

Department of the Air Force Operational Imperatives



“The heart of our mission is to deter aggression. We don’t want to fight wars -- we want to prevent them -- and the way you prevent conflicts is to convince the other side that you have the will to resist and the capability to defeat aggression.” – Secretary Kendall

WHAT

The operational imperatives are the critical operational capabilities and functions the Department of the Air Force must invest in to protect the United States’ ability to deter conflict and project power against pacing challenges.

• The success of our military depends upon the ability to control the air and space. Achieving these imperatives will enable the Air Force and Space Force to maintain our competitive advantages. **This is the change we must accelerate in order to win.**

WHY

China is fielding capabilities designed to defeat the United States’ ability to project power in the Western Pacific; Russia is attempting the same in Eastern Europe.

• While China and Russia have been building capabilities to defeat U.S. power projection and strengthen their grip in their respective regions, the U.S. answered a global call in 2001 to fight terrorism. Defeating a counterinsurgency threat represented a very different type of conflict against a very different type of opponent, using very different types of equipment than the pacing challenges we face today. The capabilities needed to conduct counterinsurgency are different than those needed to keep pace with modern peer militaries.

SPACE ORDER OF BATTLE

SITUATION

The nation’s dependency on space has only grown over time. Our potential adversaries have operationalized space to enable attacks on our terrestrial operations and to deny joint and combined forces the services from space that they depend on.

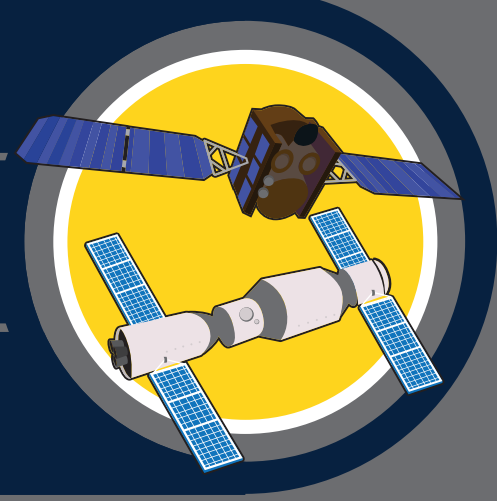
CHALLENGE

We need to protect our space capabilities, protect the services that we provide from space to our joint forces, and defeat the other side’s space capabilities, which try to do the same thing for their forces.

APPROACH

• The Department of the Air Force needs to focus its space-related acquisitions on resilient space missions -- meaning our space-based capabilities can be protected, survive attack, degrade gracefully under attack, and be reconstituted in a reasonable time, if necessary.
• The other half of that equation is that our potential adversaries have been modernizing their space-based military capabilities so they can attack us more effectively on Earth. We must be equipped and capable of denying a potential adversary’s space-based ability to attack our terrestrial assets, especially our high-value power projection assets.

OPERATIONAL IMPERATIVE 1



OPERATIONAL IMPERATIVE 2

OPERATIONALLY FOCUSED ABMS



SITUATION

The theory behind ABMS is that using modern networking capabilities, communications capabilities, artificial intelligence, and data analysis from a number of sources, and processing information intelligently will support significantly improved operational decisions, and resilient and efficient force employment.

CHALLENGE

We must identify and invest in the specific applications of ABMS that provide a measurable operational advantage to our warfighters.

APPROACH

The Department must move beyond conceptual demonstrations and experiments to focus its investments on specific capabilities with clear, quantifiable mission value and operational impact

OPERATIONAL IMPERATIVE 3

MOVING TARGET ENGAGEMENT

SITUATION

This imperative is about being able to identify, track, and engage numerous targets simultaneously, which will take a mix of air- and space-based capabilities.

CHALLENGE

In a hypothetical scenario with a well-resourced adversary, U.S. forces could be faced with numerous ground moving targets and aerial moving targets. We must be capable of engaging those threats simultaneously, in high numbers, and in a time-compressed situation where a few hours are likely to decide the outcome of the conflict. Traditional airborne moving target intelligence, surveillance, and reconnaissance sensors will be threatened.

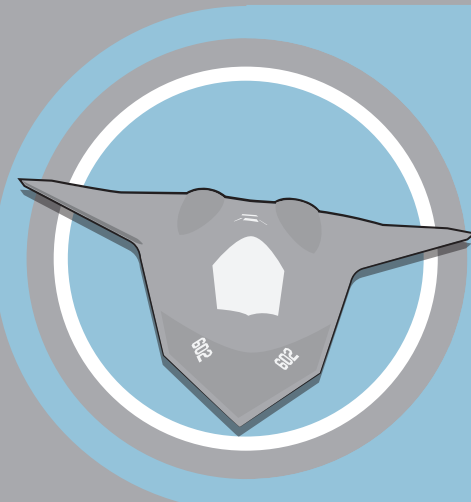
APPROACH

The joint force must be able to leverage capabilities, such as next-generation sensors and decision support provided by our ABMS investments, to acquire and, if necessary, prosecute targets, prioritizing those that would deny our access to an area of operations.



OPERATIONAL IMPERATIVE 4

TACTICAL AIR DOMINANCE



SITUATION

Next Generation Air Dominance (NGAD) started with a Defense Advanced Research Projects Agency (DARPA) study that concluded a family-of-systems approach was necessary for next generation air dominance. This concept means more than buying the next aircraft that will compliment other fighters in our inventory, like the F-35; it is about the full family of innovative platforms and systems that allows our Air Force to control the sky.

CHALLENGE

Controlling the air domain is an absolute imperative if the nation, and our allies, are going to be successful in future operations. When we look at what the DAF is currently acquiring to modernize the tactical air force (i.e. F-35s, F-15EXs, NGAD), we have an unaffordable future tactical air force. Those platforms are too expensive to fully equip an Air Force of the size we need operationally; we need to add attritable, less expensive, uncrewed autonomous aircraft to the mix.

APPROACH

The NGAD family-of-systems is, in part, a new crewed platform. It will also include uncrewed air combat aircraft teaming with the crewed platform, the connectivity systems between those platforms, the sensors that support them, the suite of weapons the platforms can carry, and more. This concept includes notionally one or more unmanned combat aircraft operating as a formation controlled by a single, modern, manned aircraft – principally the NGAD manned platform but also the F-35.

OPERATIONAL IMPERATIVE 5

RESILIENT BASING

SITUATION

One of the dependencies that our competitors have come to understand is the U.S. reliance on forward air bases. We rely on a handful of forward air bases in the Western Pacific and a relatively small number of air bases in Europe

CHALLENGE

We must deny our adversaries an easy targeting opportunity and the perceived vulnerability that a small number of known fixed locations provides.

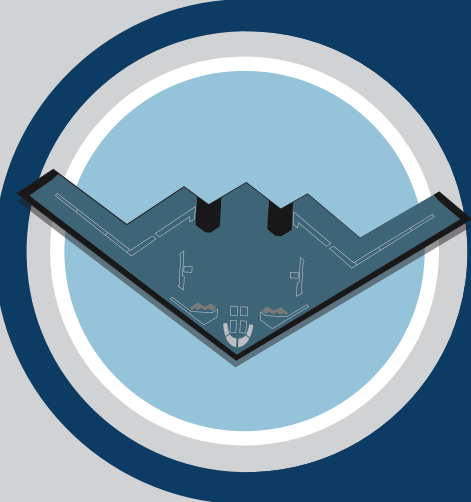
APPROACH

A mix of investments in resilient forward basing for current and planned tactical aircraft. The concept that the Department of the Air Force is pursuing in this regard, called Agile Combat Employment (ACE), is a strong step in the right direction, but a range and combination of concepts must be considered and resourced.



OPERATIONAL IMPERATIVE 6

GLOBAL STRIKE



SITUATION

This initiative, similar to the initiative associated with the NGAD, has to do with identifying the components of a B-21 family-of-systems, including uncrewed combat aircraft.

CHALLENGE

Our long range strike capacity must also be resilient against advanced threats with increasing range and sophistication and affordable.

APPROACH

The U.S. will need to supplement current and next-generation, crewed platforms with lower cost complimentary uncrewed systems. The technologies are available now to introduce uncrewed aircraft in the system-of-systems context, both at the tactical level with NGAD and at the more strategic level with the B-21.

OPERATIONAL IMPERATIVE 7

READINESS TO DEPLOY AND FIGHT

SITUATION

The Department relies upon a wide range of supporting information systems and facilities, in the continental U.S. and overseas, to mobilize, deploy and support our forces in a major conflict. All of these dependencies can be targeted by a wide variety of threats, including cyber and kinetic threats.

CHALLENGE

The Department of the Air Force must analyze the entire mobilization and support chain to ensure the entire system is hardened against the threats we would expect an enemy to present, so we can meet our commitments to combatant commanders.

APPROACH

Deploying Airmen, Guardians, and the systems they employ takes a herculean effort. This imperative will identify priority gaps and vulnerabilities in the Department’s ability to transition to and support current and projected operational plans in a contested environment.

