Execution involves putting a plan into action to accomplish the mission. This is the time engineers focus on turning the commander’s, Air Force forces (COMAFFOR) decisions into actions that lead to achieving the joint force commander’s (JFC) objectives. During execution, commanders focus on positioning the force, employing the force, sustaining the force, and recovering the force.

During contingencies, civil engineers adapt plan annexes to support selected courses of action (COAs). To position the force, Prime BEEF and RED HORSE deploy IAW the Air Force War and Mobilization Plan and other applicable orders and guidance. During execution, degradation of civil engineer capacity to support home station requirements, to include strategic missions, may be authorized to fill contingency requirements.

History has proven civil engineers should precede aircraft and other initial forces to establish bases. Once engineers arrive in theater, base operability and sortie generation can be accelerated. However, in some situations this may not be possible and engineers should be prepared to arrive where aircraft, personnel, and equipment are already in place. Upon arrival, civil engineers immediately establish or build out airfields to meet operational requirements.

Commanders use prepared plans and officially published expeditionary engineering guidance to effectively employ the force based on the COMAFFOR’s stated priorities and objectives. Site plans may need to be tailored.

Master planning should guide the future development requirements for bases. It should begin as soon as possible during initial deployment and continue through recovery of the force. In general, civil engineers begin to assess, construct, inspect and reconfigure infrastructure for industrial areas, administrative areas, communications, and utilities to provide support for personnel, equipment, and weapon systems. Special attention should be given to siting, constructing, operating, and maintaining prepositioned temporary shelters and support facilities capable of supporting sustained operations until more permanent facilities can be acquired (if needed). During this initial stage, emergency services are also established to provide fire emergency services (FES), explosive ordnance disposal (EOD), and emergency management (EM) capabilities essential to protecting personnel, weapon systems, and key infrastructure.

Actions to sustain the force begin the first day and remain continuous throughout
deployment, employment, and redeployment. For engineers, this could mean transitioning from initial base standards to temporary, semi-permanent or permanent standards (figure, Beddown and Basing Continuum). Construction standards are usually based on the anticipated life span of the base, population, and theater standards. Standards may evolve as the anticipated life span of the base changes. This can happen when the mission duration is unclear. Other factors affecting construction standards are available materials, labor resources, cost, and local threats. The decision to upgrade standards is based on factors such as JFC policies, commander's intent, and host nation considerations.

**Beddown and Basing Continuum** (Derived from JP 3-34)

The *contingency phase* for construction is considered to be the first two years of operation. During this phase, organic, initial, and temporary construction standards are used to sustain the force. Based on these standards, engineers construct facilities and infrastructure intended to be used for certain periods of time, up to two years.

The *enduring phase* for construction is considered to be after two years of military operations. During this phase, semi-permanent or permanent construction standards are used based on the combatant commander's operational requirements. Based on these standards, engineers construct facilities and infrastructure intended to be used for much longer periods of time. Multiple standards may be present on a given installation at the same time based on operational requirements. Detailed information on construction standards, intended periods of use, and methods that can be used to attain these standards is contained in JP 3-34, *Joint Engineer Operations*.

Sustaining the force also involves those actions taken by engineers to recover the
installation and ensure continued operations following incidents, natural disasters, or enemy attacks. Air Force engineers are trained to respond to these types of incidents. Teams with predefined responsibilities are formed to conduct airfield damage repair and base recovery actions to ensure critical operations continue unimpeded and to bring the installation back to full operational capability in minimum time. Detailed guidance and actions required by Air Force civil engineers following these types of incidents are outlined in numerous expeditionary engineering and emergency services publications that may be found on the Air Force Civil Engineering Center (AFCEC) website.

Once it is determined forces will be withdrawn from established operating locations, commanders should focus on efforts to recover the force. Civil engineers focus on base closure, relocation, and reconstitution. Redeploying/relocating includes moving personnel to a new location, rotating or replacing personnel, and reintegrating personnel to home units. Reconstituting is returning to prescribed levels of readiness and restoring operating locations/environments to pre-operational conditions. All of these actions can occur simultaneously.

**Closing Operating Locations.** Closure or transfer is accomplished through a multi-faceted process to include all activities necessary to satisfy laws and agreements affecting closure activities. Civil engineers should be familiar with all of these requirements. Sources of such requirements include land use agreements, status of forces agreements, final governing standards, overseas environmental baseline guidance documents, international treaties, and executive orders.

Early participation in cross-functional working groups is essential. Civil engineers develop plans to support the operational drawdown and reconstitution timeline. Closure plans could take several different approaches including gradual drawdown of personnel, infrastructure, and utilities; relocating functions to other parts of the base to free up areas for closure activities; relocating personnel off-site (providing security) while closure activities take place; contracting closure activities; or turning the base over in whole or part to host nation authorities if agreements are approved by proper authorities.

Detailed inventories of equipment, personnel, real property, facilities, and infrastructure ensure a smooth transition and facilitate appropriate transfers to host nation authorities. Civil engineers should work closely with logistics and other appropriate personnel to determine the disposition of civil engineer materiel.

In-place engineers and equipment are normally used to conduct closure activities. Therefore, it is important to have a plan to sequentially redeploy personnel as they are no longer needed for closure activities. Civil engineer capabilities outside the operating location may be used for closure. RED HORSE units can support activities such as facility demolition and horizontal construction when required.

Force protection should remain a top priority during closure. Civil engineers maintain appropriate levels of FES, EOD, and EM capabilities commensurate with the local threat and operational mission.

All local contracts and leases are assessed to determine final disposition (complete,
terminate, or transfer) and drawdown, or forces may modify the physical infrastructure to the minimum requirements needed for closure operations.

An environmental assessment is conducted once it is decided an operating location will be closed. This assessment compares findings from the initial survey to determine necessary cleanup efforts. Engineers develop a coordinated plan to execute remediation actions IAW DOD policy and status of forces agreements.

**Base Denial.** If required, civil engineers are prepared to inflict damage to a base and deny its use. Execution of base denial may be forced by enemy action, or it may be a voluntary, preplanned event.