Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Army											Date: February 2015	
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army* / BA 5: *System Development & Demonstration (SDD)*					R-1 Program Element (Number/Name) PE 0604201A / *Aircraft Avionics*							
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	-	64.396	41.236	12.939	-	12.939	2.210	6.370	6.827	8.096	Continuing	Continuing
C97: *ACFT Avionics*	-	25.353	6.491	1.858	-	1.858	1.444	5.592	6.038	6.108	Continuing	Continuing
VU3: *Networking And Mission Planning*	-	39.043	34.745	11.081	-	11.081	0.766	0.778	0.789	1.988	Continuing	Continuing

Note

FY2014: -$9,659K Below Threshold Reprogramming Actions
FY2015: +$4,000K Multiple Congressional Marks. +$20,000K Degraded Visual Environment UH-60L demonstration; -$15,000K JTRS integration delays; -$1,000K DGNS upgrade forward financing.
FY2016: +$9,270K Aviation Logistics Enterprise-Platform; +$1,811K Aircraft Notebook; -$12K miscellaneous budget reduction.

A. Mission Description and Budget Item Justification

The FY 2016 budget request funds the development of Aircraft Avionics systems required to horizontally and vertically integrate the battlefield and the integration of those systems into Army aircraft. Tasks in this Program Element support research, development, and test efforts in the Engineering and Manufacturing Development phases of these systems.

The Airborne Maritime Fixed - Aviation (AMF-A) is the transformational system that provides Army Aviation interoperability capability for Future Force and Joint Force operations. The AMF-A integration effort provides for the non-recurring engineering required to integrate and qualify the AMF-A certified radios with Link 16 and/or other advanced networking waveforms into the AH-64E and Unmanned Aircraft Systems (UAS). Funding in FY 2016 continues integration activities to install and qualify AMF-A certified networking radios on the AH-64E and Shadow UAS platforms and also supports continued development of common radio control software and qualified airborne AMF-A antennas for use on multiple platforms. The Shadow UAS solution will be incorporated into the Shadow Communications Relay Payload mission equipment package.

The Doppler Global Positioning System Navigation System (DGNS) Upgrade program completes system engineering trade studies to reduce space, weight, and power with the introduction of new navigation support capabilities such as inertial sensor, MIL-STD-1553 interface card, and Instrument Flight Rules map display. It also prepares Engineering Change Proposals (ECP) to the existing DGNS ASN-128D Line Replaceable Units (LRU) as a result of those trade studies. The effort also derives DGNS compliance matrices for current and planned Global Air Traffic Management capabilities for the upcoming decade. The DGNS upgrade continues with execution of Non-Recurring Engineering for Computer Display Unit and Signal Data Converter LRU ECP packages. The ASN-128D CDU Upgrade replaces the current CDU faceplate with a touch screen display, provides a moving navigation map capability and optimized pilot interface to augment existing Instrument Flight Rules capability and promote safer flight operations.

The Aviation Data Exploitation Capability (ADEC) is an Army aviation automated information system program providing specific capabilities needed at the aviation unit level to implement and support improvements within aviation operations, safety, and training to increase operational effectiveness and situational awareness at all

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Army	Date: February 2015
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army I* BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0604201A *I Aircraft Avionics*

command echelons. ADEC provides a common and interoperable capability required to implement the DoD mandated Military Flight Operations Quality Assurance processes. ADEC will standardize flight scheduling/management, risk management, mission approval, and flight data analysis and visualization. ADEC provides interfaces to Centralized Aviation Flight Records System and Aviation Logistics Enterprise- Platform to reduce data entry and the information technology footprint while enabling disconnected and split based operations.

The Aircraft Notebook (ACN) is an Army aviation automated information system program required to streamline the completion of aviation maintenance activities and the documentation required to maintain airworthiness for all Army aircraft. ACN implements The Army Maintenance Management System - Aviation digital logbook functionality and integrates with CAFRS and ALE-P to reduce manual entries and increase data accuracy. ACN reduces the information technology footprint within an aviation unit by integrating multiple software applications such as platform software applications, interactive electronic technical manuals, and condition based maintenance plus tools onto one hardware platform.

The Degraded Visual Environment (DVE) is required to reduce personnel and rotorcraft losses while conducting both tactical and training missions in environments that restrict or severely reduce the aircrew's visibility due to atmospheric obscurants. DVE will improve safety, reduce risk and add flexibility to aviation units by enhancing situational awareness through real-time detection and warning of terrain, obstacles and hazards. DVE will consist of integrated rotorcraft pilotage augmentation systems, sensor(s), software, software related hardware, and pilot to system interfaces and cueing devices. DVE will fuse a synthetic vision avionics backbone with aircraft state data and obscurant penetrating sensor(s) to provide a single rotorcraft capability for ground taxi, hover, takeoff and landing modes of flight.

The Aviation Logistics Enterprise Platform (ALE-P) is the single logistics information system for all of Army aviation and serves as an extension to Global Combat Support System-Army (GCSS-Army). ALE-P replaces the Unit Level Logistics System-Aviation (Enhanced) and the Unmanned Aviation Systems-Initiative systems. ALE-P provides necessary interfaces to GCSS-Army and other enterprise systems at Logistics Support Activity, Aviation and Missile Command, and Program Executive Office Aviation. ALE-P interfaces with the ACN and ADEC at the unit level to maintain continuous airworthiness and aircraft historical records and provides the maintenance/readiness posture to the commander.

B. Program Change Summary ($ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	76.547	37.246	1.870	-	1.870
Current President's Budget	64.396	41.236	12.939	-	12.939
Total Adjustments	-12.151	3.990	11.069	-	11.069
• Congressional General Reductions	-	-0.010			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	4.000			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-9.659	-			
• SBIR/STTR Transfer	-2.492	-			
• Adjustments to Budget Years	-	-	11.069	-	11.069

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604201A / *Aircraft Avionics*	Project (Number/Name) C97 / *ACFT Avionics*	

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
C97: *ACFT Avionics*	-	25.353	6.491	1.858	-	1.858	1.444	5.592	6.038	6.108	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Not applicable for this item.

A. Mission Description and Budget Item Justification

The FY 2016 budget request funds the development of Aircraft Avionics systems required to horizontally and vertically integrate the battlefield and the integration of those systems into Army aircraft. Tasks in this Project support research, development, and test efforts in the Engineering and Manufacturing Development phases of these systems.

The Airborne Maritime Fixed - Aviation (AMF-A) is the transformational system that provides Army Aviation interoperability capability for Future Force and Joint Force operations. The AMF-A integration effort provides for the non-recurring engineering required to integrate and qualify the AMF-A certified radios with Link 16 and/or other advanced networking waveforms into the AH-64E and Unmanned Aircraft Systems (UAS). Funding in FY 2016 continues integration activities to install and qualify AMF-A certified networking radios on the AH-64E and Shadow UAS platforms and also supports continued development of common radio control software and qualified airborne AMF-A antennas for use on multiple platforms. The Shadow UAS solution will be incorporated into the Shadow Communications Relay Payload mission equipment package.

The Doppler Global Positioning System Navigation System (DGNS) Upgrade program completes system engineering trade studies to reduce space, weight, and power with the introduction of new navigation support capabilities such as inertial sensor, MIL-STD-1553 interface card, and Instrument Flight Rules map display. It also prepares Engineering Change Proposals (ECP) to the existing DGNS ASN-128D Line Replaceable Units (LRU) as a result of those trade studies. The effort also derives DGNS compliance matrices for current and planned Global Air Traffic Management (GATM) capabilities for the upcoming decade. The DGNS upgrade continues with execution of Non-Recurring Engineering for Computer Display Unit (CDU) and Signal Data Converter (SDC) LRU ECP packages. The ASN-128D CDU Upgrade replaces the current CDU faceplate with a touch screen display, provides a moving navigation map capability and optimized pilot interface to augment existing Instrument Flight Rules (IFR) capability and promote safer flight operations.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Title: Airborne Maritime Fixed (AMF-A) integration and qualification for Apache AH-64E and UAS platforms.	5.804	3.113	1.858
Description: The AMF-A integration effort provides for the non-recurring engineering required to integrate and qualify the AMF-A compliant radios and/or other advanced networking waveforms into the AH-64E and UAS platforms for both production cut-in and retrofit activities.			
FY 2014 Accomplishments:			

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604201A / *Aircraft Avionics*	**Project (Number/Name)** C97 / *ACFT Avionics*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Initiated AMF-A integration activities on AH-64E for implementation of a networking radio with Soldier Radio Waveform and/ or other advanced networking waveform. Continued Link 16 integration and qualification activities for AH-64E. Continued development of AMF-A antennas and associated co-site analysis tasks. Completed AMF-A Radio Control Software Development. Completed AMF-A integration onto the Shadow platform. ***FY 2015 Plans:*** Continue integration activities to install and qualify AMF-A Link 16 and certified networking radios on the AH-64E. Continue development of qualified airborne AMF-A antennas for use on multiple platforms. ***FY 2016 Plans:*** Continue development of AMF-A antennae and associated Co-Site Analysis tasks.			
Title: Doppler Global Positioning System Navigation System (DGNS) Upgrade ***Description:*** The DGNS Upgrade effort provides for the non-recurring engineering required to develop and qualify new navigation capabilities that meets emerging GATM navigation requirements and promotes safer flight operations. The DGNS Upgrade consists of engineering changes to the CDU and SDC avionics components of the DGNS. The CDU Upgrade replaces the current CDU faceplate with a touch screen display, provides a moving navigation map capability and optimized pilot interface to augment existing IFR capability and promote safer flight operations. The SDC Upgrade replaces the current GPS receiver to support Wide Area Augmentation System and GPS precision approach as well as implementing emerging GATM Area Navigation requirements. ***FY 2014 Accomplishments:*** Initiated CDU Upgrade non-recurring engineering effort with hardware and software development from requirements definition through Critical Design Review. ***FY 2015 Plans:*** Continue CDU Upgrade non-recurring engineering effort with software implementation, hardware fabrication, DGNS system integration, and full airworthiness component level qualification testing.	19.549	3.378	-
Accomplishments/Planned Programs Subtotals	25.353	6.491	1.858

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
• COMMS, NAV Surveillance: *COMMS, NAV Surveillance*	74.613	115.795	82.904	-	82.904	100.638	110.123	107.821	98.238	Continuing	Continuing

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604201A / *Aircraft Avionics*	**Project (Number/Name)** C97 / *ACFT Avionics*

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
• GATM Rotary Wing: *GATM Rotary Wing*	38.310	41.821	33.890	-	33.890	56.500	61.166	60.528	60.865	Continuing	Continuing

Remarks

D. Acquisition Strategy

This project is comprised of multiple systems supporting aircraft avionics. While the detailed acquisition strategy varies from program to program, the general strategy is for each individual program to complete the development and testing efforts in coordination with the aircraft platforms on integration issues, use the various contracts of the aircraft platforms original equipment manufacturers on integration efforts, and utilize the Aviation & Missile Research, Development, and Engineering Center for software development. This requires the use of various contract methods and types to accomplish the aircraft avionics development efforts. All required acquisition program documentation is prepared.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604201A / *Aircraft Avionics*	Project (Number/Name) C97 / *ACFT Avionics*	

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
PM Services (AMF-A)	Reqn	PM AME : Redstone Arsenal, AL	0.600	0.622	Nov 2013	0.654	Oct 2014	0.676	Nov 2015	-		0.676	Continuing	Continuing	Continuing
		Subtotal	0.600	0.622		0.654		0.676		-		0.676	-	-	-

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
AMF-A Common Radio Control Software Development	Various	AMRDEC Software Engineering Directorate : Redstone Arsenal, AL	5.398	2.867	Mar 2014	-		-		-		-	-	8.265	8.265
AMF-A Antenna Development and Co-Site Analysis	C/CPFF	AMRDEC, Prototype Integration Facility : Redstone Arsenal, AL	3.658	0.426	Mar 2014	0.500	Mar 2015	1.182	Mar 2016	-		1.182	Continuing	Continuing	Continuing
AMF-A Shadow Communication Relay Package	C/FFP	AMS : Huntsville, AL	3.356	1.889	Aug 2014	-		-		-		-	-	5.245	9.958
DGNS Upgrade	C/CPFF	BAE Systems : Wayne, NJ	11.091	19.549	Jul 2014	3.378	Mar 2015	-		-		-	-	34.018	-
AMF-A Link-16 and Networking Waveform Integration and Qualification onto AH-64E	SS/CPFF	Boeing : Mesa, AZ	29.989	-		1.959	Mar 2015	-		-		-	-	31.948	-
		Subtotal	53.492	24.731		5.837		1.182		-		1.182	-	-	-

	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	54.092	25.353		6.491		1.858		-		1.858	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604201A / *Aircraft Avionics*	**Project (Number/Name)** C97 / *ACFT Avionics*

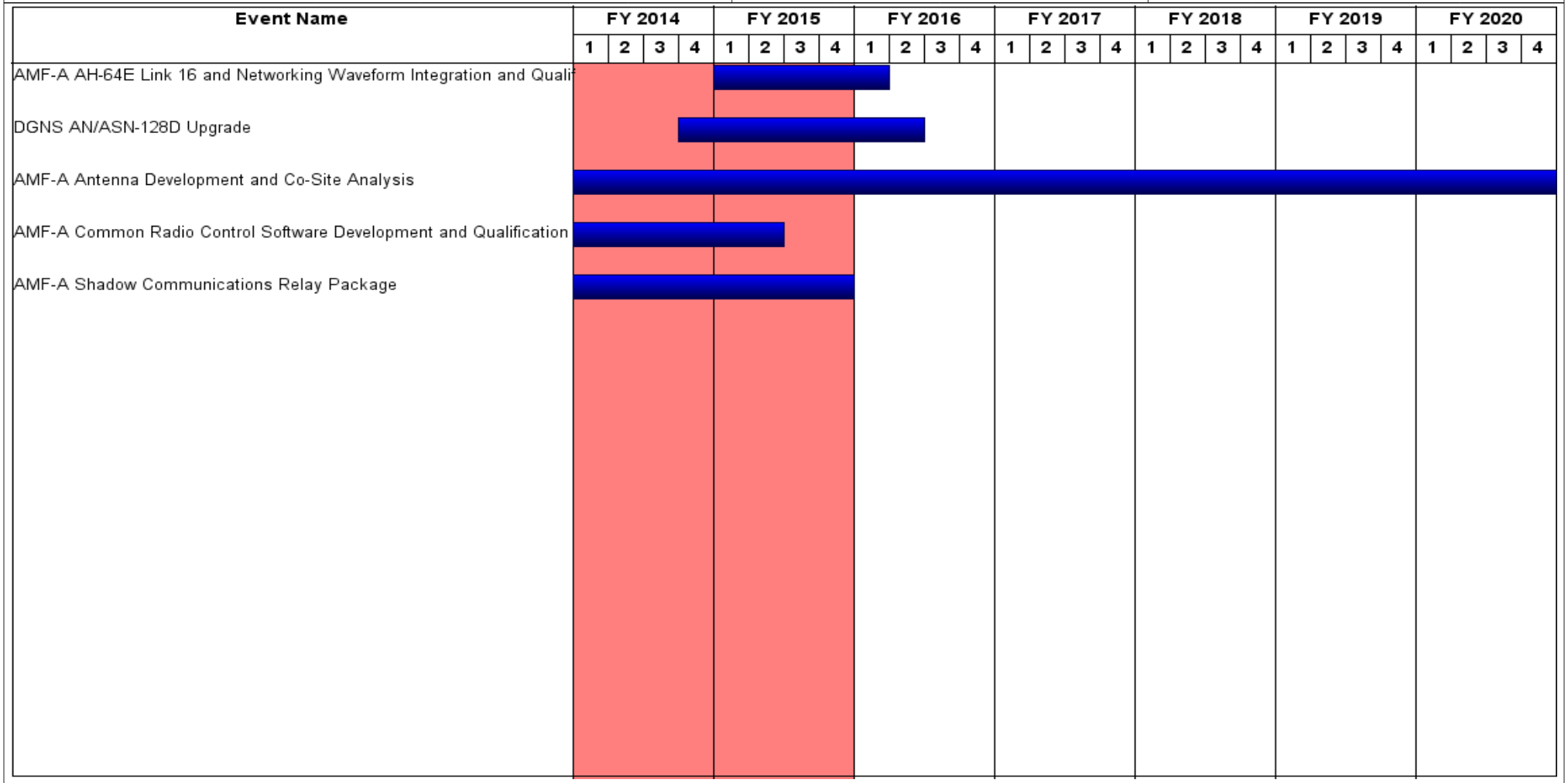

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604201A / *Aircraft Avionics*	**Project (Number/Name)** C97 / *ACFT Avionics*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
AMF-A AH-64E Link 16 and Networking Waveform Integration and Qualification AH-64	1	2015	1	2016
DGNS AN/ASN-128D Upgrade	4	2014	2	2016
AMF-A Antenna Development and Co-Site Analysis	2	2011	2	2022
AMF-A Common Radio Control Software Development and Qualification	1	2011	2	2015
AMF-A Shadow Communications Relay Package	1	2012	4	2015

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army											Date: February 2015	
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604201A / *Aircraft Avionics*				Project (Number/Name) VU3 / *Networking And Mission Planning*			
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**
VU3: *Networking And Mission Planning*	-	39.043	34.745	11.081	-	11.081	0.766	0.778	0.789	1.988	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The FY 2016 budget request funds the development of Networking and Mission Planning systems required to horizontally and vertically integrate the battlefield and the integration of those systems into Army aircraft. Tasks in this Project support research, development, and test efforts in the Engineering and Manufacturing Development (EMD) phases of these systems.

The Aviation Data Exploitation Capability (ADEC) is an Army aviation automated information system program providing specific capabilities needed at the aviation unit level to implement and support improvements within aviation operations, safety, and training to increase operational effectiveness and situational awareness at all command echelons. ADEC provides a common and interoperable capability required to implement the DoD mandated Military Flight Operations Quality Assurance processes. ADEC will standardize flight scheduling/management, risk management, mission approval, and flight data analysis and visualization. ADEC provides interfaces to Centralized Aviation Flight Records System (CAFRS) and Aviation Logistic Enterprise- Platform (ALE-P) to reduce data entry and the information technology footprint while enabling disconnected and split based operations.

The Aircraft Notebook (ACN) is an Army aviation automated information system program required to streamline the completion of aviation maintenance activities and the documentation required to maintain airworthiness for all Army aircraft. ACN implements The Army Maintenance Management System - Aviation (TAMMS-A) digital logbook functionality and integrates with CAFRS and ALE-P to reduce manual entries and increase data accuracy. ACN reduces the information technology footprint within an aviation unit by integrating multiple software applications such as platform software applications, interactive electronic technical manuals, and condition based maintenance plus tools onto one hardware platform.

The Degraded Visual Environment (DVE) is required to reduce personnel and rotorcraft losses while conducting both tactical and training missions in environments that restrict or severely reduce the aircrew's visibility due to atmospheric obscurants. DVE will improve safety, reduce risk and add flexibility to aviation units by enhancing situational awareness through real-time detection and warning of terrain, obstacles and hazards. DVE will consist of integrated rotorcraft pilotage augmentation systems, sensor(s), software, software related hardware, and pilot to system interfaces and cueing devices. DVE will fuse a synthetic vision avionics backbone with aircraft state data and obscurant penetrating sensor(s) to provide a single rotorcraft capability for ground taxi, hover, takeoff and landing modes of flight.

The ALE-P is the single logistics information system for all of Army aviation and serves as an extension to Global Combat Support System-Army (GCSS-Army). ALE-P replaces the Unit Level Logistics System-Aviation (Enhanced) (ULLS-A[E]) and the Unmanned Aviation Systems-Initiative (UAS-I) systems. ALE-P provides necessary interfaces to GCSS-Army and other enterprise systems at Logistics Support Activity (LOGSA), Aviation and Missile Command (AMCOM), and Program Executive Office (PEO) Aviation. ALE-P interfaces with the ACN and ADEC at the unit level to maintain continuous airworthiness and aircraft historical records and provides the maintenance/readiness posture to the commander.

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604201A / *Aircraft Avionics*	**Project (Number/Name)** VU3 / *Networking And Mission Planning*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Title: Aviation Data Exploitation Capability (ADEC) ***Description:*** The ADEC is an Army aviation automated information system program providing specific capabilities needed at the aviation unit level to implement and support improvements within aviation operations, safety, and training to increase operational effectiveness and situational awareness at all command echelons. ADEC provides a common and interoperable capability required to implement the DoD mandated Military Flight Operations Quality Assurance processes. ADEC will standardize flight scheduling/management, risk management, mission approval, and flight data analysis and visualization. ADEC provides interfaces to CAFRS and ALE-P to reduce data entry and information technology footprint while enabling disconnected and split based operations. ***FY 2014 Accomplishments:*** Continued design, development, integration, and testing of the hardware and software needed to realize the ADEC system. Continued the advanced component development of Phase I applications. ***FY 2015 Plans:*** Complete ADEC design, development, integration, and developmental testing of the hardware and software.	9.534	8.950	-
Title: Degraded Visual Environment ***Description:*** The DVE is required to reduce personnel and rotorcraft losses while conducting both tactical and training missions in environments that restrict or severely reduce the aircrew's visibility due to atmospheric obscurants. DVE will improve safety, reduce risk and add flexibility to aviation units by enhancing situational awareness through real-time detection and warning of terrain, obstacles and hazards. DVE will consist of integrated rotorcraft pilotage augmentation systems, sensor(s), software, software related hardware, and pilot to system interfaces and cueing devices. DVE will fuse a synthetic vision avionics backbone with aircraft state data and obscurant penetrating sensor(s) to provide a single rotorcraft capability for ground taxi, hover, takeoff and landing modes of flight. ***FY 2014 Accomplishments:*** Conducted technical design and development of DVE. ***FY 2015 Plans:*** Conduct technical design and development of DVE.	14.000	20.000	-
Title: Aviation Logistics Enterprise-Platform (ALE-P) ***Description:*** The ALE-P is the single logistics information system for all of Army aviation and serves as an extension to GCSS-Army. ALE-P replaces the ULLS-A[E] and the UAS-I systems. ALE-P provides necessary interfaces to GCSS-Army and other enterprise systems at LOGSA, AMCOM, and Program Executive Office (PEO) Aviation. ALE-P interfaces with the ACN and ADEC	6.933	3.815	9.270

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604201A / *Aircraft Avionics*	**Project (Number/Name)** VU3 / *Networking And Mission Planning*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
at the unit level to maintain continuous airworthiness and aircraft historical records and provides the maintenance/readiness posture to the commander. ***FY 2014 Accomplishments:*** Continued development, test, and integration of ALE-P hardware and software and conducted OT&E activities. ***FY 2015 Plans:*** Continue development, test, and integration of ALE-P hardware and software and conduct OT&E activities. ***FY 2016 Plans:*** Complete development, test, and integration of ALE-P hardware and software and OT&E activities.			
Title: Aircraft Notebook (ACN) ***Description:*** The ACN is an Army aviation automated information system program required to streamline the completion of aviation maintenance activities and the documentation required to maintain airworthiness for all Army aircraft. ACN implements TAMMS-A digital logbook functionality and integrates with CAFRS and ALE-P to reduce manual entries and increase data accuracy. ACN reduces the information technology footprint within an aviation unit by integrating multiple software applications such as platform software applications, interactive electronic technical manuals, and condition based maintenance plus tools onto one hardware platform. ***FY 2014 Accomplishments:*** Continued ACN design, development, integration, and testing of the software required to achieve materiel release. ***FY 2015 Plans:*** Continue development and integration of ACN hardware and software and Operational Test and Evaluation activities. ***FY 2016 Plans:*** Complete development and integration of ACN hardware and software and Operational Test and Evaluation activities.	8.576	1.980	1.811
Accomplishments/Planned Programs Subtotals	39.043	34.745	11.081

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
• Network and Mission Plan: *Network and Mission Plan*	59.326	105.380	112.807	-	112.807	102.378	137.596	143.529	146.959	Continuing	Continuing

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604201A / *Aircraft Avionics*	**Project (Number/Name)** VU3 / *Networking And Mission Planning*

D. Acquisition Strategy

This project is comprised of multiple systems supporting aircraft avionics. While the detailed acquisition strategy varies from program to program, the general strategy is for each individual program to complete the development and testing efforts in coordination with the aircraft platforms on integration issues, use the various contracts of the aircraft platforms original equipment manufacturers on integration efforts, and utilize the Aviation & Missile Research, Development, and Engineering Center for software development. This requires the use of various contract methods and types to accomplish the aircraft avionics development efforts. All required acquisition program documentation is prepared.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army			Date: February 2015
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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
PM Support (ADEC)	Various	AMCOM : Redstone Arsenal, AL	0.062	2.272	Oct 2013	1.712	Jan 2015	-		-		-	-	4.046	-
PM Support (ACN)	Various	AMCOM : Redstone Arsenal, AL	1.799	1.223	Oct 2013	0.380	Feb 2015	0.439	Oct 2015	-		0.439	-	3.841	-
PM Support (ALE-P)	Various	AMCOM : Redstone Arsenal, AL	0.000	0.705	May 2015	0.991	Sep 2015	1.548	May 2016	-		1.548	-	3.244	-
PM Support (DVE)	Various	AMCOM : Redstone Arsenal, AL	1.396	0.800	May 2015	0.800	Sep 2015	-		-		-	-	2.996	-
		Subtotal	3.257	5.000		3.883		1.987		-		1.987	-	14.127	-

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
Qualify ADEC software and hardware	Various	Various : Various	1.546	5.200	Apr 2014	4.603	Apr 2015	-		-		-	-	11.349	-
Qualify ACN software and hardware	TBD	Various : Various	1.078	5.857	Jul 2014	0.360	Mar 2015	1.006	Mar 2016	-		1.006	-	8.301	-
Develop and qualify the software and hardware for ALE-P.	Various	Various : Various	3.272	4.647	May 2015	2.785	Sep 2015	5.101	Feb 2016	-		5.101	-	15.805	-
Develop and qualify the software and hardware for DVE	TBD	Various : Various	0.000	6.720	Jun 2015	9.600	Sep 2015	-		-		-	Continuing	Continuing	Continuing
		Subtotal	5.896	22.424		17.348		6.107		-		6.107	-	-	-

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, Logistics, and Technical Support (ADEC)	Various	Various : Various	0.144	0.491	Feb 2014	0.558	Feb 2015	-		-		-	-	1.193	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604201A / *Aircraft Avionics*	Project (Number/Name) VU3 / *Networking And Mission Planning*	

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, Logistics, and Technical Support (ACN)	Various	Various : Various	0.206	0.129	Feb 2014	0.285	Mar 2015	0.151	Mar 2016	-		0.151	-	0.771	-
System Engineering, Logistics, and Technical Support (ALE-P)	Various	Various : Various	0.000	1.387	May 2015	0.039	Sep 2015	0.836	Feb 2016	-		0.836	-	2.262	-
System Engineering, Logistics, and Technical Support (DVE)	Various	Various : Various	0.000	2.000	May 2014	2.857	Sep 2015	-		-		-	-	4.857	-
		Subtotal	0.350	4.007		3.739		0.987		-		0.987	-	9.083	-

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
ADEC	Various	AMCOM : Redstone Arsenal, AL	0.309	1.571	Feb 2014	2.077	Feb 2015	-		-		-	-	3.957	-
ACN	TBD	AMCOM : Redstone Arsenal, AL	2.056	1.367	Apr 2014	0.955	Mar 2015	0.215	Mar 2016	-		0.215	-	4.593	-
ALE-P	TBD	AMCOM : Redstone Arsenal, AL	0.000	0.194	May 2015	-		1.785	Feb 2016	-		1.785	-	1.979	-
DVE	TBD	TBD : TBD	0.000	4.480	May 2015	6.743	Sep 2015	-		-		-	-	11.223	-
		Subtotal	2.365	7.612		9.775		2.000		-		2.000	-	21.752	-

	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	11.868	39.043		34.745		11.081		-		11.081	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604201A / *Aircraft Avionics*	**Project (Number/Name)** VU3 / *Networking And Mission Planning*

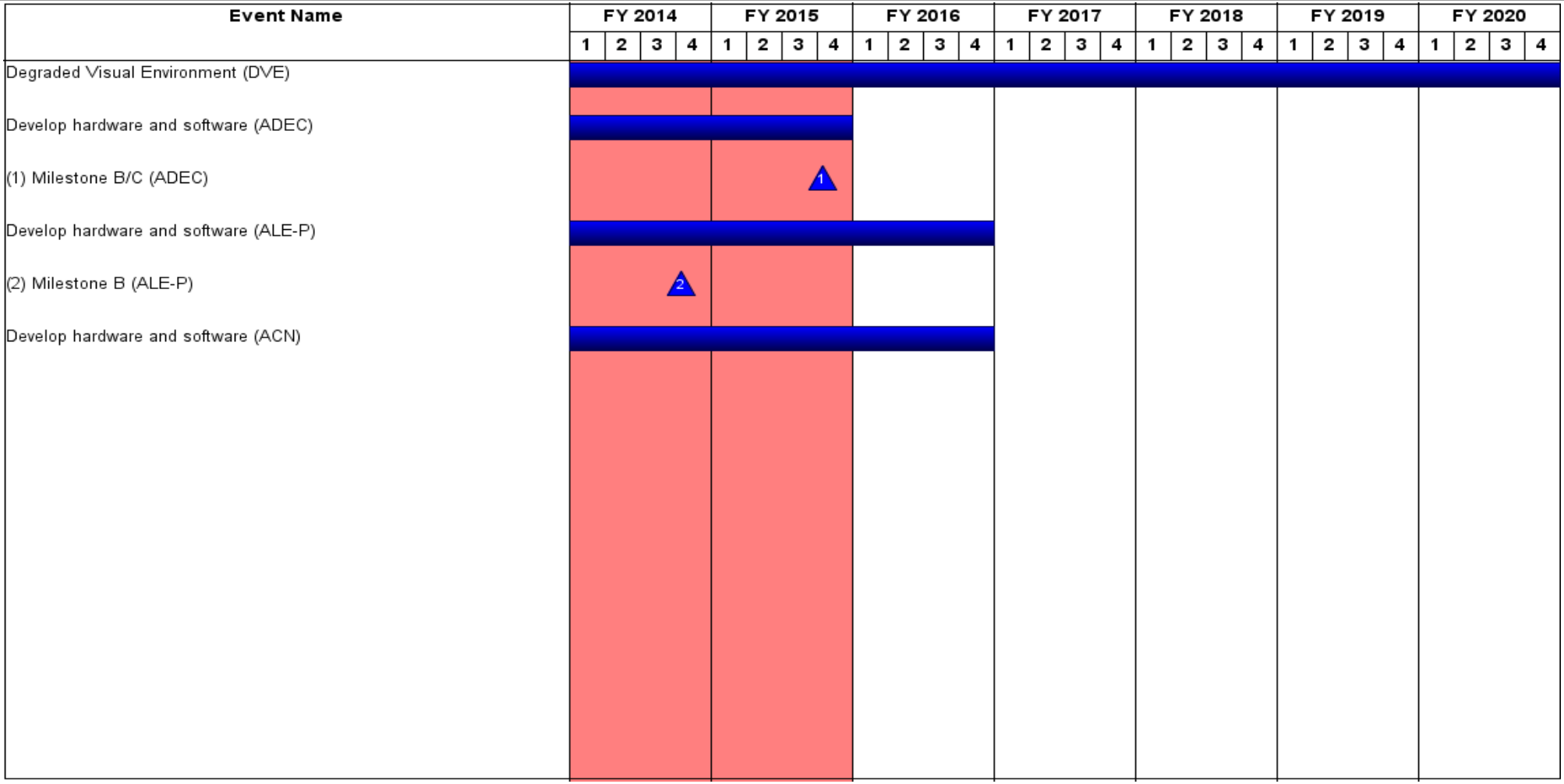

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity 2040 / 5	**R-1 Program Element (Number/Name)** PE 0604201A / *Aircraft Avionics*	**Project (Number/Name)** VU3 / *Networking And Mission Planning*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Degraded Visual Environment (DVE)	4	2011	4	2020
Develop hardware and software (ADEC)	2	2011	4	2015
Milestone B/C (ADEC)	4	2015	4	2015
Develop hardware and software (ALE-P)	2	2013	4	2016
Milestone B (ALE-P)	4	2014	1	2017
Develop hardware and software (ACN)	1	2012	4	2016