## AIR FORCE ISR 2023:

# DELIVERING DECISION ADVANTAGE



A Strategic Vision for the AF ISR Enterprise

## Introduction

IR FORCE (AF) INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE (ISR) is at a strategic turning point. The President's 2012 Defense Strategic Guidance directs the US military to begin the transition from today's wars and to prepare for future challenges including a rebalance toward the Asia-Pacific region. The challenge for AF ISR is to maintain the impressive tactical

competencies developed and sustained over the past 12 years, while rebuilding the capability and capacity to provide the air component commander and subordinate forces with the all-source intelligence required to conduct full-spectrum cross-domain operations in volatile, uncertain, complex, and ambiguous environments around the globe. We are outstanding at the former, but must rejuvenate our rich heritage of expertise in the latter. Further complicating the

"ISR is the coin of the realm, there is an unlimited appetite that won't fade..."

— James Clapper, Director of National Intelligence

transition is the reality of the fiscal environment. AF ISR has been asked to balance our capability across the range of military operations, but the resources required will be limited. While fiscal austerity will be a challenge, it is also an opportunity for AF ISR to purposefully rebalance the Enterprise to maximize our capability.

AF ISR 2023: Delivering Decision Advantage focuses the AF ISR Enterprise to meet future challenges and reinforces the importance of ISR as one of the AF's enduring core missions. It articulates our strategic vision for the future and describes three core tenets and five priorities for our Enterprise. The tenets and priorities frame the conditions that will enable AF ISR to provide high-quality tactical intelligence to war fighters and other theater customers while allowing us to prepare for cross-domain operations across the full range of potential military operations.

As WE ENTER this post-war epoch—one that will be hallmarked by fiscal austerity and strategic uncertainty—our nation needs AF ISR to once again anticipate strategic surprise, baseline the adversary, and conduct ISR operations in challenging, cross-cultural environments across the range of military operations. *AF ISR 2023: Delivering Decision Advantage* provides the guidance that will allow us to succeed.

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SUMMARY

## Purpose

IS ONE OF THE AIR FORCE'S FIVE ENDURING CORE MISSIONS along with air and space superiority, rapid global mobility, global strike, and command and control. AF ISR is integral to Global Vigilance for the nation and is foundational to Global Reach and Global Power. As we transition to what will likely be a highly volatile, unpredictable future, AF ISR will be the bedrock upon which the Air Force provides freedom of action to our joint and coalition partners.

This document provides AF ISR's strategic framework—our vision, mission, core tenets, and priorities—that will guide the AF ISR enterprise as we rebalance to operate effectively in all domains and environments. It provides the guidance and direction necessary to harmonize ISR

"Any Air Force which does not keep its vision far into the future, can only delude the nation into a false sense of security."

— Henry "Hap" Arnold

Airmen, capabilities, and resources through 2023—a task that will be particularly difficult as we face post-war resource reductions similar to those seen after each of the nation's major wars. These difficult times afford us the opportunity to think differently about ISR, relying on agility and innovation to reset, reconstitute, and refocus our ISR force. AF ISR 2023: Delivering Decision Advantage lays out a strategic vision of "Full-Spectrum Awareness" and "World-Class Expertise"

which combine to the ultimate vision of "Delivering Decision Advantage." This document provides strategic guidance for the framework of focused visions and plans that will span the ISR Enterprise and map out the steps necessary to deliver decision advantage.

A President has directed a shift toward the Asia-Pacific region. To support this grand strategic refocus while ensuring our ability to operate in all regions and potential environments, AF ISR must also rebalance. While we must sustain our honed tactical skills, today's ISR force must also recapture our traditional preeminent support to theater operations and the nation's strategic leaders. In addition to the tactical intelligence mission, the AF ISR force of 2023 must also conduct

strategic intelligence collection in peacetime—Phase 0—and provide world-class, multi- and all-source intelligence in highly contested, communications-degraded environments across all domains. Our ability to provide dominant ISR depends on well-trained, well-led professional Airmen who have strong analytical skills along with a high state of readiness, agility,

"In our ever-changing world,
America's first line of defense is timely,
accurate intelligence that is shared,
integrated, analyzed, and acted
upon quickly and effectively."

— President Barack Obama

## Purpose (cont'd.)

and responsiveness. These characteristics, along with continued innovation and integration of technological advancements, will combine to make our Airmen experts in their trade. Additionally, we will not rely solely on our own capabilities; it is imperative that we fully leverage the vast array of national capabilities along with those of the Total Force, our sister Services, the Intelligence Community (IC), and our international partners. Finally, we will develop a force presentation construct that allows AF ISR to effectively and efficiently present multi-domain, multi-INT competent ISR Airmen to air component and joint force commanders. This strategic vision charts the course we will follow to achieve these capabilities and maximize our ability to conduct full-spectrum cross-domain ISR operations.

Air Force ISR 2023: Delivering Decision Advantage links Presidential, Department of Defense, Joint Staff, and Air Force-level strategic guidance to the future of AF ISR. While understanding the need to revolutionize the AF ISR force, this strategic vision recognizes the fiscal constraints the nation will face over the next decade. We will not be able to maintain the size and composition of the current ISR force, yet we must prepare for operations which will range from humanitarian assistance to major contingency operations in highly contested environments. This strategic vision enables us to achieve national goals while tailoring our ISR force to best meet future challenges.





## **AF ISR Vision 2023**

#### AF ISR 2023 Vision:

Full-Spectrum Awareness; World-Class Expertise; Delivering Decision Advantage

**Full-Spectrum Awareness:** Operations-intelligence integration currently provides unprecedented awareness of the operational environment for tactical, operational, and strategical commanders and decision makers. Our vision depicts an AF ISR Enterprise that seamlessly ingests data from an even wider expanse of sources, swiftly conducts multi- and all-source analysis, and rapidly delivers decision advantage to war fighters and national decision makers. Full-spectrum awareness in Phase 0 and Phase 1 will enable ISR Airmen to develop a comprehensive picture of the operational environment and, in coordination with the entire intelligence enterprise, develop a better understanding of potential adversaries' intentions and capabilities. In

Phase 0: Shape
Phase 1: Deter
Phase 2: Seize Initiative
Phase 3: Dominate
Phase 4: Stabilize
Phase 5: Enable Civil

**Authority** 

understanding of potential adversaries' intentions and capabilities. In

Phases 2-5, full-spectrum awareness will provide the operations-intelligence convergence that will lead

**World-Class Expertise**: Our Airmen—Active Duty, Guard, Reserves, and civilians—are the engine that powers AF ISR and are key to the world's greatest Air Force. For our vision to become reality, we must ensure they are organized, trained, educated, and equipped to execute their assigned missions across

to informed decisions and compressed observe, orient, decide, and act (OODA) loops.

"The world's greatest Air Force
— powered by Airmen,
fueled by innovation."

— Chief of Staff of the Air Force Mark Welsh

all domains, geographic regions, and phases of conflict. Providing world-class expertise as an integral part of air component and joint operations requires ISR Airmen who are masters of threat characterization, analysis, collection, targeting, and operations-intelligence integration. Empowered to innovate, ISR Airmen will lead the way in the development of tactics, techniques, and procedures (TTP) that will compress OODA loops,

produce actionable intelligence, and provide the intelligence needed to complete the kinetic or non-kinetic targeting equation.

Delivering Decision Advantage: The fundamental job of AF ISR Airmen is to analyze, inform, and provide commanders at every level with the knowledge they need to prevent surprise, make decisions, command forces, and employ weapons. Maintaining decision advantage empowers leaders to protect friendly forces and hold targets at risk across the depth and breadth of the battlespace—on the ground, at sea, in the air, in space, and in cyberspace. It also enables commanders to apply deliberate, discriminate, and deadly kinetic and non-kinetic combat power. To deliver decision advantage, we will seamlessly present, integrate, command and control (C2), and operate ISR forces to provide Airmen, joint force commanders, and national decision makers with utmost confidence in the choices they make.



## AF ISR 2023 Mission and Core Tenets

#### AF ISR 2023 Mission:

Enable decision advantage by providing and operating integrated, cross-domain ISR capabilities in concert with joint, national, and international partners.

#### **AF ISR Core Tenets:**

ISR IS INDIVISIBLE—ISR effects depend on the synchronization and integration of intelligence, surveillance, and reconnaissance.

ISR IS DOMAIN NEUTRAL—focused on capabilities and effects, not platforms.



### **Priorities**

#### Rebalance and Optimize Integrated ISR Capabilities

ISR IS EXQUISITELY equipped to operate in permissive environments. However, the President, Secretary of Defense, Chairman of the Joint Chiefs of Staff, and Chief of Staff of the Air Force have all directed the transformation of our force to one more suited to win the nation's wars in contested or highly contested environments. While we will rebalance, this does not mean we will reduce

Contested Environment: Environment where an adversary possesses the capabilities to deny our ability to operate or restrict our freedom of action in air, space, or cyberspace.

our ability to conduct ISR operations in support of the enduring counterterrorism (CT) mission. Key to maintaining the ability to operate in both permissive and contested environments is the appropriate mix of Airmen, manned platforms/sensors, and remotely piloted aircraft (RPA). Our air, land, maritime, space, human, and cyber sensors must be able to penetrate denied space, survive

Highly Contested Environment:
Environment where an adversary
possesses the capabilities to offer
prohibitive interference in one or more
domains that requires application of
advanced war fighting techniques and
capabilities to create desired effects.

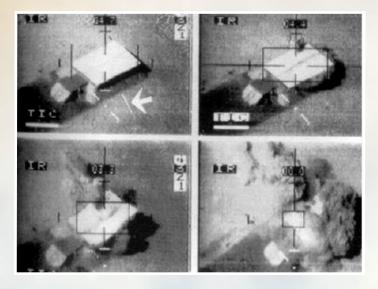
to operate, and provide required levels of persistence. The challenge is to integrate these sensors through a robust information architecture that allows highly trained multi- and all-source analysts to rapidly access and analyze all pertinent data and deliver it quickly to the war fighter and decision makers. To achieve this optimal mix of Airmen and machines, we will rebalance the AF ISR portfolio by divesting some platforms/sensors and, where possible, reinvesting the savings in information architecture, all-source analytic training, and next-generation penetrating ISR platforms/sensors.

AF ISR's processing, exploitation, and dissemination (PED) capability has evolved considerably over the last decade. To continue the maturation, we will break the linear relationship between collection and analysis, where every increment of additional collection capacity requires a proportionate increase in analytical manpower. We will embrace the need for increased automation while recognizing that analysts play the critical role in synthesis, integration, and insight. To achieve this balance we will transition the Air Force Distributed Common Ground System (AF DCGS) to a service-oriented architecture (SOA) with an initial



focus on cloud data storage, analytic and collection planning tools, and ISR visualization. To share our all-source analytical expertise across the entirety of AF ISR, we will provide our Airmen with an integrated information architecture that connects the entire Enterprise—from our Airmen

at the unit-level to those serving in the greater IC—to the expanse of sister Service, joint, and international multi- and all-source analysis. These actions will enable ISR Airmen to scale across the range of military operations in culturally complex operating environments while conducting tailored, comprehensive all-source analysis.



deliberate targeting competence has stagnated. To ensure AF readiness across the full range of military operations, we will refocus on satisfying the air component commander's air, space, and cyberspace deliberate targeting requirements by: adopting a distributed targeting concept of operations and TTPs; integrating and automating targeting capabilities across the enterprise; integrating kinetic and non-kinetic targeting TTPs; and establishing more comprehensive targeting training. Targeting is a critical

enabler of Global Vigilance, Global Reach and Global Power; we will ensure that AF ISR is ready to provide this highly perishable skill when required.

We can no longer afford to assume intelligence support for major acquisition programs; we must plan for it. The importance of Acquisition Intelligence over the life-cycle for weapons systems research and development, acquisition, sustainment, and employment cannot be overstated. We will continue professionalization of the Acquisition Intelligence workforce and mature training, policies, process, and engagement across the AF Acquisition community. Since intelligence mission data (IMD) requirements were not fully integrated during initial development of the 5th-generation systems, we will redouble our efforts with the larger IC to develop standard and modern collection, processing, exploitation, and dissemination processes for IMD. By leveraging technology solutions to drive efficiencies in our IMD production capacity, these processes will ensure that our 5th-generation aircraft, associated "smart weapons," space, and cyber systems always have the most current intelligence data available. We recognize that IMD is integral to 5th-generation survivability in contested/highly contested environments and is paramount to a joint force commander's ability to meet objectives.

FINALLY, WE WILL BOLSTER and mature intelligence engagement across acquisition processes, activities, and operations. Professionalizing the Acquisition Intelligence workforce as a routine component of acquisition programs is crucial to optimizing the capability of new AF weapon systems. To ensure the progress we have made continues, we will partner with the AF Acquisition community to enhance acquisition flexibility and the ability to allow ISR operators to rapidly integrate commercial off-the-shelf (COTS) and government off-the-shelf (GOTS) tools into approved SOA frameworks.

#### Normalize Cyber ISR, Space ISR, and HUMINT Operations

INCE 9/11, there has been an explosion in space and cyberspace capabilities, with corresponding prominence on the national stage. Additionally, the conflicts in Iraq and Afghanistan resulted in renewed, sustained emphasis on human-derived intelligence (HUMINT and open sources) by all of the Services. To execute the AF ISR mission, we must be better collectors, enablers, and

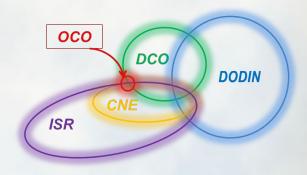
"Key to countering these [cyber] threats is learning how to grow our capabilities in this challenging domain."

— Gen Keith Alexander, Commander USCYBERCOM

integrators of information derived from space, cyberspace, human, and open sources. To achieve this, we will develop a cadre of ISR professionals who have a deeper expertise in space, cyber, and human-derived intelligence and equip them with the analytic expertise and tools that will help answer questions associated with these increasingly contested domains. This integration will enhance the battlespace awareness we provide to the war fighter and national decision makers.

FOR THE DEPARTMENT OF DEFENSE—and the nation—the fastest-growing military capabilities are in cyberspace. Activities in this human-created domain are familiar to all, but lesser known is

the fact that they evolved from ISR activities dating to the 1980s. By 2023, AF ISR and cyber forces will be an integral partner to the joint team that operates in cyberspace to meet air component commander, joint force commander, and national needs. We will also forge service-specific cyber capabilities that provide specialized applications across the domains. Computer Network Exploitation (CNE) will continue to be a crucial enabler for Offensive Cyber Operations (OCO), Defensive Cyber Operations (DCO), and Department of Defense



Information Network (DoDIN) operations, but ISR will also be a prominent and critical product of those operations, meeting Air Force, joint, and national decision maker requirements.

AF ISR RELIES HEAVILY ON SPACE-BASED ASSETS for collection and global airborne ISR operations; ISR collected from space greatly enhances our ability to characterize the battlespace through all domains and is critical to success across the full spectrum of operations. In the early stages of conflict in a contested, degraded environment, ISR from space may represent our most viable collection capabilities. But the space domain is increasingly congested and contested. Therefore, to maintain this capability, we need to identify non-kinetic and kinetic threats to space assets and architecture; identify adversary intent and capabilities to use space; and conduct target analysis

that enables offensive and defensive counterspace operations. Protecting space assets is critical to AF ISR operations and the nation's full spectrum joint operations. Purposefully developing ISR Airmen who understand ISR for and from space is the initial step we will take to ensure this critical capability. To solidify the value of space ISR, we will also broaden and improve our ability to integrate space-based ISR capabilities across the AF ISR Enterprise.



AF HUMINT is a modest but essential area for investment. Our ability to satisfy Air Force-centric requirements is paramount to our ability to provide decision advantage. Airand space-specific HUMINT requirements do not often break the national HUMINT system's threshold for collection priority. Even so, these requirements are critical for the AF's application of airpower and must be satisfied. Additionally, HUMINT should be closely integrated with technical ISR to both enable technical collection and be enabled by it. Finally, as HUMINT in some environments represents the best and most

cost-effective platform for stealth and penetration, it must be complementary and synchronize with our regional ISR and analytical efforts.



#### Strengthen Integration, Collaboration, and Partnerships

Geographic Combatant Command (GCC) boundaries and occurring throughout the global commons. These challenges are not unique to the US. International partners can yield access

"We need to promote a sense of shared responsibility within our government, with our Nation, and with our partners and allies."

Gen Martin Dempsey, Chairman,
 Joint Chiefs of Staff

to intelligence and capabilities the US might otherwise be unable to obtain. Strong relationships expand our opportunity to create regional effects and influence strategic events. Intelligence and information sharing can also be the initial step that leads to a broader, more comprehensive relationship between nations. Understanding what we can—and cannot—expect to get from, or share with, our mission partners will help us effectively structure the AF ISR Force of 2023.

FIRST AND FOREMOST, we will improve our ability to share information in all security environments. Classification barriers have historically hindered the operational effectiveness of multinational coalitions. To ensure all partner nations are able to access necessary data, we will work for increased

integration and strive to remove unnecessary and outdated classification barriers. Additionally, we will continue our efforts to integrate more sources of data into the DCGS architecture and make that information available to international partners, sister Services, and the IC. We will begin by working to ensure the "Releasable Five Eyes" classification becomes the norm, not the exception. We will also continue to partner with our sister Services and the IC to enable access to each other's data, tools, and expertise. Fully leveraging other Service and IC strengths will make us a more efficient and effective military ISR force. We also need to improve



our information sharing with our federal partners. In the event of a Department of Defense Support to Civil Authorities (DSCA) scenario, AF ISR may be called upon to provide Incident Awareness and Assessment; we must ensure that we have pre-established relationships and agreements to facilitate the timely delivery of ISR to the federal agencies that need it. Finally, we will incorporate lessons learned and best practices to ensure our Enterprise utilizes the best, cutting-edge technologies. These initiatives will significantly improve our ability to achieve actionable effects via mutual contributions.



Building ISR partnerships will be undertaken as a continuing, long-term effort. Part of this longer look requires our willingness to share more than just hardware and data. We will emphasize analytic sharing and collaboration over capabilities—the perspectives gained from our partner nations' regional focus and understanding will be invaluable as we seek greater integration.

#### **Revolutionize Analysis and Exploitation**

HE HIGHLY COMPLEX STRATEGIC environment of 2023 will require robust multi- and all-source analysis. It will demand focus on all phases of the intelligence cycle and capability to perform in all phases of conflict. Two significant trends lead to this assessment: first, our dedication to the

What is Intelligence Analysis?
A cognitive activity—both art and science—applying tools and methods to collected data and information to create and deliver intelligence knowledge that provides decision advantage to commanders and decision makers.

counterinsurgency (COIN) and CT conflicts following the terrorist attacks of 9/11 naturally resulted in a deterioration of AFISR experience and skills for operating in contested or highly contested environments. A backto-basics approach to AFISR will include teaching ISR Airmen fundamental analytical tradecraft—including enhanced cultural awareness—that will be increasingly important as the nation rebalances its strategic priorities. Second, information-age technology is advancing at a stunning pace, yielding increasingly

common information architectures, data accessibility, and knowledge management—all of which have created the conditions for a leap in intelligence processes. Whether it is labeled as "big data," data mining, activity-based intelligence (ABI), or object-based production (OBP), the vast amount

of information that we collect demands a transformation in the way we process, organize, and present data. To optimize our limited manpower and resources, we will "flip" today's larger investment of Airmen in processing and exploiting single collection streams of data to an enterprise model where ISR Airmen develop, construct, and conduct multi- and all-source analysis in concert with the squadrons, wings, Air Operations Center (AOC), Joint Intelligence Centers, joint, and national producers.

"Simply stated, the need for accurate intelligence and prescient analysis...has never been greater than it is in 2013—or than it will be in the coming years."

John Brennan, Director,
 Central Intelligence Agency

To facilitate this shift we will: create a spectrum of analysis training and education for our officer, enlisted, and civilian workforce; develop and implement the principles of critical thinking across the Enterprise; develop a new ISR force presentation model to ensure a standard, repeatable process that results in effective and efficient delivery of focused, actionable, and timely analysis from our federated fusion, SIGINT, GEOINT, and HUMINT enterprise; provide the opportunity to reset and reconstitute forces; and finally, we will develop and deploy analysis architecture and tools to better automate, visualize, collaborate, and integrate analysis and exploitation.

The most important and challenging part of our analysis and exploitation revolution is the need to shift to a new model of intelligence analysis and production. The growing complexity of the data we collect along with the sheer quantity of data has obviated the traditional linear model of production. The new model treats all intelligence collection as sources of meta-tagged data accessible across multiple domains, organizational, and security divides from which analysts—trained in all-source techniques and methods—can discover, assess, and create relevant knowledge for commanders and decision makers at all levels. The AF will present and implement this model at the forefront of the IC, as a full partner of the IC Information Technology Environment (IC-ITE) and Joint Information Environment (JIE).

#### Develop and Care for the Team of ISR Airmen

IRMEN ARE THE POWER BEHIND the AF ISR Enterprise and are our most important asset. Nothing is more vital to ensuring that AF ISR continues to deliver decision advantage than preparing ISR Airmen to conduct ISR operations and support AF missions across all domains.

To best ensure mission success, we will grow Airmen who are masters of the ISR operational art. These Airmen—fully trained and proficient in the functional competencies of analysis, collection, targeting, and operations-intelligence integration—will be critical thinkers whose expertise will drive operations and pace the intelligence cycle. We will also emphasize foreign language competency and cultural expertise as both are critical enablers to our ability to deliver ISR in



its unique cultural context. Additionally, AF ISR provides a significant number of Airmen who perform missions within national and joint intelligence organizations. These Airmen apply unique skills and provide perspectives that enable and enhance those missions and their experiences make them better ISR Airmen when they return. We are proud of this commitment and will continue to prepare our Airmen for these critical roles.

THE NATION—and our AF—is rebalancing to include greater focus on more traditional threats. This new emphasis will require AF ISR to rededicate effort towards readiness and training emphasizing the core functional competencies. As we rebalance, the rebuilding of AF ISR functional competencies will require a significant commitment of time, patience, resources, and a dedication to the air components' mission; we will make those commitments. Finally, as the nation reduces its presence in Afghanistan, we will reconstitute our intelligence force and bring deployment dwell rates back to sustainable levels; our Airmen—and their families—deserve it.

ALL OF THE aforementioned challenges must be bound by a viable personnel management plan that aligns available manpower with prioritized requirements. In the upcoming period of fiscal austerity,

The source of Air Force airpower is the fighting spirit of our Airmen.

— A Vision for the United States Air Force

we cannot rely on personnel additions to meet the growing number of ISR requirements; properly allocating our most valuable resource—our Airmen—is fundamental to our future success. To best orient the AF ISR Enterprise of the future, we will balance the force between the requirement to support frontline AF units—squadrons, wings, the AOC ISR Division (ISRD)—and the requirement to provide consolidated intelligence operations and targeting to the myriad of Service, joint, and

coalition organizations. This, along with the growing need to provide ISR Airmen to conduct ISR in cyberspace and space, will challenge current and future AF ISR leaders.

## Summary

AF ISR 2023: Delivering Decision Advantage provides an overarching framework that will allow ISR Airmen (Active Duty, Guard, Reserve, and civilians) at every level and in every AF and joint organization—from the headquarters-level to the unit-level or any of the various other important

positions we fill across the joint and larger intelligence community—to understand their roles in accomplishing the AF ISR mission. While AF ISR's contributions to COIN/CT over the past 12 years were remarkable and historic, past performance is no guarantee of future success. Relying on the status quo is a recipe for failure. To set the stage for operations in highly contested, and degraded environments while

The evolution of globally integrated ISR has fundamentally changed how America fights wars. It is the foundation upon which every joint, interagency, and coalition operation achieves success.

— Global Vigilance, Global Reach, Global Power for America

simultaneously absorbing significant force reductions demands hard work, dedication, innovation, agility, and the ability to make—and accept—difficult decisions about our ISR force. The strategic vision provided in *AF ISR 2023: Delivering Decision Advantage* addresses the areas where the AF ISR Enterprise will direct time, resources, and manpower to ensure our ability to operate effectively in all domains, across all theaters, in all phases of conflict, any time.



The vision, mission, core tenets, and priorities for AF ISR 2023 provide a clear vector on how we will embrace the next era in AF ISR. We are entering a period of turbulence and uncertainty, involving myriad new challenges for AF ISR, but we must be prepared at all times to execute global cross-domain ISR operations across the full range of military operations. Following the guidance laid out in this strategic vision will ensure that our Airmen are ready!

