

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)								DATE February 2002	
BUDGET ACTIVITY 07 - Operational System Development				PE NUMBER AND TITLE 0305205F Endurance Unmanned Aerial Vehicles					
COST (\$ in Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	145,123	195,782	309,743	354,679	300,459	183,947	225,440	Continuing	TBD
4755 Predator	5,462	3,743	3,771	3,840	3,911	3,987	4,063	Continuing	TBD
4799 Global Hawk	137,382	189,759	305,972	350,839	296,548	179,960	221,377	Continuing	TBD
4883 JTC/SIL MUSE	2,279	2,280	0	0	0	0	0	0	4,579
Quantity of RDT&E Articles	2	0	0	0	0	0	0	0	47,548
<p>1. In FY02, Predator received \$167.6M as part of the Defense Emergency Relief Fund (DERF). Funding was used to outfit Predator with the Multi-spectral Targeting System (MTS) laser designator/sensor turret and Hellfire missile launch capability, provide enabling improvements, purchase four additional Predator aircraft, and purchase three Predator B aircraft in support of operation Enduring Freedom. This funding is not reflected in the FY02 program total.</p> <p>2. The Global Hawk program also received \$72.0M in FY02 as part of the Defense Emergency Response Fund (DERF). Funding was used to cover initial preparation and deployment of two Global Hawk aircraft, provide for 120 days of operations, and accelerate delivery of EO/IR sensors; in support of OPERATION ENDURING FREEDOM. This funding is not reflected in the FY02 program total.</p> <p>3. In FY03, Globak Hawk anticipates receiving \$34M from the Cost of War Transfer Account. These funds are not included in the FY03 Air Force baseline. Funds will be used to provide a defensive suite (\$30M) and SIGINT (\$5M).</p> <p>4. In FY03, the Predator program anticipates receiving \$124.0M from the Cost of War Transfer Account. These funds are not included in the FY03 Air Force baseline. Funding will be used to begin the procurement of 3 additional MQ-9 Predator B squadrons and accelerate current RQ-1 Predator A production.</p>									

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<p>(U) <u>A. Mission Description</u> Endurance Unmanned Aerial Vehicles (UAVs) are a family of unmanned vehicles developed to provide all-weather, day/night, reconnaissance and surveillance in direct support of theater collection requirements; and integrate with existing airborne reconnaissance architectures for mission planning, data processing, exploitation and dissemination. The RQ-1 Predator UAV was initiated as an Advanced Concept Technology Demonstration (ACTD) which completed in FY96. The Predator is a medium-altitude UAV which provides close-in ISR coverage. The RQ-4A Global Hawk was also initiated as an ACTD, completing in FY00. The Global Hawk is a high-altitude endurance (HAE) UAV, which provides theater-level ISR coverage. Both Predator and Global Hawk are 'Pathfinding' systems for future UAV operational concepts. Both systems will be integrated into Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) architectures, national and international airspace systems, and Service Joint-component combat environments.</p>																																																										
<p>(U) <u>B. Budget Activity Justification</u> This program is budget activity 7, Operational Systems Development, because it involves Air Force R&D to field a highly capable operational system and provide essential operational capabilities.</p>																																																										
<p>(U) <u>C. Program Change Summary (\$ in Thousands)</u></p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:50%;"></th> <th style="text-align: right;"><u>FY 2001</u></th> <th style="text-align: right;"><u>FY 2002</u></th> <th style="text-align: right;"><u>FY 2003</u></th> <th style="text-align: right;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>(U) Previous President's Budget</td> <td style="text-align: right;">109,215</td> <td style="text-align: right;">190,237</td> <td style="text-align: right;">118,835</td> <td style="text-align: right;">TBD</td> </tr> <tr> <td>(U) Appropriated Value</td> <td style="text-align: right;">127,215</td> <td style="text-align: right;">197,737</td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Appropriated Value</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> a. Congressional/General Reductions</td> <td style="text-align: right;">-1,168</td> <td style="text-align: right;">-1,955</td> <td></td> <td></td> </tr> <tr> <td> b. Small Business Innovative Research</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> c. Omnibus or Other Above Threshold Reprogram</td> <td style="text-align: right;">17,000</td> <td></td> <td></td> <td></td> </tr> <tr> <td> d. Below Threshold Reprogram</td> <td style="text-align: right;">2,076</td> <td></td> <td></td> <td></td> </tr> <tr> <td> e. Rescissions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Budget Years Since FY 2002 PBR</td> <td></td> <td></td> <td style="text-align: right;">190,908</td> <td></td> </tr> <tr> <td>(U) Current Budget Submit/FY 2003 PBR</td> <td style="text-align: right;">145,123</td> <td style="text-align: right;">195,782</td> <td style="text-align: right;">309,743</td> <td style="text-align: right;">TBD</td> </tr> </tbody> </table>					<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Total Cost</u>	(U) Previous President's Budget	109,215	190,237	118,835	TBD	(U) Appropriated Value	127,215	197,737			(U) Adjustments to Appropriated Value					a. Congressional/General Reductions	-1,168	-1,955			b. Small Business Innovative Research					c. Omnibus or Other Above Threshold Reprogram	17,000				d. Below Threshold Reprogram	2,076				e. Rescissions					(U) Adjustments to Budget Years Since FY 2002 PBR			190,908		(U) Current Budget Submit/FY 2003 PBR	145,123	195,782	309,743	TBD
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<p>(U) <u>Significant Program Changes:</u> FY01: \$17M added for Global Hawk via FY01 Supplemental. FY01 Authorizations Conference directed that \$18M be made available from Defense-wide Counter-Drug funds to support a counter-drug demonstration in SOUTHCOM. FY01 Appropriations Conference added \$18M to purchase EO/IR sensors, develop dual band capability and precision target location.</p>																																																										

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE

February 2002

BUDGET ACTIVITY

07 - Operational System Development

PE NUMBER AND TITLE

0305205F Endurance Unmanned Aerial Vehicles

(U) **C. Program Change Summary (\$ in Thousands) Continued**

(U) **Significant Program Changes Continued:**

FY02: PBD 817 added \$81.8M RDT&E for the acceleration of spiral development activities and for a cooperative ELINT demonstration in Germany. Received \$72M in DERF funding (not reflected in program total).

FY03: \$2M for JTC/SIL Muse transferred to PE 38601F. \$130M added in FY03 for Global Hawk via PDM IV. \$53.7M added for SIGINT development on Global Hawk.

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)								DATE February 2002	
BUDGET ACTIVITY 07 - Operational System Development				PE NUMBER AND TITLE 0305205F Endurance Unmanned Aerial Vehicles				PROJECT 4755	
COST (\$ in Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
4755 Predator	5,462	3,743	3,771	3,840	3,911	3,987	4,063	Continuing	TBD
<p>1. In FY02, Predator received \$167.6M as part of the Defense Emergency Relief Fund (DERF). Funding was used to outfit Predator with the Multi-spectral Targeting System (MTS) laser designator/sensor turret and Hellfire missile launch capability, provide enabling improvements, purchase four additional Predator aircraft, and purchase three Predator B aircraft in support of operation Enduring Freedom. This funding is not reflected in the FY02 program total.</p> <p>2. In FY03, the Predator program anticipates receiving \$124.0M from the Cost of War Transfer Account. These funds are not included in the FY03 Air Force baseline. Funding will be used to begin the procurement of 3 additional MQ-9 Predator B squadrons and accelerate current RQ-1 Predator A production.</p> <p>(U) <u>A. Mission Description</u></p> <p>The Predator unmanned aerial vehicle (UAV) is capable of sustained (long dwell) surveillance of critical targets, under most weather conditions, at a range of 400 nm from the launch area. Twelve Predator systems are being procured (each system consists of four air vehicles, one ground control station, and one Predator primary satellite link). The Predator is equipped with Electro-Optical/Infrared (EO/IR) and Synthetic Aperture Radar (SAR) sensors. Predator also incorporates line-of-sight (LOS) and wide-band Ku-band SATCOM datalinks capable of providing near-real-time (NRT) transmission of high resolution imagery throughout the operational envelope. The system supports the theater commander and interfaces with the Command, Control, Communication, Computer and Intelligence (C4I) architecture. The first five Predator systems were procured either from an Advanced Concept Technology Demonstration or in an interim configuration. Beginning with the sixth system, Predators are in a Baseline (Block 1) configuration, with upgrades including de-icing, UHF/VHF voice relay, and IFF Mode IV. IR sensor improvements, growth payloads, work station upgrades and reliability and maintainability improvements are part of Block 1. UAV Common Automatic Recovery System (UCARS) has been added by Congress. As a result of a combat mission need statement (C-MNS) generated during ALLIED FORCE operations in Kosovo, one Predator system was outfitted with a temporary laser designator for use with precision guided munitions. Congress added production funds in FY00 for laser/EO/IR capable turret. In addition, Air Force funded the procurement of a permanent laser designator for use with precision guided munitions in FY02. As the first operational UAV in the Air Force, Predator will be the test platform to examine advanced capabilities, to include weaponization. The Air Force will continue experiments with Predator and expand into other roles and missions where UAVs can be used to leverage their 'risk mitigating' potential.</p>									
Project 4755			Page 4 of 21 Pages				Exhibit R-2A (PE 0305205F)		

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
07 - Operational System Development	0305205F Endurance Unmanned Aerial Vehicles	4755
(U) <u>A. Mission Description Continued</u>		
(U) <u>FY 2001 (\$ in Thousands)</u>		
(U) \$200	OT&E	
(U) \$200	Conducted developmental testing for Tactical Common Data Link (TCDL)	
(U) \$1,716	Initiated TC DL integration	
(U) \$500	Rectified identified air vehicle and ground station deficiencies to improve reliability and maintainability	
(U) \$2,600	Weaponization demonstration	
(U) \$246	Field support	
(U) \$5,462	Total	
(U) <u>FY 2002 (\$ in Thousands)</u>		
(U) \$2,393	Pre-planned Product Improvement (To include: Advance capabilities, sensor integration, quick reaction capabilities, payload development/integration, weaponization and experimentation, continuing developmental testing for TC DL integration)	
(U) \$350	System concept studies	
(U) \$500	Rectify identified air vehicle and ground station deficiencies to improve reliability and maintainability	
(U) \$450	Development and Operational Test	
(U) \$50	Field support	
(U) \$3,743	Total	
(U) <u>FY 2003 (\$ in Thousands)</u>		
(U) \$2,396	Pre-planned Product Improvement (To include: Advance capabilities, sensor integration, quick reaction capabilities, payload development/integration, weaponization and experimentation)	
(U) \$375	System concept studies	
(U) \$500	Rectify identified air vehicle and ground station deficiencies to improve reliability and maintainability	
(U) \$450	Development and Operational Test	
(U) \$50	Field support	
(U) \$3,771	Total	
Project 4755	Page 5 of 21 Pages	Exhibit R-2A (PE 0305205F)

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<p>(U) <u>B. Project Change Summary</u> \$1M in FY01 funding approved for TCDL was redirected toward Predator weaponization test and demonstration. Congressional notification was provided by correspondence and briefings to all applicable Congressional Intelligence and Defense committees. The developmental testing for TCDL integration continues on into FY02.</p> <p>FY01 received \$1.8M BTR funds to support the completion of the Phase II weaponization demo of the Predator Demo Program.</p>																																																																															
<p>(U) <u>C. Other Program Funding Summary (\$ in Thousands)</u></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th><u>FY 2001</u></th> <th><u>FY 2002</u></th> <th><u>FY 2003</u></th> <th><u>FY 2004</u></th> <th><u>FY 2005</u></th> <th><u>FY 2006</u></th> <th><u>FY 2007</u></th> <th><u>Cost to</u></th> <th><u>Total Cost</u></th> </tr> <tr> <th></th> <th><u>Actual</u></th> <th><u>Estimate</u></th> <th><u>Estimate</u></th> <th><u>Estimate</u></th> <th><u>Estimate</u></th> <th><u>Estimate</u></th> <th><u>Estimate</u></th> <th><u>Complete</u></th> <th></th> </tr> </thead> <tbody> <tr> <td>(U) AF RDT&E</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Other APPN</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Aircraft Procurement, AF (PE 35205F), Predator</td> <td align="right">30,014</td> <td align="right">35,783</td> <td align="right">23,068</td> <td align="right">23,741</td> <td align="right">27,486</td> <td align="right">31,274</td> <td align="right">31,971</td> <td align="center">Continuing</td> <td align="center">Continuing</td> </tr> <tr> <td>(U) Aircraft Modification, AF (PE 35205F)</td> <td></td> <td align="right">15,243</td> <td align="right">10,532</td> <td align="right">10,692</td> <td align="right">10,866</td> <td align="right">11,158</td> <td align="right">11,345</td> <td align="center">Continuing</td> <td align="center">TBD</td> </tr> <tr> <td>(U) Aircraft Initial Spares, AF (PE 35205F)</td> <td></td> <td align="right">504</td> <td align="right">497</td> <td align="right">495</td> <td align="right">494</td> <td align="right">494</td> <td align="right">494</td> <td></td> <td></td> </tr> </tbody> </table>											<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Cost to</u>	<u>Total Cost</u>		<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>		(U) AF RDT&E										(U) Other APPN										(U) Aircraft Procurement, AF (PE 35205F), Predator	30,014	35,783	23,068	23,741	27,486	31,274	31,971	Continuing	Continuing	(U) Aircraft Modification, AF (PE 35205F)		15,243	10,532	10,692	10,866	11,158	11,345	Continuing	TBD	(U) Aircraft Initial Spares, AF (PE 35205F)		504	497	495	494	494	494		
	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Cost to</u>	<u>Total Cost</u>																																																																						
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(U) Aircraft Initial Spares, AF (PE 35205F)		504	497	495	494	494	494																																																																								
<p>(U) <u>D. Acquisition Strategy</u> Predator is in full scale production. Twelve systems plus attrition air vehicles are being acquired with the prime contractor, General Atomics Aeronautical Systems Inc. They also are assigned total system performance responsibility (TSPR). With the exceptions of the Tactical Endurance Synthetic Aperture Radar and the Ku-band Predator primary satellite link, which are being procured as GFE, all procurement of Predator systems will be through General Atomics. Program transitioned from interim contractor logistics support (ICS) to contractor logistics support (CLS) in FY00. Normalization of logistics support to balance CLS and organic support is underway.</p>																																																																															
<p>(U) <u>E. Schedule Profile</u></p> <table style="width:100%;"> <tr> <td align="center" colspan="3"><u>FY 2001</u></td> <td align="center" colspan="3"><u>FY 2002</u></td> <td align="center" colspan="3"><u>FY 2003</u></td> </tr> </table>										<u>FY 2001</u>			<u>FY 2002</u>			<u>FY 2003</u>																																																															
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Project 4755			Page 6 of 21 Pages				Exhibit R-2A (PE 0305205F)																																																																								

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BUDGET ACTIVITY					PE NUMBER AND TITLE					PROJECT		
07 - Operational System Development					0305205F Endurance Unmanned Aerial Vehicles					4755		
(U) <u>E. Schedule Profile Continued</u>												
		<u>FY 2001</u>				<u>FY 2002</u>				<u>FY 2003</u>		
	1	2	3	4	1	2	3	4	1	2	3	4
(U)	Delivery of first Baseline system											
(U)	OT&E											
(U)	Retrofit of ACTD Systems complete											
	* denotes completed event											
	X denotes planned event											
								X				

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2002				
BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT			
07 - Operational System Development				0305205F Endurance Unmanned Aerial Vehicles				4755			
(U) A. Project Cost Breakdown (\$ in Thousands)											
						<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>	
(U)	Hardware/Software					2,041		2,393		2,396	
(U)	Demonstrations and test					2,300		500		500	
(U)	System integration and engineering support					696		350		375	
(U)	Other technical/engineering					425		500		500	
(U)	Total					5,462		3,743		3,771	
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)											
(U) Performing Organizations:											
	<u>Contractor or Government</u>	<u>Contract Method/Type</u>	<u>Award or Obligation</u>	<u>Performing Activity</u>	<u>Project Office</u>	<u>Total Prior to FY 2001</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget FY 2003</u>	<u>Budget to Complete</u>	<u>Total Program</u>
	<u>Performing Activity</u>	<u>or Funding Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>						
	<u>Product Development Organizations</u>										
	General Atomics	SS/CPFF	Apr 98	N/A	N/A	9,692	4,837	2,943	2,971	Continuing	TBD
	PM TESAR			N/A	N/A	2,300				0	2,300
	<u>Support and Management Organizations</u>										
	ASC					0	425	500	500	Continuing	TBD
	AD/NAVAIR					320				0	320
	<u>Test and Evaluation Organizations</u>										
	AFOTEC					795	200	300	300	Continuing	TBD
	Misc					330				0	330
(U) Government Furnished Property:											
	<u>Item</u>	<u>Contract Method/Type</u>	<u>Award or Obligation</u>	<u>Delivery</u>		<u>Total Prior to FY 2001</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget FY 2003</u>	<u>Budget to Complete</u>	<u>Total Program</u>
	<u>Description</u>	<u>or Funding Vehicle</u>	<u>Date</u>	<u>Date</u>							
	<u>Product Development Property</u>										

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)		DATE				
07 - Operational System Development		0305205F Endurance Unmanned Aerial Vehicles			PROJECT 4755	
(U) <u>Government Furnished Property Continued:</u>						
<u>Support and Management Property</u>						
<u>Test and Evaluation Property</u>						
	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Subtotals</u>	<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>	<u>Program</u>
Subtotal Product Development	11,992	4,837	2,943	2,971	TBD	TBD
Subtotal Support and Management	320	425	500	500	TBD	TBD
Subtotal Test and Evaluation	1,125	200	300	300	TBD	TBD
Total Project	13,437	5,462	3,743	3,771	TBD	TBD

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BUDGET ACTIVITY 07 - Operational System Development				PE NUMBER AND TITLE 0305205F Endurance Unmanned Aerial Vehicles				PROJECT 4799		
COST (\$ in Thousands)		FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
4799	Global Hawk	137,382	189,759	305,972	350,839	296,548	179,960	221,377	Continuing	TBD
<p>1. In FY02 the Global Hawk program received \$72.0M as part of the Defense Emergency Response Fund (DERF). Funding was used to cover initial preparation and deployment of two Global Hawk aircraft, provide for 120 days of operations, and accelerate delivery of EO/IR sensors; in support of OPERATION ENDURING FREEDOM. This funding is not reflected in the FY02 program total.</p> <p>2. In FY03 Global Hawk anticipates receiving \$35M from the Cost of War Transfer Account. These funds are not included in the FY03 Air Force baseline. Funding will be used to provide a defensive suite (\$30M) and SIGINT (\$5M).</p> <p>(U) <u>A. Mission Description</u></p> <p>The Global Hawk Program consists of the RQ-4A Unmanned Aerial Vehicle (UAV), the AN/MSQ-131 Ground Segment (GS), and the Support System. The Global Hawk System is designed to provide continuous, all-weather, day/night, wide area surveillance and reconnaissance and includes the communications and interfaces with other theater systems required to support joint tactical warfighters at various levels of command. The Global Hawk is a fully autonomous, high-altitude, long endurance unmanned aircraft that is directly responsive to theater tasking. Global Hawk will integrate with the existing tactical airborne reconnaissance architectures for tasking, mission planning, data processing, exploitation, and dissemination. The aircraft is designed as a standoff imagery platform with the capability to operate within low-to-moderate air defense threat environments. The Air Force has initiated Engineering and Manufacturing Development (EMD), using a spiral approach to incorporate improvements to the aircraft, ground station, communication system, imagery sensors, and will also add a signals intelligence sensor capability. The Air Force will integrate Global Hawk into Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) architecture, national and international airspace systems, and service combat environments. To support this, Air Force will conduct experiments with Global Hawk that explore its use in other mission areas and activities.</p> <p>In FY01, the Global Hawk transitioned from an Advanced Concept Technology Demonstration (ACTD) to a DoD 5000 ACAT ID acquisition program. An Acquisition Decision Memorandum was signed 6 Mar 01, approving entry into Engineering and Manufacturing Development (EMD) using spiral development and authorizing Low-rate Initial Production (LRIP).</p> <p>In FY02 - FY07, Global Hawk will continue with spiral development to enhance the design of the system to meet Operational Requirements Document (ORD) performance and capabilities.</p>										
Project 4799			Page 10 of 21 Pages				Exhibit R-2A (PE 0305205F)			

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE
BUDGET ACTIVITY		PROJECT
07 - Operational System Development	0305205F Endurance Unmanned Aerial Vehicles	February 2002 4799
(U) <u>A. Mission Description Continued</u>		
(U) <u>FY 2001 (\$ in Thousands)</u>		
(U) \$1,769	Provide Contractor and Government Demonstration and Evaluation Support necessary to accomplish the Military Utility Assessment (Phase III)	
(U) \$31,897	Fabrication and Integration of two additional air vehicles for EMD (#6 and #7) (Phase IIC)	
(U) \$60,170	Non-recurring Engineering (NRE) to evolve the Global Hawk to a Spiral 1 configuration -- Includes spiral development of sensors and other capabilities -- Spiral development (Spiral 1 to Spiral 2) of air vehicles which will satisfy needs identified in the MUA and ORD -- FY01 Supplemental added \$17M for acceleration of spiral development capabilities and competitive fly off of sensors	
(U) \$9,000	Operational Demonstration in Australia (total cost of \$10M remains unchanged - NATO R&D funds and the CDL program provided the other \$1M in support of this effort)	
(U) \$6,224	Provide Government Test and Evaluation Support	
(U) \$10,322	Government Support, Studies and Related Tasks for the Global Hawk Program	
(U) \$18,000	Added \$18M to FY01 program per Congressional plus-up for the following: -- additional EO/IR sensors and development of a dual-band capability and precision target location	
(U) \$137,382	Total	
(U) <u>FY 2002 (\$ in Thousands)</u>		
(U) \$21,286	Complete Fabrication and Integration of two additional ACTD aircraft for EMD (#6 and #7) (Phase IIC)	
(U) \$134,817	Continue Spiral Development -- Includes spiral development of sensors and other capabilities which will satisfy needs identified in the MUA and ORD	
(U) \$6,750	Provide Government Test and Evaluation Support	
(U) \$7,406	Government Support	
(U) \$500	Global Hawk/German ELINT flight demonstration	
(U) \$3,000	Demonstrations/Exercises	
(U) \$16,000	Added \$16M to FY02 program per Congressional plus-up for the following -- Integration/Demonstration of High-Band SIGINT System on Global Hawk	
(U) \$189,759	Total	
Project 4799	Page 11 of 21 Pages	Exhibit R-2A (PE 0305205F)

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)		DATE February 2002												
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT												
07 - Operational System Development	0305205F Endurance Unmanned Aerial Vehicles	4799												
<p>(U) <u>A. Mission Description Continued</u></p> <p>(U) <u>FY 2003 (\$ in Thousands)</u></p> <table border="0"> <tr> <td>(U) \$284,172</td> <td>Continue Spiral Development and related tasks -- Includes spiral development of sensors and other capabilities which will satisfy needs identified in the MUA and ORD</td> </tr> <tr> <td>(U) \$6,300</td> <td>Provide Government Test and Evaluation Support</td> </tr> <tr> <td>(U) \$7,500</td> <td>Government Support</td> </tr> <tr> <td>(U) \$5,000</td> <td>Global Hawk/German ELINT flight demonstration</td> </tr> <tr> <td>(U) \$3,000</td> <td>Demonstrations /Exercises</td> </tr> <tr> <td>(U) \$305,972</td> <td>Total</td> </tr> </table> <p>(U) <u>B. Project Change Summary</u></p> <p>The Defense Acquisition Board (DAB) met on 16 Feb 01 to consider a Milestone II decision to transition Global Hawk from an Advanced Concept Technology Demonstration to Engineering and Manufacturing Development (EMD) and Low-Rate Initial Production (LRIP). On 6 Mar 01, USD/AT&L issued an Acquisition Decision Memorandum (ADM) and designated Global Hawk as an Acquisition Category ACAT ID Major Defense Acquisition Program. The ADM approved 1) Global Hawk to enter into EMD for Block 5 and spiral development of Block 10 Global Hawk; 2) the Acquisition Strategy and Acquisition Program Baseline (APB); 3) Low Rate Initial Production (LRIP) and 4) associated advanced procurement and logistics support for the LRIP systems</p> <p>The FY01 Appropriations Conference added \$18M in FY01 to purchase replacement EO/IR sensors for the ACTD air vehicles, develop a dual-band capability, and precision target location.</p> <p>The FY01 Authorization Conference directed \$18M in FY01 be made available to support the Global Hawk SOUTHCOM Counter-Drug Demonstration. Funds were allocated for this effort from Defense-wide Drug Interdiction and Counter-Drug Activities to the Research, Development, Test, and Evaluation, Air Force Budget Activity 7, Operational System Development, and remain in PE 0208889F, BPAC 675002 for Global Hawk execution. (Reference OSD Reprogramming Action FY01-25IR in accordance with Form 440 01/02-25).</p> <p>The FY01 Supplemental added \$17M to accelerate the development of Global Hawk and to conduct a competitive flyoff demonstration to evaluate existing sensors.</p> <p>The FY02 Defense Planning Guidance identified Global Hawk as a transformational program and the Air Force accelerated plans for development, production and</p>			(U) \$284,172	Continue Spiral Development and related tasks -- Includes spiral development of sensors and other capabilities which will satisfy needs identified in the MUA and ORD	(U) \$6,300	Provide Government Test and Evaluation Support	(U) \$7,500	Government Support	(U) \$5,000	Global Hawk/German ELINT flight demonstration	(U) \$3,000	Demonstrations /Exercises	(U) \$305,972	Total
(U) \$284,172	Continue Spiral Development and related tasks -- Includes spiral development of sensors and other capabilities which will satisfy needs identified in the MUA and ORD													
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(U) \$3,000	Demonstrations /Exercises													
(U) \$305,972	Total													
Project 4799	Page 12 of 21 Pages	Exhibit R-2A (PE 0305205F)												

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)								DATE February 2002																																																																																																															
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<p>(U) <u>B. Project Change Summary Continued</u> fielding of the Global Hawk system.</p> <p>For FY02, PBD 817 added \$81.8M RDT&E for the acceleration of spiral development activities (i.e., electrical-power upgrades, sensor capabilities ,improvements, etc.), and for a cooperative ELINToperational demonstration in Germany.</p> <p>PBD 630 realigned funds for SIGINT sensor development from FY03-FY07 Airborne Reconnaissance Systems (PE 0305206F) to Global Hawk. This consolidation added \$53.7M RDT&E in FY03 for the continued development of the High Band SIGINT Subsystem.</p> <p>Global Hawk received a PDM add of \$130M in FY03 to accelerate the program and more rapidly field needed capabilities.</p> <p>In FY02 the Global Hawk program received \$72M as part of the Defense Emergency Response Fund (DERF). Funding was used to cover initial preparation and deployment of two Global Hawk aircraft, provide for 120 days of operations, and accelerate delivery of EO/IR sensors, in support of OPERATION ENDURING FREEDOM. This funding is not reflected in the FY02 program total.</p>																																																																																																																							
<p>(U) <u>C. Other Program Funding Summary (\$ in Thousands)</u></p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:15%;"></th> <th style="width:10%;"><u>FY 2001</u></th> <th style="width:10%;"><u>FY 2002</u></th> <th style="width:10%;"><u>FY 2003</u></th> <th style="width:10%;"><u>FY 2004</u></th> <th style="width:10%;"><u>FY 2005</u></th> <th style="width:10%;"><u>FY 2006</u></th> <th style="width:10%;"><u>FY 2007</u></th> <th style="width:10%;"><u>Cost to</u></th> <th style="width:10%;"><u>Total Cost</u></th> </tr> <tr> <td></td> <td style="text-align: center;"><u>Actual</u></td> <td style="text-align: center;"><u>Estimate</u></td> <td style="text-align: center;"><u>Complete</u></td> <td></td> </tr> </thead> <tbody> <tr> <td>(U) AF RDT&E</td> <td style="text-align: right;">137,382</td> <td style="text-align: right;">189,759</td> <td style="text-align: right;">305,972</td> <td style="text-align: right;">350,839</td> <td style="text-align: right;">296,548</td> <td style="text-align: right;">179,960</td> <td style="text-align: right;">221,377</td> <td style="text-align: center;">Continuing</td> <td style="text-align: center;">TBD</td> </tr> <tr> <td>(U) Other APPN</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) AF MILCON</td> <td></td> <td></td> <td style="text-align: right;">11,740</td> <td style="text-align: right;">25,000</td> <td style="text-align: right;">25,000</td> <td></td> <td></td> <td style="text-align: center;">Continuing</td> <td style="text-align: center;">TBD</td> </tr> <tr> <td>(U) AF O&M</td> <td></td> <td style="text-align: right;">3,986</td> <td style="text-align: right;">11,813</td> <td style="text-align: right;">32,725</td> <td style="text-align: right;">46,934</td> <td style="text-align: right;">65,106</td> <td style="text-align: right;">99,096</td> <td style="text-align: center;">Continuing</td> <td style="text-align: center;">TBD</td> </tr> <tr> <td>(U) AF MILPERS</td> <td></td> <td style="text-align: right;">1,053</td> <td style="text-align: right;">5,512</td> <td style="text-align: right;">13,599</td> <td style="text-align: right;">21,979</td> <td style="text-align: right;">28,282</td> <td style="text-align: right;">34,567</td> <td style="text-align: center;">Continuing</td> <td style="text-align: center;">TBD</td> </tr> <tr> <td>(U) Aircraft Procurement, APPN 10 AF (HAE UAV)</td> <td style="text-align: right;">22,183</td> <td style="text-align: right;">116,581</td> <td style="text-align: right;">104,861</td> <td style="text-align: right;">234,692</td> <td style="text-align: right;">266,083</td> <td style="text-align: right;">358,237</td> <td style="text-align: right;">814,807</td> <td style="text-align: center;">Continuing</td> <td style="text-align: center;">TBD</td> </tr> <tr> <td>(U) Aircraft Procurement APPN 11 AF (HAE UAV)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">9,865</td> <td></td> <td></td> </tr> <tr> <td>(U) Other Procurement, 3080 (HAE UAV)</td> <td></td> <td></td> <td style="text-align: right;">899</td> <td style="text-align: right;">199</td> <td style="text-align: right;">298</td> <td style="text-align: right;">298</td> <td></td> <td style="text-align: center;">Continuing</td> <td style="text-align: center;">TBD</td> </tr> <tr> <td>Project 4799</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>											<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Cost to</u>	<u>Total Cost</u>		<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>		(U) AF RDT&E	137,382	189,759	305,972	350,839	296,548	179,960	221,377	Continuing	TBD	(U) Other APPN										(U) AF MILCON			11,740	25,000	25,000			Continuing	TBD	(U) AF O&M		3,986	11,813	32,725	46,934	65,106	99,096	Continuing	TBD	(U) AF MILPERS		1,053	5,512	13,599	21,979	28,282	34,567	Continuing	TBD	(U) Aircraft Procurement, APPN 10 AF (HAE UAV)	22,183	116,581	104,861	234,692	266,083	358,237	814,807	Continuing	TBD	(U) Aircraft Procurement APPN 11 AF (HAE UAV)							9,865			(U) Other Procurement, 3080 (HAE UAV)			899	199	298	298		Continuing	TBD	Project 4799									
	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Cost to</u>	<u>Total Cost</u>																																																																																																														
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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)	DATE February 2002
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BUDGET ACTIVITY 07 - Operational System Development	PE NUMBER AND TITLE 0305205F Endurance Unmanned Aerial Vehicles	PROJECT 4799
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(U) D. Acquisition Strategy

The Global Hawk program began as an ACTD under DARPA in 1994. Of the fourteen original contractor teams, five were selected to submit design proposals, with Northrop Grumman Ryan Aeronautical Center (NG-RAC), formerly Teledyne Ryan Aeronautical (TRA), competitively selected for the design/development effort. Under the development phase of the agreement, the contractor built and tested five Global Hawk aircraft and the developmental ground segment (consisting of three LREs and two MCEs). Streamlined procurement, under Other Transaction Authority (OTA) was used to allow 'best commercial practices,' avoid all non value-added tasks and documentation, minimize cost, and provide flexibility. ACTD transition activities, fabrication of aircraft #6 and #7, support of the overseas demonstration in Australia and Congressionally directed demonstrations and tasks, will complete under the current ACTD OTA agreement.

Based on the ADM, 6 Mar 01, the DAB Milestone II decision transitions Global Hawk from an Advanced Concept Technology Demonstration to Engineering and Manufacturing Development (EMD) and Low-Rate Initial Production (LRIP). Global Hawk EMD will use spiral development to meet full ORD requirements, including improvements to sensors and subsystems. Contracts starting in FY01 will be under FAR-based rules. EMD will be a Cost-Plus Award Fee (CPAF) type contract, while LRIP will be a Fixed-Price Incentive (FPI).

In FY02 - 07, additional funding was received to accelerate spiral development and fielding.

In FY02, the program will continue spiral development of capabilities that will enable Global Hawk to address deficiencies identified during the MUA and meet full ORD requirements.

The FY01 Supplemental added \$17M for accelerate the development of Global Hawk and a conduct a competitive flyoff demonstration to evaluate existing sensors.

(U) E. Schedule Profile

	<u>FY 2001</u>				<u>FY 2002</u>				<u>FY 2003</u>			
	1	2	3	4	1	2	3	4	1	2	3	4
(U) ACTD Military Utility Assessment Report (Sep 00)												
(U) Milestone II Decision		*										
(U) Start of EMD Program		*										
(U) Australian Demonstration			*									
(U) Delivery of aircraft #6						X						
(U) Award EMD System Spiral 2 Contract						X						
(U) Delivery of aircraft #7									X			

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BUDGET ACTIVITY					PE NUMBER AND TITLE					PROJECT						
07 - Operational System Development					0305205F Endurance Unmanned Aerial Vehicles					4799						
(U) <u>E. Schedule Profile Continued</u>																
		<u>FY 2001</u>					<u>FY 2002</u>					<u>FY 2003</u>				
		1	2	3	4		1	2	3	4		1	2	3	4	
(U)	Canadian Overflight															X
(U)	Global Hawk/German ELINT Flight Demonstration															X
(U)	Global Hawk SOUTHCOM demo															X
(U)	Start EMD System Testing															X
(U)	EMD Spiral 1 Complete															X
	* denotes completed event															
	X denotes planned event															
Project 4799					Page 15 of 21 Pages					Exhibit R-2A (PE 0305205F)						

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2002				
BUDGET ACTIVITY				PE NUMBER AND TITLE			PROJECT				
07 - Operational System Development				0305205F Endurance Unmanned Aerial Vehicles			4799				
(U) <u>A. Project Cost Breakdown (\$ in Thousands)</u>											
						<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>	
(U)	Provide Contractor Demonstration and Evaluation Support necessary to accomplish Military Utility Assessment (Phase III)					1,769					
(U)	Fabrication and Integration of aircraft #6 and #7 (Phase IIC)					31,848		21,286			
(U)	Government Support, Studies and Related Tasks for the Global Hawk program					10,071		7,406		7,500	
(U)	Global Hawk/German ELINT Flight Demonstration							500		5,000	
(U)	Demonstrations/Exercises							3,000		3,000	
(U)	Spiral Development - Non-recurring Engineering (NRE) to evolve the Global Hawk to Spiral 1 and Spiral 2 configurations:					60,185		134,817		284,172	
(U)	-- Includes spiral development of sensors and other capabilities which will satisfy needs identified in the MUA, ORD, and emerging requirements										
(U)	Operational Demonstration in Australia					9,000					
(U)	Provide Government Test and Evaluation Support					6,509		6,750		6,300	
(U)	EO/IR sensors, and development of dual-band capability and precision target location					18,000					
(U)	Integration/Demonstration of High-band SIGINT System							16,000			
(U)	Total					137,382		189,759		305,972	
(U) <u>B. Budget Acquisition History and Planning Information (\$ in Thousands)</u>											
(U) <u>Performing Organizations:</u>											
	<u>Contractor or Government Performing Activity</u>	<u>Contract Method/Type or Funding Vehicle</u>	<u>Award or Obligation Date</u>	<u>Performing Activity EAC</u>	<u>Project Office EAC</u>	<u>Total Prior to FY 2001</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget FY 2003</u>	<u>Budget to Complete</u>	<u>Total Program</u>
	<u>Product Development Organizations</u>										
	Ryan Aeronautical Center	SS/CPAF/IF		N/A	N/A	112,870	111,802	170,469	284,172	Continuing	TBD
	<u>Support and Management Organizations</u>										
	Various			N/A	N/A	0	8,439	7,000	5,775	Continuing	TBD
	Support ASC						1,632	2,040	1,725	Continuing	TBD
Project 4799				Page 16 of 21 Pages				Exhibit R-3 (PE 0305205F)			

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2002			
BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT		
07 - Operational System Development				0305205F Endurance Unmanned Aerial Vehicles				4799		
(U) <u>Performing Organizations Continued:</u>										
<u>Test and Evaluation Organizations</u>										
AFFTC			N/A	N/A	0	6,075	6,000	5,860	Continuing	TBD
AFOTEC			N/A	N/A	0	124	200	190	Continuing	TBD
JITC			N/A	N/A		220	250	250	Continuing	TBD
Various			N/A	N/A	0	9,090	3,800	8,000	Continuing	TBD
(U) <u>Government Furnished Property:</u>										
	<u>Contract</u>									
	<u>Method/Type</u>	<u>Award or</u>								
<u>Item</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Delivery</u>		<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Description</u>	<u>Vehicle</u>	<u>Date</u>	<u>Date</u>		<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>	<u>Program</u>
<u>Product Development Property</u>										
<u>Support and Management Property</u>										
<u>Test and Evaluation Property</u>										
					<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Subtotals</u>					<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>	<u>Program</u>
Subtotal Product Development					112,870	111,802	170,469	284,172	TBD	TBD
Subtotal Support and Management					0	10,071	9,040	7,500	TBD	TBD
Subtotal Test and Evaluation					0	15,509	10,250	14,300	TBD	TBD
Total Project					112,870	137,382	189,759	305,972	TBD	TBD

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)								DATE February 2002																																										
BUDGET ACTIVITY 07 - Operational System Development				PE NUMBER AND TITLE 0305205F Endurance Unmanned Aerial Vehicles				PROJECT 4883																																										
COST (\$ in Thousands)		FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost																																								
4883	JTC/SIL MUSE	2,279	2,280	0	0	0	0	0	0	4,579																																								
<p>(U) <u>A. Mission Description</u> The Joint Technology Center/System Integration Laboratory Multiple UAV Simulation Environment (JTC/SIL MUSE) provides and develops simulations of UAVs, their tactical and strategic reconnaissance uses and how their imagery products are used in the DoD reconnaissance system. These simulations are applied for the development of the Army's tactical UAV (TUAV), the Navy's vertical takeoff UAV (VTUAV), Air Force's Predator medium altitude endurance UAV (EUAV) and the Air Force's Global Hawk high altitude EUAV.</p> <p>(U) <u>FY 2001 (\$ in Thousands)</u> (U) \$2,279 JTC/SIL MUSE (U) \$2,279 Total</p> <p>(U) <u>FY 2002 (\$ in Thousands)</u> (U) \$2,280 JTC/SIL MUSE (U) \$2,280 Total</p> <p>(U) <u>FY 2003 (\$ in Thousands)</u> (U) \$0 No Activity (U) \$0 Total</p> <p>(U) <u>B. Project Change Summary</u> A separate project code within PE 35205F provides visibility of the funds supporting the JTC/SIL MUSE through FY02. The remainder of the funding for this BPAC has been transferred to the Modeling and Simulation PE..</p> <p>(U) <u>C. Other Program Funding Summary (\$ in Thousands)</u></p> <table border="1"> <thead> <tr> <th></th> <th><u>FY 2001</u></th> <th><u>FY 2002</u></th> <th><u>FY 2003</u></th> <th><u>FY 2004</u></th> <th><u>FY 2005</u></th> <th><u>FY 2006</u></th> <th><u>FY 2007</u></th> <th><u>Cost to</u></th> <th><u>Total Cost</u></th> </tr> <tr> <th></th> <th><u>Actual</u></th> <th><u>Estimate</u></th> <th><u>Estimate</u></th> <th><u>Estimate</u></th> <th><u>Estimate</u></th> <th><u>Estimate</u></th> <th><u>Estimate</u></th> <th><u>Complete</u></th> <th></th> </tr> </thead> <tbody> <tr> <td>(U) AF RDT&E</td> <td align="right">0</td> </tr> <tr> <td>(U) Other APPN</td> <td align="right">0</td> </tr> </tbody> </table>												<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Cost to</u>	<u>Total Cost</u>		<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>		(U) AF RDT&E	0	0	0	0	0	0	0	0	0	(U) Other APPN	0	0	0	0	0	0	0	0	0
	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Cost to</u>	<u>Total Cost</u>																																									
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>																																										
(U) AF RDT&E	0	0	0	0	0	0	0	0	0																																									
(U) Other APPN	0	0	0	0	0	0	0	0	0																																									
Project 4883		Page 18 of 21 Pages				Exhibit R-2A (PE 0305205F)																																												

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2002			
BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT		
07 - Operational System Development				0305205F Endurance Unmanned Aerial Vehicles				4883		
(U) A. Project Cost Breakdown (\$ in Thousands)										
						<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>
(U)	No activity planned					2,279		2,300		0
(U)	Total					2,279		2,300		0
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)										
(U) Performing Organizations:										
<u>Contractor or Government Performing Activity</u>	<u>Contract Method/Type or Funding Vehicle</u>	<u>Award or Obligation Date</u>	<u>Performing Activity EAC</u>	<u>Project Office EAC</u>	<u>Total Prior to FY 2001</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget FY 2003</u>	<u>Budget to Complete</u>	<u>Total Program</u>
<u>Product Development Organizations</u>										
JTC/SIL MUSE						2,279	2,300		Continuing	TBD
<u>Support and Management Organizations</u>										
None										
<u>Test and Evaluation Organizations</u>										
None										
(U) Government Furnished Property:										
<u>Item Description</u>	<u>Contract Method/Type or Funding Vehicle</u>	<u>Award or Obligation Date</u>	<u>Delivery Date</u>		<u>Total Prior to FY 2001</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget FY 2003</u>	<u>Budget to Complete</u>	<u>Total Program</u>
<u>Product Development Property</u>										
None										
<u>Support and Management Property</u>										
None										
<u>Test and Evaluation Property</u>										
None										

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)				DATE February 2002		
BUDGET ACTIVITY		PE NUMBER AND TITLE			PROJECT	
07 - Operational System Development		0305205F Endurance Unmanned Aerial Vehicles			4883	
		<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>
		<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>
						<u>Program</u>
<u>Subtotals</u>						
Subtotal Product Development			2,279	2,300		TBD
Subtotal Support and Management						TBD
Subtotal Test and Evaluation						TBD
Total Project			2,279	2,300		TBD