

# UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Air Force										Date: May 2017		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0604617F I Agile Combat Support							
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	-	56.178	53.680	31.240	0.000	31.240	17.177	17.497	17.800	18.163	Continuing	Continuing
652895: CE Readiness	-	54.712	52.127	26.804	0.000	26.804	15.566	15.856	16.131	16.459	Continuing	Continuing
654910: Aeromedical Readiness	-	1.466	1.553	4.436	0.000	4.436	1.611	1.641	1.669	1.704	Continuing	Continuing

**Note**  
This program, BA 05 PE 0604617F, project 654910, Aeromedical Equipment, is a new start.

## 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 repair for sustainment or restoration 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.

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>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
Previous President's Budget	56.178	53.680	28.307	0.000	28.307
Current President's Budget	56.178	53.680	31.240	0.000	31.240
Total Adjustments	0.000	0.000	2.933	0.000	2.933
• 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	0.000	0.000	2.933	0.000	2.933

## Change Summary Explanation

FY18 Funding increased by \$2.844M - Non-Invasive Warming and Cooling Device (\$1.415M) and Aeromedical Equipment (\$1.429M). FY18 Funding increased by an additional \$0.089M due to inflation adjustment.

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force										Date: May 2017		
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 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
652895: CE Readiness	-	54.712	52.127	26.804	0.000	26.804	15.566	15.856	16.131	16.459	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) and Airfield Protection (AP) solutions for in-garrison, expeditionary, and contingency installations & airbases. This includes: technologies for airfield assessment, 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, and systems for improved resiliency and rapid restoration of airbase and airfield operations following an attack.

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

	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
<b>Title:</b> Airfield Damage Repair	33.212	41.752	21.837	0.000	21.837
<p><b>Description:</b> 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.</p> <p><b>FY 2016 Accomplishments:</b> Continued developing rapid assessment, mitigation and repair tools and solutions for airfield damage repair. Rapid assessment included the development of IT solutions for Minimum Airfield Operating Surface (MAOS) selection, ADR command and control (C2), ADR training, and interfaces to other AF C2 systems. Mitigation included removal of UXOs through a family of Multiple UXO Removal Systems (MURS). Repair of airfield damages focused different techniques required to return an airfield to operational status.</p> <p><b>FY 2017 Plans:</b> 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</p>					

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force				Date: May 2017		
Appropriation/Budget Activity 3600 / 5		R-1 Program Element (Number/Name) PE 0604617F / Agile Combat Support		Project (Number/Name) 652895 / CE Readiness		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
through a family of Multiple UXO Removal Systems (MURS). Repair of airfield damage focusing on different techniques required to return an airfield to operational status.						
FY 2018 Base 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 Multiple UXO Removal Systems (MURS). Repair of airfield damage focuses different techniques required to return an airfield to operational status.						
FY 2018 OCO Plans: N/A						
Title: Airfield Protection		15.000	10.375	4.967	0.000	4.967
Description: Advance and transition various solutions for protecting airfield infrastructure (not associated with airfield surfaces) 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 is designed to advance solutions developed under the Hardened Installation Protection for Persistent Operations (HIPPO) Joint Capability Technology Demonstration (JCTD) and transition for implementation at fixed and expeditionary locations, providing improved resiliency and rapid restoration of airbase and airfield operations following an attack.						
FY 2016 Accomplishments: Continued Engineering and Manufacturing Development (EMD) of technology solutions for Ultra High Performance Concrete; executed research for hardening against cruise missile threats. Finalized sheltering designs for Expeditionary Large Asset Protection & Expedient Small Asset Protection and fuel distribution restoration & recovery products. Developed test plans for final sheltering designs and training TTPs.						
FY 2017 Plans: Complete Engineering Manufacturing Development (EMD) of expedient and expeditionary sheltering concepts. Proceed with testing and performance validation of protection components in commercially-viable formats. Test and evaluate front and back shelter expedient covering systems. Continue exploration of new concepts for sheltering materials for lighter, cheaper solutions. Advance and finalize the development of models for ultrahigh velocity penetrating weapons. Advance and finalize the development of models for prediction of ultrahigh performance concrete materials (UHPC) for use in hardening and resiliency. Complete generation of physical						

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force			Date: May 2017			
Appropriation/Budget Activity 3600 / 5		R-1 Program Element (Number/Name) PE 0604617F / Agile Combat Support		Project (Number/Name) 652895 / CE Readiness		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
data to support all model development efforts. Execute and test the development of lighter, cheaper multi-layer hardening solutions for application against penetrating munitions. Develop, test and evaluate materials and concepts for hardening against cruise missile threats; plan for full scale sled track testing of possible concepts. Finalize EMD for Water and Fuels Expedient Repair System (WaFERS) for first article delivery of capability to Pacific Air Forces Regional Training Center (PRTC). Refine WaFERS training capability tactics, techniques and procedures (TTP) and mockup for ruggedized use, deliver and install to PRTC for training on WaFERS first article deliveries. Execute planning for procurement acquisition processes and methods to advance products moving through EMD to deployment. Advance development of technology for unconventional countermeasures. Deliver prototype components and systems for expedient sheltering.  <b>FY 2018 Base Plans:</b> 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.  <b>FY 2018 OCO Plans:</b> N/A						
<b>Title:</b> Bear Technology and Integration Lab (Congressional Add)  <b>Description:</b> Support to Basic Expeditionary Airfield Resources (BEAR) Technology Evaluation and Integration Lab (BTEIL) (FY16 Congressional Add).  <b>FY 2016 Accomplishments:</b> Provided support to the Basic Expeditionary Airfield Resources (BEAR) Technology Evaluation and Integration Lab (BTEIL).  <b>FY 2017 Plans:</b> N/A  <b>FY 2018 Base Plans:</b> N/A  <b>FY 2018 OCO Plans:</b>		6.500	0.000	0.000	0.000	0.000

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Appropriation/Budget Activity 3600 / 5				R-1 Program Element (Number/Name) PE 0604617F / Agile Combat Support				Project (Number/Name) 652895 / CE Readiness				
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
N/A												
Accomplishments/Planned Programs Subtotals								54.712	52.127	26.804	0.000	26.804
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost	
• OPAF:BA04:Line Item #845100A: Contingency Operations - Engineering and EOD Equipment	5.412	0.379	13.789	0.000	13.789	29.430	31.831	29.752	0.000	Continuing	Continuing	
Remarks												
FY18-22 Procurement funding for Small Sheltering products (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. Airfield Protection shelters are 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.												

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**Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Air Force** **Date:** May 2017

<b>Appropriation/Budget Activity</b> 3600 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604617F / <i>Agile Combat Support</i>	<b>Project (Number/Name)</b> 652895 / <i>CE Readiness</i>
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Product Development (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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	-	12.001	Feb 2016	20.013	Feb 2017	7.515	Dec 2017	0.000		7.515	Continuing	Continuing	-
Airfield Damage Repair (ADR) ERDC	MIPR	USERDC : Vicksburg, MS	-	8.575	Feb 2016	7.000	Feb 2017	4.000	Dec 2017	0.000		4.000	Continuing	Continuing	-
Airfield Damage Repair (ADR) Asphalt	C/CPFF	Applied Research Associates : Tyndall AFB, FL	-	1.350	Dec 2015	4.500	Jan 2017	3.000	Jan 2018	0.000		3.000	Continuing	Continuing	-
Multiple UXO Removal (MURS) Robotics	C/CPFF	Applied Research Associates : Tyndall AFB, FL	-	2.810	Apr 2016	3.950	Dec 2016	3.000	Jan 2018	0.000		3.000	Continuing	Continuing	-
Rapid Airfield Damage Assessment System (RADAS) Integration	MIPR	TORC Robotics : Blacksburg, VA	-	7.214	Feb 2016	5.000	Dec 2016	3.000	Jan 2018	0.000		3.000	Continuing	Continuing	-
Airfield Protection	Various	AFCEC : Tyndal AFB, FL	-	0.150	Feb 2016	0.375	Feb 2017	5.000	Jan 2018	0.000		5.000	Continuing	Continuing	-
Airfield Protection - ERDC Efforts	MIPR	USERDC : Vicksburg, MS	-	7.460	Mar 2016	5.975	Jan 2017	0.000		0.000		0.000	Continuing	Continuing	-
Airfield Protection - Shelters	C/CPFF	Jacobs Technology : FL	-	3.510	Jan 2016	1.720	Jan 2017	0.000		0.000		0.000	Continuing	Continuing	-
Airfield Protection - WAFERS/Hardening	MIPR	NAVFAC EXWC : Port Hueneme, CA	-	3.880	Jun 2016	2.305	Feb 2017	0.000		0.000		0.000	Continuing	Continuing	-
BEAR	Various	AFCEC : Tyndall AFB, FL	-	6.500	Aug 2016	0.000		0.000		0.000		0.000	Continuing	Continuing	-
<b>Subtotal</b>			-	53.450		50.838		25.515		0.000		25.515	-	-	-

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

Support (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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	-	0.298	Jan 2016	0.325	Dec 2016	0.325	Nov 2017	0.000		0.325	Continuing	Continuing	-

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: FY 2018 Air Force</b>													<b>Date:</b> May 2017		
<b>Appropriation/Budget Activity</b> 3600 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0604617F / <i>Agile Combat Support</i>					<b>Project (Number/Name)</b> 652895 / <i>CE Readiness</i>					

  

<b>Support (\$ in Millions)</b>				<b>FY 2016</b>		<b>FY 2017</b>		<b>FY 2018 Base</b>		<b>FY 2018 OCO</b>		<b>FY 2018 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			-	0.298		0.325		0.325		0.000		0.325	-	-	-

  

**Remarks**  
PMA includes travel and supplies to support CE Readiness RDT&E activities.

  

<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2016</b>		<b>FY 2017</b>		<b>FY 2018 Base</b>		<b>FY 2018 OCO</b>		<b>FY 2018 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-

  

<b>Management Services (\$ in Millions)</b>				<b>FY 2016</b>		<b>FY 2017</b>		<b>FY 2018 Base</b>		<b>FY 2018 OCO</b>		<b>FY 2018 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
A&AS Program Support RDT&E	C/FFP	Multiple : FL	-	0.964	Oct 2015	0.964	Jan 2017	0.964	Jan 2018	0.000		0.964	Continuing	Continuing	-
<b>Subtotal</b>			-	0.964		0.964		0.964		0.000		0.964	-	-	-

  

**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.

  

	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>	-	54.712	52.127	26.804	0.000	26.804	-	-	-

  

**Remarks**  
NOTE: This is primarily a level of effort Program Element with multiple projects.

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Exhibit R-4, RDT&amp;E Schedule Profile: FY 2018 Air Force

Date: May 2017

## Appropriation/Budget Activity

3600 / 5

## R-1 Program Element (Number/Name)

PE 0604617F / Agile Combat Support

## Project (Number/Name)

652895 / CE Readiness

	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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
ADR Command and Control Simulator																												
ADR Robotic Appliques Operational Utility Evaluation (OUE)																												
ADR Material Transfer Concept Activities, and Test and Evaluation																												
AM2 Matting (Lightweight/Autocad/Lay Pattern)																												
MOS Marking/Striping																												
Screed Development																												
ADR/2-Hr Crater Repair Performance																												
ADR/Large Crater Asphalt Repair																												
MURS - Wide Area Mechanical Blade UXO Clearance																												
RADAS Development, Test & Evaluation																												
RADBO Vehicle Operational Utility Assessment																												
RADBO Non-Recurring Engineering, Test & Evaluation																												
Airfield Protection (AP) Large/Small Sheltering Product Design, Development, Test and Evaluation																												
Airfield Protection (AP) Small Shelters Prototypes																												
AP Ultra-high Performance Concrete Model/ Materials																												
AP Guided Threats Protection Concept Activities																												
AP Guided Threats Protection Design and Development																												



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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Air Force																								Date: May 2017				
Appropriation/Budget Activity										R-1 Program Element (Number/Name)								Project (Number/Name)										
3600 / 5										PE 0604617F / Agile Combat Support								652895 / CE Readiness										
	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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
Initiate new civil engineering projects for sustained airbase operations																												
AP Fuel Repair Design and Development																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> FY 2018 Air Force			<b>Date:</b> May 2017
<b>Appropriation/Budget Activity</b> 3600 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604617F / <i>Agile Combat Support</i>	<b>Project (Number/Name)</b> 652895 / <i>CE Readiness</i>	

**Schedule Details**

<b>Events</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
ADR Command and Control Simulator	1	2016	4	2017
ADR Robotic Appliques Operational Utility Evaluation (OUE)	1	2016	4	2018
ADR Material Transfer Concept Activities, and Test and Evaluation	1	2016	3	2017
AM2 Matting (Lightweight/Autocad/Lay Pattern)	2	2016	1	2018
MOS Marking/Striping	3	2016	1	2018
Screed Development	1	2016	2	2017
ADR/2-Hr Crater Repair Performance	1	2016	4	2017
ADR/Large Crater Asphalt Repair	1	2016	4	2017
MURS - Wide Area Mechanical Blade UXO Clearance	1	2016	2	2018
RADAS Development, Test & Evaluation	1	2016	4	2018
RADBO Vehicle Operational Utility Assessment	1	2016	4	2016
RADBO Non-Recurring Engineering, Test & Evaluation	1	2017	2	2018
Airfield Protection (AP) Large/Small Sheltering Product Design, Development, Test and Evaluation	1	2016	1	2018
Airfield Protection (AP) Small Shelters Prototypes	2	2017	3	2019
AP Ultra-high Performance Concrete Model/Materials	1	2016	1	2018
AP Guided Threats Protection Concept Activities	1	2016	4	2017
AP Guided Threats Protection Design and Development	1	2018	4	2018
Initiate new civil engineering projects for sustained airbase operations	2	2018	1	2022
AP Fuel Repair Design and Development	1	2016	1	2018

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force										Date: May 2017		
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 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
654910: Aeromedical Readiness	-	1.466	1.553	4.436	0.000	4.436	1.611	1.641	1.669	1.704	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note This program, BA 05 PE 0604617F, project 654910, Aeromedical Equipment, is a new start.												
A. Mission Description and Budget Item Justification This program provides tactical and strategic management of combat casualties by further developing and optimizing existing technologies for ground Expeditionary Medical Systems (EMEDS) and Aeromedical evacuation systems. The program also supports capabilities development in the multi-disciplinary areas for light-weight, durable, and rapidly deployable medical equipment to meet Air Force medical readiness and operational requirements.												
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 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 Expeditionary Medical Systems (EMEDS) hospitals and mobile aeromedical staging facilities. FY 2016 Accomplishments: Transitioned program from EMD to Low Rate Initial Production with successful Milestone C decision. FY 2017 Plans: N/A FY 2018 Base Plans: N/A FY 2018 OCO Plans: N/A								0.200	0.000	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 2016 Accomplishments:								1.266	1.553	3.007	0.000	3.007

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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 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Completed Source Selection, entered Engineering & Manufacturing Development (EMD) phase with Milestone B decision, conducted System Requirements Review, and Preliminary Design Review.  <b>FY 2017 Plans:</b> Conduct Critical Design Review, Developmental Test Readiness Review and begin Developmental Test and Evaluation.  <b>FY 2018 Base Plans:</b> Complete Critical Design Review, Developmental Test Readiness Review and Developmental Test and Evaluation.  <b>FY 2018 OCO Plans:</b> N/A						
<b>Title:</b> Aeromedical Equipment  <b>Description:</b> Procures and qualifies commercial-off-the shelf (COTS) medical and aeromedical products and/ or performs minor development efforts. Programs that are planned to be evaluated in FY18 include, but are not limited to, a Multi-channel Infusion Pump for expeditionary purposes (MCIP-E), Field Intravenous Reconstitution (FIVR) and Pilot Physiology and Cognitive Performance (P2CP).  <b>FY 2016 Accomplishments:</b> N/A  <b>FY 2017 Plans:</b> N/A  <b>FY 2018 Base Plans:</b> Evaluate MCIP-E to enter EMD phase, conduct System Requirements Review, and Preliminary Design Review for the MCIP. Formulate and begin implementing an acquisition strategy for the Field Intravenous Reconstitution (FIVR) and Pilot Physiology and Cognitive Performance (P2CP) programs.  <b>FY 2018 OCO Plans:</b> N/A		0.000	0.000	1.429	0.000	1.429
Accomplishments/Planned Programs Subtotals		1.466	1.553	4.436	0.000	4.436

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> FY 2018 Air Force								<b>Date:</b> May 2017			
<b>Appropriation/Budget Activity</b> 3600 / 5				<b>R-1 Program Element (Number/Name)</b> PE 0604617F / <i>Agile Combat Support</i>				<b>Project (Number/Name)</b> 654910 / <i>Aeromedical Readiness</i>			

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

<u>Line Item</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u> <u>Base</u>	<u>FY 2018</u> <u>OCO</u>	<u>FY 2018</u> <u>Total</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• NA: NA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000

**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.

**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.