



ANNEX 3-30 COMMAND AND CONTROL

INTRODUCTION TO COMMAND AND CONTROL

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Modern military operations require flexibility in execution to adapt to a wide variety of scenarios; this drives a need to assemble the right mix of forces from the appropriate Services to tailor the operation. This need to assemble the right forces drives a corresponding need for proper organization, clearly defined [command relationships](#), and appropriate [command and control mechanisms](#).

[Command and control \(C2\)](#) and organization are inextricably linked. Forces should be organized around the principle of [unity of command](#). Clear lines of authority, with clearly identified commanders at appropriate echelons exercising appropriate control, are essential to achieving [unity of effort](#), reducing confusion, and maintaining priorities. To this end, commanders should be clearly identified and empowered with appropriate operational and administrative command authorities, and appropriate joint command arrangements should be clearly specified to integrate effects across Service lines. Effective joint and Service organization *is* “rocket science.”

Air Force expeditionary organization and preferred command arrangements are designed to address unity of command. The axiom that “Airmen work for Airmen, and the senior Airman works for the [joint force commander](#) (JFC),” not only preserves the principle of unity of command, it also embodies the principle of [simplicity](#). When Air Force forces are [assigned](#) or [attached](#) to a joint force at any level, the senior ranking Airman qualified for command should be designated as the [commander, Air Force forces](#) (COMAFFOR) and the Air Force component should normally be formed as an [air expeditionary task force](#) (AETF). As the senior Airman representing the Air Force component, the COMAFFOR provides a single Air Force face to the JFC for all Air Force matters.

Some capabilities may not be organic to the component and may be made available through a [supported/supporting](#) command relationship, or be made available through [reachback](#) or distributed C2 arrangements.

This annex is arranged around key related topics as follows.

- ✦ **[Key Considerations of Command and Control](#)**. This section introduces basic C2-related definitions (e.g., command, control, command and control, commander) as well as some key precepts (e.g., unity of command, centralized control and decentralized execution, commander’s intent; battle rhythm, trust).

- ✦ **Operational and Administrative Branches of the Chain of Command.** This section discusses the differences between the two branches of the chain of command. This is an important distinction.
- ✦ **Command Authorities and Relationships.** This section discusses how forces may be assigned or attached to joint and Service commands, how to tie organizations together through careful arrangements of command relationships, and how to transfer forces between organizations.
- ✦ **Commanding Airpower.** This section outlines the responsibilities of the COMAFFOR and related component command issues.
- ✦ **Command and Control Mechanisms.** This section provides an overview of the C2 mechanisms within an Air Force component: the [air operations center \(AOC\)](#) and the [Air Force forces \(AFFOR\) staff](#), along with discussion of [AOC liaisons](#) and the [joint air component coordination element](#). (Note that this is an overview; detailed discussion is found in appendices)
- ✦ **Organizing Air Force Forces.** This section starts with a discussion of the differences between [regional and functional organizations](#). It then introduces the [air expeditionary task force](#) as the model for organizing Air Force forces afield. This section also contains critical discussion on [integrating regional and functional Air Force forces](#) through specially trained liaisons and supporting command arrangements. There is also discussion of [nuclear support to regional commands](#), [homeland organizational considerations](#), integration of the [Air Reserve Components](#), and the responsibilities of a [senior/host installation commander](#) on a base with mixed forces.
- ✦ **Presenting Air Force Forces.** Once Air Force forces are organized, they should be presented to a JFC for employment. This section provides a primer on [joint force organization](#) and [air component relationships](#) within a joint force. This section contains critical discussion on [presenting an Air Force component](#) at various levels within a combatant command.

Several appendices provide deeper discussion of material presented in the main body of the document:

- ✦ [Appendix A](#) contains the formal definitions of command authorities and relationships, along with amplifying discussion.
- ✦ [Appendix B](#) presents the detailed discussion of a notional AOC.
- ✦ [Appendix C](#) presents the detailed discussion of a notional AFFOR staff, with breakdown by directorates and key responsibilities.
- ✦ [Appendix D](#) provides an overview of the theater air control system.
- ✦ [Appendix E](#) discusses accessing the Air Reserve Components.

Command and Control: Lessons Forgotten

Our ability to effectively command and control (C2) airpower in future major combat operations may be seriously challenged. Advanced technological improvements in the fields of communications, networking, and computing has given us the ability to flatten our combat operational organization into essentially a two-tier theater combat organization; at the top is a single combatant commander (CCDR)-level commander, Air Force forces (COMAFFOR)/joint force air component commander (JFACC) and a centralized air operations center (AOC), and at the bottom is a myriad of combat forces and theater air control system nodes, all responsive to daily guidance from the AOC in the form of air tasking orders and air operations directives. Thus, our combat experience of the last two decades has been characterized by centralization of authority at the highest possible level in an essentially benign, uncontested air environment.

While this was successful under the operational conditions that prevailed in US Central Command, it may also have lulled us into complacency and the false expectation that future operations would take place in the same operational environment of secure, unchallenged C2 and robust communications and cyberspace capability. As our ability to C2 has increasingly become reliant on a complex web of space and cyberspace communications, potential adversaries of the future can be expected to challenge our unfettered dominance of space, cyberspace, and communications in manners that we have not seen or trained for since the height of the Cold War.

Success in future combat will require commanders to plan for times of disrupted communications by decentralizing their control, i.e., establishing and empowering lower echelons of command to continue operations in the absence of daily guidance and constant communication. The intent is to "push forward" control authority toward the tactical edge of operations as a way to maintain continuing advantage, instead of having our C2 ability fall back until centralized control can be reestablished. Loss of communications from higher headquarters must not result in loss of control and inaction at the forward level. Commanders should seriously consider the ability of adversaries to affect the communications required for effective centralized C2 of airpower and tailor plans accordingly. These are operating procedures and skills at which we used to be proficient in planning for operations against the Warsaw Pact. It is now time to blow the dust off the old playbooks, rediscover what worked (and why), and rebuild our atrophied C2 muscles.

A note on terminology in Air Force doctrine: The Air Force prefers—and in fact, plans and trains—to employ in the joint fight through a COMAFFOR who is normally also multi-hatted as [joint force air component commander](#) (JFACC), [area air defense commander](#), [airspace control authority](#), [space coordinating authority](#), and [electronic warfare control authority](#) when involved in multinational operations, the JFACC may become a combined force air component commander (CFACC). **To simplify nomenclature, Air Force doctrine simply uses the term "COMAFFOR," with the presumption that the COMAFFOR may also be designated with multiple hats.** Similarly, Air Force doctrine recognizes that the AOC, in joint or combined operations is correctly known as a joint AOC (JAOC) or combined AOC (CAOC). However, doctrine simply uses the term "AOC."

Air Force doctrine is compatible with existing joint doctrine, but expands and elaborates upon it, because joint doctrine does not explicitly describe the philosophical underpinnings of any one Service, nor does it describe how a Service organizes to support a joint force commander. These are Service, not joint, prerogatives. The ideas presented here should enable Airmen to better describe what the Air Force can provide to the joint effort. This document should influence creation of corresponding joint and North Atlantic Treaty Organization doctrine, and may inform the doctrine of other Services as well.
