PE NUMBER: 0305220F
PE TITLE: GLOBAL HAWK DEVELOPMENT/FIELDING

Exhibit R-2, RDT&E Budget Item Justification

DATE: February 2008

BUDGET ACTIVITY: 07 Operational System Development

PE NUMBER AND TITLE: 0305220F GLOBAL HAWK DEVELOPMENT/FIELDING

Cost ($ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	224.126	274.742	284.292	243.947	195.879	168.696	170.651	Continuing	TBD
5144 Global Hawk	224.126	274.742	284.292	243.947	195.879	168.696	170.651	Continuing	TBD

(U) Footnote: FY2008 funding totals do not include $0.8M FY2008 GWoT requirements still pending Congressional consideration

(U) A. Mission Description and Budget Item Justification

The Global Hawk System provides high altitude, deep look, long endurance intelligence, surveillance, and reconnaissance (ISR) capability that compliments space and other airborne collectors during peacetime, crisis, and war-fighting scenarios.

This funding is procuring the highly capable Global Hawk System, which is comprised of aircraft, payloads, ground segment, and support segment. The aircraft is an autonomous, high altitude, long endurance, unmanned aircraft systems (UAS). The RQ-4A is an imagery-intelligence (IMINT) UAS designed to employ 2000 pounds of payload. The RQ-4A has one configuration known as the Block 10. The Block 10 employs an IMINT system comprised of a synthetic aperture radar (SAR) sensor and an electro-optical (EO) / infrared (IR) sensor. These three sensors are called the integrated sensor suite (ISS). The RQ-4B UAS is designed to employ 3000 pounds of payload and enable multi-intelligence (multi-INT) collecting. The RQ-4B has three configurations: Block 20, Block 30, and Block 40. The Block 20 will employ upgraded SAR and EO/IR sensors known as the enhanced ISS (EISS) in an IMINT only configuration. The Block 30 will employ the same EISS sensors as the Block 20 and will also integrate a wide spectrum signals intelligence (SIGINT) sensor called the Advanced Signals Intelligence Program (ASIP) sensor used simultaneously to create a multi-INT platform. The Block 40 will integrate the multi-platform radar technology insertion program (MP-RTIP) radar sensor, and currently plans to only carry the MP-RTIP sensor. The user will ultimately determine the optimal mix of quantities and payloads for each aircraft configuration based on operational requirements. The ground station (GS) includes the mission control element (MCE) and the launch and recovery element (LRE). The support segment includes aerospace ground equipment, tech orders, spares, support equipment, and training to enable operation of the Global Hawk System.

The Global Hawk program went through a Title 10, Section 2433 review in 2006, due to a unit cost breach (informally known as Nunn-McCurdy breach). The Department certified the program to Congress on June 5th, 2006. As a result of the review, the Department directed a program restructure to slow development, cap the low rate initial production (LRIP) at 5 per year, and reduce risk. LRIP will remain at 5 per year until successful completion of the initial operational test and evaluation (IOT&E).

When judged feasible and affordable, this program will participate in the development, testing, and implementation of international standards (to include NATO standardization agreements) to enhance joint, allied, and coalition interoperability.

This program is budget activity 7, Operational Systems Development, because it utilizes Air Force R&D to develop a highly capable operational system.

Exhibit R-2, RDT&E Budget Item Justification	DATE February 2008
BUDGET ACTIVITY 07 Operational System Development	PE NUMBER AND TITLE 0305220F GLOBAL HAWK DEVELOPMENT/FIELDING

(U) B. Program Change Summary ($ in Millions)

		FY 2007	FY 2008	FY 2009
(U)	Previous President's Budget	247.726	298.501	317.764
(U)	Current PBR/President's Budget	224.126	274.742	284.292
(U)	Total Adjustments	-23.600	-23.759	
(U)	Congressional Program Reductions		-15.006	
	Congressional Rescissions		-1.753	
	Congressional Increases			
	Reprogrammings	-23.600	-7.000	
	SBIR/STTR Transfer			

(U) Significant Program Changes:

In FY2008, $15M was cut from the program due to perceived future execution shortfalls. An additional $7M was transferred to Global Hawk production budget to fund spares for systems currently employed in the Global War on Terror.

In FY2009, $31M was reprogrammed to the ASIP PE to fund development tasks for ASIP operational-level sustainment.

Exhibit R-2a, RDT&E Project Justification			DATE: February 2008
BUDGET ACTIVITY: 07 Operational System Development	PE NUMBER AND TITLE: 0305220F GLOBAL HAWK DEVELOPMENT/FIELDING	PROJECT NUMBER AND TITLE: 5144 Global Hawk	

Cost ($ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
5144 Global Hawk	224.126	274.742	284.292	243.947	195.879	168.696	170.651	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

(U) Footnote: FY2008 funding totals do not include $0.8M FY2008 GWoT requirements still pending Congressional consideration

(U) A. Mission Description and Budget Item Justification

The Global Hawk System provides high altitude, deep look, long endurance intelligence, surveillance, and reconnaissance (ISR) capability that compliments space and other airborne collectors during peacetime, crisis, and war-fighting scenarios.

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Exhibit R-2a, RDT&E Project Justification		DATE: February 2008
BUDGET ACTIVITY: 07 Operational System Development	PE NUMBER AND TITLE: 0305220F GLOBAL HAWK DEVELOPMENT/FIELDING	PROJECT NUMBER AND TITLE: 5144 Global Hawk

(U) B. Accomplishments/Planned Program ($ in Millions)

		FY 2007	FY 2008	FY 2009
(U)	Continue modernization and related tasks, to satisfy Capabilities Description Document requirements.			
(U)	Aircraft	23.865	15.660	23.066
(U)	Payloads	40.954	40.608	37.580
(U)	Ground Segment	28.519	24.249	36.564
(U)	Communications	7.420	19.271	18.841
(U)	Support Segment	32.098	62.123	71.651
(U)	Block Load (System Engineering, Program Management, Flight test support, and software maintenance)	58.075	75.648	68.091
(U)	AFFTC	8.940	15.600	13.093
(U)	Other Government Costs & Mission Support	16.271	17.234	13.906
(U)	Multi-Platform Radar Technology Improvement Program (MP-RTIP) sensor adaptation	7.684		
(U)	Fielding Strategy Acceleration	0.300	4.349	1.500
(U)	Total Cost	224.126	274.742	284.292

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

		FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
(U)	* Airborne SIGINT Enterprise, AF RDT&E (PE 34260F)	10.480	10.817	41.917	34.598	20.495	11.708	11.944	Continuing	TBD
(U)	Joint Tactical Radio System, AF RDT&E (PE 27423F)	16.003	4.580	1.327	20.059	23.937	24.396	24.887	Continuing	TBD
(U)	Other APPN									
(U)	AF MILCON	49.450								
(U)	AF O&M	99.711	81.757	104.097	180.609	160.570	172.431	176.491	Continuing	TBD
(U)	AF MILPERS	29.851	42.541	54.530	59.500	61.253	73.984	87.111	Continuing	TBD
(U)	Aircraft Procurement, APPN 10 AF (HAE UAV)	442.614	580.892	712.151	516.988	533.490	558.673	475.061	Continuing	TBD
(U)	Aircraft Procurement, APPN 11 AF (HAE UAV)	7.507	25.756	103.939	109.850	127.453	109.553	57.047	Continuing	TBD
(U)	Other Procurement, 3080 (HAE UAV)		0.811	0.298						
(U)	Weapons System Initial Spares		6.953							

* Funds in the Global Hawk Development program were reprogrammed to the SIGINT Enterprise PE (FY09 $31.1M, FY10 $23.5M, FY11 $9.1M)

Exhibit R-2a, RDT&E Project Justification		DATE: February 2008
BUDGET ACTIVITY: 07 Operational System Development	PE NUMBER AND TITLE: 0305220F GLOBAL HAWK DEVELOPMENT/FIELDING	PROJECT NUMBER AND TITLE: 5144 Global Hawk

(U) D. Acquisition Strategy

The Global Hawk program uses a modernization strategy to provide the warfighter with a near-term, combat capability with increased, time-phased capability improvements as technology and risk achieve satisfactory levels.

Exhibit R-3, RDT&E Project Cost Analysis

DATE: **February 2008**

BUDGET ACTIVITY: **07 Operational System Development**

PE NUMBER AND TITLE: **0305220F GLOBAL HAWK DEVELOPMENT/FIELDING**

PROJECT NUMBER AND TITLE: **5144 Global Hawk**

(U) Cost Categories (Tailor to WBS, or System/Item Requirements) ($ in Millions)	Contract Method & Type	Performing Activity & Location	Total Prior to FY 2007 Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
(U) Product Development												
EMD	SS/CPAF	Northrop Grumman Integrated Systems, San Diego, CA	458.775	186.988	Feb-07	237.107	Feb-08	251.375	Feb-09	Continuing	TBD	TBD
MP-RTIP Adaptation	SS/CPAF	Northrop Grumman Integrated Systems, El Segundo, CA	52.842	7.684	Jan-07					0.000	60.526	60.526
ASIP	SS/CPAF	Northrop Grumman Electronic Systems Laboratory, San Jose, CA	69.074							0.000	69.074	69.074
Subtotal Product Development			580.691	194.672		237.107		251.375		Continuing	TBD	TBD
Remarks:												
(U) Support												
Contractor Program Support	SS/CPFF	Northrop Grumman Integrated Systems, San Diego, CA	5.508	4.243	Jan-07	4.800	Jan-08	5.918	Jan-09	Continuing	TBD	TBD
Government Program Support	Various	Various Government Organizations	8.066	6.135	Dec-06	6.254	Dec-07	3.323	Dec-08	Continuing	TBD	TBD
Subtotal Support			13.574	10.378		11.054		9.241		Continuing	TBD	TBD
Remarks:												
(U) Test & Evaluation												
Flight Test & Evaluation	PO	AFFTC, Edwards	20.672	8.940	Jan-07	15.600	Jan-08	13.093	Jan-09	Continuing	TBD	TBD
Subtotal Test & Evaluation			20.672	8.940		15.600		13.093		Continuing	TBD	TBD
Remarks:												
(U) Management												
A&AS	PR	Various Contractors, Dayton, OH	13.456	7.965	Nov-06	8.647	Nov-07	9.502	Nov-08	Continuing	TBD	TBD

Exhibit R-3, RDT&E Project Cost Analysis

DATE: **February 2008**

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT NUMBER AND TITLE
07 Operational System Development	**0305220F GLOBAL HAWK DEVELOPMENT/FIELDING**	**5144 Global Hawk**

	Other Government Organizations	Various	Various, Dayton, OH	8.300	2.171	2.334	1.081	Continuing	TBD	TBD
	Subtotal Management			21.756	10.136	10.981	10.583	Continuing	TBD	TBD
	Remarks:									
(U)	Total Cost			636.693	224.126	274.742	284.292	Continuing	TBD	TBD

Exhibit R-4, RDT&E Schedule Profile		DATE: February 2008
BUDGET ACTIVITY: 07 Operational System Development	PE NUMBER AND TITLE: 0305220F GLOBAL HAWK DEVELOPMENT/FIELDING	PROJECT NUMBER AND TITLE: 5144 Global Hawk

Baselined Program

Dominant Air Power: Design For Tomorrow...Deliver Today

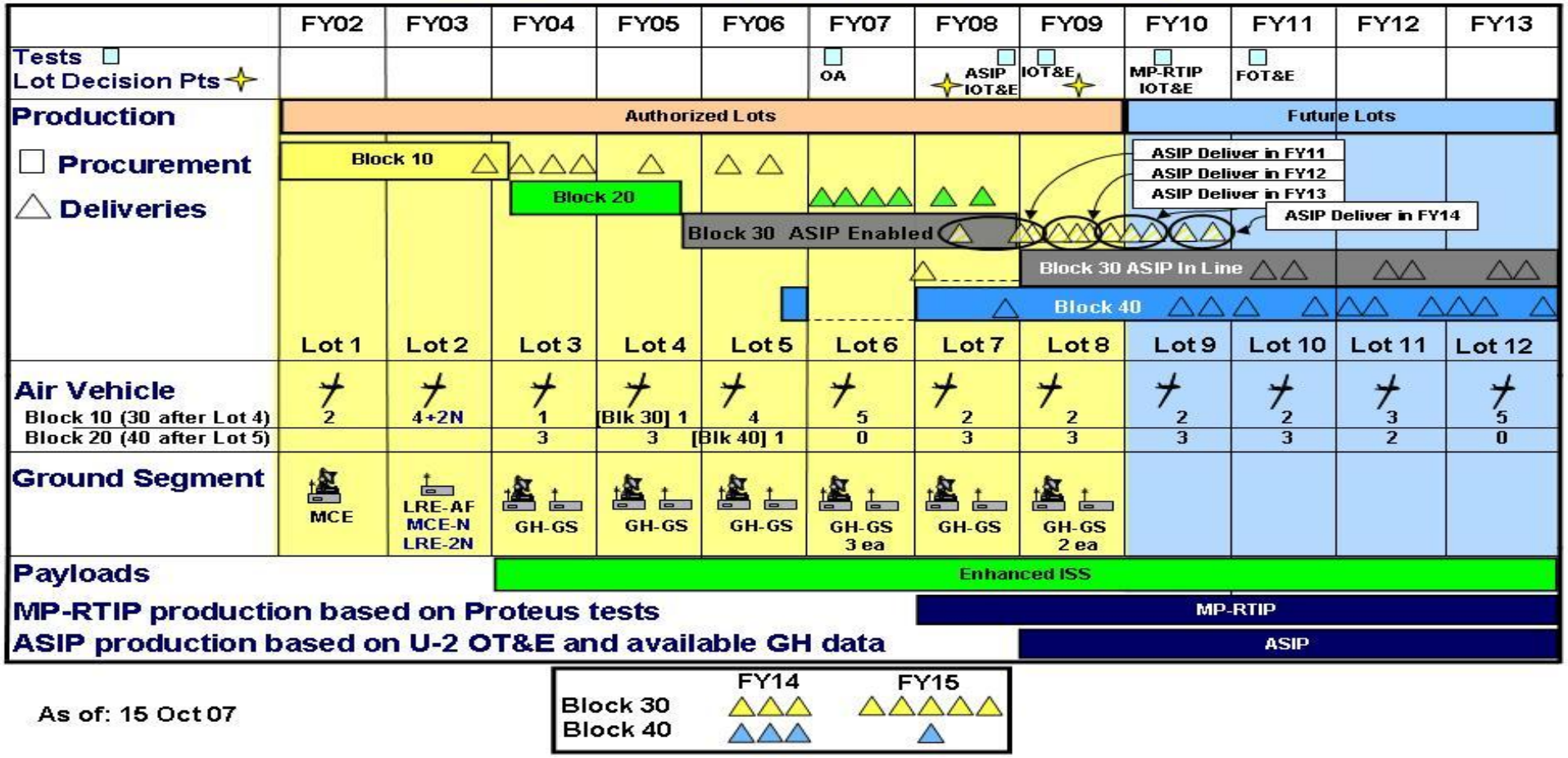

Exhibit R-4a, RDT&E Schedule Detail		DATE: February 2008
BUDGET ACTIVITY: 07 Operational System Development	PE NUMBER AND TITLE: 0305220F GLOBAL HAWK DEVELOPMENT/FIELDING	PROJECT NUMBER AND TITLE: 5144 Global Hawk

(U) Schedule Profile	FY 2007	FY 2008	FY 2009
(U) RQ-4B Block 20 First Flight	2Q		
(U) In-progress review	3Q		
(U) Block 40 Integration CDR		2Q	
(U) ASIP sensor delivers for integration with Block 30		1Q	
(U) Block 20 Operational Assessment		2Q	
(U) ASIP/Block 30 development test flights begin		2Q	
(U) Modernization Program Contract Award		2Q	
(U) Block 40 First Flight		4Q	
(U) Block 40 First Sensor Flight			1Q
(U) IOT&E			2Q