



“At the very heart of warfare lies doctrine. It represents the central beliefs for waging war in order to achieve victory.” - General Curtis Emerson LeMay, 1968

Doctrine is:

- The **agreed-upon** and operationally relevant body of **best practices and principles**. It is supported by:
 - History
 - Debate and analysis
 - Exercises, wargames, & contingency operations
- Official advice (i.e., authoritative, but not directive)
- Normally the best way to proceed. If we must deviate, there should be clear and compelling operational reasons.



Doctrine is distinct from, supports, and is supported by policy and strategy.

Policy governs the use of force, shapes strategy, and affects the application of doctrine. Policy is transmitted through formal and legal means. It includes laws, directives, instructions, and regulations.

Strategy incorporates the ends, ways, means, and risks to achieve objectives. Doctrine provides the informed starting point for developing strategy.

USAF Operational Doctrine

Air Force operational doctrine guides how the US Air Force organizes, presents, and employs forces that apply **Airpower--the ability to project military power through control and exploitation in, from, and through the air**. Air Force Doctrine is contained in a library of publications that capture our distinct USAF capabilities across **five core functions**:

- **Air Superiority**: achieving control of the air to facilitate freedom of action for a desired duration and location.
- **Global Precision Attack**: holding targets at risk or actively striking them to create precise effects across multiple domains.
- **Rapid Global Mobility**: the rapid movement of resources by air; employing and sustaining forces able to conduct decisive operations, anytime, anywhere.
- **Global Intelligence, Surveillance, and Reconnaissance**: synchronizing and integrating sensors, assets, processes, and systems to produce information and data that generates intelligence.
- **Command and Control**: the exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of a mission.

The Airman's Perspective

Airmen have a unique perspective of airpower that is distilled through several foundational statements:

- Control of the air is a necessary precondition for control of the surface.
- Airpower creates effects at the strategic level of warfare.
- Airpower exploits the principles of mass and maneuver simultaneously.
- Airpower is not bound by geographical operating areas and creates effects throughout a theater.
- Airpower's attributes combine to make it one of the most versatile components of military power.
- Airpower is a critical component of operations in the information environment.
- Airpower provides more than lethal effects.
- Airpower requires protection and sustainment to enable air operations and requires effective integration of capabilities, people, weapons, bases, logistics, and supporting infrastructure.
- Airpower's unique attributes necessitate it be centrally commanded by an Airman.

These central beliefs of airpower doctrine frame our quest to discover how emerging technologies may alter doctrine in the next decade.



Overarching Doctrinal Questions:

- How will new technologies enhance or negate airpower's inherent advantages?
- What combination or integration of technologies will create strategic advantage?
- Will machine-speed kill webs require centralization or decentralization of C2?
- Will advanced materials, bioengineering, and miniaturization upend air defense doctrine?

Artificial Intelligence & Autonomy

- How can AI, automation, and quantum science integrate with targeting doctrine to increase speed and lethality?
- How will artificial intelligence affect human judgement in the commander's decision cycle?
- If AI can increasingly solve the "physics-based" parts of our operational planning, how will that impact our planning processes and the current balances between positive and procedural control?
- How will AI and automation impact authority delegation to enable rapid and fluid command relationship adjustments in C2 doctrine?
- Will the introduction of agentic AI drive changes to the planning and execution of air operations?

Advanced Materials & Production

- How can advanced materials and production impact the ACE scheme of maneuver and the ability to sustain forces?
- How will new production processes revolutionize supply chains and rewrite logistics, sustainment and air maneuver doctrine?

Biotechnology & Neuroscience

- If highly convincing deep fakes are increasingly easy to produce, how can biotech and neuroscience help us to tell good information from bogus information for the purposes of intelligence?
- How will advances in neuroscience and human-machine teaming transform decision-making and reset command relationships?

Quantum Science

- How will quantum sensing affect the joint functions of protection and C2, while maintaining the principles of security and surprise?
- If quantum computing makes it impossible for us to do traditional cyber-attacks without being detected, what other ways can we interfere with quantum protected adversary C2 systems?

Robotics & Miniaturization

- *How will proliferated autonomous drones alter doctrine for air superiority and airspace control?*
- *How will robotics and miniaturization affect freedom of maneuver in the space domain, and subsequently alter USAF space support doctrine?*