

# 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 0207224F: <i>Combat Rescue and Recovery</i>
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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	-	2.292	2.095	2.582	-	2.582	5.159	0.420	0.000	0.000	Continuing	Continuing
676016: <i>Avionics Development and Integration</i>	-	2.292	2.095	2.582	-	2.582	5.159	0.420	0.000	0.000	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

## Note

### A. Mission Description and Budget Item Justification

The Air Force Rotary Wing Avionics Development and Integration effort is a program to develop a fully integrated avionics upgrade that includes predictive terrain awareness. This program focuses on developing and integrating technologies that will increase the situational awareness of helicopter crews in a degraded visibility environment. This effort was initiated by the Defense Safety Oversight Council.

In FY12, Project Number 657001, Avionics Development and Integration, efforts were transferred from PE 0605229F, CSAR HH-60 Recapitalization, Project Number 657001, Avionics Development and Integration, in order to effectively execute this effort for currently fielded HH-60G helicopters.

<b>B. Program Change Summary (\$ 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>
Previous President's Budget	2.292	2.095	3.633	-	3.633
Current President's Budget	2.292	2.095	2.582	-	2.582
Total Adjustments	0.000	0.000	-1.051	-	-1.051
• 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	0.000	0.000			
• Other Adjustments	0.000	0.000	-1.051	-	-1.051

### Change Summary Explanation

FY14: Reduction due to higher Air Force priorities

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<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
<b>Title:</b> Avionics Development and Integration  <b>Description:</b> This program focuses on developing and integrating technologies that will increase the situational awareness of helicopter crews in a degraded visibility environment.  <b>FY 2012 Accomplishments:</b> Provided hot bench testing for initial integration efforts, engineering support, and program management.  <b>FY 2013 Plans:</b> Provided integration contracting support, program management, engineering, simulation, software support, and initial flight test.  <b>FY 2014 Plans:</b> Provides integration contracting support, program management, engineering, simulation, software support, and second flight test.		2.292	2.095	2.582
<b>Accomplishments/Planned Programs Subtotals</b>		2.292	2.095	2.582
<b>D. Other Program Funding Summary (\$ in Millions)</b>				
N/A				
<b>Remarks</b>				
<b>E. Acquisition Strategy</b>				
The Air Force is in the process of integrating the Three Dimensional Landing Zone (3D-LZ) technology into an air worthy payload. This payload will be integrated with existing forward looking infrared turrets to minimize additional equipment and weight on the aircraft. Once the payload is tested, the Air Force will finalize its strategy for fleet implementation.				
<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.				

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2014 Air Force</b>												<b>DATE:</b> 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 0207224F: Combat Rescue and Recovery						<b>PROJECT</b> 676016: Avionics Development and Integration			
<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>
System Engineering	C/CPFF	Raytheon Space and Airborne Systems:EI Segundo, CA	-	1.256	Mar 2012	0.000		1.018	Mar 2013	-		1.018	Continuing	Continuing	
<b>Subtotal</b>			0.000	1.256		0.000		1.018		0.000		1.018			
<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>
Flight Test	MIPR	Aero Flight Dynamics Directorate:Moffett Field, CA	-	0.698		1.320		1.118		-		1.118	Continuing	Continuing	
<b>Subtotal</b>			0.000	0.698		1.320		1.118		0.000		1.118			
<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>
Program Management	MIPR	AFRL:Eglin AFB, FL	-	0.338		0.775		0.446		-		0.446	Continuing	Continuing	
<b>Subtotal</b>			0.000	0.338		0.775		0.446		0.000		0.446			
<b>Project Cost Totals</b>			<b>All Prior Years</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 To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
			0.000	2.292		2.095		2.582		0.000		2.582			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force							DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE			PROJECT			
3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development				PE 0207224F: Combat Rescue and Recovery			676016: Avionics Development and Integration			
	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks										

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**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

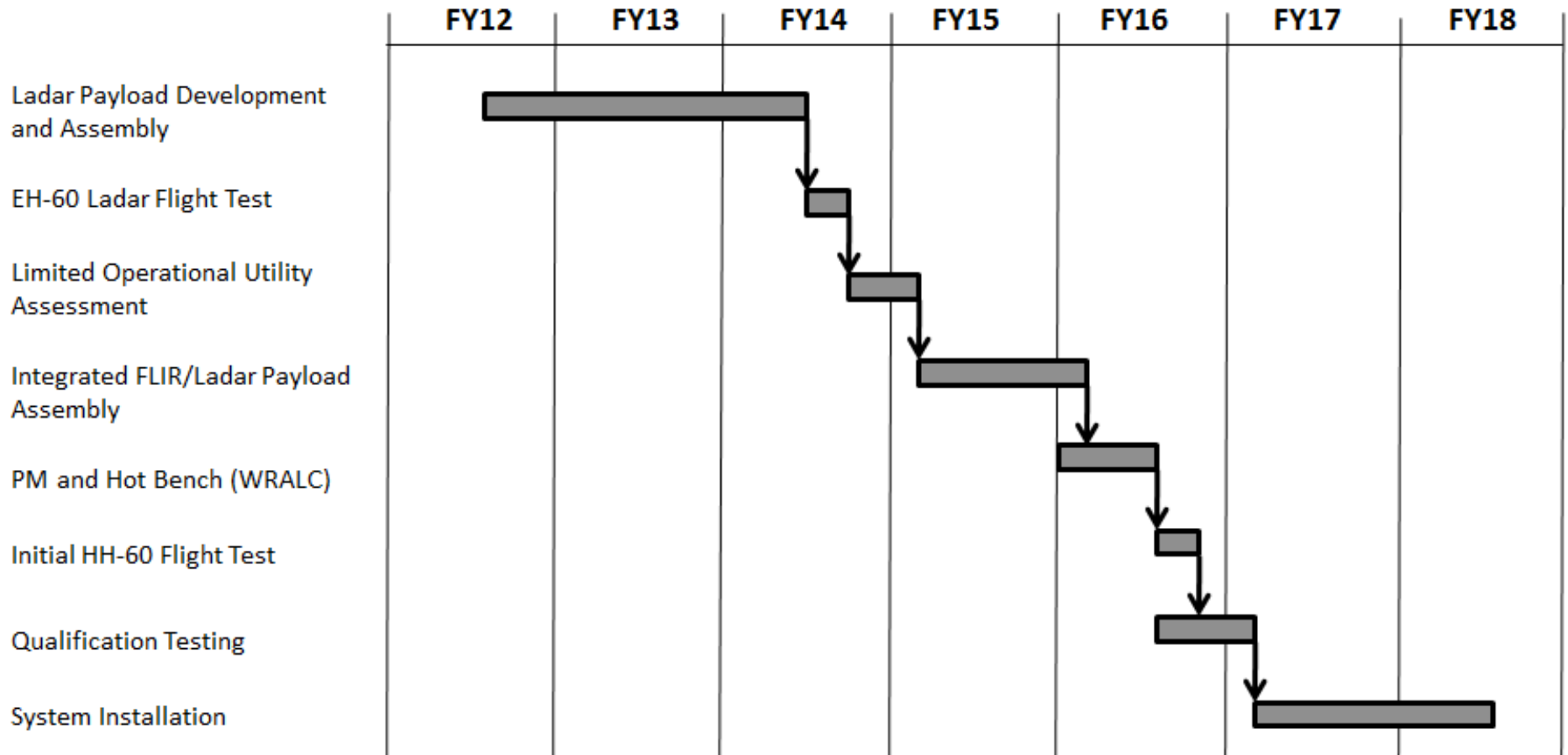
**R-1 ITEM NOMENCLATURE**

PE 0207224F: Combat Rescue and Recovery

**PROJECT**

676016: Avionics Development and Integration

## Avionics Development and Integration



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<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 0207224F: <i>Combat Rescue and Recovery</i>	<b>PROJECT</b> 676016: <i>Avionics Development and Integration</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Ladar Payload Development and Assembly	2	2012	2	2014
EH-60 Ladar Flight Test	2	2014	3	2014
Limited Operational Utility Assessment	3	2014	1	2015
Integrated FIIR/Ladar Payload Assembly	1	2015	1	2016
PM and Hot Bench (WRALC)	3	2015	3	2016
Initial HH-60 Flight Test	2	2016	4	2016
Qualification Testing	2	2016	4	2016
System Installation	1	2017	2	2018