

**Interview wt mit ... Northrop Grumman Corporation**  
**Matthew R. Copija**  
**Program Director, NATO AGS**

*1. Somewhat more than three years ago, the AGS NATO project was changed dramatically in response to financial pressures in capitals. Now, a new version of NATO AGS has come along at a critical juncture. NGC as the prime contractor has submitted an offer to NATO. What is different this time from what AGS Industries offered to provide three years ago?*

**ANSWER:**

The original program of record called for a mixed fleet of both manned and unmanned assets that involved substantial development work. NATO also originally looked at developing a multi-national radar, but funding availability and need for earliest fielding of capability made this unaffordable and unexecutable. Since then, studies on what AGS should look like focused on taking advantage of national investments already made to field the earliest capability possible to support NATO operations. Nations looked to those systems already fielded and agreed on an AGS core capability centered on the high-altitude, long-endurance unmanned aircraft system (HALE UAS) capable of providing information vital to the protection of our forces on the ground. Northrop Grumman's RQ-4 Block 40 Global Hawk HALE UAS was chosen as the air segment centerpiece of NATO's AGS program. In late September 2009, 15 nations took a major step toward fielding this operational AGS capability with the signing of a program memorandum of understanding (PMoU) for the NATO AGS core capability.

The Block 40 Global Hawk HALE UAS, an off-the-shelf already fielded and proven capability, is equipped with the state-of-the-art Multi-Platform Radar Technology Insertion Program (MP-RTIP) ground surveillance sensor. The NATO AGS core will provide affordable, operationally capable, low-risk solution, focus on integration and adaptation of existing and proven capabilities, maintain an open architecture approach, incorporate modular/scalable designs, and harness the core capabilities of national industries in each participating nation to provide the earliest possible capability to our forces.

*2. The current UAV Global Hawk (RQ-4 HALE) will be the core system – or at the heart - of the NATO AGS. What distinguishes Global the Hawk as being suitable for this purpose – and what makes it better than others available systems?*

**ANSWER:**

The RQ-4 Block 40 Global Hawk is equipped with the MP-RTIP sensor, which provides simultaneous GMTI (ground moving target indicator) and SAR (synthetic aperture radar) imagery to force commanders. Persistent wide-area GMTI is a critical ingredient to U.S./coalition success in Afghanistan because it robs insurgents of their freedom of undetected movement and surprise. This will provide valuable protection of our forces in harm's way.

The choice of the MP-RTIP sensor provides a state-of-the-art, low-risk, low-cost approach for NATO. The unmanned platform configuration and its inherent identification capability and a network centric approach represents a capability that will perform the full range of NATO missions, from peacekeeping to early detection of emerging crises to full engagement in those situations which threaten the peace. The AGS system will provide real-time data, intelligence, and even target identification to NATO users within and beyond line of sight. This data, seen simultaneously at the main operating base (MOB) and by land commanders using ground stations and other remote devices, will provide valuable foreknowledge necessary to respond to threats to peace with a solution tailored to meet the need.

This capability also has obvious peacetime and civilian applications, including border and coastal surveillance, counter-piracy, drug interdiction, and humanitarian relief in natural disasters. The Global Hawk system has already flown in some of these missions, such as disaster relief in Haiti and hurricane warning and global environment monitoring missions for NASA.

The value of Global Hawk can be expressed in its unique ability to employ a wide array of powerful sensors and sensor configurations at altitudes above 60,000 feet during missions lasting longer than 32 hours. It has the ability to be deployed 2,000 nautical miles from its main operating base with a resulting on-station time exceeding 24 hours, thus ensuring a ready capability for worldwide operations and providing incomparable operational capabilities.

The Global Hawk system has been deployed and has flown more than 35,000 hours in support of coalition operations and has consistently achieved a mission effectiveness rating above 95 percent. Global Hawk have also earned the first airworthiness certification of any UAS. Applying the lessons learned from the system's combat performance, NATO AGS will meet the needs of warfighters for the next 20 years.

*3. How does NATO Hawk differ to the Euro Hawk and why does NGC feel both are required?*

**ANSWER:**

The primary difference between the NATO AGS and Euro Hawk® systems is that the Euro Hawk® is based on the Block 20 Global Hawk configuration instead of the Block 40 and is a German national system. Euro Hawk® will be equipped with a new signals intelligence (SIGINT) mission system developed by Cassidian, providing standoff capability to detect electronic intelligence (ELINT) and communications intelligence (COMINT) emitters. Euro Hawk® will replace the aging fleet of manned Breguet Atlantic aircraft, which have been in service since 1972 and will be retired in 2010.

The NATO AGS system will be owned and operated by NATO and is missionized to meet NATO's requirements and enhanced to support NATO-specific interoperability and communications requirements with a ground-based Air Vehicle Mission Command and Control (AVMC2) Centre and ground stations deployed with field commanders. The Block 40 Global Hawk UAS is equipped with state-of-the-art multi-mode MP-RTIP ground surveillance radar sensor capable of detecting moving and fixed or stationary targets on the ground, and an communicating a ground situation picture to NATO leaders and land commanders through an extensive suite of line-of-sight (LOS) and beyond-line-of-sight (BLOS) long-range, wide-band data links. As a NATO program, the system is the transatlantic solution, involving key defense industries from all 15 participating nations, harvesting national investments already made for the good of the whole Alliance.

*4. Since this programme involves most NATO member-states in it, which contributions from other partner enterprises will be involved and how will NGC cooperate with them?*

**ANSWER:**

Northrop Grumman will be the prime contractor for the NATO AGS program, and leads an industrial team of national industries from all 15 nations, applying their core competencies with direct work in the program. Leading the team as major subcontractors are EADS (Germany), Selex Galileo (subsidiary of Finmeccanica in Italy), General Dynamics Canada, and Kongsberg (Norway). The Global Hawk air segment will include several European enhancements, and the ground segment will be wholly European, making it available for national re-use in other programs. The 15 participating nations have agreed to fund the acquisition of the NATO AGS core system, and officially signed the PMoU in September

2009 to solidify their commitment; discussions are underway with other NATO nations and we expect several to join along the way.

Since the beginning, the entire program and all its segments – air, ground and mission operation support – have been designed to be transatlantic, taking the best technologies and the best national industries from both sides of the Atlantic. A basic underpinning of the program is Northrop Grumman's interest and willingness to share technology and direct work in the program. The NATO nations have agreed with our plan to share that work in proportion to national financial contributions during the acquisition phase. The United States has long emphasized the need for burden sharing, and this program is a model for transatlantic cooperation, with Europe and Canada contributing more than 60 percent of the funding for the program.

*5. How do you see the programme of work progressing? Considering the urgency of the NATO AGS, when do you believe this "alliance" of partners will have the programme ready for deployment?*

**ANSWER:**

This program is designed to maximize use of off-the-shelf components and minimize development. The Global Hawk air vehicle is already fielded and proven, and the the MP-RTIP radar is in flight test and production. Assuming contract award in 2011, we can begin system design immediately and begin to address those NATO unique requirements to field the earliest possible capability for our soldiers. NATO hopes to have AGS operational by 2014 and will use Naval Air Station Sigonella in Italy as the main operating base.

NATO AGS represents the first international customer for the Block 40 Global Hawk. However, there is strong and growing international interest in the wide variety of Global Hawk capabilities. NATO AGS represents the first international application of the Block 40 Global Hawk and follows the German Ministry of Defence's Euro Hawk®, the SIGINT version of the Block 20 configuration. Other nations including Japan, Korea, Singapore, Spain, Norway and Canada have all expressed interest in the Global Hawk. These nations have recognized the unique capabilities of Global Hawk and have developed concepts of operations which include drug interdiction, illegal immigration, border and coastal surveillance, and disaster relief support.

It is easy to see why Global Hawk has become the intelligence, surveillance and reconnaissance, or ISR, platform of choice and interest continues to grow. In September 2010, the U.S. Air Force deployed Global Hawks worldwide to Pacific Command at Andersen Air Force Base, Guam, and European Command at Sigonella Air Base, Italy, which are considered forward operating locations. Over the next few years, Air Combat Command will increase annual combat flight hours from current 10,000 hours logged per year to nearly 64,000 hours.

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