Developing US European Command's Intelligence, Surveillance, and Reconnaissance Strategy for Fiscal Years 2010 through 2015

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[Intelligence] analysts . . . must open their doors to anyone who is willing to exchange information, including Afghans and [nongovernmental organizations] as well as the U.S. military and its allies.

—Maj Gen Michael T. Flynn, USA

Our number one priority is the current fight, which means the fight in Central Command," remarked Gen Roger Brady, commander of United States Air Forces in Europe (USAFE), highlighting a major challenge that faces most of the other theater component and combatant commanders.[1] As long as the United States continues to focus on Afghanistan and Iraq, the nation's war-fighting resources will remain dedicated to prevailing in those wars.[2] This article examines how America's emphasis on United States Central Command (USCENTCOM) adversely affects intelligence, surveillance, and reconnaissance (ISR) operations of other combatant commands (COCOM); it does so by analyzing United States European Command's (USEUCOM) ability to execute an effective ISR strategy in pursuit of its intelligence requirements. The article begins with a brief discussion of the impact of ISR operations in USEUCOM during the 1990s and then addresses national and Air Force–specific strategies and the ways they affect that command. Furthermore, it offers some tangible solutions designed to mitigate such problems as gaps in ISR collection, primarily caused by underresourcing, that, if adopted, would allow USEUCOM to better perform its critical ISR mission.

Specifically, the article suggests a three-tiered mitigation strategy: (1) a long-term solution in which USEUCOM's ISR planners alleviate the command's collection gaps by using the North Atlantic Treaty Organization's (NATO) Alliance Ground Surveillance (AGS) system, scheduled for delivery in 2014; (2) a midterm solution that calls for teaming with the British Royal Air Force (RAF) to begin planning the integration of US-purchased RC-135 Rivet Joint aircraft into USEUCOM's ISR collection profiles; and (3) a near-term solution whereby USEUCOM engages with the German Air Force (GAF) to develop tactics, techniques, and procedures (TTP) for combined post-mission processing of EuroHawk-derived signals intelligence to meet the command's ISR collection needs. Since most ISR assets continue to support USCENTCOM, other theaters competing for remaining scarce ISR resources (such as USEUCOM) should develop requirements-based strategies to better integrate current and planned allied capabilities and thereby offset their collection shortfalls.

Intelligence, Surveillance, and Reconnaissance in US European Command: The 1990s

USEUCOM enjoyed a high point of theater ISR collection operations in the 1990s due to the Balkans crises in Croatia, Bosnia and Herzegovina, and Kosovo. In 1995 the Bosnian civil war entered its third year; by that summer the international community had coalesced to put an end to the conflict, initiating an air campaign that primarily targeted the Bosnian Serbs' heavy weapons in an attempt to coerce them to the negotiating table. According to one study, "By obtaining needed combat information, ISR platforms played a key role in the planning, execution, and combat assessment phases of Deliberate Force," thus helping verify Bosnian Serb compliance with the international community's demands.[3] The U-2 and Predator in particular played key roles in monitoring the Bosnian Serbs' heavy weapons sites and assessing "whether the Serbs were withdrawing, or at least demonstrating an intention to withdraw."[4]

ISR contributed significantly to the success of Operation Deliberate Force—not only to real-time strike decisions but also to highlighting the contributions of allied ISR capabilities. In fact, "five nations employed 13 different manned or unmanned [reconnaissance] platforms for purposes that included monitoring the movement of heavy weapons out of the Sarajevo total-exclusion zone . . . towards the weapons-collection points, as well as making assessments of directed targets and battle damage."[5] British, French, German, and Dutch reconnaissance aircraft joined US

ISR assets in a combined air tasking order and contributed to the total information available to allied campaign planners.[6] Validating the criticality of both US and allied ISR assets to the joint and combined fight, Deliberate Force also demonstrated the seamless integration of allied ISR capabilities into US operations.

The Kosovo crisis spurred renewed violence in the Balkans from March to June 1999, affecting US ISR programs. It also had an impact on the availability of future ISR assets and accentuated shortfalls in connecting allied ISR capabilities to the United States' federated intelligence architecture. In an after-action report on Operation Allied Force, Gen Hugh Shelton, chairman of the Joint Chiefs of Staff, and Secretary of Defense William Cohen notified Congress that the Department of Defense (DOD) was increasing investments in ISR programs by approximately $1.09 billion (for sensors; aircraft; and tasking, production, exploitation, and dissemination [TPED] capabilities) in both supplemental spending and in the 2001 through 2005 budgets.[7] In their view, "better sensors along with improved processing and dissemination capabilities are needed to provide a capability to counter any future adversary."[8] The low-density/high-demand (LD/HD) nature of manned ISR aircraft such as the U-2 and the RC-135, which were "especially critical since they also support multiple intelligence activities in other areas around the world," heightened the need for more remotely piloted aircraft (RPA) and greater TPED capacity.[9] Thus, DOD leaders recognized how competing intelligence requirements impeded their ability to provide mission-ready ISR forces in sufficient numbers. Even if they managed LD/HD assets more carefully, they still could not guarantee their availability to all regional commanders.

Finally, the chairman of the Joint Chiefs of Staff and secretary of defense stressed that "the Department must develop a clear policy and implementation plan to explain when and how coalition partners can be connected to U.S. networks and when and how data can be shared with those partners."[10] In their view, increased reachback to US-based processing capacity represented one solution to the United States' problem with TPED. In addition, they believed that allied partners who contributed ISR assets to a joint and combined campaign should share in the intelligence output. We should take the recommendation from lessons learned in Kosovo one step further by having our allies integrate their sensor and TPED capacity into the US intelligence community's federated architecture and assist in the production process. The simple step of creating seamless US and allied intelligence production and information sharing, still not a reality 10 years following the Kosovo after-action report, could readily help the USEUCOM combatant commander begin to meet collection requirements that remain unfulfilled due to limited ISR resources.

Unfortunately, the DOD's calls for greater ISR investments and process overhauls did not come in time to meet the difficulties caused by the terror attacks of 11 September 2001 (9/11). Still reconstituting after Allied Force, US ISR assets and personnel surged to meet USCENTCOM's demands during Operation Enduring Freedom in October 2001. These accelerated activities exceeded steady-state operating levels for the service's ISR assets and continue to affect the needs of other COCOMs. Today, the majority of US ISR assets collect data for USCENTCOM, while residual assets meet the requirements of the other COCOMs on a shared or rotational basis.

Review of Intelligence, Surveillance, and Reconnaissance Strategy

US national strategy documents provide guidance for leveraging our allies' ISR capabilities to meet USEUCOM's needs. The *National Security Strategy of the United States of America* (2006) stresses nine essential tasks for safeguarding American and allied inter-

ests. This article seeks to mitigate three of those issues: combating global terrorism, defusing regional conflicts, and preventing the proliferation of weapons of mass destruction (WMD).[11] Aside from strengthening US intelligence capabilities—especially against the WMD threat—working with allied nations and strengthening relations with them are critical to carrying out these tasks. Leveraging NATO capabilities offers one way of making these partnerships even more effective.[12] For example, the *National Strategy for Combating Terrorism* (2006) calls for expanding partner capacity in the realm of intelligence and supplying friendly states with the training, equipment, and assistance they need to partner with the United States.[13]

The *National Intelligence Strategy of the United States of America* (2009) complements the two aforementioned national strategies with regard to priorities for the intelligence community writ large. The first two mission objectives outlined by the director of national intelligence deal with combating extremism and WMD proliferation, while the third objective concerns strategic intelligence and warning as well as monitoring events so that "policymakers, military officials, and civil authorities can effectively deter, prevent, or respond to threats and take advantage of opportunities."[14] Interestingly, the national intelligence strategy also calls on the intelligence community to improve collaboration and "conduct strategic outreach to key external centers of knowledge and expertise."[15] The director's message on utilizing allied partnerships is clear: we can achieve efficiencies of scale in meeting these global challenges only by collaborating with our allies.

Making use of and expanding allied capabilities as well as efficiently managing LD/HD ISR assets are DOD-level issues. The *Quadrennial Defense Review Report* (2006) attempted to address the problem of managing LD/HD assets and developing an ISR strategy by establishing a Joint Functional Component Command—Intelligence, Surveillance, and Reconnaissance under US Strategic Command to "synchronize strategy and planning and integrate all national, theater and tactical ISR capabilities."[16] This command is responsible for arbitrating competing collection requirements among other commands and allocating ISR resources, but with US intelligence concentrating on USCENTCOM, the command's processes do not guarantee an increase in assets for competing COCOMs. The 2006 quadrennial defense review (QDR) also addressed the criticality of bolstering allied capabilities and directed investments to establish NATO's planned intelligence fusion cell, which would reside within USEUCOM.[17] If used effectively, the cell could help meet the command's intelligence requirements.

The QDR of 2010 continues the trend of expanding the DOD's ISR capabilities through greater investments in "long-dwell [RPAs], such as the Predator, Reaper, and other systems."[18] Already on track to provide enough Predator and Reaper RPAs to raise the number of operational orbit areas in USCENTCOM from 37 to 50 by fiscal year 2011, the QDR of 2010 commits the Air Force to increase this number to 65 by fiscal year 2015; the Army will expand all classes of RPAs.[19]

The intention to use this additional ISR capability for counterinsurgency, stability, and counterterrorism operations creates problems for USEUCOM, however.[20] As Secretary of Defense Robert M. Gates pointed out during the official release of the 2010 QDR, "we have, to a considerable extent, stripped the other combatant commands of much of their ISR capability to put it into the fight in Iraq and Afghanistan. The reality is, there is huge demand all over the world for these capabilities—in the drug fight, here in this hemisphere, and a variety of places around the world."[21] As long as contingency operations in Afghanistan and Iraq continue, the QDR's planned increase in ISR investments will largely go to meet the requirements of those conflicts, and stripping ISR assets from other commands will proceed. However, the 2010 QDR does continue the theme of leveraging the capabilities of partner nations and learning from and training

with our allies: "As ongoing conflicts in Afghanistan and Iraq make clear, these dimensions of U.S. defense strategy have never been more important."[22] USEUCOM must look toward greater engagement with its allies to overcome intelligence-collection shortfalls and information gaps.

At the service level, the Air Force's security cooperation strategy of 2006 aligns with the director of national intelligence's vision of increased intelligence cooperation with partner nations. In fact, this strategy states that "intelligence relationships provide a means of unique access to data that the US might otherwise be unable to obtain."[23] If our partners were able to access such information, we could leverage their capabilities to realize US "global and regional objectives."[24] The security cooperation strategy speaks directly to USEUCOM's inability to satisfy all of its collection needs due to a lack of ISR resources; furthermore, from a larger DOD perspective, the strategy could serve as a possible blueprint to capitalize on allied capabilities to meet COCOMs' needs.

Air Force security cooperation objectives are important, but do they coincide with the Air Force's ISR strategy goals? Even though the service's ISR strategy of 2008 does not mention partnering with allies to satisfy national or COCOM collection demands, it does not contradict the Air Force security cooperation strategy. The ISR strategy does stress the criticality of "global cross-domain integrated knowledge dissemination."[25] The distributed common ground system's (DCGS) intelligence-processing architecture is the heart of cross-domain integration. Allies investing in ISR capabilities compatible with the DCGS, like the GAF's EuroHawk (RQ-4 Block 20), could easily integrate into that system's architecture. The Air Force's ISR strategy of 2010 already constitutes a shift toward this type of thinking. It not only stresses the importance of sharing TTPs with allies to improve interoperability and optimize the allocation of limited ISR resources, but also mentions current efforts to integrate the RAF and Royal Australian Air Force into the US Air Force's DCGS architecture.[26] Lessons learned from this process will prove useful in incorporating NATO and other key allies.[27] Thus, the path for eventually integrating the GAF's EuroHawk appears open, especially in a federated service-oriented architecture with multilevel security controls for postmission processing, as envisioned in the 2010 ISR strategy.[28]

USEUCOM's strategy of active security aligns exactly with three of the nine essential tasks found in the US national security strategy of 2006 (i.e., combating global terrorism, defusing regional conflicts, and preventing the proliferation of WMDs). Under its active security strategy, USEUCOM's mission statement calls for maintaining forces for global operations, securing strategic access and global freedom of action, strengthening NATO, promoting regional stability, and countering terrorism.[29] The command does this through two plans designed to prevent regional conflicts and through three functional plans, two of which are specifically designed to combat terrorism and prevent the proliferation of WMDs. The third functional plan, which focuses on theater force posture and transformation, deems teaming with partners just as important as maintaining theater security with a forward US presence. A USEUCOM report succinctly notes that "the posture of our forces and installations is shaped as much by our security cooperation activities as by our requirements for warfighting."[30] Thus, a large part of USEUCOM's strategic approach to dealing with regional threats involves "mitigat[ing] risk while the [United States] is at war through building partner capacity and enhancing interoperability."[31]

The Way Ahead: Utilizing NATO Capabilities

Though traditionally lacking in quantity and quality, the airborne ISR capacity of our European allies has seen significant improvement in both areas. As NATO prepares for the scheduled full operational capability

of its interoperable AGS system in 2012–14, increased cooperation with the alliance offers a potential long-term solution for USEUCOM's shortage of airborne ISR.[32] In September 2007, the 21 nations participating in AGS development abandoned an initial multiplatform concept in favor of a single air vehicle approach utilizing the RQ-4 Global Hawk Block 40. The Multi-Platform Radar Technology Insertion Program's ground surveillance radar will serve as the primary sensor.[33] The AGS's "core" segment includes line-of-sight and beyond-line-of-sight connectivity, as well as on-site data processing and exploitation capabilities. With Sigonella Air Base (AB), Italy, designated as the main operating base, NATO for the first time will enjoy dedicated ISR collection.[34] The most promising benefits of the AGS core segment, however, include its fully equipped interfaces and interoperability with national ISR systems that will enable it to become "a system of systems."[35] This is no small undertaking for NATO. Challenges in developing proper TTPs for platform and core-segment mission operations will abound.

Development will prove daunting because NATO's Intelligence Warning System, with the alliance's Situation Centre at its hub, is primarily an analytical function that relies on information feeds from a variety of sources. The latter include NATO-releasable messages from member states and information provided by the organization's political and military committees. Leaving NATO dependent on national architectures and unable to take advantage of potential synergies among those architectures, this structure offered little added value to the entities or nations providing the bulk of the information (i.e., the US intelligence community and USEUCOM).[36] In fact, "the ability of a nation to provide intelligence, the willingness of a nation to share this intelligence and the time required for this intelligence to be disseminated to NATO are all constraining factors which compromise the overall NATO intelligence effort."[37] The full operational capability of NATO's AGS in 2014 will change this dynamic. By acquiring an indigenous collection capability, NATO will be both a collector and producer of intelligence, no longer dependent solely on member states. European ISR strategists such as Klaus Becher see this as an opportunity for greater transatlantic cooperation and integration, through which "the goal would then be to make the most, for European purposes, of any future NATO intelligence analysis centres by attracting as much valuable US input with as little distortion as a result of US structural domination as possible."[38] To attain this goal, however, "Europe's terms of access to US-controlled intelligence pools on global security issues will also depend on the practical value of European assets to US intelligence."[39]

Fielding the AGS provides a unique opportunity to create the type of cooperative synergy envisioned by Becher, in which all stakeholders stand to gain meaningful outputs. For instance, the pending full operational capability of the AGS offers USEUCOM the chance to fill collection gaps. As DCGS stakeholders, USAFE and USEUCOM maintain the knowledge and expertise to conduct RQ-4 operations and postmission processing in their areas of responsibility. Both commands should engage with NATO now to develop the requisite TTPs for the proper core system utilization that the alliance currently lacks. This would make sense, given the projected US basing of three new Block 30 RQ-4s at Sigonella AB by October 2010.[40] In fact, "what makes Sigonella unique is the number of Global Hawk fleets due to take up residence there. Apart from the Air Force, the US Navy is likely to deploy Global Hawks at the base, while NATO plans to bring all eight of its Block 40 Alliance Ground Surveillance Global Hawks there."[41] Combined US-NATO Global Hawk operations and associated postmission processing could produce obvious synergies. By helping NATO employ its system, USEUCOM could make this European asset relevant to US intelligence operations.

Helping NATO develop TTPs for postmission processing offers a way of gaining entrée to AGS sensors, but USEUCOM should also advocate greater alliance use of US

intelligence-collection capabilities to foster the enhanced atmosphere of cooperation proposed by Becher. Expanded NATO access would improve the effectiveness of AGS operations and lead to a revolution in intelligence sharing, given the security classification barriers the US intelligence community currently uses to deter unwanted use. As a 2005 RAND study on reforming the intelligence process argued, "for the Intelligence Community, operational innovation must focus on changing and perhaps completely rethinking core functions."[42] In 2014 USEUCOM will be in a better position to leverage AGS capability by helping NATO navigate the uncharted waters of collecting and processing operational intelligence at the start of the AGS program. This initiative will produce far-reaching effects by complementing ongoing efforts of the Information Sharing Integrated Process Team sponsored by the DOD's ISR Task Force. Drawing largely on the experiences of working with our allies in Afghanistan, the team seeks to transcend cultural, technical, and security classification barriers that prohibit the free exchange of intelligence information with our allies.[43] At a minimum, the team's findings will lead to a transformation of the DOD's foreign disclosure and classification procedures, if not its core intelligence processes. USEUCOM could set the new standard for the DOD's information-sharing process with our allies.

The Way Ahead: Utilizing Bilateral Relationships

Existing bilateral partnerships contain mid- and near-term solutions to USEUCOM's ISR collection gaps. Many changes are under way in developing and fielding allied capabilities that promise to alleviate the previously discussed dependence on US systems. Both the RAF and GAF are in the process of leveraging and procuring the United States' ISR technologies to meet their national intelligence requirements. Nothing prevents USEUCOM and USAFE from working with our allies to fully integrate their systems into USEUCOM's ISR collection profiles and fill the command's collection gaps. Because of severe cost overruns of Project Helix, the replacement program for Britain's ageing Nimrod reconnaissance aircraft, the British approached the United States in 2007 to inquire about procuring three RC-135 Rivet Joint aircraft.[44] With congressional approval, the United States and Britain are now engaged in a foreign military sales contract to deliver all of these aircraft. Both Headquarters US Air Force and the director of national intelligence describe this effort as a "win-win" for both parties and an opportunity to improve integration.[45] Fully in line with national strategy direction to engage with allies and harness their capabilities, the main objectives of this contract address USEUCOM's "capability gaps through operational burden sharing" and focus on "maintaining and/or increasing manned signals intelligence support to CENTCOM and EUCOM [areas of responsibility]."[46] With the first aircraft scheduled for delivery in 2013, RAF aircrews are now in training on aircraft employment and utilization.[47] The RAF's RC-135 aircraft will provide a unique midterm solution to help satisfy USEUCOM's ISR collection gaps. That command should engage with the RAF now, through existing bilateral programs, to leverage Air Combat Command's in-theater RC-135 expertise at RAF Mildenhall to plan the integration of the RAF's RC-135 aircraft into its theater ISR collection profiles.

A near-term opportunity to overcome USEUCOM's shortfalls in collection presents itself in the GAF's fielding of the RQ-4 Block 20 EuroHawk RPA. After a transatlantic test flight and associated sensor demonstration from Nordholz, Germany, in 2003, the GAF signed a memorandum of understanding with the DOD in May 2006 that set the parameters for proceeding with a direct commercial sale contract for five RQ-4s.[48] The first EuroHawk vehicle rolled out on 8 October 2009 in Palmdale, California.[49] Current plans call for incorporating all five RQ-4 aircraft into the GAF's 51 Squadron at Jagel AB, Schleswig-Holstein, by 2011.[50] The GAF plans to use the RQ-4s in-theater

rather than deploy them to Afghanistan. Germany is also procuring the Heron 1, a medium-altitude RPA from Israel, for use in overseas contingency deployments. The GAF-operated RQ-4s will give USEUCOM a unique teaming opportunity to increase its ISR collection in-theater.

The United States can engage the GAF by offering its expertise in developing TTPs for postmission processing of EuroHawk-derived signals intelligence. Because the GAF procurement effort consists of the air vehicles only and not the sensors (in development by the European Aeronautic Defence and Space Company [EADS]), the Germans will not get a turnkey system. The electronic intelligence sensor demonstration in 2003 showed that the GAF will confront significant mission and postmission processing issues; according to a GAF spokesman, "there was surprise at the huge amount of radar emitters (merchant ships, airliners) that showed up in addition to the prepared profiles."[51] Once airborne, the electronic intelligence sensor began collecting data across a 500 km radius, downlinking a vast amount of sensor data that quickly overwhelmed the electronic intelligence ground support station (EGSS).[52] The GAF realized it had "more data than [it] could process. The EGSS urgently needs to be expanded in capability."[53] This situation offers an excellent partnership opportunity because a DCGS stakeholder like USEUCOM could offer tremendous expertise to help the GAF normalize RQ-4 operations and thereby gain access to GAF sensors. USAFE should expand its existing bilateral intelligence programs (traditionally focused on information sharing) to more dynamic agreements that include combined postmission processing opportunities with allied militaries such as the GAF. Completely in accordance with the Air Force's vision of a federated, multilevel, security-service-oriented architecture for its ISR capabilities, the initiative of integrating GAF operators into USAFE's DGS-4 deployable ground station—or, conversely, USAFE operators into the GAF's EGSS—would constitute a definite intelligence gain for USEUCOM by helping mitigate the command's gaps in ISR collection. The GAF, in turn, could use this partnership opportunity to enhance its EGSS capability smartly—a win-win situation for all parties.

Conclusion

Despite ongoing DOD investments in ISR platforms, these aircraft will remain LD/HD assets as long as the United States engages in combat in USCENTCOM. The Balkans conflicts of the 1990s proved that US and allied ISR capabilities are force multipliers in the modern battlespace, prompting senior DOD leaders to take the right step of calling for more ISR resources. These same leaders also acknowledged, however, that the increased demand for ISR would leave them hard pressed to field sufficient numbers of ISR assets to meet global needs. After the 9/11 attacks and subsequent surging of ISR forces to the USCENTCOM area of responsibility, competing COCOMs' ISR requirements could be met only by sharing those forces or rotating them through theaters. This is still the case—a dilemma that causes collection gaps in all commands. Both the national security and intelligence strategies, as well as the Air Force's security cooperation and intelligence strategies, recognize that the DOD's ISR forces and capabilities are stretched thin. National strategic direction advises war-fighting commands to partner with allies and utilize the latter's capabilities to help meet the needs of US national intelligence, a field in which we can easily realize synergistic efficiencies by cooperating with allies.

Given that Pres. Barak Obama's Afghanistan strategy calls for a surge in US forces and capabilities through 2011, USEUCOM must continue to look to other sources to mitigate its ISR collection gaps. In light of significant advances in allied ISR capabilities, teaming with NATO, the RAF, and the GAF offers a unique opportunity for USEUCOM to bring about a revolution in intelligence sharing that could prove to be a benchmark of security cooperation success for other COCOMs to emulate. ✪

Notes

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