

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force										Date: February 2018		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0605278F / HC/MC-130 Recap RDT&E							
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	10.543	0.000	38.579	32.574	0.000	32.574	4.817	24.750	24.860	5.095	0.000	141.218
675006: HC/MC-130 Recap	10.543	0.000	38.579	32.574	0.000	32.574	4.817	24.750	24.860	5.095	0.000	141.218
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Program MDAP/MAIS Code: 257												
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.												
The HC/MC RDT&E effort integrates Block 8.1 into a HC-130J, MC-130J and AC-130J, provides program capability updates, and integration with other HC, MC and AC unique modifications. The HC/MC Block 8.1 program follows the same "Block Upgrade" strategy being used in the C-130J program (PE 0401132F). A Block 8.X is planned to integrate future SOCOM-funded AC-130J/MC-130J capabilities with Block 8.1.												
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.												
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.												
B. Program Change Summary (\$ in Millions)				FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total				
Previous President's Budget				13.987	38.579	13.632	0.000	13.632				
Current President's Budget				0.000	38.579	32.574	0.000	32.574				
Total Adjustments				-13.987	0.000	18.942	0.000	18.942				
• 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				-13.987	0.000	18.942	0.000	18.942				

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force				Date: February 2018		
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				
<u>Change Summary Explanation</u> For PB19, FY17 funds were mistakenly put under BA05 rather than BA07. FY19 increase attributed to rephrasing of Block 7.0/8.1 development program.						
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: HC/MC-130 Recap Test and Evaluation		0.000	0.266	0.330	-	0.330
Description: Test and evaluation planning, conduct, and support for developmental and operational testing.						
FY 2018 Plans: Funding will support developmental and operational testing including Block 8.1 DT&E.						
FY 2019 Base Plans: Funding will support developmental and operational testing including Block 8.1 DT&E.						
FY 2018 to FY 2019 Increase/Decrease Statement: Block 8.1 test efforts expected to increase.						
Title: HC/MC-130 Recap Continuous Improvement Program (CIP)		0.000	0.100	0.158	-	0.158
Description: Recurring Software and hardware enhancements to address evolving requirements for Special Operations Forces and Personnel Recovery missions. These enhancements will be incorporated in both production and fielded aircraft. These enhancements will include, but are not limited to, parallel operational flight program (OFP)updates.						
FY 2018 Plans: Lay in funding through the FYDP to allow for a continuous improvement cycle of both hardware and software of multiple onboard systems, some of which may impact the aircraft OFP with programs already in work.						
FY 2019 Base Plans: Lay in funding through the FYDP to allow for a continuous improvement cycle of both hardware and software of multiple onboard systems, some of which may impact the aircraft OFP with programs already in work.						
FY 2018 to FY 2019 Increase/Decrease Statement: Incorporating requirements that were not captured in the previous CIP upgrade.						
Title: HC/MC-130 Block 8.1		0.000	30.213	24.086	-	24.086

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force				Date: February 2018		
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				
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
<p>Description: Combined software/hardware upgrade for Block 8.1. Block 8.1 includes, but is not limited to: 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).</p> <p>FY 2018 Plans: The HC-130J and MC-130J Block 8.1 trial kit installation (TKI) fabrication and engineering development and integration effort begins on both the HC-130J Increment 2 and the MC-130J Increment 3 aircraft.</p> <p>FY 2019 Base Plans: The HC-130J and MC-130J Block 8.1 TKI kitting and installation efforts occur and testing will begin.</p> <p>FY 2018 to FY 2019 Increase/Decrease Statement: Contractor activity expected to level off after initial program kick off.</p>						
<p>Title: HC/MC-130 Block 8.1 Baseline engineering change proposal</p> <p>Description: Re-define the baseline configuration of GFE aircraft to align with expected configuration at time of TKI to include, but not limited to, removal of Link-16 function. This will allow the contractor to design and integrate several HC, MC and AC unique hardware and software changes being brought to the aircraft via other programs.</p> <p>FY 2018 Plans: Contract to remove Link-16 Function from MC-130J Block 7.0/8.1. Release the RFP to change the aircraft baseline configuration to align with expected configuration at time of TKI.</p> <p>FY 2019 Base Plans: Begin work to remove Link-16 Function from MC-130J Block 7.0/8.1. Award contract to change the aircraft baseline configuration to align with expected configuration at time of TKI.</p> <p>FY 2018 to FY 2019 Increase/Decrease Statement: No change.</p>		-	8.000	8.000	-	8.000
Accomplishments/Planned Programs Subtotals		0.000	38.579	32.574	-	32.574

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force									Date: February 2018		
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						
D. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
• APAF 05 Line Item HCMC00: HC/MC-130 Modifications	51.317	220.754	37.754	87.900	125.654	5.882	4.015	4.099	4.375	385.000	801.096
• APAF 02 Line Item C130JH: HC-130J	337.576	198.502	129.437	100.000	229.437	0.000	0.000	0.000	0.000	0.000	765.515
• APAF 02 Line Item C-130JM: MC-130J	549.358	409.373	988.201	-	988.201	1,433.807	445.075	266.684	194.106	50.000	4,336.604
Remarks											
E. Acquisition Strategy											
Lockheed Martin is the primary 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.											
Development 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.											

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Air Force												Date: February 2018			
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 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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	0.998	0.000	Mar 2018	0.100	Jul 2018	0.158	Mar 2019	-		0.158	0.000	1.256	1.198
HC/MC-130 Recap Block 8.1	SS/CPIF	Lockheed Martin : Marietta, GA	8.751	0.000	Dec 2016	30.213	Mar 2018	24.086	Oct 2018	-		24.086	18.391	81.441	81.441
HC/ MC-130 Recap Block 8.1 Baseline ECP	SS/CPIF	Lockheed Martin : Marietta, GA	-	-		8.000	Apr 2018	8.000	Apr 2019	-		8.000	0.000	16.000	-
Subtotal			9.749	0.000		38.313		32.244		-		32.244	18.391	98.697	N/A
Test and Evaluation (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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	0.794	0.000	May 2017	0.266	May 2018	0.330	May 2019	-		0.330	8.075	9.465	7.756
Subtotal			0.794	0.000		0.266		0.330		-		0.330	8.075	9.465	N/A
			Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			10.543	0.000		38.579		32.574		-		32.574	26.466	108.162	N/A
Remarks															
HC/MC-130 Recap RDT&E switched from BA05 to BA07 in FY16. The FY15 and prior RDT&E total was \$91.885M.															
For PB19, FY17 funds were mistakenly put under BA05 rather than BA07 (PE: 65278F project: 675006).															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Air Force	Date: February 2018
---	----------------------------

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>
--	--	---

	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	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
<i>HC/MC-130 Recap Development</i>																												
Development Test and Evaluation																												
HC/MC-130 RECAP Block 8.1 Development																												
HC/MC-130 RECAP Block 8.1 Baseline ECP																												
Continuous Improvement Program (CIP)																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Air Force			Date: February 2018
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 by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>HC/MC-130 Recap Development</i>				
Development Test and Evaluation	1	2017	4	2023
HC/MC-130 RECAP Block 8.1 Development	1	2017	3	2021
HC/MC-130 RECAP Block 8.1 Baseline ECP	3	2018	4	2020
Continuous Improvement Program (CIP)	1	2017	4	2019