SPECIAL CIVIL ENGINEERING

TROOP CONSTRUCTION AND ENGINEERING SUPPORT OF THE AIR FORCE OVERSEAS

Headquarters
Departments of the Army, and the Air Force
Washington, DC
15 May 1979

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SUMMARY of CHANGE

AR 415-30/AFR 93-10
TROOP CONSTRUCTION AND ENGINEERING SUPPORT OF THE AIR FORCE OVERSEAS

○

○
SPECIAL CIVIL ENGINEERING

TROOP CONSTRUCTION AND ENGINEERING SUPPORT OF THE AIR FORCE OVERSEAS

By Order of the Secretaries of the Army, the Navy, and the Air Force:

Official:  
J. C. PENNINGTON  
Major General, United States Army  
The Adjutant General  

BERNARD W. ROGERS  
General, United States Army  
Chief of Staff  

Official:  
VAN L. CRAWFORD, JR., Colonel, USAF  
Director of Administration  

LEW ALLEN, JR., General USAF  
Chief of Staff

History. This publication has been reorganized to make it compatible with the Army publishing database. No content has been changed.

Summary. This revision replaces a joint regulation on the employment of US Army Engineers in support of the US Air Force overseas. It describes service responsibilities in accordance with DOD Directive 1315.6, dated 26 August 1978.

Applicability. This regulation applies to—

a. Commands, organizations, units, and individuals of the Department of the Army and the Air Force.

b. Both Active and Reserve components involved in planning, coordinating, or doing construction and engineering activities for the US Air Force overseas.

Proponent and exception authority. Not Applicable.

Army management control process. Not Applicable.

Supplementation. Local supplementation to this regulation is permitted but is not required. If supplements are issued, Army Staff agencies and major Army commands will furnish one copy of each supplement to HQDA(DAEN–ZCM), WASH DC 20310. Other commands will furnish a copy to their next higher headquarters.

Interim changes. Interim changes to the regulation are not official unless they are authenticated by The Adjutant General. Users will destroy interim changes on their expiration dates unless sooner superseded or rescinded.

Suggested Improvements. The Army office of primary interest in this joint publication is the Office of the Deputy Chief of Staff for Logistic. Users are invited to send comments and suggested improvements direct to HQDA (DALO–SMS–D) WASH DC 20310. Army users will use DA Form 2028 (Recommended Changes to Publications).

Distribution.

Active Army: To be distributed in accordance with DA Form 12–9A requirements for AR, Construction—D

ARNG & USAR: None

Air Force: F

Contents (Listed by paragraph and page number)

Purpose. • 1, page 1
Applicability. • 2, page 1
Explanation of terms. • 3, page 1
Related publications. • 4, page 1
Objectives. • 5, page 1
Policies. • 6, page 1
Responsibilities. • 7, page 1
Procedures. • 8, page 2
Peacetime operations. • 9, page 2
Budgeting and funding. • 10, page 2

Appendixes

A. EMPLOYMENT OF ENGINEERING FORCES, page 3

B. References, page 4

C. Department of Defense Directive, page 5

Figure List

Figure A.: page 5
Figure B.: page 6
Figure C.: page 7

*This regulation supersedes AR 415–30/AFR 88–12, 26 July 1965.
1. Purpose.
This regulation—
   b. Establishes departmental policies, responsibilities, and procedures for military troop construction and engineering support of the Air Force overseas (app. A).

2. Applicability.
This regulation applies to—
   a. Commands, organizations, units, and individuals of the Department of the Army and the Air Force.
   b. Both Active and Reserve components involved in planning, coordinating, or doing construction and engineering activities for the US Air Force overseas.

3. Explanation of terms.
Terms used in this regulation are explained in JCS Pub 1, JCS Pub 3, AR 310–25, AFR 11–1, and below.
   a. Base development.
      1) Force beddown. The provision of expedient facilities to support the launching and recovery of air weapons systems at an existing air or bare base. These facilities may include modular or kit-type facility substitutes.
      2) Base development (less force beddown). The acquisition, development, expansion, improvement, and construction and/or replacement of the facilities and resources of an area or location to support forces employed in military operations or deployed in accordance with strategic plans.
   b. Crash rescue and fire suppression. Extraction of air crew members from crashed or burning aircraft and the control and extinguishing of aircraft and structural fires.
   c. Operation and maintenance. Maintenance and repair of real property, operation of utilities, and provision of other services such as refuse collection and disposal, entomology, snow removal, and ice alleviation.
   d. War damage repair.
      1) Emergency repair. The least amount of immediate repair to damaged facilities necessary to accomplish the air mission. These repairs will be made using expedient materials and methods (such as AM–2 aluminum matting, cold–mix asphalt, plywood scabs, temporary utility lines, emergency generators) and modular or kit–type facility substitutes if repairs cannot be made in time to meet mission requirements. Includes rapid runway repair (RRR) to provide a minimum operating strip for assigned and transient aircraft and a meandering taxiway from shelters to the minimum runway.
      2) Repair and restoration. The repair of war damaged facilities beyond emergency repair to restore operational standards of construction. Includes repair and restoration of pavement surfaces (REREPS). Normally, repairs to facilities will be made using materials similar to those of the original construction. For severely damaged facilities (i.e., essentially destroyed), restoration may require construction.

4. Related publications.
A list of related publications is shown in appendix B.

5. Objectives.
The objective of this regulation is to ensure effective military troop construction and engineering support of the Air Force overseas according to joint policies, procedures, and assigned responsibilities.

   a. General. The Departments of the Army and Air Force will provide common services on a joint basis when such action will result in a savings to the Government and will not degrade mission accomplishment. Maximum use will be made of host nation resources in support of US forces requirements overseas. This will prevent duplication and make effective use of available resources.
   b. Design guidance. Headquarters USAF, or a designated Air Force major command or agency, will develop, define, and furnish the following to the Army, as regards weapons/support systems likely to be deployed to a particular oversea theater.
      1) Aircraft or missile physical characteristics.
      2) Allowance factors.
      3) Formulas and broad design.
      4) Layout and design criteria.
      5) Policy guidance through definitive drawings, outline specification, regulations, Air Force organization tables, manuals, or other references that are peculiar to Air Force construction.
      6) Technical and advisory personnel, as required.
   c. Plans and specifications. The Army will ensure that all of its construction plans and specification are technically adequate and concurred in by the Air Force. Where practicable, designs will be based on the Army Facilities Component System.
   d. Project surveillance. As owners, the Air Force will ensure that the Army provides design and construction services. Air Force representatives will maintain user adequacy surveillance (i.e., observe, examine, or inquire into their projects), but will not duplicate Army day–to–day supervision, inspection, and quality control.
   e. Project acceptance. The Air Force representative will formally accept the completed project (AFR 89–1). The Army construction units will transfer to the Air Force copies of all records, maps, as–built drawings, and other related items that identify and describe the constructed facilities.
   f. Command relationship. The responsible senior Army commander will command all Army troop units. When Army units are tenant on Air Forces bases, they will follow Air Force regulations that apply to tenant units or the provisions of their host/tenant agreements.

7. Responsibilities.
   a. The Army and Air Force will—
      1) Conduct bilateral staff planning to develop Civil Engineering Support Plans.
      2) Jointly review, at least annually, contingency and wartime requirements for military troop construction and engineering support of the Air Force overseas.
      3) Develop respective force structures to meet mission requirements.
      4) Program, budget, and fund for resources to carry out their respective Service obligations.
   b. The Army will provide military troop construction support to the Air Force overseas (app. C). It will ensure that the units needed are equipped, manned, and trained to support Air Force needs. This support includes—
      1) Assisting in emergency repair of war damaged air bases that exceeds Air Force’s organic capability.
      2) Repairing and restoring air bases damaged beyond emergency repair.
      3) Assisting in force beddown that exceeds Air Force’s organic responsibility.
      4) Developing bases. This includes acquiring, improving, replac-\ing, constructing, and expanding terrain and facilities.
      5) Managing repair and restoration of war damage and base development, including supervising Army personnel. The Air Force base commander will set the priorities.
      6) Supporting Air Force in training exercises.
      7) Developing engineering designs, plans, and materials to meet Air Force needs as concurred in by the Air Force.
      8) Ensuring security of construction sites during construction, including ground defense.
      9) Supplying construction materials and equipment, except for that provided by the Air Force (c below).
   c. The Air Force will provide military troop engineering support from its resources (app C). It will ensure that the units needed are equipped, manned, and trained adequately to support its needs. This support includes—
      1) Emergency repair of war damaged air bases.
      2) Force beddown of units and weapon systems, excluding Army base development responsibilities.
      3) Operation and maintenance of facilities and installations.
      4) Crash rescue and fire suppression.
(5) Managing their emergency repair of war damage and force bedding.
(6) Supplying material and equipment to perform its engineering mission.

8. Procedures.

a. Contingency operations.

(1) General. Civil Engineering Support Plans (CESPs), appendix 5 to annex D of Joint Operations Plans (OPLANs), are the basic plans for determining the troop labor and material needed for both Services to do their jobs.

(2) Definition of requirements.

(a) Command requirements for support of operations for the Department of the Air Force start with joint coordination and planning at the unified and specified commands. The Air Force and Army component commanders prepare their plans in accordance with policies, procedures, and responsibilities stated here; supplemental guidance of the unified commands; and the theater's standards of construction. The requirements for Army troop construction support of the Air Force contained in joint operations plans are expressed by the Air Force component commander in a time-phased sequence for:

1. Assistance in air base emergency repair and force between that exceeds Air Forces' capability.
2. Repair or restoration to air bases beyond emergency repair and base development.

(b) The Army component commander will determine the number and types of troop units, the type and amount of special construction material, and the material storage and quartering assets needed to provide the required support.

(c) The support requirements stated in (a) and (b) above are to be integrated into the Theater Civil Engineering Support Plan by the unified commands. The data base maintained for civil engineering support planning will contain total service capability, resources, and requirements at each base complex.

b. Submissions of requirements. Unified and specified commanders will integrate and submit their requirements as the Civil Engineering Support Plan (app 5, annex D) of the OPLAN in accordance with the Joint Operation Planning System (JOPS). The Department of the Air Force will assist in consolidating its requirements and making them available to the Department of the Army for planning and justifying its force structure and materiel program. The Departments of the Army and Air Force will jointly review the contingency wartime requirements for military troop construction and engineering support of the Air Force at least annually.

c. Action on requirements.

(1) Department of the Army will—

(a) Ensure that there are resources to support the Air Force in annual programs.

(b) Provide the number of troop units, by type, in the Active Army and Reserve components of the Army. (Units will be clearly designated in the Army troop program.)

(c) Provide the construction material to satisfy mutually agreed on requirements.

(d) Procure and store the necessary construction equipment and materials to ensure that they are available. Normally, the Army will establish operational projects in accordance with AR 710–1.

(e) Provide the Air Force with a listing of troop units and materiel programmed to support its requirements.

(2) Department of the Air Force will assist Army in justifying necessary troop units and support the Army in procuring materiel to meet Air Force stated requirements.


Under peacetime operations, the Army may support the Air Force by providing troop units to—

a. Construct new facilities or restore existing facilities as mutually agreed.

b. Reinforce Air Force elements in tests, exercises, and joint training.

10. Budgeting and funding.

a. Air Force. The Air Force will budget and fund for Air Force peacetime military construction projects to be done by Army troop units using the policies and procedures in AFR 172–1.

b. Army. The Army will budget for the number of troop units needed for Air Force support using the policies and procedures in AR 1–1.

c. Interservice support. Supplies and services provided by one Department to the other under this regulation will be budgeted and funded according to applicable statutes, Departmental regulations, and interservice agreements (DOD 4000–19M, AR 37–27, AR 37–19/AFR 172–3, and others.)
EMPLOYMENT OF ENGINEERING FORCES

A–1. Base development.
Prompt beddown of deploying units is important in introducing these units to theater air bases. Rapidly expanding air bases will require the minimum facilities essential for combat air operation. Selected existing facilities will have to be either expanded or new facilities erected.

a. Air Force. The Air Force role in base development is expedient force beddown. During mobilization, Air Force civil engineering resources deploy to meet mission requirements. The types of work for these forces include, but are not limited to—
   (1) Revetting of unsheltered aircraft.
   (2) Bomb dump expansion with matting and earth berm.
   (3) Erection of fuel bladders.
   (4) Erection of prepackaged kits for munitions, avionics, and maintenance facilities.
   (5) Site preparation for mobile control towers and communication vans.
   (6) Erection of Air Force bare base assets.
   (7) Installation of portable generators.
   (8) Wiring of perimeter security lighting.
   This work would continue until completed or pre-empted by war damage.

b. Army. The Army role in base development is all work other than force beddown. The Army will—
   (1) Acquire, repair, improve, expand, restore, and construct installations and facilities to support existing and deploying Air Force units at locations named by the theater commander.
   (2) Restore and construct facilities such as supply depots, POL systems, pavements, parking areas, buildings, and roads conforming to theater standards of construction.

A–2. Early war damage repair.
The amount of war damage may exceed the immediate repair capability of Joint Army and Air Force engineering resources. Air base commanders will prioritize the work.

a. Air Force. Air Force engineers will—
   (1) Initially make rapid runway repairs. Runway damage may be repaired with aluminum matting other expedient repair techniques. The requirement is to make a minimum operating strip and meandering taxiway from shelters form assigned and transient aircraft.
   (2) Make only rapid minimum emergency repair to critical command posts and communications, aircraft, and weapons maintenance facilities. Emergency repairs made to facilities will be expedient. Repairs are to cover holes with plywood, shore weakened buildings, secure breaks in utility lines, eliminate live electrical wires, reroute utility lines above ground, and fix roofs, walls, and floors. Repair and restoration beyond these are Army responsibilities.

b. Army. The Army will—
   (1) Make emergency repairs of war damages if they exceed Air Force’s civil engineering capability.
   (2) Repair and restore airfield pavements and other damaged facilities.
   (3) Reconstruct or replace facilities that cannot be repaired or restored.

A–3. Follow-on base development and war damage repair.
As the war subsides, additional base development and war damage repair may be required.

a. Air Force. During this phase, much of the Air Force’s available manpower will—
   (1) Operate and maintain activities.
   (2) Make crash rescues and suppress fires.
   (3) Meet beddown requirements that were deferred.

b. Army. Based on theater priorities, major effort will be to upgrade or replace the expedient facilities provided during force beddown. These facilities may include hangars, shelters, billets, dining hall, POL storage, and utilities.


a. Military construction will be minimum necessary for efficient operation.

b. Austere standards will be followed to limit the demand for resources.

c. Prefabricated or relocatable structures may be used.
Appendix B

References

Section I
Related Publications

DOD 4000.19–M
Defense Retail Interstate Support Manual

(c) JCS Pub 3
Volume 1, Chapter, 'Bases and Facilities Development (U)'

AR 1–1
Planning, Programming, and Budgeting within the Department of the Army

AR 10–1
Functions of the Department of Defense and Its Major Components

AR 37–19/AFR 172–3
Financial Administration of Interservice and Interdepartmental Support Agreement

AR 37–27

AR 310–25
Dictionary of US Army Terms

AR 415–11/AFR 88–3
Air Force Contract Construction

AR 415–15
Military Construction Army (MCA) Program Development

AR 415–16
Army Facilities Components Systems (AFCS)

AR 710–1
Centralized Inventory Management of Army Supply System (Section IV, Operational Projects)

TOE 5–115H
Engineer Construction Battalion

TOE 5–195H
Engineer Combat Battalion, Airborne

AFM 85–33
Maintenance and Repair of Expeditionary and Theater of Operations Airfields Facilities

AFM 86–3
Planning and Design of Theater of Operations Air Base

AFR 86–10
Joint Services Catalogue of Pre–Engineered Facilities Which Are Retrievable and Relocatable

AFR 86–13
Hasty Revetments Parked Aircraft

AFR 89–1
Design and Construction Management

AFR 93–2
Disaster Preparedness and Base Recovery Planning

AFR 93–3
The Prime BEEF Program

AFR 93–6
Operation and Maintenance of Prime BEEF

AFR 93–9
Civil Engineering RED HORSE Squadrons

AFR 172–1
USAF Budget Manual

Section II
Required Publications
This section contains no entries.
A. REISSUANCE AND PURPOSE

This Directive reissues reference (a) to bring it in line with current DoD policies, procedures, and requirements; and establishes responsibility for military troop construction support of the Department of the Air Force overseas.

B. APPLICABILITY

The provisions of this Directive apply to the Office of the Secretary of Defense, the Departments of the Army and the Air Force, and the Organization of the Joint Chiefs of Staff.

C. POLICY

It is the intent of Congress, and the policy of the Department of Defense, that common services required by two or more of the Military Departments shall be provided on a unified basis whenever this can be done at a savings to the Government and without detriment to the performance of operational missions. It is also the policy of the Department of Defense to make maximum use of host nation resources to support U.S. forces overseas. The policies set forth in this Directive are intended to preclude redundancy and foster effective and efficient use of available manpower.

D. RESPONSIBILITIES

1. The Secretaries of the Army and the Air Force shall, at least annually, jointly review the contingency/war time requirement for military troop construction/engineering support of the Air Force overseas. Each Secretary shall develop a force structure to meet that requirement, fully considering the potential contribution of host nation support, in accordance with the responsibilities described below. Each Secretary shall program, budget, and fund for his own units.
2. The Secretary of the Army shall provide (a) military troop construction support to the Air Force overseas and (b) ensure that the units needed are equipped, manned, and trained at the level required to support the Air Force. The support specifically includes:

   a. Assistance to the Air Force in emergency repair of war damaged air bases when that requirement exceeds the Air Force organic capability.

   b. Repair/restoration of war damage to air bases beyond emergency repair.

   c. Assistance to the Air Force in force beddown when that requirement exceeds the Air Force organic capability.

   d. Development of bases, to include the acquisition, improvement, replacement, construction, and/or expansion of terrain and facilities for support of the Air Force.

   e. Construction management of repair/restoration of war damage and base development, including the direction and control of Army units and personnel, within priorities established by the Air Base commander.

3. The Secretary of the Air Force shall provide military troop engineer support within organic Service resources for the following missions:

   a. Emergency repair of war damage to air bases.

   b. Force beddown of Air Force units and weapon systems, excluding Army base development responsibilities.

   c. Operations and maintenance of Air Force facilities and installations.

   d. Crash rescue and fire suppression.

   e. Construction management of emergency repair of war damage and force beddown.

4. The Chairman of the Joint Chiefs of Staff shall:

   a. Develop accurate, time-phased construction force requirements for each war and contingency plan which involves deployment or redeployment of military forces, fully considering the potential contribution of host nation resources.
b. Consolidate and validate all construction requirements as operations plans are reviewed.

5. The Secretaries of the Army and Air Force jointly shall refer matters which cannot be resolved in the execution of this Directive to the Secretary of Defense.

E. EFFECTIVE DATE AND IMPLEMENTATION

This Directive is effective immediately. Forward one copy of the implementing document to the Assistant Secretary of Defense (Program Analysis and Evaluation) within 120 days.

C. W. DUNCAN, JR.
Deputy Secretary of Defense