

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Air Force **Date:** February 2016

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>
--	---

COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	-	0.000	0.000	25.890	0.000	25.890	26.147	28.552	29.142	29.657	Continuing	Continuing
640210: <i>AT21 THEATER CAPABILITY</i>	-	0.000	0.000	0.491	0.000	0.491	0.491	0.491	0.000	0.000	0.000	1.473
640211: <i>GLOBAL ACCESS</i>	-	0.000	0.000	6.143	0.000	6.143	6.206	6.787	7.050	7.206	Continuing	Continuing
640212: <i>C2/OPTIMIZATION/MODELING AND SIMULATION</i>	-	0.000	0.000	13.931	0.000	13.931	14.086	15.546	16.200	16.477	Continuing	Continuing
640213: <i>CYBER</i>	-	0.000	0.000	4.830	0.000	4.830	4.869	5.233	5.396	5.479	Continuing	Continuing
640214: <i>END-TO-END VISIBILITY</i>	-	0.000	0.000	0.495	0.000	0.495	0.495	0.495	0.496	0.495	0.000	2.476

Note

This program, BA 04 PE 0604776F, project 640212, Analytics Driven Command Decision Support, is a new start.
 This program, BA 04 PE 0604776F, project 640212, Transformation to Enterprise-wide Metadata Management System, is a new start.
 This program, BA 04 PE 0604776F, project 640212, Data Lake, is a new start.

Project numbers (640210 through 0604214) in this Program Element will be realigned within the PE in execution year for FY17 and out-years (i.e., FY18-21) in the next budget cycle. Revised BPAC numbers follow:

BPAC Funding
 640210 FY17:\$0.000M, FY18:\$0.000M, FY19:\$0.000M
 640211 FY17:\$8.920M, FY18:\$8.266M, FY19:\$8.873M, FY20:\$9.113M, FY21:\$9.521M
 640212 FY17:\$14.601M, FY18:\$14.465M, FY19:\$15.896M, FY20:\$16.084M, FY21:\$16.016M
 640213 FY17:\$2.369M, FY18:\$3.416M, FY19:\$3.783M, FY20:\$3.945M, FY21:\$4.120M
 640214 FY17:\$0.000M, FY18:\$0.000M, FY19:\$0.000M, FY20:\$0.000M, FY21:\$0.000M

In FY 2017, PE 0603713S (BA3) Deployment and Distribution Enterprise Technology (DDET) and PE 0603264S (BA3) Agile Transportation for the 21st Century Theater were transferred to a single PE in the Air Force budget (PE0604776F, (BA4) Deployment and Distribution Enterprise(DDE))in order to support auditability, increase management efficiency, and reduce administrative actions.

A. Mission Description and Budget Item Justification

This program provides for the development, integration and demonstration of capabilities which improve deployment, distribution and supply chain decision-making/ collaboration (e.g., planning stage to real-time execution/retrograde operations) without need for highly specialized operators. Projects address the following: decision support tools, distribution process simulations/analytics, distribution demand forecasting/execution monitoring, automated decision-maker support (e.g., queuing,

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Air Force	Date: February 2016
--	----------------------------

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>
--	---

alerting, courses of action), automated status monitoring with information fusion to include drilldown capability, and resilient Command and Control (C2) infrastructure capabilities. Current planning/forecasting/collaboration capabilities do not permit full synchronization of people, processes and assets to execute planned operations. Automated tools must be able to dynamically analyze/predict demand and provide input to advanced distribution planning systems to include the capability for Combatant Commanders to manage theater transportation operations from the port of debarkation to the point of need. Transportation information exchange across the DOD is inhibited by disparate systems, multiple data standards and insufficient interfaces. The ability to rapidly determine the impact of any delays/changes and conduct "what -if" impact assessments on the closure of force packages is required. This program addresses the required mission support to combatant commanders and other customers in the area of C2, Optimization, and Modeling and Simulations.

This program is in Budget Activity 4, Advanced Component Development and Prototypes (ACD&P), because efforts are necessary to evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment.

B. Program Change Summary (\$ in Millions)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Previous President's Budget	0.000	0.000	0.000	0.000	0.000
Current President's Budget	0.000	0.000	25.890	0.000	25.890
Total Adjustments	0.000	0.000	25.890	0.000	25.890
• 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	0.000	0.000	25.890	0.000	25.890

Change Summary Explanation

In FY 2017, PE 0603713S (BA3) Deployment and Distribution Enterprise Technology (DDET) and PE 0603264S (BA3) Agile Transportation for the 21st Century Theater were transferred to a single PE in the Air Force budget (PE0604776F, (BA4) Deployment and Distribution Enterprise (DDE)) in order to support auditability, increase management efficiency, and reduce administrative actions.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Air Force										Date: February 2016		
Appropriation/Budget Activity 3600 / 4					R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>				Project (Number/Name) 640210 / <i>AT21 THEATER CAPABILITY</i>			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
640210: <i>AT21 THEATER CAPABILITY</i>	-	0.000	0.000	0.491	0.000	0.491	0.491	0.491	0.000	0.000	0.000	1.473
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY 2017, PE 0603713S (BA3) Deployment and Distribution Enterprise Technology (DDET) and PE 0603264S (BA3) Agile Transportation for the 21st Century Theater were transferred to a single PE in the Air Force budget (PE0604776F, (BA4) Deployment and Distribution Enterprise (DDE)) in order to support auditability, increase management efficiency, and reduce administrative actions.

Project numbers in 640210 will be realigned within the PE in execution year for FY17 and via the FY18 BES budget cycle for FY18/19 as follows: FY17: \$0.000, FY18: \$0.000, FY19: \$0.000.

A. Mission Description and Budget Item Justification

This program provides for the development, integration, demonstration and detailed assessment of Geographic Combatant Commanders (GCC) identified gaps between United States Transportation Command's strategic lift processes and GCCs' distribution processes. Highlighted is a lack of capability to (1) manage transportation planning and execution processes for cargo/passenger movement within their respective theaters of operation or (2) match global movement requirements against available lift assets to produce an optimized transportation schedule that meets delivery requirements. AT21 Theater Capability, through the implementation of process improvements, integration of commercial transportation management/optimization tools, and the development of deployment/distribution supporting technologies, will provide the capability for Combatant Commanders to manage theater transportation operations from the port of debarkation to the point of need.

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

	FY 2015	FY 2016	FY 2017
Title: AT21 Theater	-	-	0.491
Description: AT21 Theater Capability, through the implementation of process improvements, integration of commercial transportation management/optimization tools, and the development of deployment/distribution supporting technologies, will provide the capability for Combatant Commanders to manage theater transportation operations from port of debarkation to the point of need.			
FY 2017 Plans: AT21 Theater Capability, through the implementation of process improvements, integration of commercial transportation management/optimization tools, and the development of deployment/distribution supporting technologies, will provide the capability for Combatant Commanders to manage theater transportation operations from port of debarkation to the point of need.			
Accomplishments/Planned Programs Subtotals	-	-	0.491

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Air Force		Date: February 2016
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640210 / <i>AT21 THEATER CAPABILITY</i>

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

<u>Line Item</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u> <u>Base</u>	<u>FY 2017</u> <u>OCO</u>	<u>FY 2017</u> <u>Total</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• N/A: N/A	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	-

Remarks

There is no work nor funding associated with AT 21 Theater as development efforts end with FY 2016 funding.

D. Acquisition Strategy

FY 2017, not applicable. For FY2015 and FY 2016 see PE 0603264S.

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.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640210 / <i>AT21 THEATER CAPABILITY</i>
--	---	---

Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Subtotal			-	-		-		-		-		-	-	-	-

Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Integrated Logistics Support	Various	Various : Belleville, IL	-	0.000		0.000		0.491		0.000		0.491	Continuing	Continuing	-
Subtotal			-	0.000		0.000		0.491		0.000		0.491	-	-	-

Remarks
Funds will be realigned within the PE.

Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Subtotal			-	-		-		-		-		-	-	-	-

Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Subtotal			-	-		-		-		-		-	-	-	-

			Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	0.000	0.000	0.491	0.000	0.491	-	-	-

Remarks

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2017 Air Force		Date: February 2016
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640210 / <i>AT21 THEATER CAPABILITY</i>

	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

Integrated Logistic Support																												
-----------------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2017 Air Force		Date: February 2016
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640210 / <i>AT21 THEATER CAPABILITY</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Integrated Logistic Support	1	2017	4	2019

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Air Force **Date:** February 2016

Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640211 / <i>GLOBAL ACCESS</i>
--	---	---

COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
640211: <i>GLOBAL ACCESS</i>	-	0.000	0.000	6.143	0.000	6.143	6.206	6.787	7.050	7.206	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY 2017, PE 0603713S (BA3) Deployment and Distribution Enterprise Technology (DDET) and PE 0603264S (BA3) Agile Transportation for the 21st Century Theater were transferred to a single PE in the Air Force budget (PE0604776F, (BA4) Deployment and Distribution Enterprise (DDE)) in order to support auditability, increase management efficiency, and reduce administrative actions.

Project numbers in 640211 will be realigned within the PE in execution year for FY17 and via the FY18 BES budget cycle for FY18 through FY21 as follows: FY17: \$8.920M, FY18:\$8.266M, FY19:\$8.873M, FY20:\$9.113M, FY21:\$9.521M.

A. Mission Description and Budget Item Justification

This program provides for the development, integration, demonstration and detailed assessment of DOD procedures/technologies targeted at optimizing throughput at the nodes as well as across the conduits of the deployment and distribution supply chains, from origin to point of use as well as return. Needed capabilities include inventory/cargo management, materiel handling innovations, improved physical node access, port throughput improvements, innovative delivery methods (e.g., precision airlift, autonomous re-supply), and cargo/container security. This project addresses required mission support to combatant commanders and other customers of DOD's distribution and transportation systems in the area of deployment/distribution velocity management, manned/unmanned systems to the point of effect, and increased global reach in austere/anti-access environments.

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

	FY 2015	FY 2016	FY 2017
<p>Title: Preamble Initial Look Leading to Accelerated Results</p> <p>Description: Develop capability to support a deployed engineering assessment team in the expedient recon and load-capacity determination of offload structures and plan/design required repairs.</p> <p>FY 2017 Plans: TRL 5: Prototype a remotely operated vehicle capability that provide rapid/accurate assessment of pier conditions both above and below the waterline to expedite repairs.</p>	-	-	1.000
<p>Title: Port Improvement via Exigent Repair (PIER) JCTD</p> <p>Description: Develop robust capability to rapidly restore damaged pier to a minimal militarily-capable to support reception, power projection & sustainment operations.</p> <p>FY 2017 Plans:</p>	-	-	2.043

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Air Force		Date: February 2016		
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640211 / <i>GLOBAL ACCESS</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016	FY 2017
TRL 5/6: AT&L endorsed, Congressionally approved BA3 Joint Capability Technology Demonstration (JCTD) to rapidly restore damaged pier to a minimal militarily-capable to support reception, power projection & sustainment operations.				
Title: Enhanced Vision Navigation for Joint Precision Airdrop System Description: Enhance capability of a guided airdrop system to navigate in contested/denied environments where Global Positioning System data is either suspect or unavailable. FY 2017 Plans: TRL 5: U.S. Army (Natick) led effort to prototype technologies to enable accurate delivery of airdropped supplies in a Global positioning System (GPS) denied environment.		-	-	1.000
Title: Expeditionary End-to-End Fueling Concept Description: Addressing gap in theater fuel delivery/distribution capabilities to inform the development of the Army Early Entry Fluid Distribution System as well as provide a development path for Navy/USMC ship-to-shore capabilities. FY 2017 Plans: TRL 4/5: Prototyping modular pumping system to enhance over-the-shore and inland petroleum discharge capability.		-	-	0.250
Title: Large Aircraft Infrared Countermeasures Enhanced Situational Awareness Description: Mobility assets lack drop zone situational awareness, pre-drop confirmation of clear/safe drop zone, capability of post-drop assessment, and autonomous/passive bundle geo-location. FY 2017 Plans: TRL 4/5: Develop a high-resolution, real-time infrared imagery to aircrew to enable single pass airdrop operations		-	-	1.000
Title: Precision On-Demand Aerial Resupply Description: Develop a precision on-demand Aerial Resupply capability to provide small units in remote/austere locations the ability to request and track aerial resupply missions in real-time. FY 2017 Plans: TRL 5: Combines android smartphones, tactical radios, bundle tracking system, beacon technologies, Air National Guard LITENING Pod, DOD Iridium Gateway & Joint Precision Air Drop System Mission Planner into a prototype to facilitate on-demand resupply.		-	-	0.650
Title: Hybrid Airship		-	-	0.200

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Air Force	Date: February 2016
---	----------------------------

Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640211 / <i>GLOBAL ACCESS</i>
--	---	---

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017
<p>Description: Study serves as a risk reducing, stepping stone to a class of air vehicles with energy use per ton-mile approximating the efficiency achieved by overland commercial trucking on improved highway systems.</p> <p>FY 2017 Plans: TRL 4: Explore future Airship development and mitigate long-term technical risk for future heavy lift airships.</p>			
Accomplishments/Planned Programs Subtotals	-	-	6.143

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u> <u>Base</u>	<u>FY 2017</u> <u>OCO</u>	<u>FY 2017</u> <u>Total</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• N/A: N/A	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	-

Remarks

D. Acquisition Strategy
Requirements for joint deployment and distribution enterprise technology enhancements are annually identified, validated and prioritized by the Joint Deployment & Distribution Enterprise (JDDE) community. Pursuit of the development of new capabilities to meet these requirements is managed by the United States Transportation Command (USTRANSCOM). Prototype products, once evaluated by the users, are spirally transitioned by the operational community.

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.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640211 / <i>GLOBAL ACCESS</i>
--	---	---

Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Subtotal			-	-	-	-	-	-	-	-	-	-	-	-	-

Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Integrated Logistics Support	Various	Various : Belleville, IL	-	0.000		0.000		6.143	Oct 2016	0.000		6.143	Continuing	Continuing	-
Subtotal			-	0.000	0.000	0.000		6.143		0.000		6.143	-	-	-

Remarks
Funds will be realigned within the PE.

Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Subtotal			-	-	-	-	-	-	-	-	-	-	-	-	-

Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Subtotal			-	-	-	-	-	-	-	-	-	-	-	-	-

			Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	0.000	0.000	6.143	0.000	6.143	-	-	-

Remarks

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2017 Air Force		Date: February 2016
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640211 / <i>GLOBAL ACCESS</i>

	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

Integrated Logistics Support																												
------------------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2017 Air Force		Date: February 2016
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640211 / <i>GLOBAL ACCESS</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Integrated Logistics Support	1	2017	4	2021

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Air Force										Date: February 2016		
Appropriation/Budget Activity 3600 / 4					R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>				Project (Number/Name) 640212 / <i>C2/OPTIMIZATION/MODELING AND SIMULATION</i>			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
640212: <i>C2/OPTIMIZATION/MODELING AND SIMULATION</i>	-	0.000	0.000	13.931	0.000	13.931	14.086	15.546	16.200	16.477	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

This program, BA 04 PE 0604776F, project 640212, Analytics Driven Command Decision Support, is a new start.
 This program, BA 04 PE 0604776F, project 640212, Transformation to Enterprise-wide Metadata Management System, is a new start.
 This program, BA 04 PE 0604776F, project 640212, Data Lake, is a new start.

In FY 2017, PE 0603713S (BA3) Deployment and Distribution Enterprise Technology (DDET) and PE 0603264S (BA3) Agile Transportation for the 21st Century Theater were transferred to a single PE in the Air Force budget (PE0604776F, (BA4) Deployment and Distribution Enterprise (DDE)) in order to support auditability, increase management efficiency, and reduce administrative actions.

Project numbers in 640212 will be realigned within the PE in execution year for FY17 and via the FY18 BES budget cycle for FY18 through FY21 as follows: FY17: \$14.601M, FY18:\$14.465M, FY19:\$15.896M, FY20:\$16.084M, FY21:\$16.016M.

A. Mission Description and Budget Item Justification

This program provides for the development, integration, demonstration and detailed assessment of capabilities which improve deployment, distribution and supply chain decision-making/collaboration (e.g., planning stage to real-time execution/retrograde operations) without need for highly specialized operators. Projects in this area address the following: decision support tools, distribution process simulations/analytics, distribution demand forecasting/execution monitoring, automated decision-maker support (e.g., queuing, alerting, courses of action), automated status monitoring with information fusion to include drilldown capability, and resilient Command & Control (C2) infrastructure capabilities. Current planning, forecasting, and collaboration capabilities do not permit full synchronization of people, processes and assets to execute planned operations. Automated tools must be able to dynamically analyze/predict demand and provide input to advanced distribution planning systems to include the capability for Combatant Commanders to manage theater transportation operations from the port of debarkation to the point of need. Transportation information exchange across the DOD is inhibited by disparate systems, multiple data standards and insufficient interfaces. The ability to rapidly determine the impact of any delays/changes and conduct "what-if" impact assessments on the closure of force packages is required. This project addresses the required mission support to combatant commanders and other customers in the area of C2, Optimization, and Modeling and Simulations.

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

	FY 2015	FY 2016	FY 2017
Title: Analytics Driven Command Decision Support	-	-	0.960
Description: Improve organizational decision making by providing a holistic methodology that capitalizes on relevant information, captures accurate data, and leverages best practice tools and decision-making processes.			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Air Force		Date: February 2016	
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640212 / <i>C2/OPTIMIZATION/MODELING AND SIMULATION</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016
FY 2017 Plans: TRL 5: Operational prototype of analytic tool & user manual to enable analytics drive command decision support			
Title: Transformation to Enterprise-wide Metadata Management System Description: Reduce the current difficulties in providing consistent/accurate reporting and 'accurate' regulatory data to mission partners (e.g. Federal Aviation Administration, State Department)		-	-
FY 2017 Plans: TRL 5: Develop master data requirements in a Service-Oriented Architecture and move information to the enterprise level, is a key enabler to support multi-mode operations.			0.750
Title: Data Lake Description: Development of data lakes to support Fusion Net.		-	-
FY 2017 Plans: TRL 4-6: Researching application and prototyping this technology as it relates to the Joint Deployment and Distribution enterprise.			0.600
Title: End-to-End Deployment and Distribution Modeling Description: Provide an integrated deployment/distribution environment to provide continuous and optimal balancing of total demand verse capacity from planning through mission execution.		-	-
FY 2017 Plans: TRL 4-6: Assessment of various algorithmic optimization approaches.			3.130
Title: Global Mission Scheduling Description: Development effort to optimize air movement requirements against resources and movement requirements.		-	-
FY 2017 Plans: TRL 4-6: Cognitively engineered prototype to facilitate detailed Tactical Air Control Center (Air Mobility Command) mission planning, scheduling and execution			2.400
Title: Map Based Planning Services Description: Enable planners, via a collaborative geospatially enabled environment, to conduct deliberate course of action planning to include force flow feasibility concurrent with plan development.		-	-
			1.500

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Air Force		Date: February 2016	
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640212 / <i>C2/OPTIMIZATION/MODELING AND SIMULATION</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016
FY 2017 Plans: TRL 4-6: Prototype globally accessible enclave and explore how data with a geospatial element can be visualized in a geo-temporal context to enhance Combatant Command planning.			
Title: Massachusetts Institute of Technology Lincoln Labs Description: Partnership with MIT-LL to research efforts to improve enterprise operational architecture supporting high-end analytics, integrated information technology/data structures, understanding of cloud capabilities and multi-level cyber security defense.		-	-
FY 2017 Plans: TRL 4-6: Multi-faceted effort prototyping, via Lincoln Secure Enclave Lab, numerous technologies to enhance operational analytics; data integration, mining, & forensic analytics, etc.			2.021
Title: Modeling & Simulation Innovation Description: Select student research/faculty-assisted projects (e.g., Joint Transportation Asset Scheduling Kit, Next Generation Cargo Capability, Applying Post Modern Portfolio Theory to Mitigate Risk in International Shipping, Optimal CH-47/C-130 Workload Balance, Remotely Piloted Aircraft Performing Airdrop Mission).		-	-
FY 2017 Plans: TRL 4-6: Collaborative partnership with Air Force Institute of Technology for graduate research addressing Joint Deployment and Distribution Enterprise challenges.			0.125
Title: Support Planning for Air Refueling Tasking and Allocation Description: Provide collaborative decision aid to enable planners to the optimize use of the worldwide Active Duty, Air National Guard and Air Force Reserve Air Refueling fleets while maintaining or increasing operational effectiveness, agility and capacity.		-	-
FY 2017 Plans: TRL 4/5: Prototype the capability for air refueling planners an integrated human-in-the-loop and machine based cooperative system to optimizing global air refueling operations.			0.990
Title: Strategies for Enterprise Metadata Management Description: Comprehensive account of strategies, optional implementations and recommendations for enterprise-wide management of metadata.		-	-
FY 2017 Plans:			0.500

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Air Force		Date: February 2016		
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640212 / <i>C2/OPTIMIZATION/MODELING AND SIMULATION</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016	FY 2017
TRL 4-6: Collect, populate and prototype metadata tools and applications.				
Title: Technology Transfer		-	-	0.285
Description: U. S. Transportation Command uses Technology Transfer mechanisms of the Federal Laboratories to facilitate voluntary collaboration by experts from government, industry, and academia, revealing the costs and benefits of innovations, to understand the feasibility of future capabilities.				
FY 2017 Plans: TRL 4 - 6: Continue to actively promote and broker Cooperative Research and Development Agreements (CRADAs) between DOD labs and industry for development of technology with both commercial and military applications. This activity will particularly focus on non-traditional defense contractors and is intended to help lower the expense of new defense-related technology development through cost-sharing with industry and to help DOD benefit from private-sector technology investments and innovations. Continue to actively market DOD-developed technologies to U.S. companies and establish Patent License Agreements to commercialize these technologies for both civilian and military.				
Title: Program Execution		-	-	0.670
Description: Provide technical assistance and program management support to the USTRANSCOM RDT&E Program.				
FY 2017 Plans: TRL 4-6: Program support to explore technology solutions to capability gaps identified through Joint Concept Development documents, the Joint Capabilities Integration and Development System process, Joint Experimentation, etc. to increase the responsiveness, efficiency and effectiveness of the Joint Deployment & Distribution Enterprise.				
Accomplishments/Planned Programs Subtotals		-	-	13.931
C. Other Program Funding Summary (\$ in Millions)				
N/A				
Remarks				
D. Acquisition Strategy				
Requirements for joint deployment and distribution enterprise technology enhancements are annually identified, validated and prioritized by the Joint Deployment & Distribution Enterprise (JDDE) community. Pursuit of the development of new/improved capabilities to meet these requirements is managed by the United States Transportation Command (USTRANSCOM). Prototype products, once evaluated by the users, are spirally transitioned by the operational community.				

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Air Force		Date: February 2016
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640212 / <i>C2/OPTIMIZATION/MODELING AND SIMULATION</i>

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.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Air Force												Date: February 2016			
Appropriation/Budget Activity 3600 / 4				R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>					Project (Number/Name) 640212 / <i>C2/OPTIMIZATION/MODELING AND SIMULATION</i>						
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-	-	-	-	-	-	-	-	-	-	-	-
Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Integrated Logistics Support	Various	Various : Belleville, IL	-	0.000		0.000		13.261	Oct 2016	0.000		13.261	Continuing	Continuing	-
Subtotal			-	0.000	0.000	13.261	0.000	13.261	0.000	13.261	-	-	-	-	-
Remarks															
Funds will be realigned within PE.															
Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-	-	-	-	-	-	-	-	-	-	-	-
Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Support PMO	Various	Various : Belleville, IL	-	0.000		0.000		0.670	Apr 2016	0.000		0.670	Continuing	Continuing	-
Subtotal			-	0.000	0.000	0.670	0.000	0.670	0.000	0.670	-	-	-	-	-
Project Cost Totals			-	0.000	0.000	13.931	0.000	13.931	0.000	13.931	-	-	-	-	-

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2017 Air Force		Date: February 2016
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640212 / <i>C2/OPTIMIZATION/MODELING AND SIMULATION</i>

	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

Integrated Logistics Support																												
------------------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2017 Air Force		Date: February 2016
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640212 / <i>C2/OPTIMIZATION/MODELING AND SIMULATION</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Integrated Logistics Support	1	2017	4	2021

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Air Force **Date:** February 2016

Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640213 / <i>CYBER</i>
--	---	---

COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
640213: <i>CYBER</i>	-	0.000	0.000	4.830	0.000	4.830	4.869	5.233	5.396	5.479	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY 2017, PE 0603713S (BA3) Deployment and Distribution Enterprise Technology (DDET) and PE 0603264S (BA3) Agile Transportation for the 21st Century Theater were transferred to a single PE in the Air Force budget (PE0604776F, (BA4) Deployment and Distribution Enterprise (DDE)) in order to support auditability, increase management efficiency, and reduce administrative actions.

Project numbers in 640213 will be realigned within the PE in execution year for FY17 and via the FY18 BES budget cycle for FY18 through FY21 as follows: FY17: \$2.369M, FY18:\$3.416M, FY19:\$3.783M, FY20:\$3.945M, FY21:\$4.120M.

A. Mission Description and Budget Item Justification

This program provides for the development, integration, demonstration and detailed assessment of capabilities to ensure USTRANSCOM mission assurance is in a persuasive/dynamic cyber environment. USTRANSCOM requires the procedures/technologies to improve cyber surveillance and control of networks across multiple domains and the ability to continue critical network operations in contested unclassified and classified network environments. The Command also needs the ability to differentiate between valid/unauthorized users and determine/quantify the trustworthiness of hardware/software systems. Additionally USTRANSCOM must have the ability to rapidly analyze & correlate data regarding malicious activities, select/evoke real-time defense actuators, perform automated reasoning capabilities that address data quality issues, and the ability to rapidly return to a known/safe operating state.

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

	FY 2015	FY 2016	FY 2017
<p>Title: Identity and Access Management</p> <p>Description: Need secure means to credential user access to proper applications & data via single sign approach.</p> <p>FY 2017 Plans: TRL 4/5: Researching to deliver to the enterprise a set of prototype custom attribute solutions.</p>	-	-	0.500
<p>Title: Operationalizing Cyber Security</p> <p>Description: Provide USTRANSCOM Joint Cyber Center (JCC) organizational effectiveness tools to enhance cyber-security operations, plans & processes.</p> <p>FY 2017 Plans:</p>	-	-	0.969

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Air Force **Date:** February 2016

Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640213 / <i>CYBER</i>
--	---	---

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017
TRL 4-6: Prototype an advanced cyber-security Command and Control model as well as extend research on non-intrusive data gathering to enhance Joint Cyber Center operations.			
Title: Lincoln Labs	-	-	3.361
Description: Partnership with MIT-LL to research efforts to improve enterprise operational architecture supporting high-end analytics, integrated information technology/data structures, understanding of cloud capabilities and multi-level cyber security defense.			
FY 2017 Plans: TRL 4-6: Multi-faceted effort prototyping, via Lincoln Secure Enclave Lab, numerous technologies to enhance cyber analytics, forensics, etc.			
Accomplishments/Planned Programs Subtotals	-	-	4.830

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

<u>Line Item</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u> <u>Base</u>	<u>FY 2017</u> <u>OCO</u>	<u>FY 2017</u> <u>Total</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• N/A: N/A	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	-

Remarks

D. Acquisition Strategy
Requirements for joint deployment and distribution enterprise technology enhancements are annually identified, validated and prioritized by the Joint Deployment & Distribution Enterprise (JDDE) community. Pursuit of the development of new/improved capabilities to meet these requirements is managed by the United States Transportation Command (USTRANSCOM). Prototype products, once evaluated by the users, are spirally transitioned by the operational community.

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.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640213 / <i>CYBER</i>
--	---	---

Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Subtotal			-	-	-	-	-	-	-	-	-	-	-	-	-

Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Integrated Logistics Support	Various	Various : Belleville, IL	-	0.000		0.000		4.830	Oct 2016	0.000		4.830	Continuing	Continuing	-
Subtotal			-	0.000	-	0.000	-	4.830		0.000		4.830	-	-	-

Remarks
Funds will be realigned within the PE.

Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Subtotal			-	-	-	-	-	-	-	-	-	-	-	-	-

Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Subtotal			-	-	-	-	-	-	-	-	-	-	-	-	-

			Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	0.000	0.000	4.830	0.000	4.830	-	-	-

Remarks

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2017 Air Force		Date: February 2016
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640213 / <i>CYBER</i>

	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

Integrated Logistics Support																												
------------------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2017 Air Force		Date: February 2016
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640213 / <i>CYBER</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Integrated Logistics Support	1	2017	4	2021

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Air Force										Date: February 2016		
Appropriation/Budget Activity 3600 / 4					R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>				Project (Number/Name) 640214 / <i>END-TO-END VISIBILITY</i>			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
640214: <i>END-TO-END VISIBILITY</i>	-	0.000	0.000	0.495	0.000	0.495	0.495	0.495	0.496	0.495	0.000	2.476
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY 2017, PE 0603713S (BA3) Deployment and Distribution Enterprise Technology (DDET) and PE 0603264S (BA3) Agile Transportation for the 21st Century Theater were transferred to a single PE in the Air Force budget (PE0604776F, (BA4) Deployment and Distribution Enterprise (DDE)) in order to support auditability, increase management efficiency, and reduce administrative actions.

Project numbers in 640214 will be realigned within the PE in execution year for FY17 and via the FY18 BES budget cycle for FY18 through FY21 as follows: FY17: \$0.000M, FY18:\$0.000M, FY19:\$0.000M, FY20:\$0.000M, FY21:\$0.000M.

A. Mission Description and Budget Item Justification

This program provides for the development, integration, demonstration and detailed assessment to ensure end-to-end visibility of all aspects of power projection/ sustainment spectrum to improve the effectiveness and efficiency of deployment/distribution/redeployment operations to ensure warfighter support and confidence. This requires investigation into next generation Automated Information Technology (AIT)/ Total Asset Visibility (TAV) technologies and/or container security to improve end-to-end distribution visibility as well as planning/execution, and transform sustainment operations. Includes the ability to determine immediate, reliable, and accurate shipment status through system access or event management. Develop an over-arching process/system architecture which will integrate existing and innovative new programs across the supply chain to provide complete In Transit Visibility (ITV) data, to include visibility of non-DOD cargo during humanitarian/disaster relief operations. The ability of USTRANSCOM to supply transportation support for homeland defense and/or disaster relief depends on effective ways to link with other governmental and civilian agencies. Additionally need to explore the many barriers across the Joint Deployment and Distribution Enterprise (JDDE), to include non-DoD government entities, coalition partners, non-government organizations, and commercial industry, which can create confusion/conflict or detract from the optimization of the JDDE.

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

	FY 2015	FY 2016	FY 2017
Title: Asset Visibility	-	-	0.495
Description: Ensure asset visibility through the projection, sustainment and redeployment processes.			
FY 2017 Plans: See PE 0603713S			
Accomplishments/Planned Programs Subtotals	-	-	0.495

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Air Force		Date: February 2016
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640214 / <i>END-TO-END VISIBILITY</i>

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

<u>Line Item</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u> <u>Base</u>	<u>FY 2017</u> <u>OCO</u>	<u>FY 2017</u> <u>Total</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• N/A: N/A	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	-

Remarks

D. Acquisition Strategy

Not applicable (see PE 0603713S).

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.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Air Force **Date:** February 2016

Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640214 / <i>END-TO-END VISIBILITY</i>
--	---	---

Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Subtotal			-	-		-		-		-		-	-	-	-

Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Integrated Logistics Support	Various	Various : Belleville, IL	-	0.000		0.000		0.495	Oct 2016	0.000		0.495	Continuing	Continuing	-
Subtotal			-	0.000		0.000		0.495		0.000		0.495	-	-	-

Remarks
Funds will be realigned within the PE.

Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Subtotal			-	-		-		-		-		-	-	-	-

Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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			
Subtotal			-	-		-		-		-		-	-	-	-

			Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	0.000	0.000	0.495	0.000	0.495	-	-	-

Remarks

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2017 Air Force		Date: February 2016
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640214 / <i>END-TO-END VISIBILITY</i>

FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

Integrated Logistics Support																												
------------------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2017 Air Force		Date: February 2016
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604776F / <i>Deployment & Distribution Enterprise R&D</i>	Project (Number/Name) 640214 / <i>END-TO-END VISIBILITY</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Integrated Logistics Support	1	2017	4	2021