



[ANNEX 3-12 CYBERSPACE OPERATIONS](#)

COMMAND AND CONTROL OF CYBERSPACE FORCES

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See JP 1, [Doctrines for the Armed Forces of the United States](#), and [Volume 1](#) for additional doctrinal guidance on command relationships.

Command and Control (C2) Options. When contemplating C2 options for joint [cyberspace operations](#) within the operational area, the Joint Force Commander (JFC) can choose to exercise C2 through the joint force staff, through a Service component commander, or through a functional component commander by designating one of the Service component commanders. Many factors will weigh on the JFC's selection, most notably the type and availability of forces/capabilities to accomplish the assigned mission. Additional factors may include host and friendly nation support, level and commitment of coalition forces, enemy capabilities and actions, and environmental limitations.

Theater-Level Considerations. When the geographic combatant command (GCC) establishes a subordinate joint command to conduct operations, forces are normally attached as needed, with delegation of [operational control](#) (OPCON) to the subordinate JFC. However, the GCC also will weigh the operational circumstances and decide if available cyberspace forces/capabilities can be most effectively employed by the subordinate JFC(s), by retaining them at the GCC level, or a combination thereof. This decision requires careful consideration after a thorough dialogue among the joint and Service component/force commanders.

Global Cyberspace Operations

Air Force cyberspace capabilities are used around the globe daily. The [Unified Command Plan](#) (UCP) establishes US Strategic Command (USSTRATCOM) as the functional unified command with overall responsibility synchronizing planning for military cyberspace operations. CDRUSSTRATCOM exercises [combatant command](#) (command authority) (COCOM) of cyberspace forces assigned by the SecDef in the *Forces For Unified Commands* memorandum. CDRUSSTRATCOM has delegated OPCON to commander, US Cyber Command (CDRUSCYBERCOM) to employ these forces to support worldwide operations.

Some cyberspace capabilities require deconfliction with organizations outside assigned

areas of responsibility (AORs) due to collaboration with US government and partner nation organizations. Thus, theater and global cyberspace operations require a C2 system capable of collaborative design, planning, execution, and assessment across all affected AORs and with USSTRATCOM.

Cyberspace operations can be controlled as a global system operating as a single entity (for example, the Air Force portion of non-secure Internet Protocol Router Network), or by GCC's as part of theater operations. Global and theater cyberspace operations require different command relationships and levels of coordination to create desired effects.

Theater Cyberspace Integration

Cyberspace effects are created through the integration of cyberspace capabilities with air and space capabilities. The boundaries within which cyberspace C2 is exercised and the priorities and restrictions on its use should be identified in coordination with the JFC, non-DOD governmental agencies, and national leadership. The potential for cyberspace effects to cause strategically important consequences may often necessitate coordination with the highest levels of US and partner nation governments.

Theater commanders integrate cyberspace effects throughout joint and coalition military operations. Certain cyberspace forces move forward to conduct operations in specific theaters. Some organic cyberspace forces may also be assigned to particular theaters.

Even in the case of global functional C2, cyberspace experts normally are assigned to theater staffs to facilitate cyberspace integration. USSTRATCOM should provide representation to theater JFCs. For the Air Force, cyberspace expertise resides in each AOC. When requested to serve on theater staffs, the 24 AF presents expertise via an AF cyber liaison element to assist coordinating, deconflicting, synchronizing, and integrating global and theater cyberspace operations.

Air Force Presentation of Cyberspace Forces

Regional Organization and Control. In response to a military situation, a combatant commander (CCDR) will normally organize a joint task force (JTF). If the entire theater is engaged, the CCDR may be the JFC. If the contingency is less than theater-wide, the CCDR may establish a subordinate JTF commanded by a subordinate JFC. In either case, the CCDR will first look to assigned in-theater forces. If augmentation is required, the JFC will request additional forces through the SecDef. Upon SecDef approval, additional forces will transfer into the theater and will be attached to the gaining CCDR, and the degree of control gained over those forces (i.e., OPCON or tactical control [TACON]) will be specified in the deployment orders. The gaining CCDR then normally delegates OPCON of these forces downward to the JTF commander who

should, normally, delegate OPCON to the Service component commanders within the gaining JTF. All Air Force forces assigned or attached to a joint task force, or established as a single-Service task force, should be organized and presented as an [air expeditionary task force](#) (AETF).

- ★ Within a joint force, the JFC may organize forces in a mix of Service and functional components. All joint forces contain Service components, because administrative and logistical support for joint forces are provided through Service components. Therefore, by definition, every joint force containing assigned or attached Air Force forces will have a [commander of Air Force forces](#) (COMAFFOR).
- ★ The COMAFFOR normally exercises OPCON over Air Force forces within the AETF.

Functional Organization and Control. Not all air, space, and cyberspace forces employed in an operation will be attached forward to a geographic CCDR. Some Air Force forces are capable of serving more than one CCDR at a time. Such forces, such as inter-theater air mobility, space, and special operations forces, are organized under functional CCDRs to facilitate optimal use of cross-AOR forces. When such forces are deployed in a GCC's AOR, they will often remain under the OPCON of their respective functional CCDR and operate in support of the geographic CCDR. The SecDef establishes support relationships between the CCDRs for the planning and execution of joint operations.¹

Normally, a support relationship is formally established between a GCC and USSTRATCOM. In some circumstances, after coordination with the owning commander and upon SecDef approval, control of functional forces may be transferred to a geographic commander with specification of OPCON or TACON.

OPCON over assigned and attached Air Force cyberspace forces will be as directed by CDRUSSTRATCOM, normally through CDRUSCYBERCOM to the 24 AF/CC. As the COMAFFOR, the 24 AF/CC normally exercises OPCON of assigned and attached Air Force forces through the 624th Operations Center (624 OC).

For more detailed information concerning presentation of forces, see Volume 1, [Basic Doctrine](#).

The JFC may elect to establish functional component commands to integrate specific capabilities across the joint force. The JFC normally appoints a [joint force air component commander](#) (JFACC) who is responsible for air effects within the theater. When the theater COMAFFOR is designated the JFACC, the COMAFFOR is prepared to command joint cyberspace forces as well as joint air forces since the JFC may also

¹ JP 1, *Doctrine for the Armed Forces of the United States*.

delegate authority for cyberspace effects to the JFACC. The JFC specifies the elements of TACON to be exercised over forces made available. Some cyberspace forces may be attached to a COMAFFOR/JFACC even though they may remain at home station.
