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Operations

AIR FORCE CONCEPT DEVELOPMENT

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This directive establishes guidelines for developing Air Force Concepts.

SUMMARY OF REVISIONS

1. Incorporates the guidance contained within the Joint Staff's Draft *Joint Operating Concept*. 2. Replaces the CONOPS, CONEMP, and CONEX framework with the Joint Staff framework of operating, functional, and enabling concepts. 3. Focuses the concept format on effects and capabilities. 4. Defines the concept coordination and approval process.

1. Purpose. The purpose of this AFD is to provide a common framework and practical guidelines for developing and writing Air Force concepts.

2. Concept definition. Air Force concepts describe the ways (sequenced actions) in which we employ military means (capabilities) to accomplish desired ends (effects). Air Force concepts describe how the USAF intends to employ air and space power in support of Joint Operating Concepts and national security and national military objectives.

3. Concept Principles. Concepts must be articulated in sufficient detail to enable decision-makers to compare alternative approaches and conduct meaningful experimentation. Only after a concept has been thoroughly developed and validated will it provide the basis for force planning and input into the requirements, acquisition, and resource allocation processes. If implemented, Air Force concepts will impact military Doctrine, Organization, Training, Materiel, Leadership, Personnel, and Facilities (DOTMLPF). Concepts should consider the following underlying principles.

3.1. **Historical Awareness.** Even though a future concept may propose a revolutionary departure from historical patterns, a concept that ignores history sacrifices credibility.

3.2. **Consistent with the Nature and Theory of War.** A concept should consider the enduring nature and theory of war (e.g., Clausewitz and Sun Tzu). If a concept contradicts the consistent experience of war, the burden is on the concept to make its case for deviation.

3.3. **Balance Between Military Art and Science.** New concepts may stress one or the other, but they should not ignore either.

3.4. **Embedded in the Proper Military-technological Context.** It is not the primary purpose of a concept to envision new technologies or capabilities, but to envision new ways of operating with technologies or capabilities that are likely to exist.

3.5. **Recognition of the American Approach to War.** Future concepts should be aware of American military predilections, which are based on enduring values and the national experience in war. Examples include the US propensity to: control the tempo of operations as a way of gaining and maintaining the initiative; establish unity of command; expand the battlespace; rely on technology solutions; and minimize casualties and collateral damage on all sides.

4. Concept Framework. Concepts are framed in three primary ways: maturity, time applicability, and type (**Attachment 2**). It is important to understand where a specific concept fits in each framework dimension.

4.1. Concepts mature over their life cycle, and as the concept matures, so does the level of specificity. The concept development life-cycle phases include (but are not limited to) initiation, wargaming, experimentation, validation and implementation. Concept approval (see para 6.2.) is required at least twice in the concept life cycle: prior to moving into the experimentation phase and prior to the implementation phase. A validated concept will influence DOTMLPF.

4.2. Concepts also apply across the full time-spectrum. Future concepts look at ways we expect to employ air and space power in the future (five years and beyond), current concepts address how we expect to employ air and space power today (out to five years), and historic concepts highlight how we once employed air and space power. Understanding where a concept fits in the time spectrum helps understand its influence on DOTMLPF. Further, concepts can migrate, as they mature from future to current concepts.

4.3. Finally, Air Force concepts can be categorized into several different types. While it's useful to understand these different types, it's more important to understand the relationships between the concepts. Air Force concepts consist of four basic types (Institutional, Operating, Functional and Enabling), which form the following:

4.3.1. **Institutional Concepts.** A description of the features and functioning of a military institution or institutions. Also referred to as Operational Concepts or Capstone Concepts, Institutional concepts describe not only the operating policies of the institution, but also manpower, training, education, materiel, morale and welfare, and other policies. Institutional concepts are the highest-order of all military concepts. They take their guidance directly from the National Security Strategy and the National Military Strategy. They provide context and guidance for all other military concepts. Future institutional concepts are often promulgated as vision statements applying to some specified future time horizon, such as *Joint Vision 2020*.

4.3.2. **Operating Concepts.** A description in broad terms of the application of military art and science within a defined set of parameters. In simplest terms, operating concepts articulate how a commander will plan, prepare, deploy, employ or sustain a joint force against potential adversaries

within a specified set of conditions. Operating concepts encompass the full scope of military actions required to achieve a specific set of objectives. The Joint Chiefs of Staff's Joint Operations Concept (JOpsC) provides further Joint Staff guidance on operating concepts. Operating concepts may be further stratified as strategic, operational or tactical, relating to the associated levels of warfare (definitions at Appendix 1), though the specific stratification is not as important as understanding the concepts' context and interrelationships.

4.3.3. Functional Concepts. Describe the performance of individual Air Force functions as they support operating concepts. Operating concepts supply the authoritative guidance and context for functional concepts. Functional concepts generally cut broadly across multiple operating concepts, though they can be specific to a single operating concept. Agile logistics, command and control, force protection, and intelligence are examples of functional concepts. In developing functional concepts, it's important to understand the potentially complex linkages to other functional concepts (e.g., the linkages between a command and control concept and an intelligence concept).

4.3.4. Enabling Concepts. Describe how a particular task or procedure is performed, within the context of a broader functional area, using a particular capability, such as a specific technology, training or education program, organization, facility, etc. An enabling concept describes the accomplishment of a particular task that makes possible the performance of a broader military function or sub-function. The JOpsC defines an enabling concept as "A description of how a set of related military capabilities facilitate the accomplishment of particular tasks within the context of a broader military function or more specific operating concept." A concept describing base perimeter defense operations would be an enabling concept supporting force protection (a functional concept). While still expressed in conceptual terms, enabling concepts are the most specific of all military concepts. They should contain a level of guidance sufficient to lead directly to the establishment of military requirements. Like the broader functional concepts, enabling concepts usually apply to multiple operating concepts, but may, under certain circumstances, apply only to a specific operating concept.

5. Elements of Current and Future Concepts. The following elements should be incorporated into all Air Force concepts. While all concepts should include these elements, they may be rearranged or added to as necessary to adequately describe the concept. Air Force concepts should be succinct, to the point, and submitted as a paper and briefing.

5.1. Purpose. Every concept should include a purpose statement that lays out the intended uses of the concept. Early in the development of a concept, the purpose may be to generate thinking about how to cope with new operating challenges or how to exploit potential opportunities provided by technology or other developments. After a concept has been validated, the purpose may be to provide guidance to the development and evaluation of subordinate concepts.

5.2. Time Horizon, Assumptions and Risks. A concept should explicitly specify the applicable time period. A concept should also identify critical assumptions that establish the limits of the concept, and applicable risks that influence further concept development and execution. As a concept becomes more mature and validated, the risk discussion may be relegated to the formal Capabilities Review and Risk Assessment (CRRA) process as appropriate/applicable.

5.3. Description of the Military Challenge. A future concept must include a description of the military challenge the concept is meant to solve and the conditions under which the concept applies (or

does not apply, if appropriate). The challenge description should include the broader context (e.g., a strategic concept would address the political situation, an operational concept addresses the strategic situation, etc.). The challenge description must include a mission statement (e.g., gain access in an area of responsibility to allow follow-on joint/coalition operations) and to the extent necessary, any geographic or physical environment factors. The description includes the character and form of the envisioned threat and any governmental, economic, societal or other factors that may impact on the conduct of military action.

5.4. **Synopsis.** The synopsis is a high-level outline that briefly captures the essence of the concept's objective (ends), desired effects, necessary capabilities (means) and sequenced actions (ways). The synopsis should summarize the concept in the most fundamental and widest terms possible that retain practical meaning and guide the reader through the remaining concept detail.

5.5. **Desired Effects.** Describes the desired operational effect of achieving military objectives. Example: Enemy high-value assets neutralized in the opening stages of a crisis or conflict.

5.6. **Necessary Capabilities.** Describes the means necessary to accomplish a task in order to generate the desired effects, while mitigating inherent risk (reference AFI 90-901, Operational Risk Management). Include a sufficiently detailed hierarchy of capabilities and sub-capabilities required to achieve the desired effects. The concept generally should not dictate how the capability is to be created and should not specify any particular branch, service, system or organization (an exception to this guideline is for tactical level, current concepts required for operational testing and evaluation of a specific weapons system). Examples of such capability descriptions include "the ability to neutralize enemy air defenses," "the ability to conduct forcible entry," or "the ability to establish air base operations anywhere in the world."

5.7. **Enabling Capabilities (as required).** Describes those enabling capabilities not directly related to the concept objectives and desired effects, but essential for the successful execution of the concepts. Examples: Global mobility and agile combat support capabilities.

5.8. **Sequenced Actions.** Military actions occur in time and space; a concept should clearly describe these relationships, both in terms of the general flow of events, and the relationships between applicable distances, ranges, tempo and duration. This section should step through each action, in sufficient detail, to describe how the necessary capabilities will be applied to achieve the desired effects.

5.9. **Command Relationships / Architecture (as required).** This section describes the architecture and interacting command relationships necessary to execute the operating concept.

5.10. **Summary.** Briefly summarizes the operating concept.

5.11. **Appendix.** Contains any required supporting material.

6. Authorities and Responsibilities:

6.1. HQ AF/XO is responsible for policy, guidance, procedures, and oversight affecting the Air Force Concepts development process.

6.2. Concept "approval" is required at two phases during concept development: 1) prior to experimentation, and 2) prior to implementation.

6.3. Concept "validation" is a cumulative process, beginning with concept initiation, wargaming, and experimentation and ending in final concept approval. A valid concept is a concept that is "approved" for implementation in accordance with paras 6.2. and 6.4.

6.4. The CSAF is the final approval authority for all AF-wide concepts that apply to multiple organizations directly subordinate to the CSAF. Commanders of Air Force MAJCOMs, DRUs, FOAs, and Air Force Reserve and Air National Guard forces should accomplish necessary and sufficient coordination, to include the Air Staff, before submitting all proposed Air Force-wide concepts (or their changes) through the HQ AF/XO (or other appropriate Deputy Chief of Staff) to the CSAF for approval. Include AF/XOXS (the Air Staff OPR) and AF/XOX (the Air Force's senior concept developer) in coordination for all Air Force-level operating concepts. Approval authority for all other Air Force concepts rests with the appropriate commander.

6.5. The Air Force Doctrine Center (HQ AFDC) will coordinate on all concepts for doctrinal implications. Once a concept is approved, HQ AFDC will monitor experimentation and wargaming analysis for inclusion into future doctrinal revisions.

6.6. Approved products will be published electronically on the Air Force operating concepts website located at <https://afconops.hq.af.mil/support/index3.htm>.

6.7. Existing CONOPS need not be rewritten solely to comply with this policy guidance, but as they come up for periodic review through their normal life cycle, they should be brought into compliance with this guidance.

JAMES G. ROCHE
Secretary of the Air Force

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

Joint Operations Concept - Full Spectrum Dominance Through Joint Integration, Draft version 4.8, 10 February 2003

Joint Publication 1-02, amended 14 August 2002

A Practical Guide for Developing and Writing Military Concepts, Defense Adaptive Red Team Working Paper 02-4, December 2002

AFI 90-901 - Operational Risk Management, 1 April 2000

C4ISR Architecture Framework, Version 2.0, 18 Dec 97

Abbreviations and Acronyms

AFI—Air Force Instruction

AFPD—Air Force Policy Directive

AFPDO—Air Force Publication and Distribution Office

CONEMP—Concept of Employment

CONEX—Concept of Execution

CONOPS—Concepts of Operation

CSAF—Chief of Staff, United States Air Force

DOTMLPF—Doctrine, Organization, Training, Material, Leadership and Education, Personnel, and Facilities

DRU—direct reporting unit

FOA—field operating agency

F2T2EA—Find, Fix, Target, Track, Engage and Assess

HQ AFDC—Headquarters, Air Force Doctrine Center

HQ USAF/XO—Headquarters Air Force, Deputy Chief of Staff, Air & Space Operations

HQ USAF/XOXS—Headquarters Air Force, Strategy, Concepts and Doctrine Division

ISR—Intelligence, Surveillance and Reconnaissance

JOpsC—Joint Operating Concept

JP—Joint Publication

MAJCOM—major command

OPR—Office of Primary Responsibility

Terms

Concept of Operations (CONOPS) —A verbal or graphic statement, in broad outline, of a commander's assumptions or intent in regard to an operation or series of operation.

Strategic Operating Concepts —Broad, overarching concepts that describe how air and space power support and accomplish national or multinational (alliance or coalition) strategic security objectives at the strategic level of war. JP 1-02 defines the strategic level of war as, *"The level of war at which a nation, often as a member of a group of nations, determines national or multinational (alliance or coalition) security objectives and guidance, and develops and uses national resources to accomplish these objectives. Activities at this level establish national and multinational military objectives; sequence initiatives; define limits and assess risks for the use of military and other instruments of national power; develop global plans or theater war plans to achieve these objectives; and provide military forces and other capabilities in accordance with strategic plans."*

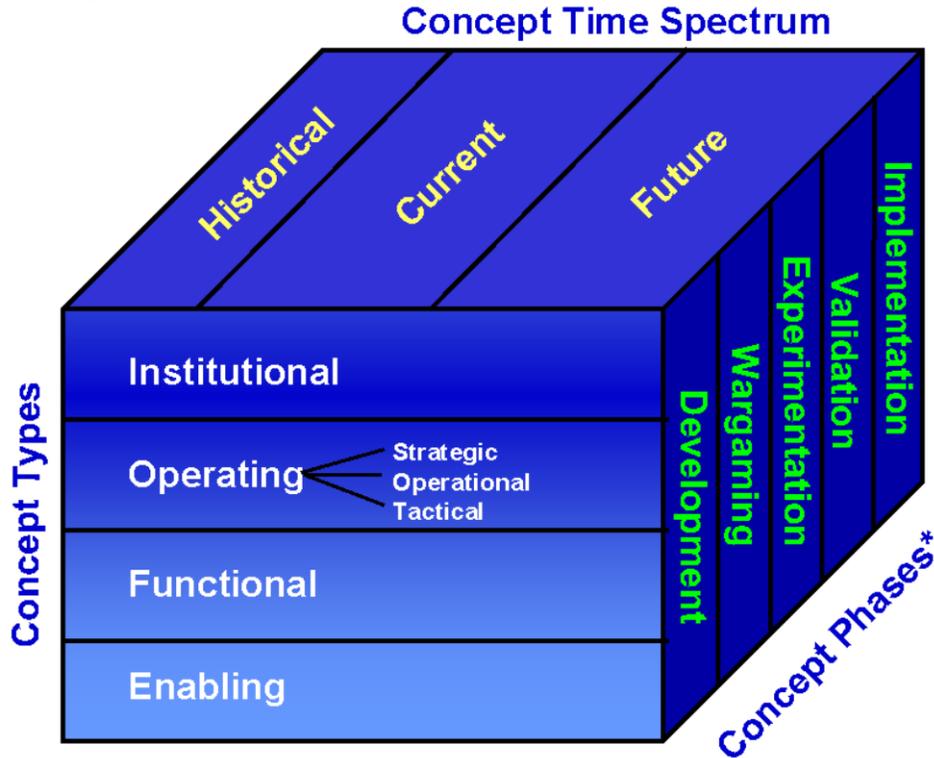
Operational Operating Concepts—Mid-level concepts that describe how to sequence air and space power operations to exploit and achieve strategic objectives at the operational level, through tactical successes. JP 1-02 defines the operational level of war as, *"The level of war at which campaigns and major operations are planned, conducted, and sustained to accomplish strategic objectives within theaters or areas of operations. Activities at this level link tactics and strategy by establishing operational objectives needed to accomplish the strategic objectives, sequencing events to achieve the operational objectives, initiating actions, and applying resources to bring about and sustain these events. These activities imply a broader dimension of time or space than do tactics; they ensure the logistic and administrative support of tactical forces, and provide the means by which tactical successes are exploited to achieve strategic objectives."*

Tactical Operating Concepts —Lower-level employment concepts that describe how to execute air and space power engagements to achieve operational objectives. JP 1-02 defines the tactical level of war as, *"The level of war at which battles and engagements are planned and executed to accomplish military objectives assigned to tactical units or task forces. Activities at this level focus on the ordered arrangement and maneuver of combat elements in relation to each other and to the enemy to achieve combat objectives."*

Attachment 2

CONCEPT FRAMEWORK

Figure A2.1. Concept Time Spectrum.



* Phases are not all inclusive

Translation Matrix (general examples)			
	Concept Type	Concept Timeframe	Concept Phase
Air Force Vision Statement	Institutional	Future	Implementation
Air Force CONOPS (e.g., Global Strike)	Operating (Operational level)	Current	Implementation
System -level CONOPS	Enabling	Current	Implementation
Functional CONOPS (e.g., Agile Combat Support)	Functional	Current	Implementation
Tactics, Techniques and Procedures	Operating (Tactical level)	Current	Implementation
Decisive Coercive Operations	Operating (Operational level)	Future	Development / Wargaming

Note: These translations are not directive, but informative. They may vary significantly on a case-by-case basis. As an example, system-level and functional CONOPS could span the entire timeframe and phase spectrums