

# UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Air Force										Date: February 2019		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0708611F I Support Systems Development							
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	-	11.362	4.497	0.539	0.000	0.539	11.860	13.746	12.707	10.448	Continuing	Continuing
675042: Log Application Logisitics Integration (LALI)	-	11.362	4.497	0.539	0.000	0.539	9.875	13.746	12.707	10.448	Continuing	Continuing
675044: Logistics Systems Development (LSD)*	-	0.000	0.000	0.000	0.000	0.000	1.985	0.000	0.000	0.000	0.000	1.985
*This project's R-2a exhibit has been suppressed due to funding not beginning until after FY 2020												
A. Mission Description and Budget Item Justification												
Logistics, Installations and Mission Support - Enterprise View (LIMS-EV) capability provides a Business Intelligence (BI) and Decision Support (DS) solution for the A4 community. USAF decision-makers, maintainers and planners require increased access to comprehensive data related to platform mission, operational status, support equipment availability and parts. This data is required to be accessible in a number different configurations ranging from preformatted executive dashboards to highly customizable ad-hoc reporting to enable improved decision making based on accurate, near-real-time data available in a simple self-service environment that provides detailed supply chain data from lowest levels all the way up to operational planners and senior leadership. By aggregating and exposing data from over 130 data sources, LIMS-EV provides warfighters with timely, authoritative information to make informed decisions.												
The LIMS-EV capability is migrating, along with the rest of AF Data Services, from GCSS-AF heritage to a commercial government cloud-configured environment. That move will result in improved performance, greater scalability and reliability, enhanced ability to leverage Software as a Service (SAAS), and reduced operational costs from utilization of common infrastructure. This move will also result in implementation of new system engineering processes based on agile software development/rapid prototyping via the CCE 2.0 dev/test/production environments and Data Services development laboratories and will leverage cloud best practices including streamlined promotion and deployment processes, automating previously manual code reviews, security testing, and deployment.												
LIMS-EV funding supports the ability to more effectively work in the cloud environment and to exploit emerging technology to enhance existing capabilities, extend access to mobile users, expand the amount of data accessible, and incorporate more predictive capabilities into the current reporting capability. This will extend existing BI capabilities to provide configurable alerting, predictive/what-if analysis, mobile applications and better integrate functionality based on priority requirements as defined/ approved by the A4 governance bodies.												
This program element may include necessary civilian pay expenses required to manage, execute, and deliver our integrated logistics capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 0605826F, 0605827F, 0605828F, 0605829F, 0605830F, 0605831F, 0605832F, 0605898F, and 0605833F.												
The FY 2019 funding request was reduced by \$5.034 million to account for the availability of prior year execution balances.												

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2020 Air Force	<b>Date:</b> February 2019
--	----------------------------

<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0708611F / <i>Support Systems Development</i>
--	--

As directed in the FY 2018 NDAA, Sec 825, amendment to PL 114-92 FY 2016 NDAA, Sec 828 Penalty for Cost Overruns, the FY 2018 Air Force penalty total is \$14.373M. The calculated percentage reduction to each research, development, test and evaluation and procurement account will be allocated proportionally from all programs, projects, or activities under such account.

This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020 Base</b>	<b>FY 2020 OCO</b>	<b>FY 2020 Total</b>
Previous President's Budget	9.362	4.497	12.648	0.000	12.648
Current President's Budget	11.362	4.497	0.539	0.000	0.539
Total Adjustments	2.000	0.000	-12.109	0.000	-12.109
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	2.000	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	-12.109	0.000	-12.109

**Change Summary Explanation**

FY18 MRK-Investment Mark for Vehicle View lower-carbon solutions effort \$2.000M

# UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force										Date: February 2019		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0708611F / Support Systems Development				Project (Number/Name) 675042 / Log Application Logisitics Integration (LALI)			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
675042: Log Application Logisitics Integration (LALI)	-	11.362	4.497	0.539	0.000	0.539	9.875	13.746	12.707	10.448	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

## A. Mission Description and Budget Item Justification

Logistics, Installations and Mission Support - Enterprise View (LIMS-EV) capability provides a Business Intelligence (BI) and Decision Support (DS) solution for the A4 community. USAF decision-makers, maintainers and planners require increased access to comprehensive data related to platform mission, operational status, support equipment availability and parts. This data is required to be accessible in a number different configurations ranging from preformatted executive dashboards to highly customizable ad-hoc reporting to enable improved decision making based on accurate, near-real-time data available in a simple self-service environment that provides detailed supply chain data from lowest levels all the way up to operational planners and senior leadership. By aggregating and exposing data from over 130 data sources, LIMS-EV provides warfighters with timely, authoritative information to make informed decisions.

The LIMS-EV capability is migrating, along with the rest of AF Data Services, from GCSS-AF heritage to a commercial government cloud-configured environment. That move will result in improved performance, greater scalability and reliability, enhanced ability to leverage Software as a Service (SAAS), and reduced operational costs from utilization of common infrastructure. This move will also result in implementation of new system engineering processes based on agile software development/rapid prototyping via the CCE 2.0 dev/test/production environments and Data Services development laboratories and will leverage cloud best practices including streamlined promotion and deployment processes, automating previously manual code reviews, security testing, and deployment.

LIMS-EV funding supports the ability to more effectively work in the cloud environment and to exploit emerging technology to enhance existing capabilities, extend access to mobile users, expand the amount of data accessible, and incorporate more predictive capabilities into the current reporting capability. This will extend existing BI capabilities to provide configurable alerting, predictive/what-if analysis, mobile applications and better integrate functionality based on priority requirements as defined/approved by the A4 governance bodies.

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

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

	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>
<b>Title:</b> LIMS-EV Version 2.0	11.362	0.000	0.000
<b>Description:</b> Minor change requests for the Vehicle Management, Supply, Maintenance, Avionics, Propulsion, Repair Network, Support Equipment and Communication Security (COMSEC) communities while refactoring LIMS-EV to native cloud services.			
<b>FY 2019 Plans:</b>			

# UNCLASSIFIED

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2020 Air Force			<b>Date:</b> February 2019		
<b>Appropriation/Budget Activity</b> 3600 / 7		<b>R-1 Program Element (Number/Name)</b> PE 0708611F / <i>Support Systems Development</i>		<b>Project (Number/Name)</b> 675042 / <i>Log Application Logistics Integration (LALI)</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>			<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>
N/A					
<b>FY 2020 Plans:</b> N/A					
<b>Title:</b> LIMS-EV Version 3.0 Business Capability Acquisition Cycle (BCAC) Phase 3 <b>Description:</b> Expanded, Scalable, Portable, Enterprise Logistics Data Accessibility  <b>FY 2019 Plans:</b> Four Major Enhancements and 11 Minor change requests for the Vehicle Management, Supply, Maintenance, Avionics, Propulsion, Repair Network, Support Equipment and Communication Security (COMSEC) communities to build the foundation and support targeted initial offerings of the following capabilities: <ul style="list-style-type: none"> <li>- Enable secure, elastic capability that automatically scales to on-demand peak needs, provides reliable response and reduces scale and time of outages</li> <li>- Provide tiers of data storage efficiently tailoring data accessibility based on needs and costs</li> <li>- Provide greater control to functional representatives to transform data by revising reference tables and business rules without developer intervention</li> <li>- Provide greater functional self service provisioning capability</li> <li>- Implement Mobile Capability to support initiatives (i.e. Flight line of the Future)</li> <li>- Enabling federation of data across multi-security and functional domains.</li> <li>- Expand ADHOC reporting capability without needing special data universes</li> <li>- Modernize expanded visualization capability, with greater consistency across application views.</li> <li>- Expand access to new data feeds as well as unstructured and semi-structured data</li> <li>- Provide foundation infrastructure for Logistics Data Environment</li> </ul> Improved Forecasting Capability <ul style="list-style-type: none"> <li>- Forecasting future health of weapon system and equipment with constraint analysis</li> <li>- Improve trend analysis</li> <li>- Implementation of Statistical Process Control with anomaly detection</li> <li>- Root cause and fault analysis</li> <li>- Future data projections with high degree of confidence</li> </ul> <b>FY 2020 Plans:</b> Eight Major Enhancements and 23 Minor change requests for the Vehicle Management, Supply, Maintenance, Avionics, Propulsion, Repair Network, Support Equipment and Communication Security (COMSEC) communities that build on prior development to enable advanced Predictive Enterprise Logistics Reporting and Analytics in the following areas:			-	4.497	0.539

# UNCLASSIFIED

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2020 Air Force		<b>Date:</b> February 2019	
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0708611F / <i>Support Systems Development</i>	<b>Project (Number/Name)</b> 675042 / <i>Log Application Logisitics Integration (LALI)</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2018</b>	<b>FY 2019</b>
<ul style="list-style-type: none"> <li>- Implement a modeling &amp; simulation Capability</li> <li>- Big Data analytics</li> <li>- Actuarial capability and reliability analysis</li> <li>- Incorporation of operational data such as flight profile data to support deep performance analysis of weapon system components and supporting predictive modeling</li> <li>- Ability to configure and simulate different logistics outcomes based on known factors</li> </ul>			
<b>FY 2019 to FY 2020 Increase/Decrease Statement:</b> Funding decreased from FY19 to FY20 due to late obligations and expenditures in FY18.			
<b>Accomplishments/Planned Programs Subtotals</b>		11.362	4.497
<b>C. Other Program Funding Summary (\$ in Millions)</b>			
N/A			
<b>Remarks</b>			
<b>D. Acquisition Strategy</b>			
<p>LIMS-EV will utilize services provided by the Air Force Common Computing Environment (CCE) Government Cloud Framework, migrating from the End-of-Life GCSS-AF Integration Framework. AFLCMC/HNII Data Services Program Management Office (PMO), as LIMS-EV Program Manager, is responsible to competitively acquire additional LIMS-EV capabilities using a variety of fixed price, labor hour, time and material, and cost plus contracts through the environment migration and within the CCE Framework.</p> <p>LIMS-EV capabilities utilize services provided by the GCSS-AF Integration/CCE Framework. AFLCMC/HNII Data Services PMO, as LIMS-EV Program Manager, manages LIMS-EV development projects following the Agile/Rapid Prototyping software development release process.</p> <p>LIMS-EV development projects will be implemented via the CCE development contract under oversight by AFLCMC/HNII Data Services Program Management Office, Wright-Patterson Air Force Base, Ohio.</p>			
<b>E. Performance Metrics</b>			
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**

<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2020 Air Force</b>												<b>Date:</b> February 2019			
<b>Appropriation/Budget Activity</b> 3600 / 7						<b>R-1 Program Element (Number/Name)</b> PE 0708611F / Support Systems Development						<b>Project (Number/Name)</b> 675042 / Log Application Logisitics Integration (LALI)			
<b>Product Development (\$ in Millions)</b>				<b>FY 2018</b>		<b>FY 2019</b>		<b>FY 2020 Base</b>		<b>FY 2020 OCO</b>		<b>FY 2020 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
LALI LIMS-EV Systems Engineering Contractor Support (Product Development) LIMS-EV Version 2.0	C/CPFF	Leidos : Dayton, OH	-	11.362		-		-		-		-	Continuing	Continuing	-
LALI LIMS-EV Systems Engineering Contractor Support (Product Development) LIMS-EV Version 3.0 - Business Capability Acquisition Cycle	C/CPAF	Leidos : Dayton, OH	-	-		4.497		0.539		-		0.539	Continuing	Continuing	-
<b>Subtotal</b>			-	11.362		4.497		0.539		-		0.539	Continuing	Continuing	N/A
			<b>Prior Years</b>	<b>FY 2018</b>		<b>FY 2019</b>		<b>FY 2020 Base</b>		<b>FY 2020 OCO</b>		<b>FY 2020 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			-	11.362		4.497		0.539		-		0.539	Continuing	Continuing	N/A
<b>Remarks</b>															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2020 Air Force																Date: February 2019			
Appropriation/Budget Activity 3600 / 7								R-1 Program Element (Number/Name) PE 0708611F / Support Systems Development								Project (Number/Name) 675042 / Log Application Logisitics Integration (LALI)			

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force		Date: February 2019
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0708611F / Support Systems Development	Project (Number/Name) 675042 / Log Application Logistics Integration (LALI)

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Support Systems Developments PE 0708611F				
LIMS-EV Version 2.0	4	2018	4	2019
LIMS-EV Version 3.0 - Business Capability Acquisition Cycle (BCAC) 3	2	2019	4	2024

**Note**  
LIMS-EV Version 3.0 - Business Capability Acquisition Cycle (BCAC) 3 period of performance end date is 2Q 2025. IDECS limits schedule to 4Q 2024.