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 0305984F *I Personnel Recovery Command & Ctrl (PRC2)*					

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	-	2.364	2.466	2.133	0.000	2.133	2.556	2.609	2.656	2.704	Continuing	Continuing
675221: *Personnel Recovery Command and Control (PRC2)*	-	2.364	2.466	2.133	0.000	2.133	2.556	2.609	2.656	2.704	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project funds operational development necessary to acquire, modify, and sustain a segment of Air Force's C2 capabilities and services associated with Personnel Recovery (PR). The Personnel Recovery Command and Control (PRC2) program develops and delivers tools and services for planning, collaborating and managing search and rescue efforts, as well as disseminating related information to all personnel recovery mission coordinators across the PR network. PRC2 provides an adaptive and networked system, delivering timely situational awareness information supporting personnel accountability and recovery mission management worldwide. PRC2 delivers a globally accessible, collaborative, inter-operable and integrated set of capabilities to prevent, prepare for and respond to joint/coalition military personnel recovery activities, and civilian rescue missions. The Joint Personnel Recovery (JPR) Initial Capability Document (ICD) (2012) articulates capabilities needed for PRC2.

The system collects, stores and delivers personnel/identity biometric data, emergency locator beacon registrations, isolated personnel reports, evasion plans of action, incident reports and other information management capabilities. The information is used for predictive, preventive and personnel vulnerability analysis and assessment in support of PR across the Department of Defense and other national and international entities. Activities also include studies and analysis to support both current program planning and execution, as well as future program planning.

In FY 2020, Personnel Recover Mission Manager (PRMM) modifications will use an Agile software development strategy to develop, test and field PRMM versions in two week increments. The modifications will improve/validate Isolated Personnel (IP) events/alerts and enable case files for Defense Prisoner of War/Missing Personnel Office (DPMO) and Joint Personnel Recovery Agency (JPRA). PRMM modifications will reflect the requirements and priorities identified by Air Combat Command (ACC) as the personnel recovery environment evolves to meet the needs of the war-fighter and personnel recovery efforts.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver PRC2 weapon system capabilities. 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, and 0605898F.

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.

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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	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	2.445	2.466	2.512	0.000	2.512
Current President's Budget	2.364	2.466	2.133	0.000	2.133
Total Adjustments	-0.081	0.000	-0.379	0.000	-0.379
• 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	-0.081	0.000			
• Other Adjustments	0.000	0.000	-0.379	0.000	-0.379

Change Summary Explanation

FY 2020 funding request was reduced by $0.379 million to account for the availability of prior year execution balances.

C. Accomplishments/Planned Programs ($ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: PRC2 - PRMM Development	2.154	2.256	1.933	0.000	1.933
Description: PRC2 will use an agile software development strategy to test and field tools and services for planning and managing search and rescue efforts, and disseminate the related information for personnel recovery. **FY 2019 Plans:** - Develop, test and field PRMM versions 2.0.1 through 3.0.9 in two-week increments; development effort will encompass an interface with the Common Distress Reporting System (CDRS) to provide various user interface upgrades and application improvements for Personnel Recovery Coordination **FY 2020 Base Plans:** - Develop, test and field PRMM versions 4.0.0 through 5.0.9 in two-week increments; development effort will encompass an interface with the CDRS to provide various user interface upgrades and application improvements for Personnel Recovery Coordination **FY 2020 OCO Plans:**					

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Air Force		Date: February 2019		
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C. Accomplishments/Planned Programs ($ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
N/A ***FY 2019 to FY 2020 Increase/Decrease Statement:*** Funding decreased due to sprints.					
Title: PRC2 - PRMM Test and Evaluation ***Description:*** Test and Evaluation ***FY 2019 Plans:*** - Test and field PRMM Versions 2.0.1 through 3.0.9 ***FY 2020 Base Plans:*** - Test and field PRMM Versions 4.0.0 through 5.0.9 ***FY 2020 OCO Plans:*** N/A ***FY 2019 to FY 2020 Increase/Decrease Statement:*** N/A	0.100	0.100	0.100	0.000	0.100
Title: PRC2 Hanscom milCloud (HmC) Software Licenses ***Description:*** MilCloud subscription support to demonstrate PRMM capabilities and tests ***FY 2019 Plans:*** - Testing platform for customer feedback ***FY 2020 Base Plans:*** - Testing platform for customer feedback ***FY 2020 OCO Plans:*** N/A ***FY 2019 to FY 2020 Increase/Decrease Statement:*** N/A	0.110	0.110	0.100	0.000	0.100
Accomplishments/Planned Programs Subtotals	2.364	2.466	2.133	0.000	2.133

Exhibit R-2, **RDT&E Budget Item Justification:** PB 2020 Air Force	**Date:** February 2019
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D. Other Program Funding Summary ($ in Millions)

Line Item	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
• OPAF 03 834520: *Theater Battle Mgt C2 System*	1.286	1.301	0.323	-	0.323	0.347	0.372	0.396	0.421	Continuing	Continuing

Remarks

E. Acquisition Strategy

PRC2 product support is provided to the program office by the 517th Software Maintenance Squadron (517 SMXS), Hill AFB Utah, in accordance with a memorandum of agreement and on a fee for service basis. This strategy to utilize the 517 SMXS for agile product development and sustainment was reviewed and approved by the Air Force Program Executive Officer for Digital, and implemented in mid-FY 2014. The work done by the 517 SMXS includes, but is not limited to, modernization development, sustainment support services, and software maintenance of the PRC2 system.

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 contributing to Air Force performance goals and most importantly, how they contribute to our mission.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force													Date: February 2019	
Appropriation/Budget Activity 3600 I 7						**R-1 Program Element (Number/Name)** PE 0305984F I Personnel Recovery Command & Ctrl (PRC2)						**Project (Number/Name)** 675221 I Personnel Recovery Command and Control (PRC2)		

Product Development ($ in Millions)				**FY 2018**		**FY 2019**		**FY 2020 Base**		**FY 2020 OCO**		**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**
PRC2 - PRMM Agile Software Development	PO	Ogden ALC : Hill AFB, UT	-	2.144	Dec 2017	2.246	Dec 2018	1.923	Dec 2019	-		1.923	Continuing	Continuing	-
Subtotal			-	2.144		2.246		1.923		-		1.923	Continuing	Continuing	N/A

Support ($ in Millions)				**FY 2018**		**FY 2019**		**FY 2020 Base**		**FY 2020 OCO**		**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**
PRC2 - PRMM Hanscom milCloud (HmC) Software Licenses	MIPR	General Services Admin : Boston, MA	-	0.110	Dec 2017	0.110	Dec 2018	0.100	Dec 2019	-		0.100	Continuing	Continuing	-
Subtotal			-	0.110		0.110		0.100		-		0.100	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)				**FY 2018**		**FY 2019**		**FY 2020 Base**		**FY 2020 OCO**		**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**
PRC2 - PRMM Test and Evaluation	PO	45th Test Squadron : Eglin AFB, FL	-	0.100	Dec 2017	0.100	Dec 2018	0.100	Dec 2019	-		0.100	Continuing	Continuing	-
Subtotal			-	0.100		0.100		0.100		-		0.100	Continuing	Continuing	N/A

Management Services ($ in Millions)				**FY 2018**		**FY 2019**		**FY 2020 Base**		**FY 2020 OCO**		**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**
PRC2 - PRMM Program Management Administration	TBD	Various : Hill AFB, UT	-	0.010	Mar 2018	0.010	Mar 2019	0.010	Mar 2020	-		0.010	Continuing	Continuing	-
Subtotal			-	0.010		0.010		0.010		-		0.010	Continuing	Continuing	N/A

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 0305984F / Personnel Recovery Command & Ctrl (PRC2)	Project (Number/Name) 675221 / Personnel Recovery Command and Control (PRC2)

	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	2.364	2.466	2.133	-	2.133	Continuing	Continuing	N/A

Remarks

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 0305984F / Personnel Recovery Command & Ctrl (PRC2)	**Project (Number/Name)** 675221 / Personnel Recovery Command and Control (PRC2)

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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
Personnel Recovery Command & Control (PRC2)																												
Personnel Recovery Mission Manager (PRMM) Ver 2.0.0 Fielding	■	■																										
PRMM Ver 2.0.1 - 3.0.9 Development, Testing and Fielding						■	■	■																				
PRMM Ver 4.0.0 - 5.0.9 Development, Testing and Fielding										■	■	■																
PRMM Ver 6.0.0 - 7.0.9 Development, Testing and Fielding														■	■	■												
PRMM Ver 8.0.0 - 9.0.9 Development, Testing and Fielding																		■	■	■								
PRMM Ver 10.0.0 - 11.0.9 Development, Testing and Fielding																						■	■	■				
PRMM Ver 12.0.0 - 13.0.9 Development, Testing and Fielding																										■	■	■

Exhibit R-4A, **RDT&E Schedule Details:** PB 2020 Air Force		**Date:** February 2019
Appropriation/Budget Activity 3600 *I* 7	**R-1 Program Element (Number/Name)** PE 0305984F *I Personnel Recovery Command & Ctrl (PRC2)*	**Project (Number/Name)** 675221 *I Personnel Recovery Command and Control (PRC2)*

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Personnel Recovery Command & Control (PRC2)				
Personnel Recovery Mission Manager (PRMM) Ver 2.0.0 Fielding	1	2018	1	2019
PRMM Ver 2.0.1 - 3.0.9 Development, Testing and Fielding	2	2019	1	2020
PRMM Ver 4.0.0 - 5.0.9 Development, Testing and Fielding	2	2020	1	2021
PRMM Ver 6.0.0 - 7.0.9 Development, Testing and Fielding	2	2021	1	2022
PRMM Ver 8.0.0 - 9.0.9 Development, Testing and Fielding	2	2022	1	2023
PRMM Ver 10.0.0 - 11.0.9 Development, Testing and Fielding	2	2023	1	2024
PRMM Ver 12.0.0 - 13.0.9 Development, Testing and Fielding	2	2024	4	2024