WHITE PAPER

ON

USAF INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE ENTERPRISE

PRIORITY EFFORTS AND CHALLENGES IN SUPPORT OF A BALTIC CRISIS


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**ABSTRACT**

The AF ISR enterprise must ruthlessly tackle institutional challenges it will face as the DoD shifts its focus away from CT efforts and towards GPC. The enterprise must address the very real manpower limitations that exist, exploitation bottlenecks and historical production standards that no longer meet warfighter needs, and in the case of a potential Baltic crisis, a lack of placement and access as well as institutional expertise due to years of limited prioritization. This white paper addresses such challenges as well as ongoing and potential future efforts that could result in a more responsive force that provides enduring relationships with regional partners and a new generation of subject matter expertise.

# 1. PURPOSE

This white paper will attempt to identify ongoing and future priority efforts as well as notable challenge areas where additional focus will be required in order to support a Baltic crisis with tailored Intelligence, Surveillance, and Reconnaissance (ISR) capabilities as well as potential liabilities within our ISR enterprise, largely scoped within the United States Air Force (USAF) but not exclusive of the USAF's responsibilities, limitations, and challenges. The examples provided below are neither all-inclusive nor guarantees of future success but opportunities to either remedy historic challenges we have faced, or continue to support initiatives that have shown promise as we vector our efforts towards great power conflicts. For the purpose of this white paper, the challenges that will be addressed will include ISR professional manpower, relative to the missions we attempt to maintain and the sheer amount of data collected, placement and access, and expertise in the Baltics.

## Background

The Baltic nations of Estonia, Latvia, and Lithuania possess key geographic access that has led to strategic support that include the Baltic Air Policing mission, increased economic injections directed at bolstering Balitc air defense capabilities to the tune of $50 million in 2020 alone, and regular exercises in an attempt to stifle Russian influence in these former Soviet states. While these efforts provide a significant show of

unity and support across the Baltics, what they will not provide is enhanced intelligence collection capabilities to match the air defense capabilities that rely on key indications and warning and enduring intelligence gathering. Future defense support to the Baltics must be matched by dedicated intelligence sharing agreements in order to build partner capabilities.

Each of the Baltic states has identified the need to bolster regional intelligence capabilities. In recent years these nations voiced the need for external support in this regard, leading to multiple intelligence support agreements. In addition to identifying priority efforts and future challenges within our ISR enterprise, this paper will attempt to outline ways in which the Baltic nations' capabilities could be enhanced in order to establish and maintain enhanced intelligence capabilities. Recent history has left us to ponder the question, not if, but when will Russia attempt to build on the successes of Georgia and Ukraine to strengthen key regional influence and geographic accesses provided by the Balkans utilizing lessons learned from Georgia in 2008 and Ukraine in 2014. With that, it is now imperative to ensure that our ISR enterprise is postured to support increased intel sharing in the event that this takes place.

## 2. HISTORICAL CONTEXT & LESSONS LEARNED

### USAF Great Power Competition Recognition

In September 2014, Gen Martin Dempsey, then Chairman of the Joint Chiefs of Staff (CJCS), penned a Intelligence, Surveillance, and Reconnaissance (ISR) Joint Force 2020 White Paper that detailed many areas where the force required modernization, eight such initiatives to advance ISR capabilities that include greater interoperability across U.S., Coalition, and other mission partners, multinational ISR, and ISR that is efficiently managed. The question now is, was that vision realized? Six years later is our force better prepared to meet great power crisis needs when our priorities were very clearly aligned to counterterrorism efforts at the time Gen Dempsey provided his vision? More recently, Gen Charles "CQ" Brown, Chief of Staff of the Air Force, provided his strategic vision with the title and driving point, "Accelerate Change or Lose", clearly identifying the challenges we face in maintaining U.S. air dominance moving forward, with ISR remaining a key tenant as well as a core mission of the USAF. As with the reflection on Gen Dempsey's vision, has the force responded to Gen Brown's view of the USAF's part in our global mission moving forward?

A clear  indication of the shift in priority across the force was recently provided by Lt. Gen James Slife, Commander of Air Force Special Operations Command (AFSOC) who stated that "We have to look ruthlessly at what we have been doing and what we're

going to be required to do and make the trade to position ourselves for the future". While Lt Gen Slife's statements weren't directed at the ISR enterprise, the force as a whole has realized a shift in focus is necessary to meet the needs of tomorrow and begun to identify force requirements for a great power crisis. The Intelligence Community role in counterrorism (CT) in the wake of 9/11 has been both necessary and fruitful, but the reality of a renewed acknowledgement of great power competitions (GPC) requires prioritization in a world where the force simply cannot meet the requirements of both CT and GPC simultaneously. Furthermore, as Lt. Gen Slife, and Gen Dempsey before him, realized that future improvements will require additional support from our global partners, our ISR enterprise will need to delve even further into the expertise and capabilities that our partners possess.

### 3. CURRENT AND FUTURE EFFORTS

In order to meet the daunting intelligence requirements needed to answer the call of a potential GPC conflict, the same ruthless approach Lt. Gen Slife prescribed to AFSOC must be utilized for the ISR enterprise architecture. The manpower and exploitation backbone that follows ISR collection efforts that the majority of the DoD has spent the last 19 years prioritized towards, namely CT, has left the intelligence community less prepared to answer the requirements of a great power competition fight like that of a Baltic crisis without significant shifts in the way it operates.

### Manpower & Artificial Intelligence

One potentially significant challenge that could plague a shift to a Baltic conflict is the sheer amount of data that has the potential to be collected. This is not unique to such a conflict, however, the addition of yet another focus area, and not one where our expertise has been previously prioritized towards in the aftermath of the Cold War, there is likely to be a lack of experienced analysts in the problem-set, but also analysts in general to interpret and exploit that data. Project Maven is an Undersecretary of Defense for Intelligence (USD-I) effort that was developed specifically to leverage machine learning to sort through the mass amount of ISR data collected by the DoD and Intelligence Community and reduce the number of analysts required for this mission. While Project Maven's full impact on the ISR enterprise is yet to be realized, in recent years the USAF has rolled the program into its larger Artificial Intelligence effort, recognizing its broader warfighting capabilities as it was accepted into the Advanced Battle Management System (ABMS) portfolio.This signals a distinct opportunity to leverage Artificial Intelligence in a more meaningful way across the battlefield, and that is driven by intelligence.

Further emphasis and acceptance across the force of Artificial Intelligence and machine learning will be necessary to meet the ever increasing amount of data that is collected. Machine learning and Artificial intelligence will help to resolve multiple challenges facing the ISR enterprise, namely manpower. Overall budgets are shrinking and retaining expertise remains challenging, even within organizations that have had the luxury of avoiding such concerns in the past, and Project Maven and broader Artificial Intelligence efforts hope to answer these limitations head on. This challenge coupled with the reality that missions are not being divested from at the same rate we are accepting new ones, makes it clear that there is simply not enough human exploitation capability to answer all intelligence needs.

**Enterprise Modernization**

One notable effort that has the potential to relieve some of the stress of intelligence exploitation is an 480th Intelligence, Surveillance, and Reconnaissance Wing (ISRW) initiative. Distributed Common Ground System (DCGS) Next Generation is an organizational modernization largely grounded in creating an exploitation capability that is sensor-agnostic, problem-focused, and able to create fused intelligence products to answer specific intelligence requirements. This is the 480th ISRW's vision for the future of DCGS support. In short, the DCGS enterprise recognized that a shift in its identity was necessary to meet the needs of decision makers as we shift our main focus away from counterterrorism and towards potential great power conflicts. Looking deeper, what this allows the DCGS to do is ensure exploitation efforts are prioritized towards answering priority intelligence requirements and better meet National Defense Strategy (NDS) requirements and build an intelligence production capability that fosters a deeper understanding of the problem set, a true ownership in the mission and focus area. While only time will tell whether the large-scale transformation the DCGS enterprise is enacting will meet the intelligence communities needs, there is no doubt the DCGS of the past was not organized to support a GPC conflict of the future.

**Intelligence Sharing**

An additional avenue for enhanced awareness that has a proven track record is intelligence fusion cells. Arguably the most recognizable and successful implementation to date is the Coalition Intelligence Fusion Cell (CIFC) located at Al Udeid Air Base, Qatar, established by the U.S. Air Force Central Command (USAFCENT) in 2014. While neither a unique collaboration nor the first of its kind, the CIFC has shown there is a capability and a willingness for nations outside of our immediate intelligence sharing community to support such efforts. This cell has resulted in advanced intelligence gathering and exploitation capabilities via our sharing partners, a true force multiplier in

the United States Central Command (USCENTCOM) area of responsibility. While intelligence fusion cells or other established intelligence sharing capabilities are not inherently USAF missions, the proven value of the CIFC shows that the USAF can provide a service-tailored capability in an effort to enhance regional stability. With the potential reorganization of U.S. forces out of Germany and towards broader NATO missions in line with the NDS, there may be an opportunity to prioritize such coalition missions in the future to deter Russian influence and enhance U.S. situational awareness in the region.

Building on the potential for increased intelligence interoperability, in June 2020, the USAF deployed MQ-9 Reapers to Estonia for the first time in support of Baltic region intelligence collection efforts. While not the sole airborne intelligence collection capability in the region, the deployment, coupled with a potential future intelligence fusion capability in the region, could begin to more effectively layer collection and exploitation capabilities towards U.S. priorities in the region. However, as USCENTOM showed in 2018 when they successfully ferried MQ-9s from Iraq to Afghanistan as internal priorities shifted, there is a substantial footprint required for Remotely Piloted Aircraft (RPAs) to operate, from the facilities required to take-off and land them, maintain those aircraft, the intelligence capabilities to support those operations, and countless other needs. Any such undertaking in USEUCOM must be deliberately planned and enduring to ensure a lasting capability that builds long-term partner relationships.

In 2019, the United States and Lithuania signed a defense cooperation strategic roadmap that over a five-year period would support multiple security goals to include increased intelligence sharing. These agreements spurred similar initiatives with Latvia and Estonia shortly after and while they are still in their infancy, they create an opportunity to support and empower regional allies with clear placement and access to strategic threat warning in the Baltics. Even as broader NATO efforts more closely resembling the layout of the CIFC exist today, enhanced and tailored intelligence development of Lithuania, Latvia, and Estonia can augment advanced U.S. ISR capabilities with regional expertise and provide a constant presence the U.S. cannot currently maintain alone. Without enhanced intelligence sharing agreements between the U.S. and Baltic nations, the U.S. will find it challenging to maintain the necessary relationships to provide adequate indications and warnings of Russian interests and activities in the region. Greater efforts in more direct and enduring intelligence sharing will pay significant long-term benefits, without these sharing agreements the United States is at risk of having gaps in understanding the dynamic regional threats.

## 4. SUMMARY

With the realization that a shift away from counterterrorism and towards great power conflicts, many efforts are now underway to ensure that the ISR enterprise is postured to meet decision makers' needs. Furthermore, there are many possible initiatives that have the potential to lead to even greater impacts on this front. One such area where further research will be required in the future is the challenge of appropriate asset allocation. The recent deployment of MQ-9s to Estonia is a promising step towards providing intelligence collection capabilities towards the Baltics but does not address the overall allocation challenge that USEUCOM has faced over the last two decades as the CT fight raged on. Allocation must not only entail a rebalance of assets across commands, but an update to ISR planning and mission execution that accompanies them. With that said, there are only so many assets available in the U.S. inventory, analysts capable of exploiting the data collected, and partners in the world to support these missions. The challenge now, that Lt. Gen Slife, Gen Dempsey, and Gen Brown's vision hopes to guide us towards, is how to best utilize those assets, analysts, and relationships while simultaneously identifying what challenges we're likely to face in the future. No one effort described above will lead to success in a Baltic crisis, or any similar challenge we may face, but each has the opportunity to better prepare us to respond to the very real possibility that we will face a crisis similar to this in the future.

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