Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force

DATE: February 2011

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

3600: Research, Development, Test & Evaluation, Air Force

PE 0605229F: CSAR HH-60 Recapitalization

BA 5: Development & Demonstration (SDD)

- · · · · - · · · · · · · · · · · · ·											
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	-	12.584	94.113	-	94.113	40.365	19.826	-	4.508	Continuing	Continuing
654364: HH-60 Recap RDT&E	-	10.650	94.113	-	94.113	40.365	19.826	-	4.508	Continuing	Continuing
657001: Avionics Development and Integration	-	1.934	-	-	-	-	-	-	-	Continuing	Continuing

Note

In FY12, Project Number 657001, Avionics Development and Integration efforts were transferred to PE 0207224F, Project Number 676016, and PE 0101235F, Modification Number 3149T, in order to effectively execute this effort for both HH-60G and UH-1N aircraft.

A. Mission Description and Budget Item Justification

The HH-60 Recapitalization (Recap) acquisition program is designed to replace the Air Force HH-60G Pave Hawk helicopter with a new aircraft to perform Combat Search and Rescue (CSAR). The primary mission of HH-60G Recap will be to recover isolated personnel (IP) from hostile or denied territory. Rescue forces may also conduct other missions inherent in their capabilities to conduct Personnel Recovery (PR), such as non-conventional assisted recovery, non-combatant evacuation operations, civil search and rescue, international aid, emergency medical evacuation, disaster/humanitarian relief, and insertion/extraction of combat forces. HH-60 Recap will address current HH-60G capability shortfalls in survivability, adverse weather capability, mission equipment, avionics human factors, and Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) interoperability.

654364 - HH-60 Recap RDT&E: Funding is needed, but not limited to, efforts to procure a Government Off The Shelf/Contractor Off the Shelf (GOTS/COTS) aircraft modified with mission equipment to perform the CSAR mission. There will be a required effort to integrate mature subsystems and the associated software development. The mature subsystem integration and software development will include human systems integration, advanced communication/net ready, and improved survivability among others. Two production-representative test aircraft will be procured.

657001 - Avionics Development and Integration: This effort is an OSD-mandated program to fund a fully-integrated avionics upgrade that includes predictive terrain awareness and traffic collision avoidance warnings for all currently fielded Air Force helicopters.

HH-60 Recapitalization is in Budget Activity 5, System Development and Demonstration (SDD) because it is conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force

DATE: February 2011

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

3600: Research, Development, Test & Evaluation, Air Force

PE 0605229F: CSAR HH-60 Recapitalization

BA 5: Development & Demonstration (SDD)

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	-	12.584	21.227	-	21.227
Current President's Budget	-	12.584	94.113	-	94.113
Total Adjustments	-	-	72.886	-	72.886
 Congressional General Reductions 		-			
 Congressional Directed Reductions 		-			
 Congressional Rescissions 	-	-			
 Congressional Adds 		-			
 Congressional Directed Transfers 		-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustments	-	-	72.886	-	72.886

Change Summary Explanation

Increase in FY12 funding is for the procurement of two (2) production-representative aircraft for testing.

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DATE: February 2011

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APPROPRIATION/BUDGET ACTIV 3600: Research, Development, Tes BA 5: Development & Demonstration	t & Evaluatio	n, Air Force		R-1 ITEM NOMENCLATURE PE 0605229F: CSAR HH-60 Recapitalization PROJECT 654364: HH-60					H-60 Recap RDT&E			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost	
654364: HH-60 Recap RDT&E	-	10.650	94.113	-	94.113	40.365	19.826	-	4.508	Continuing	Continuing	
Quantity of RDT&E Articles	0	0	2	0	2	0	0	0	0			

A. Mission Description and Budget Item Justification

R Accomplishments/Planned Programs (\$ in Millions)

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force

The HH-60 Recapitalization program will replace the aging PAVE HAWK HH-60G Combat Search and Rescue aircraft. The primary mission of the HH-60G Recap will be to recover isolated personnel from hostile or denied territory. Other possible missions, inherent in their capabilities to conduct personnel recovery, include non-conventional assisted recovery, non-combatant evacuation operations, civil search and rescue, international aid, emergency medical evacuation, disaster/humanitarian relief, and insertion/extraction of combat forces.

Budget Justification: Funding is needed for, but not limited to, acquisition program activities, milestone (MS) document development and test and evaluation activities. Key activities and products include systems engineering strategy and analysis, technology and manufacturing maturity analysis, test and evaluation activities, life cycle cost estimates, sustainment and logistics analysis and configuration studies. Additionally, two production representative test aircraft will be procured.

B. Accomplishments/Planned Programs (\$ in Millions)			FY 2012	FY 2012	FY 2012
	FY 2010	FY 2011	Base	oco	Total
Title: HH-60 Recap	-	10.650	94.113	-	94.113
Description: Procure a helicopter with improved adverse weather capability, survivability, CSAR mission equipment, avionics human factors, and C4ISR interoperability.					
FY 2010 Accomplishments:					
FY 2011 Plans: Program office support, Joint Capabilities Integration and Development System (JCIDS) requirement document reviews, development of statutory and regulatory acquisition documentation and preparation for an FY12 contract award					
FY 2012 Base Plans: Finalization of Source Selection activities in preparation for an FY12 contract award to include program office support, and development of statutory & regulatory acquisition documentation concurrant with an FY12 Milestone B. Procurement of two test vehicles. Design, integration, testing, and certification of the mission components required by the Capability Development Document. System design and demonstration including but not limited to non-recurring engineering, test vehicle hardware, software, simulator development and data.					
FY 2012 OCO Plans:					

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force

DATE: February 2011

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

3600: Research, Development, Test & Evaluation, Air Force

PE 0605229F: CSAR HH-60 Recapitalization

654364: HH-60 Recap RDT&E

BA 5: Development & Demonstration (SDD)

В	3. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
	Accomplishments/Planned Programs Subtot	ls -	10.650	94.113	-	94.113

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

			FY 2012	FY 2012	FY 2012					Cost To	
<u>Line Item</u>	FY 2010	FY 2011	Base	<u>000</u>	<u>Total</u>	FY 2013	FY 2014	FY 2015	FY 2016	Complete	Total Cost
• PE 0207229F: <i>APAF, CSAR</i>	0.000	0.000	0.000	0.000	0.000	237.863	463.147	748.555	615.916	Continuing	Continuing
HH-60 Recapitalization											

D. Acquisition Strategy

HH-60 Recap acquisition program will replace the HH-60G helicopter with a new aircraft to perform Combat Search and Rescue (CSAR). The acquisition strategy is to procure a Government Off The Shelf/Contractor Off the Shelf (GOTS/COTS) aircraft modified with mission equipment to perform the CSAR mission. There will be a required effort to integrate mature subsystems and the associated software development will include human systems integration, advanced communication/net ready and improved survivability among others. The acquisition strategy is to develop a test and evaluation master plan, prepare milestone documents, develop a request for proposal, support source selection activities, and contract award.

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: PB 2012 Air Force DATE: February 2011 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 3600: Research, Development, Test & Evaluation, Air Force PE 0605229F: CSAR HH-60 Recapitalization 654364: HH-60 Recap RDT&E BA 5: Development & Demonstration (SDD) FY 2012 FY 2012 FY 2012 **Product Development (\$ in Millions) FY 2011** Base oco Total **Total Prior** Target Contract Method Performing Years Award Award Award Cost To Value of **Cost Category Item Activity & Location** Cost Date Cost Date Cost Date **Total Cost** Contract & Type Cost Cost Complete Studies and Analysis **TBD** TBD:TBD. 1.500 0.500 0.500 0.000 2.000 0.000 10.647 Software and Integration **TBD** TBD:TBD, 10.647 0.000 10.647 0.000 12.647 0.000 Subtotal 1.500 11.147 11.147 0.000 FY 2012 FY 2012 FY 2012 Support (\$ in Millions) **FY 2011** oco Base Total Contract **Total Prior** Target Method Performing Years Award Award Award Cost To Value of Cost Cost Date **Total Cost Cost Category Item** & Type **Activity & Location** Cost Date Date Cost Cost Complete Contract Subtotal 0.000 0.000 0.000 FY 2012 FY 2012 FY 2012 Test and Evaluation (\$ in Millions) FY 2011 oco Total Base Contract **Total Prior** Target Method Performing Years Award Award Award Cost To Value of **Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Contract Government Test and 46 Test Sa:Ealin AFB. TBD 3.280 Feb 2011 3.280 0.000 3.280 0.000 **Evaluation** FL Test Aircraft and Associated C/TBD TBD:. 0.000 0.000 78.186 78 186 78 186 Support Subtotal 0.000 81.466 81.466 81.466 0.000 FY 2012 FY 2012 FY 2012 Management Services (\$ in Millions) **FY 2011** oco Total Base **Total Prior Target** Contract Method Performing Years Award Award Award **Cost To** Value of **Cost Category Item Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Contract & Type TBD SPO Support Various:WPAFB. OH 9.150 1.500 1.500 0.000 10.650 0.000 9.150 1.500 1.500 Subtotal 0.000 10.650 0.000 **Total Prior** Target Years FY 2012 FY 2012 FY 2012 Cost To Value of Cost FY 2011 Base oco Total Complete **Total Cost** Contract **Project Cost Totals** 10.650 94.113 94 113 0.000 104.763 0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012	Air Force					DAT	E: Februar	y 2011	
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air F BA 5: Development & Demonstration (SDD)	I	MENCLATURE : CSAR HH-60 Reca _l	pitalization	PROJECT 654364: HH-60 Recap RDT&E					
	Total Prior Years Cost	FY 2011	FY 2012 Base	FY 201 OCO		2012 otal	Cost To Complete	Total Cost	Target Value of Contract
<u>Remarks</u>									

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force	R-1 ITEM NOMENCLATURE PE 0605229F: CSAR HH-60 Recapitalization	PROJECT 654364: HH-60 Recap RDT&E
BA 5: Development & Demonstration (SDD)		

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Air Force

DATE: February 2011

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

3600: Research, Development, Test & Evaluation, Air Force PE 0605229F: CSAR HH-60 Recapitalization 654364: HH-60 Recap RDT&E

BA 5: Development & Demonstration (SDD)

Schedule Details

	Si	tart	E	nd
Events	Quarter	Year	Quarter	Year
Acquisition Strategy Panel	3	2011	3	2011
Request for Proposal	3	2011	4	2011
Source Selection Contract Award	3	2012	4	2012
Test Aircraft Purchased	4	2012	4	2012
Initiate Responsible Test Organization Activities	4	2012	4	2015
System Readiness Review	1	2013	1	2013
Preliminary Design Review	2	2013	2	2013
Milestone B	3	2013	3	2013
Low rate initial production	4	2013	4	2013
Interoperability and Live Fire Testing	4	2013	4	2016
Critical Design Review	3	2014	3	2014
Test Readiness Review 1	4	2015	4	2015
Developmental and Operational Test	4	2015	4	2016
Test Readiness Review 2	2	2016	2	2016
Milestone C	3	2016	3	2016

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DATE: February 2011

APPROPRIATION/BUDGET ACTIV 3600: Research, Development, Test BA 5: Development & Demonstration	& Evaluation	n, Air Force			IOMENCLA 9F: <i>CSAR H</i>	TURE H-60 Recapi	italization	PROJECT 657001: <i>Av</i>	ionics Devel	opment and	Integration
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
657001: Avionics Development and Integration	-	1.934	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

Note

In FY12, Project number 657001, Avionics Development and Integration efforts were transferred to PE 0207224F, Project Number 67616, and PE 0101235F, APAF, Modification Number 3149T, in order to effectively execute this effort for both HH-60G and UN-1N aircraft.

A. Mission Description and Budget Item Justification

Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force

The Air Force Rotary Wing Avionics Development and Integration effort is an OSD-mandated program to fund a fully integrated avionics upgrade that includes predictive terrain awareness and traffic collision avoidance warnings for all Air Force helicopters. The Air Force will assess the requirements of both the UH-1N and HH-60 and develop acquisition solutions unique to each platform.

FY11 is the last year of funding in this Line. The funds have been redistributed to PE 0101235F (WSC H00100) for the UH-1N and PE 0207224F (BPAC 676016) for the HH-60.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Avionics Development and Integration	-	1.934	-	-	-
Description: Procure avionics upgrades that include predictive terrain awareness and traffic collision avoidance warnings for UH-1N and HH-60G helicopters.					
FY 2010 Accomplishments:					
FY 2011 Plans: Investigate and develop technologies to integrate avionics upgrades that include predictive terrain awareness and traffic collision avoidance warnings. Efforts to include studies and analysis.					
FY 2012 Base Plans:					
FY 2012 OCO Plans:					
Accomplishments/Planned Programs Subtotals	-	1.934	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force	DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
3600: Research, Development, Test & Evaluation, Air Force	PE 0605229F: CSAR HH-60 Recapitalization	657001: Av	ionics Development and Integration
BA 5: Development & Demonstration (SDD)			

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

		-	FY 2012	FY 2012	FY 2012					Cost To	
<u>Line Item</u>	FY 2010	FY 2011	Base	<u>000</u>	<u>Total</u>	FY 2013	FY 2014	FY 2015	FY 2016	Complete	Total Cost
• APAF: <i>PE 0101235F, ICBM</i>	0.000	0.000	3.000	0.000	3.000	3.000	4.750	4.750	0.000	Continuing	Continuing
Helicopter Support											
• RDT&E: PE 0207224, Combat	0.000	0.000	2.292	0.000	2.292	2.091	3.633	4.528	0.000	Continuing	Continuing
Rescue and Recovery											

D. Acquisition Strategy

Assess the requirements of both the UH-1N and HH-60 and develop acquisition solutions unique to each platform. The solution set for the UH-1N is expected to be an in-production, non-developmental, Government Off-The-Shelf or Commercial Off-The-Shelf (GOTS/COTS) aircraft modification.

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: PB 2012 Air Force DATE: February 2011 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 3600: Research, Development, Test & Evaluation, Air Force PE 0605229F: CSAR HH-60 Recapitalization 657001: Avionics Development and Integration BA 5: Development & Demonstration (SDD) FY 2012 FY 2012 FY 2012 **Product Development (\$ in Millions)** oco **FY 2011** Base Total **Total Prior** Contract Target Method Performing Years Award Award Award **Cost To** Value of Complete **Cost Category Item Activity & Location** Cost Date Cost Date Cost Date **Total Cost** Contract & Type Cost Cost Studies and Analysis TBD TBD:TBD. 1.000 0.000 1.000 0.000 Subtotal 1.000 0.000 1.000 0.000 FY 2012 FY 2012 FY 2012 Support (\$ in Millions) FY 2011 Base oco Total **Total Prior** Target Contract Years Method Performing Award Award Award Cost To Value of **Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Contract Not specified.:Location TBD Not specified. 0.000 0.000 0.000 not provided. Subtotal 0.000 0.000 0.000 FY 2012 FY 2012 FY 2012 Test and Evaluation (\$ in Millions) **FY 2011** Base oco Total Contract **Total Prior** Target Value of Method Performing Years Award Award Award **Cost To** Cost Cost Cost Date **Total Cost** Contract Cost Category Item **Activity & Location** Cost Date Date Cost Complete & Type Subtotal 0.000 0.000 0.000 FY 2012 FY 2012 FY 2012 Management Services (\$ in Millions) FY 2011 Base oco Total Contract **Total Prior** Target Method Performing Years Award Award Award **Cost To** Value of **Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Contract SPO Support TBD TBD:TBD. 0.934 0.000 0.934 0.000 Subtotal 0.934 0.934 0.000 0.000 **Total Prior** Target Years FY 2012 FY 2012 FY 2012 Cost To Value of Cost FY 2011 Base oco Total Complete **Total Cost** Contract **Project Cost Totals** 1.934 0.000 1.934 0.000 Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force	DATE: February 2011				
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT			
3600: Research, Development, Test & Evaluation, Air Force	PE 0605229F: CSAR HH-60 Recapitalization	657001: Avionics Development and Integration			
BA 5: Development & Demonstration (SDD)					

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Air Force			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
3600: Research, Development, Test & Evaluation, Air Force BA 5: Development & Demonstration (SDD)	PE 0605229F: CSAR HH-60 Recapitalization	657001: Av	rionics Development and Integration

Schedule Details

	Start		End	
Events	Quarter	Year	Quarter	Year
Finalization of Source Selection Activities	1	2012	2	2012
Contract Award for UH-1N Solution	2	2012	2	2012