Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force											Date: February 2015	
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force* / BA 7: *Operational Systems Development*					R-1 Program Element (Number/Name) PE 0305240F / *Support to DCGS Enterprise*							
COST ($ in Millions)	**Prior Years**	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016 Total**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**Cost To Complete**	**Total Cost**
Total Program Element	-	19.309	17.118	28.434	-	28.434	27.944	26.528	27.027	27.511	Continuing	Continuing
674826: *Common Imagery Ground / Surface Systems*	-	12.040	8.460	16.148	-	16.148	15.880	15.071	15.355	15.630	Continuing	Continuing
675265: *Common Imagery Processor (CIP)*	-	7.269	8.658	12.286	-	12.286	12.064	11.457	11.672	11.881	Continuing	Continuing

A. Mission Description and Budget Item Justification

This Program Element contains Distributed Common Ground/Surface System (DCGS) Family of Systems interoperability efforts for which the AF is lead service. The DCGS Family of Systems, including AF DCGS, was directed to migrate to a net-centric DoD Intelligence, Surveillance and Reconnaissance (ISR) enterprise enabling the Services to operate and share intelligence products more effectively in a joint environment. All Services must pursue a common path based on a set of common enterprise services consistent with the Department's net-centric vision while maintaining flexibility to support the full range of warfighter missions. Specifically, DoD charged the Air Force to lead the development, upgrade, integration, and test of common DCGS Integration Backbone (DIB) enterprise services. The DIB is a set of enterprise standards and services that enable interoperability and component reuse. All the military services are mandated to incorporate DIB interoperability standards and commit to DIB architecture as the migration path to common DCGS enterprise services.

The Distributed Common Ground Systems-Imagery (DCGS-I) Testbed is an integration and test environment, used by the Services and Agency DCGS program offices to conduct integration of DCGS components and test interoperability interfaces with new sensors, applications, and net-centric operations. This testbed also supports the integration and testing of DoD DCGS components prior to introduction into the operational environment. Periodic upgrades ensure the Testbed stays current with DCGS standards and architecture.

Support to OUSD(I), AF DCGS, and NATO interoperability efforts is also provided through this program element. This includes development, testing, and implementation of international standards (to include NATO standardization agreements) to ensure joint, allied, and coalition interoperability.

The Common Imagery Processor effort develops a common imagery sensor processing capability within the DCGS architecture. The imagery processor accepts airborne imagery data, processes it into an exploitable format, and provides it to other elements within the weapon system and the DCGS Enterprise. Current efforts are transitioning the legacy imagery processor from a hardware/software capability to a virtual software capability, thereby improving enterprise processing capabilities. Efforts continue to keep the capability on track to handle the current sensors. Activities also include testing, development, and demonstrations integrating updated and new/emerging sensors into DCGS.

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

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force	Date: February 2015
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force* / BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0305240F / *Support to DCGS Enterprise*

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. Program Change Summary ($ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	19.309	20.218	28.623	-	28.623
Current President's Budget	19.309	17.118	28.434	-	28.434
Total Adjustments	-	-3.100	-0.189	-	-0.189
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-3.100			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-	-	-0.189	-	-0.189

Change Summary Explanation

In FY15, $3.1M cut by Congress due for forwarding financing.
In FY16, $.189M taken for higher AF priorities.

Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force			Date: February 2015
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305240F / *Support to DCGS Enterprise*	Project (Number/Name) 674826 / *Common Imagery Ground / Surface Systems*	

COST ($ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
674826: *Common Imagery Ground / Surface Systems*	-	12.040	8.460	16.148	-	16.148	15.880	15.071	15.355	15.630	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

DoD charged the AF with developing, upgrading and managing the Distributed Common Ground/Surface System (DCGS) Integration Backbone (DIB) for all the Services to provide common DCGS enterprise services and interoperability at the data level. The DIB is a set of enterprise standards and services that enable interoperability and component reuse. Using the DIB, the Air Force Distributed Common Ground System (AF DCGS) modernization will transform AF DCGS from its existing proprietary system to a net-centric service oriented architecture.

The DCGS Family of Systems, including AF DCGS, was directed to migrate to a net-centric DoD Intelligence, Surveillance, and Reconnaissance (ISR) enterprise enabling the Services to operate and share intelligence products more effectively in a joint environment. All Services must pursue a common path based on common enterprise services consistent with the Department's net-centric vision, while maintaining flexibility to support the full range of warfighter missions. Also, all Services are mandated to incorporate DIB interoperability standards and commit to DIB architecture as the migration path to common DCGS enterprise services.

The Distributed Common Ground Systems-Imagery (DCGS-I) Testbed is an integration and test environment, used by the Services and Agency DCGS program offices to conduct integration of DCGS components and test interoperability interfaces with new sensors, applications, and net centric operations. This testbed also supports the integration and testing of DoD DCGS components prior to introduction into the operational environment. Periodic upgrades ensure the Testbed stays current with DCGS standards and architecture.

The AF-sponsored DIB System Program Office also participates in the development, testing, and implementation of international standards (to include NATO standardization agreements) to ensure joint, allied, and coalition interoperability.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Title: Distributed Common Ground / Surface System (DCGS) Integration Backbone	8.955	4.389	12.021
Description: Upgrade, improve and manage the DCGS Integration Backbone (DIB).			
FY 2014 Accomplishments: Continued to upgrade, improve and manage the DIB.			
FY 2015 Plans: Continuing to upgrade, improve and manage the DIB.			
FY 2016 Plans:			

Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force		Date: February 2015
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305240F / *Support to DCGS Enterprise*	**Project (Number/Name)** 674826 / *Common Imagery Ground / Surface Systems*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Will continue to upgrade, improve and manage the DIB.			
Title: Distributed Common Ground / Surface System-Imagery (DCGS-I) Testbed ***Description:*** Continue DCGS-I Testbed development and upgrades. Continue to use the Testbed to conduct DIB and DCGS enterprise tests. ***FY 2014 Accomplishments:*** Continued DCGS-I Testbed development and upgrades. Continued to use the Testbed to conduct DIB and DCGS enterprise tests. ***FY 2015 Plans:*** Continuing DCGS-I Testbed development and upgrades. Continuing to use the Testbed to conduct DIB and DCGS enterprise tests. ***FY 2016 Plans:*** Will continue to develop and upgrade the DCGS-I Testbed and use for DIB and DCGS enterprise tests.	1.184	1.871	1.927
Title: Support to Distributed Common Ground / Surface System (DCGS) Enterprise ***Description:*** Provide support to OUSD(I), AF DCGS and NATO Interoperability Enterprise efforts. ***FY 2014 Accomplishments:*** Continued to provide support to OUSD(I), AF DCGS and NATO Interoperability Enterprise efforts. ***FY 2015 Plans:*** Continuing to provide support to OUSD(I), AF DCGS and NATO Interoperability Enterprise efforts. ***FY 2016 Plans:*** Will continue to provide support to OUSD(I), AF DCGS and NATO Interoperability Enterprise efforts.	1.901	2.200	2.200
Accomplishments/Planned Programs Subtotals	12.040	8.460	16.148

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force		Date: February 2015
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305240F / *Support to DCGS Enterprise*	**Project (Number/Name)** 674826 / *Common Imagery Ground / Surface Systems*

D. Acquisition Strategy

The Air Force uses an evolutionary acquisition approach with version releases and periodic upgrades 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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force			Date: February 2015
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305240F / *Support to DCGS Enterprise*	Project (Number/Name) 674826 / *Common Imagery Ground / Surface Systems*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DIB Modernization, Integration, DT and Interoperability	C/Various	Various : Various,	-	8.096	May 2014	3.535	Apr 2015	11.268	Apr 2016	-		11.268	Continuing	Continuing	-
Testbed Modernization and Licenses	C/Various	Various : Various,	-	1.184	May 2014	1.871	Mar 2015	1.927	Apr 2016	-		1.927	Continuing	Continuing	-
		Subtotal	-	9.280		5.406		13.195		-		13.195	-	-	-

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
System Engineering	C/CPFF	MITRE : Bedford, MA	-	0.288	Oct 2013	0.159	Oct 2014	-		-		-	-	0.447	-
Management Services	C/CPFF	Various : Bedford, MA	-	0.185	Apr 2014	0.281	Apr 2015	0.289	Apr 2016	-		0.289	Continuing	Continuing	-
PMA	Various	Various : Various,	-	0.386	Feb 2014	0.414	Mar 2015	0.464	Mar 2016	-		0.464	Continuing	Continuing	-
DCGS Team Support for OUSD(I)	C/Various	Various : Various,	-	1.901	Jul 2014	2.200	Jul 2015	2.200	Jul 2016	-		2.200	Continuing	Continuing	-
		Subtotal	-	2.760		3.054		2.953		-		2.953	-	-	-

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	-	-		-		-		-		-	-	-	-

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	-	-		-		-		-		-	-	-	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force			Date: February 2015
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305240F / *Support to DCGS Enterprise*	Project (Number/Name) 674826 / *Common Imagery Ground / Surface Systems*	

	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	12.040		8.460		16.148		-		16.148	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force		Date: February 2015
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305240F / *Support to DCGS Enterprise*	**Project (Number/Name)** 674826 / *Common Imagery Ground / Surface Systems*

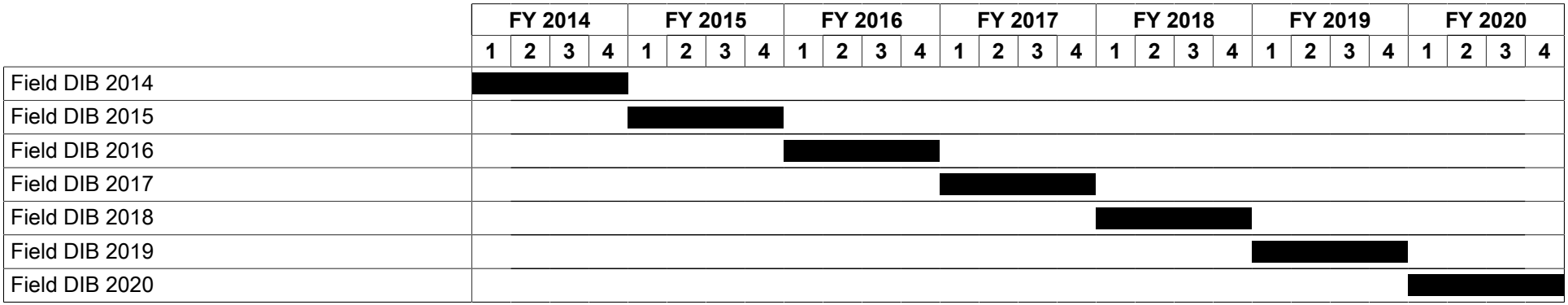

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force		Date: February 2015
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305240F / *Support to DCGS Enterprise*	**Project (Number/Name)** 674826 / *Common Imagery Ground / Surface Systems*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Field DIB 2014	1	2014	4	2014
Field DIB 2015	1	2015	4	2015
Field DIB 2016	1	2016	4	2016
Field DIB 2017	1	2017	4	2017
Field DIB 2018	1	2018	4	2018
Field DIB 2019	1	2019	4	2019
Field DIB 2020	1	2020	4	2020

Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force			Date: February 2015
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305240F / *Support to DCGS Enterprise*	Project (Number/Name) 675265 / *Common Imagery Processor (CIP)*	

COST ($ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
675265: *Common Imagery Processor (CIP)*	-	7.269	8.658	12.286	-	12.286	12.064	11.457	11.672	11.881	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Imagery Processing effort develops imagery sensor processing capability within the DCGS architecture. The imagery processor accepts airborne imagery data, processes it into an exploitable format, and provides it to other elements within the weapon system and/or the DCGS Enterprise. Current efforts are transitioning the legacy imagery processor from a hardware/software capability to a virtual software capability, thereby improving enterprise processing capabilities. Efforts continue to keep the capability on track to handle the current sensors. Activities also include testing, development, and demonstrations integrating updated and new/emerging sensors into DCGS.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Title: Imagery Processor	7.269	8.658	12.286
Description: Continue to develop the imagery processor to keep pace with growing sensor baseline. ***FY 2014 Accomplishments:*** Continued development of imagery processing capability to keep pace with growing sensor baseline. ***FY 2015 Plans:*** Continuing to develop imagery processing capability to keep pace with growing sensor baseline. Centralizing imagery processing at ingest locations ***FY 2016 Plans:*** Will continue to develop imagery processing capability to keep pace with growing sensor baseline. Will continue centralizing imagery processing at ingest locations.			
Accomplishments/Planned Programs Subtotals	7.269	8.658	12.286

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
• OPAF: BA07: Line Item # 846080: *Support to DCGS Enterprise*	18.471	25.187	25.619	-	25.619	30.114	24.350	24.729	22.038	Continuing	Continuing

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force		Date: February 2015
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305240F / *Support to DCGS Enterprise*	**Project (Number/Name)** 675265 / *Common Imagery Processor (CIP)*

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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force			Date: February 2015
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305240F / *Support to DCGS Enterprise*	Project (Number/Name) 675265 / *Common Imagery Processor (CIP)*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Imagery Processing Software Development	C/CPAF	Various; Various : ,	-	7.071	Mar 2014	8.658	Mar 2015	12.286	Mar 2016	-		12.286	Continuing	Continuing	-
		Subtotal	-	7.071		8.658		12.286		-		12.286	-	-	-

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	-	-		-		-		-		-	-	-	-

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	-	-		-		-		-		-	-	-	-

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
PMA	Various	Various : Various,	-	0.198	Nov 2013	-		-		-		-	-	0.198	-
		Subtotal	-	0.198		-		-		-		-	-	0.198	-

	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	7.269		8.658		12.286		-		12.286	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force		Date: February 2015
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305240F / *Support to DCGS Enterprise*	**Project (Number/Name)** 675265 / *Common Imagery Processor (CIP)*

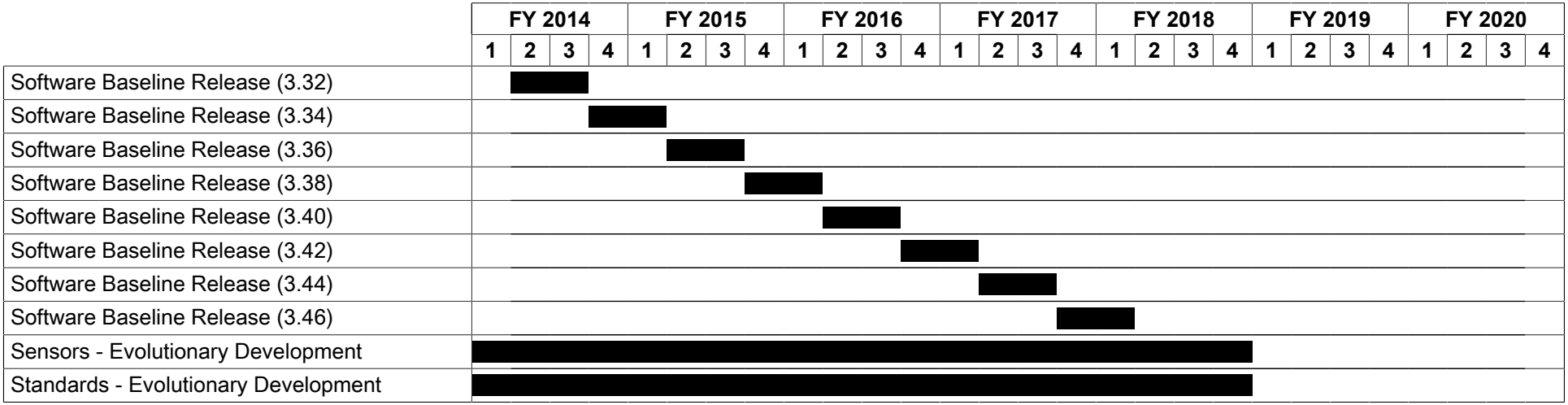

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force		Date: February 2015
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305240F / *Support to DCGS Enterprise*	**Project (Number/Name)** 675265 / *Common Imagery Processor (CIP)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Software Baseline Release (3.32)	2	2014	3	2014
Software Baseline Release (3.34)	4	2014	1	2015
Software Baseline Release (3.36)	2	2015	3	2015
Software Baseline Release (3.38)	4	2015	1	2016
Software Baseline Release (3.40)	2	2016	3	2016
Software Baseline Release (3.42)	4	2016	1	2017
Software Baseline Release (3.44)	2	2017	3	2017
Software Baseline Release (3.46)	4	2017	1	2018
Sensors - Evolutionary Development	1	2014	4	2018
Standards - Evolutionary Development	1	2014	4	2018