Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Air Force

R-1 ITEM NOMENCLATURE

3600: Research, Development, Test & Evaluation, Air Force

PE 0207418F: TAC AIRBORNE CONTROL SYSTEM

DATE: February 2011

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	-	-	8.309	-	8.309	5.786	4.467	3.362	3.612	Continuing	Continuing
675234: TACP Support	-	-	8.309	-	8.309	5.786	4.467	3.362	3.612	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Joint Terminal Control Training and Rehearsal System (JTC TRS) project, under the Tactical Airborne Control System, funds development necessary to provide a Distributed Mission Operations (DMO) capable, high-fidelity simulator for the Joint Terminal Attack Controller (JTAC), Combat Control Team (CCT) and Air Support Operations Center (ASOC). JTC TRS provides incremental development to network aircrew full mission training sand mission training centers in Increment 1. Increment 2 integrates the ASOCs and Special Operations Forces (SOF) Command and Control (C2) Simulation System (ASC2S2) trainer for Joint Fires. ASC2S2 is a continuation of the Joint Theater Air Ground Simulation System initially funded in 2009. It complements the JTC TRS trainer by providing persistent simulated C2 echelons supporting a total air-ground virtual environment for networked air-ground training and mission rehearsal capability that will develop both JTAC/CCT skills and ASOC/SOF C2 battlestaff skills. The JTC TRS Project provides research and development to facilitate interoperability with joint/sister Service air ground simulation using industry standards. ASC2S2 will provide the ASOC, SOF, and TACP with the vertical and horizontal C2 communications and coordination required for training and mission rehearsal. It will be designed to meet the needs and training requirements for personnel conducting Joint Theater Air Ground C2. The Enhanced operational training in support of conventional and special operations forces during irregular and traditional warfare will result in better efficiency and effectiveness in real-world contigencies. The system will be designed to incorporate live, virtual, and constructive training environments using the DMO and Joint National Training Capability network to connect to other Theater Air Ground System C2 elements or simulate those elements using intelligent agent technology. ASC2S2 will have full tactical datalink capability to replicate real-world digital communications. The system will be composed

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	_	-	8.337	-	8.337
Current President's Budget	-	-	8.309	-	8.309
Total Adjustments	-	-	-0.028	-	-0.028
 Congressional General Reductions 		-			
 Congressional Directed Reductions 		-			
 Congressional Rescissions 	-	-			
 Congressional Adds 		-			
 Congressional Directed Transfers 		-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustments	-	-	-0.028	-	-0.028

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DATE: February 2011

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	APPROPRIATION/BUDGET ACTIV	R-1 ITEM N	OMENCLAT	TURE		PROJECT						
	3600: Research, Development, Test & Evaluation, Air Force					BF: TAC AIR	BORNE CO	675234: <i>TA</i>	75234: TACP Support			
BA 7: Operational Systems Development				SYSTEM								
	COST (\$ in Millions)			FY 2012	FY 2012	FY 2012					Cost To	
	COST (\$ III WIIIIONS)	FY 2010	FY 2011	Base	oco	Total	FY 2013	FY 2014	FY 2015	FY 2016	Complete	Total Cost
	675234: TACP Support	-	_	8.309	-	8.309	5.786	4.467	3.362	3.612	Continuing	Continuing

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A. Mission Description and Budget Item Justification

Quantity of RDT&E Articles

Fxhibit R-2A RDT&F Project Justification: PR 2012 Air Force

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The Joint Terminal Control Training and Rehearsal System (JTC TRS) project, under the Tactical Airborne Control System, funds development necessary to provide a Distributed Mission Operations (DMO) capable, high-fidelity simulator for the Joint Terminal Attack Controller (JTAC), Combat Control Team (CCT) and Air Support Operations Center (ASOC). JTC TRS provides incremental development to network aircrew full mission trainers and mission training centers in Increment 1. Increment 2 integrates the ASOCs and Special Operations Forces (SOF) Command and Control (C2) Simulation System (ASC2S2) trainer for Joint Fires. ASC2S2 is a continuation of the Joint Theater Air Ground Simulation System initially funded in 2009. It complements the JTC TRS trainer by providing persistent simulated C2 echelons supporting a total air-ground virtual environment for networked air- ground training and mission rehearsal capability that will develop both JTAC/CCT skills and ASOC/SOF C2 battlestaff skills. The JTC TRS Project provides research and development to facilitate interoperability with joint/sister Service air ground simulation using industry standards. ASC2S2 will provide the ASOC, SOF, and TACP with the vertical and horizontal C2 communications and coordination required for training and mission rehearsal. It will be designed to meet the needs and training requirements for personnel conducting Joint Theater Air Ground C2. The Enhanced operational training in support of conventional and special operations forces during irregular and traditional warfare will result in better efficiency and effectiveness in real-world contigencies. The system will be designed to incorporate live, virtual, and constructive training environments using the DMO and Joint National Training Capability network to connect to other Theater Air Ground System C2 elements or simulate those elements using intelligent agent technology. ASC2S2 will have full tactical datalink capability to replicate real-world digital communications. The system will be composed

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: JTAC/CCT Trainer Development	-	-	0.876		0.876
Description: Continue development of high-fidelity simulation system for JTAC/CCT Training					
FY 2010 Accomplishments:					
FY 2011 Plans:					
FY 2012 Base Plans: Begin development of portable configuration for the JTAC Trainer.					
FY 2012 OCO Plans:					
Title: ASC2S2 Trainer Development	-	-	6.933	-	6.933

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Exhibit R-2A, RDT&E Project Justin	fication: PB	2012 Air Fo	rce					1	DATE: Febr	uary 2011	
APPROPRIATION/BUDGET ACTIVI 3600: Research, Development, Test of BA 7: Operational Systems Development	& Evaluation,	Air Force	ı	R-1 ITEM NO PE 0207418I S <i>YSTEM</i>	_	URE BORNE CON	ITROL	PROJECT 675234: <i>TAC</i>	P Support		
B. Accomplishments/Planned Prog	grams (\$ in N	<u>/lillions)</u>					FY 201	10 FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Description: Develops high fidelity supports JTAC training.	simulation sys	stem for ASC	DC/SOF Cor	mmand and (Control Syst	em that					
FY 2010 Accomplishments:											
FY 2011 Plans:											
FY 2012 Base Plans: Begin development of ASC2S2 simu	lator configur	ation.									
FY 2012 OCO Plans:											
Title: Program Office Support									0.500	-	0.500
Description: Program Office Suppor	t										
FY 2010 Accomplishments:											
FY 2011 Plans:											
FY 2012 Base Plans: Continue Program Office Support											
FY 2012 OCO Plans:											
			Accomplisi	hments/Plar	nned Progra	ams Subtota	als		8.309	-	8.309
C. Other Program Funding Summa	ry (\$ in Milli	ons)									
	5 \(0040	5 1/ 6 044	FY 2012	FY 2012	FY 2012	5)/ 00/0	5)/ 00///	5)/ 004 5	5)/ 0040	Cost To	-
Line Item • PE 0207418F: TAC Airborne Control System, Fixed Configuration, Other Procurement,	FY 2010 7.810	FY 2011 24.916	<u>Base</u> 15.778	<u>OCO</u> 0.000	<u>Total</u> 15.778	FY 2013 7.674	FY 2014 5.116	FY 2015 5.116		Complete Continuing	
AF • PE 0207418F (1): TAC Airborne Control System, JTAC Portable Configuration, Other Procurement, AF	0.000	0.000	0.822	0.000	0.822	2.144	0.822	2.053	2.013	Continuing	Continuing

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force	DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
3600: Research, Development, Test & Evaluation, Air Force	PE 0207418F: TAC AIRBORNE CONTROL	675234: <i>TA</i>	CP Support
BA 7: Operational Systems Development	SYSTEM		

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

			FY 2012	FY 2012	FY 2012					Cost To	
<u>Line Item</u>	FY 2010	FY 2011	Base	<u>000</u>	<u>Total</u>	FY 2013	FY 2014	FY 2015	FY 2016	Complete	Total Cost
• PE 0207418F (2): TAC Airborne	0.000	0.000	0.540	0.000	0.540	0.550	1.121	1.138	1.122	Continuing	Continuing
0 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -											

Control System ASC2S2, Other

Procurement, AF

D. Acquisition Strategy

The acquisition strategy for production of the fixed configuration of the JTC TRS will be based on full and open competition with an evolutionary acquisition approach using incremental development. The portable version of the JTAC trainer is planned to be an option on the production contract for JTC TRS. The acquisition strategy for the ASC2S2 trainer has not been determined.

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 2012 Air Force

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0207418F: TAC AIRBORNE CONTROL

SYSTEM

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PROJECT

675234: TACP Support

DATE: February 2011

Product Development (\$ in Millions)			FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
ASC/WNS, AFMC, Fixed and Portable Develoment	C/CPIF	ASC/WNS, AFMC:Wright Patterson AFB, OH	3.366	-		0.876	Nov 2012	-		0.876	Continuing	Continuing	TBD
ASC/WNS, AFMC, ASC2S2 Development	C/CPIF	ASC/WNS, AFMC:Wright Patterson AFB, OH	-	-		6.933	May 2013	-		6.933	Continuing	Continuing	TBD
		Subtotal	3.366	-		7.809		-		7.809			

Remarks

Funding prior to FY10 supported Fixed/In-Garrison configuration. Funding in FY12 supports portable configuration.

Support (\$ in Millions)				FY:	2011	FY 2 Ba	2012 ise	FY 2	2012 CO	FY 2012 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
		Subtotal	-	-		-		-		-	0.000	0.000	0.000

Test and Evaluation (\$	in Millions	3)		FY 2	2011		2012 se		2012 CO	FY 2012 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
605 TES ACC	MIPR	605 TES/TXT ACC:Eglin AFB FL, FL	0.467	-		-		-		-	0.000	0.467	TBD
		Subtotal	0.467	-		-		-		-	0.000	0.467	

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Air Force

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0207418F: TAC AIRBORNE CONTROL

SYSTEM

PROJECT

675234: TACP Support

DATE: February 2011

Management Services	(\$ in Millio	ons)		FY	2011	FY 2 Ba			2012 CO	FY 2012 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	ASC/WNS, AFMC:Wright Patterson AFB, OH	2.424	-		0.500		-		0.500	Continuing	Continuing	TBD
		Subtotal	2.424	-		0.500		-		0.500			
			Total Prior Years Cost	FY:	2011	FY 2 Ba			2012 CO	FY 2012 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	6.257	-		8.309		-		8.309			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force	DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0207418F: TAC AIRBORNE CONTROL SYSTEM	PROJECT 675234: TACP Support

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force		DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0207418F: TAC AIRBORNE CONTROL SYSTEM	PROJECT 675234: TACP Support		

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Air Force

R-1 ITEM NOMENCLATURE

DATE: February 2011

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development

PE 0207418F: TAC AIRBORNE CONTROL SYSTEM PROJECT

675234: TACP Support

Schedule Details

Events	Sta	Start		End	
	Quarter	Year	Quarter	Year	
JTC TRS In-garrison/Fixed Development	1	2010	3	2011	
JTC In-garrison/Fixed I/OT& E	3	2011	3	2011	
JTC TRS In-garrison/Fixed Development Delivery	3	2011	3	2011	
JTC TRS In-garrison/Fixed Production Contract Award	4	2012	4	2012	
JTC TRS In-garrison/Fixed Production Installs Begin	2	2013	2	2013	
JTC TRS In-garrison/Fixed Production IOC	4	2013	4	2013	
JTC TRS Portable configuration Development	1	2013	4	2013	
JTC TRS Portable configuration Production Installs Begin	4	2013	4	2016	
ASC2S2 Development	1	2010	4	2011	
ASC2S2 Acceptance Test	3	2012	4	2012	
ASC2S2 Production Contract Award	3	2013	3	2013	
ASC2S2 First Prduction Delivery	1	2014	1	2014	
ASC2S2 IOC	4	2014	4	2014	

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