



# CURTIS E. LEMAY CENTER

FOR DOCTRINE DEVELOPMENT AND EDUCATION



## ANNEX 3-30 COMMAND AND CONTROL

### REACHBACK AND DISTRIBUTED OPERATIONS

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Commanders may use the concepts of reachback and distributed operations to execute operations and support forces deployed or operating in place from multiple locations. Communications and information systems should provide a seamless information flow of prioritized data to and from forward and rear locations.

#### REACHBACK

Reachback is defined as **“the process of obtaining products, services, and applications, or forces, or equipment, or material from organizations that are not forward deployed.”** Reachback may be provided from a supporting/supported relationship or by Service retained forces. This relationship gives the commander, Air Force forces (COMAFFOR) the support necessary to conduct operations while maintaining a smaller deployed footprint. Effective reachback enhances the operational capability and facilitates informed and timely decision-making by the COMAFFOR.

#### DISTRIBUTED OPERATIONS

Distributed operations are defined as **operations when independent or interdependent forces, some of which may be outside the joint operations area, participate in the operational planning and/or operational decision-making process to accomplish missions and objectives for commanders.** While Service-retained forces may provide reachback, forces conducting distributed operations should be assigned or attached to a combatant command. For instance, the Joint Space Operations Center may task the Global Positioning System operations center to provide required data to theater planners for planning of air strikes. While the relationships may vary according to the nature of the operation, the design of a distributed operation should enable a more survivable command and control (C2) network through distribution of tasks, information, and responsibilities. In some instances, the commander may establish a formal supported/supporting relationship between distributed nodes. In other instances, distributed nodes may have a horizontal relationship. Military commanders have used distributed C2 for many years. The method and means for controlling forces have changed, but military leaders have always distributed their operations among multiple echelons. What has changed in recent years is that technology enables more participants from greater distances to create and manage complex networks.

## SPLIT OPERATIONS

Split operations are a type of distributed operations. The term describes those **distributed operations conducted by a single C2 entity that is separated between two or more geographic locations**. A single commander should have oversight of all aspects of a split C2 operation. For example, sections of the air tasking order may be developed from a rear area or backup operation center to reduce the deployed [air operations center](#) (AOC) footprint. In this case the AOC is geographically separated and is a split operation. During split operations, the commander should be given the authorities necessary to ensure mission success.

Although distributed operations are similar to reachback, there is one major difference.

**Reachback provides ongoing combat support such as products, services, or equipment to the operation from the rear, while a distributed operation indicates actual involvement in operational planning and/or operational decision-making.**

It is possible for an organization or individual to be involved in both. Information technology advances may further enhance distributed operations. **The goal of effective distributed operations is to support the operational commander in the field.** The concept of

“reachback” allows functions to be supported by a staff at home station, to keep the manning and equipment footprint smaller at a forward location. Distributed operations, which may rely heavily on reachback support, vary by mission, circumstances, and level of conflict.

The decision to establish distributed or split operations invokes several tradeoffs:

### Remotely Piloted Aircraft and Remote Split Operations

Current remotely piloted aircraft (RPA) technology provides extremely effective employment capabilities as well as unique (C2) challenges. One solution is a concept called remote split operations (RSO).

RSO refers to the geographical separation of the RPA and its launch and recovery crew, typically bedded down in a geographic combatant commander’s (CCDR) area of operations, from the mission crew, which generally remain in the continental US (CONUS). This enables the extension of RPA capabilities to almost anywhere in the world through a distributed secure network.

For RSO, the in-theater RPA and launch crew are typically assigned/attached to the CCDR, similar to other in-theater forces. However, the CONUS mission crew and control center may be formally attached to the CCDR based on Secretary of Defense-established global priorities and requirements, and can “swing” to support other CCDRs as those priorities and requirements change. This allows significant flexibility in RPA tasking and support, while allowing these high-demand but limited assets to best meet warfighter needs.

- ✦ The fewer the number of personnel/forces deployed forward, the less support is required to be pushed across great distances; however, face-to-face interaction between forward and rear decision makers may be limited, and decision making timelines may stretch.
- ✦ Having fewer personnel/forces forward reduces security requirements; however, their expertise is no longer immediately at hand for ad hoc problem solving.
- ✦ Reachback requires more bandwidth for communications. These links then become vulnerabilities. However, a distributed operation may arguably be more survivable and less prone to single-point failure.

Each Air Force C2 entity should have a defined function that contributes to an overall distributed operation, whether they provide information from a fixed location at home station, or whether they are forward deployed. In a distributed C2 operation, specific roles, functions, and capabilities at each node should be fully understood to effectively execute operations.

Depending on the scenario, communications capabilities, joint/combined requirements, and the political situation, C2 nodes may be required to operate in a distributed operations mode. To employ distributed operations most effectively, early and extensive planning is required to prepare for contingencies. Component staffs should already have plans drawn up to accommodate a variety of C2 arrangements for various scenarios, to include devolution of command in a degraded or contested environment.

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