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

R-1 Program Element (Number/Name)

3600: Research, Development, Test & Evaluation, Air Force I BA 7:

PE 0605018F I AF Integrated Personnel and Pay System (AF-IPPS)

**Date:** February 2019

Operational Systems Development

Appropriation/Budget Activity

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	214.117	17.298	41.058	40.567	0.000	40.567	43.941	12.756	7.149	25.132	0.000	402.018	
676003: HRM Structural Development	214.117	17.298	41.058	40.567	0.000	40.567	43.941	12.756	7.149	25.132	0.000	402.018	
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-			

Program MDAP/MAIS Code: N86

## A. Mission Description and Budget Item Justification

Air Force Integrated Personnel and Pay System (AFIPPS) will be a web-enabled, Enterprise Resource Planning (ERP) solution that will integrate existing personnel and pay processes into one self-service system. The Department of the Air Force (DAF) plans to accomplish this goal by modernizing existing technology, resulting in a secure and authoritative data environment that improves accuracy, strengthens decision making and reduces processing time and costs. AFIPPS supports effective military personnel management and development throughout the lifecycle of all military members, by providing an accurate and single authoritative source of personnel data. Active (RegAF), National Guard (ANG),and Reserve (AFRes) components will integrate personnel and pay functionality; streamline and improve automated support to the mobilization and deployment processes; and implement standard data that reflects the core requirements of the Combatant Commands, the Department of the Air Force, the Office of the Secretary of Defense and other federal agencies.

Congress, the Department of Defense (DoD), and other federal agencies rely on accurate AF Human Resources (HR) data to make key decisions on how the US military is organized, operated, maintained, and funded. The AFIPPS program will ensure accurate and timely delivery of pay, entitlements, allowances, and benefits information is provided for the Total Force (Active Duty, Guard, and Reserve). AFIPPS represents the AF commitment to modernize business practices and provide enhanced support to service members and their families by integrating personnel and pay systems. AFIPPS will eliminate AF reliance on the end-of-life/unsustainable Defense Finance and Accounting (DFAS) Defense Joint Military Pay System (DJMS) for payroll processing and will ensure continued/improved auditability of service member pay. The AFIPPS approach utilizes Agile to develop pay capabilities and integrate into existing USAF personnel system. Additionally, The AFIPPS approach follows the DoD principle of pursuing enterprise solutions, not enterprise systems. Efforts are underway to establish DoD-level enterprise governance, ensure common standards, and create shared services while pursuing a distinctive approach appropriate for the AF.

AFIPPS's customers include approximately 510,000 AF service members across all components (RegAF, ANG, and AFRes) including thousands of military leaders of different ranks, specialties, and career fields who are responsible for the conduct of AF operations that rely on these services to ensure service members with the appropriate skill sets are deployed where needed at home and on the battlefield. Congress, the rest of the Department of Defense (DoD), and other federal agencies all rely on accurate AF Human Resources (HR) data to make key decisions that affect how the US military is organized, funded, deployed, and maintained.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver integrated personnel and pay 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,

PE 0605018F: AF Integrated Personnel and Pay System (... Air Force

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Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Air Force		Date: February 2019						
Appropriation/Budget Activity	R-1 Program Element (Number/Name)							
3600: Research, Development, Test & Evaluation, Air Force I BA 7:	PE 0605018F I AF Integrated Personnel and Pay System (AF-IPPS)							
Operational Systems Development								

0605832F, and 0605898F. Also, funds will be used to perform studies and innovative integration efforts for common technology capabilities such as cloud migration, technology development, and mobile application.

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. Program Change Summary (\$ in Millions)	FY 2018	FY 2019	<b>FY 2020 Base</b>	FY 2020 OCO	FY 2020 Total
Previous President's Budget	21.915	47.287	54.938	0.000	54.938
Current President's Budget	17.298	41.058	40.567	0.000	40.567
Total Adjustments	-4.617	-6.229	-14.371	0.000	-14.371
<ul> <li>Congressional General Reductions</li> </ul>	0.000	0.000			
<ul> <li>Congressional Directed Reductions</li> </ul>	-4.617	-6.229			
<ul> <li>Congressional Rescissions</li> </ul>	0.000	0.000			
<ul> <li>Congressional Adds</li> </ul>	0.000	0.000			
<ul> <li>Congressional Directed Transfers</li> </ul>	0.000	0.000			
Reprogrammings	0.000	0.000			
SBIR/STTR Transfer	0.000	0.000			
Other Adjustments	0.000	0.000	-14.371	0.000	-14.371

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2018	FY 2019	FY 2020
Title: Air Force Integrated Personnel and Pay System (AFIPPS) - Product Development	16.577	38.987	38.463
<b>Description:</b> Acquire and develop the activities that support the acquisition of a personnel/pay capability for USAF personnel across all components (i.e., RegAF, ANG, and AFRes).			
FY 2019 Plans:  - Determine and initiate system interface modifications required to integrate pay capability into AFIPPS  - Continue Oracle Subject Matter Expertise contract to advise program office on Commercial-off-the Shelf (COTS) product implementation  - Continue contract to use the Agile approach for developing pay capabilities and integrate into existing USAF personnel system (first full year)  - Purchase COTS S/W licenses to support development activities			

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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 0605018F I AF Integrated Personnel and Pay S	ystem (AF-IP	PS)	
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019	FY 2020
<ul> <li>Maintain contract documentation to support AFIPPS strategy and Full Deplot</li> <li>Continue acquisition planning, reporting, and the execution of AFIPPS and f</li> <li>Continue AF information technology efforts (e.g., Common Computing Envir (FIAR)/Federal Information System Controls Audit Manual(FISCAM) audit support the AF &amp; DoD enterprise networks, databases, and information systems</li> <li>Maintain the required AFIPPS computing environments, e.g. development, t</li> <li>Continue risk reduction activities to support decision-making</li> <li>Continue to design and implement enterprise architecture for pay</li> <li>Continue to perform change management and other integration activities</li> <li>Complete EBS training contract</li> <li>Continue to use Engineering, Professional, and Administrative Support Servi Funded Research and Development Center (FFRDC) resources to support in</li> </ul>	ollow-on activities conment, Financial Improvement and Audit Readiness opport, etc.) to ensure AFIPPS is fully integrated into est environment  ces (EPASS) contracted personnel and Federally			
FY 2020 Plans:  - Will continue system interface modifications required to integrate pay capable. Will continue Oracle Subject Matter Expertise contract to advise program of the Will continue to use the Agile approach for developing pay capabilities and in the Will purchase COTS S/W licenses to support development activities.  - Will maintain contract documentation to support AFIPPS strategy and Full Discrete Will continue acquisition planning, reporting, and the execution of AFIPPS are will continue AF information technology efforts (e.g., Common Computing Ensure AFIPPS is fully integrated into the AF & DoD enterprise networks, dature will maintain the required AFIPPS computing environments, e.g. developmed will continue risk reduction activities to support decision-making.  - Will continue to design and implement enterprise architecture for pay.  - Will continue to perform change management and other integration activities.  - Will continue to use EPASS contracted personnel and FFRDC resources to	ility into AFIPPS fice on COTS product implementation integrate into existing USAF personnel system reployment ATP approval ind follow-on activities invironment, FIAR/FISCAM audit support, etc to abases, and information systems ent, test environment			
FY 2019 to FY 2020 Increase/Decrease Statement: No significant change between FY2019 and FY2020.				
Title: AFIPPS - Test and Evaluation		0.721	2.071	2.104
Description: Government integrated test and evaluation activities.				
FY 2019 Plans:				

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Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Air Force	Date: February 2019							
Appropriation/Budget Activity	R-1 Program Element (Number/Name)							
3600: Research, Development, Test & Evaluation, Air Force I BA 7:	PE 0605018F I AF Integrated Personnel and Pay System (AF-IPPS)							
Operational Systems Development								

C. Accomplishments/Planned Programs (\$ in Millions)  - Continue refining Test and Evaluation Master Plan (TEMP) and preparing test plans  - Begin AFIPPS integrated contractor development test activities  - Continue Cyber Vulnerability Assessments to evaluate current/future AFIPPS system environments	FY 2018	FY 2019	FY 2020
FY 2020 Plans:  - Will continue refining TEMP and preparing test plans  - Will continue AFIPPS integrated contractor development test activities  - Will continue Cyber Vulnerability Assessments to evaluate current/future AFIPPS system environments  - Will plan and conduct Developmental/Operational Testing on AFIPPS			
FY 2019 to FY 2020 Increase/Decrease Statement: Funding increase is due to projected inflation adjustment			
Accomplishments/Planned Programs Subtotals	17.298	41.058	40.567

### D. Other Program Funding Summary (\$ in Millions)

	-	-	FY 2020	FY 2020	FY 2020					<b>Cost To</b>	
<u>Line Item</u>	<b>FY 2018</b>	FY 2019	<b>Base</b>	<u>000</u>	<u>Total</u>	FY 2021	FY 2022	FY 2023	FY 2024	<b>Complete</b>	<b>Total Cost</b>
• OPAF 03 834410: INTEGRATED	0.000	0.000	20.900	-	20.900	0.000	0.000	0.000	_	0.000	20.900
PERSONNEL AND PAY SYSTEM											

#### Remarks

#### E. Acquisition Strategy

AFIPPS acquisition strategy focuses on expanding the fielded AF personnel system (MilPDS) by integrating a pay capability. MilPDS is implemented using the commercial Oracle ERP E-Business Suite (EBS). The AFIPPS strategy will be to configure/develop the pay portion of EBS, ensure the system is fully integrated, and deployed. The Government awarded a contract for the pay system development, test, and deployment. The development activities will be fully coordinated and integrated with the on-going operation and sustainment of MilPDS.

AFIPPS is using agile software development to the maximum extent practical for a COTS implementation effort. The capability will be broken into epics, and each sprint will be developed and tested by the developer and government on a pre-production system. Once functionality and associated business processes from current payroll and leave systems are incorporated into the pre-production system, AFIPPS will be delivered in a single release in Q2FY21. The release is strategically planned for January to coincide with all domestic and international financial transactions that occur on the first of the year, mitigating any potential impacts to the warfighter. Incremental releases on top of the existing operational AF Military Personnel Data System (MilPDS) are not feasible due to the following:

- Incremental releases require complementary changes to dependent, disparate Legacy IT systems at the same time; changes to those systems requires resources and scheduling for each system owner and management office
- Business processes cannot be fielded using a mix of newly re-engineered segments with legacy; an end-to-end re-engineered process is required from day one

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Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Air Force		Date: February 2019
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	
3600: Research, Development, Test & Evaluation, Air Force I BA 7:	PE 0605018F I AF Integrated Personnel and Pay System	1 (AF-IPPS)
Operational Systems Development		

- · Rapid Change Management and Training is required across the AF to accompany each incremental release
- Changes to MilPDS infrastructure require significant lead time with DISA; cybersecurity mandates are additional approvals

Air Force Program Executive Officer (PEO) for Business and Enterprise Systems (AFPEO BES) is the PEO for AFIPPS. Air Force Life Cycle Management Center (AFLCMC) is the Contracting Authority for the AFIPPS Program and provides Contracts, Legal, and Comptroller support. The Office of the Under Secretary of Defense for Acquisition and Sustainment [OUSD(A&S)] has delegated the program's Milestone Decision Authority (MDA) to the Service Acquisition Executive (SAE) for the Air Force.

#### F. 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 contri	outing to Air
Force performance goals and most importantly, how they contribute to our mission.	

PE 0605018F: AF Integrated Personnel and Pay System (... Air Force

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

Date: February 2019

Appropriation/Budget Activity

3600 / 7

R-1 Program Element (Number/Name)
PE 0605018F I AF Integrated Personnel
and Pay System (AF-IPPS)

Project (Number/Name) 676003 I HRM Structural Development

Product Developmen	nt (\$ in M	illions)		FY 2	2018	FY 2	2019		2020 ise		2020 CO	FY 2020 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
Common Computinng Environment (CCE)	Various	Various : Various	0.701	-		-		-		-		-	0.000	0.701	0.701
Prime Devlelopment & Integration Contract	C/CPAF	ACCENTURE FEDERAL SVCS : ARLINGTON, VA	16.391	6.115	May 2018	20.229	Nov 2018	20.232	Dec 2019	-		20.232	56.896	119.863	124.894
Application Hosting Environment	MIPR	DISA EIS : Pensacola, FL	56.268	1.799	Apr 2018	1.698	Dec 2018	1.809	Dec 2019	-		1.809	1.888	63.462	63.462
COTs Licenses	Various	Various : Various	11.991	3.472	Apr 2018	1.862	Oct 2018	1.640	Apr 2020	-		1.640	15.027	33.992	33.992
System Interface Integration & Modification	TBD	TBD : TBD	0.000	0.000		3.195	Feb 2019	5.343	Dec 2019	-		5.343	2.921	11.459	11.459
Engineering Support (FFRDC)	SS/CPAF	CMU-SEI : Pittsburgh, PA	10.807	1.110	Oct 2018	2.621	Jan 2019	1.969	Aug 2020	-		1.969	4.098	20.605	20.605
Oracle EBS Subject Matter Experts	C/T&M	DLT SOLUTIONS, LLC : HERNDON, VA	0.000	0.588	May 2018	1.183	Oct 2018	1.441	Nov 2019	-		1.441	0.738	3.950	3.950
Financial Improvement and Audit Readiness(FIAR) and Acquisition Planning Subject Matter Experts	C/FP	Various : Various	0.482	0.498	Aug 2018	0.509	Aug 2019	0.567	Aug 2020	-		0.567	0.598	2.654	2.654
Oracle eBusiness Suite (EBS) Training Development	C/FP	ASPECT SOFTWARE INC : PHOENIX, AZ	2.796	0.660	Sep 2018	1.167	Nov 2018	-		-		-	0.000	4.623	4.623
Direct Mission Support (Other)	Various	Various : Various	53.862	-		-		-		-		-	0.000	53.862	53.862
		Subtotal	153.298	14.242		32.464		33.001		-		33.001	82.166	315.171	N/A
Tost and Evaluation	(か : B#:III							FY 2	2020	FY 2	2020	FY 2020			

Test and Evaluation	(\$ in Milli	ions)		FY 2	2018	FY 2	2019		2020 ise		2020 CO	FY 2020 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
Independent Verification & Validation (IV&V)	Various	Various : Various	2.354	-		-		-		-		-	0.000	2.354	2.354

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

Appropriation/Budget Activity
3600 / 7

R-1 Program Element (Number/Name)
PE 0605018F / AF Integrated Personnel
and Pay System (AF-IPPS)

Pate: February 2019

R-1 Program Element (Number/Name)
676003 / HRM Structural Development

Test and Evaluation	Evaluation (\$ in Millions)		FY 2	2018	FY 2	2019	FY 2 Ba		FY 2	2020 CO	FY 2020 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
Gov't Integrated Test & Evaluation Activities	MIPR	Various : Various	1.723	0.101	Mar 2018	0.372	Dec 2018	1.038	Dec 2019	-		1.038	0.514	3.748	3.748
Development and Test Infrastructure	C/CPIF	DTSI : San Antonio, TX	0.100	0.620	Jul 2018	1.699	Dec 2018	1.066	Jul 2020	-		1.066	1.094	4.579	4.579
		Subtotal	4.177	0.721		2.071		2.104		-		2.104	1.608	10.681	N/A

Management Service	s (\$ in M	illions)		FY 2	2018	FY 2	2019	FY 2 Ba	2020 ise		2020 CO	FY 2020 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
Engineering and Technology Acquisition Support Services (ETASS)	C/CPFF	Oasis Systems, LLC : Lexington, MA	11.370	1.661	Apr 2018	0.400	Jan 2019	0.000		-		0.000	0.000	13.431	13.431
Engineering, Professional, and Administrative Support Services (EPASS)	C/CPAF	Oasis Systems, LLC : Lexington, MA	0.000	-		5.388	Nov 2018	4.690	Mar 2020	-		4.690	3.950	14.028	14.028
Other Program Support Cost	Various	Various : Various	25.594	0.321	Apr 2018	0.440	Nov 2018	0.449	Jan 2020	-		0.449	0.755	27.559	27.559
Professional Acquisition Support Services II (PASS II)	C/CPAF	Quantech Services, Inc. : Lexington, MA	15.849	0.353	Jul 2018	0.000		0.000		-		0.000	0.000	16.202	16.202
Specialized Cost Services (SCS): EPASS	C/CPAF	BusinessTechnologies & Solutions : Beavercreek, OH	3.829	0.000	Apr 2018	0.295	Apr 2019	0.323	Apr 2020	-		0.323	0.499	4.946	4.946
		Subtotal	56.642	2.335		6.523		5.462		-		5.462	5.204	76.166	N/A

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	Prior Years	FY 2	018	FY 2	019	FY 2 Ba	 FY 2	2020 CO	FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	214.117	17.298		41.058		40.567	-		40.567	88.978	402.018	N/A

Remarks

PE 0605018F: AF Integrated Personnel and Pay System (... Air Force

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Ai	ir Fo	orce	<del>)</del>																			Da	ate:	Feb	rua	ıry 2	2019	)	
Appropriation/Budget Activity 3600 / 7															Number/Name) HRM Structural Development														
		FY	201	8		FY	201	9		FY	202	0		FY	202	1		FY	202	2		F۱	<b>/ 20</b>	23			FY 2	2024	<u> </u>
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	1	2 3	3	4	1	2	3	4
Integrated Personnel and Pay System				'		,					'		,		'		'					,		,					
AFIPPS Development and Test Environments																													
Enterprise Architecture Design/Implement																													
Acquisition planning, RFP, Contract Award																													
Prime Development, Integration, and Deployment																													
AF Information Technology Efforts																													
Government Integrated Test and Evaluation Activities																													

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force			Date: February 2019
3600 / 7	, ,	- 3 (	umber/Name) IRM Structural Development

# Schedule Details

	Si	E	nd	
Events by Sub Project	Quarter	Year	Quarter	Year
Integrated Personnel and Pay System				
AFIPPS Development and Test Environments	1	2018	3	2021
Enterprise Architecture Design/Implement	1	2018	4	2020
Acquisition planning, RFP, Contract Award	1	2018	3	2018
Prime Development, Integration, and Deployment	3	2018	2	2021
AF Information Technology Efforts	1	2018	4	2024
Government Integrated Test and Evaluation Activities	1	2018	1	2022