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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Air Force **Date:** February 2020

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|--|---|
| Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development</i> | R-1 Program Element (Number/Name) PE 0901538F / <i>Financial Management Information Systems Development</i> |
|--|---|

| COST (\$ in Millions) | Prior Years | FY 2019 | FY 2020 | FY 2021 Base | FY 2021 OCO | FY 2021 Total | FY 2022 | FY 2023 | FY 2024 | FY 2025 | Cost To Complete | Total Cost |
|--|-------------|---------|---------|--------------|-------------|---------------|---------|---------|---------|---------|------------------|------------|
| Total Program Element | 0.000 | 86.578 | 9.323 | 7.006 | 0.000 | 7.006 | 5.185 | 5.278 | 5.372 | 5.472 | Continuing | Continuing |
| 672222: <i>Program Budget Enterprise Service (PBES)</i> | 0.000 | 15.346 | 4.359 | 1.967 | 0.000 | 1.967 | 0.041 | 0.042 | 0.043 | 0.044 | 0.000 | 21.842 |
| 675177: <i>Cost Estimating Modeling (CEM)</i> | 0.000 | 4.773 | 4.964 | 5.039 | 0.000 | 5.039 | 5.144 | 5.236 | 5.329 | 5.428 | Continuing | Continuing |
| 675178: <i>DEAMS Continuous Capability Development</i> | 0.000 | 5.500 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 5.500 |
| 675179: <i>Defense Enterprise Accounting Management System Increment 1 (DEAMS Inc 1)</i> | 0.000 | 60.959 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 60.959 |

Program MDAP/MAIS Code: N87

Note

In FY20, PE 0901554F, DEAMS, changed from PE 0901538F, Financial Management Information Systems Development.
 In FY20, Project 675178, DEAMS Continuous Capability Development, changed from Defense Enterprise Accounting Management System Increment 2 (DEAMS Inc 2).

A. Mission Description and Budget Item Justification

This program element develops upgrades to existing financial management systems. These upgrades are required to comply with auditability and transparency requirements as well as efficiencies in processing financial transactions. This program element also supports studies and analysis to improve future program planning and execution.

There are four projects within this program element: Program and Budget Enterprise Services (PBES), Cost Estimating Modeling (CEM), Defense Enterprise Accounting and Management System (DEAMS) Increment 1 (Inc 1), and DEAMS Continuous Capability Development (CCD), formally known as DEAMS Increment 2, prior to FY20.

PBES is a software development effort that will utilize a Service Oriented Architecture (SOA) to deliver budgeting and programming capability for the Air Force and will replace legacy systems (Automated Budget Interactive Data Environment System (ABIDES) and Resource Allocation Programming Information Decision System (RAPIDS), and Enhanced Tradespace Tool (ETT) that support the budget formulation and force programming process.

CEM is a knowledge-based study effort to improve Air Force-wide cost estimating by analyzing cost data and recommending changes to estimating models, methods, and tools.

DEAMS development will be governed in Capability Support Phase after Increment 1 Full Deployment (FD).

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DEAMS is the Air Force's target core accounting and financial management solution and is a key component of the long-term business process improvements needed to sustain auditability and correct financial system weaknesses.

Activities also include studies and analysis to support both current program planning and execution and future program planning.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver financial management information system capabilities. The use of such program funds would be in addition to the civilian pay expenses budgeted in program element 0605831F.

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. Program Change Summary (\$ in Millions) | FY 2019 | FY 2020 | FY 2021 Base | FY 2021 OCO | FY 2021 Total |
|---|----------------|----------------|---------------------|--------------------|----------------------|
| Previous President's Budget | 93.418 | 9.323 | 7.020 | 0.000 | 7.020 |
| Current President's Budget | 86.578 | 9.323 | 7.006 | 0.000 | 7.006 |
| Total Adjustments | -6.840 | 0.000 | -0.014 | 0.000 | -0.014 |
| • 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 | -6.840 | 0.000 | -0.014 | 0.000 | -0.014 |

Change Summary Explanation

FY2020 funds for DEAMS transitioned to new PE 0901554F

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| Exhibit R-2A, RDT&E Project Justification: PB 2021 Air Force | | | | | | | | | | Date: February 2020 | | |
| Appropriation/Budget Activity 3600 / 7 | | | | | R-1 Program Element (Number/Name) PE 0901538F / <i>Financial Management Information Systems Development</i> | | | | | Project (Number/Name) 672222 / <i>Program Budget Enterprise Service (PBES)</i> | | |
| COST (\$ in Millions) | Prior Years | FY 2019 | FY 2020 | FY 2021 Base | FY 2021 OCO | FY 2021 Total | FY 2022 | FY 2023 | FY 2024 | FY 2025 | Cost To Complete | Total Cost |
| 672222: <i>Program Budget Enterprise Service (PBES)</i> | 0.000 | 15.346 | 4.359 | 1.967 | 0.000 | 1.967 | 0.041 | 0.042 | 0.043 | 0.044 | 0.000 | 21.842 |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

A. Mission Description and Budget Item Justification

PBES will be the single solution software development effort to deliver planning, programming, budgeting and execution (PPBE) capability for the United States Air Force. PBES will replace legacy systems such as the Automated Budget Interactive Data Environment System (ABIDES), Resource Allocation Programming Information Decision System (RAPIDS) and the Enhanced Tradespace Tool (ETT), supporting the budget formulation and force programming process. Upon full deployment of PBES, the system will be compliant with the Standard Financial Information Structure (SFIS) and Standard Line of Accounting (SLOA) conventions, which will enable data standardization across the Department of Defense (DoD).

Utilizing Business Process Re-engineering (BPR), the Air Force has designated PBES as the solution to deliver traceability of financial data in support of the PPBE process. Through the use of BPR, PBES will address excessive overhead, outdated business practices and other time-consuming support activities. PBES will make the budget formulation process more efficient by incorporating business best practices, organizing programming and budgeting personnel, as well as utilizing current technology. PBES will also eliminate checks and balances required of older technology, taking advantage of automated reconciliation services. In addition, the solution will allow the use of Authoritative Data Sources (ADS) for data exposure, resulting in more timely and accurate budget submissions to Office of the Secretary of Defense (OSD), Congress, and other internal and external customers.

A Commercial-off-the-Shelf (COTS) product has been selected as the tool of choice which will require minor configuration changes to meet the stated user requirements. This strategy requires no code changes to the actual COTS product and will drive lower support costs along with making future requirements changes easier in the out-years. Requirements will be satisfied through an iterative process of sprint development cycles, where usable capability is produced and made available to operational users after every sprint. The Integrated Product Office construct along with application of agile principles allows the program to properly plan system requirements, deliver early capability to the end users, achieve early return on investment of taxpayer dollars, division of risk, reduce waste, effectively respond to change, and continuously improve our processes.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver financial management information system capabilities. The use of such program funds would be in addition to the civilian pay expenses budgeted in program element 0605831F.

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

| | FY 2019 | FY 2020 | FY 2021 Base | FY 2021 OCO | FY 2021 Total |
|--------------------|----------------|----------------|---------------------|--------------------|----------------------|
| Title: PBES | 15.346 | 4.359 | 1.967 | 0.000 | 1.967 |

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| Exhibit R-2A, RDT&E Project Justification: PB 2021 Air Force | | Date: February 2020 |
| Appropriation/Budget Activity 3600 / 7 | R-1 Program Element (Number/Name) PE 0901538F / <i>Financial Management Information Systems Development</i> | Project (Number/Name) 672222 / <i>Program Budget Enterprise Service (PBES)</i> |

| B. Accomplishments/Planned Programs (\$ in Millions) | FY 2019 | FY 2020 | FY 2021 Base | FY 2021 OCO | FY 2021 Total |
|---|----------------|----------------|---------------------|--------------------|----------------------|
| <p>Description: Software development effort providing modern and enhanced planning, programming, budgeting and execution capabilities to the USAF. Funding supports engineering, cybersecurity, technical development, implementation and automated testing.</p> <p>ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> - Stood-up Integration/Development pipeline environments needed for agile development of software and training - Delivered programming/budgeting capability to Air Staff to shadow build the FY2021 PB - Delivered Sprints 6-11 (AF submission to OSD and reporting with Business Intelligence Reporting Tool) for test and fielding - Delivered foundational Planning capability - 1 Year early - Received approval to deploy to MAJCOM and Air Staff users to support the FY2021 PB build - Migrated Legacy system historical data into PBES module (ETT, RAPIDS, ASARS, ABIDES) <p>FY 2020 Plans:</p> <ul style="list-style-type: none"> - Deliver expanded programming/budgeting capability to MAJCOM to support FY2021 PB inputs to Air Staff - Deliver final Sprints 12-14 (Fidelity of programming and budget functions) for test and fielding - Complete 2 Limited Deployments and pursue Authority to Proceed with Milestone Decision Authority - Deliver patches as needed to correct system deficiencies or upgrades required - Continue PBES acquisition planning, reporting, and execution activities - Continue to make updates to system design, configuration, test, and training - Continue to satisfy risk management framework (RMF) controls needed for ATO <p>FY 2021 Base Plans:</p> <ul style="list-style-type: none"> - Will deliver additional development Sprints 15-22 (Expanded Planning, Program, and Budget capabilities) for test and fielding - Will complete Full Deployment Authority to Proceed with Milestone Decision Authority - Will deliver patches as needed to correct system deficiencies or upgrades required - Will continue PBES acquisition planning, reporting, and execution activities - Will continue to make updates to system design, configuration, test, and training - Will continue to satisfy risk management framework (RMF) controls needed for ATO <p>FY 2021 OCO Plans:</p> | | | | | |

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| Appropriation/Budget Activity 3600 / 7 | R-1 Program Element (Number/Name) PE 0901538F / <i>Financial Management Information Systems Development</i> | Project (Number/Name) 672222 / <i>Program Budget Enterprise Service (PBES)</i> |
|--|---|--|

| | | | | | |
|--|----------------|----------------|---------------------|--------------------|----------------------|
| B. Accomplishments/Planned Programs (\$ in Millions) | FY 2019 | FY 2020 | FY 2021 Base | FY 2021 OCO | FY 2021 Total |
| N/A | | | | | |
| FY 2020 to FY 2021 Increase/Decrease Statement: Changes reflect ramp down toward contract completion | | | | | |
| Accomplishments/Planned Programs Subtotals | 15.346 | 4.359 | 1.967 | 0.000 | 1.967 |

| | | | | | | | | | | | |
|--|----------------|----------------|---------------------|--------------------|----------------------|----------------|----------------|----------------|----------------|-------------------------|-------------------|
| C. Other Program Funding Summary (\$ in Millions) | | | | | | | | | | | |
| Line Item | FY 2019 | FY 2020 | FY 2021 Base | FY 2021 OCO | FY 2021 Total | FY 2022 | FY 2023 | FY 2024 | FY 2025 | Cost To Complete | Total Cost |
| • OPAF 03 834010: <i>General Information Technology</i> | 5.386 | 1.966 | 0.695 | - | 0.695 | 0.000 | 0.000 | - | - | 0.000 | 8.047 |

Remarks

D. Acquisition Strategy
PBES is a Business Category (BCAT) III program following DOD 5000.75 BCAC policy. The PBES strategy, supported by all Stakeholders, employed an empowered joint Program Office, Functional Community, and Senior Stakeholder group to rapidly develop, test, and deploy the Air Forces Planning, Programming, Budgeting, and Execution (PPBE) capability within two years. This strategy required mutual trust and risk acceptance by all parties to be successful. Thus far, this strategy has been highly successful delivering PBES capabilities ahead of schedule and substantially under budget.

The first step in this strategy utilized early risk reduction efforts (sometimes referred to as "prototyping") to prove the capability and contractors existed to meet user's needs. This was conducted using two 6-month contract vehicles which were both completed months early, delivering several hundred user requirements. The success of these efforts led to the strategy of selecting a COTS product called Oracle Hyperion and to hire a small-business system integrator (SI). The significance in both of these is that the COTS product and the SI have both already been deployed across commercial companies and multiple DoD agencies, thus reducing the risk for implementation by the Government.

Both contract awards for the SI and Oracle licenses were made in 1QFY2018, with substantial cost savings received by negotiating bulk license purchases for all AF users. The development strategy employs agile development methods creating 4-6 week "Sprint" releases to deploy capability rapidly with substantial user feedback along the way. Fourteen total Sprints were planned across two years in an attempt to match on-going Air Force PPBE cycles. As Sprints are developed and tested, they are then deployed for operational use.

MAJCOMs will first use PBES in October 2019, for their FY2022 POM development and then submit their budget requests up to the Air Staff for their review and creation of the Air Force FY2022 POM. Air Staff will primarily use PBES over the legacy system in April 2020, with continued use throughout the FY2022 POM cycle. In

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|--|---|--|

FY2018, the AF decided to accelerate the PBES Planning application, so AF Planners will first use PBES for the FY2022 Plan creation in Feb 2020. While PBES will be continually updated throughout these two years, it is also the strategy to migrate all legacy system data into PBES in manageable packages across the two years.

Full deployment of PBES is on schedule to be completed in 2QFY2021. The success of this strategy can be attributed to mutual buy-in by all parties, risk acceptance that the solution will not be perfect from the start, and an understanding that not all requirements are exactly known up-front and that changes will be required continuously to be successful.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Air Force **Date:** February 2020

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|--|---|--|

| Product Development (\$ in Millions) | | | | FY 2019 | | FY 2020 | | FY 2021 Base | | FY 2021 OCO | | FY 2021 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 |
| PBES Systems Integrator | C/FFP | AFLCMC : Maxwell-Gunter AFB, AL | 0.000 | 7.896 | Dec 2018 | 1.675 | Dec 2019 | 0.564 | Dec 2020 | - | | 0.564 | Continuing | Continuing | - |
| Architecture | C/Variou | Bowhead Technology : Alexandria, VA | 0.000 | 0.115 | Mar 2019 | 0.126 | Mar 2020 | - | | - | | - | 0.000 | 0.241 | - |
| Subtotal | | | 0.000 | 8.011 | | 1.801 | | 0.564 | | - | | 0.564 | Continuing | Continuing | N/A |

| Support (\$ in Millions) | | | | FY 2019 | | FY 2020 | | FY 2021 Base | | FY 2021 OCO | | FY 2021 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 |
| PBES DEV/TEST Hosting | MIPR | HEDC : Hill AFB, UT | 0.000 | 2.503 | Sep 2019 | 1.260 | Sep 2020 | 1.403 | Apr 2021 | - | | 1.403 | Continuing | Continuing | - |
| PMO Technical/SME Support | C/FFP | TACG : Beavercreek, OH | 0.000 | 1.140 | May 2019 | 0.780 | May 2020 | - | | - | | - | 0.000 | 1.920 | - |
| Cyber Security Analyst DDC-IT | C/FFP | DDC IT Services : Albuquerque, NM | 0.000 | 0.139 | Mar 2019 | 0.169 | Mar 2020 | - | | - | | - | 0.000 | 0.308 | - |
| Subtotal | | | 0.000 | 3.782 | | 2.209 | | 1.403 | | - | | 1.403 | Continuing | Continuing | N/A |

Remarks
Hill AFB Enterprise Data Center

| Test and Evaluation (\$ in Millions) | | | | FY 2019 | | FY 2020 | | FY 2021 Base | | FY 2021 OCO | | FY 2021 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 |
| Test Support | MIPR | 96 Test Wing : Eglin AFB, FL | 0.000 | 0.083 | Apr 2019 | 0.092 | Dec 2019 | - | | - | | - | 0.000 | 0.175 | - |
| Subtotal | | | 0.000 | 0.083 | | 0.092 | | - | | - | | - | 0.000 | 0.175 | N/A |

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| Exhibit R-4, RDT&E Schedule Profile: PB 2021 Air Force | | Date: February 2020 |
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| FY 2019 | | | | FY 2020 | | | | FY 2021 | | | | FY 2022 | | | | FY 2023 | | | | FY 2024 | | | | FY 2025 | | | |
|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|
| 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 |

| | |
|--|--|
| Program Budget Enterprise Service | |
| System Integrator Contract Award | |
| Develop/Modify Air Staff Application | |
| Load of Legacy System Data | |
| Develop/Modify MAJCOM Application | |
| Develop/Modify Planning Application | |
| Limited Deployment Decision #2 (release MAJCOM app) | |
| Limited Deployment Decision #3 (release PBES data outside AF) | |
| Limited Deployment Decision #4 (release final MAJCOM, Program & Budget Requests) | |
| Limited Deployment Decision #5 (release Reporting, Data Warehouse & FSDM) | |
| Full Deployment Decision (fully deploy PBES & authorize Legacy sys shutdown) | |

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| Exhibit R-4A, RDT&E Schedule Details: PB 2021 Air Force | | Date: February 2020 |
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Schedule Details

| Events by Sub Project | Start | | End | |
|--|---------|------|---------|------|
| | Quarter | Year | Quarter | Year |
| Program Budget Enterprise Service | | | | |
| System Integrator Contract Award | 1 | 2019 | 1 | 2021 |
| Develop/Modify Air Staff Application | 1 | 2019 | 1 | 2021 |
| Load of Legacy System Data | 4 | 2019 | 4 | 2019 |
| Develop/Modify MAJCOM Application | 1 | 2019 | 4 | 2019 |
| Develop/Modify Planning Application | 1 | 2019 | 2 | 2020 |
| Limited Deployment Decision #2 (release MAJCOM app) | 1 | 2019 | 1 | 2019 |
| Limited Deployment Decision #3 (release PBES data outside AF) | 4 | 2019 | 4 | 2019 |
| Limited Deployment Decision #4 (release final MAJCOM, Program & Budget Requests) | 2 | 2020 | 2 | 2020 |
| Limited Deployment Decision #5 (release Reporting, Data Warehouse & FSDM) | 3 | 2020 | 3 | 2020 |
| Full Deployment Decision (fully deploy PBES & authorize Legacy sys shutdown) | 2 | 2021 | 2 | 2021 |

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| Appropriation/Budget Activity 3600 / 7 | | | | | R-1 Program Element (Number/Name) PE 0901538F / <i>Financial Management Information Systems Development</i> | | | | | Project (Number/Name) 675177 / <i>Cost Estimating Modeling (CEM)</i> | | | |
| COST (\$ in Millions) | Prior Years | FY 2019 | FY 2020 | FY 2021 Base | FY 2021 OCO | FY 2021 Total | FY 2022 | FY 2023 | FY 2024 | FY 2025 | Cost To Complete | Total Cost | |
| 675177: <i>Cost Estimating Modeling (CEM)</i> | 0.000 | 4.773 | 4.964 | 5.039 | 0.000 | 5.039 | 5.144 | 5.236 | 5.329 | 5.428 | Continuing | Continuing | |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | | |

A. Mission Description and Budget Item Justification

Cost Estimating Modeling (CEM) provides and enhances Air Force-wide cost estimating capabilities by developing current cost data and estimating methods and tools, data process reengineering, data structure development, and gap filling initiatives. In collaboration with the OSD Cost Assessment Data Enterprise (CADE) project (DoD's unified initiative to collect, organize, store, and use data more efficiently), these products will improve the quality, timeliness, and effectiveness of the acquisition program cost estimates required by statute (e.g., 10 USC 2366, 2433, 2434) and policy directives (e.g., DoDI 5000.02) in support of AF and DoD acquisition decisions, programming and execution decisions, and Congressional mandates.

CEM will ensure the Air Force continuously improves cost estimating capabilities for broad cross-cutting areas, as well as specific to each weapon system type (aircraft, UAVs, ballistic missiles, tactical missiles, munitions, electronics and aircraft modifications, ground stations and automated information systems, space and launch vehicles). Changing technologies, acquisition laws, policy directives, and initiatives drive the need to revise cost estimating processes, methods, and tools. For example, current capability shortfalls reflect gaps in the ability to respond effectively to the laws and regulations that drive increased cost estimating demands such as FY16/17/18 NDAA reports (PL 114-92/114-328/115-91--provisions relating to Major Defense Acquisition Programs (Section 804 of the FY16 NDAA authorized rapid prototyping and rapid fielding of defense systems), Weapon System Acquisition Reform Act (WSARA) (provisions related to improving cost estimating quality, especially earlier in the program life-cycle and affordability analysis), Secretary of the Air Force Acquisition Excellence Plan (priorities to improve cost estimating capability and affordability analysis and improved cost estimating support to requirements process), and Office of the Secretary of Defense policy (initiatives on enhanced trade-off analysis, affordability analysis, and will- versus should-cost analysis). The CADE and CEM partnership is the lead example for better data initiatives designed as a response to Congressional expressed desire for better outcomes in acquisition. The partnership provides data/analysis/methods/tools and institutional knowledge at the analysts' fingertips versus the status quo inefficient, ad hoc approach.

This project will perform knowledge-based studies to include analyzing historical data and changing technologies/programmatics to develop new estimating methods (e.g. statistical tools, cost estimating relationships) across hundreds of product work breakdown structure elements and functional cost elements within each weapon system type noted above. Examples of areas of cost studies and modeling efforts that cut across all weapon system types are directed energy costs, software cost datasets and metrics; contract or engineering change order studies, analysis, and models; other government cost data, methods, and analysis tools (e.g., depot standup and government test); reliability and maintainability trends and impacts on cost; and fixed price contract performance.

CEM will deliver valuable analytical tools in support of higher quality/credible estimates (as required by statute and regulation) allowing for more realistic cost conscious decisions on over \$100B of critical warfighter capability.

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|--|---|--|

This program element may include necessary civilian pay expenses required to manage, execute, and deliver financial management information system capabilities. The use of such program funds would be in addition to the civilian pay expenses budgeted in program element 0605831F.

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

| | FY 2019 | FY 2020 | FY 2021 Base | FY 2021 OCO | FY 2021 Total |
|---|---------|---------|--------------|-------------|---------------|
| <p>Title: CEM</p> <p>Description: Perform knowledge-based studies (KBS) — Develop/modernize cost data, data collection process improvements, collect and analyze data to develop new estimating methods (e.g. statistical tools, cost estimating relationships (CERs)), and perform other gap filling studies for aircraft, UAVs, ballistic and tactical missiles, munitions, electronics and aircraft modifications, ground stations and automated information systems, space, launch vehicles, and cross-cutting areas.</p> <p>FY19 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> - Completed studies in the areas of electronic warfare, space systems O&S, advanced materials and manufacturing processes, joint cost analysis research, ECO, common computing environments (cloud), agile, cybersecurity, ground radios/terminals - Completed several data collection process reforms <p>FY 2020 Plans:</p> <ul style="list-style-type: none"> - Continue to collect historical program data to fill gaps against defined data collection requirements from previous year efforts and integrate historical data collected into CADE system for central access to all DoD - Develop normalized data sets, benchmark metrics, and cost estimating methods/analytical tools with recent data collections - Continue studies started in FY17/18/19 and begin in areas such as advanced engines, O&S shortfalls cost, and tie depot workshare to cost - Continue to work with OSD CADE team to implement data design and structure requirements and visual analysis tool requirements into CADE system - Conduct weekly reviews with technical/cost teams and quarterly contractor progress reviews with entire government cost community <p>FY 2021 Base Plans:</p> <ul style="list-style-type: none"> - Will continue to collect historical program data to fill gaps against defined data collection requirements from previous year efforts and integrate historical data collected into CADE system for central access to all DoD - Will develop normalized data sets, benchmark metrics, and cost estimating methods/analytical tools with recent data collections | 4.773 | 4.964 | 5.039 | - | 5.039 |

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| B. Accomplishments/Planned Programs (\$ in Millions) | FY 2019 | FY 2020 | FY 2021 Base | FY 2021 OCO | FY 2021 Total |
|---|----------------|----------------|---------------------|--------------------|----------------------|
| - Will continue studies started in FY17/18/19/20 and begin in areas that are topical/timely or surface from prior research - Will continue to work with OSD CADE team to implement data design and structure requirements and visual analysis tool requirements into CADE system - Will conduct weekly reviews with technical/cost teams and quarterly contractor progress reviews with entire government cost community FY 2020 to FY 2021 Increase/Decrease Statement: Inflationary Adjustment | | | | | |
| Accomplishments/Planned Programs Subtotals | 4.773 | 4.964 | 5.039 | - | 5.039 |

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

N/A

Remarks

N/A

D. Acquisition Strategy

Contracts are expected to be firm-fixed price and/or cost plus, and will be awarded through full and open competition and follow Federal Acquisition Regulations (FAR) guidelines. Headquarters Air Force will provide contract management oversight and direction. Contracted knowledge-based studies progress will be reviewed on a quarterly basis and adjusted as appropriate.

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| Exhibit R-4, RDT&E Schedule Profile: PB 2021 Air Force | | Date: February 2020 |
| Appropriation/Budget Activity 3600 / 7 | R-1 Program Element (Number/Name) PE 0901538F / <i>Financial Management Information Systems Development</i> | Project (Number/Name) 675177 / <i>Cost Estimating Modeling (CEM)</i> |

| | FY 2019 | | | | FY 2020 | | | | FY 2021 | | | | FY 2022 | | | | FY 2023 | | | | FY 2024 | | | | FY 2025 | | | |
|--|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|
| | 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 |
| CEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Commodity Specific KBS Activities | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Populate Data Templates w/ Commodity Specific KBS findings (ongoing) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Develop CERs/Estimating Tools/Models | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Data / CERs / Tools / Models Deliverables (Feb 2019) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Data / CERs / Tools / Models Deliverables (Sep 2019) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Data / CERs / Tools / Models Deliverables (Feb 2020) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Data / CERs / Tools / Models Deliverables (Sep 2020) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Data / CERs / Tools / Models Deliverables (Feb 2021) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Data / CERs / Tools / Models Deliverables (Sep 2021) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Data / CERs / Tools / Models Deliverables (Feb 2022) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Data / CERs / Tools / Models Deliverables (Sep 2022) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Data / CERs / Tools / Models Deliverables (Feb 2023) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Data / CERs / Tools / Models Deliverables (Sep 2023) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Data / CERs / Tools / Models Deliverables (Feb 2024) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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Exhibit R-4, RDT&E Schedule Profile: PB 2021 Air Force **Date:** February 2020

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| Appropriation/Budget Activity 3600 / 7 | R-1 Program Element (Number/Name) PE 0901538F / <i>Financial Management Information Systems Development</i> | Project (Number/Name) 675177 / <i>Cost Estimating Modeling (CEM)</i> |
|--|---|--|

| | FY 2019 | | | | FY 2020 | | | | FY 2021 | | | | FY 2022 | | | | FY 2023 | | | | FY 2024 | | | | FY 2025 | | | |
|--|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|
| | 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 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Data / CERs / Tools / Models Deliverables (Sep 2024) | ■ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Data / CERs / Tools / Models Deliverables (Feb 2025) | ■ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Data / CERs / Tools / Models Deliverables (Sep 2025) | ■ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Quarterly KBS Progress Reviews | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| Exhibit R-4A, RDT&E Schedule Details: PB 2021 Air Force | | Date: February 2020 |
| Appropriation/Budget Activity 3600 / 7 | R-1 Program Element (Number/Name) PE 0901538F / <i>Financial Management Information Systems Development</i> | Project (Number/Name) 675177 / <i>Cost Estimating Modeling (CEM)</i> |

Schedule Details

| Events by Sub Project | Start | | End | |
|--|---------|------|---------|------|
| | Quarter | Year | Quarter | Year |
| CEM | | | | |
| Commodity Specific KBS Activities | 1 | 2019 | 4 | 2025 |
| Populate Data Templates w/ Commodity Specific KBS findings (ongoing) | 1 | 2019 | 4 | 2025 |
| Develop CERs/Estimating Tools/Models | 1 | 2019 | 4 | 2025 |
| Data / CERs / Tools / Models Deliverables (Feb 2019) | 2 | 2019 | 2 | 2019 |
| Data / CERs / Tools / Models Deliverables (Sep 2019) | 4 | 2019 | 4 | 2019 |
| Data / CERs / Tools / Models Deliverables (Feb 2020) | 2 | 2020 | 2 | 2020 |
| Data / CERs / Tools / Models Deliverables (Sep 2020) | 4 | 2020 | 4 | 2020 |
| Data / CERs / Tools / Models Deliverables (Feb 2021) | 2 | 2021 | 2 | 2021 |
| Data / CERs / Tools / Models Deliverables (Sep 2021) | 4 | 2021 | 4 | 2021 |
| Data / CERs / Tools / Models Deliverables (Feb 2022) | 2 | 2022 | 2 | 2022 |
| Data / CERs / Tools / Models Deliverables (Sep 2022) | 4 | 2022 | 4 | 2022 |
| Data / CERs / Tools / Models Deliverables (Feb 2023) | 2 | 2023 | 2 | 2023 |
| Data / CERs / Tools / Models Deliverables (Sep 2023) | 4 | 2023 | 4 | 2023 |
| Data / CERs / Tools / Models Deliverables (Feb 2024) | 2 | 2024 | 2 | 2024 |
| Data / CERs / Tools / Models Deliverables (Sep 2024) | 4 | 2024 | 4 | 2024 |
| Data / CERs / Tools / Models Deliverables (Feb 2025) | 2 | 2025 | 2 | 2025 |
| Data / CERs / Tools / Models Deliverables (Sep 2025) | 4 | 2025 | 4 | 2025 |
| Quarterly KBS Progress Reviews | 1 | 2019 | 4 | 2025 |

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|---|--------------------|----------------|----------------|---------------------|---|----------------------|----------------|----------------|----------------|---|-------------------------|-------------------|
| Exhibit R-2A, RDT&E Project Justification: PB 2021 Air Force | | | | | | | | | | Date: February 2020 | | |
| Appropriation/Budget Activity 3600 / 7 | | | | | R-1 Program Element (Number/Name) PE 0901538F / <i>Financial Management Information Systems Development</i> | | | | | Project (Number/Name) 675178 / <i>DEAMS Continuous Capability Development</i> | | |
| COST (\$ in Millions) | Prior Years | FY 2019 | FY 2020 | FY 2021 Base | FY 2021 OCO | FY 2021 Total | FY 2022 | FY 2023 | FY 2024 | FY 2025 | Cost To Complete | Total Cost |
| 675178: <i>DEAMS Continuous Capability Development</i> | 0.000 | 5.500 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 5.500 |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

Note

In FY2020, PE 0901554F, DEAMS, changed from PE 0901538F, Financial Management Information Systems Development.
 In FY2020, Project 675178, DEAMS Continuous Capability Development, changed from Defense Enterprise Accounting Management System Increment 2 (DEAMS Inc. 2).

A. Mission Description and Budget Item Justification

Defense Enterprise Accounting and Management System (DEAMS) is a commercial-off-the-shelf (COTS), Oracle-based software implementation effort that will provide an auditable, modern accounting and finance system. DEAMS is a Joint United States Air Force (USAF) and United States Transportation Command (USTRANSCOM) Enterprise Resource Planning (ERP) Program that will replace many existing accounting and finance legacy systems and will provide core funds execution management functions consistent with financial management laws, regulations and policy, general ledger, funds management, payments, receivables, cost and revenues, and fiduciary reporting. DEAMS is compliant with the Clinger-Cohen Act, Business Enterprise Architecture (BEA), and integrates into Global Combat Support System-Air Force (GCSS-AF). When fully deployed, DEAMS will be key to Air Force compliance with the Financial Improvement and Audit Readiness (FIAR) requirement in the 2010 NDAA.

The remaining DEAMS Increment 1 development activities will be completed using agile software development methodologies under a project called DEAMS Rapid Acquisition. As a Section 873 Agile Pilot program, Rapid Acquisition will also be a stepping stone in the implementation of agile development methodologies for DEAMS Continuous Capability Development (CCD). Under Rapid Acquisition, the program contracted with a new System Integrator (SI) to sustain the DEAMS R12 baseline, develop the remaining Inc. 1 requirements (disbursing, reporting, Governance/Risk/Compliance (GRC)), and provide continual enhancement and improvement to the deployed system, utilizing agile software development.

DEAMS CCD capabilities will be implemented utilizing an agile software development methodology. Requirements for CCD include, but are not limited to, development of the core accounting and reporting functionality necessary to enable deployment of modernized personnel, contracting, and logistics systems. Additional capabilities under requirements definition include complex acquisition management, reimbursable cost accounting, military entitlement accounting, advanced accounting controls and audit sustainment, treasury cash accountability, and management accounting and billing for revolving funds. Included in these capabilities are selected requirements deferred from Increment 1.

Requirements will be addressed through an iterative process of sprint development cycles, where usable capability is produced after every sprint. The PMO construct along with application of agile principles allows the program to properly plan system requirements, deliver early capability to the end users, achieve early return on investment of taxpayer dollars, division of risk, reduce waste, effectively respond to change, and continuously improve our processes.

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| Exhibit R-2A, RDT&E Project Justification: PB 2021 Air Force | | Date: February 2020 |
| Appropriation/Budget Activity 3600 / 7 | R-1 Program Element (Number/Name) PE 0901538F / <i>Financial Management Information Systems Development</i> | Project (Number/Name) 675178 / <i>DEAMS Continuous Capability Development</i> |

Additional user deployments enabled by future increment capabilities include acquisition program executive offices; ranges, laboratories and test centers; and air logistics centers. These deployments will add an additional 4,600 users to the Inc 1 baseline for a total of 22,500 users.

This funding request will support development of the Business Capability Acquisition Cycle (BCAC) compliance information artifacts and plans necessary to support the program, Capability Process Maps (CPMs) for each business capability, and mapping of financial management processes the capability will require (Blueprinting). Additionally, the funding will support acquisition strategy planning by early identification/definition of Information Technology Functional Requirements (ITFRs) and Information Assets (IA), Acquisition Strategy Determination, Solution Approach, and Request for Proposal (RFP) preparation.

Funds may be used to develop, acquire, and integrate hardware and software solutions to provide improvements and enhancements in support of the development of the DEAMS capabilities.

Activities also include studies and analysis to support both current program planning and execution and future program planning.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver financial management information system capabilities. The use of such program funds would be in addition to the civilian pay expenses budgeted in program element 0605831F.

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

| | FY 2019 | FY 2020 | FY 2021 Base | FY 2021 OCO | FY 2021 Total |
|---|----------------|----------------|---------------------|--------------------|----------------------|
| Title: DEAMS Continuous Capability Development (CCD) Product Development | 5.500 | 0.000 | - | - | - |
| Description: DEAMS CCD system capabilities will be developed and enhanced through completion of development sprint cycles in accordance with an agile software development strategy. DEAMS expects to leverage lessons learned during the Increment I rapid acquisition to develop a T&E process that is more complimentary to the Agile software development process. Development activities include requirements analysis, design, build, test, data conversion, cut-over from legacy systems, and the resolution of deficiency reports and defects. Also includes the support services (product development support, solution architecture support, configuration control and management support, quality assurance support, acquisition strategy support, test planning support, and cybersecurity support) of various Advisory and Assistance Services (A&ASs), Program Management Administration (PMA) activities, and Federally Funded Research and Development Centers (FFRDCs). | | | | | |
| FY2019 ACCOMPLISHMENTS - Formed Integrated Product Team (IPT) and started planning for follow-on acquisition of System Integrator post Inc 1 completion | | | | | |

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| Exhibit R-2A, RDT&E Project Justification: PB 2021 Air Force | | Date: February 2020 |
| Appropriation/Budget Activity 3600 / 7 | R-1 Program Element (Number/Name) PE 0901538F / <i>Financial Management Information Systems Development</i> | Project (Number/Name) 675178 / <i>DEAMS Continuous Capability Development</i> |

| B. Accomplishments/Planned Programs (\$ in Millions) | FY 2019 | FY 2020 | FY 2021 Base | FY 2021 OCO | FY 2021 Total |
|---|----------------|----------------|---------------------|--------------------|----------------------|
| - Procured resources (EN, DBAs Testers and FMO Integration) needed as DEAMS transitions to agile software development - Initiated planning for infrastructure/architecture modernization | | | | | |
| FY 2020 Plans: See new PE 0901554F | | | | | |
| FY 2020 to FY 2021 Increase/Decrease Statement: Funding moved to PE 091554 after FY19 | | | | | |
| Accomplishments/Planned Programs Subtotals | 5.500 | 0.000 | - | - | - |

| C. Other Program Funding Summary (\$ in Millions) | | | | | | | | | | | |
|--|----------------|----------------|---------------------|--------------------|----------------------|----------------|----------------|----------------|----------------|-------------------------|-------------------|
| Line Item | FY 2019 | FY 2020 | FY 2021 Base | FY 2021 OCO | FY 2021 Total | FY 2022 | FY 2023 | FY 2024 | FY 2025 | Cost To Complete | Total Cost |
| • OPAF 03 834470: <i>Defense Enterprise Accounting & Mgt Sys</i> | 0.802 | 1.905 | 0.899 | - | 0.899 | 3.104 | 3.158 | 3.215 | 3.274 | Continuing | Continuing |

Remarks

D. Acquisition Strategy

The DEAMS Continuous Capability Development (CCD) acquisition strategy will leverage experience gained from FY2019 NDAA Section 869 Pilot Program activities and from agile software development efforts in Increment 1. CCD will be implemented using an agile methodology approach following the Business Capability Acquisition Cycle (BCAC). DEAMS will be in the Capability Sustainment Phase 5 (per DOD Instruction 5000.75) and will conduct continual enhancement/process improvements for the life of the program. DEAMS will continue technical support services for requirements definition and analysis and System Integrator request for proposal (RFP) development, and continue acquisition planning and support for first set of agile development epics supporting CCD system capabilities.

CCD will deliver functionality at earliest opportunity on a stable Increment 1 baseline. User experience and mission impact will be taken into account when establishing the release battle rhythm to the operational system. Factors for software releases include:

- Budget formulation and justification cycles
- End of year financial closeout
- Interdependencies with enterprise business systems
- Higher DOD requirements
- On-going development efforts with LOG-IT, CON-IT, MRO, AFIPPS, and other legacy systems
- Interfaces/data standards changes

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| Exhibit R-2A, RDT&E Project Justification: PB 2021 Air Force | | Date: February 2020 |
| Appropriation/Budget Activity 3600 / 7 | R-1 Program Element (Number/Name) PE 0901538F / <i>Financial Management Information Systems Development</i> | Project (Number/Name) 675178 / <i>DEAMS Continuous Capability Development</i> |
| <p>- Changes to hosting, deployment technologies, or strategies to optimize system security, performance, and cost savings</p> | | |

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| Exhibit R-4A, RDT&E Schedule Details: PB 2021 Air Force | | Date: February 2020 |
| Appropriation/Budget Activity 3600 / 7 | R-1 Program Element (Number/Name) PE 0901538F / <i>Financial Management Information Systems Development</i> | Project (Number/Name) 675178 / <i>DEAMS Continuous Capability Development</i> |

Schedule Details

| Events by Sub Project | Start | | End | |
|---|---------|------|---------|------|
| | Quarter | Year | Quarter | Year |
| DEAMS | | | | |
| Acquisition Planning | 1 | 2019 | 1 | 2021 |
| Agile Software Development Contract Award | 3 | 2020 | 2 | 2021 |
| Continuous Capability Development | 2 | 2021 | 4 | 2024 |

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|--|--------------------|----------------|----------------|---------------------|---|----------------------|----------------|----------------|---|----------------------------|-------------------------|-------------------|
| Exhibit R-2A, RDT&E Project Justification: PB 2021 Air Force | | | | | | | | | | Date: February 2020 | | |
| Appropriation/Budget Activity 3600 / 7 | | | | | R-1 Program Element (Number/Name) PE 0901538F / <i>Financial Management Information Systems Development</i> | | | | Project (Number/Name) 675179 / <i>Defense Enterprise Accounting Management System Increment 1 (DEAMS Inc 1)</i> | | | |
| COST (\$ in Millions) | Prior Years | FY 2019 | FY 2020 | FY 2021 Base | FY 2021 OCO | FY 2021 Total | FY 2022 | FY 2023 | FY 2024 | FY 2025 | Cost To Complete | Total Cost |
| 675179: <i>Defense Enterprise Accounting Management System Increment 1 (DEAMS Inc 1)</i> | 0.000 | 60.959 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 60.959 |
| Quantity of RDT&E Articles | - | - | - | - | - | - | - | - | - | - | | |

Note

In FY2020, PE 0901554F, DEAMS, changes from PE 0901538F, Financial Management Information Systems Development.

A. Mission Description and Budget Item Justification

Defense Enterprise Accounting and Management System (DEAMS) is a commercial-off-the-shelf (COTS), Oracle-based software implementation effort that will provide an auditable, modern accounting and finance system. DEAMS is a Joint United States Air Force (USAF) and United States Transportation Command (USTRANSCOM) Enterprise Resource Planning (ERP) Program that will replace many existing accounting and finance legacy systems and will provide core funds execution management functions consistent with financial management laws, regulations and policy, general ledger, funds management, payments, receivables, cost and revenues, and fiduciary reporting. DEAMS is compliant with the Clinger-Cohen Act, Business Enterprise Architecture (BEA), and integrates into Global Combat Support System-Air Force (GCSS-AF). When fully deployed, DEAMS will be key to Air Force compliance with the Financial Improvement and Audit Readiness (FIAR) requirement in the 2010 NDAA.

DEAMS user deployments include:

- Air Mobility Command (AMC) without Transportation Working Capital Funds (TWCF)
- AMC with TWCF, in conjunction with Defense Finance and Accounting Service (DFAS) Rome
- Air Combat Command (ACC) and Air Force Global Strike Command (AFGSC)
- Air Force Reserve Command (AFRC), and Air National Guard (ANG) and other Geographically Separated Units (GSUs) to include DFAS Limestone, Air Force District of Washington (AFDW), Air Force Special Operations Command (AFSOC), U.S. Air Force Academy (USAFA), Pacific Air Forces (PACAF), and DFAS Japan
- U. S. Air Forces in Europe (USAFE), DFAS Europe, and Air Education and Training Command (AETC), Joint Base San Antonio
- Air Force Material Command (AFMC) and Air Force Space Command (AFSPC) (Incremental Deployments)
- Remaining DFAS locations and all other GSUs

On 23 January 2017, the senior official provided the Critical Change Report (CCR) with certifications to Congress. The report recommended a restructure of DEAMS from one increment to multiple increment. The Milestone Decision Authority (MDA) approved the restructured program for DEAMS Inc 1, to include deferring certain requirements to future increments, a limited deployment to an additional 700 users for Inc 1 to United States Air Force in Europe (USAFE), and the updated Full Deployment Authority to Proceed (FD ATP) criteria via an Acquisition Decision Memorandum (ADM) dated 2 June 2017. (FD ATP date is August 2020 and Capability Support Authority to Proceed (CS ATP) date is February 2021.)

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| Exhibit R-2A, RDT&E Project Justification: PB 2021 Air Force | | Date: February 2020 |
| Appropriation/Budget Activity 3600 / 7 | R-1 Program Element (Number/Name) PE 0901538F / <i>Financial Management Information Systems Development</i> | Project (Number/Name) 675179 / <i>Defense Enterprise Accounting Management System Increment 1 (DEAMS Inc 1)</i> |

The remaining DEAMS Inc 1 schedule includes the Oracle e-Business Suite R12 upgrade and development and deployment of the remaining Increment 1 capabilities (disbursing, reporting, and Governance/Risk/Compliance (GRC)), as well as enhancements and improvements to the existing baseline. In accordance with the FY2019 NDAA, DEAMS is an Agile Pilot program as defined in Sec 873 of the FY2018 NDAA, and all remaining development will be accomplished using agile software development methodologies.

DEAMS Inc 1 is developing capability which allows for deployment to the remaining user locations. However, DEAMS has also begun transitioning the support of previously deployed locations to the Operation and Support (O&S) phase.

Funds may be used to develop, acquire, and integrate hardware and software solutions to provide improvements and enhancements in support of the development of the DEAMS capabilities.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver financial management information system capabilities. The use of such program funds would be in addition to the civilian pay expenses budgeted in program element 0605831F.

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

| | FY 2019 | FY 2020 | FY 2021 Base | FY 2021 OCO | FY 2021 Total |
|--|----------------|----------------|---------------------|--------------------|----------------------|
| Title: Product Development | 60.428 | 0.000 | - | - | - |
| <p>Description: DEAMS Inc 1 capability development activities support multiple software releases and user deployments as described in the mission description. Development activities include design, build, test, data conversion, reporting, cutover from legacy systems, and the resolution of deficiency reports and defects. Activities also include hardware support (system administration and database security) and storage service by Defense Information Systems Agency (DISA); continued development of interface to Global Combat Support System - Air Force (GCSS-AF); Enterprise Resource Planning (ERP) Common Computing Environment (CCE); Independent Verification and Validation (IV&V); Developmental Release Field Support (DRFS) to include process execution and data scripts; help desk support; Engineering Integration Services (EIS) for oversight of development tools and processes; deployment training and change management activities. Provides acquisition, contract, finance, and cost management planning and Program Management Administration (PMA) utilizing an agile approach for reporting, disbursing, and auditing initiatives.</p> <p>Develop, using an Agile software development approach, the Disbursing Initiative (includes modernizing disbursing and implementing daily reconciliation with the U.S. Treasury, which will manage the receipt and acceptance of agreements, orders, and invoices), the Reporting Initiative (establish a modernized Business Intelligence reporting solution), and the Segregation of Duties (SOD) Initiative (allow DEAMS to meet regulatory compliance requirements associated with Financial Information System Controls Audit Manual (FISCAM)).</p> | | | | | |

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| Exhibit R-2A, RDT&E Project Justification: PB 2021 Air Force | | Date: February 2020 |
| Appropriation/Budget Activity 3600 / 7 | R-1 Program Element (Number/Name) PE 0901538F / <i>Financial Management Information Systems Development</i> | Project (Number/Name) 675179 / <i>Defense Enterprise Accounting Management System Increment 1 (DEAMS Inc 1)</i> |

| B. Accomplishments/Planned Programs (\$ in Millions) | FY 2019 | FY 2020 | FY 2021 Base | FY 2021 OCO | FY 2021 Total |
|--|----------------|----------------|---------------------|--------------------|----------------------|
| <p>FY2019 ACCOMPLISHMENTS</p> <ul style="list-style-type: none"> - Completed planned FY2019 deployment of DEAMS to 800 personnel at 10 locations, bringing total users to 15,500 - Awarded contract for Agile software development for remaining Increment 1 capabilities, in accordance with Sec 873 of the FY2018 NDAA - Awarded contracts for development, test, and training environments with the Oracle Federal Managed Cloud Services, for all Agile software development on DEAMS - Awarded bridge contract for R12 upgrade to continue developmental testing and defect correction while contract for new System Integrator was finalized - Successful FY2019 end of year closeout <p>FY 2020 Plans: See new PE 0901554F</p> <p>FY 2020 to FY 2021 Increase/Decrease Statement: Funding moved to PE 091554 after FY19</p> | | | | | |
| <p>Title: Test and Evaluation (T&E)</p> <p>Description: The T&E process will be a complete system operational test to determine DEAMS effectiveness, suitability, and mission capability using the R12 Upgrade. It begins with validation of requirements and end to end functional capabilities including compliance mandates. The T&E effort are conducted in developer sites, Air Force test sites, DISA production sites, and user locations. The DEAMS Test and Evaluation Master Plan (TEMP), Lead Developmental Test Organization (LDTO) Integrated Test Plan (ITP), System Integrators (SIs) Software Test Plans (STPs), and Operational Test Agency (OTA) operational test plans covers the details of Increment 1 T&E. Database Administrator (DBA) Test Support required to service test instances. Capabilities Integration Environment (CIE) Integration/Development support for ancillary Test activities required. Hardware and software required for test activities.</p> <p>The T&E effort for the Agile Pilot Program includes Sprint Testing where functionality developed code in the sprint is tested for conformance to functional and non-functional requirements. Sprint Testing shall address unit and integrated testing. Additionally, there will be Regression Testing to validate that the work within the sprint</p> | 0.531 | 0.000 | - | - | - |

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| Exhibit R-2A, RDT&E Project Justification: PB 2021 Air Force | | Date: February 2020 |
| Appropriation/Budget Activity 3600 / 7 | R-1 Program Element (Number/Name) PE 0901538F / <i>Financial Management Information Systems Development</i> | Project (Number/Name) 675179 / <i>Defense Enterprise Accounting Management System Increment 1 (DEAMS Inc 1)</i> |

| B. Accomplishments/Planned Programs (\$ in Millions) | FY 2019 | FY 2020 | FY 2021 Base | FY 2021 OCO | FY 2021 Total |
|---|----------------|----------------|---------------------|--------------------|----------------------|
| has not introduced defects into areas of the product not directly impacted by the work of the sprint and has not introduced defects into cross-product dependencies such as interfaces. | | | | | |
| FY 2020 Plans: See new PE 0901554F | | | | | |
| FY 2020 to FY 2021 Increase/Decrease Statement: Funding moved to PE 091554 after FY19 | | | | | |
| Accomplishments/Planned Programs Subtotals | 60.959 | 0.000 | - | - | - |

| C. Other Program Funding Summary (\$ in Millions) | | | | | | | | | | | |
|--|----------------|----------------|---------------------|--------------------|----------------------|----------------|----------------|----------------|----------------|-------------------------|-------------------|
| Line Item | FY 2019 | FY 2020 | FY 2021 Base | FY 2021 OCO | FY 2021 Total | FY 2022 | FY 2023 | FY 2024 | FY 2025 | Cost To Complete | Total Cost |
| • OPAF 03 834470: <i>Defense Enterprise Accounting and Mgmt System</i> | 0.802 | 1.905 | 0.899 | - | 0.899 | 3.104 | 3.158 | 3.215 | 3.274 | Continuing | Continuing |

Remarks

D. Acquisition Strategy

DEAMS Inc 1 is over 87% deployed as the baseline viable product for the AF operational finance community. The program relies on heavy customer involvement through the functional management office to govern system changes, requirements development, and day-to-day customer support. DEAMS will employ multiple contract actions as the various Development Activities and Releases are developed, tested, and deployed through FY 2020.

DEAMS Inc 1 accelerated deployment to Air Combat Command (ACC), Air Education & Training Command (AETC), and AF Reserve Command (AFRC) tenant users from FY2020 to FY2019. This user base was orphaned from ACC, AETC, and AFRC because they reside on bases owned by other Major Commands.

AF Space Command and AF Materiel Command Incremental users at the base operations level will migrate to DEAMS Inc 1 capability in FY2020 as planned.

In the FY2019 NDAA, DEAMS was selected as an FY2018 NDAA Sec 873 Agile Pilot program. To facilitate the transition from traditional to agile software development, Increment 1 development items will be completed under a new rapid acquisition contract action using agile software development methods. This new effort will also inform and facilitate the agile program implementation for DEAMS Continuous Capability Development.

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|--|--|--|--|---|--|--|--|---|--|--|----------------------------|--|--|--|--|
| Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Air Force | | | | | | | | | | | Date: February 2020 | | | | |
| Appropriation/Budget Activity 3600 / 7 | | | | R-1 Program Element (Number/Name) PE 0901538F / <i>Financial Management Information Systems Development</i> | | | | Project (Number/Name) 675179 / <i>Defense Enterprise Accounting Management System Increment 1 (DEAMS Inc 1)</i> | | | | | | | |

| Product Development (\$ in Millions) | | | | FY 2019 | | FY 2020 | | FY 2021 Base | | FY 2021 OCO | | FY 2021 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 | | | |
| Product Development | C/CPAF | Not specified. : TBD | 0.000 | - | | - | | - | | - | | - | 0.000 | 0.000 | - |
| DEAMS DRFS (Post Production Support, Level 2/3 Help Desk Support), System Stabilization, Design, Blueprint, Code, Development tools/ processes, etc. | C/FFP | Accenture Federal Services LLC : Various | 0.000 | 2.828 | Oct 2018 | - | | - | | - | | - | 0.000 | 2.828 | - |
| DEAMS: Direct Mission Support (Development/ Integration Environments) | Various | Various : Various | 0.000 | 6.772 | Oct 2018 | - | | - | | - | | - | 0.000 | 6.772 | - |
| DEAMS FFRDC ERP Engineering | C/Various | The MITRE Corporation : Various | 0.000 | 1.390 | Oct 2018 | - | | - | | - | | - | 0.000 | 1.390 | - |
| DEAMS: Rapid Acquisition | C/CPAF | CACI-ISS, INC : Chantilly, VA | 0.000 | 43.448 | Apr 2019 | - | | - | | - | | - | 0.000 | 43.448 | - |
| DEAMS: ERP DBA Development and Support Services | C/FFP | DDC IT Services : Albuquerque, NM | 0.000 | 1.090 | Feb 2019 | - | | - | | - | | - | 0.000 | 1.090 | - |
| Subtotal | | | 0.000 | 55.528 | | - | | - | | - | | - | 0.000 | 55.528 | N/A |

Remarks
 DRFS: Developmental Release Field Support
 ERP: Enterprise Resource Planning
 FFRDC: Federally Funded Research and Development Center
 SME: Subject Matter Expert

| Test and Evaluation (\$ in Millions) | | | | FY 2019 | | FY 2020 | | FY 2021 Base | | FY 2021 OCO | | FY 2021 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 | | | |
| Test and Evaluation | C/CPAF | Not specified. : TBD | 0.000 | - | | - | | - | | - | | - | 0.000 | 0.000 | - |

UNCLASSIFIED

| | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|---|--|--|--|--|---|--|--|--|--|
| Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Air Force | | | | | | | | | | | Date: February 2020 | | | | |
| Appropriation/Budget Activity 3600 / 7 | | | | | | R-1 Program Element (Number/Name) PE 0901538F / <i>Financial Management Information Systems Development</i> | | | | | Project (Number/Name) 675179 / <i>Defense Enterprise Accounting Management System Increment 1 (DEAMS Inc 1)</i> | | | | |

| Test and Evaluation (\$ in Millions) | | | | FY 2019 | | FY 2020 | | FY 2021 Base | | FY 2021 OCO | | FY 2021 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 | | | |
| DEAMS: Test services from AFOTEC, JITC, LDTO and other miscellaneous test resources | MIPR | Various : Various | 0.000 | 0.531 | Oct 2018 | - | | - | | - | | - | 0.000 | 0.531 | - |
| Subtotal | | | 0.000 | 0.531 | | - | | - | | - | | - | 0.000 | 0.531 | N/A |

Remarks
 AFOTEC: Air Force Operational Test and Evaluation Center
 JITC: Joint Interoperability Test Command
 LDTO: Lead Developmental Test Organization

| Management Services (\$ in Millions) | | | | FY 2019 | | FY 2020 | | FY 2021 Base | | FY 2021 OCO | | FY 2021 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 | | | |
| Management Services | C/CPAF | Not specified. : TBD | 0.000 | - | | - | | - | | - | | - | 0.000 | 0.000 | - |
| DEAMS:Program Management Administration | Various | AFLCMC : Wright-Patterson AFB, OH | 0.000 | 4.900 | Oct 2018 | - | | - | | - | | - | 0.000 | 4.900 | - |
| Subtotal | | | 0.000 | 4.900 | | - | | - | | - | | - | 0.000 | 4.900 | N/A |

Remarks
 A&AS: Advisory & Assistance Services

| | Prior Years | FY 2019 | FY 2020 | FY 2021 Base | FY 2021 OCO | FY 2021 Total | Cost To Complete | Total Cost | Target Value of Contract |
|----------------------------|-------------|---------|---------|--------------|-------------|---------------|------------------|------------|--------------------------|
| Project Cost Totals | | 0.000 | 60.959 | 0.000 | - | - | 0.000 | 60.959 | N/A |

Remarks

UNCLASSIFIED

| | | |
|--|---|---|
| Exhibit R-4A, RDT&E Schedule Details: PB 2021 Air Force | | Date: February 2020 |
| Appropriation/Budget Activity 3600 / 7 | R-1 Program Element (Number/Name) PE 0901538F / <i>Financial Management Information Systems Development</i> | Project (Number/Name) 675179 / <i>Defense Enterprise Accounting Management System Increment 1 (DEAMS Inc 1)</i> |

Schedule Details

| Events by Sub Project | Start | | End | |
|--|---------|------|---------|------|
| | Quarter | Year | Quarter | Year |
| DEAMS | | | | |
| DEAMS Inc 1, Software Change Requests | 1 | 2019 | 3 | 2021 |
| DEAMS Inc 1, R12 Software Baseline Development | 1 | 2019 | 1 | 2020 |
| DEAMS Inc 1, Reporting | 3 | 2019 | 3 | 2021 |
| DEAMS Inc 1, Disbursing | 3 | 2019 | 3 | 2021 |
| DEAMS Inc 1, Auditing | 3 | 2019 | 3 | 2021 |
| Deploy DEAMS Inc 1 Capability | 1 | 2019 | 4 | 2020 |
| DEAMS Inc 1, Follow-on Operational Test and Evaluation (FOT&E) | 1 | 2020 | 3 | 2020 |
| DEAMS Inc 1, Full Deployment Authority to Proceed | 4 | 2020 | 4 | 2020 |