

# The Aviation Unit Training Center Fort Huachuca, Arizona

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**T**HE pressing need for Engineer Aviation units as a result of the Korean War, led to establishment of the Engineer Aviation Unit Training Center at Fort Huachuca, Arizona, on June 5, 1951.

Here, on a site more accustomed to trooper and doughboy than the engineer, an assortment of Engineer Aviation units ranging from brigade to separate companies, were activated, organized, trained and turned over to Air Force control. Between May 1951 and January 1953, several thousand troops, mostly new inductees, were trained as engineer soldiers and specialists and organized into units capable of performing their basic mission of designing, constructing, rehabilitating, and maintaining airfields and air bases in a theater of operations.

## FORT HUACHUCA

From the standpoint of terrain, climate, and facilities, Fort Huachuca was ideally fitted for this mission. Situated in the foothills of the rugged Huachuca Mountains in southeast Arizona, it contained a varie-



Ruins of Adobe Huts of the Early Apache Scouts, Fort Huachuca

ty of terrain and ample area suitable for practically every type of engineer training. Plentiful local sources of material were available, including large gravel deposits, rock for quarrying, and even timber sufficient in size and quantity for lumbering operations. A favorable climate with a high percentage of sunshine and few extremes of temperature insured practically no loss of time due to inclement weather. Troop housing and supporting logistical training facilities available were ample for the number of troops contemplated.

The history of Fort Huachuca is as varied and colorful as its terrain. Established in 1877 as a temporary camp by Captain Samuel Whitside and elements of

the Sixth Cavalry from Fort Grant, Arizona Territory, it had an important part in protecting southeast Arizona from Apache Indian depredations. Strategically located, overlooking the rich Sonoita and San Pedro valleys—the scene of many Apache raids—it was close enough to the border to intercept Indian marauders seeking to slip away into northern Mexico. The possibilities of the camp for long-range development were recognized by Army authorities and in 1882, it was designated as Fort Huachuca and construction of permanent facilities was initiated.

After the Indian wars, the fort was used in safeguarding the border during Mexican civil wars in 1910-1920. Up to the outbreak of World War II it remained an active post garrisoned by cavalry and infantry.

During World War II, the post was expanded to division size by mobilization type construction and the 93d and 92d Infantry Divisions trained there.

After the war, in anticipation of long years of peace, Fort Huachuca was declared surplus. But the outbreak of the Korean War and the need for additional troop housing and training facilities, brought the historic old post back to life. Re-possessed by the Air Force in February 1951, it was shortly thereafter turned over to the Army and an extensive program of rehabilitation began. By the time the Engineer Aviation Unit Training Center (EAUTC) was activated, it was well on its way towards regaining its former status as an outstanding military installation.

## ACTIVATION OF THE TRAINING CENTER

The first training unit to arrive at Fort Huachuca—the 419th Engineer Aviation Brigade, a reserve unit from Kearny, New Jersey—was selected for a key assignment. The orders dated June 5, 1951, which activated the EAUTC, directed that the Training Center be staffed by personnel of the 419th Engineers and charged that unit with the mission of planning, directing, and supervising the training of all Engineer Aviation units stationed at Fort Huachuca while concurrently continuing its own training as a brigade. This meant that the entire personnel of the 419th was committed to staffing the Training Center throughout its life.

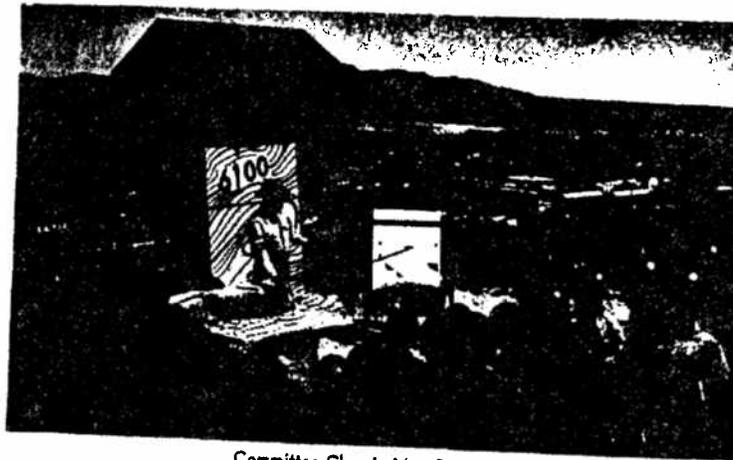
This method of providing overhead personnel to newly organized Army activities was better in theory than in practice. The Brigade, on arrival at Fort Huachuca, was about half strength in officers and had only a handful of enlisted men, far short of even cadre strength. And the organizational structure of

an Engineer Aviation Brigade was not intended to run a Training Center. A major reorganization and re-alignment of functions was necessary. The reorganization consisted primarily of the establishment of strong training and schools branches; an Equipment Pool for heavy construction equipment and materials; an EAUTC School for on-post specialist training; an Aggressor Force to instill security-mindedness; and an Air Section, consisting of two light planes, for training in engineer reconnaissance, camouflage, and security against air attack.

Two complete unit training cycles were to be conducted at Fort Huachuca, each with approximately the same number of troops,<sup>1</sup> and with the 419th Brigade remaining as supervisory headquarters throughout. The 705th Engineer Field Maintenance Company and the 597th Light Equipment Company were assigned to the EAUTC and remained during both cycles to assist in the conduct of training in heavy engineer equipment operation and maintenance.

Units of the first cycle began to arrive in May and before the end of June 1952, most unit cadres had reported to Fort Huachuca. All of the units had been recently recalled from reserve status and with few exceptions their cadres were far below minimum strength. Strengthening and training the cadres were early and important responsibilities of the EAUTC.

As units arrived they were attached to one of two groups. Groups, in turn, and the two Brigades reported to Headquarters EAUTC. The resulting command structure provided for proper control and gave group commanders and staffs an opportunity to receive practical training in their supervisory functions. This same procedure was followed during the second cycle, with group commanders being given, eventually, full command responsibility for their attached units.

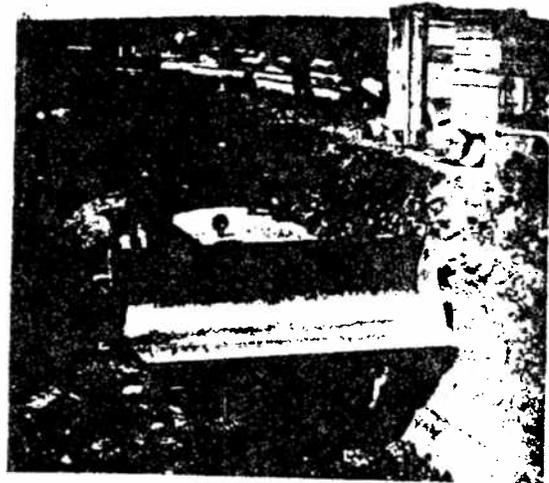


Committee Class in Map Reading

Enlisted fillers followed soon thereafter for the first cycle units in accordance with unit strength and military specialty requirements. Fillers for the first

<sup>1</sup>Engineer Aviation units of the first cycle (May 1951-February 1952) included the 417th and 419th Brigades, the 322d and 334th Groups, the 840th, 841st, 843d, 868th, and 868th Battalions, the 886th Field Maintenance Company, the 733d Supply Point Company and the 420th Topographic Detachment. Units of the second cycle (March 1952-January 1953) consisted of the 45th, 327th, and 304th Groups, the 68th, 69th, 71st, 820th, and 844th Battalions, the 583d Supply Point Company and the 572d Topographic Detachment. Of these latter units, one Group, three Battalions and the Supply Point Company completed unit training but were inactivated before leaving Fort Huachuca.

cycle consisted largely of surplus personnel from two infantry divisions on overseas alert. The quality of second cycle fillers was quite high. Fresh from induction centers, they received basic training at Fort Ord and Camp Roberts. On reporting to Fort Huachuca



Drainage Ditch Construction

they gave evidence of high morale, sound training in military fundamentals, and leadership and specialist potentialities.

Regulations required initiation of the training cycle whenever a unit received sufficient enlisted fillers to reach 80 per cent of authorized strength. Since most of the fillers arrived only a few weeks after unit cadres, first cycle units received little lead time for advance preparation before the start of training. This "catch-up" of cadres and fillers and the accelerated nature of the whole training program posed numerous problems for the relatively inexperienced Training Center staff. Cadres were green and required intensive training which had to be conducted concurrently with the arrival of fillers and establishment of unit organizations. Heavy engineer equipment and other training equipment and supplies were inadequate at the start.

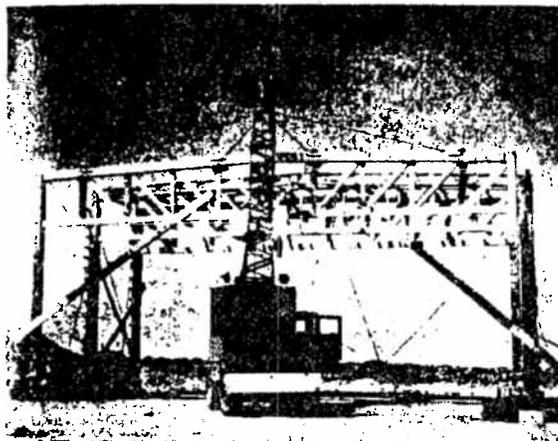
The second cycle faced few such problems. Phasing of unit cadres and fillers allowed ample time for advance planning and preparation, almost all equipment authorized was on hand, adequate stocks of construction materials were available and all Post rehabilitation was completed. And an augmented and more experienced EAUTC staff was available for the second cycle.

#### THE TRAINING PROGRAM

Applicable Army training programs (ATP's) and Sixth Army training directives established the basis for the EAUTC training program. As prescribed in

directives from higher headquarters, training advanced progressively through basic, advanced individual, and unit. Most fillers had received basic training prior to arrival at Fort Huachuca. On the other hand, advanced individual training, which transforms the basic soldier into an engineer soldier, was required by cadre and fillers alike.

Initially it was planned to require training units to give their own personnel advanced individual training. This was not feasible because of a shortage of qualified instructors and limitations on training supplies and equipment; therefore, the Committee method of instruction was adopted generally. In this method, a group of selected specialists prepare training sites, aids, and lesson plans and present instruction to all



Training in Hangar Truss Erection

trainees. Practical tests given on completion of advanced individual training indicated that the instruction had been thoroughly assimilated.

The training so far described provided each unit with basically trained engineer soldiers. The creation of the unit "team" was the function of the unit-training phase which, in the case of the Engineer Aviation Battalion, was further sub-divided into platoon, company, and battalion phases.

Unit training was conducted generally through construction projects assigned by the EAUTC to group headquarters. These projects, with amplifying instructions, were further assigned by groups to units under their control for execution of the work and, in some cases, for additional planning and engineering.

Projects were assigned to platoons to develop their ability to perform their specialized functions of construction, earth moving or transportation. Construction platoons built small classroom buildings and sheds, laid pipe lines, installed utilities, et cetera; earth-moving platoons built earth dams, roads, cuts and fills, and similar works; transportation platoons provided truck transportation for the other two platoons.

Typical company projects included large culverts, bridges and dams, major structures, and rehabilitation of the old airfield and portions of the new Fort Huachuca airfield.

It was recognized early that actual airfield construction was the only practical way to train Engineer Aviation Units. The reservation was well adapted

for this purpose: there were many suitable sites and very favorable soil and climatic conditions.

Relatively little work on the airfield itself was done by troops of the first cycle. The small amount (about 6 per cent of the total) actually accomplished consisted mostly of clearing, grubbing, and earthwork. Training requirements for units of this cycle were met largely by work on other projects. Final plans were prepared early in 1952 prior to the start of the second training cycle.

As originally planned, the airfield included two large paved runways each 150 feet wide by 8,000 feet long, and connecting taxiways, hardstands, operational structures, and most of the other subsidiary facilities required at a modern air base. Planning was purposely on a large scale to insure an airfield of sufficient size to meet anticipated future demands and to provide successive cycles of Engineer Aviation units at Fort Huachuca with training on airfield construction. Most of the engineering and planning was performed by the EAUTC engineering staff but enough remained to give each unit in training a measure of that responsibility.

Work assignments to appropriate portions of the project were made to groups and battalions. Airfield project work served as a framework around which other training was programmed.

With the experience of the first cycle as a guide and with more time available for prior planning, the airfield project progressed much more smoothly during the second cycle. Before the cycle started, the necessary plans, specifications, and bills of material for each construction item were prepared and all supplies requisitioned. A construction schedule based on the phasing of units in training was developed for coordination of work and equipment allocation and utilization.

While original targets called for completion of an 8,000-foot asphalt cement runway during the second cycle, a reduction in funds for supplies and the inactivation of three of the five battalions available necessitated limiting the length to 5,300 feet. By the end of the second cycle the following major work had been completed:

Paved runway, 5,300 feet by 150 feet, with 1,000-foot overruns

Concrete operations apron, 200 feet by 600 feet

Paved taxiway, 675 feet by 75 feet

Timber hangar, 86 feet by 64 feet

Operations building, 20 feet by 60 feet

Control tower, 28 feet high

Access road, 3 miles

Practically completed by the end of November 1952, the airfield was dedicated on December 3 with a Brigade review and the unveiling of a monument in honor of Sgt. George D. Libby.<sup>2</sup>

Included in unit training were military subjects such as drill, ceremonies and inspections, marches, motor movements and bivouacs, and subjects such as quarrying, asphalt plant operation, sawmill and lumbering operations, rock crushing, concrete batching and paving, and similar production operations. Familiarization instruction in these engineer subjects was obtained by assigning responsibility for plant operation and maintenance to battalions in turn for

<sup>2</sup>Sgt. Company C, 3d Engineer Combat Battalion, 24th Division, who was posthumously awarded the Congressional Medal of Honor following his death in action in Korea in July 1950.

a given period (about four weeks) and furnishing assistance at each plant site in the form of a small continuing cadre of trained operators. This procedure insured a degree of knowledge of the equipment and its operation within each unit though at some expense to production output.

Production operations were at their peak about the middle of the second training cycle. A large quarry and an extensive gravel bed, both conveniently located on the reservation, furnished rock and gravel for five crushers which were kept in almost continuous operation by around-the-clock maintenance. From the crushers, aggregate was fed to a centrally located concrete batching plant and an asphalt hot-mix plant whose products were then transported to the airfield for paving operations.

Many thousands of board feet of pine and fir were cut on the Huachuca Mountains. A small sawmill was set up nearby and operated by units in rotation, thus enabling the battalions to receive valuable training. The lumber was obtained at considerable savings.

Unit training for brigade and group headquarters and separate companies and detachments followed quite a different pattern from that prescribed for battalions. Brigades and groups had the dual mission of supervising the training of other attached units while concurrently training themselves. This made it necessary to extend the training cycle from six to twelve weeks. It was thus possible to devote the morning to supervisory duties and the afternoon and evening to training. Maintenance companies were kept occupied on heavy engineer equipment repair; supply point companies obtained excellent training operating the equipment pool; the topographic detachments were engaged in printing the *Huachuca Scout* and

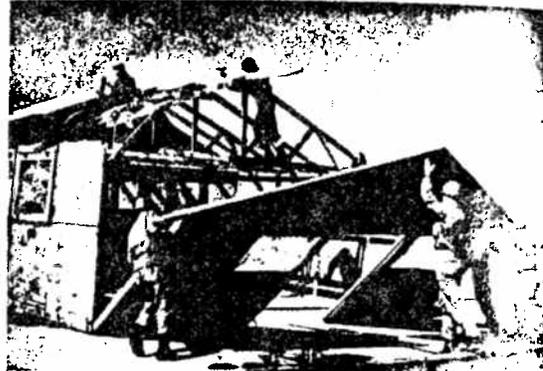


The Asphalt Hot-Mix Plant at the EAUTC

other reproduction job orders. This realistic and applicatory training was invaluable.

The training of specialists was carried on during both cycles concurrently with unit training. Army Service School quotas filled approximately one-third of unit specialists needs. The remaining specialists, more than 4,000 in all, were trained at the EAUTC school. Courses were given for engineer specialists including carpenters, electricians, plumbers, riggers, shovel operators, grader operators, construction technicians, demolition specialists, and others; communication spe-

cialists including low and intermediate speed radio operators and signal message center clerks; and common specialists such as typists, supply clerks, and armorers. At full operation, twenty-six different continuing courses were given at the EAUTC school and, in addition, special courses were conducted from time to time to fit particular needs. These courses included



Trainees Erecting Prefabricated Building

asphalt paving, dozer operation, equipment maintenance, and instruction by manufacturers' representatives in the operation and maintenance of special types of equipment.

#### SCHOOL ORGANIZATION

The school organization was modeled to a large extent after the Engineer School at Fort Belvoir, Virginia. A staff and faculty were selected from personnel assigned to EAUTC units.

Course supervisors were charged with preparing programs of instruction, lesson plans, training aids, and classroom facilities and with the selection and training of their own instructional staff. Course programs followed comparable programs at the Engineer School, modified and shortened to meet the accelerated pace of the training cycle and the need to furnish the units with a nucleus of trained specialists as early as possible. Great stress was placed on training instructors by establishing an abbreviated instructional methods course and requiring successful completion by each member of the school staff and faculty. This course was eventually expanded so that every company officer, key non-

commissioned officer, and unit instructor in the EAUTC attended it.

One other course deserves special mention. From the beginning there was a pressing need for trained non-commissioned officers and leaders. Quotas at other schools were limited, and permitted the training of only a few of the many hundreds of leaders required. A modified leadership course, therefore, under the EAUTC school, was set up with such high standards that only about half of the students were graduated. Those who graduated provided a valuable

cadre of leaders and potential leaders for the units.

The EAUTC school improved progressively in facilities and instructional procedures until, by the middle of the second training cycle, it was providing a capacity load of 600 students with sound basic training in their designated military specialties. However, because of the abbreviated nature of the training cycle, specialist training was conducted largely at the expense of unit training. The phasing of quotas and the length of courses and travel time (in the case of off-post schools) meant that students were absent during much of the unit training cycle. Since personnel selected for school attendance necessarily had high mental and physical qualifications, this in turn meant that units conducted unit training and underwent training tests with many of their key personnel absent. This condition was unavoidable under the circumstances but it acted greatly to the disadvantage of units striving to meet high training standards and to pass training tests.

#### THE AGGRESSOR FORCE

The lessons of the Korean War and the need for thorough security indoctrination in all units led to the establishment of the Aggressor Force. This organization with a strength of 1 officer and 33 enlisted



The Combat in Cities Range for Combat Training

men, operated as a separate entity under the supervision of EAUTC S-2. Personnel consisted largely of Korean returnees highly proficient in guerrilla warfare and night action. All units were made subject to Aggressor attack while in the field whether on a construction project or on a tactical march or bivouac. Blank ammunition, dummy grenades, fireworks, and sound effects were used to achieve realistic training. At times such realism was obtained that hand-to-hand combat was prevented only by prompt and sometimes drastic action by umpires. Security-mindedness became habitual in every unit as a result of unremitting action on the part of this efficient and aggressive force.

In a similar manner, security-consciousness against air attack was brought about through the co-operation of Luke Air Force Base, Phoenix, Arizona. Air attacks, simulating bombing and strafing, were made on

work parties and units in bivouac and on the march. The training was of mutual benefit to the pilots and to the engineer soldier and unit.

#### TRAINING TESTS AND COMPLETION

To determine its status of training, each unit near the end of the cycle was given a comprehensive training test, designed to gauge the ability of the unit to maintain itself in the field and accomplish its normal mission under combat conditions. Battalion tests, for example, covered a three-day period and required a motor movement, making and breaking camp, security measures against ground and air attack, preparation of operation orders, planning and engineering, assignment of work tasks, and the execution and supervision of actual construction projects. The performance of the unit on each requirement was rated separately and the aggregate score was used to determine the final over-all rating of the unit. All EAUTC units passed their tests with ratings ranging from Satisfactory to Excellent. The critiques following the tests were particularly valuable in pointing out deficiencies and the need for further training.

Soon after completion of training tests, units were prepared for movement to Air Force stations to assume their new role as SCARWAF (Special Category Army With Air Force) units. That units left with their authorized personnel and equipment properly prepared was a responsibility of EAUTC. Units of the first cycle were faced with a serious personnel problem because frequent enlisted levies and the necessity to "pull" cadres for second cycle units left them depleted in strength and essential specialists. As a result, although Sixth Army sources provided sufficient additional personnel, a number of units of that cycle were forced to depart with relatively large contingents of newly-joined personnel whose qualifications were not known. This condition was eliminated in the second cycle as Engineer Aviation units were exempted from overseas levies during the unit training period.

Units of the second cycle completed their training in December

1952, and the Engineer Aviation Unit Training Center was officially inactivated on December 31, 1952. The last unit to leave, the 419th Engineer Aviation Brigade, left January 6, 1953.

Within a period of eighteen months the EAUTC, starting from scratch had activated, organized, and trained two brigades, five groups, ten battalions, two supply point companies, a maintenance company and two topographic detachments, some 11,000 engineer troops in all. Many of these units are presently engaged on airfield construction and maintenance in this country, the Far East, and Europe. Under Air Force control, they are carrying out the lessons learned in the EAUTC. Old Fort Huachuca, whose past spans the military history of our country since Apache Indian wars, can look back with satisfaction upon the successful completion of another mission vital to the National Defense.