# Manned Airborne Intelligence, Surveillance, and Reconnaissance

Strategic, Tactical . . . Both?

Maj Tyler Morton, USAF

We've adapted over time ... from a predominantly strategic asset that is able to bring a tremendous amount of capability to bear in the tactical environment.

—Lt Col Rich Rosa, Commander 763rd Expeditionary Reconnaissance Squadron, 2011



he Obama administration's desire to rebalance the United States' global focus to the Western Pacific and East Asia has serious ramifications for the manned airborne intelligence, surveillance, and reconnaissance (ISR) community.<sup>1</sup> That force, historically steeped in strategic-level intelligence collection, has become—through

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the exigencies of the counterinsurgency conflicts of the early twentyfirst century—the world's finest supplier of tactical-level intelligence. The US Air Force's arsenal of manned airborne ISR assets is a fixture over the battlefields of Afghanistan, and ground war fighters rely on these platforms for tactical intelligence.<sup>2</sup> The intelligence that the United States' manned airborne ISR force communicates often means the difference between life and death for ground forces engaged in combat. This was not always the case, however. Prior to the Persian Gulf War, these platforms were the masters of the peacetime airborne reconnaissance program. They spent the Cold War flying near the peripherv of the Soviet Union-and that of many other nations-gathering intelligence designed to inform national-level decision makers. Beginning with the Persian Gulf War and developing fully in Operation Enduring Freedom, manned airborne ISR was transformed. First providing indications and warning to aircrews patrolling over Iraq and developing the ability to give near-real-time threat warning to ground forces in Afghanistan, the new force is now a world-class provider of tactical intelligence. The upcoming Asia rebalance and the nearsimultaneous Afghanistan drawdown, however, herald a shift in mission. The question now becomes, What next for manned airborne ISR?

If a mission shift does indeed occur for manned airborne ISR, the force will require a major retooling of its capability. A community now overwhelmingly intent on the tactical-support mission needs time to reorient itself to a strategic mind-set. Two decades of flying over Iraq and Afghanistan have undoubtedly whittled away at the community's ability to conduct sustained missions in the Pacific theater; the majority of Airmen who will fly these missions were raised in the tactical environment. Additionally, the manned airborne ISR community faces the possibility of maintaining both capabilities—strategic and tactical. As the following discussion shows, manned airborne ISR forces historically have been asked to fluctuate between collecting strategic intelligence and tactical. Traditionally, though, following termination of the tactical requirement (Korea, Vietnam), the ISR force returned to its strategic focus. Will this time be different? Will the Air Force seek to

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maintain some level of tactical-support capability or abandon it, as it has so many other times? If it does choose to retain a tactical capability, it faces the unenviable challenge of training and maintaining dissimilar collection, processing, and exploitation; analysis and production; and dissemination tactics, techniques, and procedures.

Finally, the Air Force also confronts the daunting task of preserving the manned airborne ISR fleet in times of fiscal austerity. As highlighted by the subsequent discussion, after major periods of combat, the United States traditionally has sought to downsize the force; ISR forces have not always been immune from these cuts. Fortunately, history offers many examples of shifts in manned airborne ISR's mission and its ability to persevere, despite the sometimes draconian budget restraints. From the establishment of consistent strategic manned airborne ISR against the Union of Soviet Socialist Republics (USSR) to today's tactical mission over Afghanistan, the manned airborne ISR force has been asked to alter its direction many times. By examining the initial development of that force and tracking its historical mission swings, this article shows that manned airborne ISR forces have adapted before and can successfully do so again. The limiting factors now, as in the past—include time, personnel, and resources.

## Strategic Manned Airborne ISR

Although militaries first envisioned and operationalized manned airborne ISR as a tactical collection asset, the inability of balloons and aircraft to provide timely intelligence rapidly and consistently to ground customers led forces around the world to begin using their airborne platforms to deliver strategic intelligence. At the dawn of World War I, ground commanders believed that aerial reconnaissance of the front and artillery observation were the aircraft's main contribution to land warfare. Both of these missions inextricably linked the aircraft—whether balloon or airplane—to the war fighter on the ground. Despite the linkage, as the war began, armies remained uncertain of the value of the new capability. Communications remained problematic, and

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many skeptical ground commanders still questioned the veracity of the intelligence gained by observation.<sup>3</sup> Furthermore, a number of the airborne observers exaggerated their reports.<sup>4</sup> As stalemate ensued on the ground, however, airborne ISR became the primary—if not the only—means of gathering intelligence about enemy movements. The technical development of aircraft and the additional capabilities they offered also justified the new reliance on ISR.

Aircraft progress was staggeringly rapid—new platforms reached the front, only to find themselves outclassed in a matter of months by the next development.<sup>5</sup> During the course of the war, airspeeds doubled, maximum altitudes and climb rates tripled, engine horsepower increased fivefold, and aircraft added armament.<sup>6</sup> With these capability increases came additional tasks. By the end of the war, aircraft were performing a considerable number of missions, most of them new: strategic bombing, air interdiction, attack from aircraft carriers, air defense, ground attack, and ISR.

ISR was not new, but the depth and height at which aircraft could penetrate enemy territory had changed. The additional capabilities permitted deep-penetrating ISR and fundamentally altered the type of intelligence supplied by aircraft. No longer was airborne ISR limited to the front lines, nor was it tied to the ground war fighters; the new capabilities enabled aircraft to look deep into enemy territory and allowed Airmen to predict an enemy's course of action. By seeing the enemy's movements well behind the front lines, ISR Airmen could forecast his intentions with sufficient time for friendly forces to head off assaults and frustrate his plans. Because of these new capacities, Airmen quickly validated their significance.

In the First Battle of the Marne, deep-penetrating airborne ISR detected a fatal error committed by Gen Alexander von Kluck of Germany. In a move designed to cut off Paris from the main French forces, von Kluck wheeled his units eastward. By doing so, he exposed the entire right flank of the German First and Second Armies.<sup>7</sup> Manned airborne ISR assets detected the weakness, enabling two

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French armies and the British Expeditionary Force to take advantage and rout the Germans, forcing them into a 40-mile retreat to the Aisne River where they began fortifying their positions for what would become the infamous trench-war stalemate.<sup>8</sup> The First Battle of the Marne changed the course of the war. Airborne ISR provided the intelligence that allowed Allied commanders to act decisively and save what seemed a likely French defeat and loss of Paris.

In this example, ISR aircraft had sufficient time to return from their sorties and report what they had seen, just as the French and British had time to design a counterattack. Strategic collection was beginning to take form. Nevertheless, problems still plagued direct air-to-ground communication. Foreseen as early as 1907 by Benjamin Foulois, future chief of the Air Corps, the inability of aircraft to relay intelligence information accurately and rapidly was the bane of tactical ISR.<sup>9</sup> During the early stages of the war, the primary method for communicating intelligence obtained from ISR sorties called for the pilot to land his aircraft near the artillery battery and simply tell the gunners what he had found.<sup>10</sup> When possible, observers would annotate locations of hostile artillery batteries on maps to aid in their descriptions.<sup>11</sup> These reports often proved imprecise because in the excitement of the first taste of combat, the observers' inadequate prior training frequently led them to misidentify troop nationalities and activities.<sup>12</sup> The use of aerial photography helped obviate some of these problems, but the airborne ISR force never overcame difficulties with tactical communication. Although this situation fundamentally sealed the fate of tactical intelligence collection at the time, it opened the door for the strategic level of manned airborne ISR that would typify the majority of the United States Army Air Forces' (USAAF) effort during World War II and beyond.

Airpower emerged from World War I as a worthy complement to the Army's capabilities, but it remained vulnerable to major force drawdowns and the return to isolationism that characterized the period. Although the National Defense Act of 1920 recognized the success of

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airpower by establishing the Air Service as an independent branch of the Army, by the late 1920s, the Army had instituted drastic cuts to aviation in an attempt to modernize the ground forces.<sup>13</sup> Airmen had not risen to the highest ranks of Army leadership and were thus powerless to prevent air cuts ordered by the still-parochial ground generals. This move away from the air and back toward the ground left the Air Corps, particularly the fledgling ISR forces, with little money to acquire new aircraft and with few people to advance airpower doctrine into the modern era.

As a new war brewed in Europe and the Pacific, American airborne ISR found itself woefully underprepared. ISR doctrine had not advanced, and even though World War I had established the value of strategic intelligence collection, airborne ISR remained doctrinally tied to the ground forces and inherently short range in nature. In addition to stagnant doctrine, the capabilities of ISR aircraft had not kept pace with the rapidly modernizing militaries. Airmen had vigorously advocated for additional reconnaissance aircraft, but when America's part in the war began in 1941, the Air Corps possessed few modern airframes.<sup>14</sup>

Despite the innovation-stifling environment, airborne ISR was on the precipice of a major evolution. As World War II progressed, enhanced aircraft capabilities, along with dogged determination, permitted America's airborne ISR forces to make significant contributions to Allied success. In addition to the incredible expansion of the imagery intelligence (IMINT) mission they had validated during World War I, airborne ISR forces in World War II created a first-rate capacity for collecting communications intelligence (COMINT) and electronic intelligence (ELINT). In the summer of 1942, during flights to determine the extent of German radar coverage in the Sardinia-Taranto-Tripoli areas, the British experimented with placing linguists on 162 Squadron's Wellington ELINT aircraft.<sup>15</sup> Their ability to give pilots advanced warning of German fighter activity became highly valued. As with so many other developments, the Americans adopted the British procedure, and

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by October 1943 they were flying with linguists on their Mediterranean ELINT ferret aircraft.<sup>16</sup> In addition to protecting the aircraft and bomber formations, the linguists could call in friendly fighters to attack German aircraft. According to 1st Lt Roger Ihle, one of the earliest American airborne electronic warfare officers, "We had these Germanspeaking boys we had monitoring all of the aircraft frequencies of the Germans, so when they heard the Germans starting to scramble, why, they told the [American] fighters what was happening."<sup>17</sup> The presence of linguists improved situational awareness, so by late 1944, bomber crews commonly flew with a number of them on board.<sup>18</sup>

These advancements-enhanced IMINT, COMINT, and ELINT-solidified the role of airborne strategic intelligence. In fact, due to the development of these new capabilities, the terms strategic aerial reconnaissance and tactical aerial reconnaissance had already entered the USAAF's lexicon before the end of the war. In the intelligence appendix of the USAAF's report on the contributions of airpower to the defeat of Germany, the US Air Forces in Europe / A-2 defined strategic *aerial reconnaissance* as "the program of acquiring aerial intelligence as a basis for carrying on strategic air warfare against the enemy" and tactical aerial reconnaissance as something concerned with "large scale daily cover of the enemy forward areas, damage assessment photographs for fighter bomber attacks, and enemy defenses, airfields, and other special targets up to 150 miles from the front."<sup>19</sup> Moreover, the United States Strategic Bombing Survey concluded that "the U.S. should have an intelligence organization capable of knowing the strategic vulnerabilities, capabilities and intentions of any potential enemy."20 This clear delineation solidified the USAAF's needs for an indigenous, long-range strategic airborne collection capability after the war and armed the future Air Force with the justification to sustain the growth of airborne ISR.

Following World War I, the American military faced a major force drawdown as a return to isolationism had become the common mantra. After World War II, however, the United States confronted a menacing

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threat that it could not avoid by simple retrenchment. As the Cold War with the USSR escalated, it became clear that the Soviets would be a major adversary for the foreseeable future. In a time before intercontinental ballistic missiles, the Air Force's long-range bombers represented the United States' only viable attack option. When Air Force planners began building target information for strategic air warfare, they quickly recognized the paucity of intelligence on the USSR. If called upon, Air Force bombers needed to know about the critical Soviet targets; in the late 1940s, American-derived information simply did not exist.<sup>21</sup> When the Soviets joined the nuclear age in 1949, the need became paramount.

To meet the Cold War's intelligence demands, the Air Force began conducting airborne strategic intelligence missions along the periphery of Soviet-held territory. Initially, ISR aircraft-typically, modified C-47s, B-17s, or B-24s-based in Britain and occupied Germany conducted photomapping of large areas under Soviet control.<sup>22</sup> Under a project known as "Casey Jones," Air Force aircraft mapped nearly 2,000,000 square miles of Europe and North Africa.<sup>23</sup> In the Arctic, modified B-29s from Strategic Air Command's (SAC) first operational unit-the 46th Reconnaissance Squadron-photomapped potential divert locations for SAC bombers.<sup>24</sup> The IMINT proved useful, but the inability to obtain deep-range photographs, together with the increased danger posed by Soviet air defenses, forced planners to search for other solutions. In September 1946, SAC began flying dedicated ELINT collection missions along potential Arctic bombing routes for the purpose of characterizing Soviet radar sites.<sup>25</sup> Although successful, the sorties painted only a small picture of the USSR's air defenses. To truly understand the threat, the United States would have to order overflights of Soviet territory.

Frustrated by the lack of information on Soviet radar locations and capabilities, and with inaccurate map data of the Soviet coastline, on 5 April 1948, Secretary of the Air Force Stuart Symington sent a letter to Gen Carl Spaatz, the Air Force chief of staff, expressing his concern

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about the lack of detail and urging Spaatz to authorize direct overflight of the USSR.<sup>26</sup> Spaatz agreed, and on 5 August 1948, the 46th Reconnaissance Squadron conducted the first mission authorized to overfly the USSR.<sup>27</sup> These wildly successful sorties generated unprecedented images of Soviet radar sites as well as detailed photography of the Russian littoral area. Soviet air defenses quickly evolved, however, and by the early 1950s, when the risk of losing an aircraft over Soviet territory had become too great, President Dwight Eisenhower ordered the development of the U-2. That aircraft enjoyed early success overflying the USSR, but the Francis Gary Powers incident of May 1960 again relegated the collection of airborne strategic intelligence to the periphery of the USSR.<sup>28</sup>

During the Cold War, using ISR aircraft to collect strategic intelligence became a core requirement for understanding the Soviet military. Peripheral and direct overflight missions provided the intelligence that the United States needed to remain one step ahead of the Soviets. Although oftentimes dangerous, the collection of strategic intelligence does not typically carry a sense of urgency.<sup>29</sup> Usually not time-sensitive, it contributes to an overall understanding of the enemy.<sup>30</sup> But on occasion the Air Force used its strategic airborne ISR platforms to support tactical commanders directly. These situations challenged the ISR community because the information collected often meant life or death for troops on the ground and other Airmen in the skies. In Korea and Vietnam, airborne ISR Airmen developed innovative ways to ensure that their intelligence reached the war fighter. Their efforts demonstrated that airborne ISR assets could satisfactorily fill both roles-strategic and tactical-but that fully making the transition took time and ingenuity.

# The Korean War: COMINT to the Cockpit

When North Korea invaded the south in June 1950, American airborne ISR was woefully unprepared to provide ground and air commanders the support they needed. A dearth of linguists, photo interManned Airborne Intelligence, Surveillance, and Reconnaissance

preters, equipment, and aircraft all contributed to the scarcity of information in the early stages of the conflict. As the war progressed, however, airborne ISR evolved. Airmen of the US Air Force Security Service (USAFSS) created a system to deliver airborne COMINT directly to the cockpits of fighters and bombers, supplying them with unprecedented situational awareness. These successes in Korea laid the groundwork for the integration of airborne ISR in subsequent conflicts.

When the war began, Far East Air Force's (FEAF) signals intelligence (SIGINT) capability was in atrocious condition. In June 1950, the USAFSS's 1st Radio Squadron Mobile, the only operational SIGINT unit under FEAF's control, did not possess an airborne collection capability.<sup>31</sup> Further, at the start of the war, the squadron had no Korean linguists and limited access to North Korean COMINT.<sup>32</sup> In an internal report, USAFSS characterized its SIGINT at the outbreak of war as "pitifully small and concentrated in the wrong places."<sup>33</sup>

Immediately upon the outbreak of the war, USAFSS Airmen began developing innovative ways to get intelligence to the war fighter. Just as they had done in World War II, Airmen began flying as "tagalongs" on non-ISR aircraft. As early as January 1951, Unit 4 of the 21st Troop Carrier Squadron was flying deep-penetrating, low-level missions into North Korean territory for the purpose of infiltrating friendly spies. These Douglas C-47 sorties often carried a Korean-American Airman to advise the mission aircraft of enemy activity and to support Fifth Air Force's intelligence requirements.<sup>34</sup> In that month alone, the unit flew as many as 13 "radio intercept" missions.<sup>35</sup> These forays deep behind enemy lines gave FEAF unprecedented understanding of the enemy situation and contributed significantly to Fifth Air Force's airplanning effort.<sup>36</sup>

Seeking to move intelligence directly to the cockpit, in February 1953 the USAFSS installed a COMINT collection position on a C-47 airborne tactical air control center.<sup>37</sup> In the beginning, "Mosquito Mellow," as it became known, passed messages among tactical air control parties, airborne controllers, fighter-bombers, and the ground control sta-

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tion.<sup>38</sup> Over time, though, the aircraft's prowess in shortening the communications chain between tactical aircraft and the ground control station led it to become a de facto airborne command post. The USAFSS installed a secure communication method that let the onboard linguist validate the intelligence he collected with the USAFSS's Detachment 153 ground unit. After confirming the information, the linguist then relayed it to the tactical air control center's crew, who quickly passed it directly to other aircraft in the area. This process often had the effect of diverting fighters, bombers, and ground forces from their primary missions to support emerging situations as detected by the airborne linguist.<sup>39</sup>

The final effort by the USAFSS to supply airborne COMINT directly to the war fighter occurred in a project known as Blue Sky. Maj Leslie Bolstridge of the 6920th Security Group proposed the idea of equipping C-47s with COMINT collection equipment.<sup>40</sup> In late 1952, FEAF gave the group three C-47s, assigning them to the 6053rd Radio Flight Mobile at Yokota Air Base (AB), Japan.<sup>41</sup> Commencing almost immediately, the operations were a huge success. Flying over mainland Korea and the Sea of Japan, the newly outfitted RC-47 delivered unprecedented access to targets deep within North Korea and China. Even though the C-47s did not have direct communications with war fighters, ingenious Airmen devised a system by which the aircraft would jettison its tape recordings to waiting members of the USAFSS's Detachment 153 ground unit on Cho Do Island, Korea. In a procedure that foreshadowed the CORONA imagery satellite's delivery mechanism, the RC-47's crew rigged parachutes on the recorded tapes and then released them over a designated area of beach on the island.<sup>42</sup> The tapes then quickly went to Detachment 153, which subsequently passed any pertinent intelligence directly to the war fighters. Although not as timely as direct warning of threats eventually became, this method provided valuable intelligence. As proof of its value, when one of the squadron's RC-47s crashed during a takeoff from Yokota AB, Gen Otto Weyland, the FEAF commander, offered his own VIP C-47 as a replacement for the damaged aircraft.43

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When the war began, airborne ISR had no significant tactical capability. Nevertheless, as it had done in World War II, the Air Force built a competent airborne COMINT force. Mostly neglected in the early stages of the war, airborne COMINT became a major contributor to the success of both land and air power. More importantly, the ability of Airmen to swing their focus rapidly from the USSR to Korea showed not only their flexibility but also the power of their innovation. When properly outfitted with adequate equipment—in this case the C-47 the aircrews quickly improvised and found ways to contribute to the fight. Their experiences in Korea helped the Airmen who succeeded them replicate many of their accomplishments in the Vietnam War.

# Vietnam: Project Teaball

Successful operations of the USAFSS's detachments during the Korean War made possible the delivery of sanitized COMINT to the war fighter. In perhaps the most well known effort of the Vietnam War, Doyle Larson, a colonel at that time, developed a similar system called Project Teaball. Whereas the Korean War effort provided only CO-MINT, Larson's system enabled the rapid dissemination of multisource information directly to the war fighter.

Responding to a plea for help from Gen John Vogt, the Seventh Air Force commander, Larson's team investigated ways to protect the Seventh's aircraft.<sup>44</sup> Because ongoing U-2 flights over Laos were already downlinking intelligence collection to a van at Nakhon Phanom Royal Thai AFB in Thailand, Larson's team decided that setting up a command and control van next to the U-2 exploitation van offered the best way of relaying the intelligence.<sup>45</sup> This new system would allow the command and control van to pass warning information about direct threats to pilots within seconds of reception.

In subsequent weeks, both General Vogt and Gen John Ryan, the Air Force chief of staff, approved the project and directed its implementation. Upon arrival in-theater and fearful of relying solely on the U-2's

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collection, Larson's team members began to look for more platforms that could contribute.<sup>46</sup> Visiting the RC-135M Rivet Card crews in Japan, they discovered that the aircraft could pass its collection to the USAFSS's 6929th Security Squadron at Osan, Korea, which could then relay it to the Teaball van at Nakhon Phanom via secure communications. In addition to the U-2 and RC-135 information, they also incorporated radar data from orbiting EC-121 Warning Star and US Navy radar picket ships. These multiple sources of information gave the Teaball operations center the most robust intelligence picture available.

On 26 July 1972, Project Teaball went into effect.<sup>47</sup> After suffering initial growing pains marked by communications problems, the project met with huge success.<sup>48</sup> As in Korea, American pilots now had the information they needed to avoid enemy air ambushes and to set up their own. Within weeks, pilots were contacting the Teaball Weapons Control Center before their sorties to ensure that they could receive Teaball-derived intelligence.<sup>49</sup> The air-to-air kill ratio skyrocketed from 1:2 (before Teaball) to over 4:1.<sup>50</sup> Looking back on Teaball operations, General Vogt declared that "with the advent of Teaball, we dramatically reversed this [10ss-to-victory ratio]. . . . During Linebacker we were shooting down the enemy at the rate of four to one . . . same airplane, same environment, same tactics; largely [the] difference [was] Teaball."<sup>51</sup>

Teaball unequivocally had shown that airborne ISR forces could deliver intelligence directly to the war fighter. As was the case in Korea, the ingenuity of the Airmen made the difference. Given time and resources, they altered their mind-set from Soviet-based strategic intelligence to one highly capable of delivering intelligence directly to those who needed it. Not everything was perfect: communications complications, linguist confusion, and pilot buy-in complicated the system, but in the end, the intelligence delivered by the airborne ISR forces saved lives.<sup>52</sup>

After Vietnam, manned airborne ISR forces once again cast aside the lessons learned from war and returned to collecting strategic intelli-

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gence against the Soviets. This reorientation on the USSR continued until Operation Urgent Fury in Grenada again underscored the inability to deliver tactical intelligence to joint ground customers.<sup>53</sup> Afterward, aircraft engineers labored tirelessly to automate data flow and supply compatible radios that allowed aircrews to talk directly to ground forces and other air assets. By the time Operations Desert Shield and Desert Storm began, these capabilities were in place. Throughout the counterinsurgency conflicts of the early 2000s, manned airborne ISR crews fine-tuned these capabilities so that we can now offer both threat warning and enemy information in near real time to a multitude of war fighters.

# Conclusion

Granted, the tactical ability of today's manned airborne ISR force remains critical to the successful execution of ground operations and has saved countless lives, but without firm leadership, the upcoming rebalance to the Pacific could herald the demise of such proficiency. The previous discussion has shown that, when returning from its forays into tactical collection, the Air Force's manned airborne ISR force historically has abandoned the tactical collection mission. The upcoming Asia-Pacific shift following the drawdown in Afghanistan, however, differs from the case studies mentioned here. Going into both Korea and Vietnam, the Air Force had to create new aircraft capabilities and dissemination methods to deliver tactical intelligence to war fighters. As we leave Afghanistan, this will not be the case. The airborne ISR force has integrated these tactical capabilities into the aircraft's baselines. Whether we use these platforms for collecting tactical or strategic intelligence, their radios and advances in data distribution will remain, allowing the assets to flow seamlessly from the tactical to the strategic environment as necessary and making the decision to maintain competency in tactical collection much easier. We deserted the tactical mission after the Korean War, and rebuilding it for Vietnam took time

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and considerable effort. We now have a hard-earned tactical support capability that we should not abandon as our gaze turns to the Pacific.

If the communications hardware is adaptable, the question then shifts to our aircrews' ability to flex between the two missions. Has our concentration on counterinsurgency for the last 11 years atrophied our strategic skills? Undoubtedly, the Air Force has not completely abandoned the strategic mission, but for more than 20 years the preponderance of its efforts has been in the Middle East and Afghanistan. As in Korea and Vietnam, the need to deliver timely intelligence directly to the war fighter has driven today's aircrew tactics, techniques, and procedures. Today's young airborne ISR Airmen have always conducted the tactical mission; for them, switching to the strategic will demand considerable retraining. Our Airmen are razor sharp, but the current fight calls for a paper-thin level of analysis. The delivery of timely intelligence has bred a linguist force short on analytic skills. Strategic collection will precipitate a return to the days of slower, methodical analysis and reporting—relearning that skill will also take time.

History has shown that airborne ISR Airmen are more than capable of transitioning from tactical to strategic collection. As missions vacillated between Cold War strategic collection and tactical forays (Korea and Vietnam), our manned airborne ISR forebears had the luxury of dropping the tactical skill set when they returned to strategic collection. Modern ISR aircrews will not be as lucky. Because of the uncertainty of the threat environment, the Air Force must maintain tactical capabilities. Our force includes some of this nation's best talent; like their predecessors, they undoubtedly have the aptitude to make the transition. But we cannot compensate for an 11-year hiatus from the strategic collection mission overnight. Today's tactical fight demands rapid dissemination of intelligence with little in-depth analytic focus. Tomorrow's strategic missions will be different. As was the case during the Cold War, national decision makers need comprehensively developed intelligence. Consequently, the manned airborne ISR force must change its mind-set to accommodate them. These Airmen will have to

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learn and relearn strategically focused linguistic, analytic, and reporting skills. Moving from the rapid, first-glance type of intelligence that typifies today's missions to one that calls for patience and target development will not be easy. We cannot make an absolute shift to the strategic, though. As mentioned above, we must be able to return to the tactical mission as the exigencies of today's dynamic environment demand. Doing so requires a great deal from our ISR Airmen. As always, they will succeed, but it is imperative that our leaders give them the time, personnel, and resources that they need.  $\diamondsuit$ 

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