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FOR DOCTRINE DEVELOPMENT AND EDUCATION



ANNEX 3-17 AIR MOBILITY OPERATIONS

PLAN DEVELOPMENT

Last Updated: 5 April 2016

Once the strategic guidance and concept development are complete, air mobility planners can begin to look at the following cross-sectional factors which affect plan development: Aircrew/operations support, air mobility support, materials handling equipment (MHE), petroleum, oils, and lubricants (POL), aerospace ground equipment (AGE), replacement spares package, special support equipment, patient movement items/aeromedical evacuation (AE) support equipment, weather, and maximum on ground. Some of these factors impact every element of the overall plan. Planners should reference each of these when developing the overall air mobility [operation plan](#) (OPLAN) or [contingency plan](#) (CONPLAN).

Cross-sectional Air Mobility Planning Development Factors

This section addresses supporting equipment and service factors that should be considered when developing an air mobility plan.

Air Mobility Support

During the deployment and redeployment phases of any operation, manpower requirements for the Global Air Mobility Support System (GAMSS) are normally predictable. These requirements are identified in the [time-phased force and deployment data](#) (TPFDD) associated with a particular OPLAN, or identified as precursor movements if a [deployment order](#) (DEPOD) is used. The GAMSS is composed of five different tasks: onload, contingency tanker task force, stage/en route, hub/transload, and spoke/offload. The manner in which forces are organized directly affects GAMSS responsiveness and versatility. As the requirements and the tempo of operations change, so does the GAMSS force structure. The result of this arrangement is an en route support system that rapidly expands during contingencies or periods of intensive air mobility operations to meet increased demands of airlift and [air refueling](#) (AR) aircraft. When the increased level of air mobility operations subsides, the en route support system shrinks back to peacetime requirement levels.

Materials Handling Equipment (MHE)

A key resource critical to throughput of cargo and personnel is MHE. MHE includes all ground equipment necessary for cargo loading and unloading, a capability that should be analyzed during both the deliberate and crisis action planning processes. Commanders and planners should coordinate closely to ensure the right types and

quantities of MHE are available to support successful operations. It is essential to get MHE/GAMSS items in the TPFDD early to increase throughput and permit overall TPFDD efforts. Likewise, the GAMSS force commander should pare and tailor the deployable equipment to meet each tasking. Not only should MHE be a planning factor, it should be properly identified for TPFDD insertion for early deployment within the air mobility flow. The TPFDD should be evaluated for any over or outsize cargo or equipment to determine if aircraft loader requirements (i.e. multi-pallet trains) exist. When planning war reserve materiel for use, MHE should be fully operational, tasked in sufficient quantity, and be of the correct type. An assessment of host-nation MHE capability is a key factor to consider. MHE available at a forward location should lessen airlift requirements.

Aerospace Ground Equipment (AGE)

AGE, both powered and unpowered, is necessary to support maintenance and ground operation of aircraft systems. Planners should normally complete an analysis prior to deployments to ensure sufficient quantity and operational status of the airfield's AGE. It may be necessary to augment the existing capability if the required equipment is unavailable or non-operational. However, due to the high multi-Service competition for airlift resources during the early phases of deployment and the Air Force objective of minimizing the deployed footprint, logistics planners should, whenever possible, minimize or delay forward deployment of equipment. When possible, planners should consider "[reaching back](#)" to main support bases for specific pieces of equipment if and when required, rather than forward deploying any equipment that "might" be required.

Replacement Spares Package

Aircraft spares are parts needed for repairs. Typically, MAF deploy with readiness spares packages sufficient to support the expected airflow for a given amount of time. However, for operations that begin with a high tempo soon after arrival of combat forces and then continue for an extended duration, time-definite delivery of replacement spares should be established early in the deployment sequence. Non-availability of spare parts can cause an aircraft to become non-mission capable (NMC). NMC aircraft occupy valuable ramp space and negatively impact throughput.

Special Support Equipment

Special support equipment or other resources unique to a particular circumstance or location can also impact throughput. For example, a lack of snow removal equipment at a cold-weather airfield during operations can cause a bottleneck. Items such as these should be accounted for on a case-by-case basis.

Aircraft Rescue and Fire Fighting

Mission planners should determine what aircraft rescue and fire fighting capabilities exist at the airfield, and if they are sufficient for the planned operation.

Weather

Accurate and timely weather information is essential in all phases of air mobility operations. The climatology for an area is an important consideration during the planning of airlift and AR operations. Historic measurements of temperature, precipitation, ceiling, visibility, etc., impact equipment or supply requirements (e.g., navigation aids and deicing or snow removal equipment) that should be programmed into the OPLAN. During planning and execution of air mobility missions, accurate and timely weather information identifies weather conditions that could potentially limit or enhance operations. This information provides planners and operators the opportunity to adjust aircraft flow, cargo loads, and timing to ensure effective, efficient, and safe task accomplishment. Additionally, space and atmospheric weather conditions have a significant impact on communications for command and control (C2). Anticipating space and atmospheric weather impacts and creating alternate plans when necessary enhance air mobility operations. See Annex 3-59, [Weather Operations](#).

Working Maximum on Ground

The maximum number of aircraft at a given location that can be simultaneously turned is called working maximum on ground (MOG). Parking MOG is the physical parking spaces available for Department of Defense airlift aircraft and contract carriers. It should not exceed the number of spots identified on the most current parking plan and may be limited by factors such as host/partner nation agreement, hazardous parking spots available, or other infrastructure limitations. Local commanders determine working MOG based on the most restrictive of multiple planning factors (e.g. manpower, servicing equipment, etc.) and notify appropriate C2 and planning agencies for dissemination.
