

# **Developing a US European Command Intelligence, Surveillance, and Reconnaissance Strategy for FY 2010–15**

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*Intelligence analysts . . . must open their doors to anyone who is willing to exchange information, and this includes Afghans and non-governmental organizations as well as the US military and its allies.*

—Maj Gen Michael T. Flynn, US Army

“Our number one priority is the current fight, which means the fight in Central Command,” said Gen Roger Brady, commander of the US Air Forces in Europe (USAFE), highlighting a major challenge facing most of today’s theater component and combatant commanders.<sup>1</sup> As the United States continues to fight overseas contingency operations (OCO) in Afghanistan and Iraq, the nation’s war-fighting resources remain dedicated to prevailing in today’s wars.<sup>2</sup> This study examines how America’s OCO focus in the US Central Command (USCENTCOM) impacts the operations of other commands by analyzing US European Command’s (USEUCOM) ability to execute an effective intelligence, surveillance, and reconnaissance (ISR) strategy in pursuit of its intelligence requirements.

To begin this discussion, the impact of ISR operations in USEUCOM during the 1990s is introduced, followed by national and Air Force-specific strategies and their impact on USEUCOM’s strategy of active security. The topics then turn to specific threats to US national security interests in the USEUCOM area of responsibility (AOR), the command’s responsibilities versus these threats, and USEUCOM’s ability to meet its responsibilities and requirements with allocated ISR resources.

I propose a three-tiered mitigation strategy based on this information. For a long-term solution, USEUCOM ISR planners can mitigate command collection gaps through the use of the North Atlantic Treaty Organization’s (NATO) alliance ground surveillance (AGS) system, scheduled for delivery in 2014. As a mid-term solution, the United States would team with the Royal Air Force (RAF) to begin planning the integration of US-purchased RC-135 Rivet Joint aircraft into

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USEUCOM ISR collection profiles. Finally, in the near term, USEUCOM can engage with the German Air Force (GAF) to develop tactics, techniques, and procedures (TTP) for combined postmission processing of EuroHawk-derived signals intelligence (SIGINT) to meet command collection requirements. With most ISR assets still dedicated to supporting OCO in USCENTCOM, I contend that other theaters competing for remaining scarce ISR resources—such as USEUCOM—should develop requirements-based collection strategies that better integrate current and planned allied capabilities to offset collection shortfalls.

### **ISR in USEUCOM—The 1990s**

USEUCOM witnessed a high point of theater ISR collection operations in the 1990s due to the Balkan crises in Croatia, Bosnia-Herzegovina, and Kosovo. In 1995 the Bosnian civil war was in its third year; by that summer, the international community coalesced to put an end to the conflict by attempting to coerce the Bosnian Serbs to the negotiating table through an air campaign primarily targeting their heavy weapons. Operation Deliberate Force lasted from 30 August to 14 September 1995, with airborne ISR sensors playing a critical role in verifying Bosnian Serb compliance “by obtaining needed combat information in the planning, execution and combat assessment phase” of the operation.<sup>3</sup> The U-2 and Predator played key roles in monitoring Bosnian Serb heavy weapons sites and assessing “whether the Serbs were withdrawing, or at least demonstrating an intention to withdraw.”<sup>4</sup>

ISR contributions to the success of Deliberate Force were significant not only in making real-time strike decisions but also in highlighting the contributions of allied ISR capabilities. In fact, “five nations employed 13 different manned or unmanned recce [reconnaissance] platforms for purposes that included monitoring heavy weapons as well as making assessments.”<sup>5</sup> British, French, German, and Dutch tactical and select strategic reconnaissance aircraft were integrated with US ISR assets in a combined air tasking order (ATO) to add “to the total information available to the combined air and space operations center.”<sup>6</sup> In sum, while Deliberate Force validated both the criticality of US and allied ISR assets to the joint/combined fight, it also demonstrated how allied ISR capabilities could be seamlessly integrated with US operations.

Renewed violence in the Balkans from March to June 1999 due to the Kosovo crisis affected US ISR programs, had an impact on future ISR asset availability, and highlighted shortfalls in connecting allied ISR capabilities to the US federated intelligence architecture. In an after-action lessons learned report to Congress on Operation Allied

Force, the chairman of the Joint Chiefs of Staff (CJCS), Gen William L. Shelton, and Secretary of Defense (SecDef) William S. Cohen, notified Congress of the Department of Defense's (DOD) increased investments in ISR programs by approximately \$2.5 billion for sensors; aircraft; and tasking, production, exploitation, and dissemination (TPED) capabilities.<sup>7</sup> In their view, "better sensors with improved dissemination capabilities are needed to provide a capability to counter any future adversary."<sup>8</sup> The critical need for more remotely piloted aircraft and greater TPED capacity was especially compelling because of the low density and high demand (LD/HD) of manned ISR aircraft, such as the U-2 and the RC-135. These aircraft were "especially critical since they also support multiple intelligence activities in other areas around the world."<sup>9</sup> Thus, DOD leaders were aware of how competing intelligence requirements impeded their ability to provide combat-mission-ready ISR forces in sufficient numbers. LD/HD assets needed to be more carefully managed; even then, their availability could not be guaranteed.

Finally, the CJCS and SecDef stressed that "the Department must develop a clear policy and implementation plan to explain when and how coalition partners can be connected to US networks and how data can be shared with those partners."<sup>10</sup> In their view, one solution to the US TPED challenge was through increased reach-back to US-based processing capacity. In addition, they believed that allied partners who were contributing ISR assets to a joint/combined campaign should be able to benefit from and share in the intelligence output. This study takes the Kosovo lessons-learned recommendation one step further and argues that our allies should integrate their sensor and TPED capacities into the US intelligence community's (IC) federated architecture and assist in the production process. This simple step of creating seamless US and allied intelligence production and information sharing, still not a reality 10 years after the Kosovo after-action report, could readily help the USEUCOM combatant commander begin to meet unfulfilled collection requirements due to limited ISR resources.

Unfortunately, the DOD calls for greater ISR investments, and process overhauls did not come in time to meet the challenges caused by the terror attacks of 9/11. Still reconstituting after Operation Allied Force, US ISR assets and personnel surged to meet USCENTCOM requirements during Operation Enduring Freedom in October 2001. The surge in ISR operations exceeded steady-state operating levels for service ISR assets and continues to impact the requirements of other combatant commanders (COCOM). Today, USCENTCOM collection requirements absorb the majority of US ISR

assets, with other COCOM requirements met by residual US ISR assets on a shared or rotational basis.

### **ISR Strategy Review**

This US ISR strategy review will not only reemphasize and highlight US priorities but also offer strategic areas where competing theaters can explore ways to leverage allied ISR capabilities to meet their needs. The 2006 national security strategy (NSS) stresses three major threats to American and allied interests: global terrorism, regional conflicts, and weapons of mass destruction (WMD).<sup>11</sup> Aside from strengthening US intelligence capabilities—especially against the WMD threat—working with allied power centers and strengthening relations with them are critical to countering these threats. The leveraging of “NATO capabilities must be accelerated” to strengthen this partnership and make it more effective.<sup>12</sup> America’s 2006 *National Security Strategy for Combating Terrorism* takes this one step further and calls for expanding partner capacity in the realm of intelligence and providing friendly states with the training, equipment, and assistance they need to partner with the United States.<sup>13</sup>

The 2009 national intelligence strategy (NIS) complements the two aforementioned national strategies in the priorities for the IC writ large. The first two mission objectives outlined by the director of national intelligence (DNI) deal with combating extremism and WMD proliferation. The third objective concerns strategic intelligence and warning and the monitoring of events so “policymakers and military officials can effectively deter, prevent, or respond to threats and take advantage of opportunities.”<sup>14</sup> Interestingly, the NIS also calls on the IC to improve collaboration and “conduct strategic outreach to key external centers of knowledge and expertise.”<sup>15</sup> The DNI’s message on leveraging allied partnerships is clear: due to worldwide threats of extremism, WMDs, and the necessary strategic warning nation states require, efficiency of scale in meeting these global challenges can be achieved only through collaboration with our allies.

Leveraging and expanding allied capabilities and coming to terms with efficiently managing LD/HD ISR assets are DOD-level issues. First, to address the problem of LD/HD asset management and developing an ISR strategy, the 2006 quadrennial defense review (QDR) established a joint functional component command (JFCC)-ISR under US Strategic Command to “synchronize strategy and planning and integrate all national, theater and tactical ISR capabilities.”<sup>16</sup> JFCC-ISR is responsible for arbitrating competing command collection requirements and allocating ISR resources. With US intelligence focused on

USCENTCOM, however, JFCC-ISR processes do not guarantee an asset increase for competing COCOMs. Secondly, the QDR also addressed the criticality of bolstering allied capabilities and directed investments to stand up NATO's planned intelligence fusion cell, which would reside within USEUCOM. The fusion cell could help service the command's intelligence requirements if leveraged effectively.

The 2010 QDR continues the trend of expanding DOD ISR capabilities through greater investments in "long-dwell unmanned aircraft systems (UAS), such as the Predator and Reaper."<sup>17</sup> Already on track to grow the number of Predator/Reaper orbits from 37 to 50 by fiscal year (FY) 2011, the Air Force is now committed to increasing the number to 65 by FY 2015; the Army will expand all classes of UASs.<sup>18</sup>

Problematic for USEUCOM, however, is that this increase in ISR capability is intended for counterinsurgency, stability, and counterterrorism operations.<sup>19</sup> As Secretary Gates pointed out during the official release of the QDR, "We have to a considerable extent stripped the other combatant commands of much of their ISR capability to put into the fight in Iraq and Afghanistan. The reality is that huge demands all over the world are for these capabilities."<sup>20</sup> As long as contingency operations in Afghanistan and Iraq are ongoing, the QDR's increase in ISR investments will largely go to meet the requirements of those conflicts. The stripping of ISR assets from other commands will continue. The 2010 QDR continues the theme of leveraging partner capacities as an "important dimension of US defense strategy."<sup>21</sup> USEUCOM must look toward greater engagement with its allies to overcome intelligence collection shortfalls and information gaps.

At a service level, the Air Force's 2006 *Security Cooperation Strategy* (SCS) is in line with the DNI's vision of increased intelligence cooperation with partner nations. In fact, the SCS states that "intelligence relationships provide a means of unique access to data that the US might be otherwise unable to obtain."<sup>22</sup> However, US partners must have the capabilities and the capacity to obtain such information, and, if they do, these capabilities can be used to satisfy US "global and regional objectives."<sup>23</sup> The SCS speaks directly to USEUCOM's dilemma of not being able to satisfy all of its collection requirements due to lack of ISR resources and, from a DOD perspective, provides a possible strategy for leveraging allied capabilities to meet COCOM needs. This is critically important in light of the UK's RC-135 foreign military sales (FMS) procurement effort and the GAF's direct commercial sale (DCS) effort to procure the RQ-4 Global Hawk.

Air Force security cooperation objectives are important, but do they coincide with Air Force ISR strategy goals? A review of the service's 2008 strategy for ISR lacks any mention of partnering with al-

lies, expanding allied capacity, or leveraging allied unique ISR capabilities to satisfy US national or COCOM collection requirements. This does not mean that the SCS and ISR strategies contradict each other. While there is no specific mention of partnering with allies, the Air Force's ISR strategy stresses the criticality of "global cross-domain integrated knowledge dissemination."<sup>24</sup> At the heart of this effort is the distributed common ground station (DCGS) intelligence processing architecture. Allied investments in ISR capabilities compatible with DCGS, like the GAF's RQ-4 procurement effort, could be easily integrated into the Air Force's DCGS architecture.

USEUCOM's strategy of active security is fully in line with the three major threats found in the 2006 US NSS. USEUCOM's mission statement calls for maintaining ready forces for global operations, securing strategic access and global freedom of action, strengthening NATO, promoting regional stability, and countering terrorism.<sup>25</sup> The command does this through two regional plans for Europe and Eurasia to prevent regional conflicts and three functional plans, two of which are specifically designed to combat terrorism and prevent the proliferation of WMDs. The third functional plan focuses on theater force posture and transformation and stresses that, while a forward US presence is critical for theater security, teaming with partners is just as important. "The posture of our forces and installations is shaped as much by our security cooperation activities as by our requirements for war fighting."<sup>26</sup> Thus, a large part of the COCOM's strategic approach to dealing with regional threats is to "mitigate risk while the [US] is at war through building partner capacity and enhancing interoperability."<sup>27</sup>

### **The Way Ahead: Utilizing NATO Capabilities**

While traditionally lacking in quantity and quality, European airborne ISR capacity is seeing significant expansion in both areas. As a potential long-term solution for USEUCOM's lack of airborne ISR, this study proposes increased cooperation with NATO as the alliance prepares for the 2012–14 scheduled full operational capability (FOC) of its interoperable AGS system.<sup>28</sup> In September 2007, the 21 participating AGS nations abandoned an initial multiplatform concept for a single air vehicle approach utilizing the RQ-4 Global Hawk Block 40. The multiplatform radar technology insertion program (MP-RTIP) ground surveillance radar will be the primary sensor.<sup>29</sup> 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, Italy, destined to be the main operating base,

NATO will for the first time have a dedicated ISR collection capability.<sup>30</sup> However, the most promising benefit of the AGS Core segment is its fully equipped interfaces and interoperability with national ISR systems. “The Core system will be supplemented by interoperable national airborne stand-off ground surveillance systems from NATO countries, thus forming a system of systems.”<sup>31</sup> This is no small undertaking for NATO. Until AGS, NATO never had its own intelligence collection capability, but instead relied on the national assets of member states. Challenges in developing proper TTPs for platform and Core segment mission operations will abound.

NATO traditionally does not conduct its own intelligence collection. In fact, NATO’s intelligence warning system (NIWS), with the NATO situation center at its hub, is primarily an analytical function that relies on information feeds from a variety of sources that include NATO-releasable messages from member states and information provided by the NATO political and military committees. This structure created a dependency on national architectures, with no ability by NATO to leverage those architectures. This offered little value-added to the nations providing the bulk of the information, that is, the United States and USEUCOM.<sup>32</sup> In *NATO Intelligence and Early Warning*, John Kriendler said that “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.”<sup>33</sup>

The FOC of the NATO AGS in 2014 will change this dynamic. By acquiring an indigenous collection capability, NATO will be both a collector and a producer of intelligence and will no longer depend solely on member states. European ISR strategists such as Klaus Becher see this as an opportunity for greater transatlantic cooperation because NATO will finally have the leverage to request greater “access to US capabilities.”<sup>34</sup> In fact, “Europe’s access to US-controlled intelligence on global security issues will depend on the practical value of European assets to US intelligence.”<sup>35</sup>

AGS will provide practical value as its pending FOC date offers USEUCOM an opportunity to satisfy collection gaps. As stakeholders, USAFE and USEUCOM maintain the knowledge and expertise on how to conduct RQ-4 operations and postmission processing in their AOR. This study recommends that the command engage with NATO now to develop the requisite TTPs for proper Core system utilization that the alliance currently lacks. This especially makes sense given the projected basing of three new Block 30 RQ-4s at Sigonella AB in October 2010. These aircraft will be operated by USEUCOM within the constraints of the JFCC-ISR allocation process.<sup>36</sup>

Helping NATO develop TTPs for postmission processing is one way to gain access to AGS sensors. However, this study also recommends that USEUCOM champion greater NATO access to US intelligence collection capabilities and information to build the enhanced atmosphere of cooperation proposed by Becher. This will improve the effectiveness of AGS operations and lead to a revolution in intelligence sharing, given the “not releasable to foreign nationals” barrier the US IC currently uses to deter unwanted access. As a RAND study on intelligence process reform recently argued, “For the intelligence community, operational innovation must focus on changing and perhaps completely rethinking core functions.”<sup>37</sup>

By helping NATO navigate the uncharted waters of operational intelligence collection and processing at the start of the AGS program, USEUCOM will be in a better position four years from now to leverage AGS capability. This initiative will have far-reaching effects by complementing ongoing efforts of the information-sharing integrated process team (IPT) sponsored by DOD’s ISR task force. Based largely on the experiences of working with our allies in Afghanistan, the IPT seeks to transcend cultural, technical, and arcane classification barriers that prohibit the free-flow exchange of intelligence information with our allies. At a minimum, the results of the IPT 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**

Mid- and near-term solutions to USEUCOM ISR collection gaps can be found in existing bilateral partnerships. Many changes are under way in the development and fielding of allied capabilities that promise to alleviate “fragile dependence.” Both the UK’s RAF and the Federal Republic’s GAF are in the process of leveraging and procuring US ISR technologies to meet their national intelligence requirements. There is no reason why USEUCOM and USAFE should not work with our allies to fully integrate their systems into USEUCOM’s ISR collection profiles and fill command collection gaps. Due to severe cost overruns of Project Helix, the replacement program for the UK’s ageing Nimrod aircraft, the UK approached the United States in 2007 to inquire about procuring three RC-135 Rivet Joint aircraft. Approved by the USAF chief of staff and Congress in 2008, the United States and the UK are now engaged in an FMS contract to deliver three RC-135 SIGINT aircraft. The deputy chief of staff for ISR and the DNI describe this effort as a “win-win” for both parties and an opportunity

to improve integration.<sup>38</sup> Fully in line with national strategy direction to engage with allies and harness their capabilities, the main objectives of this FMS contract address the command's "capability gaps through operational burden sharing" and focus on "maintaining and/or increasing manned SIGINT support to CENTCOM and EUCOM AORs."<sup>39</sup> With the first of three aircraft scheduled for delivery in 2013, RAF aircrews are now being trained on aircraft employment and utilization.<sup>40</sup> The RAF's RC-135 aircraft will provide a unique mid-term solution to help satisfy USEUCOM ISR collection gaps. The command should engage with the RAF now, through existing bilateral programs, and leverage in-theater Air Combat Command RC-135 expertise at RAF Mildenhall to plan the integration of the RAF's RC-135 aircraft into USEUCOM's theater ISR-collection profiles.

In the immediate future, a near-term opportunity to overcome USEUCOM's collection capability shortfalls presents itself in the GAF's fielding of the RQ-4 Block 20 "EuroHawk" remotely piloted aircraft (RPA). After a 2003 transatlantic test flight and associated sensor demonstration from Nordholz, Germany, the GAF signed a memorandum of understanding with the DOD in May 2006 that set the parameters for proceeding with a DCS contract of five RQ-4 RPAs.<sup>41</sup> The rollout of the first EuroHawk vehicle was on 8 October 2009 in Palmdale, California.<sup>42</sup> Current plans call for incorporating all five RQ-4 aircraft into the GAF's 51 Squadron, Jagel AB, Schleswig-Holstein, by 2011.<sup>43</sup> The GAF plans to use RQ-4's in-theater, rather than deploying them to Afghanistan. Germany is also procuring the Heron 1, a medium-altitude RPA from Israel, for use in overseas contingency deployments. With a total of five GAF-operated RQ-4s in its AOR by 2011, USEUCOM has a unique teaming opportunity to increase theater ISR-collection capability through the GAF.

One way to engage the GAF is by offering US expertise in developing TTPs for postmission processing of EuroHawk-derived SIGINT. The GAF will not be getting a turnkey system since the procurement effort is a DCS contract, consisting of the air vehicles and not the sensors (being developed by EADS). The 2003 electronics intelligence (ELINT) sensor demonstration showed that the GAF will be faced with significant mission and postmission processing challenges as it tries to operationalize its sensor packages.

According to a GAF spokesman, we were "surprised at the huge amount of radar emitters (merchant ships, airliners) that showed up in addition to the prepared [demonstration] profile . . . the ELINT Ground Support Station (EGSS) was quickly overwhelmed."<sup>44</sup> The GAF realized there "was more data than we could process," leading one to conclude that a DCGS stakeholder such as USEUCOM could

provide tremendous expertise to help the GAF normalize RQ-4 operations while gaining access to GAF sensors.<sup>45</sup>

I recommend that USAFE 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. The intelligence gain for USEUCOM of integrating GAF operators into USAFE's DGS-4 ground station, or conversely, USAFE operators into the GAF's EGSS, will go a long way to help mitigate command ISR-collection gaps.

### **Conclusion**

This study shows that despite continued DOD investments in ISR platforms, these capabilities will remain LD/HD assets as long as the United States is engaged in OCO with USCENTCOM. The Balkan conflicts of the 1990s proved ISR capabilities are force multipliers in the modern battlespace, prompting senior DOD leaders to take the right steps in calling for more ISR resources. These DOD leaders also acknowledged that due to the increased demand for ISR, they would be hard-pressed to field sufficient numbers of ISR assets to meet global needs. After the 9/11 attacks and the subsequent surging of ISR forces to the USCENTCOM AOR, ISR requirements from competing COCOMs could be met only through ISR rotational forces. This is still the case, causing collection gaps in all commands. National security and intelligence strategies, as well as USAF security cooperation and intelligence strategies, recognize that DOD ISR forces and capabilities are stretched thin. As this analysis demonstrates, national strategic direction provides guidance to warfighting commands to partner with allies and leverage their capabilities to help meet US national intelligence requirements. Intelligence is a field where synergistic efficiencies of cooperation can easily be achieved.

Given that President 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 presents itself as 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.

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## **Abbreviations**

AGS	alliance ground surveillance
AOR	area of responsibility
ATO	air tasking order
CJCS	chairman of the Joint Chiefs of Staff
COCOM	combatant commander
DCGS	distributed common ground station
DCS	direct commercial sale
DNI	director of national intelligence
DOD	Department of Defense
EGSS	ELINT Ground Support Station
ELINT	electronics intelligence
FMS	foreign military sales
FOC	full operational capability
FY	fiscal year
GAF	German Air Force
IC	intelligence community
IPT	integrated process team
IS	Intelligence Squadron
ISR	intelligence, surveillance, and reconnaissance
JFCC	joint functional component command
LD/HD	low density and high demand
MP-RTIP	multiplatform radar technology insertion program
NATO	North Atlantic Treaty Organization
NIS	<i>National Intelligence Strategy</i>
NIWS	NATO intelligence warning system
NSS	<i>National Security Strategy</i>
OCO	overseas contingency operations
QDR	<i>Quadrennial Defense Review</i>
RAF	Royal Air Force
RPA	remotely piloted aircraft
SCS	<i>Security Cooperation Strategy</i>
SecDef	secretary of defense
SIGINT	signals intelligence
TPED	tasking, production, exploitation, and dissemination
TTP	tactics, techniques, and procedures
UAS	unmanned aircraft system
USAFE	United States Air Forces in Europe
USCENTCOM	United States Central Command
USEUCOM	United States European Command
WMD	weapon of mass destruction

