Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

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

PE 1001004F: International Activities

DATE: February 2010

BA 6: RDT&E Management Support

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	3.789	3.748	3.764	0.000	3.764	3.811	3.861	3.920	3.977	Continuing	Continuing	
664645: International Cooperative Research & Development	3.789	3.748	3.764	0.000	3.764	3.811	3.861	3.920	3.977	Continuing	Continuing	

A. Mission Description and Budget Item Justification

The mission of this program is to gain access to our Allies' best defense technologies, eliminate costly duplication of Research and Development (R&D) efforts, accelerate availability of defense systems, and to deploy and sustain common or interoperable USAF and allied equipment through International Cooperative Research and Development (ICR&D).

The USAF is party to multiple international cooperative agreements to solve common US and allied military scientific and technological problems, develop materiel solutions to harmonize coalition requirements and build interoperability with our coalition partners. This program element funds the USAF to discover, develop, process, negotiate, implement, and manage these international cooperative agreements and projects in compliance with statutory reporting provisions and exacting legal statutes, fiscal constraints, technology transfer controls, intellectual property rights, third party transfer provisions, quid-pro-quo criteria, industrial base factors, and political-military interests. Included in this budget are international technology assessment teams; space cooperation; specialized working groups; Research Technology Project development; Air Senior National Representative activities; support for cooperative opportunity assessments; developing, processing, negotiating and managing international agreements; oversight of ICR&D projects; program reviews; overseas R&D liaison offices; bilateral and multilateral staff talks; USAF displays at International Trade Shows to promote cooperation and interoperability activities; Engineering and Scientist Exchange Program (ESEP); and Administrative and Professional Exchange Program (APEP).

This program is in Budget Activity 6, Management and Support, funding provides for general R&D Management support for all aspects of ICR&D activities in the USAF.

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 6: RDT&E Management Support

R-1 ITEM NOMENCLATURE

PE 1001004F: International Activities

B. Program Change Summary (\$ in Millions)

	FY 2009	FY 2010	<u>FY 2011 Base</u>	FY 2011 OCO	<u>FY 2011 Total</u>
Previous President's Budget	3.789	3.748	0.000	0.000	0.000
Current President's Budget	3.789	3.748	3.764	0.000	3.764
Total Adjustments	0.000	0.000	3.764	0.000	3.764
 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	3.764	0.000	3.764

Change Summary Explanation

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 6: RDT&E Management Support									DATE: Feb	ruary 2010	
					PE 1001004F: International Activities				PROJECT 664645: International Cooperative Research & Development		
COST (\$ in Millions) FY 2009 FY 2010 Base Actual Estimate 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	
664645: International Cooperative Research & Development	3.789	3.748	3.764	0.000	3.764	3.811	3.861	3.920	3.977	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

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The USAF is party to multiple international cooperative agreements to solve common US and allied military scientific and technological problems, develop materiel solutions to harmonize coalition requirements and build interoperability with our coalition partners. This program element funds the USAF to discover, develop, process, negotiate, implement, and manage these international cooperative agreements and projects in compliance with statutory reporting provisions and exacting legal statutes, fiscal constraints, technology transfer controls, intellectual property rights, third party transfer provisions, quid-pro-quo criteria, industrial base factors, and political-military interests. Included in this budget are international technology assessment teams; space cooperation; specialized working groups; Research Technology Project development; Air Senior National Representative activities; support for cooperative opportunity assessments; developing, processing, negotiating and managing international agreements; oversight of ICR&D projects; program reviews; overseas R&D liaison offices; bilateral and multilateral staff talks; USAF displays at International Trade Shows to promote cooperation and interoperability activities; Engineering and Scientist Exchange Program (ESEP); and Administrative and Professional Exchange Program (APEP).

This program is in Budget Activity 6, Management and Support, funding provides for general R&D Management support for all aspects of ICR&D activities in the USAF.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
MAJOR THRUST: ESEP/APEP - Funds the USAF execution and management oversight of ESEP and APEP agreements.	0.190	0.300	0.290	0.000	0.290

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force				DATE: Feb	ruary 2010	
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 1001004F: International Activities	s	PROJECT 664645: International Cooperative Resear Development			Research &
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: In FY 2009: Funds eight to ten field level military and civilian p Centers, Test Centers, Logistic Centers, and the Academy for t government laboratories or other institutionsContinuation of	tours at selected European and Asian					
FY 2010 Plans: In FY 2010: Continuation of above listed activities.						
FY 2011 Base Plans: In FY 2011: Continuation of above listed activities.						
FY 2011 OCO Plans: In FY 2011 OCO: Not applicable.						
MAJOR THRUST: ICR&D - Funds USAF overseas R&D liaison off oversight of International Affairs Armaments Cooperation Division (• • • • • • • • • • • • • • • • • • • •	2.488	2.383	2.324	0.000	2.324
FY 2009 Accomplishments: In FY 2009: Funds USAF participation in NATO Forums to pro requirements, standardization, and new cooperative R&D programicipation in OSD bi-lateral Acquisition forums. Funds intern costs associated with promising cooperative R&D programs. For relationships, technology development activities and interoperation Denmark, France, Germany, India, Israel, Italy, Japan, NATO, Singapore, Spain, Sweden, and UK. Funds USAF participation activities with: Brazil, Poland, Chile, Czech Republic, India, So above listed activities.	rams. Funds USAF support and national agreements negotiation start-up funds USAF efforts to expand existing ability issues with: Australian, Canada, Netherlands, Norway, South Korea, in in initiating ICR&D relationships and					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 1001004F: International Activities		PROJECT 664645: International Cooperative Research			esearch &
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: In FY 2010: Continuation of above listed activities.						
FY 2011 Base Plans: In FY 2011: Continuation of above listed activities.						
FY 2011 OCO Plans: In FY 2011 OCO: Not applicable.						
MAJOR THRUST: Armaments Cooperation -		0.686	0.750	0.750	0.000	0.750
FY 2009 Accomplishments: In FY 2009: Funds the USAF's ability to develop and negotiate for ICRD&A bi-lateral and multi-lateral Agreements with key all developed, but not signed, during FY09 in the areas of: materi effectiveness, robotics, nanotechnology, coalition information s design, hypersonics, alternative energy, IED defeat, WMD defeasers, unmanned air systems, reconnaissance and surveilland interoperability and systems level programs.	lies. Work will continue on agreements als and composites, human sharing, biometrics, virtual munitions eat, distributed mission operations,					
FY 2010 Plans: In FY 2010: Continuation of above listed activities.						
FY 2011 Base Plans: In FY 2011: Continuation of above listed activities.						
FY 2011 OCO Plans: In FY 2011 OCO: Not applicable.						
		0.300	0.250	0.200	0.000	0.200

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 1001004F: International Activities	s	PROJECT 664645: Int Developme	nternational Cooperative Research		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
MAJOR THRUST: Air Force Material Command (AFMC) - Funds supp Armaments Cooperation R&D efforts within the Air Force Research Lab						
FY 2009 Accomplishments: In FY 2009: Funds AFRL support of technical assessments and didevelop promising cooperative R&D programs.	scussions to identify, create, and					
FY 2010 Plans: In FY 2010: Continuation of above listed activities.						
FY 2011 Base Plans: In FY 2011: Continuation of above listed activities.						
FY 2011 OCO Plans: In FY 2011 OCO: Not applicable.						
MAJOR THRUST: International Space Cooperation -		0.081	0.065	0.150	0.000	0.150
FY 2009 Accomplishments: In FY 2009: Funds research and development activities to provide operational strategies, concepts of operations, tactics techniques a and prototype systems with our allies, which in turn provides found operational cooperation. Space cooperation with our allies enables the USAF access to critic ground systems, and remote test ranges for test and evaluation of challenged environments, as well as joint development and acquis	and procedures, and technologies ation for long-term, full spectrum cal geography for distributed space capabilities in electronically					
FY 2010 Plans: In FY 2010: Continuation of above listed activities.						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 1001004F: International Activities	s	PROJECT 664645: Inte		Research &	
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: In FY 2011: Continuation of above listed activities.						
FY 2011 OCO Plans: In FY 2011 OCO: Not applicable.						
MAJOR THRUST: Cyberspace Cooperation -		0.044	0.000	0.050	0.000	0.050
FY 2009 Accomplishments: In FY 2009: Funds establishing cooperative relationships with interoperability, sharing of information on threats, and develop to our critical information systems. Supports integration of air to create global effects. Cyberspace requires significant rese responsiveness to avoid technological surprise.	ping new capabilities to defeat threats r, space, and cyberspace capabilities					
FY 2010 Plans: In FY 2010: Continuation of above listed activities.						
FY 2011 Base Plans: In FY 2011: Continuation of above listed activities.						
FY 2011 OCO Plans: In FY 2011 OCO: Not applicable.						
Acco	omplishments/Planned Programs Subtotals	3.789	3.748	3.764	0.000	3.764

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

3600: Research, Development, Test & Evaluation, Air Force PE 1001004F: International Activities 664645: International Cooperative Research &

BA 6: RDT&E Management Support Development

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

			FY 2011	FY 2011	FY 2011					Cost lo	
<u>Line Item</u>	FY 2009	FY 2010	<u>Base</u>	OCO	<u>Total</u>	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
PE Not Provided (3502): Activity	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Not Provided											

D. Acquisition Strategy

This program element is the only source of USAF funds to identify and initiate opportunities for international armaments cooperation to (a) deploy and support common or interoperable equipment with our allies; (b) leverage USAF resources with our allies through cost sharing and economies of scale; and (c) exploit the best US and allied technologies for equipping coalition forces. We obtain these benefits only after international cooperative opportunities are identified, explored, assessed, developed and international agreements are negotiated and concluded. This PE provides funds to execute up-front armaments cooperation responsibilities, realize cooperative opportunities, assess allied technologies and generate sound, cost-effective cooperative programs between the USAF and our international partners. Once these initiatives and programs are started as international efforts they are transferred to the appropriate technology or systems program office and are then funded by the program office.

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.