

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2014 Air Force	<b>DATE:</b> April 2013
--	-------------------------

APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE							
3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>					PE 0207227F: <i>Combat Rescue - Pararescue</i>							
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	-	0.914	1.119	0.542	-	0.542	0.894	0.800	0.643	0.655	Continuing	Continuing
675352: <i>Guardian Angel RDT&amp;E</i>	-	0.914	1.119	0.542	-	0.542	0.894	0.800	0.643	0.655	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

**A. Mission Description and Budget Item Justification**

Guardian Angel (GA) is an Air Force non-aircraft weapon system within the overarching Battlefield Airmen Modernization program. GA is a Family of Systems (FoS) based in both human and equipment capabilities formulated to execute Air Force Personnel Recovery (PR) across the full spectrum of military operations. Established by the Air Force Chief of Staff in 2003 and officially captured in AFD 10-9, the GA FoS is employed by three distinct Air Force specialties: Pararescuemen (PJ), Combat Rescue Officer (CRO), and Survival, Evasion, Resistance, Escape (SERE). The GA FoS is comprised of nine critical mission areas: Precision Aerial Insertion, Information Management, Force Application, Visual Augmentation, Maritime Recovery, Ground Mobility, Technical Rescue, Medical, and SERE. GA focus is on maintaining legacy weapon system capability while modernizing/improving subsystems for better mission effectiveness.

Funds will be used to obtain significant improvements in operational capability and develop items within the GA FoS to include but not limited to: SONAR, Maritime Recovery, Technical Recovery, Integrated Oxygen System, Medical Monitoring, and the Guardian Angel Air Operations Kit. The Guardian Angel weapon system development activities also include studies, analysis, and developmental testing to support both current and future program planning and execution. Funding will deliver enhanced capability for the dismounted Guardian Angel soldier in terms of dramatic weight reduction and increased mission effectiveness across the conflict spectrum.

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.

## UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force				DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0207227F: Combat Rescue - Pararescue				
B. Program Change Summary (\$ in Millions)		FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget		0.927	1.119	0.542	-	0.542
Current President's Budget		0.914	1.119	0.542	-	0.542
Total Adjustments		-0.013	0.000	0.000	-	0.000
• Congressional General Reductions		-	0.000			
• Congressional Directed Reductions		-	0.000			
• Congressional Rescissions		0.000	0.000			
• Congressional Adds		-	0.000			
• Congressional Directed Transfers		-	0.000			
• Reprogrammings		0.000	0.000			
• SBIR/STTR Transfer		-0.013	0.000			
• Other Adjustments		0.000	0.000	0.000	-	0.000
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2012	FY 2013	FY 2014
Title: GA FoS				0.914	1.119	0.542
Description: Standardize, modernize and develop additional capability for the Guardian Angel weapon system used by Combat Rescue Officers and Pararescuemen. Development efforts provide enhanced and improved capabilities for execution of Air Force combat search and rescue and personnel recovery. This weapon system is utilized across the full spectrum of PR military operations to include patient treatment, extrication, surface/underwater search and recovery, airborne infill/exfill, and ground recovery operations.						
FY 2012 Accomplishments: Continued exploration and development efforts with NAVSEA on a multi-fuel submersible motor for Maritime Recovery. Delivered motor development assets to government testing. Transitioned Tech Recovery self contained breathing apparatus from combined PATRIOT/ELABS system to a single Self Contained Hybrid Emergency Life Support Device (SHIELD) system reducing operator weight by more than 13 lbs and adding increased oxygen capability and duration. Continued development and government testing activities for the GA Integrated Oxygen System (GAIOS); two of the three systems officially entered government Developmental Testing and will move to Operational Testing in FY13. Completed development of software plug-ins, software updates, and integration for inclusion of Medical 9 Line and CSAR 15 line form templates in GAO Kit software for greater battlefield situational awareness and patient care. In addition, additional training was required to be developed and conducted to support government testing events for the GAO Kit software and equipment. Continued development efforts and studies for Remote Patient Monitoring and Digital Enhanced Vision Devices as tools for use within the GAO Kit.						
FY 2013 Plans:						

# UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force										DATE: April 2013		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development					<b>R-1 ITEM NOMENCLATURE</b> PE 0207227F: Combat Rescue - Pararescue							
<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>										FY 2012	FY 2013	FY 2014
Continue execution and development of previous year's acquisition activities. Complete test, study, strategic planning, and development activities for increased capability and address Engineering Change Proposals as needed. Conduct development and system enhancements on existing and future systems through incorporating test feedback and user inputs into subsequent iterations for better capability and mission success.												
<b>FY 2014 Plans:</b> Continue execution and development of previous year's acquisition activities. Complete test, study, strategic planning, and development activities for increased capability and address Engineering Change Proposals as needed. Conduct development and system enhancements on existing and future systems through incorporating test feedback and user inputs into subsequent iterations for better capability and mission success.												
<b>Accomplishments/Planned Programs Subtotals</b>										0.914	1.119	0.542
<b>D. Other Program Funding Summary (\$ in Millions)</b>												
<b>Line Item</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014 Base</b>	<b>FY 2014 OCO</b>	<b>FY 2014 Total</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	
• OPAF: BA04: Line Item # 842990: Items Less than \$5 (Safety)	12.598	23.435	22.854		22.854	24.389	23.690	21.556	0.000	Continuing	Continuing	
• OPAF: BA02: Line Item# 823230: Security and Tactical Vehicles	0.000	4.101	3.800		3.800	3.752	3.933	4.004	4.076	Continuing	Continuing	
<b>Remarks</b>												
<b>E. Acquisition Strategy</b> The GA program will address the warfighter immediate needs to standardize, modernize, and develop additional capability for the weapon system used by Combat Rescue Officers and Pararescuemen (Phase one). Until this point, GA has not had a formal acquisition process for the weapon system. The program will also address future requirements for the weapon system that will encompass the needs of all three GA career fields (Phase two).  Phase two of the GA program is an incremental evolutionary acquisition effort in which requirements are fulfilled through further sub-system development and integration. These requirements are being identified in an ongoing F-study conducted by HQ ACC. The program has been divided into two phases to more rapidly meet the users immediate need to standardize and modernize the weapon system. All work prior to FY10 was accomplished using 3400 dollars and NGREA 350 funds. NGREA funding is not shown here.												

**UNCLASSIFIED**

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force		DATE: April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0207227F: <i>Combat Rescue - Pararescue</i>
<b>F. Performance Metrics</b> 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**

<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Air Force													<b>DATE:</b> April 2013		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>							<b>R-1 ITEM NOMENCLATURE</b> PE 0207227F: <i>Combat Rescue - Pararescue</i>				<b>PROJECT</b> 675352: <i>Guardian Angel RDT&amp;E</i>				
<b>Product Development (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All 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>
GA Family Of Systems	Various	Various:Various,	-	0.514	Aug 2012	0.561	Mar 2013	0.102	Dec 2013	-		0.102	Continuing	Continuing	TBD
<b>Subtotal</b>			0.000	0.514		0.561		0.102		0.000		0.102			
<b>Support (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All 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>			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000
<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All 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>
Accreditation and Certification	C/Various	413 TS:Nellis AFB, NV	-	0.200	Sep 2012	0.279	Jan 2013	0.115	Dec 2013	-		0.115	Continuing	Continuing	TBD
Test Agency Support	RO	46TS:Eglin AFB, FL	-	0.200	Aug 2012	0.279	Jan 2013	0.325	Mar 2014	-		0.325	Continuing	Continuing	TBD
<b>Subtotal</b>			0.000	0.400		0.558		0.440		0.000		0.440			
<b>Management Services (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All 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>			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000
<b>Project Cost Totals</b>			0.000	0.914		1.119		0.542		0.000		0.542			
<b>Remarks</b>															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Air Force

DATE: April 2013

**APPROPRIATION/BUDGET ACTIVITY**

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

**R-1 ITEM NOMENCLATURE**

PE 0207227F: Combat Rescue -  
Pararescue

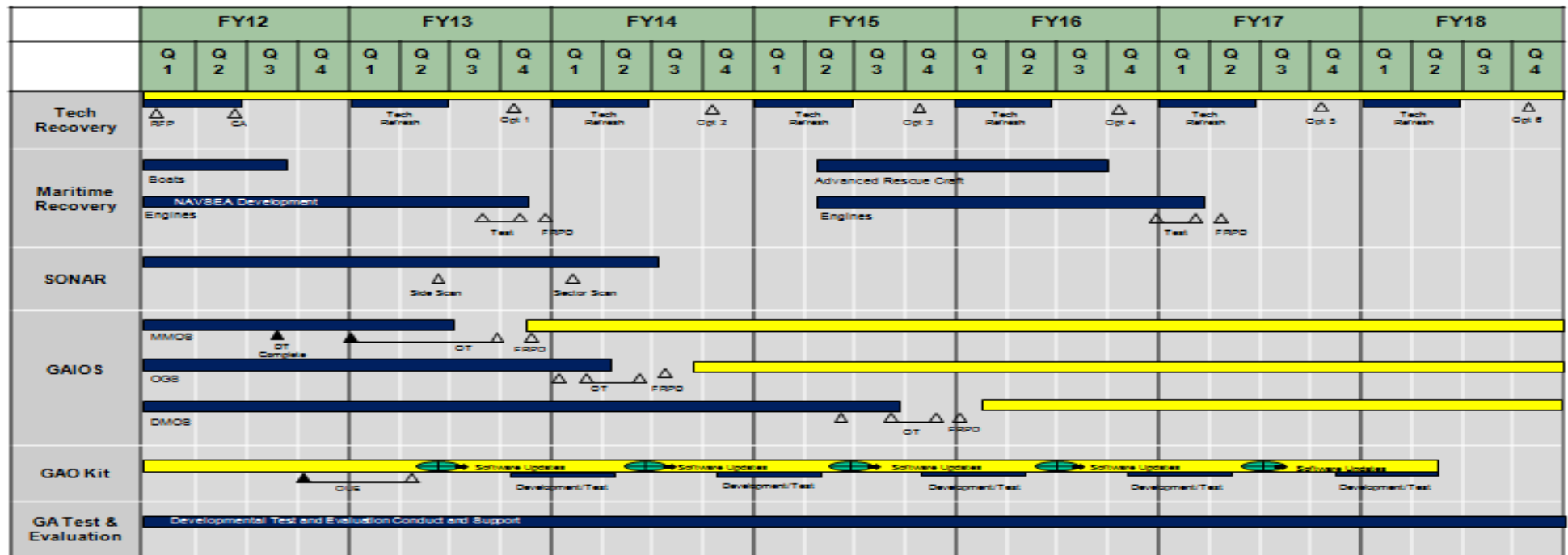
**PROJECT**

675352: Guardian Angel RDT&E



U.S. AIR FORCE

# GA RDT&E Schedule Profile



OUE: Operational Utility Evaluation  
OGS: Oxygen Generation System  
DMOS: Dismounted Medical Oxygen System

MMOS: Mounted Medical Oxygen System  
OT: Operational Test

DT: Developmental Test  
FRPD: Full Rate Production Decision

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Air Force			<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0207227F: <i>Combat Rescue - Pararescue</i>	<b>PROJECT</b> 675352: <i>Guardian Angel RDT&amp;E</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Technical Recovery	1	2012	4	2018
Maritime Recovery	1	2012	1	2017
SONAR	1	2012	2	2014
GAIOS	1	2012	4	2015
GAO Kit	1	2012	2	2018
Test and Evaluation	1	2012	4	2018