Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

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

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603791F: International Space Cooperative R&D

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	-	0.615	0.652	0.379	-	0.379	0.843	0.805	0.702	0.714	Continuing	Continuing
645035: Intl Space Coop R&D	-	0.615	0.652	0.379	-	0.379	0.843	0.805	0.702	0.714	Continuing	Continuing
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

These funds will be used to initiate space-related international cooperative research, and development (ICR&D) projects with North Atlantic Treaty Organization (NATO) member states, major non-NATO allies and friendly foreign countries. Each of the selected projects are required to have a concluded international agreement (IA), prior to funds being released, that implement the provisions of Title 10 US Code, Section 2350a. The legislation (Title 10 US Code, Section 2350) authorizes funds to significantly improve US 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 program element 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 PE is designated in Budget Activity 4 because most of the ICR&D projects support specific systems, include all efforts necessary to evaluate integrated technologies in as realistic an operating environment as possible to assess the performance or cost reduction potential of advanced technology, and help expedite technology transition from the laboratory to operational use. These funds are not to be used for civilian salaries or the construction of permanent facilities.

PE 0603791F: International Space Cooperative R&D Air Force

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^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force DATE: April 2013 APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE 3600: Research, Development, Test & Evaluation, Air Force PE 0603791F: International Space Cooperative R&D BA 4: Advanced Component Development & Prototypes (ACD&P) FY 2012 FY 2013 FY 2014 Base FY 2014 OCO FY 2014 Total **B. Program Change Summary (\$ in Millions)** Previous President's Budget 0.615 0.652 0.661 0.661 Current President's Budget 0.615 0.652 0.379 0.379 **Total Adjustments** 0.000 0.000 -0.282-0.282 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 -0.282-0.2820.000 C. Accomplishments/Planned Programs (\$ in Millions) FY 2012 FY 2013 FY 2014 Title: International Space Cooperative Research and Development 0.615 0.652 0.379 **Description:** Supports bi- and multi-lateral space-related 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 2012 Accomplishments: FY12 cooperative projects include but are not limited to: Ionospheric Effects on Intel, Surveillance and Reconnaissance, Space Situational Awareness and Defensive Counterspace; Global Positioning System Electronic Prevention; and others FY 2013 Plans: FY13 cooperative projects include but are not limited to: Nanosatellites Plug and Play Architectures II; Hyper-Temporal Imaging Exploitation and Validation of Technology; and others FY 2014 Plans: FY14 cooperative projects include but are not limited to: Spacecraft Plasma Expansion Test; Combat Search and Rescue/Blue Force Tracking Enhancements for Nanosatellites; and others **Accomplishments/Planned Programs Subtotals** 0.615 0.652 0.379 D. Other Program Funding Summary (\$ in Millions)

PE 0603791F: International Space Cooperative R&D Air Force

N/A

UNCLASSIFIED
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Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

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R-1 ITEM NOMENCLATURE

PE 0603791F: International Space Cooperative R&D

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

Remarks

E. Acquisition Strategy

A principal goal of the International Space Cooperative R&D program is to effectively utilize the aggregate resources invested by the US and our allies in space-related R&D. This program element provides the critical funding incentive needed to pursue space-related 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 space-related 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. Most 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

PE 0603791F: International Space Cooperative R&D

Air Force

DATE: April 2013 Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 3600: Research, Development, Test & Evaluation, Air Force PE 0603791F: International Space 645035: Intl Space Coop R&D Cooperative R&D BA 4: Advanced Component Development & Prototypes (ACD&P) FY 2014 FY 2014 FY 2014 **Product Development (\$ in Millions)** oco FY 2012 FY 2013 Base Total Contract Target Method Performing All Prior Award Award Award Award **Cost To** Total Value of **Cost Category Item** & Type **Activity & Location** Years Cost Date Date Cost Date Cost Date Complete Contract Cost Cost Cost Subtotal 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 FY 2014 FY 2014 FY 2014 Support (\$ in Millions) FY 2012 FY 2013 Base oco Total Contract Target **Cost To** Method Performing All Prior Award Award Award Award Total Value of **Cost Category Item** Cost Date Cost Cost Contract & Type Activity & Location Years Cost Date **Date** Date Cost Complete Cost International Research 0.615 Dec 2011 Feb 2014 Various Various:. 0.652 Jan 2013 0.379 0.379 Continuing Continuing **Projects** Subtotal 0.000 0.652 0.379 0.615 0.000 0.379 FY 2014 FY 2014 FY 2014 Test and Evaluation (\$ in Millions) FY 2012 FY 2013 oco Total Base Contract Target Method Performing All Prior Award Award Award Award **Cost To** Total Value of Cost Contract **Cost Category Item** & Type **Activity & Location** Years Date Cost Date Cost Date Cost Date Cost Complete Cost Subtotal 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 FY 2014 FY 2014 FY 2014 Management Services (\$ in Millions) FY 2012 FY 2013 Base oco Total Contract Target Cost To Method Performing All Prior Award Award Award Award Total Value of **Activity & Location Cost Category Item** & Type Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract Subtotal 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 Target All Prior FY 2014 FY 2014 FY 2014 **Cost To** Value of Total Years FY 2012 FY 2013 Base oco Total Complete Cost Contract 0.615 0.652 0.379 0.000 0.379 **Project Cost Totals** 0.000 Remarks

PE 0603791F: International Space Cooperative R&D

Air Force

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Air Force

APPROPRIATION/BUDGET ACTIVITY

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

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

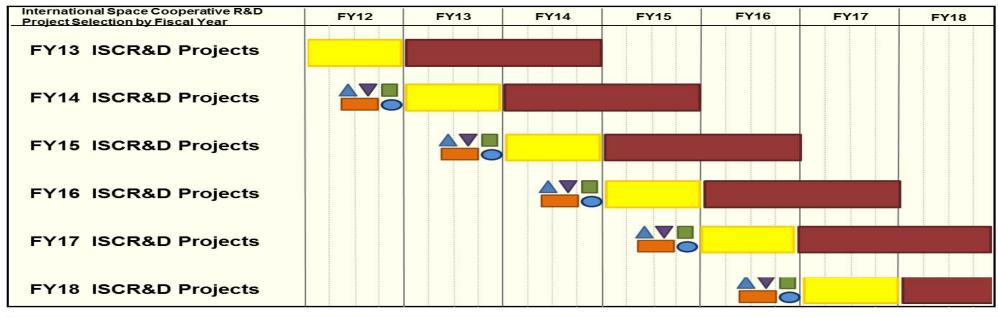
PE 0603791F: International Space

Cooperative R&D

PROJECT

645035: Intl Space Coop R&D

PE 63791F – International Space Cooperative Research and Development Schedule



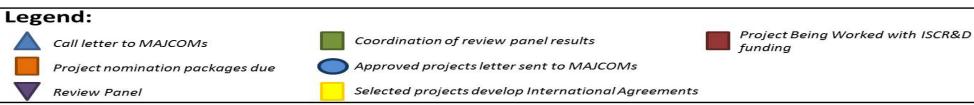


Exhibit R-4A, RDT&E Schedule Details: PB 2014 Air Force

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

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

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603791F: International Space

Cooperative R&D

PROJECT

645035: Intl Space Coop R&D

Schedule Details

	Sta	art	End		
Events	Quarter	Year	Quarter	Year	
FY14 ISCR&D Projects - Call letter	2	2012	2	2012	
FY14 ISCR&D Projects - Project nomination package development	2	2012	3	2012	
FY14 ISCR&D Projects - Review panel	3	2012	3	2012	
FY14 ISCR&D Projects - Coordination of review panel results	4	2012	4	2012	
FY14 ISCR&D Projects - Approved projects letter sent to MAJCOMS	4	2012	4	2012	
FY14 ISCR&D Projects - Project agreement development, negotiations, and signature	1	2013	4	2013	
FY14 ISCR&D Projects - RDT&E cooperative project work	1	2014	4	2015	
FY15 ISCR&D Projects - Call letter	2	2013	2	2013	
FY15 ISCR&D Projects - Approved projects letter sent to MAJCOMS	4	2013	4	2013	
FY15 ISCR&D Projects - RDT&E cooperative project work	1	2015	4	2016	
FY16 ISCR&D Projects - Call letter	2	2014	2	2014	
FY16 ISCR&D Projects - Approved projects letter sent to MAJCOMS	4	2014	4	2014	
FY16 ISCR&D Projects - RDT&E cooperative project work	1	2016	4	2017	
FY17 ISCR&D Projects - Call letter	2	2015	2	2015	
FY17 ISCR&D Projects - Approved projects letter sent to MAJCOMS	4	2015	4	2015	
FY17 ISCR&D Projects - RDT&E cooperative project work	1	2017	4	2018	
FY18 ISCR&D Projects - Call letter	2	2016	2	2016	
FY18 ISCR&D Projects - Approved projects letter sent to MAJCOMS	4	2016	4	2016	
FY18 ISCR&D Projects - RDT&E cooperative project work	1	2018	4	2018	

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Air Force