Continued development of the imagery processor to keep pace with growing sensor baseline.												
FY 2012 Accomplishments: Continued development of the imagery processor to keep pace with growing sensor baseline.												
FY 2013 Plans: Starting in FY13 effort transferred to PE 0305240F, Support to DCGS Enterprise.												
Title: PMA									0.312	0.000	0.000	
Description: Maintained a program management office, including engineering, finance, and acquisition strategy execution.												
FY 2012 Accomplishments: Maintained a program management office, including engineering, finance, and acquisition strategy execution.												
FY 2013 Plans:												

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Air Force										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0305208F: Distributed Common Ground/ Surface Systems				PROJECT 675265: Common Imagery Processor (CIP)				
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2012	FY 2013	FY 2014
Starting in FY13 effort transferred to PE 0305240F, Support to DCGS Enterprise.												
Accomplishments/Planned Programs Subtotals										10.709	0.000	0.000
C. Other Program Funding Summary (\$ in Millions)												
Line Item	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	
• OPAF: BA07: Line Item #:	215.146	99.466	115.801		115.801	159.988	116.904	121.748	123.939	Continuing	Continuing	
846080: DCGS-AF												
• RDT&E: BA07: PE 0305240F:	0.000	24.500	23.016		23.016	25.350	26.026	26.497	26.974	Continuing	Continuing	
Support to DCGS Enterprise												
Remarks												
D. Acquisition Strategy												
For imagery processing the Air force uses an evolutionary acquisition approach with blocks (increments) and spirals to develop, field, and upgrade the system and structure contracts for the improved capabilities through full and open competition to the maximum extent possible.												
E. Performance Metrics												
Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.												

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2014 Air Force</b>												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development						<b>R-1 ITEM NOMENCLATURE</b> PE 0305208F: Distributed Common Ground/ Surface Systems						<b>PROJECT</b> 675265: Common Imagery Processor (CIP)			
<b>Product Development (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
CIP Software Development	C/CPFF	Northrop Grumman:Baltimore, MD	-	10.160	Apr 2012	0.000		0.000		-		0.000	Continuing	Continuing	TBD
<b>Subtotal</b>			0.000	10.160		0.000		0.000		0.000		0.000			
<b>Support (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000
<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000
<b>Management Services (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
ISR&SOF Directorate	C/Various	ASC/WI:Wright- Patterson AFB, OH	-	0.154	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	TBD
PMA	Various	Various:Various,	-	0.395	Nov 2011	0.000		0.000		-		0.000	Continuing	Continuing	TBD
<b>Subtotal</b>			0.000	0.549		0.000		0.000		0.000		0.000			
<b>Project Cost Totals</b>			0.000	10.709		0.000		0.000		0.000		0.000			

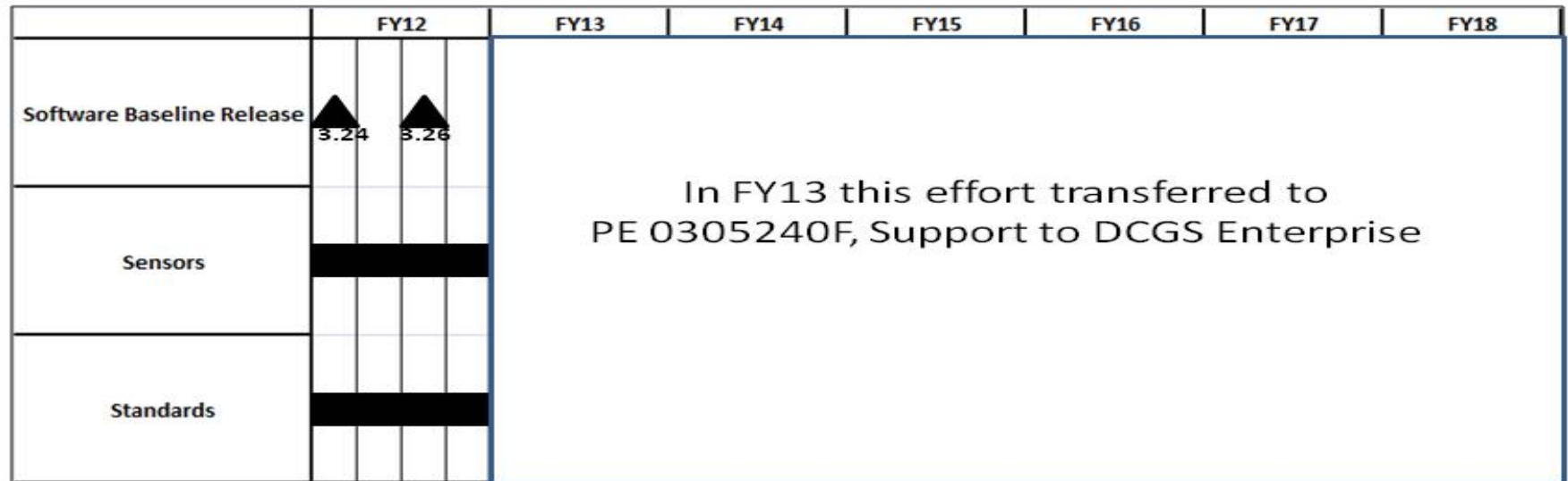
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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force							DATE: April 2013				
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE			PROJECT				
3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development				PE 0305208F: Distributed Common Ground/ Surface Systems			675265: Common Imagery Processor (CIP)				
	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract		
Remarks											

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2014 Air Force		<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0305208F: <i>Distributed Common Ground/Surface Systems</i>	<b>PROJECT</b> 675265: <i>Common Imagery Processor (CIP)</i>

## ***Imagery Processing Schedule***



 Integration / test  
 Key events



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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Air Force			<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0305208F: <i>Distributed Common Ground/Surface Systems</i>	<b>PROJECT</b> 675265: <i>Common Imagery Processor (CIP)</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Software Baseline Release (3.24)	1	2012	1	2012
Software Baseline Release (3.26)	3	2012	3	2012
Sensors - Evolutionary Development	1	2012	4	2012
Standards - Evolutionary Development	1	2012	4	2012

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Air Force										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE				PROJECT			
3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development					PE 0305208F: Distributed Common Ground/ Surface Systems				676025: Data Compression			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
676025: Data Compression	-	14.424	29.699	0.027	-	0.027	7.605	4.891	1.492	1.519	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		
# 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 initiative will provide the warfighter a capability to efficiently compress and decompress airborne ISR sensor data and transmit real/near-real time to tactical users through current and future band-width limited commercial SATCOM or military SATCOM. The effort will develop, test and implement new sensor data compression/ decompression algoithms for current and emerging airborne ISR sensors. Correspondingly, the program develops compression/decompression capabilities for manned and unmanned airborne platforms, associated ground stations, and DCGS. Outputs will meet standard certification for use within the DoD Imagery Intelligence (IMINT)/Measurement and Signatures (MASINT) architecture.												
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2012	FY 2013	FY 2014
Title: Data Compression										13.855	26.190	0.000
Description: The program began developing and testing compression/ decompression algorithms for airborne ISR sensor data, then will eventually build, integrate and test sensor specific hardware(with the algorithms embedded) for onboard data compression. The effort focused initially on compression/decompression of complex/detected Synthetic Aperture Radar (SAR) data followed by applications of compression technologies to other DoD IMINT/MASINT sensor data (i.e., Spectral, Electro-Optical/Infrared (EO/IR), Light Detection and Ranging (LIDAR), Laser Radar (LADAR), Video) and ground architecture. Outputs will meet DoD standard certification.												
FY 2012 Accomplishments: Developed compression/decompression capabilities for complex/ detected SAR spectral, LiDAR, & Wide Area Motion Imagery (WAMI) sensor data. Developed DoD standard certification plan. Prepared technology demonstration effort(s) for future integration of new data compression capabilities.												
FY 2013 Plans: Continue development and testing of complex/ detected SAR, spectral, LIDAR,& WAMI sensor data compression capabilities. Continue to prepare technology demonstration effort(s).												
Title: PMA										0.569	3.509	0.027

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Air Force		<b>DATE:</b> April 2013	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0305208F: <i>Distributed Common Ground/Surface Systems</i>	<b>PROJECT</b> 676025: <i>Data Compression</i>
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2012</b>	<b>FY 2013</b>
<p><b>Description:</b> Maintain a Program Management Office, including program supervision, engineering support, finance, and acquisition strategy execution.</p> <p><b>FY 2012 Accomplishments:</b> Maintained a Program Management Office, including program supervision, engineering support, finance, and acquisition strategy execution.</p> <p><b>FY 2013 Plans:</b> Maintaining a Program Management Office, including program supervision, engineering support, finance, and acquisition strategy execution</p> <p><b>FY 2014 Plans:</b> Will continue to maintain a Program Management Office, including program supervision, engineering support, finance, and acquisition strategy execution</p>			
<b>Accomplishments/Planned Programs Subtotals</b>		14.424	29.699
<b>C. Other Program Funding Summary (\$ in Millions)</b>			
N/A			
<b>Remarks</b>			
<b>D. Acquisition Strategy</b>			
The Data Compression acquisition approach will be to design and develop compression/decompression technology hardware and software components, interfaces and standards for various airborne ISR platforms and ground stations utilizing existing contracts and with full and open competition where appropriate.			
<b>E. Performance Metrics</b>			
Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development						R-1 ITEM NOMENCLATURE PE 0305208F: Distributed Common Ground/ Surface Systems				PROJECT 676025: Data Compression					
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Technology Development-SAR Phase 1 (SAIC)	C/CPFF	SAIC:McLean, VA	-	2.238	Aug 2012	0.000		0.000		-		0.000	Continuing	Continuing	
Technology Development-SAR Phase 1 (KEYW)	C/CPFF	KEYW:Hanover, MD	-	1.272	Aug 2012	0.000		0.000		-		0.000	Continuing	Continuing	
Technology Development-SAR Phase 2 (TBD)	C/CPFF	TBD:TBD,	-	0.000		4.393	Oct 2013	0.000		-		0.000	Continuing	Continuing	
Technology Development-HSI Phase 1 (ATA)	C/CPFF	ATA:Albuquerque, NM	-	2.393	Nov 2012	0.000		0.000		-		0.000	Continuing	Continuing	
Technology Development-HSI Phase 1 (NASA/JPL)	C/CPFF	NASA/JPL:Pasadena, CA	-	0.000		1.727	Jan 2013	0.000		-		0.000	Continuing	Continuing	
Technology Development-HSI Phase 2 (TBD)	C/CPFF	TBD:TBD,	-	0.000		4.773	Jan 2014	0.000		-		0.000	Continuing	Continuing	
Technology Development-LIDAR Phase 1 (SAIC)	C/CPFF	SAIC:McLean, VA	-	1.500	Dec 2012	0.000		0.000		-		0.000	Continuing	Continuing	
Technology Development-LIDAR Phase 2 (SAIC)	C/CPFF	SAIC:McLean, VA	-	0.000		4.773	Feb 2014	0.000		-		0.000	Continuing	Continuing	
Technology Development-WAMI (ISS/UDRI)	C/TBD	ISS/UDRI:Dayton, OH	-	1.700	Nov 2012	0.600	Mar 2013	0.000		-		0.000	Continuing	Continuing	
Technology Development-WAMI (BAE)	C/TBD	BAE:Baltimore, MD	-	0.700	Sep 2012	0.000		0.000		-		0.000	Continuing	Continuing	
Technology Demonstration- Study (Global Hawk)	SS/TBD	Northrop Grumman:Rancho Bernardo, CA	-	0.000		0.300	Jan 2013	0.000		-		0.000	Continuing	Continuing	
Technology Demonstration- Study (Reaper)	SS/TBD	General Atomics:San Diego, CA	-	0.000		0.670	Jun 2013	0.000		-		0.000	Continuing	Continuing	
Technology Demonstration- Study (ACES HY)	SS/CPAF	Raytheon:Los Angeles, CA	-	0.000		0.500	Jul 2013	0.000		-		0.000	Continuing	Continuing	
Technology Demonstration (Global Hawk)	SS/TBD	Northrop Grumman:Rancho Bernardo, CA	-	0.000		6.996	Aug 2014	0.000		-		0.000	Continuing	Continuing	
Other	TBD	TBD:TBD,	-	3.472	Jun 2013	0.000		0.000		-		0.000	Continuing	Continuing	

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2014 Air Force</b>												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development						<b>R-1 ITEM NOMENCLATURE</b> PE 0305208F: Distributed Common Ground/ Surface Systems						<b>PROJECT</b> 676025: Data Compression			
<b>Product Development (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			0.000	13.275		24.732		0.000		0.000		0.000			
<b>Support (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000
<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Technology Development- AFRL Support	C/Various	Various:Various,	-	0.300	Sep 2012	1.408	May 2013	0.000		-		0.000	Continuing	Continuing	
Technology Development- Other Support	C/Various	Various:Various,	-	0.280	Dec 2012	0.050	Mar 2013	0.000		-		0.000	Continuing	Continuing	
<b>Subtotal</b>			0.000	0.580		1.458		0.000		0.000		0.000			
<b>Management Services (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Program Office Support	Various	Govt/ Contractors:TBD,	-	0.569	Oct 2011	3.509	Oct 2012	0.027	Oct 2013	-		0.027	Continuing	Continuing	
<b>Subtotal</b>			0.000	0.569		3.509		0.027		0.000		0.027			
<b>Project Cost Totals</b>			0.000	14.424		29.699		0.027		0.000		0.027			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force							DATE: April 2013				
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE			PROJECT				
3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development				PE 0305208F: Distributed Common Ground/ Surface Systems			676025: Data Compression				
	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract		
Remarks											

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Air Force

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force  
BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

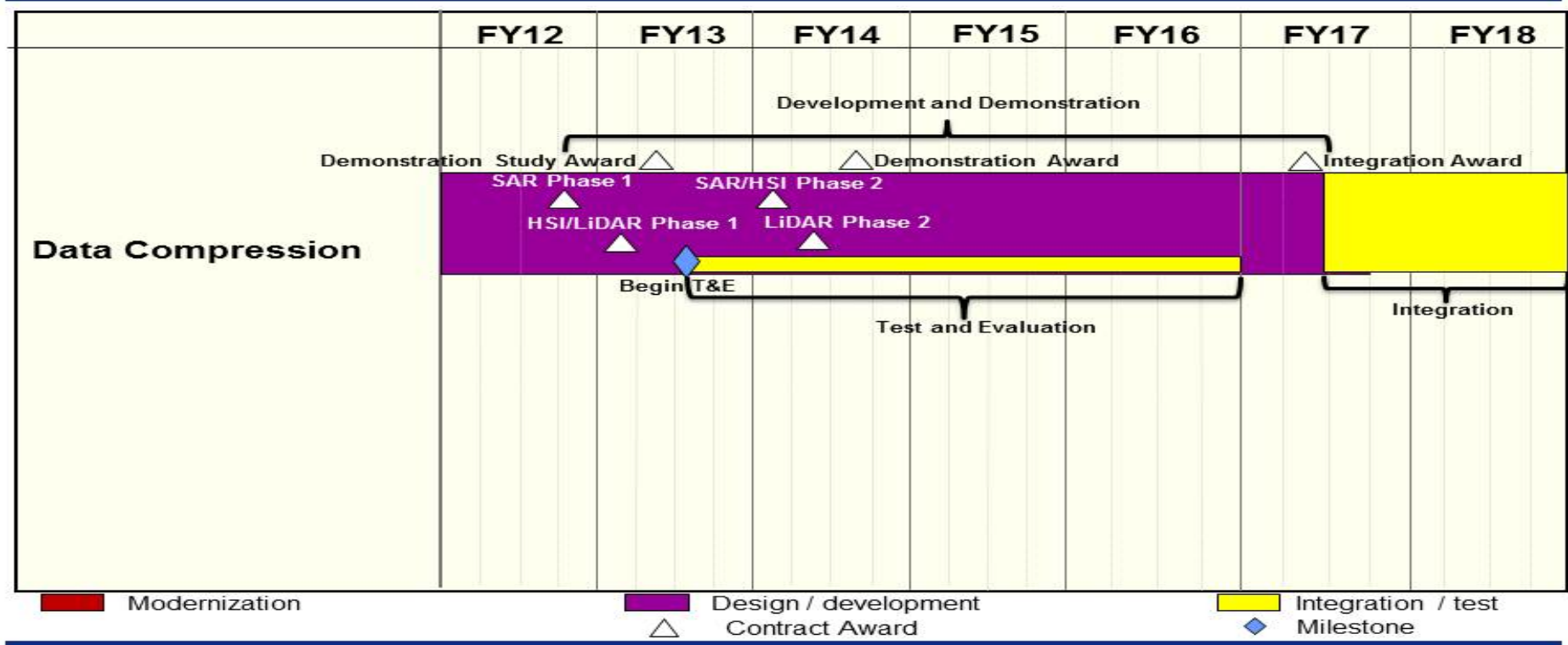
PE 0305208F: Distributed Common Ground/  
Surface Systems

PROJECT

676025: Data Compression



## Data Compression Schedule



FY14 PBR RDOCs

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2014 Air Force

**DATE:** April 2013

**APPROPRIATION/BUDGET ACTIVITY**

3600: *Research, Development, Test & Evaluation, Air Force*  
BA 7: *Operational Systems Development*

**R-1 ITEM NOMENCLATURE**

PE 0305208F: *Distributed Common Ground/Surface Systems*

**PROJECT**

676025: *Data Compression*

## Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Data Compression	1	2012	4	2018
Development and Demonstration	4	2012	2	2017
SAR Phase 1 Development Contract Award	4	2012	4	2012
Spectral (HSI/LiDAR) Phase 1 Development Contract Award	1	2013	1	2013
SAR/HSI Phase 2 Development Contract Award	1	2014	1	2014
LIDAR Phase 2 Development Contract Award	2	2014	2	2014
Test/Evaluation	3	2013	4	2016
Begin Test and Evaluation	3	2013	3	2013
Demonstration Study Award	2	2013	2	2013
Demonstration Award	3	2014	3	2014
Integration Award	2	2017	2	2018
Integration	2	2017	4	2018



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Exhibit R-2A, RDT&E Project Justification: PB 2014 Air Force										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development					R-1 ITEM NOMENCLATURE PE 0305208F: Distributed Common Ground/ Surface Systems				PROJECT 676028: Dynamic Time Critical Warfighting Capability			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
676028: Dynamic Time Critical Warfighting Capability	-	0.000	6.961	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		
# 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												
Note												
In FY 2014, Project 676028, Dynamic Time Critical Warfighting Capability, is being terminated because the technology development has not met objective requirements and thus has not been fielded in an operational capacity.												
A. Mission Description and Budget Item Justification												
Dynamic Time Critical Warfighting Capability (DTCWC) fuses Electronics Intelligence (ELINT) and Imagery in an upstream data fusion methodology that greatly improves target of interest identification and geolocation timeliness and accuracy. While not part of the AF DCGS weapon system, this Military Intelligence Program funded capability will initially fuse ISR feeds outside of AF DCGS while leveraging AF DCGS for access to multiple raw ISR data feeds. The primary aim of this capability is to support the targeting process, with likely outputs to the AOC.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2012	FY 2013	FY 2014	
Title: Dynamic Time Critical Warfighting Capability (DTCWC)									0.000	6.848	0.000	
Description: Fuse ELINT and Imagery in an up-stream data fusion methodology that greatly improves target of interest identification and geolocation timeliness and accuracy.												
FY 2013 Plans: Continuing efforts to add additional sensors and sensor modalities to DTCWC fusion engine. Will refine current algorithms to allow for target detection in added environments and terrain types. Will add new target sets to the existing DTCWC targets list.												
FY 2014 Plans: In FY 2014 Dynamic Time Critical Warfighting Capability was terminated.												
Title: PMA									0.000	0.113	0.000	
Description: Maintain a Program Management Office, including program supervision, finance and acquisition strategy execution.												
FY 2013 Plans:												

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Air Force		<b>DATE:</b> April 2013	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0305208F: <i>Distributed Common Ground/Surface Systems</i>	<b>PROJECT</b> 676028: <i>Dynamic Time Critical Warfighting Capability</i>
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2012</b>	<b>FY 2013</b>
Maintaining a Program Management Office, including program supervision, finance and acquisition strategy execution.			
<b>Accomplishments/Planned Programs Subtotals</b>		0.000	6.961
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A			
<b>Remarks</b>			
<b>D. Acquisition Strategy</b> DTCWC uses the acquisition strategy of providing spiral releases of software and capabilities. A sole-source contract has been awarded to Johns Hopkins University Applied Physics Lab due to their evolutionary approach to upstream data fusion.			
<b>E. Performance Metrics</b> Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.			

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2014 Air Force</b>												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development						<b>R-1 ITEM NOMENCLATURE</b> PE 0305208F: Distributed Common Ground/ Surface Systems						<b>PROJECT</b> 676028: Dynamic Time Critical Warfighting Capability			
<b>Product Development (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Develop DTCWC	SS/FFP	Johns Hopkins University, Applied Physics Lab:Columbia, MD	-	0.000		6.961	Jul 2013	0.000		-		0.000	0.000	6.961	6.961
<b>Subtotal</b>			0.000	0.000		6.961		0.000		0.000		0.000	0.000	6.961	6.961
<b>Support (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000
<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000
<b>Management Services (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000
<b>Project Cost Totals</b>			0.000	0.000		6.961		0.000		0.000		0.000	0.000	6.961	6.961
<b>Remarks</b>															

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Air Force

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force  
BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

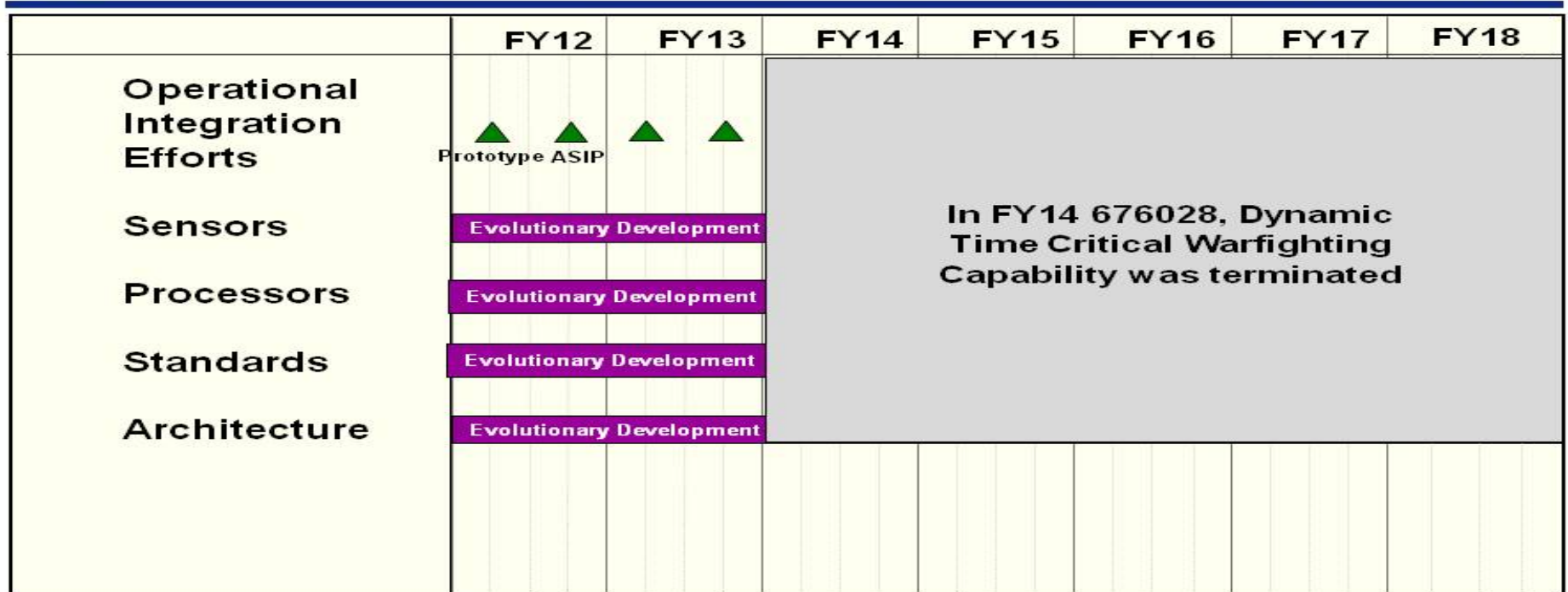
PE 0305208F: Distributed Common Ground/  
Surface Systems

PROJECT

676028: Dynamic Time Critical Warfighting  
Capability



# DTCWC Program Schedule



Development

▲ Spiral Integration

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Air Force			<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0305208F: <i>Distributed Common Ground/Surface Systems</i>	<b>PROJECT</b> 676028: <i>Dynamic Time Critical Warfighting Capability</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Operational Integration Efforts	1	2012	3	2013
Sensors - Evolutionary Development	1	2012	4	2013
Processors - Evolutionary Development	1	2012	4	2013
Standards - Evolutionary Development	1	2012	4	2013
Architecture - Evolutionary Development	1	2012	4	2013