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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0408011F: SPECIAL TACTICS/COMBAT CONTROL							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	7.549	11.354	7.345	10.325	17.670	7.454	7.571	7.686	7.798	Continuing	Continuing
675138: ST System Development	7.549	11.354	7.345	10.325	17.670	7.454	7.571	7.686	7.798	Continuing	Continuing

A. Mission Description and Budget Item Justification

Battlefield Air Operations (BAO) Kit is a program within the overarching Battlefield Airmen Modernization (BA-Mod) Program. BAO Kit will develop a Family of Systems (FoS) that provides a state-of-the-art Command, Control, Communications, Computer, Intelligence, Surveillance and Reconnaissance (C4ISR) suite for AFSOC's Battlefield Airmen. BAO Kit will enhance the three core capabilities of Line of Sight (LOS) targeting, Beyond Line of Sight (XLOS) targeting, and Battlefield Air Operations Human Machine Interface (BAO HMI) while reducing the risk of fratricide and substantially reducing the weight carried. This program will develop and enhance technologies for Battlefield Airmen Combat Controllers (CCT) to recognize, identify, range, nominate and designate targets during both day and night. BAO Kit will also significantly reduce the time required to find, fix, track, target and engage the enemy by providing highly accurate target grid coordinates in three dimensions, generating target imagery both pre and post-strike, and transmitting target data to Command and Control centers. All BAO Kit systems are light, compact and portable for use by dismounted Battlefield Airmen. The significant improvements in operational capability, BAO Kit Increment II, will build upon the HMI and XLOS effort and deliver enhanced capability for the dismounted soldier in terms of dramatic weight reduction, and increased mission effectiveness across the conflict spectrum.

This program is in Budget Activity 7, Operational System Development, since it improves the already fielded capabilities of the Battlefield Airmen Combat Control Teams by demonstrating technology, component and subsystem maturity.

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APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
3600: Research, Development, Test & Evaluation, Air Force		PE 0408011F: SPECIAL TACTICS/COMBAT CONTROL			
BA 7: Operational Systems Development					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	7.549	11.354	0.000	10.325	10.325
Current President's Budget	7.549	11.354	7.345	10.325	17.670
Total Adjustments	0.000	0.000	7.345	0.000	7.345
• Congressional General Reductions		0.000			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	7.345	0.000	7.345

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0408011F: <i>SPECIAL TACTICS/COMBAT CONTROL</i>				PROJECT 675138: <i>ST System Development</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
675138: <i>ST System Development</i>	7.549	11.354	7.345	10.325	17.670	7.454	7.571	7.686	7.798	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
Note FY 2011 funding totals include \$10.325M requested for Overseas Contingency Operations.											
A. Mission Description and Budget Item Justification Battlefield Air Operations (BAO) Kit is a program within the overarching Battlefield Airmen Modernization (BA-Mod) Program. BAO Kit will develop a Family of Systems (FoS) that provide a state-of-the-art Command, Control, Communications, Computer, Intelligence, Surveillance, and Reconnaissance (C4ISR) suite for AFSOC's Battlefield Airmen. BAO kit will enhance the three core capabilities of Line of Sight (LOS) targeting, Beyond Line of Sight (XLOS) targeting, and Battlefield Air Operations Human Machine Interface (BAO HMI) while reducing the risk of fratricide and substantially reducing the weight carried. This program will develop and enhance technologies for Battlefield Airmen Combat Controllers (CCT) to recognize, identify, range, nominate, and design targets during both day and night. BAO Kit will also significantly reduce the time required to find, fix, track, target and engage the enemy by providing highly accurate target grid coordinates in three dimensions, generating target imagery both pre and post strike, and transmitting target data to Command and Control centers. All BAO Kit systems are light, compact and portable for use by dismounted Battlefield Airmen. Five sub-component projects (Human I/O, Machine to Machine Software, Power Generation and Management, Communication and Small Wearable Computers) were managed separately prior to the HMI CDD being approved in May 2007. These five components now make up the HMI program. The significant improvement in operational capability, coupled with dramatic weight reduction, will provide increased mission effectiveness across the conflict spectrum. Program is in Budget Activity 7 because it provides for the development of technologies and capabilities in support of operational system development.											
B. Accomplishments/Planned Program (\$ in Millions)											
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total						
MAJOR THRUST: Continue BAO Kit system and equipment development	7.549	11.354	7.345	10.325	17.670						

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B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
<i>FY 2009 Accomplishments:</i> In FY 2009: Continue BAO Kit software development (rolled into BAO Kit system and equipment development in FY08 and 09)											
<i>FY 2010 Plans:</i> In FY 2010: Continue system test and evaluation efforts											
<i>FY 2011 Base Plans:</i> In FY 2011: Continue program office operations effort											
<i>FY 2011 OCO Plans:</i> In FY 2011 OCO: Continuation of above listed activities											
Accomplishments/Planned Programs Subtotals						7.549	11.354	7.345	10.325	17.670	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• PE 0408011F: <i>Tactical C-E Equipment Other Procurement, AF</i>	12.484	9.565	11.453	0.000	11.453	15.007	15.274	15.504	15.775	0.000	0.000
• PE 0305234F: <i>WASP Aircraft, AF</i>	0.000	3.608	3.275	0.000	3.275	0.000	0.000	0.000	0.000	0.000	0.000
D. Acquisition Strategy											
The evolutionary acquisition strategy will focus on meeting immediate requirements with current technology while pursuing future increments for improved accuracy, increased vertical and horizontal integration, and reduced weight. Future increments will be incorporated as funding and technology allow.											

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E. 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.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force											DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0408011F: SPECIAL TACTICS/COMBAT CONTROL				PROJECT 675138: ST System Development					
Product Development (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Human Machine Interface (HMI)	C/Various	Various Various	4.750	4.797	Apr 2010	1.604	Nov 2010	0.000		1.604	Continuing	Continuing	0.000
Line of Sight	TBD/TBD	TBD TBD	0.050	5.632	Apr 2010	2.087	Nov 2010	10.325		12.412	0.000	18.094	0.000
Machine-To-Machine C4ISR System	C/CPFF	Systems Research & Applications Corp Dayton, Ohio	0.000	0.474	Dec 2009	0.862	Oct 2010	0.000		0.862	Continuing	Continuing	Continuing
Beyond Line of Sight Targeting System	C/CPFF	Various Various	2.470	0.000		2.121	Nov 2010	0.000		2.121	Continuing	Continuing	0.000
Subtotal			7.270	10.903		6.674		10.325		16.999			
Remarks													
Support (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
N/A	TBD/TBD	TBD TBD	0.000	0.000		0.050	Dec 2010	0.000		0.050	0.000	0.050	0.000
Subtotal			0.000	0.000		0.050		0.000		0.050	0.000	0.050	0.000
Remarks													

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Test and Evaluation (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test Agency Support	MIPR	46TS Eglin AFB, FL	0.000	0.231	Jan 2010	0.421	Dec 2010	0.000		0.421	0.000	0.652	0.000
Integration and Certification	Various	Various Various	0.279	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing
Subtotal			0.279	0.231		0.421		0.000		0.421			
Remarks													
Management Services (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Office Support	Various	Various Various	0.000	0.220	Nov 2009	0.200	Mar 2011	0.000		0.200	Continuing	Continuing	Continuing
Subtotal			0.000	0.220		0.200		0.000		0.200			
Remarks													
			Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			7.549	11.354		7.345		10.325		17.670			

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	Total Prior Years Cost	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks Total Prior Years Cost may include only FY 2009 data.									

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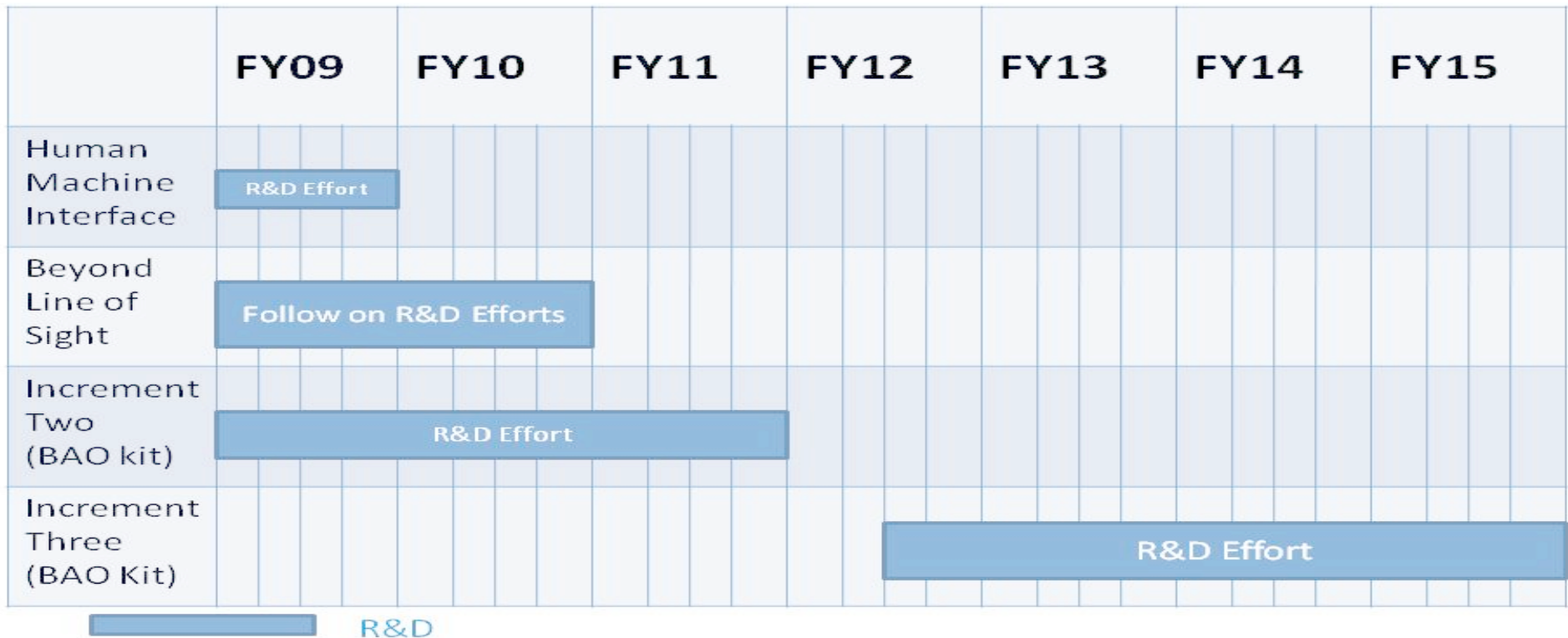
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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force				DATE: February 2010			
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				PROJECT 675138: <i>ST System Development</i>			

BAO Kit Schedule

As of 7 Aug 09



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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Air Force			DATE: February 2010
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Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
HMI Research & Development	1	2009	4	2009
Beyond LOS Development	1	2009	4	2010
Increment II	1	2009	4	2011

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