

**CHAPTER 9**  
**ENGINEER TOPOGRAPHIC AND INTELLIGENCE UNITS**  
**AND CIVIL AFFAIRS**

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**54. Mission**

The topographic and engineer intelligence teams, mentioned in chapter 4, provide specialized support to the Army in the theater of operations. These teams normally are attached to a larger unit or organized into an engineer composite unit to provide for engineer topographic and intelligence support under varying conditions.

**55. Capabilities**

The capabilities of an engineer unit composed of these teams vary with the number and types of teams used. The capabilities of the individual teams are given in this chapter.

**56. Logistical Support**

Since the teams have no mess or administrative personnel, they must be furnished mess, organizational maintenance, supply, administrative, and personnel services by the supported unit or by the appropriate TOE 29-500 teams.

**57. Basis of Allocation**

Teams are allocated as required by the engineer topographic or intelligence requirements of the command.

**58. Topographic and Intelligence Teams**

This paragraph outlines the strength, basis of allocation, strength and mobility of each of the topographic and intelligence teams.

*a. Team IA, Survey.*

- (1) *Capability.* Provides qualified personnel and equipment to perform second, third, and fourth order topographic and artillery fire control support surveys. Tower and FADAC computer support is provided by the

supported unit.

- (2) *Basic of collocation.* Normally assigned to a corps company or army battalion to provide additional survey support.

- (3) *Strength.* 1 WO    2 NCO    12 EM  
15 Agg

- (4) *Mobility.* 100 percent.

*b. Team IB, Photomapping Platoon.*

- (1) *Capability.* Provides qualified personnel with equipment for the preparation and revision of topographic planimetric and special maps, photomaps, mosaics, and other engineer intelligence data, to include final drafting of map manuscripts, color separation drawings and scribed manuscripts, grids, and marginal data. Requires water supply support from supported unit.

- (2) *Basis of allocation.* May be attached to an engineer topographic battalion, when mapping operations require additional effort. Normally located at army level.

- (3) *Strength.* 1 Off    1 WO    4 NCO  
38 EM    44 Agg

- (4) *Mobility.* 80 percent.

*c. Team IC, Map Reproduction Platoon.*

- (1) *Capability.* Provides qualified personnel and equipment for the production of maps and other engineer intelligence material from original manuscripts.

- (2) *Basis of allocation.* Normally attached to an engineer topographic unit when mapping operations require additional effort.

- (3) *Strength.* 1 Off    1 WO    8 NCO  
43 EM    53 Agg

- (4) *Mobility*. 80 percent.
- d. *Team ID, Map Depot Platoon*.
- (1) *Capability*. Provides qualified personnel and equipment for the receipt, storage, and distribution of maps and other engineer intelligence material for a base, army, or corps.
  - (2) *Basis of allocation*. Normally one to three per topographic battalion to operate forward depots.
  - (3) *Strength*. 1 Off    3 NCO    34 EM  
38 Agg
  - (4) *Mobility*. 80 percent.
- e. *Team IE, Geodetic Survey*.
- (1) *Capability*. Provides qualified personnel with equipment to accomplish, instruct in, or supervise first order astronomic observation surveys and computations in a theater of operations survey operation, or in the field army for guided missile and artillery fire control support.
  - (2) *Basis of allocation*. Normally one per base or army topographic battalion.
  - (3) *Strength*. 3 Off    1 WO    1 NCO  
15 EM    20 Agg
  - (4) *Mobility*. 100 percent.
- f. *Team IF, Terrain*.
- (1) *Capability*. Provides qualified personnel with equipment- for the collection, evaluation, and dissemination of terrain data, and the production of military terrain studies, and for consultant services in military geology and hydrology.
  - (2) *Basis of allocation*. Normally one per field army.
  - (3) *Strength*. 6 Off    1 NCO    6 EM  
13 Agg
  - (4) *Mobility*. 100 percent.
- g. *Team IG, Topo Planning*.
- (1) *Capability*. Map program and other engineer intelligence planning, and technical supervision of map and engineer intelligence compilation; surveying and geodetic activities, including supervision, collection, maintenance, and dissemination of engineer topographic and artillery fire control survey data; coordination of map and

engineer intelligence reproduction to include evaluation of reproduction facilities, and planning the employment of such facilities; supervision of the topographic map and engineer intelligence program, including the operation of map and engineer intelligence depots and supply points throughout the command. Maintains liaison with higher headquarters and allied armies. Supervises the indigenous reproduction and mapping agency programs used to accomplish the mission.

- (2) *Basis of allocation*. One per theater army headquarters, army group headquarters, field army headquarters, or topographic battalion as required.
  - (3) *Strength*. 8 Off    7 NCO    5 EM  
20 Agg
  - (4) *Mobility*. 100 percent.
- h. *Team IH, Photographic Evaluation*.
- (1) *Capability*. Provides qualified personnel with equipment to evaluate USAF photographic units' production of photography to determine its suitability for the compilation of military topographic maps.
  - (2) *Basis of allocation*. Normally to an engineer topographic battalion.
  - (3) *Strength*. 1 WO    1 NCO    7 EM  
9 Agg
  - (4) *Mobility*. 100 percent.
- i. *Team II, Survey (Airborne)*.
- (1) *Capability*. Provides jump-qualified personnel with equipment to perform second, third, and fourth order topographic and artillery fire control support surveys for an airborne corps or independent airborne force to include support of TOE 5-195T, Engineer Combat Battalion (Airborne). Tower and FADAC computer support must be provided by others.
  - (2) *Basis of allocation*. Normally assigned to a topographic unit.
  - (3) *Strength*. 1 WO    2 NCO    12 EM  
15 Agg
  - (4) *Mobility*. 100 percent.

*j. Team II, Military Hydrology.*

- (1) *Capability.* Provides for prediction of river stages and discharges, and of natural and artificial flood velocities, depths, and widths in a drainage basin of small to moderate size, up to 1,000 square miles. The team prepares studies of hydrologic and hydraulic factors involved in military installations from the point of view of flood incidence, and gives technical advice on hydraulic features of logistic operations and on equipment for use in water. Theater or CONUS commanders will provide for the allocation of necessary communications facilities and for joint operation of Air Weather Service Units and Corps of Engineer units when such is considered necessary.
- (2) *Basis of allocation.* Normally one per field army or separate corps. May be assigned to a geographic area determined by stream and drainage basin characteristics.
- (3) *Strength.* 5 Off      1 NCO      16 EM  
22 Agg
- (4) *Mobility.* 100 percent.

## 59. Table of Organization and Equipment

The table of organization and equipment of engineer troop organizations and the modification of units are given in appendix B, C 1, FM 5-1, and TOE 5-540D.

## 60. Engineer Role in Civil Affairs

The commander and his staff must have accurate, complete, and timely civil affairs (CA) intelligence which determines the necessary requirements for the control and welfare of the people of the area (FM 41-10). This intelligence involves the economic, sociological, psychological, and other necessities and comforts of the inhabitants. The civil affairs officer or the G5 in divisions is responsible for civil affairs. He can, however, depend on the engineers for engineer intelligence in his planning

and for assistance from the engineers as well as from other agencies in carrying out his plans.

*a. Area Surveys.* In the drafting of a CA intelligence collection plan prior to moving into an area of operations, the engineers supply the following information on the area: topography, hydrology, climate, weather, and terrain. The latter includes land forms, drainage, vegetation, and soils. They also supply the intelligence sources on caves, mines, urban buildings, and other construction, rural buildings, storage of crops, hiding places, and shelters. Area surveys are conducted on the ground through physical reconnaissance and the use of all available local sources of information.

*b. Real Estate.*

- (1) The acquisition and disposal of real estate is an engineer responsibility and is usually accomplished by engineer real estate officers. These officers and real estate teams can often provide valuable information and intelligence because they are familiar with the area, the facilities, and many local problems. Real estate teams should work closely with civil affairs officers and agencies because of the mutual benefits.
- (2) Civil affairs officers and agencies assist the engineers by determining the availability of real estate for military use and by establishing the limitations that should be imposed on its use and the effect of its use on the local economy.

*c. CA Assistance in Obtaining Engineer Intelligence.* CA collects maps, blueprints, plans, industrial and commercial records, documents, technical intelligence information, and equipment of interest to engineers. It also aids in supplying labor in the skills and types required by the engineers and describes the general attitude of the civilian population of an area.