Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force

R-1 ITEM NOMENCLATURE

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

APPROPRIATION/BUDGET ACTIVITY

PE 0305178F: National Polar-Orbiting Op Env Satellite

DATE: February 2012

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

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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	173.016	43.000	-	-	-	-	-	-	-	Continuing	Continuing
644056: National Polar-orbiting Operational Env. Sat. Syst.	173.016	43.000	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

Note

Air Force

The restructure from the National Polar-orbiting Operational Environmental Satellite System (NPOESS) program to the Defense Weather Satellite System (DWSS) was finalized in FY 2011. The DWSS program was terminated per Congressional direction in FY 2012. DoD will utilize the remaining Defense Meteorological Satellite Program (DMSP) satellites to satisfy DoD overhead weather requirements until a follow-on capability can be acquired. All FY 2012 activities in this PE support DWSS program termination.

Weather Satellite Follow-on (WSF) activities were funded starting in FY 2012 using a new RDT&E, AF PE (0604422F).

The Cost to Complete and Total Cost for MDAP projects in this program element are documented in the R3. The Cost to Complete and Total Cost on the R2 are entered as "Continuing" and not reflective of the total cost for MDAP projects since the R2 does not account for prior years funding.

A. Mission Description and Budget Item Justification

Presidential Decision Directive/National Science and Technology Council-2 (PDD/NCTC-2) (May 1994) directed the DoD, Department of Commerce (DOC), and the National Aeronautics and Space Administration (NASA) to establish a converged national polar-orbiting weather satellite program. The converged program, the National Polar-orbiting Operational Environmental Satellite System (NPOESS), combined the follow-on to DoD's Defense Meteorological Satellite System (DMSP) and the DOC's Polar-orbiting Operational Environmental Satellite (POES) program.

On 1 February 2010, the Executive Office of the President announced a restructure of the NPOESS program which directed the acquisition and development of separate military and civil weather satellite programs. The Air Force began acquisition of the Defense Weather Satellite System (DWSS) to satisfy military weather requirements. The National Oceanographic and Atmospheric Administration (NOAA) will acquire the Joint Polar Satellite System (JPSS) and a shared common ground system to address civil weather and environmental requirements. The DWSS system was designed to produce environmental data records for regional/global meteorological, oceanographic, environmental, climatic data, and space environmental remote sensing information. DWSS capabilities would enable the anticipation and exploitation of atmospheric and space environment conditions for military operations planning. DWSS data would also be instrumental to civilian weather forecasters as they work to improve climate forecasting and severe weather modeling and prediction, reducing the potential for loss of civilian life and property.

PE 0305178F: National Polar-Orbiting Op Env Satellite

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Exhibit R-2, **RDT&E Budget Item Justification:** PB 2013 Air Force **DATE:** February 2012

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The DWSS program was designed to satisfy DoD's environmental monitoring requirements in the early morning orbit by developing and launching two satellites [flight-1 (F1) and flight-2 (F2)], each with an electro-optical sensor, Space Environment Monitor (SEM-N), and a microwave sensor, with a planned initial launch capability no earlier than 2018.

RDT&E funds in FY 2011 were used for early development of the two DWSS satellites, contract restructure efforts, and continued transition of non-DoD payloads to NASA/NOAA for JPSS.

RDT&E funds in FY 2012 were used to support DWSS program termination activities such as: leveraging and/or transitioning government investments in the NPOESS/DWSS program including electro-optical, microwave, and space weather sensors, spacecraft, materials, algorithms and other DoD-specific elements of the common ground system; acquiring if necessary, any intellectual property rights and data; storage of program assets for potential future use; and covering any contractor or government liabilities incurred while performing termination activities. FY 2012 funds were also used to complete the transition of non-DoD payloads and support to NOAA/NASA for the Joint Polar Satellite System (JPSS).

BA-4 - This program is a Budget Activity 4, Advanced Component Development and Prototypes (ACP&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 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	325.505	444.900	526.785	-	526.785
Current President's Budget	173.016	43.000	-	-	-
Total Adjustments	-152.489	-401.900	-526.785	-	-526.785
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-444.900			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	43.000			
 Congressional Directed Transfers 	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-1.091	-			
Other Adjustments	-151.398	-	-526.785	-	-526.785

Change Summary Explanation

The restructure from the National Polar-orbiting Operational Environmental Satellite System (NPOESS) program to the Defense Weather Satellite System (DWSS) was finalized in FY 2011. The DWSS program was terminated per Congressional direction in FY 2012. DoD will utilize the remaining Defense Meteorological Satellite Program (DMSP) satellites to satisfy DoD overhead weather requirements until a follow-on capability can be acquired. All FY 2012 activities in this PE supported DWSS program termination. Weather Satellite Follow-on activities (WSF) were funded starting in FY 2012 using a new PE (0604422F).

PE 0305178F: National Polar-Orbiting Op Env Satellite Air Force

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force **DATE:** February 2012 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE** 3600: Research, Development, Test & Evaluation, Air Force PE 0305178F: National Polar-Orbiting Op Env Satellite BA 4: Advanced Component Development & Prototypes (ACD&P) FY11: -\$225.5M congressional-directed reduction for program reduction; +\$75M congressional add; -\$0.898M congressional general reduction; -\$1.091M SBIR FY12: \$43M congressional add (DWSS termination liability) FY12: -\$444.9M congressional directed reduction (DWSS program termination) FY13: -\$526.785M removes FY13 DWSS funding and is reallocated to higher DoD priorities FY 2013 FY 2013 FY 2013 C. Accomplishments/Planned Programs (\$ in Millions) FY 2011 FY 2012 Base OCO Total Title: DWSS 173.016 43.000 Description: Develop and acquire DWSS satellites and sensors, fund development of DoD-specific elements within the common ground system, and develop algorithms. FY 2011 Accomplishments: Completed contract restructure and early development of DWSS. Continued transition of non-DoD payloads to NOAA/NASA for JPSS. FY 2012 Plans: Performed activities related to DWSS program termination such as: leveraging and/or transitioning government investments in the NPOESS/DWSS program including electro-optical, microwave, and space weather sensors, spacecraft, materials, algorithms and other DoD-specific elements of the common ground system; acquiring if necessary, any intellectual property rights and data; storage of program assets for potential future use; and covering any contractor or government liabilities incurred while performing termination activities. FY 2012 funds were also used to complete the transition of non-DoD payloads and support to NOAA/NASA for the Joint Polar Satellite System (JPSS). FY 2013 Base Plans: Starting in FY 2013, DWSS will no longer be funded. DoD will utilize the remaining DMSP satellites until a follow-on capability can be acquired.

PE 0305178F: National Polar-Orbiting Op Env Satellite

Air Force

FY 2013 OCO Plans:

Not applicable

Accomplishments/Planned Programs Subtotals

R-1 Line #57

173.016

43.000

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Air Force

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

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

PE 0305178F: National Polar-Orbiting Op Env Satellite

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

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

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	Base	OCO	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
• R-48: <i>RDT&E, AF, PE 0604422F,</i>	0.000	125.000	2.000	0.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000
Weather Satellite Follow-On											

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E. Acquisition Strategy

The restructure from the National Polar-orbiting Operational Environmental Satellite System (NPOESS) program to the Defense Weather Satellite System (DWSS) was finalized in FY 2011. The DWSS program was terminated per Congressional direction in FY 2012. DoD will utilize the remaining Defense Meteorological Satellite Program (DMSP) satellites to satisfy DoD overhead weather requirements until a follow-on capability can be acquired. All FY 2012 activities in this PE support DWSS program termination.

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 0305178F: National Polar-Orbiting Op Env Satellite Air Force

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DATE: February 2012 Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Air Force APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 3600: Research, Development, Test & Evaluation, Air Force PE 0305178F: National Polar-Orbiting Op Env 644056: National Polar-orbiting Operational BA 4: Advanced Component Development & Prototypes (ACD&P) Satellite Env. Sat. Syst. FY 2013 FY 2013 FY 2013 **Product Development (\$ in Millions)** FY 2012 oco Base Total **Total Prior** Target Contract Method Performing Years Award Award Award Cost To Value of Cost Category Item & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Complete **Total Cost** Contract Cost Northrop **DWSS** Development and C/CPIF Grumman:Redondo 465.687 34.000 0.000 499.687 0.000 System Integration Beach, CA Naval Research Lab and Johns Hopkins **Applied Physics** GFE Sensor Development **MIPR** 71.577 8.000 0.000 79.577 0.000 Lab:Laurel, MD & Wash, DC, Subtotal 537.264 42.000 0.000 579.264 0.000 FY 2013 FY 2013 FY 2013 Support (\$ in Millions) FY 2012 Base oco Total Contract **Total Prior** Target Method Performing Years Award Award Award Cost To Value of **Cost Category Item** & Type **Activity & Location** Cost Cost Complete **Total Cost** Cost Cost Date Date Date Cost Contract System Program Office (SPO) Support:El Segundo, Various 30.712 1.000 0.000 31.712 0.000 Support CA Subtotal 30 712 1 000 0.000 31 712 0.000 **FY 2013** FY 2013 FY 2013 **Test and Evaluation (\$ in Millions)** FY 2012 oco Base Total Contract **Total Prior** Target Method Performing Years Award Award Award Cost To Value of **Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Contract Subtotal 0.000 0.000 0.000 FY 2013 FY 2013 FY 2013 Management Services (\$ in Millions) FY 2012 oco Total Base **Total Prior** Contract Target Method Performing Award Cost To Value of Years Award Award **Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Contract Program Management Admin Various Support:, 0.000 0.000 0.000 0.000 0.000 0.000 Subtotal

PE 0305178F: National Polar-Orbiting Op Env Satellite Air Force

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DATE: February 2012 Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Air Force APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT 3600: Research, Development, Test & Evaluation, Air Force PE 0305178F: National Polar-Orbiting Op Env 644056: National Polar-orbiting Operational BA 4: Advanced Component Development & Prototypes (ACD&P) Satellite Env. Sat. Syst.

Management Services (\$ in Millions)			FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 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	Total Cost	Target Value of Contract
Remarks	EV12 and out												

Included in IPO Support for FY12 and out.

	Total Prior Years Cost	FY 20	FY 2013 12 Base	FY 20		Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	567.976	43.000	-	-	-	0.000	610.976	0.000

Remarks

PE 0305178F: National Polar-Orbiting Op Env Satellite Air Force

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Air Force	DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force	R-1 ITEM NOMENCLATURE PE 0305178F: National Polar-Orbiting Op Env	PROJECT 644056: National Polar-orbiting Operational
BA 4: Advanced Component Development & Prototypes (ACD&P)	Satellite Satellite	Env. Sat. Syst.

PE 0305178F: *National Polar-Orbiting Op Env Satellite* Air Force

Exhibit R-4A, RDT&E Schedule Details: PB 2013 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 0305178F: National Polar-Orbiting Op Env Satellite

PROJECT
644056: National Polar-orbiting Operational Env. Sat. Syst.

Schedule Details

	St	art	E	nd
Events	Quarter	Year	Quarter	Year
Microwave Sensor for DWSS F1	2	2011	4	2012
Early Electrical Power Subsystem and Attitude Control Subsytem Electrical Engineering Model Testbed (EEMTB)	4	2011	4	2012
Electro-optical Sensor for DWSS F1	2	2011	4	2012
DWSS Program Termination Settlement	2	2012	4	2015

PE 0305178F: *National Polar-Orbiting Op Env Satellite* Air Force

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