Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Army											Date: February 2015	
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army* / BA 6: *RDT&E Management Support*					R-1 Program Element (Number/Name) PE 0605606A / *Aircraft Certification*							
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	-	5.953	4.700	4.760	-	4.760	4.854	4.852	4.022	6.536	-	-
092: *Aircraft Certification*	-	5.953	4.700	4.760	-	4.760	4.854	4.852	4.022	6.536	-	-

A. Mission Description and Budget Item Justification

The Airworthiness Certification program ensures safe flight operation of Army aircraft and aviation systems by means of technical design approval and qualification of systems to appropriate airworthiness standards. It provides independent airworthiness qualification for all assigned developmental and in-production Army aircraft, both manned and unmanned, as required by AR 70-62, and is essential for ensuring the safe operation of Army aircraft. This program performs all engineering functions (design, analysis, testing, demonstrations, and system specification compliance) essential for certifying the airworthiness of assigned Army aircraft, to include performing safety-of-flight investigations/assessments, evaluating system risks, developing Airworthiness Impact Statements, developing Airworthiness Releases, and evaluating Safety of Flight Messages and Aviation Safety Action Messages for new and upgraded aircraft systems. This program also provides management/execution of the Army's Aeronautical Design Standards (ADS) program; management/execution of airworthiness approval for new systems and materiel changes for all assigned Army aircraft systems; airworthiness engineering support to the Program Executive Office for Aviation (PEO AVN) and the Technology Applications Program Office (TAPO, the Army's Special Operations Aircraft program office) in developing requirements for major development/modification and for any future systems/subsystems; and management of the test and evaluation process in support of the airworthiness qualification process. The Airworthiness Certification program also performs general research and development in support of aircraft qualification and overarching airworthiness projects that involve multiple aircraft models. Current ongoing programs requiring airworthiness qualification are PEO Aviation and TAPO Future Force systems including Longbow Apache E-model; Chinook F-model; Blackhawk M-model and; Special Operations MH-47G and MH-60M; Light Utility Helicopter; Gray Eagle unmanned aircraft system (UAS); Enhanced Multi-sensor Airborne Reconnaissance and Sensor System (EMARSS); and modified Shadow UAS. Additionally the Airworthiness Certification program supports application of other critical aviation subsystems onto Army aircraft, including Aircraft Survivability Equipment (e.g. Advanced Threat Infrared Countermeasures (ATIRCM), Common Missile Warning System (CMWS), Aviation Mission Equipment (e.g. advanced multiband avionics and Tactical Radio Systems and digital data links), Common Sensor (electro-optical multi-spectrum visual sensor), and Blue Force Tracker. The D092 funding profile partially funds the airworthiness certification program and therefore the effort will be limited to resourcing military use civil derivative aircraft technical qualification through the Federal Aviation Administration's Military Certification Office; development of airworthiness procedures, specifications, critical standards, and other design and qualification documents; participation in senior leadership mandated airworthiness tri-service activities (e.g. National Airworthiness Council, Joint Aeronautical Commanders Group) and international airworthiness related activities mandated by treaty (e.g. Flight Into Non-segregated Airspace (FINAS); and limited early airworthiness involvement in Technology Transition projects (e.g. Joint Multi Role (JMR) Technology Demonstrator and Future Vertical Lift aircraft) and other OSD initiatives.

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Army					Date: February 2015
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army* / BA 6: *RDT&E Management Support*		R-1 Program Element (Number/Name) PE 0605606A / *Aircraft Certification*			
B. Program Change Summary ($ in Millions)	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016 Total**
Previous President's Budget	6.022	4.700	4.794	-	4.794
Current President's Budget	5.953	4.700	4.760	-	4.760
Total Adjustments	-0.069	-	-0.034	-	-0.034
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.069	-			
• Adjustments to Budget Years	-	-	-0.034	-	-0.034

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity 2040 / 6	R-1 Program Element (Number/Name) PE 0605606A / *Aircraft Certification*	Project (Number/Name) 092 / *Aircraft Certification*	

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
092: *Aircraft Certification*	-	5.953	4.700	4.760	-	4.760	4.854	4.852	4.022	6.536	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Airworthiness Certification program ensures safe flight operation of Army aircraft and aviation systems by means of technical design approval and qualification of systems to appropriate airworthiness standards. It provides independent airworthiness qualification for all assigned developmental and in-production Army aircraft, both manned and unmanned, as required by AR 70-62, and is essential for ensuring the safe operation of Army aircraft. This program, when fully funded, performs all engineering functions (design, analysis, testing, demonstrations, and system specification compliance) essential for certifying the airworthiness of assigned Army aircraft, to include performing safety-of-flight investigations/assessments, evaluating system risks, developing Airworthiness Impact Statements, developing Airworthiness Releases, and evaluating Safety of Flight Messages and Aviation Safety Action Messages for new and upgraded aircraft systems. This program also provides management/execution of the Army's Aeronautical Design Standards (ADS) program; management/execution of airworthiness approval for new systems and materiel changes for all assigned Army aircraft systems; airworthiness engineering support to the Program Executive Office for Aviation (PEO AVN) and the Technology Applications Program Office (TAPO, the Army's Special Operations Aircraft program office) in developing requirements for major development/modification and for any future systems/subsystems; and management of the test and evaluation process in support of the airworthiness qualification process. The Airworthiness Certification program also performs general research and development in support of aircraft qualification and overarching airworthiness projects that involve multiple aircraft models. Current ongoing programs requiring airworthiness qualification are PEO Aviation and TAPO Future Force systems including Longbow Apache E-model; Chinook F-model; Blackhawk M-model and; Special Operations MH-47G and MH-60M; Light Utility Helicopter; Gray Eagle unmanned aircraft system (UAS); Enhanced Multi-sensor Airborne Reconnaissance and Sensor System (EMARSS); and modified Shadow UAS. Additionally the Airworthiness Certification program supports application of other critical aviation subsystems onto Army aircraft, including Aircraft Survivability Equipment (e.g. Advanced Threat Infrared Countermeasures (ATIRCM), Common Missile Warning System (CMWS), Aviation Mission Equipment (e.g. advanced multiband avionics and Tactical Radio Systems and digital data links), Common Sensor (electro-optical multi-spectrum visual sensor), and Blue Force Tracker. The D092 funding profile partially funds the airworthiness certification program and therefore the effort will be limited to resourcing military use civil derivative aircraft technical qualification through the Federal Aviation Administration's Military Certification Office; development of airworthiness procedures, specifications, critical standards, and other design and qualification documents; participation in senior leadership mandated airworthiness tri-service activities (e.g. National Airworthiness Council, Joint Aeronautical Commanders Group) and international airworthiness related activities mandated by treaty (e.g. Flight Into Non-segregated Airspace (FINAS); and limited early airworthiness involvement in Technology Transition projects (e.g. Joint Multi Role (JMR) Technology Demonstrator and Future Vertical Lift aircraft) and other OSD initiatives.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Title: Certification Assessments and Studies Force Modernization Aircraft	0.048	0.040	0.044
Description: Perform assessments and studies in support of Force Modernization Aircraft Systems			
FY 2014 Accomplishments:			

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity 2040 / 6	**R-1 Program Element (Number/Name)** PE 0605606A / *Aircraft Certification*	**Project (Number/Name)** 092 / *Aircraft Certification*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Conducted technical and airworthiness qualification assessments and studies to demonstrate airworthiness and system performance for Army force modernization aircraft systems or multi-system programs (e.g. AH-64E, UH-60M, MH-47G, MH-60M, AAS, etc). ***FY 2015 Plans:*** Conduct technical and airworthiness qualification assessments and studies to demonstrate airworthiness and system performance for Army force modernization aircraft systems or multi-system programs (e.g. AH-64E, UH-60M, MH-47G, MH-60M, etc). ***FY 2016 Plans:*** Will conduct technical and airworthiness qualification assessments and studies to demonstrate airworthiness and system performance for Army force modernization aircraft systems or multi-system programs (e.g. AH-64E, UH-60M, MH-47G, MH-60M, etc).			
Title: Certification Requirements and Studies for Future Aircraft ***Description:*** Perform studies to support airworthiness certification requirements for Future Aircraft Systems ***FY 2014 Accomplishments:*** Conducted studies of Airworthiness Certification requirements for future aircraft systems and other technology transition programs (e.g. Joint Multi-Role Technology Demonstrator, Versatile Affordable Advanced Turbine Engine Program) ***FY 2015 Plans:*** Conduct studies of Airworthiness Certification requirements for future aircraft systems and other technology transition programs (e.g. Joint Multi-Role Technology Demonstrator Aircraft, Future Vertical Lift Aircraft, Improved Turbine Engine Program) ***FY 2016 Plans:*** Will conduct studies of Airworthiness Certification requirements for future aircraft systems and other technology transition programs (e.g. Joint Multi-Role Technology Demonstrator Aircraft, Future Vertical Lift Aircraft, Improved Turbine Engine Program)	0.960	0.603	0.617
Title: Design Standards ***Description:*** Support the development, implementation and maintenance to support Army Aeronautical Design Standards, airworthiness procedures and tools, and overarching Airworthiness qualification documentation. ***FY 2014 Accomplishments:*** Developed, implemented, and maintained Army Aeronautical Design Standards, airworthiness procedures and tools, and overarching airworthiness qualification documentation. ***FY 2015 Plans:***	2.967	2.632	2.626

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity 2040 / 6	**R-1 Program Element (Number/Name)** PE 0605606A / *Aircraft Certification*	**Project (Number/Name)** 092 / *Aircraft Certification*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Develop, implement, and maintain Army Aeronautical Design Standards, airworthiness procedures and tools, and overarching airworthiness qualification documentation. ***FY 2016 Plans:*** Will develop, implement, and maintain Army Aeronautical Design Standards, airworthiness procedures and tools, and overarching airworthiness qualification documentation.			
Title: Certification Assessments of Technology Upgrades ***Description:*** Perform certification assessments of technology upgrades. ***FY 2014 Accomplishments:*** Conducted technical and airworthiness certification assessments of technology upgrades to Army force modernization aircraft systems or programs (e.g. Advanced Threat Infrared Countermeasures integration, Common Missile Warning System integration, Common Sensor integration). ***FY 2015 Plans:*** Conduct technical and airworthiness certification assessments of technology upgrades to Army force modernization aircraft systems or programs (e.g. Advanced Threat Infrared Countermeasures integration, Common Missile Warning System integration, Common Sensor integration). ***FY 2016 Plans:*** Will conduct technical and airworthiness certification assessments of technology upgrades to Army force modernization aircraft systems or programs (e.g. Advanced Threat Infrared Countermeasures integration, Common Missile Warning System integration, Common Sensor integration).	0.048	0.040	0.043
Title: Commercial Derivative Aircraft ***Description:*** Technical and airworthiness qualification for Commercial Derivative Aircraft ***FY 2014 Accomplishments:*** Provided technical and airworthiness qualification for Commercial Derivative Aircraft through the Federal Aviation Administration. ***FY 2015 Plans:*** Povide technical and airworthiness qualification for Commercial Derivative Aircraft through the Federal Aviation Administration. ***FY 2016 Plans:*** Will provide technical and airworthiness qualification for Commercial Derivative Aircraft through the Federal Aviation Administration.	0.545	0.420	0.430
Title: Technology Advancement	1.385	0.965	1.000

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity 2040 / 6	**R-1 Program Element (Number/Name)** PE 0605606A / *Aircraft Certification*	**Project (Number/Name)** 092 / *Aircraft Certification*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Description: Support efforts to establish and maintain aircraft safety for a fleet of aircraft. ***FY 2014 Accomplishments:*** Led and participated in national and international airworthiness certification committees, conferences and working groups responsible for establishing and maintaining aircraft safety for a fleet of aircraft (e.g. National Airworthiness Council, Joint Aviation Commanders Group, Joint Council on Aging Aircraft, Joint Propulsion Coordinating Committee, North Atlantic Treaty Organization (NATO) working groups, Air and Space Interoperability Council (ASIC) Working Groups, Global Air Traffic Management working groups). ***FY 2015 Plans:*** Lead and participate in national and international airworthiness certification committees, conferences and working groups responsible for establishing and maintaining aircraft safety for a fleet of aircraft (e.g. National Airworthiness Council, Joint Aeronautical Commanders Group, Joint Propulsion Coordinating Committee, North Atlantic Treaty Organization (NATO) Airworthiness working groups, Air and Space Interoperability Council (ASIC) Airworthiness Working Groups, Global Air Traffic Management working groups). ***FY 2016 Plans:*** Will lead and participate in national and international airworthiness certification committees, conferences and working groups responsible for establishing and maintaining aircraft safety for a fleet of aircraft (e.g. National Airworthiness Council, Joint Aeronautical Commanders Group, Joint Propulsion Coordinating Committee, North Atlantic Treaty Organization (NATO) Airworthiness working groups, Air and Space Interoperability Council (ASIC) Airworthiness Working Groups, Global Air Traffic Management working groups).			
Accomplishments/Planned Programs Subtotals	5.953	4.700	4.760

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A