



CURTIS E. LEMAY CENTER

FOR DOCTRINE DEVELOPMENT AND EDUCATION



ANNEX 3-17 AIR MOBILITY OPERATIONS

AIR REFUELING OPERATIONS

Last Updated: 5 April 2016

Air refueling (AR) creates opportunities for the use of in-flight refuelable aircraft in operations. Whether keeping surveillance aircraft on station to observe adversaries, refueling airlifters flying long direct delivery missions, or enabling sustained strike operations; AR is an invaluable part of overall Air Force capability.

Nuclear Operations Support

AR supports [nuclear operations](#) in several ways:

Bomber Support

Tanker assets are incorporated into nuclear operations to support bomber strike requirements. AR provides the nuclear-equipped bomber force the ability to deliver their payload to any location in the world and recover to suitable reconstitution bases. Through AR, the payload, range, and endurance of bomber aircraft is significantly increased, further enhancing their flexibility to strike at distant targets. Bombers may be launched during periods of increased tension and proceed to orbit areas well beyond the range of enemy missiles or attack aircraft, providing flexible options to national senior leadership. With AR the bombers can maintain this orbiting status until they are directed to fulfill their mission or are recalled.

Reconnaissance in Support of Nuclear Operations

The greatly enhanced flight endurance provided by AR is also an indispensable component of reconnaissance in support of nuclear operations. It enables the reconnaissance assets to provide timely and accurate intelligence information to the command authorities.

Command and Control Aircraft Support

In the same manner, the greatly enhanced flight endurance provided by AR is an indispensable component of the strategic airborne command post concept. It provides the President and Secretary of Defense the ability to continue to direct military action from an airborne platform.

Global Strike Support

Tankers give strike platforms the ability to reach any target globally without relying on intermediate basing locations. This provides the ability to rapidly strike targets in distant

locations and recover to safe areas. Depending on the situation, tanker assets may be transferred to other combatant commanders in support of existing operation plans. AR provides continental United States (CONUS)-based airpower forces a global presence, providing geographic combatant commanders with greater capabilities than they may otherwise have available.

Air Bridge Support

An air bridge creates an air line of communication linking the CONUS and a theater, or any two theaters. AR makes possible accelerated air bridge operations since en route refueling stops are reduced or eliminated. It reduces the number of aircraft on the ground at staging bases, minimizes potential en route maintenance delays, and enables airlift assets to maximize their payloads. This significantly increases the efficiency and effectiveness of airlift operations by making possible the direct delivery of personnel and materiel. It is an effective method for moving forces in the initial days of a conflict; however, the level of effort required is significantly increased and such operations may reduce the number of tankers available for other potential missions like combat support. Outside the continental United States, tanker basing may be a requirement for air bridge operations.

Aircraft Deployment Support

Tankers extend the range of deploying combat and combat support aircraft, often allowing them to fly with few or no stops en route to an area of responsibility. AR increases the deterrent effect of CONUS-based forces and allows rapid response to regional crises. The capability of aircraft to fly non-stop to a theater may eliminate the need to obtain landing rights from countries remaining neutral in a conflict. Deployment support is key to achieving successful expeditionary operations. The deployment support operation is considered a separate and distinct operation because the coordination, communication, and search and rescue responsibilities differ based on receiver capabilities. Deployments of heavy aircraft (bombers, airlifters) normally use an air bridge operation for primary support. This operation can also be associated with the movement of fighter aircraft between theaters in the form of missions named CORONETs.

CORONETs move fighter aircraft in support of contingencies, rotations, or exercises for logistics purposes and normally include extended overwater legs. Joint Publication 3-17, *Airlift Operations*, defines CORONET as “*a peacetime movement of air forces in support of rotations, exercises, or aircraft movements for logistic purposes.*” These flights may include a dual-role cargo- and passenger-carrying element as well as refueling. They normally have long lead times for planning, tasking, and execution, and the tanker portion of the flight is normally planned by the [618th Air Operations Center \(AOC\) \(Tanker Airlift Control Center \[TACCI\]\)](#). CORONET operations usually have a higher priority than routine training operations. Depending on operational requirements, the 618 AOC (TACC) may position tanker aircraft and crews in preparation for deployment and may coordinate with the theater AOC for AR support, if required. Typically the tanker accompanies the receivers for the majority of the flight, especially during an oceanic crossing.

Theater Support (Combat Air Refueling Support)

During a combat operation, the highest priority for intratheater AR forces is normally supporting combat and combat support aircraft executing the air portion of the joint force commander (JFC)'s campaign. This is especially true during the initial phases of a conflict. Combat aircraft may be based well outside enemy threats to protect themselves from hostile attack, and may need tankers to give the range and increased weapons load necessary to engage targets. AR increases the endurance of air combat support assets. Airborne command and control; battle management; and intelligence, surveillance, and reconnaissance aircraft are used to manage, direct, conduct, and assess air combat operations. Without in-flight refueling, these assets have limited endurance and require extensive regeneration periods between sorties.

Tankers allocated for theater support may occasionally be called upon to provide support to air bridge operations, especially supporting direct delivery missions. The [director of mobility forces](#) judges the capabilities and requirements of tankers assigned or attached to the theater to determine their ability to provide air bridge support and recommend proper allocation to the commander, Air Force forces (COMAFFOR). When tanker requirements for theater support operations exceed availability, the COMAFFOR, with the assistance of the DIRMOBFOR, may request increased augmentation from the joint force commander (JFC).

Special Operations Air Refueling Support (SOAR)

SOAR enables special operations forces to maintain a long-range operating capability, as well as endurance and persistence in an operational area. Air Mobility Command (AMC) maintains AR crews trained to air refuel special operations aircraft. Successful operations require specialized equipment, crew training, and operational procedures. When assigned or attached to a joint task force, these forces may fall under a special operations functional component commander who reports directly to the JFC.
