Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force											Date: February 2018	
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force* / BA 7: *Operational Systems Development*					R-1 Program Element (Number/Name) PE 0305208F / *Distributed Common Ground/Surface Systems*							
COST ($ in Millions)	**Prior Years**	**FY 2017**	**FY 2018**	**FY 2019 Base**	**FY 2019 OCO**	**FY 2019 Total**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**Cost To Complete**	**Total Cost**
Total Program Element	-	18.898	27.501	24.554	29.500	54.054	25.009	25.443	25.972	26.447	Continuing	Continuing
674826: *Common Imagery Ground / Surface Systems*	-	18.898	27.501	24.554	3.500	28.054	25.009	25.443	25.972	26.447	Continuing	Continuing
675246: *MQ-9 Development and Fielding*	-	0.000	0.000	0.000	26.000	26.000	0.000	0.000	0.000	0.000	Continuing	Continuing

Note

This program, BA 7, PE 0305208F, project 674826, Sensor Integration, is a new start.
This program, BA 7, PE 0305208F, project 675246, Video Data Link, is a new start.

A. Mission Description and Budget Item Justification

Air Force Distributed Common Ground System (AF DCGS) is the Combat Air Force (CAF) weapon system architecture for planning and direction, collection, processing and exploitation, analysis and production, and dissemination (PCPAD) of data from Intelligence, Surveillance, and Reconnaissance (ISR) missions. Since AF DCGS is also a major component of the DoD DCGS, the system is designed to complement and interoperate with the DoD, Army, Navy and Marine Corps DCGS. The AF DCGS mission is to provide Joint Task Force (JTF) Commanders, Air Component Commanders, Unified Commands, and other directed organizations with global, time-sensitive ISR PCPAD across the spectrum of military operations. AF DCGS is a multi-INT network linked weapon system (AN/GSQ-272) capable of exploiting intelligence data from manned platforms, remotely piloted aircraft (RPA), non-traditional ISR platforms, national and commercial satellites, and other collection systems. AF DCGS is designed to support joint operational requirements by providing a common PCPAD means to provide time-sensitive intelligence to field commanders and in support of the Air Operations Center (AOC) mission requirements. Currently, the AF DCGS worldwide architecture is composed of two worldwide core sites, three regional core sites, two remote Air Force Forces (AF FOR) sites, four National Mission Partner (NMP) sites, three support sites, and multiple National Guard Bureau (NGB) sites. Currently, AF DCGS is supporting ongoing operations from forward deployed and in-garrison CONUS and OCONUS based locations. The system employs a concept of data distribution, information sharing and collaborative work centers. AF DCGS provides the national leadership and the warfighter with integrated and interoperable national and airborne reconnaissance by providing quality and fused Signals Intelligence (SIGINT), Measurement and Signature Intelligence (MASINT), and Geospatial Intelligence (GEOINT) tailored to the warfighter for all levels of conflict.

AF DCGS is transforming by integrating the necessary technologies and tools to provide increased capabilities and meet emerging and urgent operational needs. These efforts will also integrate commercial-off-the-shelf and government-off-the-shelf 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, as well as enhance interoperability by migrating to an Open Architecture (OA) to improve data sharing ability per DoD direction.

Program management consists of eight ACAT III efforts: GEOINT (GB 4.1), GEOINT Transformation, Systems Release (SR 3.0), SIGINT Transformation, Sensor Integration, Multi-INT, Network Infrastructure Transformation, and DCGS Reference Imagery Transition (DRT):

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force	Date: February 2018
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force* / BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0305208F / *Distributed Common Ground/Surface Systems*

1. *GB 4.1: The GEOINT Baseline 4.1 (GB4.1) effort completes the Bulk Release process and provides a common baseline across the weapon system. It also integrates Airborne Cuing and Exploitation System, Hyper Spectral ACES-HY (MQ-1) and Global Hawk (GH) Block 40 capability into AF DCGS.
2. GEOINT Transformation: The GEOINT Transformation effort rapidly integrates new capabilities and migrates GEOINT-specific applications & capabilities into the open architecture framework.
3. *SR 3.0: The Systems Release (3.0) effort completes SIGINT Bulk Release process and provides a common baseline across the weapon system. Provides the ability to PCPAD the Airborne Signals Intelligence Payload (ASIP) family of systems and integrates the Common Intelligence Collections System (CICS) capability.
4. SIGINT Transformation: Rapidly integrate new capabilities, leverage mission partner methods and tools, exchange data, and migrate the SIGINT-specific applications/ capabilities into the open architecture framework.
5. *Sensor Integration: The Sensor Integration effort rapidly integrates AF, Joint, & Coalition Sensor data into DCGS Enterprise to ingest data, perform sensor planning, and Command & Control.
6. Multi-INT: Provides and supports Open Architecture (OA)-based Enterprise Services, moves to commodity hardware, a virtual desktop environment, and facilitates enterprise-wide collaborative tools.
7. Network Infrastructure Transformation: The Infrastructure Transformation effort modernizes the AF DCGS infrastructure to improve data ingest, transfer, and storage capabilities while migrating the network toward a cloud architecture.
8.*DRT: The Air Force DCGS Reference Imagery Transition (DRT) effort provides data ingest, transfer, and storage capabilities for NGA reference imagery data.

NOTES:
*For FY19, this effort does not have any associated RDT&E funding. The Other Procurement Air Force (OPAF) funding is exhibited in the Procurement Documentation (WSC846080, DCGS-AF).

B. Program Change Summary ($ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	30.448	27.501	23.170	0.000	23.170
Current President's Budget	18.898	27.501	24.554	29.500	54.054
Total Adjustments	-11.550	0.000	1.384	29.500	30.884
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	-11.550	0.000	1.384	29.500	30.884

Change Summary Explanation

In FY 2017, $11.550M Request for Additional Appropriations was denied in the FY 2017 Appropriations Act.

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force	Date: February 2018
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force* / BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0305208F / *Distributed Common Ground/Surface Systems*

In FY 2019 Base, the AF transferred $2.403M from the Project SUTER effort in PE 0305221F, Network-Centric Collaborative Targeting to PE 0305208F. The AF also transferred $1.019M for the Automatic Target Recognition effort from PE 0305208F to PE 0305206F, Airborne Reconnaissance Systems. These transfers result in the $1.384M aggregate reported on the "Other Adjustment" line.

In FY 2019 OCO, $3.5M add reflects the AF request for OCO funding for the Full Motion Video (FMV) Geo-Coordination (Geo-Coord) Accuracy effort.

Due to a database error, the additional $26M in FY 2019 OCO for "MQ-9 Development and Fielding" (Project 675246) was erroneously placed in PE 0305208F but belongs in PE 0305829F,"Video Data Link". The error will be fixed during the next President's Budget cycle. This effort is a new start and will provide situational awareness (SA) to the operator on the ground using real time Full Motion Video (FMV) from secure line of sight links to airborne ISR and other platforms. The FY19 OCO is for further system development of the Mounted and Airborne Video Data Link (MAVDL). Focus areas will be Mobile Ad-Hoc Networking, updated cryptographic hardware, and improved waveforms for LPI/LPD (Low Probability of Intercept/Low Probability of Detection) operations.

Exhibit R-2A, RDT&E Project Justification: PB 2019 Air Force			Date: February 2018
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305208F / *Distributed Common Ground/Surface Systems*	Project (Number/Name) 674826 / *Common Imagery Ground / Surface Systems*	

COST ($ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
674826: *Common Imagery Ground / Surface Systems*	-	18.898	27.501	24.554	3.500	28.054	25.009	25.443	25.972	26.447	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

This program, BA 7, PE 0305208F, project 674826, Sensor Integration, is a new start.

In FY 2019, PE 0305221F, Network-Centric Collaborative Targeting, Project 675275, SUTER efforts were transferred to PE 0305208F, Distributed Common Ground/ Surface Systems, Project 674826, Common Imagery Ground/Surface Systems, in order to facilitate the development and integration of SUTER as a mission application on Open Architecture (OA) DCGS.

In FY 2019, PE 0305208F, Distributed Common Ground/Surface Systems, Project 674826, Automated Target Recognition (ATR) effort was transferred to PE 0305206F, Airborne Reconnaissance Systems, Project 674818, Imaging and Targeting Support, in order to align funding with like ATR development efforts.

A. Mission Description and Budget Item Justification

Air Force Distributed Common Ground System (AF DCGS) is the Combat Air Force (CAF) weapon system architecture for planning and direction, collection, processing and exploitation, analysis and production, and dissemination (PCPAD) of data from Intelligence, Surveillance, and Reconnaissance (ISR) missions. Since AF DCGS is also a major component of the DoD DCGS, the system is designed to complement and interoperate with the DoD, Army, Navy and Marine Corps DCGS. The AF DCGS mission is to provide Joint Task Force (JTF) Commanders, Air Component Commanders, Unified Commands, and other directed organizations with global, time-sensitive ISR PCPAD across the spectrum of military operations. AF DCGS is a multi-INT network linked weapon system (AN/GSQ-272) capable of exploiting intelligence data from manned platforms, remotely piloted aircraft (RPA), non-traditional ISR platforms, national and commercial satellites, and other collection systems. AF DCGS is designed to support joint operational requirements by providing a common PCPAD means to provide time-sensitive intelligence to field commanders and in support of the Air Operations Center (AOC) mission requirements. Currently, the AF DCGS worldwide architecture is composed of two worldwide core sites, three regional core sites, two remote Air Force Forces (AF FOR) sites, four National Mission Partner (NMP) sites, three support sites, and multiple National Guard Bureau (NGB) sites. Currently, AF DCGS is supporting ongoing operations from forward deployed and in-garrison CONUS and OCONUS based locations. The system employs a concept of data distribution, information sharing and collaborative work centers. AF DCGS provides the national leadership and the warfighter with integrated and interoperable national and airborne reconnaissance by providing quality and fused Signals Intelligence (SIGINT), Measurement and Signature Intelligence (MASINT), and Geospatial Intelligence (GEOINT) tailored to the warfighter for all levels of conflict.

AF DCGS is transforming by integrating the necessary technologies and tools to provide increased capabilities, meet emerging/urgent operational needs, and enable Multi-Domain Awareness. This transformation maximizes the use of commercial-off-the-shelf and government-off-the-shelf upgrades. The next series of upgrades is migrating the Weapon System to an Open Architecture (OA) environment to meet the operational need to rapidly integrate new/improved sensor capabilities, integrate big data and machine learning, as well as enhance interoperability and improve data sharing per DoD direction.

Exhibit R-2A, RDT&E Project Justification: PB 2019 Air Force		Date: February 2018
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305208F / *Distributed Common Ground/Surface Systems*	**Project (Number/Name)** 674826 / *Common Imagery Ground / Surface Systems*

Project SUTER effort being moved from PE 0305221F to PE 0305208F in FY19. SUTER develops concepts, Tactics/Techniques/Procedures (TTPs) and technologies for synchronizing the capabilities of ISR and non-kinetic capabilities in a coordinated fashion with traditional kinetic weapons to prosecute targets connected together or dependent upon some form of communications network.

Program management consists of eight ACAT III efforts: GEOINT (GB 4.1), GEOINT Transformation, Systems Release (SR 3.0), SIGINT Transformation, Sensor Integration, Multi-INT, Network Infrastructure Transformation, and DCGS Reference Imagery Transition (DRT):

1. *GB 4.1: The GEOINT Baseline 4.1 (GB4.1) effort completes the Bulk Release process and provides a common baseline across the weapon system. It also integrates Airborne Cuing and Exploitation System, Hyper Spectral ACES-HY (MQ-1) and Global Hawk (GH) Block 40 capability into AF DCGS.
2. GEOINT Transformation: The GEOINT Transformation effort rapidly integrates new capabilities and migrates GEOINT-specific applications & capabilities into the open architecture framework.
3. *SR 3.0: The Systems Release (3.0) effort completes SIGINT Bulk Release process and provides a common baseline across the weapon system. Provides the ability to PCPAD the Airborne Signals Intelligence Payload (ASIP) family of systems and integrates the Common Intelligence Collections System (CICS) capability.
4. SIGINT Transformation: Rapidly integrates new capabilities, leverages mission partner methods and tools, improves data exchange, and migrates the SIGINT-specific applications/capabilities into the open architecture framework.
5. Sensor Integration: The Sensor Integration effort rapidly integrates AF, Joint, & Coalition Sensor data into DCGS Enterprise to ingest data, perform sensor planning, and Command & Control.
6. Multi-INT: Provides and supports Open Architecture (OA)-based Enterprise Services, moves to commodity hardware and a virtual desktop environment, facilitates enterprise-wide collaborative tools, and integrates SUTER efforts into OA DCGS.
7. Network Infrastructure Transformation: The Infrastructure Transformation effort modernizes the AF DCGS infrastructure to improve data ingest, transfer, and storage capabilities while migrating the network toward a cloud architecture.
8.*DRT: The Air Force DCGS Reference Imagery Transition (DRT) effort provides data ingest, transfer, and storage capabilities for NGA reference imagery data.

NOTES:
*For FY19, this effort does not have any associated RDT&E funding. The Other Procurement Air Force (OPAF) funding is exhibited in the Procurement Documentation (WSC846080, DCGS-AF).

This program element may include necessary civilian pay expenses required to manage, execute, and deliver AF DCGS weapon system capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 0605826F, 0605827F, 0605828F, 0605829F, 0605830F, 0605831F, 0605832F, and 0605898F.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: GEOINT Transformation	0.000	0.000	0.000	3.500	3.500

Exhibit R-2A, RDT&E Project Justification: PB 2019 Air Force		Date: February 2018
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305208F / *Distributed Common Ground/Surface Systems*	**Project (Number/Name)** 674826 / *Common Imagery Ground / Surface Systems*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Description: The GEOINT Transformation effort rapidly integrates new capabilities and migrates GEOINT-specific applications and capabilities into the open architecture framework. Furthermore, GEOINT Transformation provides continuous and incremental improvement to the capability for planning and direction, collection, processing and exploitation, analysis and production, and dissemination (PCPAD) of advanced imagery intelligence. GEOINT Transformation builds upon GB4.1 to integrate new sensors, provide enhanced processing techniques, and provide imagery analysts the advanced capability to exploit, analyze, produce, and disseminate imagery. ***FY 2018 Plans:*** None. ***FY 2019 Base Plans:*** None. ***FY 2019 OCO Plans:*** Will fund the Full Motion Video Geo-Coordinate Accuracy effort. ***FY 2018 to FY 2019 Increase/Decrease Statement:*** Funding increased due to OCO request.					
Title: SIGINT Transformation ***Description:*** The Signal Intelligence (SIGINT) Transformation effort rapidly integrates new capabilities, leverages mission partner methods and tools, improves data exchange, and migrates the SIGINT-specific applications/capabilities into the open architecture framework. The SIGINT Segment provides command and control (C2) of ISR sensors, data processing, and data distribution to the customers in near real time from connected sensors at both core and remote sites. ***FY 2018 Plans:*** Continue to develop and integrate connectivity directly to NSANET, leveraging SIGINT and the SR 3.0 architecture to improve the tactical SIGINT available to the warfighter. ***FY 2019 Base Plans:*** Will continue to develop and integrate connectivity directly to NSANET, leveraging SIGINT and the SR 3.0 architecture to improve the tactical SIGINT available to the warfighter. ***FY 2018 to FY 2019 Increase/Decrease Statement:***	4.330	9.442	11.386	-	11.386

Exhibit R-2A, RDT&E Project Justification: PB 2019 Air Force		Date: February 2018
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305208F / *Distributed Common Ground/Surface Systems*	**Project (Number/Name)** 674826 / *Common Imagery Ground / Surface Systems*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Funding increased due to requirement to accelerate integration with NSANET.					
Title: Sensor Integration ***Description:*** The Sensor Integration effort rapidly integrates AF, Joint, and Coalition Sensor data into the DCGS Enterprise to ingest data, and perform sensor planning and Command and Control. ***FY 2018 Plans:*** None. ***FY 2019 Base Plans:*** Begin integration of RQ-4 Global Hawk Block 40 sensor modification processing, exploitation, and dissemination capabilities into OA DCGS. ***FY 2019 OCO Plans:*** None. ***FY 2018 to FY 2019 Increase/Decrease Statement:*** New start.	0.000	0.000	6.580	0.000	6.580
Title: Multi-INT Transformation ***Description:*** Provides and supports Open Architecture-based Enterprise Services, moves to commodity hardware and a virtual desktop environment, facilitates enterprise-wide collaborative tools, and integrates SUTER capability into Open Architecture DCGS. ***FY 2018 Plans:*** Provide support for all project's test and evaluation activities for the Air Force DCGS weapons system. ***FY 2019 Base Plans:*** Will begin efforts to replace existing legacy communications within the weapon system with the Enterprise Communications Capability (ECC) project and to integrate Real-time analytics into the intel analysts' suite of exploitation tools. ***FY 2019 OCO Plans:*** None ***FY 2018 to FY 2019 Increase/Decrease Statement:***	0.665	0.884	5.413	0.000	5.413

Exhibit R-2A, RDT&E Project Justification: PB 2019 Air Force		Date: February 2018
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305208F / *Distributed Common Ground/Surface Systems*	**Project (Number/Name)** 674826 / *Common Imagery Ground / Surface Systems*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Funding increased due to work on ECC, Real-time analytics and SUTER capabilities.					
Title: Network Infrastructure Transformation	13.903	17.175	1.175	0.000	1.175
Description: The Network Infrastructure Transformation effort modernizes the AF DCGS infrastructure to improve data ingest, transfer, and storage capabilities while migrating the network toward a cloud architecture. A primary task is to replace the Asynchronous Transfer Mode (ATM) capability with a non-ATM based Transport Architecture. ***FY 2018 Plans:*** -Continue modernizing the AF DCGS infrastructure to improve data ingest, transfer, and storage capabilities while migrating the network toward an open architecture. - Continue integration and deployment activities for the AF DCGS Transport Architecture. ***FY 2019 Base Plans:*** -Will continue modernizing the AF DCGS infrastructure to improve data ingest, transfer, and storage capabilities while migrating the network toward an open architecture. -Will continue integration and deployment activities for the AF DCGS Transport Architecture. -Weapon System Trainer effort will incrementally add to the DWST intelligence discipline enterprise level and world-wide positional and team/crew virtual training capabilities. ***FY 2019 OCO Plans:*** None ***FY 2018 to FY 2019 Increase/Decrease Statement:*** Funding decreased due to completion of the RDT&E phase of the Network Enterprise Transformation effort.					
Accomplishments/Planned Programs Subtotals	18.898	27.501	24.554	3.500	28.054

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
• OPAF 04 Line Item, 846080: *DCGS-AF*	174.688	157.130	426.770	-	426.770	128.537	130.886	133.207	135.577	Continuing	Continuing

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2019 Air Force		Date: February 2018
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305208F / *Distributed Common Ground/Surface Systems*	**Project (Number/Name)** 674826 / *Common Imagery Ground / Surface Systems*

D. Acquisition Strategy

The AF DCGS acquisition strategy is to transition the weapon system to an open hardware and software architecture. Also, the strategy leverages approved lean and agile industry practices to increase delivery cycles and incorporates remote installation capabilities to speed up the installation tempo.

Contracting strategy involves a combination of Basic Ordering Agreements (BOAs), Indefinite Delivery/Indefinite Quantity (IDIQ) contracts awarded to execute program funds and delivery/task orders are negotiated/awarded individually.

The program is managed as eight ACAT III efforts: GEOINT (GB 4.1), GEOINT Transformation, Systems Release (SR 3.0), SIGINT Transformation, Sensor Integration, Multi-INT-1, Network Infrastructure Transformation, and DCGS Reference Imagery Transition (DRT).

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 2019 Air Force		Date: February 2018
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305208F / *Distributed Common Ground/Surface Systems*	**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 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
GEOINT Transformation	Various	Various : Various	-	-		-		0.000		3.500	Dec 2018	3.500	Continuing	Continuing	-
SIGINT Transformation	Various	Various : Various	-	4.330	Nov 2016	8.322	Jun 2018	11.386	Jan 2019	-		11.386	Continuing	Continuing	-
Sensor Integration	Various	Various : Various	-	-		-		6.580	May 2019	-		6.580	Continuing	Continuing	-
Network Infrastructure Transformation	Various	Various : Various	-	11.903	Feb 2017	14.900	Jun 2018	1.175	Feb 2019	-		1.175	Continuing	Continuing	-
		Subtotal	-	16.233		23.222		19.141		3.500		22.641	Continuing	Continuing	N/A

Remarks

Note on "various" entries - Contract Method, Contract Type, Performing Activity, Target Value of Contract are entered as "various" because there are multiple projects within each upgrade and depending on the type of effort to be completed determines the contract vehicle to use. There is no way on this document to delineate the contracts that support each upgrade as they are numerous.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Multi-Intelligence	Various	Various : Various	-	0.665	Jan 2017	0.779	Jan 2018	5.413	Jan 2019	-		5.413	Continuing	Continuing	-
		Subtotal	-	0.665		0.779		5.413		-		5.413	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
PMA	Various	Various : Various	-	2.000	Feb 2017	3.500	Nov 2017	-		-		-	Continuing	Continuing	-
		Subtotal	-	2.000		3.500		-		-		-	Continuing	Continuing	N/A

Remarks

Note on "various" entries - Contract Method, Contract Type, Performing Activity, Target Value of Contract are entered as "various" because there are multiple projects within in each upgrade and depending on the type of effort to be completed determines the contract vehicle to use. There is no way on this document to delineate the contracts that support each upgrade as they are numerous.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Air Force			Date: February 2018
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305208F / *Distributed Common Ground/Surface Systems*	Project (Number/Name) 674826 / *Common Imagery Ground / Surface Systems*	

	Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	18.898		27.501		24.554		3.500		28.054	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Air Force		Date: February 2018
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305208F / *Distributed Common Ground/Surface Systems*	**Project (Number/Name)** 674826 / *Common Imagery Ground / Surface Systems*

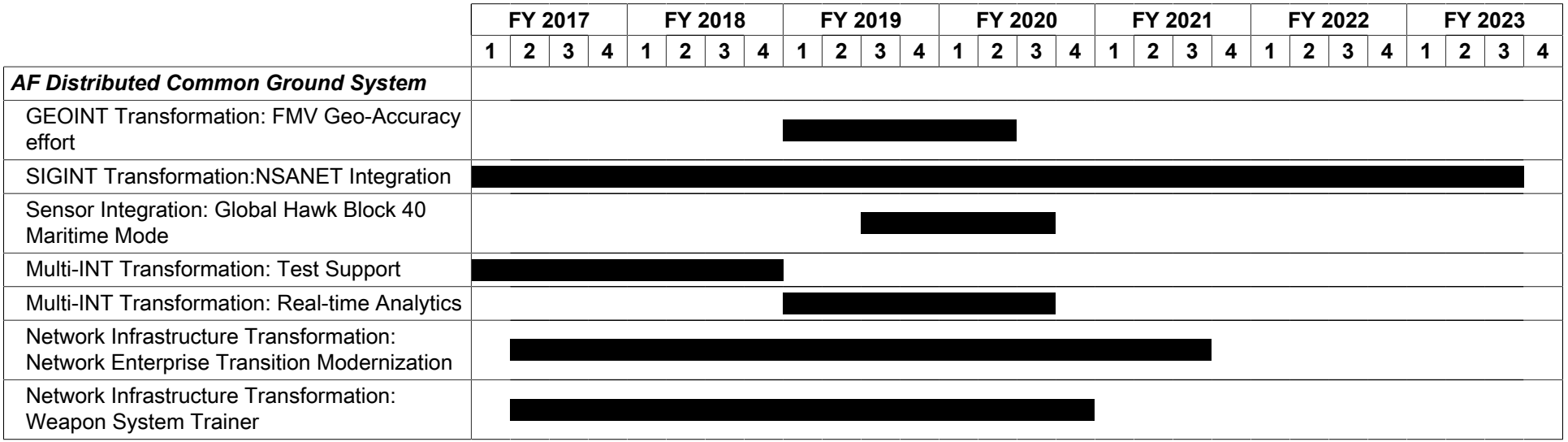

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Air Force		Date: February 2018
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305208F / *Distributed Common Ground/Surface Systems*	**Project (Number/Name)** 674826 / *Common Imagery Ground / Surface Systems*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
AF Distributed Common Ground System				
GEOINT Transformation: FMV Geo-Accuracy effort	1	2019	2	2020
SIGINT Transformation:NSANET Integration	1	2017	3	2023
Sensor Integration: Global Hawk Block 40 Maritime Mode	3	2019	3	2020
Multi-INT Transformation: Test Support	1	2017	4	2018
Multi-INT Transformation: Real-time Analytics	1	2019	3	2020
Network Infrastructure Transformation: Network Enterprise Transition Modernization	2	2017	3	2021
Network Infrastructure Transformation: Weapon System Trainer	2	2017	4	2020

Exhibit R-2A, RDT&E Project Justification: PB 2019 Air Force			Date: February 2018
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305208F / *Distributed Common Ground/Surface Systems*	Project (Number/Name) 675246 / *MQ-9 Development and Fielding*	

COST ($ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
675246: *MQ-9 Development and Fielding*	-	0.000	0.000	0.000	26.000	26.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

This program, BA 7, PE 0305208F, project 675246, Video Data Link, is a new start.

A. Mission Description and Budget Item Justification

Due to a Database Error, the additional $26M in FY19 OCO for "MQ-9 Development and Fielding" (Project 675246) was erroneously added to PE 0305208. This funding belongs in Air Force PE 0305829F,"Video Data Link".

Video Data Link (VDL) Family of Systems (FoS) provides situational awareness (SA) to the operator on the ground using real time Full Motion Video (FMV) from secure line of sight links to airborne ISR, NTISR, PR and SF platforms.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver nuclear weapon support capabilities. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 0605826F, 0605827F, 0605828F, 0605829F, 0605830F, 0605831F, 0605832F, 0605898F, and 0605833F.

BA-7 This program is Budget Activity 7, Operational System Development because this budget activity includes development effort 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: Video Data Link	-	-	0.000	26.000	26.000
Description: Video Data Link (VDL) Family of Systems (FoS) provides situational awareness (SA) to the operator on the ground using real time Full Motion Video (FMV) from secure line of sight links to airborne ISR, NTISR, PR and SF platforms.					
FY 2019 Base Plans: N/A					
FY 2019 OCO Plans:					

Exhibit R-2A, RDT&E Project Justification: PB 2019 Air Force		Date: February 2018
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305208F / *Distributed Common Ground/Surface Systems*	**Project (Number/Name)** 675246 / *MQ-9 Development and Fielding*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
--VDL FoS consists of interoperable Mounted (Airborne/Ground) and Handheld terminal variants. Current variants are utilized with 20 different platforms. --Crypto Core Modernization (CCM) driven by NSA will create an imminent DMS issue by FY21; the current VDL equipment is incompatible with the enhanced Crypto Core. --FY19 OCO - MAVDL system development project will provide technology refresh for Mounted and Airborne Video Data Link. Focus areas will be Mobile Ad-Hoc Networking, updated cryptographic hardware, and improved waveforms for LPI/LPD (Low Probability of Intercept/Low Probability of Detection) operation. ***FY 2018 to FY 2019 Increase/Decrease Statement:*** New Start					
Accomplishments/Planned Programs Subtotals	-	-	0.000	26.000	26.000

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
• OPAF 07 846080: DCGS A-F: *OPAF 04 Line Item*	174.688	157.130	426.770	-	426.770	128.537	130.886	133.207	135.577	Continuing	Continuing

Remarks

D. Acquisition Strategy

The Video Data Link acquisition strategy will be to conduct a competitive acquisition that will involve a CPIF contract vehicle to encourage proposals to integrate the required capability rapidly and within the identified budget.

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 2019 Air Force		Date: February 2018
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305208F / *Distributed Common Ground/Surface Systems*	**Project (Number/Name)** 675246 / *MQ-9 Development and Fielding*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Video Data Link Crypto Core Modernization	TBD	AFMAA/WIS, SOF/ PR & BA : Dayton, OH	-	-		-		0.000		23.000	Mar 2019	23.000	Continuing	Continuing	23.000
		Subtotal	-	-		-		0.000		23.000		23.000	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
PMA	TBD	Not specified. : TBD	-	-		-		0.000		3.000	Nov 2018	3.000	Continuing	Continuing	3.000
		Subtotal	-	-		-		0.000		3.000		3.000	Continuing	Continuing	N/A

	Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	-		0.000		0.000		26.000		26.000	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Air Force		Date: February 2018
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305208F / *Distributed Common Ground/Surface Systems*	**Project (Number/Name)** 675246 / *MQ-9 Development and Fielding*

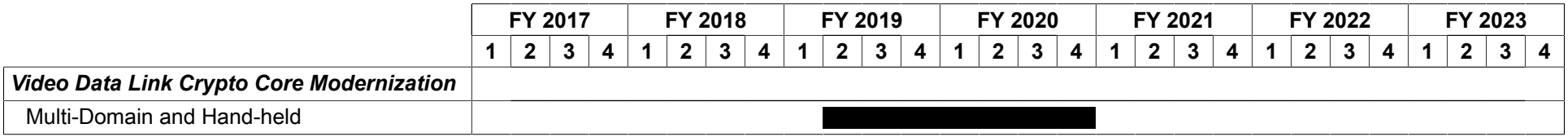

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Air Force		Date: February 2018
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305208F / *Distributed Common Ground/Surface Systems*	**Project (Number/Name)** 675246 / *MQ-9 Development and Fielding*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Video Data Link Crypto Core Modernization				
Multi-Domain and Hand-held	2	2019	4	2020