

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2020 Air Force **Date:** March 2019

Appropriation / Budget Activity / Budget Sub Activity: 3020F: Missile Procurement, Air Force / BA 02: Other Missiles / BSA 2: Tactical **P-1 Line Item Number / Title:** JAGM00 / Joint Air-to-Ground Munition

ID Code (A=Service Ready, B=Not Service Ready): B **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	60	-	60	-	-	-	-	-	60
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	0.000	0.000	15.000	-	15.000	0.000	0.000	0.000	0.000	-	15.000
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	0.000	0.000	15.000	-	15.000	0.000	0.000	0.000	0.000	-	15.000
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	0.000	0.000	15.000	-	15.000	0.000	0.000	0.000	0.000	-	15.000
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	0.214	-	0.214	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	0.250	-	0.250	-	-	-	-	-	0.250

Description:

The Army is the Lead Service for the Joint Air-to-Ground Missile (JAGM) program with Air Force missiles being procured through the Army's Redstone Arsenal. The JAGM is the next generation of aviation-launched, fire and forget missiles to augment HELLFIRE capability. The JAGM multi-mode guidance section is integrated with the combat proven HELLFIRE II (AGM-114R) propulsion, warhead, and control section. JAGM will provide precision-kill capability and be used by joint service aircraft for destruction of high value stationary, moving, and relocatable land and maritime targets from standoff range in day, night, adverse weather, and obscured operational environments. JAGMs will be used by the MQ-9 Reaper aircraft.

JAGM procurement funding supports the entire JAGM system to include resolution of obsolescence, end-of-life buys, safety, insensitive munitions, reliability, weapon integration activities, test sets, engineering changes, modifications, and production issues. Funding may be used to address Diminishing Manufacturing Sources (DMS) issues. Unit cost may vary based on procurement quantities of Lead Service, other Services and/or Foreign Military Sales (FMS) from the HELLFIRE and JAGM production capacity. Starting in FY2020, JAGM and HELLFIRE missiles will be procured using the same annual production contract.

Funding for this exhibit contained in PE 0201109F.

Note: Procurement quantities can change based on negotiated options/pricing bands and available funding, in accordance with Title 10, U.S. Code Section 2308 BUY-TO-BUDGET ACQUISITION.

As directed in the FY 2018 NDAA, Sec 825, amendment to PL 114-92 FY 2016 NDAA, Sec 828 Penalty for Cost Overruns, the FY 2018 Air Force penalty total is \$14.373M. The calculated percentage reduction to each research, development, test and evaluation and procurement account will be allocated proportionally from all programs, projects, or activities under such account.

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2020 Air Force **Date:** March 2019

Appropriation / Budget Activity / Budget Sub Activity: 3020F: Missile Procurement, Air Force / BA 02: Other Missiles / BSA 2: Tactical **P-1 Line Item Number / Title:** JAGM00 / Joint Air-to-Ground Munition

ID Code (A=Service Ready, B=Not Service Ready): B **Program Elements for Code B Items:** N/A **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	Joint Air-to-Ground Munition	P-5a, P-21	B		- / -	- / 0.000	- / 0.000	60 / 15.000	- / -	60 / 15.000
P-40	Total Gross/Weapon System Cost				- / -	- / 0.000	- / 0.000	60 / 15.000	- / -	60 / 15.000

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
 This program is a new start.

JAGM is a more capable, multi-sensor air-to-ground missile that will increase the lethality of the Joint Force Commander against time sensitive targets in challenging environments. JAGM entered production in FY2018, leveraging the HELLFIRE system. AF will augment the HELLFIRE inventory with JAGMs to improve the lethality of the MQ-9 Reaper.

FY2020 funding procures 60 missiles for AF training and operations to improve MQ-9 capability. Quantities are based on current estimated prices for purchase through the Army.

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2020 Air Force					Date: March 2019			
Appropriation / Budget Activity / Budget Sub Activity: 3020F / 02 / 2			P-1 Line Item Number / Title: JAGM00 / Joint Air-to-Ground Munition			Item Number / Title [DODIC]: Joint Air-to-Ground Munition		
ID Code (A=Service Ready, B=Not Service Ready) : B				MDAP/MAIS Code:				
Resource Summary			Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Procurement Quantity (Units in Each)			-	-	-	60	-	60
Gross/Weapon System Cost (\$ in Millions)			-	0.000	0.000	15.000	-	15.000
Less PY Advance Procurement (\$ in Millions)			-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)			-	0.000	0.000	15.000	-	15.000
Plus CY Advance Procurement (\$ in Millions)			-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)			-	0.000	0.000	15.000	-	15.000
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>								
Initial Spares (\$ in Millions)			-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)			-	-	-	0.250	-	0.250

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2018			FY 2019			FY 2020 Base			FY 2020 OCO			FY 2020 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Flyaway - Joint Air-to-Ground Msl Cost																		
Recurring Cost																		
AGM-179 - All-up-Rounds ^(†)	-	-	-	-	-	0.000	-	-	0.000	0.214	60	12.840	-	-	-	0.214	60	12.840
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	0.000	-	-	0.000	-	-	12.840	-	-	-	-	-	12.840
<i>Subtotal: Flyaway - Joint Air-to-Ground Msl Cost</i>	-	-	-	-	-	0.000	-	-	0.000	-	-	12.840	-	-	-	-	-	12.840
Hardware - Hardware End Item Cost																		
Recurring Cost																		
First Destination Shipping Charges	-	-	-	-	-	-	-	-	-	-	-	0.050	-	-	-	-	-	0.050
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	0.050	-	-	-	-	-	0.050
<i>Subtotal: Hardware - Hardware End Item Cost</i>	-	-	-	-	-	-	-	-	-	-	-	0.050	-	-	-	-	-	0.050
Support - Support End Item Cost																		
Program Management Administration	-	-	-	-	-	-	-	-	-	-	-	1.110	-	-	-	-	-	1.110
Production Engineering Support	-	-	-	-	-	-	-	-	-	-	-	1.000	-	-	-	-	-	1.000
<i>Subtotal: Support - Support End Item Cost</i>	-	-	-	-	-	-	-	-	-	-	-	2.110	-	-	-	-	-	2.110
Gross/Weapon System Cost	-	-	-	-	-	0.000	-	-	0.000	0.250	60	15.000	-	-	-	0.250	60	15.000

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2020 Air Force		Date: March 2019
Appropriation / Budget Activity / Budget Sub Activity: 3020F / 02 / 2	P-1 Line Item Number / Title: JAGM00 / Joint Air-to-Ground Munition	Item Number / Title [DODIC]: Joint Air-to-Ground Munition
ID Code (A=Service Ready, B=Not Service Ready) : B	MDAP/MAIS Code:	
^(†) indicates the presence of a P-5a		

UNCLASSIFIED

Exhibit P-5a, Procurement History and Planning: PB 2020 Air Force **Date:** March 2019

Appropriation / Budget Activity / Budget Sub Activity: 3020F / 02 / 2	P-1 Line Item Number / Title: JAGM00 / Joint Air-to-Ground Munition	Item Number / Title [DODIC]: Joint Air-to-Ground Munition
---	---	---

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ M)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
AGM-179 - All-up-Rounds ^(†)		2020	Lockheed Martin / Orlando	MIPR	Redstone Arsenal, AL	Sep 2020	Oct 2022	60	0.214	Y		Apr 2019

^(†) indicates the presence of a P-21

Remarks:
JAGMs will be procured via options on the HELLFIRE Fixed Price Incentive Firm (FPIF) production contract.

UNCLASSIFIED

Exhibit P-21, Production Schedule: PB 2020 Air Force **Date:** March 2019

Appropriation / Budget Activity / Budget Sub Activity: 3020F / 02 / 2	P-1 Line Item Number / Title: JAGM00 / Joint Air-to-Ground Munition	Item Number / Title [DODIC]: Joint Air-to-Ground Munition
---	---	---

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2020												Fiscal Year 2021												BALANCE	
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT	Calendar Year 2020												Calendar Year 2021												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
AGM-179 - All-up-Rounds																															
	1	2020	AF	60	0	60																							60		
	1	2020	ARMY (‡)	609	0	609																							609		
	1	2020	NAVY (‡)	382	0	382																							382		
	1	2020	Total	1,051	0	1,051																							1,051		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

UNCLASSIFIED

Exhibit P-21, Production Schedule: PB 2020 Air Force **Date:** March 2019

Appropriation / Budget Activity / Budget Sub Activity: 3020F / 02 / 2	P-1 Line Item Number / Title: JAGM00 / Joint Air-to-Ground Munition	Item Number / Title [DODIC]: Joint Air-to-Ground Munition
---	---	---

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2022												Fiscal Year 2023												BALANCE	
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT	Calendar Year 2022												Calendar Year 2023												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G		S E P
AGM-179 - All-up-Rounds																															
	1	2020	AF	60	0	60	-	-	-	-	-	-	-	-	-	-	-	-	5	5	5	5	5	5	5	5	5	5	5	0	
	1	2020	ARMY (‡)	609	0	609	-	-	-	-	-	-	-	-	-	-	-	-	50	50	50	51	51	51	51	51	51	51	51	51	0
	1	2020	NAVY (‡)	382	0	382	-	-	-	-	-	-	-	-	-	-	-	-	31	31	32	32	32	32	32	32	32	32	32	32	0
	1	2020	Total	1,051	0	1,051	-	-	-	-	-	-	-	-	-	-	-	-	86	86	87	88	0								
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

UNCLASSIFIED

Exhibit P-21, Production Schedule: PB 2020 Air Force	Date: March 2019
---	-------------------------

Appropriation / Budget Activity / Budget Sub Activity: 3020F / 02 / 2	P-1 Line Item Number / Title: JAGM00 / Joint Air-to-Ground Munition	Item Number / Title [DODIC]: Joint Air-to-Ground Munition
---	---	---

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
		MSR For 2020	1-8-5 For 2020	MAX For 2020	Initial				Reorder			
					ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Lockheed Martin - Orlando	600	1,200	2,400	5	12	25	37	0	0	0	0

Remarks:
 Yearly Minimum Sustainment Rate (MSR) = 600 missiles.
 Yearly Economical Production Rate (1-8-5) = 1,200 missiles.
 Yearly Maximum Production Rate (MPR) = 2,400 missiles.

MSR and MPR consist of the sum of USAF, USN, and Army procurements for the year.

(±) Delivery rows marked with this symbol indicate that they are funded through a separate Line Item. See the respective components' exhibits for details, including the full delivery schedule.

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).