



# CURTIS E. LEMAY CENTER

FOR DOCTRINE DEVELOPMENT AND EDUCATION



## ANNEX 3-17 AIR MOBILITY OPERATIONS

### AIR MOBILITY PLANNING GENERAL PLANNING CONSIDERATIONS

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This section focuses on the general planning considerations of the threat environment, the physical environment, and infrastructure. Air mobility operational planners should take these considerations into account when developing [air tasking orders](#) (ATO), [airspace control orders](#) (ACO), special instructions (SPINS), [rules of engagement](#) (ROE), [rules for the use of force](#), and other applicable [operation plans](#) (OPLANs) and contingency plans (CONPLANs) according to a commander's intent and objectives.

#### **Infrastructure**

As with any military operation, regional politics can have a significant effect on air mobility operations. With a majority of air mobility operations occurring over foreign territories, the decisions made by US political leaders and those of our allies may affect the options available to the air mobility planners. The following are some of the more significant factors.

#### ***Partner Nation Support***

Support from the countries involved in air mobility efforts is essential, since deployed air operations rely on [host nation](#) support to grant access and to promote a smaller footprint. Legal advisors should be consulted to determine what agreements and treaties exist and whether there is a [status-of-forces agreement](#) (SOFA) in place. The geographic [combatant commander](#) (GCC)/J4 and commander, Air Force forces (COMAFFOR)/A4 should be consulted for acquisition and cross-servicing agreements and mutual logistics support agreements that may exist. SOFAs normally include status of personnel, as well as operating rights and responsibilities and may include waivers of landing fees, duties, taxes, or personnel entry requirements. Failure to adequately ascertain host nation support and provide for any required augmentation can result in significant roadblocks to mission accomplishment.

The ability to obtain diplomatic clearance for both overflight and landing is crucial. Past conflicts have demonstrated that challenges obtaining diplomatic clearances have far-reaching impacts on every air mobility effort. The importance of [partner nation](#) support cannot be underestimated. This support is also crucial with regard to petroleum, oils, and lubricants availability due to high consumption rates.

## **Access**

A successful air mobility operation depends on access to networks of facilities and usable destinations, which include airfields and [drop zones](#). Access to theater airspace and airfields throughout the world presents a major limiting factor to air mobility operations. In underdeveloped regions of the world, aircraft often use austere airfields. These may be limited in one or more of the following ways: runway condition and size, taxiway systems, ramp space, fuel (resupply, storage, quality, and handling capabilities), security, materials handling equipment, marshalling/storage capability, aircraft servicing, maintenance, navigation aids, weather observing sensors, and communications. Additional limitations based on access that should be considered include routing restrictions, flow control, terminal instrument procedure restrictions, host base support, and other airfields' infrastructure.

## **Communications**

Airborne mobility missions should be flexible and responsive to the users' requirements. Because of their extended loiter capacity, airborne tankers and airlifters can be redirected whenever their primary mission is changed or canceled. To accomplish this, [command and control](#) (C2) elements should maintain flight following of air mobility aircraft to be able to contact them. This should normally be accomplished by the [air mobility division](#) (AMD) in the theater or the [618th Air Operations Center \(AOC\) \(Tanker Airlift Control Center \[TACC\]\)](#) if outside the theater. In addition, operational requirements and communication capabilities may dictate that another airborne or ground C2 element relay a new tasking. Bolstered communications security (COMSEC) procedures and mandated low [emissions control](#) (EMCON) environments may make it difficult for control elements to maintain contact with airborne tankers. Retasking procedures and frequencies should be thoroughly explained in the SPINS portion of the ATO or the ACO to ensure coordination between aircrews and command personnel. For intertheater missions, the 618 AOC (TACC) is normally responsible for passing the information required to the aircrews and coordinating with and integrating any changes with the receiving geographic AOC. However, if the intertheater forces are under the operational control (OPCON) of the theater COMAFFOR, such communication is executed through the theater AOC.

## **Base Operating Support**

Except in the case of self-sustaining short-term contingency response forces, base operating support (BOS) for deployed forces enhancing the [Global Air Mobility Support System](#) should be provided by the GCC's Service component responsible for the airfield or by the host nation when no component has a presence. When insufficient host base BOS exists, deploying air mobility support forces normally are augmented by the appropriate BOS unit type codes drawn from across the command or the Air Force as a whole.

## **Airspace Control**

The use of air mobility in any theater should be integrated into the airspace control plan and any civilian or international airway control system. Air mobility planners should coordinate with the [airspace control authority](#)'s staff, and obtain diplomatic clearances to ensure airlift and air refueling activities comply with all routes and

procedures through any area they may transit. The nature and intensity of the air operation may require the establishment of specific air traffic corridors and air refueling tracks.

### ***Diplomatic Clearances***

Diplomatic clearances include aircraft overflight and landing rights, communications connection approval, personnel visas, and other entry requirements. Customs, immigration, and quarantine requirements (or waiver thereof) can also be critical. [Time-phased force and deployment data](#) (TPFDD) flow cannot occur without appropriate clearances obtained in advance. Diplomatic clearances impact footprint, throughput, [force protection](#) (FP), and ultimately, operational success, and should be acquired prior to execution of a TPFDD or [deployment order](#).

### ***Legal Issues (Principles of International Law)***

Global air mobility operations are governed by international (i.e., US, host/partner nation, and/or the laws of any nation whose sovereign airspace will potentially be used during the course of an operation) and domestic laws. The rights, privileges, and immunities of aircraft differ depending on the status of the aircraft (i.e., “state” or “civil”). Military aircraft are state aircraft. Aircrews and those planning and managing missions outside the continental United States (OCONUS) should consult the [Department of Defense Foreign Clearance Guide](#) for current, country-specific information. In addition, aircrew and mission planners/managers should be aware of and abide by the applicable ROE when operating outside US airspace.

### ***Medical***

The global reach laydown (GRL) team includes medical capabilities designed to reduce the impact of disease non-battle injuries on mission accomplishment in contingency operations and provide limited medical support. The GRL team and associated equipment package deploys with the contingency response group or contingency response element and assesses health risks associated with environmental and occupational health hazards for deployed personnel, in support of establishing a potential main operating base in a forward deployed location.

### ***Multimodal Ports and Hubs***

Planners should be aware of multimodal ports when designing airlift plans. Ninety percent of intertheater cargo goes by sea, often with intratheater airlift as the final segment. Multimodal hubs act as a force multiplier, enabling maximum efficiency for high demand airlift assets and provide resiliency of logistics through alternate delivery channels.

### ***Geography***

Some areas of the world are isolated geographically, and therefore air mobility remains the best source of supply. Operations in such areas naturally increase the demand for airlift. Multimodal options in these areas are often reduced.

## ***Climatology/Weather***

Weather effects on air mobility operations present ongoing challenges. Incorporating the impact of climate and weather effects on air mobility operations should be part of planning for all activities. For example, weather greatly reduced airlift for Bosnia in 1996 and tanker capability in Kosovo in 1999, and extreme heat limited airlift execution in Kuwait during Operation IRAQI FREEDOM. For additional information, see Annex 3-59, [Weather Operations](#).

## **Threat Environment**

Mobility air forces (MAF) operate in a wide variety of threat environments across the spectrum of conflict, performing a variety of missions. Air mobility operations can be flown in threat environments that include conventional military forces, insurgents, and terrorists. Adversary capabilities can range from basic small arms to later-generation man-portable air defense systems or even radar-guided surface-to-air missiles and anti-aircraft artillery. While conducting operations in a wartime environment, air mobility aircraft should be able to depend upon friendly forces to suppress enemy air defenses and provide threat warning support. However, during contingency or peacetime operations, friendly FP and [intelligence, surveillance, and reconnaissance](#) (ISR) support may be limited or absent. Planning factors for [chemical, biological, radiological, or nuclear](#) threat environment operations should include operational and clearance decontamination levels for aircrew and aircraft. MAF planners should consider applicable elements within the cyberspace domain to ensure maximum visibility and response options during operational planning and execution.

## ***ISR***

ISR support is required to effectively and accurately describe the battlespace and threat environment, and their impact on air mobility operations.

## ***Threat Working Group***

The AMC and theater threat working groups (TWGs) are the air mobility focal point for coordinated global risk analysis and for developing recommendations to mitigate identified threats and vulnerabilities. The TWG conducts an annual review of the global threat to air mobility operations that establishes baseline risks, sets risk assessment production requirements, and determines minimal FP recommendations. In addition, the TWG monitors for changes to the threat environment; conducts risk analysis to support new operations, missions, and requirements; and reviews daily OCONUS missions for new or emerging FP concerns. Information is then provided to TWGs within each operational area.

## ***Threat Mitigation***

Timely and accurate intelligence reduces vulnerabilities and is essential to air mobility mission planning. Intelligence personnel provide information about enemy composition, vulnerabilities, capabilities, intentions, and probable [courses of action](#) for air movement operations. Employing proper EMCON, operational security, and COMSEC procedures helps to ensure that the information environment of any military operation is kept secure. Mitigation recommendations cover a variety of options and can include the requirement for defensive systems and aircraft armor to mitigate the

surface-to-air fire threat, restrictions on remaining overnight or requirements to carry PHOENIX RAVEN security forces to protect the crew and aircraft while on the ground, or restrictions on allowing contract/[Civil Reserve Air Fleet](#) commercial flight operations.

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