

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force **Date:** February 2018

Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force / BA 5: System Development & Demonstration (SDD)	R-1 Program Element (Number/Name) PE 0604617F / Agile Combat Support
--	--

COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	-	49.005	31.240	20.028	0.000	20.028	20.344	20.646	18.033	18.359	Continuing	Continuing
652895: CE Readiness	-	47.504	26.804	18.429	0.000	18.429	18.715	18.989	16.341	16.637	Continuing	Continuing
654910: Aeromedical Readiness	-	1.501	4.436	1.599	0.000	1.599	1.629	1.657	1.692	1.722	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program provides lighter, leaner, rapidly-deployable and technologically-advanced materiel, forces and capabilities to the warfighter. Current projects in this program include Civil Engineering Readiness (Project 652895) and Aeromedical Readiness (Project 654910). Civil Engineering Readiness projects enable airfield protection, and airfield damage recovery for sustainment, and increased resiliency of airfield operations anywhere in the world. Aeromedical Readiness projects provide aerospace medical systems and treatment equipment to improve casualty care and meet worldwide warfighter medical operational requirements.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver the Civil Engineering and Aeromedical Readiness 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, 0605898F and 0605833F.

BA 5 - This program is in Budget Activity 5, System Development and Demonstration (SDD) because it has passed Milestone B approval and is conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production.

B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	53.680	31.240	17.177	0.000	17.177
Current President's Budget	49.005	31.240	20.028	0.000	20.028
Total Adjustments	-4.675	0.000	2.851	0.000	2.851
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	-15.000	0.000			
• Congressional Adds	12.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	-1.675	0.000	2.851	0.000	2.851

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 652895: CE Readiness

FY 2017	FY 2018

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force		Date: February 2018	
Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 5: System Development & Demonstration (SDD)</i>		R-1 Program Element (Number/Name) PE 0604617F <i>I Agile Combat Support</i>	
Congressional Add Details (\$ in Millions, and Includes General Reductions)		FY 2017	FY 2018
Congressional Add: <i>Bear Technology and Integration Lab (Congressional Add)</i>		12.000	0.000
Congressional Add Subtotals for Project: 652895		12.000	0.000
Congressional Add Totals for all Projects		12.000	0.000
Change Summary Explanation FY17 Funding reduced -\$15.0M for Forward Financing (HAC). \$12.0M Program increase (SAC) for Bear Technology and Integration Lab. Reduction -\$1.675 reduction for SIBR Assessment. FY19 Program Increase +\$2.851 for JCTD for PACOM Joint Expeditionary Airfield Damage Repair			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2019 Air Force										Date: February 2018		
Appropriation/Budget Activity 3600 / 5					R-1 Program Element (Number/Name) PE 0604617F / Agile Combat Support				Project (Number/Name) 652895 / CE Readiness			
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
652895: CE Readiness	-	47.504	26.804	18.429	0.000	18.429	18.715	18.989	16.341	16.637	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This Civil Engineering (CE) Readiness project develops Airfield Damage Repair (ADR), Airfield Protection (AP), Energy & Utilities, and CE Materials solutions for in-garrison, expeditionary, and contingency installations & airbases. This includes: technologies for airfield assessment, pavement repair and unexploded ordnance identification & mitigation to enable rapid recovery and regeneration of airfield operations; infrastructure design criteria, construction methods, hardened shelters, evaluation tools, materials, force protection technologies, expeditionary energy, waste water recycling/treatment, CE materials applications and systems for improved resiliency and rapid recovery of airbase and airfield operations following an attack.

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

	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: Airfield Damage Repair	22.504	21.837	16.429	-	16.429
Description: This effort develops, tests, and certifies equipment, materials, and Tactics, Techniques, and Procedures (TTPs) for the rapid assessment and repair of airfield damage, which includes identification, mitigation or removal of unexploded ordnance and expedient repairs for fuel and utility systems. This effort will also accelerate the transition of proven technologies in expedient and sustained protection of critical infrastructure, including operating surfaces, shelters, fuel storage and distribution systems, and command and control (C2) systems. Further, this effort focuses on the resiliency of airbase infrastructure as well as the timely repair and regeneration of airfield operations within established time limits in order to gain and maintain air superiority.					
FY 2018 Plans: Mature the rapid assessment, mitigation and repair tools and solutions for airfield damage repair through testing and delivery. Rapid assessment includes the development of IT solutions for MAOS selection, ADR command and control (C2), ADR training, and interfaces to other AF C2 systems. Mitigation includes removal of UXOs through a family of Rapid Explosive Hazard Mitigation (REHM) systems. Repair of airfield damage focuses different techniques required to return an airfield to operational status.					
900K Reduction for FY18					
FY 2019 Base Plans: Mature the rapid assessment, mitigation and repair tools and solutions for airfield damage repair through research, development, testing and evaluation. Rapid assessment includes the development of spiral 2 SUAS,					

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2019 Air Force			Date: February 2018		
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0604617F / <i>Agile Combat Support</i>		Project (Number/Name) 652895 / <i>CE Readiness</i>		
B. Accomplishments/Planned Programs (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
sensors, and automated damaging detection solutions to significantly improve the ability to assess runway damage and conduct the MAOS selection. Mitigation includes the development of generation 2 systems to remotely neutralize and remove UXOs through a family of Rapid Explosive Hazard Mitigation (REHM) systems. Repair of airfield damage focuses on RDT&E of lighter/leaner systems and materials including maximum use of native in-situ materials for airfield recovery. FY 2018 to FY 2019 Increase/Decrease Statement: Budget decrease due to USAF planning priorities.					
Title: Airfield Protection Description: Advance and transition various solutions for protecting airfield infrastructure from ballistic and guided penetrating threats. Included within this effort are structural solutions, expeditionary and expedient hardening and protection solutions, rapid restoration of fuels distribution and storage, hardening criteria, implementation costs, and updated Tactics, Techniques and Procedures (TTPs). This effort advances solutions developed under the Hardened Installation Protection for Persistent Operations (HIPPO) Joint Capability Technology Demonstration (JCTD) for implementation at fixed and expeditionary locations, providing improved resiliency and rapid restoration of airbase and airfield operations following an attack. FY 2018 Plans: Continue exploration of new concepts for protection materials for lighter, cheaper solutions for sheltering. Advance and finalize the development of models for prediction of ultrahigh performance concrete materials (UHPC) for use in hardening and resiliency. Advance solution development for penetrating munitions including cruise missile hardening. Continue development of unconventional countermeasures technology. Improve expedient sheltering to address other threats. Initiate selective hardening development for infrastructure. Execute planning for acquisition of expedient shelters through design reviews, final testing, to deployment. FY 2019 Base Plans: Continue exploration of new concepts for protection materials for lighter, cheaper solutions for sheltering and facility hardening. Advance solution development for penetrating munitions including cruise missile hardening. Continue development of unconventional countermeasures technology. Improve expedient sheltering to address advanced threats. Continue development of selective hardening for infrastructure. FY 2018 to FY 2019 Increase/Decrease Statement: Budget decrease due to program ramp	13.000	4.967	2.000	-	2.000
Accomplishments/Planned Programs Subtotals	35.504	26.804	18.429	-	18.429

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2019 Air Force								Date: February 2018			
Appropriation/Budget Activity 3600 / 5			R-1 Program Element (Number/Name) PE 0604617F / Agile Combat Support			Project (Number/Name) 652895 / CE Readiness					
						FY 2017	FY 2018				
Congressional Add: Bear Technology and Integration Lab (Congressional Add)						12.000	0.000				
FY 2017 Accomplishments: Install BTEIL metering, monitoring, test, communication, control, and data management equipment. .Develop specific and integrate a scientific sensor network and data acquisition/ management system for benchmarking and evaluating energy and wastewater technologies under test. Collect, analyze, and report field test results. Assemble designated modular solutions, monitoring/test equipment and network required to accomplish energy and water systems field testing. Demonstrate, test, and troubleshoot (if necessary) BTEIL, equipment, metering, monitoring, communication, and control equipment. Conduct analytics technology performance assessment for benchmarking and evaluating energy and wastewater technologies. Generate the final report that documents test results; lessons learned, and future technical or operational system capability improvements to improve the Air Force technology maturation and implementation timeline and aid in future capability transition success.											
FY 2018 Plans: N/A											
Congressional Adds Subtotals						12.000	0.000				

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
• OPAF 04 Line Item 845100A: Contingency Operations - Engineering and EOD Equipment	4.000	93.920	51.632	53.500	105.132	31.906	131.952	132.519	133.097	Continuing	Continuing
Remarks											
FY18-23 Procurement funding for Small Sheltering products, Rapid Airfield Damage Assessment System (RADAS) and Recovery of Airbases Denied by Ordnance (RADBO)in PE 0208028F.											
D. Acquisition Strategy											
The majority of efforts in this project employ existing contracts established to support CE Readiness requirements. Other DoD and US Government laboratories/ engineering centers are used whenever practical and appropriate, especially where a unique technical capability or expertise exists. Established DoD and GSA contracts are considered and evaluated for applicability and use before a new contract effort is implemented. Water and Fuel Expedient Repair (WaFERS) is being transitioned to the Air Force Life Cycle Management Center (AFLCMC), Agile Combat Support Program Executive Officer (PEO), for procurement.											
E. 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.											

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Air Force **Date:** February 2018

Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0604617F / <i>Agile Combat Support</i>	Project (Number/Name) 652895 / <i>CE Readiness</i>
--	---	--

Product Development (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Airfield Damage Repair (ADR)	Various	AFCEC : Tyndall AFB, FL	-	6.454	Feb 2017	7.515	Dec 2017	5.640	Dec 2018	-		5.640	Continuing	Continuing	-
Airfield Damage Repair (ADR) ERDC	MIPR	USERDC : Vicksburg, MS	-	5.500	Feb 2017	4.000	Dec 2017	3.000	Jan 2019	-		3.000	Continuing	Continuing	-
Airfield Damage Repair (ADR) Asphalt	C/CPFF	Applied Research Associates : Tyndall AFB, FL	-	1.850	Jan 2017	3.000	Jan 2018	2.000	Jan 2019	-		2.000	Continuing	Continuing	-
Rapid Explosive Hazard Mitigation (REHM) Robotics	C/CPFF	Applied Research Associates : Tyndall AFB, FL	-	4.450	Dec 2016	3.000	Jan 2018	1.500	Dec 2018	-		1.500	Continuing	Continuing	-
Rapid Airfield Damage Assessment System (RADAS) Integration	MIPR	TORC Robotics : Blacksburg, VA	-	3.347	Dec 2016	3.000	Jan 2018	3.000	Dec 2018	-		3.000	Continuing	Continuing	-
Airfield Protection	Various	AFCEC : Tyndall AFB, FL	-	3.644	Feb 2017	5.000	Jan 2018	2.000	Jan 2019	-		2.000	Continuing	Continuing	-
Airfield Protection - ERDC Efforts	MIPR	USERDC : Vicksburg, MS	-	5.963	Jan 2017	-		-		-		-	Continuing	Continuing	-
Airfield Protection - Shelters	C/CPFF	Jacobs Technology : FL	-	1.988	Jan 2017	-		-		-		-	Continuing	Continuing	-
Airfield Protection - WAFERS/Hardening	MIPR	NAVFAC EXWC : Port Hueneme, CA	-	1.405	Feb 2017	-		-		-		-	Continuing	Continuing	-
BEAR	Various	AFCEC : Tyndall AFB, FL	-	11.614	Oct 2017	-		-		-		-	Continuing	Continuing	-
Subtotal			-	46.215		25.515		17.140		-		17.140	Continuing	Continuing	N/A

Remarks

\$77K increase to FY18 ADR due to inflation adjustment

Support (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Program Management Administration (PMA)	Various	AFCEC : Tyndall AFB, FL	-	0.325	Dec 2016	0.325	Nov 2017	0.325	Nov 2018	-		0.325	Continuing	Continuing	-

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Air Force												Date: February 2018			
Appropriation/Budget Activity 3600 / 5						R-1 Program Element (Number/Name) PE 0604617F / <i>Agile Combat Support</i>						Project (Number/Name) 652895 / <i>CE Readiness</i>			
Support (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Subtotal			-	0.325		0.325		0.325		-		0.325	Continuing	Continuing	N/A
Remarks PMA includes travel and supplies to support CE Readiness RDT&E activities.															
Management Services (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
A&AS Program Support RDT&E	C/FFP	Multiple : FL	-	0.964	Jan 2017	0.964	Jan 2018	0.964	Jan 2019	-		0.964	Continuing	Continuing	-
Subtotal			-	0.964		0.964		0.964		-		0.964	Continuing	Continuing	N/A
Remarks Advisory and Assistance Services (A&AS) contract support for the Life Cycle Management Center (LCMC) procurement of Expeditionary Small Airfield Protection (ESAP), Expeditionary Large Airfield Protection (ELAP), and WaFERS.															
			Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	47.504		26.804		18.429		-		18.429	Continuing	Continuing	N/A
Remarks NOTE: This is primarily a level of effort Program Element with multiple projects.															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Air Force

Date: February 2018

Appropriation/Budget Activity

3600 / 5

R-1 Program Element (Number/Name)

PE 0604617F / Agile Combat Support

Project (Number/Name)

652895 / CE Readiness

	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	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
CE Readiness																												
ADR Robotic In-seat Appliques																												
ADR In-situ Material Repair RDT&E																												
ADR Lighter/Leaner Expeditionary Repair																												
REHM - Wide Area Mechanical Blade UXO Clearance																												
REHM Spiral 2 Rapid UXO Clearance																												
RADAS Development, Test & Evaluation																												
RADAS Spiral 2 RDT&E																												
Airfield Mitigation and Recovery Robotics																												
Site Infrastructure and Coordination																												
RADBO Non-Recurring Engineering, Test & Evaluation																												
Directed Energy Application for UXO Neutralization																												
Airfield Protection (AP) Small Shelters Prototypes																												
Civil engineering projects for sustained airbase operations																												
Airfield Protection - Advanced Hardening RDT&E																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Air Force			Date: February 2018
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0604617F / <i>Agile Combat Support</i>	Project (Number/Name) 652895 / <i>CE Readiness</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
CE Readiness				
ADR Robotic In-seat Appliques	4	2017	4	2020
ADR In-situ Material Repair RDT&E	1	2018	4	2023
ADR Lighter/Leaner Expeditionary Repair	3	2018	4	2022
REHM - Wide Area Mechanical Blade UXO Clearance	1	2017	4	2019
REHM Spiral 2 Rapid UXO Clearance	3	2018	4	2023
RADAS Development, Test & Evaluation	1	2017	4	2023
RADAS Spiral 2 RDT&E	3	2018	4	2021
Airfield Mitigation and Recovery Robotics	1	2018	3	2019
Site Infrastructure and Coordination	1	2018	4	2019
RADBO Non-Recurring Engineering, Test & Evaluation	1	2017	2	2018
Directed Energy Application for UXO Neutralization	2	2019	4	2023
Airfield Protection (AP) Small Shelters Prototypes	2	2017	3	2019
Civil engineering projects for sustained airbase operations	2	2018	1	2023
Airfield Protection - Advanced Hardening RDT&E	1	2019	4	2023

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2019 Air Force										Date: February 2018		
Appropriation/Budget Activity 3600 / 5					R-1 Program Element (Number/Name) PE 0604617F / Agile Combat Support				Project (Number/Name) 654910 / Aeromedical Readiness			
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
654910: Aeromedical Readiness	-	1.501	4.436	1.599	0.000	1.599	1.629	1.657	1.692	1.722	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This program provides key capabilities that provide life-saving and/or quality of life technologies and equipment. Aeromedical Readiness program enables the critical care of combat casualties by further developing and optimizing existing technologies for ground Expeditionary Medical Systems (EMEDS) and Aeromedical evacuation systems. EMEDS and Aeromedical Evacuation systems provide the urgent care that combat casualties need so they can be safely transported to a hospital for follow-on treatment. The program also supports critical capabilities development in the multi-disciplinary areas for light-weight, durable, and rapidly deployable medical equipment to ensure the Air Force is poised to meet future medical readiness and operational requirements.

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

	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: Deployable Oxygen Generation System - Small (DOGS-S) Description: This effort designs, develops and engineers manufacturing capability for a portable oxygen generation system which provides medical grade oxygen for EMEDS hospitals and mobile aeromedical staging facilities. FY 2018 Plans: Program is fully funded and will complete Jan 2018. FY 2019 Base Plans: N/A	0.004	0.000	0.000	-	0.000
Title: Non-Invasive Warming and Cooling Device (NIWCD) Description: Single device to provide therapeutic temperature control during treatment and movement of patient from point of injury through the continuum of care. The mortality in combat casualties with hypothermia is double that of normothermic casualties with similar injuries. Cooling the patient is required to treat hyperthermia. FY 2018 Plans: Complete Critical Design Review, Developmental Test Readiness Review and Developmental Test and Evaluation. FY 2019 Base Plans: NIWCD Completion of Final Testing FY 2018 to FY 2019 Increase/Decrease Statement:	1.497	3.014	0.625	-	0.625

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2019 Air Force				Date: February 2018	
Appropriation/Budget Activity 3600 / 5		R-1 Program Element (Number/Name) PE 0604617F / Agile Combat Support		Project (Number/Name) 654910 / Aeromedical Readiness	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO
Program is completing in mid-FY19.					
Title: Aeromedical Equipment Testing/Studies/Minor Development Description: Procures and qualifies commercial-off-the shelf (COTS) or near COTS medical and aeromedical products and/or performs minor development/studies efforts and program management activities. Programs/ studies that are planned to be evaluated in FY19 include, but are not limited to, Multi-channel Infusion Pump for expeditionary purposes (MCIP-E) and Cognitive and Physiologic Performance (CPP) projects (formerly titled Pilot Physiology and Cognitive Performance (P2CP)). FY 2018 Plans: Evaluate MCIP-E to enter Engineering & Manufacturing Development (EMD) phase, conduct System Requirements Review and Preliminary Design Review. Formulate and begin implementing an acquisition strategy for CPP projects. FY 2019 Base Plans: Continue the development of MCIP-E in EMD. Continue implementation of the acquisition strategy for CPP projects. FY 2018 to FY 2019 Increase/Decrease Statement: Decreased to adjusted requirements.		0.000	1.422	0.974	-
Accomplishments/Planned Programs Subtotals		1.501	4.436	1.599	-
C. Other Program Funding Summary (\$ in Millions) N/A					
Remarks					
D. Acquisition Strategy Programs will consider a streamlined acquisition approach. Whenever practical, commercial items are tested and evaluated as candidates for providing solutions to user needs. This normally involves characterization, verification, and qualification testing to ensure commercial off-the-shelf equipment is properly evaluated to identify any capability gaps that may require minor modifications for military use. However, acquisition strategies may be carried out for traditional Engineering and Manufacturing Development (EMD), e.g., Non-Invasive Warming and Cooling Device (NIWCD). Funds may be used to address associated emerging Aeromedical Readiness requirements and for program management activities.					

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2019 Air Force			Date: February 2018
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0604617F / <i>Agile Combat Support</i>	Project (Number/Name) 654910 / <i>Aeromedical Readiness</i>	

E. 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.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Air Force												Date: February 2018			
Appropriation/Budget Activity 3600 / 5						R-1 Program Element (Number/Name) PE 0604617F / Agile Combat Support				Project (Number/Name) 654910 / Aeromedical Readiness					
Product Development (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Deployable Oxygen Generation System - Small (DOGS-S)	C/FFP	AirSep Corporation : Amherst, NY	-	-		-		-		-		-	Continuing	Continuing	-
Non-Invasive Warming and Cooling Device (NIWCD)	C/CPIF	Edaptive Computing : Dayton, OH	-	1.403	Jul 2017	2.926	Feb 2018	0.580	Jan 2019	-		0.580	Continuing	Continuing	-
Aeromedical Equipment	C/TBD	TBD : TBD	-	-		1.305	Jun 2018	0.924	Feb 2019	-		0.924	Continuing	Continuing	-
Subtotal			-	1.403		4.231		1.504		-		1.504	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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 & Evaluation	MIPR	AFMESA : Ft Detrick, MD	-	0.030	May 2017	0.120	May 2018	-		-		-	Continuing	Continuing	-
Subtotal			-	0.030		0.120		-		-		-	Continuing	Continuing	N/A
Management Services (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Program Management Administration	Various	AFLCMC : Wright-Patterson AFB, OH	-	0.068	Dec 2017	0.085	Jul 2018	0.095		-		0.095	Continuing	Continuing	-
Subtotal			-	0.068		0.085		0.095		-		0.095	Continuing	Continuing	N/A
Remarks															
FY18 cost increase result of \$12K adjustment for inflation															
			Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	1.501		4.436		1.599		-		1.599	Continuing	Continuing	N/A

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Air Force							Date: February 2018			
Appropriation/Budget Activity 3600 / 5				R-1 Program Element (Number/Name) PE 0604617F / Agile Combat Support			Project (Number/Name) 654910 / Aeromedical Readiness			
	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks										

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Air Force	Date: February 2018
---	----------------------------

Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0604617F / <i>Agile Combat Support</i>	Project (Number/Name) 654910 / <i>Aeromedical Readiness</i>
--	---	---

	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	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
<i>Aeromedical Readiness RDTE Efforts</i>																												
Production and Fielding Phase for the DOGS - Small System																												
EMD Phase for the Non-Invasive Warming & Cooling Device (NIWCD)																												
Production and Fielding Phase for NIWCD																												
Conduct market research and initiate EMD for the Aeromedical Readiness products																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Air Force			Date: February 2018
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0604617F / <i>Agile Combat Support</i>	Project (Number/Name) 654910 / <i>Aeromedical Readiness</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Aeromedical Readiness RDTE Efforts</i>				
Production and Fielding Phase for the DOGS - Small System	1	2017	2	2018
EMD Phase for the Non-Invasive Warming & Cooling Device (NIWCD)	1	2017	2	2019
Production and Fielding Phase for NIWCD	2	2019	4	2019
Conduct market research and initiate EMD for the Aeromedical Readiness products	2	2018	4	2023