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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Air Force **Date:** May 2021

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 0207452F / DCAPES
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COST (\$ in Millions)	Prior Years ⁽⁺⁾	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	238.650	19.180	14.789	4.305	0.000	4.305	-	-	-	-	-	-
674801: <i>DCAPES INC 2B</i>	51.469	19.180	14.789	4.305	0.000	4.305	-	-	-	-	-	-

Program MDAP/MAIS Code: 500

⁽⁺⁾ The sum of all Prior Years is \$187.181 million less than the represented total due to several projects ending

A. Mission Description and Budget Item Justification

Deliberate and Crisis Action Planning and Execution Segments (DCAPES) is the USAF system used to project air expeditionary forces (includes weapon systems, logistics, and personnel). It enables the USAF to posture mission ready and equipped forces (organized in effects-based operational capability packages) to deliver air, space and cyberspace capabilities to Joint commanders worldwide. Technical requirements planned for Increment 2B include enabling the system to support Public Key Infrastructure and elimination of Social Security Account Numbers as the primary key for identifying Air Force military and civilian members by replacing it with the Electronic Data Interchange Personal Identifier.

DCAPES funding will be executed against capabilities packaged into agile development projects for multiple releases based on the warfighter's priorities.

Funds will be used to perform studies and innovative integration efforts for common technology capabilities such as cloud migration, technology development and mobile application.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver weapons system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605831F. In FY20 \$0.0M was expended for civilian pay expenses in this program element, and in FY21 \$0.0M is forecasted for civilian pay expenses in this program element.

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.

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B. Program Change Summary (\$ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	19.910	14.816	4.370	0.000	4.370
Current President's Budget	19.180	14.789	4.305	0.000	4.305
Total Adjustments	-0.730	-0.027	-0.065	0.000	-0.065
• Congressional General Reductions	0.000	-0.027			
• 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	-0.730	0.000			
• Other Adjustments	0.000	0.000	-0.065	0.000	-0.065

Change Summary Explanation

Funding decreased due to Increment 2B scheduled completion in FY22. Program was re-structured in August 2020 to continue development.

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Air Force										Date: May 2021		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0207452F / DCAPES				Project (Number/Name) 674801 / DCAPES INC 2B			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
674801: DCAPES INC 2B	51.469	19.180	14.789	4.305	0.000	4.305	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-	-	-

A. Mission Description and Budget Item Justification

Deliberate and Crisis Action Planning and Execution Segments (DCAPES) is the USAF system used to project air expeditionary forces (includes weapon systems, logistics, and personnel). It enables the USAF to posture mission ready and equipped forces (organized in effects-based operational capability packages) to deliver air, space and cyberspace capabilities to Joint commanders worldwide. DCAPES stores planning and execution information for Air Force (AF) functional users in the four (4) main AF disciplines: 1) operations, 2) logistics, 3) manpower, and 4) personnel. These disciplines support joint, combined, and AF military operations worldwide. Technical requirements planned for Increment 2B include enabling the system to support Public Key Infrastructure and elimination of Social Security Account Numbers as the primary key for identifying Air Force military and civilian members by replacing it with the Electronic Data Interchange Personal Identifier.

Funds will be used to perform studies and innovative integration efforts for common technology capabilities such as cloud migration, technology development and mobile application.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver weapons system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605831F. In FY20 0.0M was expended for civilian pay expenses in this program element, and in FY21 0.0M is forecasted for civilian pay expenses in this program element.

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

	FY 2020	FY 2021	FY 2022
Title: DCAPES INCREMENT 2B	19.180	14.789	4.305
<p>Description: DCAPES Increment 2B includes Infrastructure Support, Business Intelligence, and the development of multiple Warfighter Capabilities (see remarks section below for capability titles). The Program continued execution of Warfighter Capabilities 1,2,4,6 during FY20. In August 2020, the Air Force restructured DCAPES Inc 2B Acquisition Program Baseline adding two and a half capability packages (second half of 6 plus 7 and 8), that had previously been deferred. DCAPES continued execution of Warfighter Capabilities 4,5,6,8 during FY21, and will execute Warfighter Capabilities 5,6,7,8, & JPES during FY22.</p>			
<p>FY 2021 Plans:</p> <ul style="list-style-type: none"> - Continue the development of Warfighter Capabilities 4,5,6,8 - Continue JPES integration 			
<p>No OCO</p>			
<p>FY 2022 Plans:</p> <ul style="list-style-type: none"> - Will continue the development of Warfighter Capabilities 5,6,7,8 			

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Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0207452F / DCAPEs	Project (Number/Name) 674801 / DCAPEs INC 2B

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022
- Will continue JPES integration			
<i>FY 2021 to FY 2022 Increase/Decrease Statement:</i> Funding decreased due to Increment 2B scheduled completion in FY22. Program was re-structured in August 2020 to continue development.			
Accomplishments/Planned Programs Subtotals	19.180	14.789	4.305

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

N/A

Remarks

DCAPES Increment 2B Warfighter Capability Packages:
 Capability 1 - Electronic Data Interface Personnel Identifier (EDIPI)
 Capability 2 - Global Force Management Interoperability (GFM-DI)
 Capability 3 - Enhanced Contingency-Rotational Air Expeditionary Force Scheduling Tool Interface (ECAST)
 Capability 4 - Manpower & Equipment Force Packaging (MEFPAK)
 Capability 5 - Logistics Factor File (LFF)
 Capability 6 - Force Availability Analysis (FAA)
 Capability 7 - Air Reserve Component (ARC) Forces
 Capability 8 - Workflow
 JPES - Joint Planning Execution Services

D. Acquisition Strategy

The DCAPES program successfully awarded the DCAPES Increment 2B Development Task Order for a one-year Base Period and four one-year Option Periods using the NETCENTS 2 Application Services Small Business Indefinite Delivery Indefinite Quantity (IDIQ) contract. The period of performance started on 6 April 2020 and ends on 5 April 2024.

DCAPES is an Evolutionary Acquisition Program using an incremental development approach (DoDI 5000.02 Model 3) to develop capabilities over several increments. To support the rapid development and delivery of capabilities, DCAPES employs a hybrid Agile acquisition strategy in which capabilities are incrementally delivered in time-phased stages based on warfighter priorities and adoption of key architecture and technology requirements as a trade-off for accelerated delivery and risk reduction.

The DCAPES Program Management Office (PMO) uses a mix of agreements (Service Level Agreements and Memorandums) with DCAPES interface partners. A Service Level Agreement is in place with the Capabilities Integration Environment (AFLCMC/HNIZ) to provide the infrastructure used to conduct software development and testing. Memorandums of Agreement with Joint Interoperability Test Command, Air Force Operational Test and Evaluation Command, and the 45th Test Squadron are in place and outline the test support required before fielding the final capability packages.

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The DCAPES Increment 2B requirements have been packaged into multiple discreet capabilities which will be developed in multiple releases. Each capability will be developed using several Sprints and with one or more fieldings to satisfy the approved requirements within each package.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Air Force **Date: May 2021**

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0207452F / DCAPES	Project (Number/Name) 674801 / DCAPES INC 2B
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Product Development (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 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			
DCAPES Increment 2B/ Prime Contract	C/FFP	Array Information Technology, Inc. : Greenbelt, MD	24.202	7.998	Dec 2019	6.157	Dec 2020	1.131	Dec 2021	-		1.131	-	-	43.136
DCAPES Infrastructure/ Integration	C/FFP	DATUM Software Inc. : John Creek, GA	2.999	0.779	Feb 2020	0.800	Feb 2021	0.369	Feb 2022	-		0.369	-	-	5.152
DCAPES Architecture Documentation Development	C/FFP	Bowhead LLC : Springfield, VA	1.120	0.326	Aug 2020	0.356	Aug 2021	0.125	Aug 2022	-		0.125	-	-	13.756
DCAPES DISA Hosting	MIPR	DISA : Pensacola, FL	4.167	1.754	Oct 2019	1.496	Oct 2020	0.526	Oct 2021	-		0.526	-	-	15.166
Subtotal			32.488	10.857		8.809		2.151		-		2.151	-	-	N/A

Support (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 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			
DCAPES HIB Integration Contract Support	C/FFP	MacaLogic, LLC : Dayton, OH	4.567	0.749	Apr 2020	0.855	Apr 2021	0.544	Apr 2022	-		0.544	-	-	3.225
DCAPES Cost Analysis Contract Support	C/CPFF	BTAS, Inc. : Beavercreek, OH	1.131	0.317	May 2020	0.340	May 2021	0.141	May 2022	-		0.141	-	-	1.908
DCAPES Engineering Contract Support	C/CPFF	Oasis Systems, LLC : Lexington, MA	3.490	1.987	Dec 2019	1.502	Dec 2020	0.774	Dec 2021	-		0.774	-	-	5.392
DCAPES CIE Tech Support	MIPR	AFLCMC/HNIZ CIE : MAFB-Gunter Annex, AL	2.247	0.607	Mar 2020	0.608	Mar 2021	0.221	Mar 2022	-		0.221	-	-	7.390
DCAPES Development Environment HW	C/Various	Various : Various	0.879	1.720	Aug 2020	0.000	Aug 2021	0.000	Aug 2022	-		0.000	-	-	1.720
DCAPES Licenses (Software/Hardware)	C/Various	Various : Various	0.939	0.134	Feb 2020	0.245	Feb 2021	0.030	Feb 2022	-		0.030	-	-	1.573
DCAPES Oracle Licenses	C/FFP	Mythics : Vienna, VA	2.789	0.253	Aug 2020	0.258	Aug 2021	0.095	Aug 2022	-		0.095	-	-	4.560
DCAPES Government Purchase Card	Reqn	Various : Various	0.069	0.020	Oct 2019	0.020	Oct 2020	0.015	Oct 2021	-		0.015	-	-	0.209

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Support (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			16.111	5.787		3.828		1.820		-		1.820	-	-	N/A

Test and Evaluation (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 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			
DCAPES Development Test and Evaluation	MIPR	45th Test Sqdn : Eglin AFB, FL	0.954	0.347	Dec 2019	0.367	Dec 2020	0.141	Dec 2021	-		0.141	-	-	3.519
DCAPES Interoperability Testing and Evaluation	MIPR	DISA JITC : Huachuca, AZ	0.269	0.133	Oct 2019	0.135	Oct 2020	0.128	Oct 2021	-		0.128	-	-	1.278
Subtotal			1.223	0.480		0.502		0.269		-		0.269	-	-	N/A

Management Services (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 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			
Program Management Assessments	Various	Various : Various	1.387	1.991	Oct 2019	1.585	Oct 2020	0.000	Oct 2021	-		0.000	-	-	4.145
DCAPES Travel	Reqn	Various : Various	0.120	0.030	Oct 2019	0.030	Oct 2020	0.030	Oct 2021	-		0.030	-	-	0.330
DCAPES Business Integration Support	Various	Various : Various	0.140	0.035	Oct 2019	0.035	Oct 2020	0.035	Oct 2021	-		0.035	-	-	0.385
Subtotal			1.647	2.056		1.650		0.065		-		0.065	-	-	N/A

			Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			51.469	19.180	14.789	4.305	-	4.305	-	-	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2022 Air Force **Date:** May 2021

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0207452F / DCAPES	Project (Number/Name) 674801 / DCAPES INC 2B
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	FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026			
	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

DCAPES Increment 2B																												
DCAPES Increment 2B (Restructured)																												
- Capability 2 Global Force Management Interoperability (GFM-DI)																												
- Capability 4 Manpower & Equipment Force Packaging (MEFPAK)																												
- Capability 5 Logistics Factor File																												
- Capability 6 Force Availability Analysis																												
- Capability 7 Air Reserve Component (ARC) Forces																												
- Capability 8 Workflow																												
- JPES (Joint Planning Execution Services)																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2022 Air Force **Date:** May 2021

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0207452F / DCAPES	Project (Number/Name) 674801 / DCAPES INC 2B
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
DCAPES Increment 2B				
DCAPES Increment 2B (Restructured)	1	2020	4	2022
- Capability 2 Global Force Management Interoperability (GFM-DI)	1	2020	2	2020
- Capability 4 Manpower & Equipment Force Packaging (MEFPAK)	1	2020	1	2021
- Capability 5 Logistics Factor File	1	2020	3	2022
- Capability 6 Force Availability Analysis	1	2020	4	2022
- Capability 7 Air Reserve Component (ARC) Forces	3	2022	4	2022
- Capability 8 Workflow	1	2021	4	2022
- JPES (Joint Planning Execution Services)	3	2021	4	2022