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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Office of the Secretary Of Defense **Date:** February 2015

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0604400D8Z I <i>Unmanned Systems Common Development</i>
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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	35.394	7.977	7.791	3.129	-	3.129	3.486	3.992	3.847	3.899	Continuing	Continuing
P440: <i>UAS Airspace Integration</i>	20.938	3.675	6.599	2.103	-	2.103	2.357	2.652	2.590	2.596	Continuing	Continuing
P442: <i>Interoperability</i>	13.737	4.130	1.022	0.859	-	0.859	0.900	1.100	1.000	1.033	Continuing	Continuing
P443: <i>Unmanned Systems Roadmap</i>	0.719	0.172	0.170	0.167	-	0.167	0.229	0.240	0.257	0.270	Continuing	Continuing

Note

PE 0305220F: RQ-4 UAV (Global Hawk) contains funding for the Common-ABSAA development.
 PE 0305219A: MQ-1 Gray Eagle UAV contains additional funding for GBSAA development.
 PE 0305220N: RQ-4 UAV (MQ-4 Triton) contains funding for an initial common RQ/MQ-4 ABSAA capability via a Pilot In The Loop (PITL) Due Regard system.
 The FY2014 President's Budget transferred \$83.169M (FYDP) to the above UAS programs' PEs.

A. Mission Description and Budget Item Justification

The Department of Defense (DoD) Unmanned Systems Common Development program is a joint effort to develop and demonstrate common standards, architectures, and technologies that address unmanned systems' issues across all Military Services. The intent is to increase interoperability and effectiveness by promoting cooperative development of solutions that are applicable across all unmanned systems. This effort will initially focus on addressing DoD unmanned aircraft system (UAS) integration into the National Airspace System (NAS) and a demonstration of a common, interoperable ground station architecture and associated interface standards. While UAS initially will be the primary focus, interoperability among all unmanned and manned systems is the long-term goal.

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	8.263	3.702	3.150	-	3.150
Current President's Budget	7.977	7.791	3.129	-	3.129
Total Adjustments	-0.286	4.089	-0.021	-	-0.021
• Congressional General Reductions	-	-0.011			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	4.100			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.037	-			
• SBIR/STTR Transfer	-0.249	-			
• FY 2016 Baseline Adjustment	-	-	-0.021	-	-0.021

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Office of the Secretary Of Defense **Date:** February 2015

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604400D8Z / <i>Unmanned Systems Common Development</i>	Project (Number/Name) P440 / <i>UAS Airspace Integration</i>
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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
P440: <i>UAS Airspace Integration</i>	20.938	3.675	6.599	2.103	-	2.103	2.357	2.652	2.590	2.596	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Airborne Sense-and-Avoid (ABSAA) and Ground Based Sense-and-Avoid (GBSAA) technology development transitioned to UAS programs of record during FY2013.

A. Mission Description and Budget Item Justification

Global Hawk and Triton, as well as other Group 3-5 UAS, need a sense-and-avoid (SAA) capability as an alternate means of compliance to Title 14 Code of Federal Regulations, Part 91.111 and Part 91.113, requirement to see-and-avoid other aircraft. The Air Force is leading the effort to develop an ABSAA system that is suitable to support operations within US and foreign national airspace. The RQ-4 Global Hawk, MQ-4C Triton, MQ-1B Predator, MQ-1C Gray Eagle, and MQ-9 Reaper all have a requirement for SAA capability and will leverage the technology being developed by the Air Force. The Army is leading the development of a GBSAA system using existing technology to provide a near-term solution for improved airspace access, both for terminal operations and for operations/training within the GBSAA system's coverage area (e.g., Gray Eagle at El Mirage, Shadow operations at Cherry Point).

This joint funding also supports development of common operating concepts, standards, modeling and simulation, and technology to enable DoD UAS to routinely access the national and international airspace systems.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2014	FY 2015	FY 2016
Title: Unmanned Aircraft System Airspace Integration Initiatives	3.675	6.599	2.103
Description: Starting in FY 2010 the Department's sense-and-avoid (SAA) developmental efforts are enhanced by this defense-wide program element. This program provides joint funding to accelerate the development of SAA technology and standards to enable UAS to routinely access the national and international airspace systems. This program also develops UAS airspace integration requirements and standards, as well as supports the modeling, simulation, and operational analysis needed to validate the systems and standards. In FY 2013 ABSAA and GBSAA efforts transitioned to the Services.			
FY 2014 Accomplishments: Standards Development - Continued the update of MIL-HDBK-516 for airworthiness criteria, standards, and methods of compliance for both fixed and rotary wing UAS, and SAA systems. Leveraged Probabilistic Risk Assessment (PRA) and Markov Decision Process (MDP) methodologies to better understand SAA system conflict mitigation strategies to support the development of a safety case for integrating UAS in the NAS. Completed and published an update to the UAS Airspace Integration CONOPS. Researched and facilitated a DoD-wide exemption to 14 CFR 91.113 to enable specified DoD UAS operations in the NAS. Conducted operational analysis to assist DoD in overcoming UAS AI challenges.			

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Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604400D8Z / <i>Unmanned Systems Common Development</i>	Project (Number/Name) P440 / <i>UAS Airspace Integration</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2014	FY 2015	FY 2016
<p>Modeling & Simulation (M&S) - Supported analysis of modeling and simulation requirements to address high priority research gaps, as identified by the SAA Science and Research Panel (SARP).</p> <p>FY 2015 Plans: Standards Development - Complete and publish the update of MIL-HDBK-516 for airworthiness criteria, standards, and methods of compliance for both fixed and rotary wing UAS and SAA integrated in these aircraft systems. Continue work to define airworthiness requirements for small UAS (Groups 1-3). Continue ongoing analysis of UAS Airspace Integration safety case development issues in order to facilitate expanded UAS access to the NAS. Conduct analysis to address high priority safety gaps as identified by the SARP. Expand scope of the SARP to include additional UAS integration issues relevant to DoD. Coordinate system requirements and safety guidelines within appropriate standards development organizations. Conduct operational analysis to assist DoD in overcoming UAS AI challenges. Work with the FAA to update DoD/FAA Memorandum of Agreement (MOA) as related to current FAA guidelines regarding UAS operations in DoD managed airspace.</p> <p>Modeling & Simulation (M&S) - Support analysis of modeling and simulation requirements to address high priority research gaps, as identified by the SARP. Continue to support Joint Test programs related to UAS operations in US airspace.</p> <p>Funding includes a FY 2015 Congressional Add of \$4.089 million.</p> <p>FY 2016 Plans: Standards Development – Complete updates to and implement DoD/FAA MOA. Work with OUSD(Policy) and Joint Staff to implement findings from Joint Test of UAS operation in US airspace. Complete small UAS Groups 1-3 airworthiness requirements work and provide document to DOD and OSD for possible annex to MIL-HDBK-516C (TBD). Complete survey and analysis of UAS CONUS operating locations and airspace requirements. Continue to identify and address research gaps as identified by the SARP.</p>			
Accomplishments/Planned Programs Subtotals	3.675	6.599	2.103

C. Other Program Funding Summary (\$ in Millions)
N/A

Remarks

D. Acquisition Strategy
N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Office of the Secretary Of Defense		Date: February 2015
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604400D8Z / <i>Unmanned Systems Common Development</i>	Project (Number/Name) P440 / <i>UAS Airspace Integration</i>

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Office of the Secretary Of Defense **Date:** February 2015

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604400D8Z / <i>Unmanned Systems Common Development</i>	Project (Number/Name) P440 / <i>UAS Airspace Integration</i>
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Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Airworthiness	Various	AED/AFMLCC/ NAVAIR : AL/OH/MD	-	0.366		0.200		-		-		-	-	-	-
Subtotal			-	0.366		0.200		-		-		-	-	-	-

Remarks
Airborne Sense-and-Avoid (ABSAA) and Ground Based Sense-and-Avoid (GBSAA) technology development transitioned to UAS programs of record during FY2013. The majority of the "Prior Year" Funding was for ABSAA and GBSAA. For purposes of this R-3, all prior year funding has been included in the UAS Task Force category.

Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
SARP	Various	MITRE/NMSU : VA/ NM	-	0.300		0.650		0.600		-		0.600	-	-	-
Integration Studies & Analysis	MIPR	Various : Various	-	0.722		1.250		0.910		-		0.910	-	-	-
UAS Task Force	MIPR	Various : Various	20.938	2.287		0.410		0.593		-		0.593	-	-	-
Congressional Add	TBD	TBD : TBD	0.000	-		4.089		-		-		-	-	4.089	-
Subtotal			20.938	3.309		6.399		2.103		-		2.103	-	-	-

	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		20.938	3.675	6.599	2.103	-	-	-	-

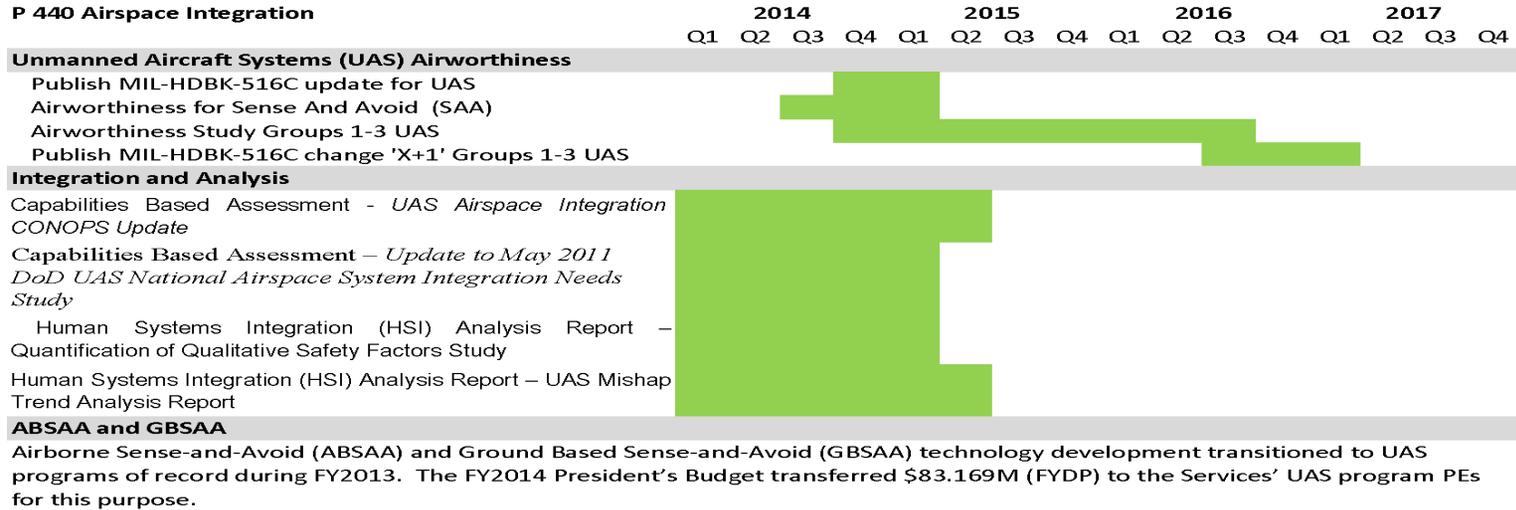
Remarks
Airborne Sense-and-Avoid (ABSAA) and Ground Based Sense-and-Avoid (GBSAA) technology development transitioned to UAS programs of record during FY2013. This joint funding also supports development of common operating concepts, standards, modeling and simulation, and technology to enable DoD UAS to routinely access the national and international airspace systems.

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Office of the Secretary Of Defense **Date:** February 2015

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604400D8Z / <i>Unmanned Systems Common Development</i>	Project (Number/Name) P440 / <i>UAS Airspace Integration</i>
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P 440 Airspace Integration



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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Office of the Secretary Of Defense		Date: February 2015
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604400D8Z / <i>Unmanned Systems Common Development</i>	Project (Number/Name) P440 / <i>UAS Airspace Integration</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>UAS Airworthiness</i>				
Publish MIL-HDBK-516C update for UAS	4	2014	1	2015
Airworthiness for Sense And Avoid (SAA)	3	2014	1	2015
Airworthiness Study - Groups 1-3 UAS	4	2014	3	2016
Publish MIL-HDBK-516C change 'X+1' Groups 1-3 UAS (TBD)	3	2016	1	2017
<i>Integration and Analysis</i>				
Capabilities Based Assessment - UAS Airspace Integration CONOPS Update	1	2014	2	2015
Capabilities Based Assessment – Update to May 2011 DoD UAS National Airspace System Integration Needs Study	1	2014	1	2015
Human Systems Integration (HSI) Analysis Report – Quantification of Qualitative Safety Factors Study	1	2014	1	2015
Human Systems Integration (HSI) Analysis Report – UAS Mishap Trend Analysis Report	1	2014	2	2015

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Office of the Secretary Of Defense **Date:** February 2015

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604400D8Z / <i>Unmanned Systems Common Development</i>	Project (Number/Name) P442 / <i>Interoperability</i>
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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
P442: <i>Interoperability</i>	13.737	4.130	1.022	0.859	-	0.859	0.900	1.100	1.000	1.033	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Interoperability project will develop and demonstrate an interoperable, standards-based, open ground station architecture for RQ/MQ-4 (Global Hawk/Triton), MQ-1 (Predator/Gray Eagle), MQ-5 (Hunter), MQ-8 (Fire Scout), MQ-9 (Reaper), and other cross-domain (air, ground, maritime) unmanned systems. The intent is to improve joint and coalition interoperability and to promote competition through the implementation of open standards and open architectures.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2014	FY 2015	FY 2016
Title: Interoperability	4.130	1.022	0.859
<p>Description: Develop and demonstrate an interoperable, standards-based, open ground station architecture for RQ/MQ-4 (Global Hawk/TRITON), MQ-1 (Predator/Gray Eagle), MQ-5 (Hunter), MQ-8 (Fire Scout), MQ-9 (Reaper), and other cross-domain (air, ground, maritime) unmanned systems; improve joint and coalition interoperability; and promote competition through the implementation of open standards and open architectures.</p> <p>FY 2014 Accomplishments: Released UAS Control Segment (UCS) V3.2 and V3.3, integrated Army/Navy flight safety critical and information assurance requirements; completed Phase I alignment with the Joint Common Unmanned System Architecture (JCUA), Universal Systems Interoperability Profile (USIP), and Future Airborne Capability Environment (FACE) standard; and demonstrated UCS in hardware-in-the-loop Unmanned Maritime System (UMS) maritime simulations. Phase I alignment identified “integration touch points” and an agreed upon integration - alignment plan. Phase II is to complete the integration - alignment, this work has commenced. USIP 1.1 update 2013 posted to the DoD IT Standards Registry (DISR) as a mandated standard.</p> <p>FY 2015 Plans: Release UCS V3.4 and V3.5. Complete Phase II alignment with JCUA, USIPs, and FACE. Assess National Information Exchange Model (NIEM) for adoption. Complete UCS Repository Technical Governance documentation which will provide UAS Programs of Record, their Prime System Integrator (PSI) contractors, and industry the aim, content, and functionality of the Repository; and to include sections on its business acumen, mandated product description, and UCS conformance regimen. Continue to support UCS PoR migration, to include a UMS maritime demonstration test in a lab environment, and if successful, the potential for a live UMS maritime operational test. The same may apply to an Unmanned Ground Robotics device in cooperation with the Joint Ground Robotics Enterprise (JGRE) and Joint Robotic and Autonomous Systems Team (JRAST). Complete JGRE studies on Communication Waveform Analysis; Military Standard/Interoperability Profile Transition to Industry Standards; and Common</p>			

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Office of the Secretary Of Defense		Date: February 2015		
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604400D8Z / <i>Unmanned Systems Common Development</i>	Project (Number/Name) P442 / <i>Interoperability</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016
Control Architecture. Initiate UCS Open Business Model (OBM) revision to include all unmanned system domains (air, ground, maritime). FY 2016 Plans: Release UCS V3.6 and V3.7. Support, prepare, and conduct a live UMS maritime operational test. Support, prepare, and conduct a live UGR operational test. Continue cross-domain (air, ground, maritime) harmonization efforts in coordination with the JRAST. Complete UCS OBM revision.				
Accomplishments/Planned Programs Subtotals		4.130	1.022	0.859
C. Other Program Funding Summary (\$ in Millions) N/A				
Remarks				
D. Acquisition Strategy n/a				
E. Performance Metrics n/a				

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Office of the Secretary Of Defense **Date:** February 2015

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604400D8Z / <i>Unmanned Systems Common Development</i>	Project (Number/Name) P442 / <i>Interoperability</i>
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Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
UCS Architecture	MIPR	COLSA : AL	13.737	1.515		-		-		-		-	-	-	-
JGRE	Various	Various : Various	0.000	0.900		0.200		-		-		-	-	-	-
Subtotal			13.737	2.415		0.200		-		-		-	-	-	-

Remarks
Prior Year cost are shown under UCS Architecture the primary product for P442.

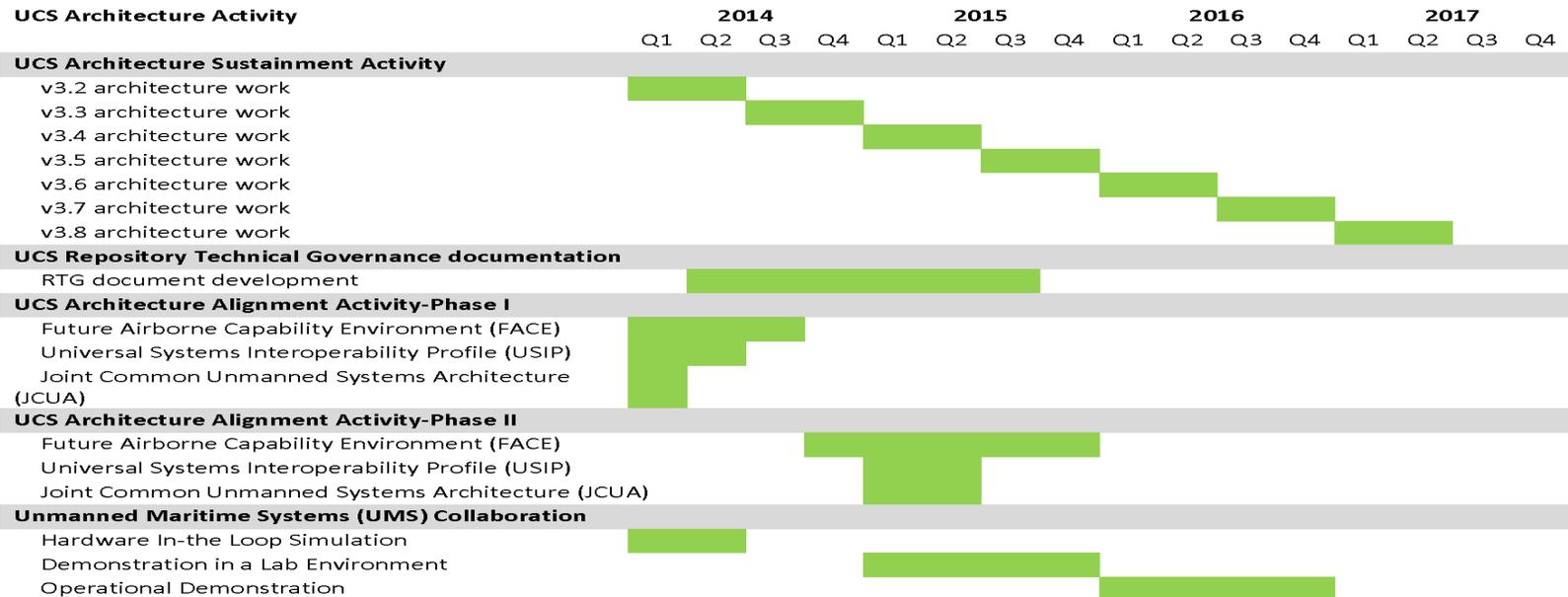
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Interoperability Working Groups & Studies	Various	Various : Various	-	1.124		0.522		0.266		-		0.266	-	-	-
UAS Task Force	MIPR	MTSI : VA	-	0.291		-		0.293		-		0.293	-	-	-
Weapons Integration	MIPR	NAWC-WD : China Lake, CA	-	0.300		0.300		0.300		-		0.300	-	-	-
Subtotal			-	1.715		0.822		0.859		-		0.859	-	-	-

	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		13.737	4.130	1.022	0.859	0.859	-	-	-

Remarks
Interoperability efforts are focused on developing and demonstrating an interoperable, standards-based, open ground station architecture for UAS and other unmanned systems; improving joint and coalition interoperability; and promoting competition through the implementation of open standards and open architectures. UAS Control Segment (UCS) V3.2 was released in FY 2014.

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Office of the Secretary Of Defense		Date: February 2015
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604400D8Z / <i>Unmanned Systems Common Development</i>	Project (Number/Name) P442 / <i>Interoperability</i>



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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Office of the Secretary Of Defense		Date: February 2015
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604400D8Z / <i>Unmanned Systems Common Development</i>	Project (Number/Name) P442 / <i>Interoperability</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>UCS Architecture Sustainment Activity</i>				
v3.2 architecture work	1	2014	2	2014
v3.3 architecture work	3	2014	4	2014
v3.4 architecture work	1	2015	2	2015
v3.5 architecture work	3	2015	4	2015
v3.6 architecture work	1	2016	2	2016
v3.7 architecture work	3	2016	4	2016
v3.8 architecture work	1	2017	2	2017
<i>UCS Repository Technical Governance</i>				
RTG document development	2	2014	3	2015
<i>UCS Architecture Alignment Activity-Phase II</i>				
Future Airborne Capability Environment (FACE)	4	2014	4	2015
Universal Systems Interoperability Profile (USIP)	1	2015	2	2015
Joint Common Unmanned Systems Architecture (JCUA)	1	2015	2	2015
<i>Unmanned Maritime Systems (UMS) Collaboration</i>				
Demonstration in a Lab Environment	1	2015	4	2015
Operational Demonstration	1	2016	4	2016

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Office of the Secretary Of Defense **Date:** February 2015

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604400D8Z / <i>Unmanned Systems Common Development</i>	Project (Number/Name) P443 / <i>Unmanned Systems Roadmap</i>
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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
P443: <i>Unmanned Systems Roadmap</i>	0.719	0.172	0.170	0.167	-	0.167	0.229	0.240	0.257	0.270	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This effort supports the Department's Unmanned Systems Integrated Roadmap and updates. The roadmap provides a DoD vision for the continuing development, fielding and employment of unmanned systems technologies; establishes the current state of unmanned systems in today's force; and outlines a strategy to address common challenges to achieve the shared vision across all unmanned domains (air, ground, and maritime).

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2014	FY 2015	FY 2016
Title: Unmanned Systems Roadmap	0.172	0.170	0.167
Description: Develops and updates the Department's Unmanned Systems Integrated Roadmap.			
FY 2014 Accomplishments: Published the Department's "Unmanned Systems Integrated Roadmap, FY 2013-2038" and performed related studies supporting the Department's vision for unmanned systems. Established and maintained an on-line unmanned system catalogue for DoD use.			
FY 2015 Plans: Update the Department's Unmanned Systems Integrated Roadmap and perform related studies supporting the Department's vision for unmanned systems. Maintain the on-line unmanned system catalogue for DoD use.			
FY 2016 Plans: Update and publish the Department's "Unmanned Systems Integrated Roadmap, 2015-2040" and perform related studies supporting the Department's vision for unmanned systems. Maintain the on-line unmanned system catalogue for DoD use.			
Accomplishments/Planned Programs Subtotals	0.172	0.170	0.167

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604400D8Z / <i>Unmanned Systems Common Development</i>	Project (Number/Name) P443 / <i>Unmanned Systems Roadmap</i>

E. Performance Metrics

Provide up-to-date Unmanned Systems Roadmap providing a DoD vision for the continuing development, fielding and employment of unmanned systems technologies.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Office of the Secretary Of Defense **Date:** February 2015

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604400D8Z / <i>Unmanned Systems Common Development</i>	Project (Number/Name) P443 / <i>Unmanned Systems Roadmap</i>
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Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Unmanned Systems Roadmap	Various	Various : Various	0.719	0.172		0.170		0.167		-		0.167	-	-	-
Subtotal			0.719	0.172		0.170		0.167		-		0.167	-	-	-
Project Cost Totals			0.719	0.172		0.170		0.167		-		0.167	-	-	-

Remarks
 This effort supports the Department's Unmanned Systems Integrated Roadmap and updates. The roadmap is published every two years, with the most recent edition released in FY 2014.

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Office of the Secretary Of Defense		Date: February 2015
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604400D8Z / <i>Unmanned Systems Common Development</i>	Project (Number/Name) P443 / <i>Unmanned Systems Roadmap</i>

	2014				2015				2016				2017				2018				2019				2020			
	Q1	Q2	Q3	Q4																								
Unmanned Systems Integrated Roadmap																												
2015-2040 Edition																												
2017-2042 Edition																												
2019-2044 Edition																												

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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Unmanned Systems Integrated Roadmap</i>				
2015-2040 Edition	3	2014	2	2016
2017-2042 Edition	3	2016	2	2018
2019-2044 Edition	3	2018	2	2020