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

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

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

PE 0305238F: NATO AGS

BA 7: Operational Systems Development

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	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	0.000	0.000	210.109	264.134	-	264.134	235.757	140.000	40.000	40.720	0.000	930.720
676001: NATO AGS	0.000	0.000	210.109	264.134	-	264.134	235.757	140.000	40.000	40.720	0.000	930.720
Quantity of RDT&E Articles		0	0	0		0	0	0	0	0		

MDAP/MAIS Code(s): 252

### Note

In FY 2012, Project 676001, NATO Alliance Ground Surveillance (AGS) efforts were transferred from OSD PE 1001018D8Z, NATO AGS, Project P018, NATO AGS, to PE 0305220F, RQ-4 Global Hawk (GH), Project 676001, NATO AGS in order to transfer control of this effort from OSD to the USAF.

In FY 2013, Project 676001, NATO AGS, efforts transferred from PE 0305220F, RQ-4 GH, Project 676001, NATO AGS to PE 0305238F, NATO AGS, Project 676001, NATO AGS, in order to manage NATO AGS as a separate OSD special interest program.

# A. Mission Description and Budget Item Justification

U.S. participation in NATO AGS was ratified by SECDEF signature of the NATO AGS Program Memorandum of Understanding (PMOU) in June 2009. The PMOU went into effect in Sept 2009 when fifteen nations, including the United States, financially committed for procurement and delivery of the NATO Commander's number one priority to the war fighter. Canada withdrew in August 2011, leaving 14 participating nations.

In FY2012, OSD transferred the NATO AGS project to the USAF for management and execution. The NATO AGS project funds the U.S. share of the cost for NATO to acquire an air-to-ground ground surveillance capability, improvements to the radar, and the U.S. support of NATO AGS-related activities. Operations and continuing support will be funded through a future NATO Military Commanders' Capability Package funded within the NATO Security Investment Program (NSIP).

The AGS system will be a NATO-owned and operated airborne ground surveillance capability that provides continuous, wide area surveillance information in all weather conditions for use at the strategic, operational and tactical levels of command. Interoperable with other national assets, AGS will provide NATO decision makers with near real time, continuous information and situational awareness concerning friendly, neutral, and opposing ground forces to support mission planning and execution, including force protection and targeting.

The NATO AGS Program includes an air segment consisting of a five (5) NATO-developed air vehicles, using elements of the USN Triton (previously Broad Area Maritime Surveillance (BAMS)) command and control architecture and the U.S. Radar Technology Insertion Program (RTIP) radar; a unique configuration to allow export of system; a ground segment for data exploitation and distribution that consists of fixed-based site and transportable/mobile ground stations; establishment and operation of a management organization; development of operations and support concepts; and definition and establishment of an initial support capability. As part

PE 0305238F: *NATO AGS* 

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<sup>&</sup>lt;sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

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

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

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

PE 0305238F: *NATO AGS* 

BA 7: Operational Systems Development

of the U.S. government agreement with NATO AGS Management Agency (NAGSMA), the U.S. will integrate Maritime Moving Target and Inverse Synthetic Aperture Radar capability into the RTIP radar for NATO AGS. This design and development includes correcting deficiencies, flight testing on the modes and system level performance validation.

The system level configuration changes include a unique configuration to allow for export of the system. (Additional details are classified and available on a need-to-know basis.)

Deliveries are planned for 2016-2017. The follow-on sustainment and operations will be supported by all 28 NATO nations through their contributions of funding to the program. Mission elements will support 2 orbits. The main operating base (MOB) air vehicles and mission C2 will be in Naval Air Station Sigonella, Italy. Exploitation at MOB will be developed by Selex. EADS and Selex will develop the transportable and mobile general ground stations.

The program, managed by the NAGSMA, is composed of design, development and demonstration, as well as initial in-service support (IISS). While the current program includes IISS, the current Direct Commercial Sale (DCS) contract with Northrop Grumman does not include these tasks.

The DCS contract between Northrop Grumman and NAGSMA was signed on 20 May 2012. This funding is the U.S. cost share for the acquisition of the NATO airborne ground surveillance capability as well as the cost share associated with the IISS. IISS and In-Service Support (ISS) will be contracted under separate action. It is anticipated that ISS costs will be commonly funded through a future NATO Military Commanders' Capability Package, using the NATO Security Investment Program (NSIP). This funding also includes developmental activity for RTIP to include additional functionality and configuration requirements, studies and analysis related to mission security and exportability, and current and future program planning, project execution, engineering, and program management support to NATO.

This program is in Budget Activity 7, Operational System Development, because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	0.000	210.109	264.134	-	264.134
Current President's Budget	0.000	210.109	264.134	-	264.134
Total Adjustments	0.000	0.000	0.000	-	0.000
Congressional General Reductions	-	0.000			
Congressional Directed Reductions	-	0.000			
Congressional Rescissions	0.000	0.000			
Congressional Adds	-	0.000			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	0.000			
Reprogrammings	0.000	0.000			
SBIR/STTR Transfer	0.000	0.000			
Other Adjustments	0.000	0.000	0.000	-	0.000
<ul><li>Reprogrammings</li><li>SBIR/STTR Transfer</li></ul>	0.000	0.000 0.000	0.000	-	

PE 0305238F: *NATO AGS* 

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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 0305238F: *NATO AGS* 

BA 7: Operational Systems Development

# **Change Summary Explanation**

In FY 2013, Project 676001, NATO AGS, efforts were transferred from RQ-4 Global Hawk (GH) PE 0305220F, NATO AGS, Project 676001, NATO AGS to PE 0305238F, NATO AGS, Project 676001, NATO AGS, in order to manage NATO AGS as a separate OSD special interest program.

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
Title: Design / Development of NATO AGS	0.000	180.280	222.954
Description: United States contribution to NATO for AGS development acquisition and initial fielding.			
Supports configuration changes at a system level. (Additional details are classified and available on a need-to-know basis.)			
FY 2013 Plans: Continuing United States contribution to NATO for AGS development acquisition and initial fielding.			
Supports configuration changes at a system level. (Additional details are classified and available on a need-to-know basis.)			
FY 2014 Plans: Will continue United States contribution to NATO for AGS development acquisition and initial fielding.			
Supports configuration changes at a system level. (Additional details are classified and available on a need-to-know basis.)			
Title: Design/Development of Maritime Modes	0.000	28.506	39.009
<b>Description:</b> Supports development of maritime modes capability for RTIP and additional configuration changes that cannot be performed under the direct commercial sale contract between Northrop Grumman and NAGSMA.			
FY 2013 Plans: Supporting development of maritime modes capability and additional configuration changes that cannot be performed under the direct commercial sale contract between Northrop Grumman and NAGSMA.			
FY 2014 Plans: Will continue to support development of maritime modes capability and additional configuration changes that cannot be performed under the direct commercial sale contract between Northrop Grumman and NAGSMA.			
Title: Technical Support for NATO AGS	0.000	0.535	0.392
Description: Provide engineering and logistics support for NATO AGS development and initial fielding.			
FY 2013 Plans:			

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DATE: April 2013 Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE** 3600: Research, Development, Test & Evaluation, Air Force PE 0305238F: NATO AGS BA 7: Operational Systems Development C. Accomplishments/Planned Programs (\$ in Millions) FY 2012 FY 2013 FY 2014 Providing engineering and logistics support for NATO AGS development and initial fielding. FY 2014 Plans: Will continue engineering and logistics support for NATO AGS development and initial fielding. Title: Test and Evaluation Support for NATO AGS 0.000 0.384 1.368 **Description:** Provide testing and evaluation via the Air Force Flight Test Center. FY 2013 Plans: Conducting preliminary test and evaluation planning with the Air Force Flight Test Center. FY 2014 Plans: Will complete detailed test and evaluation planning with the Air Force Flight Test Center. Title: Management Services for NATO AGS 0.000 0.404 0.411 **Description:** Establish and support a program office for US Government support to NATO for AGS development and initial fielding. Serve as interface to the US program offices and the prime contractor for NATO AGS capability. FY 2013 Plans: Supporting a program office for US Government support to NATO for AGS development and initial fielding. Serve as interface to the US program offices and the prime contractor for NATO AGS capability. FY 2014 Plans: Will continue support of a program office for US Government support to NATO for AGS development and initial fielding. Serve as interface to the US program offices and the prime contractor for NATO AGS capability. **Accomplishments/Planned Programs Subtotals** 0.000 210.109 264.134 D. Other Program Funding Summary (\$ in Millions) FY 2014 FY 2014 Cost To FY 2014 Line Item FY 2012 FY 2013 **Base** OCO Total FY 2015 FY 2016 FY 2017 FY 2018 Complete Total Cost • RDTE: BA07: PE 0305220F: 82.745 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 RQ-4 UAV Remarks

PE 0305238F: NATO AGS

Air Force

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 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0305238F: NATO AGS	

# E. Acquisition Strategy

The U.S. signed the PMOU committing the U.S. Government to NATO-derived cost shares of the AGS prime contract for design, development, demonstration, and initial production of the NATO AGS system. The system will be delivered via a fixed price direct commercial sale contract between Northrop Grumman Integrated Sensor Systems International, Incorporated (NGISSI) & NATO, which was signed on 20 May 2012. The program is managed by NAGSMA.

## 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	₁g to Air
Force performance goals and most importantly, how they contribute to our mission.	

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Air Force

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force

APPROPRIATION/BUDGET ACTIVITY

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

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0305238F: *NATO AGS* 

**PROJECT** 

676001: NATO AGS

DATE: April 2013

Product Developme	Product Development (\$ in Millions)			FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Design / Development of NATO AGS	SS/FFP	NATO AGS Management Agency:Brussels, Belgium,	0.000	0.000		146.247	Dec 2012	203.581	Oct 2013	-		203.581	385.620	735.448	
System Level Configuration Changes	SS/FFP	AFLCMC/WI:Wright Patterson, AFB, OH	0.000	0.000		34.033	Apr 2013	19.373	Oct 2013	-		19.373	19.747	73.153	
Design / Development of RTIP	SS/FFP	AFLCMC/ HB:Hanscom AFB, MA	0.000	0.000		28.506	Jan 2013	39.009	Oct 2013	-		39.009	3.590	71.105	
		Subtotal	0.000	0.000		208.786		261.963		0.000		261.963	408.957	879.706	

Support (\$ in Millions	s)			FY 2	2012	FY 2	:013	FY 2 Ba		FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Technical Support for NATO AGS	SS/FFP	Multiple:Hanscom, WPAFB,	0.000	0.000		0.535	Apr 2013	0.392	Apr 2014	-		0.392	1.169	2.096	
		Subtotal	0.000	0.000		0.535		0.392		0.000		0.392	1.169	2.096	

Test and Evaluation	(\$ in Milli	ons)		FY 2	2012	FY 2	2013		2014 ase	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test and Evaluation Support for NATO AGS	SS/FFP	Multiple:Hanscom, WPAFB, Edwards,	0.000	0.000		0.384	Apr 2013	1.368	Apr 2014	-		1.368	4.497	6.249	
	•	Subtotal	0.000	0.000		0.384		1.368		0.000		1.368	4.497	6.249	

PE 0305238F: *NATO AGS* 

Air Force

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force

**R-1 ITEM NOMENCLATURE** 

**PROJECT** 

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

PE 0305238F: NATO AGS

676001: NATO AGS

DATE: April 2013

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

Management Service	es (\$ in M	lillions)		FY 2	2012	FY 2	2013		2014 ase	FY 2	2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Services for NATO AGS	SS/FFP	Multiple:Hanscom, WPAFB, Pax River,	0.000	0.000		0.404	Dec 2012	0.411	Dec 2013	-		0.411	1.134	1.949	
		Subtotal	0.000	0.000		0.404		0.411		0.000		0.411	1.134	1.949	
			All Prior Years	FY 2	2012	FY:	2013		2014 ase	FY 2	2014 CO	FY 2014 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	0.000	0.000		210.109		264.134		0.000		264.134	415.757	890.000	

#### Remarks

Per Memo from SAF/AQX & SAF/FMB on "Reporting of PMA FY12 Efficiencies" dated 9 Jan 2012, NATO AGS is excluded from PMA tracking.

The Industrial Structure consists of Northrop Grumman (NGISSII) prime contractor, three European-subcontractors, and 14 participating nation industries that will receive direct work; no indirect offsets. The technical support of the NATO AGS program includes MITRE Engineering, U.S. Navy's Triton program office support, U.S. government travel, and supplies. The test and evaluation support of the NATO AGS program includes the AFMC 412 TW support of Flight Testing and Frequency Management by the AFMC 88 CG. The management services support of the NATO AGS program includes Advisory & Assistance Services.

PE 0305238F: NATO AGS

Air Force

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UNCLASSIFIED Exhibit R-4, RDT&E Schedule Profile: PB 2014 Air Force DATE: April 2013 **R-1 ITEM NOMENCLATURE** APPROPRIATION/BUDGET ACTIVITY **PROJECT** 3600: Research, Development, Test & Evaluation, Air Force PE 0305238F: NATO AGS 676001: NATO AGS BA 7: Operational Systems Development NATO AGS Program Schedule **U.S. AIR FORCE** FY 12 FY 13 FY 14 FY 15 **FY 16 FY 17** FY 18 Q1 Q2 Q3 Q4 IOC. Prime Contract Award-AGS  $\nabla$ FOC Design & Development-NATO AGS Flight Test Activity-NATO AGS Air Vehicle Delivery-NATO AGS **Ground Station Delivery-NATO AGS** Design/Develop Mar Mode Test & Eval Sup NATO AGS Tech Sup NATO AGS

PE 0305238F: *NATO AGS* 

Air Force

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

R-1 ITEM NOMENCLATURE

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

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

BA 7: Operational Systems Development

PE 0305238F: *NATO AGS* 

PROJECT

676001: NATO AGS

# Schedule Details

	St	art	E	nd
Events	Quarter	Year	Quarter	Year
Contract Award	3	2012	3	2012
IOC	1	2017	1	2017
FOC	3	2017	3	2017
Flight Test	4	2015	3	2016
Aircraft Delivery	4	2016	2	2017
Ground Station Delivery	4	2016	3	2017
Design and Development Maritime Mode	3	2012	3	2015
Test and Evaluation Support	1	2012	3	2017
Tech Support	1	2012	4	2018

PE 0305238F: *NATO AGS* 

Air Force