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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force										Date: March 2014		
Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
3600: Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)					PE 0603790F I NATO Research and Development							
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	-	3.981	4.568	2.392	-	2.392	4.972	4.748	4.202	4.283	Continuing	Continuing
64NATO: Nato Coop R&D	-	3.981	4.568	2.392	-	2.392	4.972	4.748	4.202	4.283	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

These funds will be used to initiate air, space, and cyber international cooperative research, and development (ICR&D) agreements with North Atlantic Treaty Organization (NATO) member states, major non-NATO allies and friendly foreign countries. Each of the selected activities and projects are required to have a concluded international agreement (IA), prior to funds being released, that implements the provisions of Title 10 U.S. Code, Section 2350a. This legislation (Title 10 U.S. Code, Section 2350) authorizes funds to significantly improve U.S. and allied conventional defense capabilities by leveraging the best defense technologies, eliminating costly duplication of R&D efforts, accelerating the availability of defense systems, and promoting US and allied interoperability or commonality. These funds will not be used for government civilian salaries, permanent construction, or spent overseas. This PE funds the implementation of Air Force ICR&D agreements in (1) Basic Research (2) Applied Research (3) Advanced Technology Development (4) Advanced Component Development and Prototypes (5) System Development and Demonstration and (6) RDT&E Management Support.

This program is in Budget Activity 4, Advanced Component Development and Prototypes (ACD&P) because efforts are necessary to evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment.

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	4.507	4.568	4.633	-	4.633
Current President's Budget	3.981	4.568	2.392	-	2.392
Total Adjustments	-0.526	-	-2.241	-	-2.241
• Congressional General Reductions	-0.006	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-0.520	-	-2.241	-	-2.241

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Change Summary Explanation Reduction of \$2.241M in FY15 due to higher DoD priorities.				
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2013	FY 2014	FY 2015
Title: International Cooperative Research and Development		3.981	4.568	2.392
Description: Supports bi- and multi-lateral international agreements that meet USAF RDT&E objectives and goals. Each of the cooperative projects that receive funding must meet one or more of the following requirements: enhance warfighter capabilities and coalition interoperability; accelerate the availability of defense systems; strengthen and reinforce strategic partnerships; gain access to the best defense technologies, capabilities and techniques; build relationships and influence with allies; and/or eliminate duplication of R&D efforts.				
FY 2013 Accomplishments: FY13 cooperative projects included but were not limited to: Surveillance by Thermal Hypersectral Imaging Exploitation and Validation of Technology; Unmanned Aircraft Systems Heavy Fuels Operations; Background Oriented Schlieren Comparison; Global Positioning System (GPS)/Inertial/Vision Integrated Navigation System; Fire and Explosion Vulnerability Assessment; Multi-Interoperability Experiment for Enhanced ISR Applications; Command and Control Information Synergy for Combined Space Operations; Silicon Carbide-fiber-reinforced Silicon Carbide-matrix composites Ultra-High Temperature Ceramic Compositions (SiC/SiC-UHTC Compositions); and others.				
FY 2014 Plans: FY14 cooperative projects include but are not limited to: First Generation Quad-Stimulus Laser Eye Protection; Hot Spots Structural Health Monitoring; Coalition Live, Virtual and Constructive Training Research; Bio-Inspired Technologies for Unmanned Aerial Systems (UAS); Air Vehicle Integrated Energy and Power Management Modeling and Simulation; Non-Invasive Rapid Detection of Stress Levels via Nano Devices; Solid Rocket Motor Critical Defect Analysis and Health Monitoring; Robust Affordable Network Global Navigation Satellite Systems Receiver for Military Applications; and others.				
FY 2015 Plans: FY15 cooperative projects will include, but are not limited to, RDT&E efforts in human performance, directed energy, information systems, aerospace systems, munitions, materials and manufacturing, sensors, and space vehicles. Representative projects include but are not limited to Unmanned Aerial Systems Crew Training Research, Modeling Fatigue from Prolonged Driving, Quantification Standards to Assess the Loss of Thermal Barrier Coating due to Calcium-Magnesia-Alumina-Silicate Exposure, Advanced Rotary Engine Design for Tactical Unmanned Aerial Vehicles, Time Critical Targeting in Urban Environments, Environmental Health and Safety of Advanced Nanomaterials, Panchromatic Materials for Optical Sensor Protection, Resolving High Temperature/Pressure and Unsteady Flow Measurements for Advanced Cycle Diagnostics, Flight Information Exchange				

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C. Accomplishments/Planned Programs (\$ in Millions)		FY 2013	FY 2014	FY 2015
Model for Air Force Mission Planning, Tessellated Nanosatellite-enhanced Communications Feasibility, Coalition Performance Evaluation Tracking System, Real-time Coalition Performance Assessment; and others.				
Accomplishments/Planned Programs Subtotals		3.981	4.568	2.392
D. Other Program Funding Summary (\$ in Millions) N/A				
Remarks				
E. Acquisition Strategy A principal goal of the NATO Cooperative R&D program is to effectively utilize the aggregate resources invested by the US and our allies in air, space, and cyber R&D. This program element provides the critical funding incentive needed to pursue air, space and cyber related International Cooperative Research Development and Acquisition (ICRD&A) agreements and helps to (a) leverage USAF and allied resources through cost sharing and economies of scale; (b) exploit the best US and allied technologies for equipping coalition forces; (c) demonstrate areas of commonality or interoperability with our allies; and (d) accelerate the availability of defense technology and systems. Candidate projects are reviewed against USAF goals, DoD objectives, and warfighter needs prior to being approved. An international agreement defining project objectives, responsibilities and costs is required prior to release of funds. To obtain these funds and ensure service commitment, projects are selected from existing or new RDT&E programs funded in the Future Years Defense Plan (FYDP). Project offices must show matching funds and contributions from associated program elements and equitable allied funding. As appropriate, funding responsibility for out-year requirements and follow-on efforts are transferred to the project office and associated program elements. Any new contracts are awarded after full and open competition.				
F. 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-4, RDT&E Schedule Profile: PB 2015 Air Force

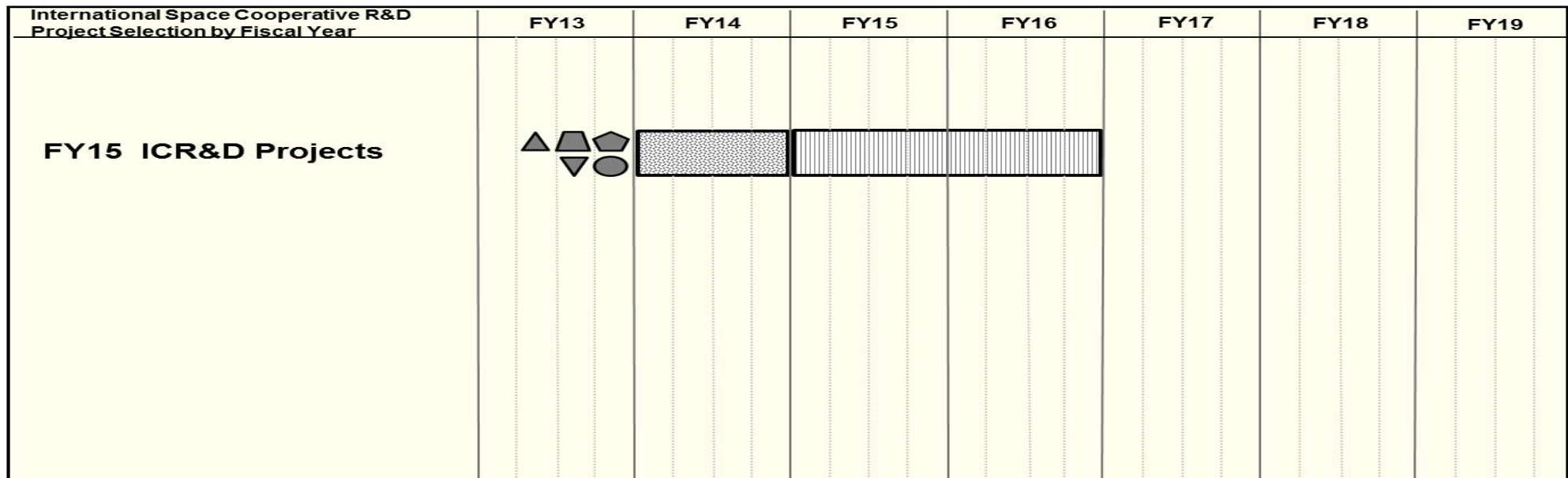
Date: March 2014

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R-1 Program Element (Number/Name)
PE 0603790F / NATO Research and Development

Project (Number/Name)
64NATO / Nato Coop R&D

PE 0603790F – International Cooperative Research and Development Schedule



Legend:

- | | | |
|---|--|---|
|  Call letter to MAJCOMs |  Coordination of review panel results |  Project Being Worked with ICR&D funding |
|  Project nomination packages due |  Approved projects letter sent to MAJCOMs | |
|  Review Panel |  Selected projects develop International Agreements | |