

AIR FORCE INFORMATION DOMINANCE VISION





INFORMATION DOMINANCE VISION FOR THE UNITED STATES AIR FORCE

Our ways of accessing and sharing information have evolved through innovation and technology. The pivotal role information has played in every campaign in the Air Force's proud history has remained unchanged. Air Force Chief of Staff, General Mark Welsh III, has focused the Air Force on five core missions that "capture what the Air Force is all about and what we should focus on for tomorrow"¹:

- Air and Space Superiority
- Intelligence, Surveillance, and Reconnaissance
- Rapid Global Mobility
- Global Strike
- Command and Control



These core missions are why the Air Force was created, why we exist as an independent service, and what we contribute to our national security. And every one of these missions depends upon information dominance: the operational advantage gained from the ability to collect, control, exploit, and defend information to optimize decision making and maximize warfighting effects.

INFORMATION DOMINANCE AND ITS IMPORTANCE TO THE AIR FORCE AND AIRMEN



Airmen at every level need timely and accurate information to make decisions and act upon it.² We often take information for granted and are surprised and frustrated when it is not available when, where, and in the form we need it.

Every Airman performing any mission needs information to make the right decisions – whether it's putting bombs on the correct targets, dropping humanitarian aid to people in desperate need or getting flight crews the information they need to plan and fly those missions.

Every single mission depends on information dominance. The Air Force vision for *Information Dominance* is this:

The Air Force fully exploits the man-made domain of cyberspace to *execute, enhance* and *support* Air Force core missions.

Each Airman needs access to accurate, timely, and usable information, regardless of location; Airmen need this information to make quick, smart decisions—whether on base or at the tip of the spear. Exploiting cyberspace allows us to do these things, and thwart our adversaries from doing the same.

¹ [Vision for the United States Air Force](#) and [Global Vigilance, Global Reach, Global Power for America](#)

² **Command and Control (C2)** is essentially about information: getting it, judging its value, processing it into useful form, acting on it, and sharing it with others. There are two basic uses for information. The first is to help create situational awareness (SA) as the basis for a decision. The second is to direct and coordinate actions in the execution of the decision. ([Joint Pub 6-0](#)).



CYBER-AIRMEN AND THE AIR FORCE'S CORE MISSIONS

Every Airman has a role in cyberspace. Every time you read an email, see a target location pop up on a heads up display, or receive a radio call you need to make a decision, you are counting on information dominance. The Air Force specifically trains a cadre of Cyber-Airmen. *Cyber-Airmen exist to directly execute, enhance, and support Air Force core missions in and through cyberspace.* Cyber-Airmen have the unique ability to directly execute, enhance and support Air Force core missions in and through cyberspace from a common, air-minded set of cyber-skills.

Some Cyber-Airmen *execute* Global Strike and Intelligence Surveillance Reconnaissance (ISR) directly in cyberspace, “striking,” “surveilling,” or manipulating targets anywhere on the globe in cyberspace, often with visible physical effects ranging from changes in operational states and functions to destruction. Similarly, the traditional communications role of moving data across the world at the speed of light is the *Rapid Global Mobility* of information.

Some Cyber-Airmen *enhance* Air Force core missions in and through cyberspace. For example Air Force Computer System Programmers in Combined Air Operations Centers (CAOC) develop innovative, on-the-fly solutions to improve the Combined Force Air Component Commander’s ability to *Command and Control* theater air forces.

Finally, some Cyber-Airmen *support* Air Force core missions through cyberspace; they enable C2 and *Air and Space Superiority* by ensuring Air Tasking Orders can pass from the CAOC to each Wing around the theater of operations, and by enabling communications among weapon systems. Others watch and protect communications linkages providing mission assurance to ensure flawless transmission and receipt of mission-critical data around the theater or across the world.

Going forward, the Air Force will develop all Cyber-Airmen into experts not only in cyberspace, but in the core missions they serve.





TENETS OF AIR FORCE INFORMATION DOMINANCE

Three prioritized tenets will guide our efforts for achieving this Information Dominance vision:



1. Increase Effectiveness of Air Force Core Missions.

Our first consideration is to increase the effectiveness of our core missions. We achieve maximum effectiveness when information is both timely and accurate, ensuring that Airmen at every level can make informed decisions as quickly as possible. Information that arrives late or is full of errors is useless at best and an obstacle at worst. *The Air Force will pursue solutions that prioritize the timeliness and accuracy of information.*

2. Increase Cybersecurity of Air Force Information and Systems.

Cybersecurity is crucial to the proper execution of Air Force core missions. The persistent and evolving cyberspace threat to the Air Force requires a holistic approach to cybersecurity that encompasses our people, culture, and operational processes. *The Air Force will integrate cybersecurity throughout weapons systems development, and program management culture and will focus efforts on securing information across all of our core missions.*

3. Realize Efficiencies through Innovative Information Technology Solutions.

The Air Force will continue to innovate as we leverage cyberspace. As a man-made domain, cyberspace is fertile ground for innovation. We must identify, vet, fund, and implement the untapped, innovative ideas of our Airmen to realize our full potential and meet future needs. Innovations to shorten the kill chain, increase the speed of decision-making, and realize cost savings to enhance Air Force core missions for the future. *The Air Force will create a Cyberspace Innovation Center to identify, vet, fund, and implement information and cyberspace innovations to increase Air Force competitive advantages in its core missions.*



WAY FORWARD

Moving toward the vision I have outlined here and applying the three tenets will help Airmen at all levels and in every location use information to achieve their missions. **The follow on Information Dominance Flight Plans strengthen mission assurance processes and optimize our investments to meet Air Force missions throughout the world.**

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