DOD MQ-9 Reaper Procurement Spending

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	This is a Cent	er for the Study of the	Drone Research Doc	ument. All amounts ir	n millions and may be	rounded. Contact cs	d@bard.edu for more	information.	
				SAF FY16 MQ-9	PROCUREMENT				
	E 1		BASE	Tatal Orac		000	Tatal Oast	04.7.4.1	T - 4 - 1
Line Item/ Litle	Element	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Qty I otal	lotal
PRDTB1 / MQ-9									
	MQ-9 Reaper Aircraft and GFE	14.483	29	420.021				29	420.021
FI Υ-Δ\Λ/ΔΥ	Production Support			10.572					10.572
RECURRING ITEM COSTS	Fixed Ground Control Station and GFE	3.17	6	19.02	3.17	4	12.68	10	31.7
	Predator Primary Satellite Link (PPSL)			2.965					2.965
	Other Government Costs (OGC)			60.502			0.82		61.322
SUPPORT	Support Equipment			29.291					29.291
	Training Device/Simulator			10.157					10.157
								Total	566.028
Note: All amoun	ts in millions.								
Line Item/Title	Element				Justification				
	MQ-9 Reaper Aircraft and GFE	FY16 funding wi Sensors, Lynx S	II procure 29 MQ- synthetic Aperture	9 Reaper aircraft Radars (SAR), H	and associated I fellfire Launchers	Multi-Spectral Tar and Rails and of	rgeting Systems-I ther GFE.	B (MTS-B) EO/IR	
	Production Support	FY16 funding inc non-recurring pr safety enhancer	cluded in Product oduction costs as nents, and higher	ion Support cons sociated with dim level initiatives d	ists of Engineerin ninishing manufac irected by the Air	g Change Orders turing sources, re Force.	s (ECO) urgent se eliability and mair	ervices, and Itenance (R&M)	
FLY-AWAY RECURRING ITEM COSTS	Fixed Ground Control Station and GFE	Ground Control either within Line communciation a United States lo	Station (GCS) & (e-of-Sight (LOS) of architectures. GC cations. Block 50	GFE - The GCS f or Beyond Line-of Ss are used prim GCS procureme	unctions as the a f-Sight (BLOS) via arily to support R nt begins in FY16	ircraft cockpit and a a combination c emote Split Oper	d can control the a of satellite relay an ations (RSO) fror	aircraft from nd terrestrial n Continental	
	Predator Primary Satellite Link (PPSL)	FY16 funding inc equipment is rec Terminals (FSS included.	cludes communic quired to support I F). Due to fluctuat	ation GFE, includ RSO for the weap ions in quantities	ling terminals and oon system. Quar associated with	l amplifiers, to su ntities in FY16 are GFE and FSSTs,	pport SATCOM. Se for (4) Fixed Site only FSST quant	SATCOM SATCOM tities are	

	Other Government Costs (OGC)	FY16 funding for OGCs includes direct mission support and Program Management Administration (PMA). PMA includes program office costs such as Management Information System (MIS) support, travel, training, security, and facility management. In addition, costs for Advisory and Assistance Services (A&AS) for program management, logistics, integration and test, and administration support services are included.								
SUPPORT	Support Equipment	FY16 funding includes Su maintenance and operation	Y16 funding includes Support Equipment to include peculiar and common support equipment required to support the naintenance and operations of the MQ-9 weapon system.							
	Training Device/Simulator	FY16 funding will procure Brief/Debrief Stations and local area network (LAN) cabinets to support aircrew training. Predator Mission Aircrew Training Simulators (PMATS) quantities are various configurations of Instructor Operator Stations (IOS) with mission coordination capabilities, Brief/Debrief Stations and LAN cabinets to support aircrew training. Due to fluctuations in quantities and associated unit costs, only quantities for PMATS IOS are included.								
Other	000	FY16 OCO request is for	four fixed Ground Cont	trol Stations to incre	ease Combat Air F	Patrol capacity.				
Contracting Notes:										

MQ-9s are procured sole-source with General Atomics-Aeronautical Systems Incorporated (GA-ASI). GA-ASI is responsible for the aircraft and GCS, The Raytheon Company for the MTS-B Electro-Optical InfraRed (EO-IR) sensor, and L3 Communications for the Operator Simulator and satellite communication (SATCOM) infrastructure components.

USAF FY15 MQ-9 PROCUREMENT										
			BASE			000				
Line Item/Title	Element	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Qty Total	Total	
PRDTB1 / MQ-9										
	MQ-9 Reaper Aircraft and GFE	15.83	12	189.957	15.83	12	189.96	24	379.917	
	Production Support			12.48			2.04		14.52	
RECURRING	Fixed Ground Control Station and GFE									
	Predator Primary Satellite Link (PPSL)			1.186					1.186	
	Other Government Costs (OGC)			20.901					20.901	
SUPPORT	Support Equipment			13.98					13.98	
	Training Device/Simulator	2.207	12	26.479				12	26.479	
				362.983			192	Total	456.983	

Remarks: The FY15 unit cost increase is due to the plan to only procure 12 aircr General Atomics ASI's minimum sustaining rate and the procurement of a new M System-B DAS 4 Sensor.				re 12 aircraft whic of a new Multi-Sp	h is below ectral Targeting Remarks: Congress Program Increase to Base + 98				
-									
			<u>U</u> :	SAF FY14 MQ-9	PROCUREMENT				
			BASE			000			
Line Item/Title	Element	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Qty Total	Total
PRDTB1 / MQ-9									
	MQ-9 Reaper Aircraft and GFE	14.418	12	173.015				12	173.015
	Advanced Sensors			18.826					18.826
FLY-AWAY	Production Support			26.31					26.31
ITEM COSTS	Fixed Ground Control Station and GFE								
	Predator Primary Satellite Link (PPSL)								
	Other Government Costs (OGC)			14.085					14.085
	Program Management Administration (PMA) OGC			1.931					1.931
SUPPORT	PMA Contractor Services			5.585					5.585
	Support Equipment			8.619					8.616
	Training Device/Simulator	3.974	6	23.846				6	23.846
								Total	272.214
							Remarks: Con	gress Program Ir	ncrease + 80
			SO	COM FY16 MQ-9	PROCUREMEN	Т			
			BASE			000			
Line Item/Title	Element	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Qty Total	Total
PRDTB1 / MQ-9									

	Production										
	Support			0.49					0.49		
RECURRING COSTS	Mission Kits, Mission Payloads, Weaponization and Modification			11.236					11.236		
								Total	11.726		
All amoun	ts in millions.										
MQ-9 Modifications											
Appropriation /	Budget Activity / E	Budget Sub Activ	vity:								
3010F: Aircraft	Procurement, Air I	Force / BA 05: M	odification of Ins	service Aircraft /	BSA 5: Other A	ircraft					
I	tem	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO						
1 / GCS Blk 50 (Improvement)	Capability	-									
2 / MTS-B HD (0 Improvement)	Capability	-									
3 / IP Migration Improvement)	(Capability	-	3.13								
4 / Communicati (Capability Impre	on Enhancements ovement)	-	1.452	1.14							
5 / Technology I Improvement)	nsertion (Capability	-									
6 / MQ-9 Low Co & Maintainability	ost Mods (Reliablity /)	2	2	2							
9151 / Block 5 (Improvement)	Capability	-		14.778							
9152 / MQ-9 Fie Improvement)	ld (Capability	29.899	20.167	9.941							
9154 / Lynx SAF Improvement)	R (Capability	-	44.536	33.524							
9155 / GCS Blk Improvement)	30 (Capability	-	24.106	19.406							
9159 / R&M enh (Reliablity & Mai	ancements intainability)	9.241	16.914	13.717							
9164 / Extended (Capability Impre	l Range MQ-9 ovement)	17.83	43.14	20.72	69						

Total		58.97	155.445	115.226	69				
				Modification	ns Details				
Line Number / Item	Title	Total Amount	осо	Description					
PRDTB2 / MQ-9 MODS	9151 / Block 5	14.778		This modification configuration to the modification inclu Primary Data Lin Mission Control	n is a portion of th the Block 5 config ude, but are not li k (PPDL), Forwa Module/Payload (e retrofit program juration and occu mited to, installing rd Avionics Bay F Control Computer	n that upgrades M rs at the Depot. U g High Capacity S Redesign, VORTE r (MCM/PCC).	Q-9 aircraft from Jpgrades that are starter-Generator X Encrypted Dat	the Block 1 part of this , Predator alink, and
Line Number / Item	Title	Total Amount	осо	Description					
PRDTB2 / MQ-9 MODS	9152 / MQ-9 Field	9.941		This modification aircraft with enha modification. Up aircraft upgrades Landing Gear (H (SMS), and Sele costs reflect all o retrofits.	n is a portion of th anced capabilities grades that are p s, Bomb Release IMLG), VORTEX active Availability / costs associated v	e field retrofit pro and utilizes a fie art of this modific: Units (BRU)-71 b encrypted datalin Anti-Spoofing Mo with the multiple e	gram that upgrad Id team to perforn ation include High omb racks, Heav k, Stores Manage dule (SAASM). T elements of the M	es Block 1 MQ-9 n the n Definition (HD) yweight Main ement System he associated Q-9 field	
Line Number / Item	Title	Total Amount	осо	Description					
PRDTB2 / MQ-9 MODS	9154 / Lynx SAR	33.524		This effort will re Radar (SAR) to t	trofit 110 aircraft the Block 20A SA	fielded with Lynx R configuration.	Block 20 Synthet T	ic Aperture	
Line Number / Item	Title	Total Amount	осо	Description					
PRDTB2 / MQ-9 MODS	9155 / GCS Blk 30	19.406		The Ground Cor Mobile GCS with Predator Primary approach, GCS significant Huma enhancements.	ntrol Station (GCS n new Linux proce y Data Link (PPD modernization ret nMachine Interfa	 Block 30 moder Block 30 moder ssors, high definit and 2nd ARC-2 rofits the legacy solution ce (HMI) improve 	rnization retrofit p ition displays, erg 210 radio capabili system with user- ments and reliab	rogram upgrades onomic improven ities. Through an prioritized capabi ility and maintena	the Fixed and nents and added incremental lities, to include ince
Line Number / Item	Title	Total Amount	000	Description					

PRDTB2 / MQ-9 MODS	9159 / Reliability and Maintainability (R&M) Enhancements	13.717		The purpose of t aircraft, sensor p System (PMATS) requirements dri limited to, improv system sampling Test System (RA Joint Reliability a	his effort is to ena bayloads, Ground b) to improve com ving down systen ved fuel bladders g, new battery jun AMTS) and impro- and Maintainabilit	able reliability and Control Station (ponent mean time n sustainabilty co fuel pumps, and ction box, angle c ved power inverte y Evaluation Tear	I maintainability (GCS), and Prima e between failure st over time. Curr wing sump boxe of attack probe, R er. This effort add n (JRMET) and C	R&M) modification ry Mission Aircrew and maintenance ent examples incl s, and, potentially uggedized Aircra ress R&M issues CAT I deficiency re	n for the MQ-9 w Training e action rate lude, but are not , improved oil ft Maintenance identified by the eports.
Line Number / Item	Title	Total Amount	000	Description					
PRDTB2 / MQ-9 MODS	9164 / Extended Range MQ-9	89.72	69	This program inc modifications. Ca shipping contain modifications. Ca	cludes extending andidate aircraft r ers, engine modif urrent plan is to n	the range capabil nodifications inclu ications, fuel syst nodify all MQ-9 ai	ity for the MQ-9 v ude external fuel em modifications rcraft to Extended	veapon system th tanks, new wings , 4-blade propelle d Range configura	rough aircraft and tail, er, and software ation.
				FY16 OCO fund production lead (\$8.2M) are com for the 36 OCO I	s are requested to time, installation v ibined with Other kits appears to be	o procure and ins will occur in FY18 Government Cos e zero.	tall 36 Block 1 air as reflected in th ts in the FY16 O(craft Extended Raine schedule. Insta CO. Therefore, the	ange kits. Due to llation costs e installation cost
				HELLFIRE	MISSILES				
				FY1	6				
		BASE			000			TOTALS	
Line Item/Title	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Avg Unit Cost	Qty	Total
PRDTA2 /									
Predator Hellfire Missile	0.1	3756	423.016	0.138	1811	280.902	0.112	5567	703.918
Predator Hellfire Missile	0.1	3756	423.016	0.138	1811	280.902	0.112	5567	703.918
Predator Hellfire Missile	0.1	3756	423.016	0.138 FY1	1811 5	280.902	0.112	5567	703.918
Predator Hellfire Missile	0.1	3756 BASE	423.016	0.138 FY1	1811 <u>5</u> OCO	280.902	0.112	5567	703.918
Predator Hellfire Missile	0.1 Unit Cost	3756 BASE Qty	423.016 Total Cost	0.138 FY1 Unit Cost	1811 5 <u>OCO</u> Qty	280.902 Total Cost	0.112 Avg Unit Cost	5567 Qty	703.918 Total
Predator Hellfire Missile Line Item/Title PRDTA2 / Predator Hellfire Missile	0.1 Unit Cost 0.12	3756 BASE Qty 283	423.016 Total Cost 33.878	0.138 FY1 Unit Cost 0.117	1811 5 0C0 Qty 983	280.902 Total Cost 114.983	0.112 Avg Unit Cost 0.118	5567 Qty 1,266	703.918 Total 169.347
Predator Hellfire Missile Line Item/Title PRDTA2 / Predator Hellfire Missile	0.1 Unit Cost 0.12	3756 BASE Qty 283	423.016 Total Cost 33.878	0.138 FY1 Unit Cost 0.117	1811 5 0CO Qty 983	280.902 Total Cost 114.983	0.112 Avg Unit Cost 0.118	5567 Qty 1,266	703.918 Total 169.347

	BASE			000					
Line Item/Title	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Avg Unit Cost	Qty	Total
PRDTA2 / Predator Hellfire Missile	0.118	413	48.548	0.115	211	24.2	0.091	624	64.928