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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 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0605278F I HC/MC-130 Recap RDT&E							
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	0.000	8.646	13.987	38.579	0.000	38.579	13.632	4.853	4.937	5.040	0.000	89.674
675006: HC/MC-130 Recap	0.000	8.646	13.987	38.579	0.000	38.579	13.632	4.853	4.937	5.040	0.000	89.674
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Program MDAP/MAIS Code: 257												
Note This program, BA 07 PE 0605278F, project 675006, HC/MC-130 Block 8.X, is a new start.												
A. Mission Description and Budget Item Justification HC/MC-130 Recapitalization will replace and augment the aging USAF fleets of combat rescue HC-130P/N and special operations MC-130E/P/H aircraft which are experiencing airworthiness, maintainability and operational limitations. This program will develop and integrate changes from discrepancies found during development and operational flight test, and common C-130J block upgrades during HC/MC production. The HC/MC Block 8.1 program follows the same "Block Upgrade" strategy being used in the C-130J program (PE 0401132F). The internationally developed Block 8.1 program addresses mandated Communication, Navigation, and Surveillance/Air Traffic Management (CNS/ATM) requirements. It also incorporates capabilities such as Link 16, a new Flight Management System (FMS), Civil GPS Navigation, Identification Friend or FOE (IFF) transponder Mode-5, Civil Data-link, and Automatic Dependent Surveillance-Broadcast Out (ADS-B Out). The HC/MC Block 8.1 RDT&E effort integrates Block 8.1 into a HC-130J and a MC-130J via a trial kit install effort followed by a Development and Operational Test effort. The USAF will be fielding the IFF Mode 5 and ADS-B Out portions of Block 8.1 ahead of the remaining 36 capabilities in order to comply with the 2020 mandates. The Block 8.1 fleet modification program begins in FY 2019.												

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B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	10.807	13.987	27.513	0.000	27.513
Current President's Budget	8.646	13.987	38.579	0.000	38.579
Total Adjustments	-2.161	0.000	11.066	0.000	11.066
• 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	-2.161	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	11.066	0.000	11.066
Change Summary Explanation					
FY16 -\$2.161M is the result of a Below Threshold Reprogramming where HC/MC-130J was used as a source for PEC: 25219F MQ-9 UAV to adequately fund Hybrid release 1.					
FY18 +11.066 is to integrate a 4th station Communication, Navigation, Identification Management Unit into Block 8.1 as part of the MC-130J Trial Kit Install.					
C. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: HC/MC-130 Recap Test and Evaluation	0.785	0.200	0.101	-	0.101
Description: Test and evaluation planning, conduct, and support for developmental and operational testing.					
FY 2016 Accomplishments: Funding supported developmental and operational testing.					
FY 2017 Plans: Funding will support developmental and operational testing including Block 8.1 DT&E.					
FY 2018 Base Plans: Funding will support developmental and operational testing including Block 8.1 DT&E.					
Title: HC/MC-130 Recap Continuous Improvement Program (CIP)	0.000	0.200	0.200	-	0.200
Description: Recurring Software and hardware enhancements to address evolving requirements for Special Operations Forced and Personnel Recovery missions. These enhancements will be incorporated in both					

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
production and fielded aircraft. These enhancements will include, but are not limited to, parallel operational flight program (OFP)updates.						
FY 2016 Accomplishments: Initial CIP software build completed. Regression testing and DT completed.						
FY 2017 Plans: Contract to develop software only updates to the HC/MC-130J MTS-A and any OFP changes that arise.						
FY 2018 Base Plans: Lay in funding through the FYDP to allow for a continuous improvement cycle of both hardware and software of the sensor, some of which may impact the aircraft OFP with programs already in work.						
Title: HC/MC-130 Block 8.1		7.861	13.587	22.278	-	22.278
Description: Combined software/hardware upgrade for Block 8.1. Block 8.1 includes: Link 16, a new Flight Managment System (FMS), Civil Global Positioning System (GPS) Navigation, a Special Mission Processor Interface (SMP-I), Identification Friend or Foe (IFF) Mode 5, Civil Data Link, and Automatic Dependent Surveillance-Broadcast Out (ADS-B-Out).						
FY 2016 Accomplishments: Technical Evaluation of proposal began.						
FY 2017 Plans: Due to program interdependencies, HC/MC Block 8.1 program begins in FY17 with the ordering of long lead parts. A Block 8.1 trial kit installation (TKI) will be developed on one HC-130J (Increment 2) and one MC-130J (Increment 3) aircraft.						
FY 2018 Base Plans: The HC-130J and MC-130J Block 8.1 TKI hardware installation and engineering development and integration effort begins on both the HC-130J Increment 2 and the MC-130J Increment 3 aircraft.						
Title: HC/MC-130 Block 8.X		-	-	16.000	-	16.000
Description: Update to the Block 7.0/8.1 effort for HC/MC to do the following. Remove Link-16 function from Block 7.0/8.1 (It will come via other programs). Re-define the baseline configuration of GFE aircraft to align with						

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C. Accomplishments/Planned Programs (\$ in Millions)										FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
expected configuration at time of TKI. This will allow the contractor design to account for several hardware and software changes being brought to the aircraft via other programs.														
FY 2018 Base Plans: Contract to remove Link-16 Function from Block 7.0/8.1. Release the RFP to change the aircraft baseline configuration to align with expected configuration at time of TKI.														
Accomplishments/Planned Programs Subtotals										8.646	13.987	38.579	-	38.579
D. 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			
• APAF: BA05: Line Item #	31.070	51.317	67.674	153.080	220.754	38.264	6.127	4.249	4.333	385.000	764.653			
HCMC00: HC/MC-130 Modifications														
• APAF: BA02: Line Item # C130JH: HC-130J	458.030	437.576	198.502	0.000	198.502	0.000	0.000	0.000	0.000	0.000	2,622.590			
• APAF: BA02: Line Item # C-130JM: MC-130J	803.770	998.358	409.373	0.000	409.373	366.949	569.344	476.856	228.105	1,195.758	7,404.580			
Remarks														
E. Acquisition Strategy														
Lockheed Martin is the prime contractor for Research and Development work in support of the HC/MC-130J RECAP program. Block 8.1 strategy takes the common core Block 8.1 developed in the C-130J program and integrates it into the MC-130J Increment 3 and HC-130J Increment 2 configurations. Block 8.1 will also integrate with MC- and HC- unique mods. The C-130J ADS-B Out program includes all C-130J variants. The MC-130J ADS-B Mod funds the Group A kits and the installation for AC/MC-130Js.														
Work done to date on the HC/MC-130J RECAP program has been on Cost Plus Award Fee (CPAF) and Cost Plus Incentive Fee (CPIF) type contracts.														
F. 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			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0605278F / HC/MC-130 Recap RDT&E				Project (Number/Name) 675006 / HC/MC-130 Recap					
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
HC/MC-130 Recap Continuous Improvement Program (CIP)	SS/CPIF	Lockheed Martin : Marietta, GA	0.000	0.000		0.200	Jul 2017	0.200	Jul 2018	0.000		0.200	4.625	5.025	6.078
HC/MC-130 Recap Block 8.1	SS/CPIF	Lockheed Martin : Marietta, GA	0.000	7.861	Dec 2016	13.587	Dec 2016	22.278	Jan 2018	0.000		22.278	12.363	56.089	56.979
HC/ MC-130 Recap Block 8.X	SS/CPIF	Lockheed Martin : Marietta, GA	0.000	0.000		0.000		16.000	Jan 2018	0.000		16.000	0.000	16.000	-
Subtotal			0.000	7.861		13.787		38.478		0.000		38.478	16.988	77.114	-
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
Subtotal			-	-		-		-		-		-	-	-	-
Test and Evaluation (\$ 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
HC/MC-130 Recap Test and Evaluation Support	RO	46th Test Wing : EAFB, FL	0.000	0.785	May 2016	0.200	May 2017	0.101	May 2018	0.000		0.101	6.670	7.756	7.756
Subtotal			0.000	0.785		0.200		0.101		0.000		0.101	6.670	7.756	7.756
Management Services (\$ 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
Subtotal			-	-		-		-		-		-	-	-	-

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			Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	8.646		13.987		38.579		0.000		38.579	23.658	84.870	-
Remarks HC/MC-130 Recap RDT&E switched from BA05 to BA07 in FY16. The FY15 and prior RDT&E total was \$91.885M.															

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Air Force	Date: May 2017
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Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0605278F / HC/MC-130 Recap RDT&E	Project (Number/Name) 675006 / HC/MC-130 Recap
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	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
Development Test and Evaluation																												
HC/MC-130 RECAP Block 8.1 Development																												
HC/MC-130 RECAP Block 8.X Development																												
Continuous Improvement Program (CIP)																												

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Air Force			Date: May 2017
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0605278F / <i>HC/MC-130 Recap RDT&E</i>	Project (Number/Name) 675006 / <i>HC/MC-130 Recap</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Development Test and Evaluation	1	2016	4	2022
HC/MC-130 RECAP Block 8.1 Development	1	2017	4	2020
HC/MC-130 RECAP Block 8.X Development	2	2018	2	2021
Continuous Improvement Program (CIP)	1	2016	4	2022