

# Patton's Desert Training Center

JOHN S. LYNCH  
J. W. KENNEDY  
ROBERT L. WOLEY



# Patton's Desert Training Center

*JOHN S. LYNCH  
JOHN W. KENNEDY  
ROBERT L. WOOLEY*



This monograph appeared originally as issue number 47  
*Periodical: Journal of the Council on America's  
Military Past*, December, 1982.

Copyrighted 1982, Council on America's Military Past  
Post Office Box 1151  
Fort Myer, Virginia 22211

Second Printing, 1984

# Patton's Desert Training Center

BY JOHN W. KENNEDY, JOHN S. LYNCH, ROBERT L. WOOLEY

General George C. Marshall in his *Biennial Report of the Chief of Staff of the United States Army, July 1, 1941 to June 30, 1943 to the Secretary of War* reported that the enlisted strength of the Army has been "increased by 5,000,000 men" and "the officer corps has grown from 93,000 to 521,000." The gains included 182,000 officers and nearly 2 million enlisted men in the Air Force. Unprecedented growth included a 3,500 percent increase in the Air Force proper, 4,000 percent in the Corps of Engineers and 12,000 percent in the service personnel of the Air Force.<sup>1</sup>

In 1943, the Joint Chiefs of Staff, after prolonged debate, were to receive Presidential approval for an armed force over-all total of 11,264,000 to be reached by the end of 1944. Of this the Army and Air Force were allotted 7.7 million. The number of divisions was set at 90. By 1945 the Army and Air Force were to total 8½ million.<sup>2</sup>

In 1942 the Army knew it must prepare for a variety of special operations under extreme conditions of climate, as exemplified in Norway, Libya and Malaysia, and operations by special means of assault such as amphibious and airborne. Lieutenant General Leslie J. McNair, later Commanding General of Army Ground Forces, wanted the Army to concentrate on the production of standard units and to give special training only to units that had completed their standard training, and only when operations requiring specialized training could be foreseen. Theatre training would be more realistic if and when specialized training was required.<sup>3</sup>

However, in the six months from March to September, 1942, the Army Ground Forces activated four special installations: the Airborne Command (later "Center"), the Amphibious Training Command (later "Center"), the Mountain Training Center and the Desert Training Center (DTC).<sup>4</sup>

The Desert Training Center was to remain active for 13 months and then was closed due to the inability of the Army Service Forces to properly support it during the War. General Marshall lamented closing of the post-graduate course for his infantry and armored units but with most of the Army overseas and the few remaining divisions enroute to ports of embarkation, the value of continued operation of the Desert Training Center (subsequently the California-Arizona Maneuver Area) was questionable.

Sixty-four infantry divisions were to be trained in the United States but only 13 were to train in the desert. Of the 26 divisions activated after July, 1942 only one would come to the desert. A total of 20 of the 87 divisions of all



Desert Training Center at height of its use shown in this panoramic shot with tent cities in background.



Photo courtesy Charles E. Keller, sergeant, 773rd Tank Destroyer Battalion.

types were to train in the DTC, California-Arizona Maneuver Area (CAMA) and these were the 5th, 7th, 8th, 33rd, 77th, 79th, 89th, 81st, 85th, 90th, 93rd, 95th and 104th Infantry Divisions. Armored Divisions assigned were the 3rd, 4th, 5th, 6th, 7th, 9th and 11th.<sup>4</sup>

One of CAMP's objectives is to ". . . memorialize military installations and units that no longer serve the role for which they were created . . ." The World War II Desert Training Center (CAMA) and its abandoned military installations and units fit this objective precisely.

#### FOOTNOTES

1. Forest C. Pogue, *George C. Marshall, Organizer of Victory, 1943-1945*, New York, Viking Press, 1973, 280.
2. *Ibid*, 354.
3. Department of the Army, *U.S. Army in World War II, The Army Ground Forces: The Organization of Ground Combat Troops*, Washington, Government Printing Office, 339-340.
4. Department of the Army, *ibid*, *The Procurement and Training of Ground Combat Troops*, 470n.

### *The California-Arizona Maneuver Area, World War II*

To set the stage, France was defeated, the attempt of the British to hold the Balkans and Greece had failed, and General Archibald Wavell was holding Egypt with a depleted force. On February 12, 1941, General Erwin Rommel arrived with his staff in Tripoli to join his Italian ally against whom he had formerly fought with distinction in World War I.<sup>1</sup>

Soon afterward, General George S. Patton received a new assignment. To a friend at the War Department, he wrote:

I have been detailed to organize and command a Desert Training Area

. . . I should deeply appreciate your sending to me . . . any and all information, pamphlets, and what-not, you may have on the minutia of desert fighting, to the end that I may duplicate, so far as is practicable, the situation which exists in the desert of North Africa . . .

Pardon me for writing you such a dry letter. We will try to correct the dryness when we see each other.<sup>2</sup>

In January, 1942, Patton announced, "The war in Europe is over for us. England will probably fall this year. It is going to be a long war. Our first chance to get at the enemy will be in North Africa. We can not train troops to fight in the desert of North Africa by training in the swamps of Georgia. I sent a report to Washington requesting a desert training center in California. The California desert can kill quicker than the enemy. We will lose a lot of men from heat, but training will save hundreds of lives when we get into combat. I want every officer and section to start planning on moving all of our troops by rail to California."

He added that "In less than sixty days every I Armored Corps Unit was enroute to Indio, California. Our final destination was a point in the middle of the desert near the town of Desert Center which in 1942 had a population of nineteen people. We were two commands, I Armored Corps and the Desert Training Center."<sup>3</sup>

March 4, 1942, Patton flew to March Field, Riverside, California, then chose for his base camp a site 20 miles east of Indio. He selected locations near Desert Center, Iron Mountain and Needles for Division Cantonements where troops began to arrive April 11, 1942.<sup>4</sup>

It is not clear just when the War Plans Division of the War Department General Staff foresaw that our Army might have to fight in the deserts of North Africa. It may well be that Patton's prodding was the decisive factor. The fact that the General became the first Commanding General of the Desert Training Command established the austerity, discipline and high standards of unit and division training throughout the time at which the area was used. Pat-

ton's tenure was rather short but his influence was established.

On February 5, 1942, McNair as Army Ground Forces Commander concurred in the recommended plan that a Desert Training Center be established. Patton was ordered to reconnoiter the area, which he did between the fourth and seventh of March, 1942. The site was unlike any with which the Army was familiar, either in training or previous combat. The desert was hot, temperatures climbed to 120 degrees in the shade, vegetation was sparse, and rainfall averaged 3 inches a year. Perhaps as important as any terrain feature was the fact that it was sparsely populated area and therefore would make it much easier to acquire for Army purposes. There were some units already in the area: a Field Artillery training area south of Indio, an Ordnance Section at Camp Seeley, an Engineer Board Desert Test Section at Yuma, Arizona, an Air Corps Depot at San Bernardino, Camp Haan at Riverdale, and an Army Air Base at Las Vegas, Nevada.

As the North African Campaign wound down in 1943, Rommel had given the Americans their first severe drubbing at Kasserine Pass and Gafsa. Patton had long since departed from the Desert Maneuver Area, leaving in October 1942 for the North African Theatre. The Morocco landing was successful but the near collapse of the American front in Tunisia forced General Dwight Eisenhower to relieve Major General Lloyd R. Fredenall and replace him with Patton. By March, 1943 the North African campaign was in its final stages with Field Marshall Bernard Montgomery grinding in from the east and a revitalized and already veteran American force, now well beyond the nadair of Kasserine and Gafsa, coming from the west.

So the primary mission of the Desert Maneuver Area to train the troops in desert survival and tactics did not apply to troops who were now coming to the maneuvers and who were to be deployed worldwide. Therefore the name of the Center was changed by War Department directive to The California-Arizona Maneuver Area (CAMA). The first directive by the War Department November 25, 1942 gave notice that the Army Ground Forces were in command, with a skeletal structure of the Center as the theatre of operations. This later was amplified to restrict the use of the terms "Theatre and Operations" to employment within the DTC only. A second directive related to the Air Arm of the Center. Army Ground Forces control of ground and service units had been delineated in the original directive. The additional one stated that the Air Support Command — including combat and service units — and facilities for its use, which included Desert Center Airfield, Rice Army Airfield and Shevers Summit Airfield were to be under the Commanding General of the Desert Center. (Can't you just see the combined bristle of all air personnel at such a suggestion these days!) The third directive, of January 14, 1943, "enlarged the center to include SOS installations existing or under construction, at or near Needles, Camp Young, Indio, Pamona, San Bernardino all in California and Yuma, Arizona." It declared that the primary purpose of assimilating the Center into a Theatre of Operations was to afford maximum training of combat troops, service units and staffs under conditions similar to



*Situation Map for the Desert Training Center, showing the three principal Maneuver Areas, A, B and C.*

those which might be encountered overseas."

As it turned out the designated combat zone was encircled by the designated zone of communications. This was something less than ideal for simulating true combat conditions. In the simulated desert area if you ran through the opposing forces you found you were back in your own zone of communications.

By November, 1943 the California-Arizona Maneuver Area had been enlarged and the IV Corps was in command. "This area, a barren stretch of wasteland, sand, rock and cactus, was roughly oval shaped and considering both the Communications Zone and the Combat Zone, was approximately 350 miles wide from Pomona, California, eastward almost to Phoenix, Arizona, and 250 miles deep from Yuma, Arizona, northward to Boulder City, Nevada. This area included at the time of IV Corps Command, Camp Young, Camp Coxcomb, Camp Iron Mountain, Camp Granite, Camp Essex, Camp Ibis, Camp Hyder, Camp Horn, Camp Laguna, Camp Pilot Knob and Camp Bouse. These were all temporary tent camps with a division being located at some of these, and at others armored cavalry, anti-aircraft and field artillery units. The Corps Headquarters, California-Arizona Maneuver Area, was located at Camp Young along with station hospitals that served the outlying camps."

## The Desert Training Center

The base camp received its name designation on May 12, 1942, deriving its name from Lieutenant General S.B.M. Young, an Indian fighter who had operated in the region and was the first Army Chief of Staff.<sup>6</sup> (During the Indian wars it was very common for camps or stations to be named after the officer who established them or the Commanding General of the district. Young had to wait a long time for his name to be thus enshrined; he had long since departed from the area and his terrestrial stay.) On May 26 electric power lines from Parker Dam were in place.

One of the original units to be transferred to the DTC was the 773rd Tank Destroyer Battalion commanded by Lieutenant Colonel F.G. Spiess. It had previously taken part in the Louisiana and North Carolina maneuvers and was said to have traveled some 9,500 miles through seven states over a period of four months, but the men were to find a new experience at Camp Young where they arrived shortly after April 5, 1942. Their official history relates that, "Camp Young was the world's largest Army Post and the greatest training maneuver area in U.S. military history. Eighteen thousand square miles of nothing, in a desert designed for Hell." One soldier who had endured it reported that clothes, equipment such as water bags, radios, vehicles, armored vehicles of all types and weapons were to be severely tested in this desert area. "Water in the Lister bags sometimes reached 90 degrees. After you have been

U.S. Grant M3 tank



inside the tanks for a while, water even at 90 degrees seemed cool. The tank destroyers were even hotter because they had the open top turrets. Sometimes the heat registered at 152 degrees. Inspection of tools and equipment was made early in the mornings or late in the evenings as any equipment or tools laid out on tarps by the individual vehicles, in the desert sun, could not be picked up as they would burn the hands."

Not all of the recollections of those who spent time on the desert were unpleasant. Another member of the 773rd Tank Destroyer Battalion recorded that "My greatest experience for the desert was observing the beauties of nature, both on the desert and also the nearby mountains. My worst experience was being stranded for two days in Pahlen Dry Lake in a disabled half track with four crewmen during which time we had one can of sardines, one can of corn, and one and one-half canteens of water."

Before the first mass maneuver, and to add to initial confusion, an epidemic of yellow jaundice (hepatitis) swept the camps in July. This filled all of the hospitals in the California area. Convalescence of the patients was slow and this further delayed training. As we now know this was due to the contamination of the yellow fever vaccine given to the troops with a then undiscovered virus which caused hepatitis and jaundice. The yellow fever vaccine had been stabilized with human blood serum. The serum had been derived from volunteer medical students. This blood had been drawn from at least one student who had suffered from hepatitis previously. Thus, this widespread Army epidemic of hepatitis was iatrogenic in origin and it was devastating. Hundreds who received the yellow fever vaccine were thus inadvertently inoculated with another disease, hepatitis.

All accounts related that, as the first commanding general, Patton certainly stamped his brand on the training center. The hill from which he could observe a wide area was called "The King's Throne." It was a lone elevation between the Crocopia and the Chuckwalla Mountains and separated them both. The General used to sit or stand up there scrutinizing critically the line of march of tanks and motorized units below him. Detecting a mistake or way to improve, he would shout instructions into his radio. Something ought to be said about Patton's radio. The official Army history of the Desert Training Center simply states the above but Porter B. Williamson in *Patton's Principles* gives a detailed and delightful account of Patton's communication system. This is how he describes the situation at the I Armored Corps Headquarters: "Our headquarters was approximately sixty miles east of Indio, California. Radio reception in our tents was poor due to the long distance between our portable radios and the broadcasting stations in Palm Springs and Los Angeles. General Patton's first concern was always the welfare of the troops, so he purchased radio broadcasting equipment. The initial investment was his own money! Our Signal Corps troops installed the radio broadcasting equipment. The station broadcast only news and music. It was a quick method of communication with the troops. General Patton wanted to talk to the troops as often as possible. At a staff meeting he said, 'This new station could save

several weeks of training. We can reach the troops, every one of them, as often as we need. In an emergency, we could reach every man in seconds.' "

Williamson continued, "Our desert radio broadcasting station had one unusual feature. There was a microphone in General Patton's office and a second microphone by his bed in his tent. Day and night General Patton would cut off all broadcasting and announce a special message or order from his personal mike. When the music would click off we knew we would hear "This is General Patton." He would use it to commend the special efforts by the troops. He would announce, "found a damn good soldier today!" He would continue giving the name of the man and the organization. This officer encouraged every man and officer to give his best effort at all times. Often his harsh words for an officer would provoke laughter from others. For example, one time General Patton ordered, "Col. Blank, you are removed from command! If you know what is good for you, you will stay away from me for a week."

The Commanding General was "uncompromising." Firstly, he was not easy on his men. When they did not drill they policed. He was a driver and a disciplinarian. Secondly, he was uncompromising with himself as well. He demanded that his men appear in uniform. Despite the heat and sand he himself wore his uniform in a military manner. He did not live in Indio but in a tent at Camp Young. In fact, one of the first things he did when he reported to the desert area was empty out the hotel at Indio. Only one officer was left behind and it was said that he was sick and could not be moved. In the third place, he wanted housekeeping arrangements to be minimal and tactical and technical instruction to be at the maximum.

It was initially planned that there would be a maneuver of troops in the area on July 15, but due to the logistics snarl, and the late arrival of troops, it was postponed until October 18. Gen. Patton prepared for the first DTC maneuvers but he was not to command them. He was relieved and his I Armored Corps was needed for action in North Africa. As one reviews various facets of the development of this maneuver area, it seems almost incredible that within a period of six to eight months, in spite of the fact that it was never fully operable under Patton, he left his lasting imprint. His technique of training continued until the maneuver area was closed.

The Desert Training Center was a war baby and it was a thorn to the spirit with its isolation, evasive dust and extreme shifts in temperature. Men had to be acclimated. The 3rd Armored Division suffered many casualties from heat prostration. Other units did too, but there is very little in the official reports on this subject. The surgeon under General Patton warned the command that danger lurked in reaching for an object on the ground unless you were sure that a rattlesnake wasn't coiled around it. He advised that liquids be drunk slowly and in small amounts, but with an eventual increased intake over a 24 hour period and to avoid over-exposure in the sun. Three 10-grain salt tablets were to be taken daily.

Problems with the civilian population in the area were not particularly

unique. These camps which sprang up all over the zone of interior in the States created a great deal of stress on adjacent communities, many of which were small. There was a flood of wives and families trying to follow their loved ones as they trained, discovering that housing, food, the whole bit was very difficult. The official history relates that "the situation in Indio was deplorable."

Initially the train transportation was snarled and deficient, which delayed proper distribution of food, water and other supplies; however, in time this was corrected. Water supplies were increased after wells were completed. Generally rations were the modified "B" ration with fresh milk and frozen beef added at a later date. The latter must have been the exception for the majority of those interviewed recall that two of the camps on the Arizona side were forbidden to have ice for long periods and they were not permitted fresh fruit or vegetables. The beer ration, when available, was served warm.

Equipment was in very short supply during the major portion of the maneuver area activation. The 5th Armored Division which had been activated a year earlier, still lacked 40 percent of its equipment at the time it maneuvered in the desert. Service units were in very short supply and all vehicles were used to their limits without proper maintenance. The original concept was for units not to bring new equipment, other than personal, into the maneuver area. Instead an outgoing division was to leave its trucks, tanks, signal equipment and all of that type of field materiel properly serviced so as to be used by an incoming division. Major General George Ruhlen, now retired remembers, "the 4th Armored Division's unit issue of tanks, trucks and the like being in horrible condition and it was in even worse shape when the 4th Armored Division left Camp Ibis. The idea of leaving equipment for the following unit at least relieved the strain on the supply and rail services.

The Desert Training Center severely taxed civilians as well as the military. It doesn't make much difference if one is talking about Indio, Yuma, Blythe or the larger towns such as Phoenix, the civilians learned that when the troops were on leave, especially weekends, the civilians were not going to get into restaurants, movie theaters, trains and busses. The increased demand sometimes deprived the local civilian population of certain foods. In Yuma, after the 6th Armored Division spent a weekend, eggs and beef were in very short supply.

### *Corps Maneuvers*

While the maneuver area was active, the following Corps commanders and their staffs cycled through one after the other:

I Armored Corps, Major General George S. Patton, Jr., April, 1942 to August 1, 1942.

II Armored Corps, Major General Alvan Gillem, Jr., August 2, 1942 to October, 1942.

IV Armored Corps, Major General William W. Walker, November 9, 1942 to March 29, 1943. IX Corps, Major General Charles H. White, March 29, 1943 to July 26, 1943. XV Corps, Major General Wade H. Haislip, July

23, 1943 to November 13, 1943. IV Corps, Major General Alexander M. Patch, Jr., November 13, 1943 to January 17, 1944. X Corps, Major General Jonathon W. Anderson, January 17, 1944 to April, 1944.

*IX CORPS (29 MARCH-23 JULY 1943)*

Under General White the area of the Center was enlarged (See Areas "B" and "C" on map) into the rough oval of its final shape. Its military population soared to almost 190,000, the elements of which were scattered through an area exceeding in size the state of Pennsylvania.

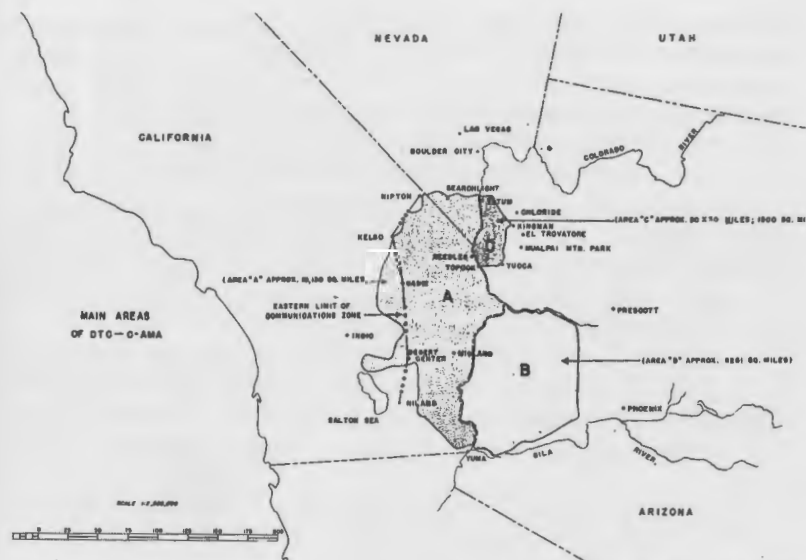
Much construction was necessary. Roads were always being built or repaired. Hospitals were badly needed. In June, 1943, although but 90 percent complete, the general hospital at Spadra, California, was occupied by more than 1,000 patients. After engineer troops had completed projects of higher priority such as hospitals, they built open-air theaters of simple design at Base General Depot and Pomona.

Movement in and out of the Center by large numbers of units and the load the railroads were forced to bear in supplying them led Joseph B. Eastman, director of the Office of Defense Transportation to request the Under Secretary of War to have activities in the Center decreased. The greatest rail congestion in the country existed in this western region. The War Department wished the western railroads to improve and increase their facilities in preparation for the war effort in the Pacific, but it believed that the point had been reached, especially on the Santa Fe, when an interval for recovery must be allowed.

Since curtailment of the Center must be counterbalanced by acquisition of equal facilities in another locality, the Army Ground Forces met the problem in three ways. In the first place, the Center was not further expanded. Secondly, movement of large units was arranged so as to cause the least possible interference with other activities of the railroads. Wherever possible rolling stock bringing in a unit was used to carry a similar unit from the Center. Finally, equipment was exchanged. With the exception of the armored division which left the Center in August, exchange of equipment was made in all cases. A vehicle pool was introduced. In general, after a unit arrived at the Center it borrowed equipment and vehicles from pools in the Center; before it left, it returned equipment and vehicles to the pools.

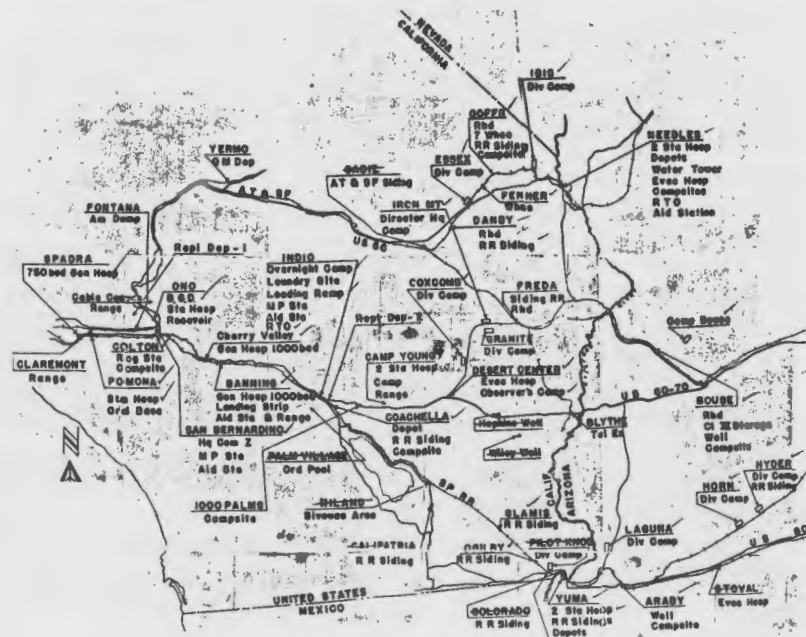
The major units involved in the maneuvers under the IX Corps, from 27 June until July 15, 1943, were the 7th Armored Division, the 8th and 77th Infantry Divisions and the 76th Field Artillery Brigade. In the maneuvers also were the 114th Coast Artillery (Antiaircraft), the 4th Mechanized Cavalry, the 5th and 6th Tank Destroyer Groups, the 144th Field Artillery Group, the 8th Reconnaissance Squadron, and the 6th Tank Group composed of its headquarters and the 742d Tank Battalion (Light) and the 743d Tank Battalion (Medium).

An Army Ground Forces directive of July 16, 1943 did not seek to revolutionize but to refine the structure of the Center. The system of administering



Map of main areas of Desert Training Center.

*CAMA installations.*



the communications zone which had originated with General Walker was incorporated into the directive. Large changes came about not as an alteration in the purpose or plan of the Center, but rather as a better means of fulfillment of that plan. Thus the communications zone was given a boundary, and no longer surrounded the combat zone.

#### *XV CORPS (23 JULY-13 NOVEMBER 1943)*

On July 23, 1943, one week after the AGF directive was issued, General Haislip, commanding the XV Corps, assumed command of the Center. To him and his staff fell the responsibility for realizing the provisions of the directive. Administration was simplified for Headquarters and realism was enhanced, attention again focused on training.

Haislip inherited vexing problems. One was the allotment of personnel for overhead. A request had been submitted for an increased allotment for Headquarters, the Communications Zone, and for the Base General Depot. A lesser increase than asked for was granted by Headquarters, Army Ground Forces.

Another problem was the lack of service units. A staff study made under direction of the G-4, DTC was sent by Haislip to Headquarters, Army Ground Forces, for reorganizing certain phases of the Center. Its major element was a listing of the number and types of service units needed for operation of the Center and which were thereafter to be assigned to it. This feature was not approved by Headquarters, Army Ground Forces, which was itself considering the problem. General McNair felt strongly that an effort had to be made to stabilize the service units at the Center and other maneuver areas. He believed that the "ideal system would be one where the necessary *operating* service units would be established as an element of the troops basis — in the same manner as school troops." Then the service units destined for overseas could flow through the Center without affecting operations. But the overall requirements of the Army here and abroad did not permit the assignment of an adequate number of service units to the Desert Training Center-California-Arizona Maneuver Area.

The maneuvers under the XV Corps were held from October 25 until November 13, 1943. The major units involved were the 81st and 79th Infantry Divisions, the 15th Cavalry (Mechanized), and 182d and 119th Field Artillery Groups, each group including 52 155 mm howitzer battalions and one 155-mm gun battalion, the 3d Field Artillery Observation Battalion, the 185th Tank Destroyer Battalion and two antiaircraft groups, one with two battalions and one with three.

During this period, September 22, 1943 Colonel James B. Edmunds became commander of the communications zone.

#### *IV CORPS (13 NOVEMBER 1943-17 JANUARY 1944)*

On November 13, 1943, five days before the maneuvers, General Patch and the IV Corps took command of the California-Arizona Maneuver Area. The maneuvers, from November 20, 1943 until December 11, 1943, involved

the 90th and 93d Infantry Divisions, the 11th Cavalry Group, the 22d and 33d Antiaircraft Groups, the 12th Tank Destroyer Group and the 711th Tank Battalion.

The process towards greater realism continued except in one particular, and that was air. The unity of command with the CAMA was broken when the War Department assigned the III Tactical Air Division (previously the IV Air Support Command), including supporting service units and airdromes, to the Third Air Force. The Commanding General of the Third Air Force was made responsible for providing the units required for airground training in the CAMA.

More serious was the deteriorating situation involving service units. Towards the end of 1943 shipments of service units overseas were increasing, and the situation for CAMA looked hopeless. General McNair therefore recommended to the War Department that the CAMA be closed.<sup>9</sup>

#### *X CORPS (17 JANUARY-30 APRIL 1944)*

On January 17, 1944, amid maneuvers between the 11th Armored Division and the 104th Infantry Division, General Jonathan W. Andersen and the X Corps took command of the CAMA. On January 21, Headquarters, Army Ground Forces, phoned that the CAMA would be discontinued as soon as practicable after April 15, 1944. The message was later elaborated: the CAMA was to be discontinued as a maneuver area as of April 15, 1944, to cease internal operations as a training theatre as of May 1, 1944.<sup>10</sup>

The X Corps directed the last maneuvers held at CAMA. The major participating units were the 9th and 104th Infantry Divisions and the 15th Tank Destroyer Group. At midnight April 30-May 1, 1944, Andersen turned over the installations and a modicum of personnel in the Ninth Service Command, representing the Army Ground Forces and the Desert Training Center California-Arizona Maneuver Area was at an end.<sup>4</sup>

All senior officers who participated in this maneuver area training agreed that the experience was extremely valuable for them later in combat. General Patton stated that except for his World War I combat experience this was the most valuable training that he undertook.

With deactivation of CAMA there remained a concentrated effort to police up the area, close the camps, collect, salvage and ship to outside depots thousands of pieces of equipment and tons of material. The location and disposal of any unexploded shells presented a problem and in some instances these fields simply had to be marked with warning signs and left for future desposition. The fortified area at Palen Pass presented such a problem that any hope of restoring it to its pre-maneuver condition was abandoned. By April 15 only Camp Young, Headquarters of the Communication Zone, the Base General Hospital Depot and the Pomona Ordinance base remained open with service troops. A partial list of the materials which had been turned in by April 15, 1945 is as follows:

1,239 pieces of artillery  
43,708 small arms weapons

6,110 tons of servicable parts (automotive and weapons).

The list goes on and on, including six Division Camps and two temporary non-Divisional Camps. Four hundred and fourteen organizational units, with a total strength of approximately 130,000 were moved from the area and released to the Army Service Forces or disbanded.

Now, with the departure of the Generals, their headquarters, the combat tankers and infantrymen and their various support units for other scenes of action, the desert has slowly reclaimed a great deal of the area. It is only from the air that the outline of the camps in the extensive maneuver area can be fully appreciated in 1982.

During General Patton's tenure as commanding general at the DTC, all unit buglers sounded taps at the appointed hour. As this melody rang across the desert camps it was an impressive if not eerie experience.

Now at twilight some 40 years later, in the canyons, desert waste and mountains — one-time site of the California-Arizona Maneuver Area — it is said that faint notes of Patton's long departed buglers can be faintly discerned, and they are answered by coyote calls from desolate desert lairs.

#### FOOTNOTES

1. Churchill, Winston. *The Grand Alliance*, 1950, 198.
2. Blumenson, Martin. *The Patton Papers, 1940-1945*, II. Boston, Houghton Mifflin Company, 1974, 57.
3. Williamson, Porter B. *Patton's Principles*. Tucson, Arizona, Managements and Systems Consultants, privately printed, 1979.
4. Blumenson, *The Patton Papers 1940-45*, 58.
5. *History of the IV Corps 1941-45*, Military History, Department of the Army.
6. *The Desert Training Center*. Army Ground Forces Historical Center, Study 15, 1946. Most of the technical information that follows derives from this work.
7. Personal Communication in 1980 from T/Sgt Charles E. Keller, 773rd Tank Destroyer Battalion.
8. Personal Communication in 1980 from Edward McClelland, 773rd Tank Destroyer Battalion.
9. *The Desert Training Center*, op. cit.
10. *Ibid.*
11. *Ibid.*

#### *The Story of Three Camps*

It is impossible to tell the complete story of every unit that trained in the desert. Each was unique and it would be beyond our capabilities at this time to relate them all.

However, Camps Horn, Hyder and Bouse were among the major training camps at CAMA in 1943 and 1944. Each was located in a remote part of the Arizona desert where the troops could receive rigorous training under austere conditions as combat training for World War II. The 81st Infantry Division trained at Camp Horn; the 77th Infantry was stationed at Camp Hyder, and the 9th Tank Group was shrouded in secrecy at Camp Bouse with a "... weapons system that would change the course of the war . . .," or so it was promised.



#### THE PYRAMID AT FLAGSTOP HORN

Camp Horn, Arizona was the home of the 81st Infantry Division from June to November, 1943, and was one of six Division-sized cantonments included in the U.S. Army's Desert Training Center. The 81st was reactivated June 15, 1942 at Camp Rucker, Alabama. Its 321st, 322nd and 323rd Infantry Regiments were Army Reserve units headquartered in North Carolina, South Carolina and Georgia, so the 81st contained many "Southern Gentlemen."

This Division originally was activated in 1917 and incurred more than 1,000 casualties in the Meuse-Argonne campaign of World War I. It had the unique distinction of being the first Army Division to wear a shoulder patch. Wildcat Creek, a tiny stream flowing through the training area at Fort Jackson, South Carolina, inspired the World War I Doughboys to create a shoulder patch with a black wildcat on a black-bordered olive drab disk. Other Divisions in France in 1918 challenged the right of the 81st to so distinguish itself and took the question to the General John J. (Black Jack) Pershing who ruled that the Wildcat Division could keep its patch and suggested that the other Divisions adopt similar distinctive insignia.

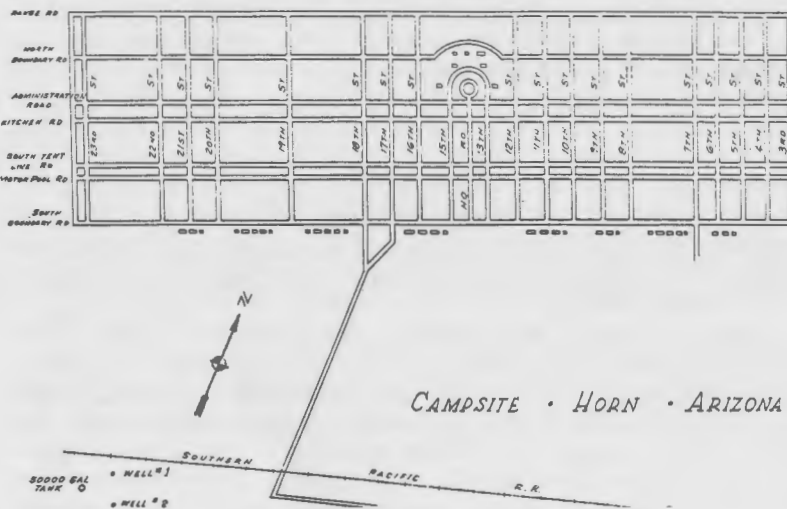
After 12 months of basic training at Fort Rucker and a shakedown on Tennessee maneuvers, the Wildcats entrained for a flagstop on the Southern Pacific Railroad in the Arizona desert, the advance party arriving at Flagstop Horn in late June, 1943. They found themselves in the middle of nowhere. The only sign of civilization was the railroad and a sign, "Horn." This arid region is noted for low sand dunes unanchored by even widely spaced creosote bushes and saguaro and other cactus. Consequently, the slightest winds generate

sandstorms that make life miserable. Awesome clouds of billowing fine sand penetrate one's clothing and dusts the hair and fills every wrinkle in the skin. Cloudbursts usually follow sandstorms and result in flash flooding by great volumes of water. Fortunately, the downpours ordinarily are local and occur only during the monsoon season, July-August and January-February. Rain-falls at other times is definitely not plentiful as judged from an annual 5 inches or less.

Immediately after the arrival of the advance party, the 306th Engineers completed a survey of the new camp and began construction of the minimal essentials specified by Desert Training Center policy. Frame and canvas shower buildings, latrines, kitchens and dispensaries were given first priority. A few frames for higher headquarters and post exchange tents followed; and one fence was built to serve as a stockade. The camp was completed by the erection of six-man pyramidal tents.

The whole Division had moved into camp by the 25th of July when the temperature reached 126°F. On the 28th, the continuing high temperatures caused two deaths and many severe cases of sunstroke. This heat wave, whose daily highs exceeded 110°F for 45 consecutive days, was finally broken on July 31st by the first rain of the late monsoon season. That day the camp was almost washed away!

"Nearly every company constructed an underground icebox, into which ice was destined never to take its place. No ice in the ice boxes was the result of an experiment conceived by the higher headquarters controlling the desert training and put into effect shortly after the Wildcats arrived at Horn. No ice and no fresh fruit were to be furnished the messes, and B rations — that is, meat, crackers, fruit and vegetables — were all to come from cans. The Division did not have to wait until combat days to develop dislike for pressed



*A few lines of stones which once marked streets and walks are all that remain of much of Camp Horn.*

meats, canned sausages and dehydrated foods." However, an historian continued, "Despite the difficulties of the life in the desert, some came to enjoy the desert and found it interesting in many ways and a provider of choice reminiscences. Its space was immeasurable — in the 1,200 square miles assigned to the Division, there lived only two civilians, both hermit guards at inactive gold mines. However, it was not entirely deserted because there were many kangaroo rats, sidewinders, and other rattlesnakes, birds, tarantulas and coyotes."

Phoenix, a difficult 135-mile ride from camp, was believed by GIs to be the desert's greatest oasis. Leave-takers in packed autos left camp weekends as often as permitted, so the San Carlos, the Westward Ho and other luxurious hotels were quickly filled. In addition, recreational convoys took groups of 1,000 Wildcats to the Division's temporary camp at the Arizona State Fair Grounds in Phoenix where they could enjoy heavy meals of steak, salad and steins of cold beer.

On August 4, 1943, a "battle demonstration group" made up of the 322nd Infantry's Company I and detachments from the 306th Engineer and 306th Medical Battalions left for the Fair Grounds. In Phoenix, Ogden, Salt Lake City and other Western mining cities, this Wildcat "roadshow" demonstrated sham battles and military equipment usage, and underscored the importance of western metals in the war effort.

Training of course was given first priority at Camp Horn. Emphasis was

on tactics, and interest was maintained by the use of large quantities of live ammunition. Long marches by day and night were frequent. A 24-hour tactical march was planned to prevent any sleep, to move over difficult terrain at night, and to require maximum exertion approaching the limits of endurance. This march under the most difficult conditions with limited quantities of food and water was a good reason for one of the Wildcats to declare: "The horrors of hell no longer frighten me".

"Officers and men who completed the six-day platoon leadership problem will never forget it. The platoons maneuvered, mostly at night, in "enemy" territory and reached or seized objectives where they usually found their day's supply of food or water. During one of these marches, men of the 306th Medical Battalion had a rather unusual emergency litter case when on the second day out, in the midst of the terrain impassable for ambulances, one of the men became a casualty. A litter squad carried him across country for three hours. It was generally held that every other part of the desert training was easy compared to these marches."<sup>2</sup>

During the final Division field exercise when the whole outfit and its equipment was exposed in the desert, a violent rain was climaxed by a hailstorm which whitened the ground with hailstones the size of pigeon eggs. Within minutes dry gulches became raging torrents that upset trucks and trailers and scattered equipment for miles. Those tactical units which camped in the gulches for better concealment learned about desert flash floods the hard way.

In late October, 1943, the Division moved 200 miles by motor convoy to the vicinity of Palen Pass in the California portion of the Desert Training Center to participate in XV Corps maneuvers. The "enemy" was the 79th Infantry Division holding fortified positions in the pass. Movements were carried out mostly at night, so the damage to field telephone wire and the long distances that separated the units required Herculean performances on the part of the men of the 81st Signal Company. The importance of digging in, camouflage and dispersion was frequently demonstrated by fighter planes whose strafing attacks were made at such low altitudes that the ground troops could not resist throwing rocks at the planes. General McNair, Commander of the Army Ground Forces, gave the Wildcats a passing grade for the maneuver, so they prepared to move to a new station.<sup>3</sup>

By November, 1943, the Allies had won the North Africa Campaign, so there was no longer a need for a desert-hardened Infantry Division. Thus, the 81st was retrained in amphibious operations in California and Hawaii. It entered combat on Angaur Island (just south of Peleiu) September 17, 1944. After additional actions on Peleliu, Yap and other Palau Islands, the 81st was sent to New Caledonia for rehabilitation and training during January, 1945. The Wildcats arrived on Leyte, Philippine Islands May 17, 1945, and moved to Japan September 18, 1945 for occupational duty. Immediately after returning to the States the 81st Infantry Division was inactivated April 5, 1945.<sup>4</sup>

At the entrance to Camp Horn, near the Southern Pacific Railroad, a



*81st Division dedicates monument to memory of Wildcats who died during desert training. Monument is near former Camp Horn.*



pyramid of concrete and stone stands in memory of seven men who died while training at Camp Horn. The inscription on the plaque reads:

HERE TRAINED  
FOR VICTORY  
UNDER  
DESERT SKIES  
THE

81st INFANTRY  
DIVISION  
THE WILDCATS  
1943

IN MEMORIUM  
PRIVATES  
AGEEA J. VILELLA  
PAUL M. WEST  
EARL S. SMITH  
JAMES J. DeCARLG  
LYNN REMMEY  
CLYDE L. SLAYTON  
ARDON W. BRIDGES

The Order of Battle for the 81st Infantry Division was: Division HQ & HQ Company; 321st Infantry Regiment; 322nd Infantry Regiment; 323rd Infantry Regiment; 306th Engineer Battalion; 306 Medical Battalion, The HQ & HQ Battery, 81st Division Artillery; 316th Field Artillery Battalion; 317th Field Artillery Battalion; 318th Field Artillery Battalion; 906th Field Artillery Battalion, The HQ Special Troops, 81st Infantry Division; 81st Division Band; 81st Reconnaissance Troop; 81st Quartermaster Company; 81st Ordnance Company, and the 81st Signal Company.

#### FOOTNOTES

1. *The 81st Infantry Division in World War II*, Wildcat Division Historical Committee, Washington, D.C., The Infantry Journal Press, 1948.
2. Ibid.
3. Ibid.; *The Desert Training Center and the California-Arizona Maneuver Area*, Army Ground Forces Historical Section, Study Number 15, 1946.
4. *The Army Alamanc*, Armed Forces Information School, Washington, D.C., Government Printing Office, 1950.

## 77TH INFANTRY DIVISION



### THE SANDS OF HYDER

Camp Hyder, Arizona was one of the Division-sized cantonments that served the U.S. Army's Desert Training Center in World War II, and its history is part of the history of the 77th Infantry Division. This "Eastern" outfit had the dubious honor of including the first foot soldiers sent to the Desert Training Center. Reborn at Fort Jackson, South Carolina on March 25, 1942, the World War II 77th had much in common with the old World War I Division which achieved an outstanding battle record in 68 days of combat ending with the Meuse-Argonne campaign of 1918. A good number of recruits of both the old and the new considered the sidewalks of New York home. Consequently, the old 77th called itself "The Metropolitan Division" and proudly wore the gold Statue of Liberty on a blue truncated triangle shoulder patch. The new 77th just as appropriately called itself "The Liberty Division" and wore the same shoulder insignia.<sup>1</sup> Men of the old 77th, which included members of the "Lost Battalion"<sup>2</sup> of the 308th Infantry Regiment, passed the torch to the new generation by bringing the national and regimental colors out of retirement and ceremonially presenting them to the reactivated organizations. Delegations of old timers visited their successors to give them encouragement and pass along history and tradition.

After one year of shedding sweat and fat on the drill fields and training

grounds of Fort Jackson, and a shakedown in the Louisiana maneuvers, a self-reliant, cocky and impatient 77th entrained for a water-stop called Hyder on the Southern Pacific Railroad in the heart of the Arizona desert. The troops were convinced that they were a fighting team ready for combat even though the Division advance party found itself at Hyder on April Fool's Day 1943. At that time the Allies had not yet won the North African Campaign, so a need for desert-hardened infantry was anticipated. Consequently several infantry divisions were scheduled to train in the Desert Training Center, initially established to train the tank, tank destroyer, artillery and supporting units of Patton's I Armored Corps. These infantry divisions assigned to the Arizona desert included besides the 77th at Camp Hyder, the 81st at Camp Horn and the 8th at Camp Laguna.

At Hyder (elevation 536 feet) the Southern Pacific Railroad passes just north of the Agua Caliente Mountains, their slopes covered with volcanic rock. These mountains bear the name of the hot water springs at their southern end several miles south of the rail line. This oasis served the Spanish explorers as early as 1748, the gold-seeking 49ers on the old trail between Tucson and Yuma Crossing and health seekers at the time of arrival of the 77th.

The 77th Division Band welcomed the troop trains with such appropriate tunes as "This Is The Army" and "There'll Be A Hot Time" as one by one they rolled to a stop at the siding. The transition from comfortable Pullman cars, good food and clean sheets to the barren desert with its powdery ankle-deep dust, piles of folded tents and two miles of survey stakes was a morale-busting shock! As each company detrained, it was marched off through the choking dust to its assigned area where it erected a double row of pyramidal tents. Each tent contained 6 cots, 6 straw ticks, 12 barracks bags and very quickly a population of lizards, scorpions and flies. Even today, this experience is not forgotten because the 77ers who retired to Arizona show little interest in revisiting the site of their old tent city.

Heavy construction was the forte of the 302nd Engineers. When roads disappeared in the powdery silt, they rebuilt them with rock blasted from the naked Agua Caliente Mountain. Since the nearest water was six miles away at the Agua Caliente Hot Springs, they drilled a very deep well near the railroad and luckily obtained a flow of 120,000 gallons per day. A huge shower facility was built at the well site. However, its value was lessened by the long dirty marches between the tent city and the showers.<sup>3</sup>

Training was impeded by the necessary acclimatization and by Mother Nature. For example, it was necessary to police the firing range each morning to remove the rattlesnakes. Platoon-sized, six-day compass marches were impeded by deep unmapped arroyos that slowed travel to caches of water and rations. Several narrow escapes from death and frequent instances of real hardship resulted. Also, when the Division was called up to maneuver as a whole on a broad front, clouds of rolling dust engulfed the landscape for days as 13,000 men and hundreds of vehicles churned up the dust. Training included service as "guinea pigs" to test the drinking water requirements of foot



*Pyramidal tents dotting dusty Palomas Plain at Camp Hyder (above). Desert shrubs provide scant shade for men of the 77th Infantry Division in 1943 (below). Photos courtesy Elizabeth R. Springer, widow of Lieutenant Vernon L. Springer of 77th.*





*77th Infantrymen train in Arizona desert.*

soldiers in the desert. Patton, who established the Desert Training Center "rules" or training methods, planned to develop lean and hard desert troops by making the training as rigorous and as realistic as possible. Unquestionably, the General was a superb military tactician, but he lacked a knowledge of human physiology. All his attempts to forcefully acclimatize soldiers to using only one canteen of water (one quart) per day failed as measured by increasing casualties. The 77th Infantry Division proved the hard way what Sir Hubert Wilkins, an Australian-born polar explorer and desert expert tried to tell Patton. One quart of drinking water per day is far from sufficient to replace body losses in 120°F desert temperatures in non-existent shade.

The Army's concern for the physiological aspects of desert training prompted the Quartermaster General to assign a team headed by Wilkins and Conservationist Weldon F. Heald to the grim human proving ground that was the Desert Training Center. Their job was to evaluate the performance of clothing and equipment and to recommend improvements. Also they unofficially were to seek clues to the multiplying physiological crackups. This team headquartered at the Blythe Air Base and collaborated with the Air Corps Aero Medical Laboratory at Wright Field, Ohio. It found the most comfortable desert summer clothing to be light khaki trousers and an open-necked, long-sleeved cotton khaki shirt. Shorts and rubber-soled shoes were eliminated early in the test program. Tents with a second canvas roof 12 to 15 inches above the first reduced daytime temperatures about 10°F.<sup>4</sup>

Human tests in the 77th confirmed that a soldier must replace each

24-hour water loss in order to fight effectively another day. The Wilkins-Heald data shows that men on desert maneuvers during the summer months can sweat as much as 2½ gallons in 24 hours and such accumulating water deficits quickly made for hospital casualties. "We learned that 20 to 25 miles is about the limit for walking in the desert, but whatever the individual limit was, each additional quart of water boosted a man's capability for walking about 5 miles."<sup>5</sup>

Another unique feature of the 77th's desert training program was the "Bull Dog School" established at a remote site by Lieutenant Colonel Gordon F. Kimbrill of the British Commandos. "Under the most realistic conditions possible, with lavish use of service ammunition, all company officers and many NCO's of the Division practiced small unit tactics, hand-to-hand fighting, infiltration under fire and village fighting. A week at this school sweated many pounds from any man and added much to his skill and self-confidence. He took part in patrols against 'the enemy' who fired live ammunition. He manufactured and used demolition charges and booby traps. He fired all infantry weapons under all conditions. He lived hard and dangerously because despite precautions, men were hurt and one officer was killed."<sup>6</sup>

Discipline was not maintained by means of a conventional stockade. Instead a "Training Company" was established in a very isolated location where prison life was even more rigorous than at Bull Dog School. News of the tragic fate of one attempted AWOL limited the size of this company to only a few. The story of the buzzard-torn remains and the empty canteen in a waterless arroyo spread rapidly and with effect.

Life at Camp Hyder included some recreation. A limited amount of beer and soft drinks found their way into the Post Exchanges even though the ice supply to cool them was inadequate. Nightly movies and a few courageous Hollywood troupes did much to minimize the boredom. Baseball, boxing and other athletic activities permitted representatives of the various units to compete. The Engineers even found time to rebuild the swimming pool at Agua Caliente where the water was abundant though hot. Best of all were visits to Phoenix. This city, 100 miles to the east, was a recreation spot for the dehydrated soldiers, and its hospitality was appreciated. In its modern hotels and homes they scrubbed off desert dust and drank cool liquids and here in the city the wives of the 77th found houses and apartments.

While selected personnel and units took their turn in participating in desert compass marches, in serving as human guinea pigs or in enduring life at the Bull Dog School, the bulk of the Division concentrated on a more conventional training program involving: Week 1 — individual, crew, and squad training; week 2 — Company or battery training; week 3 — Battalion training; week 4 — Combat Team (Regiment) training; weeks 5 to 7 — Division field exercises, and weeks 8 to 13 — Corps maneuvers.

This regime was supplemented by instructions from HQ Army Ground Forces that the training in the DTC was to emphasize (1) operations with restricted water supply; (2) sustained operations remote from a railhead; (3)



*Onetime street marked by rocks.*

*Tent area, Camp Hyder.*



dispersal of combat groups, during which constant threat of hostile air and mechanized attack would be simulated; (4) speed in combat supply, particularly of ammunition and refueling; (5) supply under cover of darkness; (6) desert navigation for all personnel; (7) laying and removal of mine fields by all personnel; (8) maintenance and evacuation of motor vehicles; (9) special



*Mess kitchen site, Camp Hyder.*

*Revisiting Camp Hyder: Lieutenant Sid Stein, Dr. Hugh Randel, and Chuck and Jane Rider (great grand niece of General George Crook).*



features of hygiene, sanitation and first aid, and (10) combined training with the Army Air Forces.<sup>7</sup>

By late June, 1943 the 77th Infantry Division moved by motor convoy to Palo Verde in the California desert for the IX Corps maneuvers. There they joined their "Blue" teammate, the 7th Armored Division, and attacked 'the enemy,' the 8th Motorized Division, after an 80-mile advance in a single night to surprise him in Palen Pass. The 77th performed well as a division in this

mock war of movement, However, "the Division's leadership, physical and disciplinary standards were considered unsatisfactory" by General McNair, Ground Forces Commander who directed the 77th to return to Camp Hyder and correct its deficiencies. Thus, late in July, 1943, the 77th again occupied their old tent rows.

This decision was a bitter disappointment to a fighting team convinced it was ready for combat before coming to Camp Hyder in the first place, so morale noticeably dropped. Fortunately their commander, Major General Andrew D. Bruce established the 77th's desired effectiveness within two months after a rather drastic attention in officers. Bruce sharpened the 77th via strenuous six-day marches in the mountains and desert east of Hyder. These included night marches along narrow mountain roads, camouflage instruction, patrol missions over difficult terrain and close air-support coordination.

McNair again inspected the Division and observed some of these field exercises. He seemed favorably impressed, because on September 15, 1934, the 77th was ordered to entrain for Indian Gap Military Reservation in Pennsylvania.

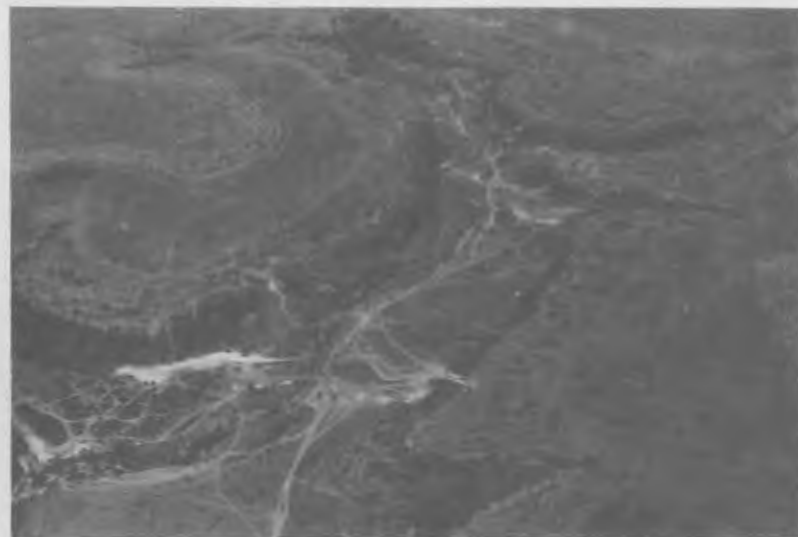
Nature celebrated the 77th's departure with a great natural phenomenon. It rained. Not once but several times. An awesome wind and dust storm always preceded the rains and ripped and flattened whole rows of tents. Not once but several times on successive nights. And flash floods washed away parts of the camp, as if to say "Farewell, 77th!"

With Army logic, after five or six months at the Desert Training Center, the 77th Infantry Division was sent to the Pacific jungles to fight the Japanese. The Division landed on Guam July 21, 1944, Leyte in the Philippines November 23, Okinawa March 26, 1945 and Ie Shima April 16 where Ernie Pyle was killed. The Division landed in Japan in October, 1945 for occupation duty and was inactivated in Japan March 25, 1946.<sup>8</sup>

Although unrecognized by the Department of the Army, the Hyder Campaign Medal still ranks high today among those who are aware of truly arduous service. In the words of one soldier who lost 30 pounds during the desert summer, "The Hyder Ribbon is a strip of sandpaper on which is mounted a broken thermometer. If you fought at Palen Pass, you can mount one salt tablet on it, and if you climbed Fourth-of-July Butte, you are authorized to wear on it one small cactus lobe."

Today, Camp Hyder, Arizona exhibits no monument dedicated to the 77th Infantry Division, except the two stone gate posts and rock-bordered company streets that pattern the barren desert. Who will light a "Liberty Division" torch at Hyder?

The Order of Battle for the 77th Infantry Division was: Division HQ & HQ Company; 305th Infantry Regiment; 306th Infantry Regiment; 307th Infantry Regiment; 77th Reconnaissance Troop; 302nd Engineer Battalion; 302nd Medical Battalion; HQ & HQ Battery, 77th Division Artillery; 304th Field Artillery Battalion; 305th Field Artillery Battalion; 306th Field Artillery



*1943 aerial view of Palen Pass where mock battle was staged. Note fortifications.*

*Concrete pillars with barbed wire entanglements still exist in west of Palen Mountains; other battleground rubble nearby.*



Battalion; 902nd Field Artillery Battalion; HQ Special Troops; 77th Division Band; 77th Quartermaster Company; 77th Ordnance Company, and the 77th Signal Company.

*TO THOSE WHO DID NOT RETURN*

*They shall not grow old as we who are left grow old.  
Age shall not weary them, nor the years condemn,  
To the going down of the sun, and in the morning,  
We shall remember them.*

—Lawrence Bryan<sup>9</sup>

**FOOTNOTES**

1. *History of the Seventy-Seventh Division: 25 August 1917 to 11 November 1918.* New York, Wynkoop-Hallenbeck-Crawford Company, 1919; *Ours to Hold High: The History of the 77th Infantry Division in World War II, by the Men Who Were There.* Washington, D.C., The Infantry Journal Press, 1947.
2. *History of the Seventy-Seventh Division.*
3. *Ours to Hold High, op. cit.*
4. Weldon F. Heald, "With Patton on Desert Maneuvers," *Desert Magazine*, Volume 23, No. 9 (July, 1960).
5. *Ibid.*
6. *History of the Seventy-Seventh Division, op. cit.*
7. *The Desert Training Center and the California-Arizona Maneuver Area.* Army Ground Forces Historical Section, Study Number 15, 1946.
8. *The Army Almanac.* Armed Forces Information School. Washington, D.C., Government Printing Office, 1950.
9. *Ours to Hold High, op. cit.*

**CAMP BOUSE AND THE CANDLELIGHT CAPER**

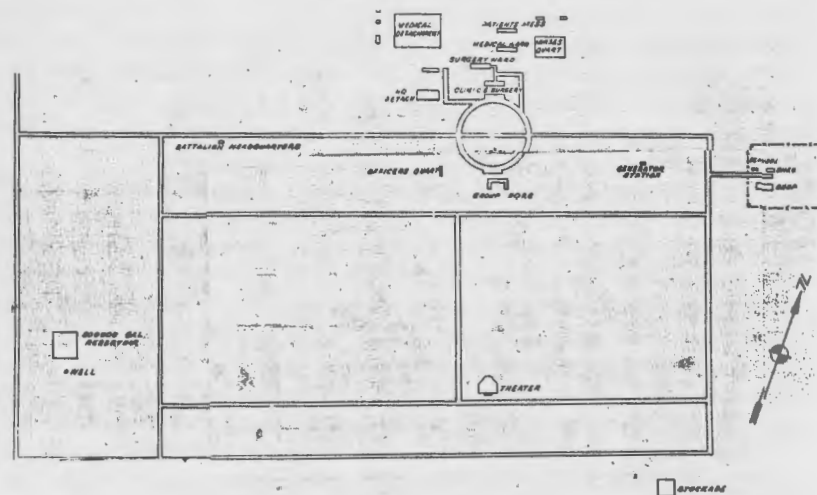
Camp Bouse was the mystery post of the California-Arizona Maneuver Area. This large tent city complex located in remote Butler Valley in western Arizona was the ideal location for the Ninth Tank Group (Medium) (Special) to train in absolute secrecy for American participation in the British developed "Canal Defense Light" (CDL) project in 1943-44.

In mid-1943, the United States Army ordered the formation of a special tank group to be entirely manned by carefully screened, highly qualified volunteers. The order further stated that once selected to become a member of this elite unit, future transfers were prohibited and that they would train with "... a weapon system that would change the course of the war. . ."

The Ninth Tank Group would subsequently consist of six tank battalions and one armored infantry battalion with the unit isolated in a remote part of Fort Knox, Kentucky, known as "Area X," once the selection process was completed. Officers and men were assembled in the post theater for a security briefing where they learned that mail would be censored and the enlisted men would only be permitted to leave their compound in groups of five with a sergeant in charge. The rigid security precautions taken care of, the Ninth Tank Group was introduced to their "T-10 Shop Tractor" or "Gizmo" as the



Modern aerial of Camp Bouse looking southwest (above), showing traces of original post; diagram (below), from opposite viewpoint, shows layout.



CAMP SITE • BOUSE • ARIZONA

troops affectionately called it. Security and secrecy became a way of life with some families firmly convinced their son were under military arrest when they were accompanied home on leave with their group and sergeant. Even today, there are former members of this special unit who firmly insist their project has never been declassified and will not discuss their participation with the CDL project or their training at Camp Bouse.

While the troops trained in the technical side of the CDL project, a team of officers was sent to the CAMA to select a training area. Operating with blanket orders from Headquarters, Desert Training Center, the team determined that Butler Valley would be a suitable area for the practical training required for the Ninth Tank Group to become combat-ready. Butler Valley, approximately 20 miles east of the small village of Bouse, Arizona, is an isolated area 30 miles long and 10 miles wide, surrounded by high mountains that enhanced security.

Work began in late August to ready the camp for operations by mid-September. "B" Company, 369th Special Engineer Battalion, put in 45 miles of highway, laid out the camp and manufactured the frames for supply, kitchen and company headquarters tents. One large wooden building, 150 feet by 120 feet with a reinforced concrete floor was constructed for tank maintenance. A secure schooling area and the digging of a well was commenced.

Because of the high degree of security required for the CDL project, a hospital with four buildings, a surgical clinic, surgical and medical wards and a mess building were constructed in order to provide proper medical care within the Bouse complex rather than sending anyone to an outside medical facility. Hot and cold water was provided by boilers shipped in and a high-pressure steam sterilization plant was also constructed. In early September, 1943, the 150th Station Hospital with 8 officers, 12 nurses and 45 enlisted men arrived in the desert from Mississippi. Originally scheduled for England, the group was sworn to secrecy and immediately confined to camp, much to the dismay of the nurses who felt that "Lady Luck" had been unkind, indeed.

By September 10, 1943, the camp was ready for occupancy except for well construction, which was incomplete. Mother Nature entered the picture at this time with one of her infamous high winds and thunderstorms which practically slushed the camp down Cunningham Wash. The hospital bore the brunt of damage and was relocated near the command circle. The storm damage took one week to repair and subsequently delayed troop arrivals until mid-October.

The first train from Fort Knox arrived at the Bouse, Arizona rail water station at 2400 October 14 and the second movement came in the following day. Trucks hauled the men to their new home. For many this was a first introduction to the Great West. The 23 mile trip to Camp Bouse was made on newly built rough, rocky and dusty roads and to make matters worse, the troops passed the remains of an ammo truck that had blown up scattering duds two hundred yards in all directions.<sup>2</sup>

The Ninth Tank Group, commanded by Colonel Joseph Gilbreth, was



*Range complex at Camp Bouse as it appears from air today.*

composed of the following units during their stay at Camp Bouse: 701st, 736th, 738th, 739th, 740th and 748th Tank Battalions (Medium) (Special); 526th (Medium) (Special) Armored Infantry Battalion; 150th Station Hospital (150 bed); 554th Ordnance Heavy Maintenance Company (Tank); 166th Quartermaster Battalion (Mobile) Headquarters and Headquarters Detachment; 629th Quartermaster Laundry (2 sections).<sup>3</sup>

The 629th Quartermaster Laundry Company was not actually within the Bouse Restricted Area, but was stationed at the Bouse railhead. When offered the opportunity of joining the Ninth, the Negro soldiers declined asserting that "anyone who goes in there never comes out. . ."

The men quickly discovered that everything in the desert had either a sting or a thorn as scorpions, rattlesnakes, cactus, gila monsters and tarantulas contested the intrusion of the Ninth into their homeland. Also contesting the intrusions were local homesteaders who refused to leave Butler Valley when the Ninth arrived. This problem was quickly resolved with the artillery firing in close proximity. Where words failed, artillery muzzle blasts convinced. Butler Valley now belonged to the Ninth who shared it with jackrabbits and other desert creatures.

Most of the old soldiers remember the meals being the finest of modified "B" rations which looked and tasted the same as dog food served with a coating of fine golden dust that seemed to hang in the air. Motivation suffered when the men were told they had one week to ready their camp, prepare training schedules and to submit to proficiency tests on their previous training.



*"Old" medical area at Camp Bouse.*

Police details of 400 men worked placing large rocks, almost a foot in diameter, in neat rows about the headquarters, chapel, post exchange, troop areas, and so on creating streets and sidewalks. A concrete sidewalk was constructed in the hospital area near the nurses' quarters.

The backside of the Harcuvar Mountains became a massive firing range and a regulation machine gun range was built on the Buckskin Mountain immediately adjacent to the camp.

To add insult to injury, the DTC edict that only limited ice was permitted did little to improve tempers when beer, chilled to 100 degrees, was sold at the PX. But the lack of a cold beer did not slow consumption if the beer bottle cap residue in the PX area today are any indication.

Others came to Camp Bouse at various times, arriving, for example, by milk trucks from the rail depot at Wickenburg, Arizona. Orders, identification, security clearances were checked repeatedly at many checkpoints enroute to Camp Bouse. Replacements were required to submit to search and when they finally arrived in the main camp, no one would discuss the CDL program. Instead, these few replacements were told to report to the school area for an "electronics briefing" the following day.<sup>4</sup>

Finally, the secret "Gizmos" began arriving in small quantities and a decision was made to train the first arrivals while the others continually policed the area. At last, the police details were reduced to 100 men per day and



*Personnel of the 526th Armored Infantry Battalion in informal desert dress at Camp Bouse in 1943.  
Photo courtesy Claire Williams, St. Marys, Ohio.*

eventually everyone was involved in becoming combat ready in the "T-10."

At Camp Bouse, most training began at 1500 hours and would take most of the night as the Ninth Tank Group exercised and perfected small unit operations with heavy emphasis on night platoon operations. Supporting fire, time-on target and split second maneuvering became second nature. Weapons cross-training was begun and soon tank repairmen were handling mortars like professionals.

More importantly, tactics and communications for moving and employing tanks were standardized between the British and the U.S. CDL units. To further this standardization and to help in realistic combat training, a small cadre of British officers was assigned to Camp Bouse shortly before its closure.<sup>6</sup>

Other combat techniques honed to a high degree included night artillery fired directly over the camp with minimum clearance. This was done almost on a nightly basis so those who were having a rare evening for relaxation would not forget what they were training for. Sleep was hard to come by, but the troops adjusted.

Thanksgiving and Christmas Days 1943 brought some relief to the dull rations and intensive training when the traditional turkey, dressing and the trimmings were served to the troops, complete with dust. A Christmas present of a



*Nurses' sidewalks, "New" medical area, Camp Bouse.*

*Headquarters, 738th Tank Battalion.*



four day pass gave the men an opportunity of seeing green grass, having some cold beer and sleeping in a real bed for a change. All this in groups of five and their sergeant! Then back to "Happy Valley" for more day-and-night firing, combat infiltration courses, fire and movement against surprise targets of varying types at varying ranges.<sup>7</sup>

When orders were received to close the DTC, it was directed that the 739th and 7490th, the last units into Camp Bouse, would remain to police the area and salvage as much government property as possible in preparation for

closing the camp. Anyone who has seen army service will appreciate the following sentiment: "We not only policed the camp and the desert valley surrounding it, but what seemed the entire Southwest as well before we were finished. We took down all the tents, packed and shipped them . . . We delivered several hundred tanks and miscellaneous vehicles to the Bouse railhead . . . You will remember we talked of hauling and stacking rocks along neat, nice rows, well, we hauled them back into the mountains and on 24 April 1944, we departed 'Happy Valley' and boarded the train for Fort Knox . . ."<sup>8</sup>

In 1950, the military again returned to Camp Bouse and "Happy Valley", this time to complete the policing of stray ordnance. Thirty-one tons of scrap were cleared and warning signs posted at strategic locations alerting visitors not to molest stray objects or to do any sub-surface digging.

Camp Bouse is virtually intact today. A patchwork of graveled streets laces the area. On both sides of the streets are stone-bordered walks, parking lots and tent squares of various armored outfits. Each battalion had an inclined triangular insignia with the unit designation spelled out in white rocks. Most now are illegible because cattle have trampled the area. One is still untouched — "738th Tank Battalion Headquarters." Also virtually intact is the site of the camp's chapel which was evidently a large tent with neatly laid sidewalks in rectangles and triangles. In front of the chapel are two large stone squares with a white rock cross in each. The word "Peace" is solemnly spelled on white stones.

There are no buildings left, just a few concrete slabs which once held wooden barracks and stonehouses. One bore the inscription: "Headquarters Service. Dec. 8, 1943," that had been scratched into the once wet concrete by someone with a flair for fine handwriting. The area is remarkably clear of litter. Even the ground looks clean, probably the result of hundreds of men periodically policing the area on hands and knees. The Army buried its trash, after burning it, along Cunningham Wash. Some of this junk is now being dug out by souvenir hunters. Like pot hunters in Indian ruins, they have dug test holes in the landfill dump, exposing the bits and pieces of military life. There are some rusted mess kits, a ruined machine-gun barrel, some rifle casings, hundreds of broken beer bottles and some green glass Coca Cola bottles. Much of the glass has been melted by the intense heat of the fires.

Just how long the tank tracks will remain is anyone's guess.

Desert vegetation like creosote bushes is slowly marking the damage, sprouting up in the tracks and breaking up the outlines of the deep depressions.<sup>9</sup>

## THE CANDLELIGHT

Thusfar we have said nothing about the classified weapon involved in the "Canal Defense Light Project" in order to tell the tale of Camp Bouse and the Ninth Tank Group, its organization and training.

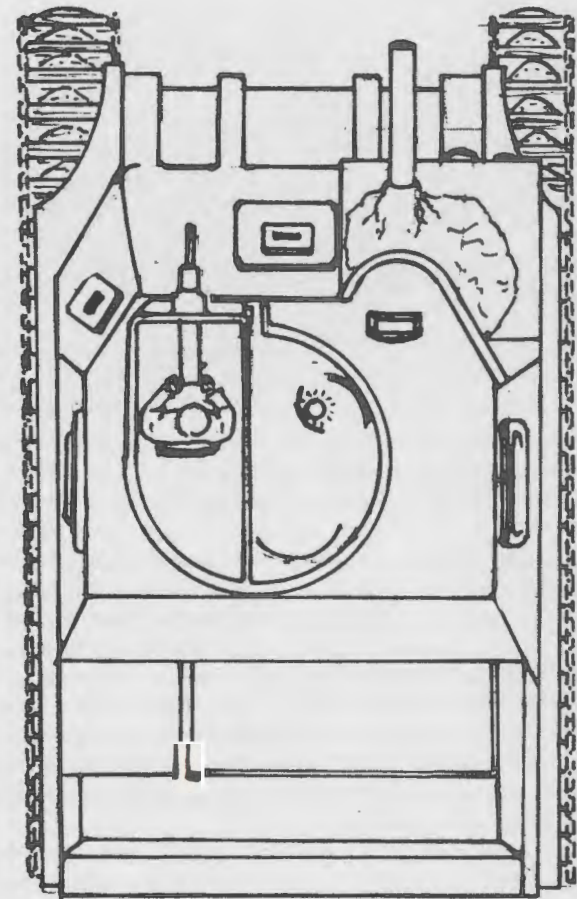
To complete the circle, the Canal Defense Light had its genesis during World War I when Commander Oscar de Thoren, Royal Navy, proposed the use of a searchlight mounted in an armored housing on a tank to be used to blind and dazzle the enemy during a night attack. The principle of the light is based upon common knowledge that when a bright light falls upon the eye, the pupil dilates to increase the amount of light falling on it. (Most children have experimented with this principle with a flashlight.) The theory was that if a very bright light was shown through a mechanically driven shutter set to open and close with regular frequency, the onlooker would become virtually blind as his eyes would be continually trying to adjust to ever-changing conditions.<sup>10</sup>

The British War Office turned the suggestion down in 1917 and again in 1922; however in 1927 a field trial was carried out by the Mechanized Field Company, Experimental Mechanized Force, Great Britain's armored force which determined that the idea held promise.

In 1933, the De Thoren Syndicate was formed with Marcel Mitzakis as its manager, Major General J.F.C. Fuller, technical advisor, and financing provided by the Duke of Westminster. The first trial took place in France in 1934 and the second, with improved apparatus, in 1936, this time with a War Office representative in attendance. Additional tests were made on the Salisbury Plain in 1937 and after many delays, a final test was done in June, 1940. Ten days later the War Office took over the project and immediately ordered 300 CDL turrets.<sup>11</sup>

With a working model, the British were anxious to demonstrate its capabilities. At Lulworth Range in Dorset, a volunteer agreed to drive the experimental tank in a live fire exercise at some risk to his life. During the day, the range was swept clear of all previous tank tracks and a 25 pound field gun was emplaced with instructions to the gun crew that they were to fire and stop a vehicle using live ammunition. After dark and upon a given signal, the tank was driven on to the field and while under fire from the 25 pounder, the driver maneuvered his tank from side to side, stopping, reversing, all the while keeping the light aimed at the gun using various color filters. Stopping the fire with a pre-arranged signal, the observers were asked to draw a line representing the path taken by the tank. Almost without exception, the officers drew a straight line from the starting point to their position. Then to prove his point, the driver turned and illuminated his track marks to the incredulous officers.<sup>12</sup>

The first British units to train in the CDL project were the 1st and subsequently, the 35th Royal Tank Brigades, equipped with Matilda tanks. At one point, a limited number of Churchill and Valentine tanks were also converted to CDL configuration, but none of these vehicles saw combat. The Matilda and others in the CDL configuration, were placed at a severe disadvantage for with their gun turrets removed and the CDL turret installed, they could not de-

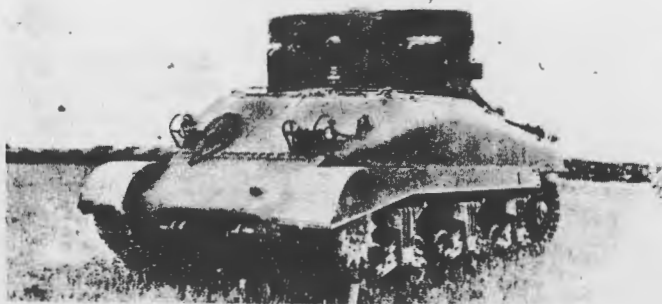


*The "Candlelight" arrangement in the "T-10 Shop Tractor, as seen from above.*

fend themselves.

When the M-4 Sherman tanks replaced the M-3 General Lee/Grant tanks in the western desert in 1943, it was decided to convert some of the spare Grant tanks to CDL configuration. It was determined that the conversion could easily be made and the Grant had advantage of having its 75mm gun mounted in a sponson for offensive action.<sup>13</sup>

To accommodate the CDL configuration, the searchlight turret was divided into two compartments. The operator sat on the left and operated his equipment which was located on the right side of the turret. The 13 million candlepower light came from carbon-arcs mounted in the center and, through various reflectors the light passed through a vertical slit to hit the target



T10E1 Shop Tractor was experimental American-built CDL on M4A1. T10 was similar searchlight mounting on M3 medium tank.

horizontally. The reflectors were made of polished aluminum which prevented the mirror from being shattered by machine gun or small arms fire. In fact, it was found that the light's intensity was hardly affected even after repeated hits.<sup>14</sup>

As mentioned earlier, a "Scatter" device was added to the vertical light slit which opened and closed six times a second giving a flickering effect to add to enemy confusion. In addition various color filters were fitted to enhance the difficulty of estimating the ranges of a CDL tank from an enemy position.

Under optimum operating conditions, the CDL light would cover a cone shaped area beginning at 90 yards in front of the tank to a maximum of 340 yards wide by 35 yards high at 10,000 yards. Conceptually the combat deployment was to have 15 tanks advance line abreast, maintaining a 30 yard interval thereby providing a solid wall of light with supporting infantry following closely behind the vehicles.

As more experience was gained using the CDL tanks, it became clear that some of the earlier claims were exaggerated and that the blinding effect was not as great as originally believed. It was also determined that the German 88mm gun sight when fitted with a green sun filter actually enabled the observer to clearly see the slot through which the light passed.<sup>15</sup>

In time the CDL tanks were to become the weapon too secret to use but the hope that these tanks would overcome the problems of night combat lingered. The men and their "Gizmo" were ready for the call that would only come briefly and with little fanfare.

After Camp Bouse the Ninth Tank Group was subsequently sent to Great Britain and assigned near Milford Haven where the entire Linney Haven Peninsula was turned into a CDL training area. Lord Louis Mountbatten and other high level SHAPE officers were to see a night CDL demonstration and were sufficiently impressed to recommend to General Eisenhower, now Supreme Allied Commander, SHAPE, that both the United States and British CDL forces would have to be deployed simultaneously in order to achieve



*British CDL Matilda.*

maximum surprise. It was later directed that British Chiefs of Staff approval would be obtained prior to the CDL employment.<sup>16</sup>

After the Normandy invasion the Ninth was transferred to France some two months after the D-Day landings. The unit did not participate in the breakout as anticipated nor were the British CDL units used in "Operation Epsom", the Caen fight as planned.<sup>17</sup>

The Ninth's combat units were deployed with various divisions across the broad American front. Somehow the opportunity to use the CDL tanks in combat failed to materialize and most of the Ninth's units were reequipped with Sherman DD (amphibious tank designation) and their "Gizmos" were withdrawn from service and sent to the rear. One company of the 426th Infantry Battalion was assigned to XII Army Group Headquarters for security and ceremonial duties.

However, during the night of December 17-18, 1944 at the Battle of the Bulge, a company of the 526th Armored Infantry Battalion, without CDL tanks, under the command of Major Paul J. Solis, with a platoon of towed three-inch tank destroyers was sent to Stavelot, Belgium, where the head of Obersturmbannführer (Lieutenant Colonel Waffen-SS) Jochen Peiper's column lay. Just before daybreak, Major Solis began moving his unit into position, placing two platoons on the south bank of the Ambieve River, a section of tank destroyers at the old roadblock, and one platoon with three 57mm antitank guns and a second section of tank destroyers in reserve around the town square north of the Ambieve River.

Before his troops were completely organized, the Nazi infantry attacked. Taken by surprise, the Americans failed to destroy the bridge and, in short order were driven back into the center of Stavelot. Major Solis' defense held the town square for some time and a two-hour tank battle caused heavy losses to both sides, but by the end of the morning the Americans were driven from



A U.S. Grant CDL with dummy gun.

Stavelot. In the confusion of pulling back, Solis' detachment moved eastward along the Malmedy Road towards the Francorchamps gas dump which originally contained 2 million gallons of gasoline. Knowing he could not stop Peiper's armor, Major Solis came up with an ingenious gambit. He had his men pour some of the fuel into a deep road cut and set it ablaze. Peiper's lead tanks, unable to cross the configuration, turned back.

Other 526th AIB units were made a part of Colonel Francis T. Tompkins' "T" Force, a small, specialized unit of 300 men, hardly the type designed for heavy combat and later assigned to the 30th Infantry Division. On December 18, C Company, 526 AIB was given a mission destined to have a major impact on the Ardennes battle when it was ordered to the small town of Trois Ponts. Commanded by Major Robert Yates, Executive Officer, 51st Engineer Battalion, the advanced section arrived at 2330 and made preparations to blow two of the bridges at Trois Ponts. Major Yates found a wandering 57mm antitank gun and crew lost from their parent unit and placed them forward of the Ambieve Bridge. The gun duelled with Peiper's Tiger tanks, disabling the lead tank before the crew was killed by other German tank fire. The crew gave warning to the engineers who literally blew the bridge in the face of Peiper's lead tank. C Company settled down to a defensive position and effectively used various ruses to convince Peiper he was facing heavy armor. The blowing of the bridges over the Salm and Ambieve was a bitter disappointment to Peiper.

As he later said, "If we had captured the bridge at Trois Ponts intact and had enough fuel, it would have been a simple matter to drive through to the Meuse River early that day."<sup>11</sup>

Later on in the war, the 738th Tank Battalion used 13 "Gizmos" to illuminate the Rhine after the capture of the Remagen Bridge.<sup>20</sup> One German officer interrogated after the war reported that "We wondered what those lights were as we had the hell shot out of us while we tried to destroy the bridge . . ."

The British used their CDL vehicles during a major crossing of the Rhine at Rees where the Grant CDL tanks drew heavy fire with one tank being destroyed. Another group was used to cover British and American crossing of the Elbe River at Laurenburg and Bleckede.

The 43rd Royal Tank Regiment was deployed to India to take part in the planned night invasion of Malaya scheduled for February, 1946. This regiment, completely equipped with CDL tanks, sent a squadron into the Calcutta riots of 1946 cooperating with police and local forces with great success.<sup>21</sup>

The U.S. 9th Armored Group's CDL tanks were mostly withdrawn from active service by late 1944 with the majority of these vehicles being destroyed in a large fire at the tank park in Cherbourg, France. They are now the foundation for the present day Cherbourg city dump!<sup>22</sup>

#### FOOTNOTES

1. "The Mystery of Our Most Secret Weapon," *The American Weekly*, August 11, 1957, reprinted in the 526th Armored Infantry Battalion Association's quarterly newsletter, *Pekan*, February, 1981.
2. *Daredevil Tankers — The Story of the 740th Tank Battalion, U.S. Army, 740 Tank Battalion Association*, pp. 9-30, undated edition.
3. Undated Ninth Service Command report obtained from the National Archives.
4. Colonel George K. Rubel, USA. (Ret.), former adjutant, Ninth Tank Group. Colonel Rubel provided a series of interviews describing his unit, the CDL tank, training and ETO deployment, 1981.
5. *Daredevil Tankers, op. cit.*
6. Rubel, *op. cit.*
7. Louis J. Azevedo and Irving R. Haight, *History of Service Company, 526th Armored Infantry Battalion, October 1943-November 1945*, privately circulated to the 526th AIB Association.
8. *Daredevil Tankers, op. cit.*
9. Bob Thomas, Outdoor Editor, "Desert Warfare: Patton is Dead, but the Arizona Desert Still Bears Scars from U.S. Army Tanks," *Arizona Republic*, December 21, 1979, p. H-5.
10. "The CDL Tanks of Lowther Castle," *After the Battle* magazine, No. 16, pp. 50-54. The magazine tells the story of the British CDL project in great detail.
11. *Ibid.*
12. *Ibid.*
13. "Grant CDL Tanks," Duncan Crow, ed., *British and Commonwealth Armored Fighting Vehicles, 1940-1946, Armored Fighting Vehicles in Profile*, Volume III, Doubleday Company, 1971, pp. 299-300. Also see pages 128, 134, 144, 172-173, 249, 253 and 290 for descriptions of other CDL tanks; "Special Purpose Types,"

Duncan Crow, ed., *American Armored Fighting Vehicles in World War II, Armored Fighting Vehicles in Profile*, Volume IV, Doubleday Company, 1972, pp. 45-50; Peter Chamberlain and Chris Ellis, *British and American Tanks of World War II, The Complete History*, Aero Publishing Company, Inc., 1969. See pages 57, 61, 70-71, 110, 113 for pictures and descriptions of the various CDL tanks.

14. *After the Battle*, *op. cit.*
15. *Ibid.*
16. *Ibid.*
17. Rubel, *op. cit.*
18. Department of the Army, *U.S. Army in World War II, European Theater of Operations, The Ardennes: Battle of the Bulge*. Washington, D.C., Government Printing Office, pp. 266-267, 337.  
John D. Eisenhower, *The Bitter Woods*, Ace Publishing Company, 1970, pp. 298ff.  
John Toland, *Battle: The Story of the Bulge*, New American Library, 1969, pp. 106ff.
19. Department of the Army, *The U.S. Army in World War II, European Theater of Operations, The Last Offensive*. Washington, D.C., Government Printing Office, pp. 229, 268.
20. *After the Battle*, *op. cit.*
21. *Ibid.*
22. *Pekan*, *op. cit.*

### CAMA Camp Locations — But Be Careful!

Traces of the many posts associated with the Desert Training Center are still visible and are very remote even by modern standards. Should you decide to visit these old abandoned military posts, take the proper safety precautions and we recommend you use a four-wheel vehicle.

Area "A" posts can easily be reached and we suggest you begin your trip at Blythe, California.

*Blythe Army Air Field* was first occupied by the 46th Bomb Group and later the 34th Bomb Group (H). Now the city airport, the field is just west of town on Interstate 10. DB-7, B-17, B-24, A-31 and A-36 (forerunner of the famous F-51) aircraft were assigned to Blythe AAF at various times. The local FAA Flight Service Station is very helpful if you have questions. There are a few buildings and one hangar remaining from World War II. Also in Blythe is *Gary Field*, a primary flying school that was operated by Morton Air Academy during the War. Follow the road to the Blythe golf course and you will see the former flying school on your left. Many a love affair for the B-17 and B-24 aircraft began here. Wonder how many who were stationed here knew of Ehrenberg, Arizona, and its military heritage?

*Camp Young*, California, Headquarters DTC (CAMA) is just northeast of the intersection of Interstate 10 and California route 195, 69 miles west of Blythe. From Desert Center, California, 47 miles west of Blythe on Interstate 10, go north on California route 177 watching for an orchard approximately five miles north and immediately adjacent to the right of the highway. Just as



*Blythe Army Air Force tent city, summer, 1942.*

you clear the orchard, the road into *Desert Center Army Airfield* will appear. Turn right and drive to the airport beacon tower. Aside from a few modern buildings, there are numerous foundations to visit.

*Camp Coxcomb*, California, is approximately 15 miles north of Desert Center. Route 177 will make a 45-degree left turn and after passing a small ranch on your right watch for a hard surfaced road on the left that leads to the California Aqueduct tunnel. Turn west (left) and go to the end where you will be on the southern edge of the old post. The 7th Armored Division, 93rd and 95th Infantry Divisions were here at separate times during their stay in the desert. You can leave either by returning to route 177 or following the power line road north to its intersection with route 177. The *Palen Pass* road is readily visible on your right and *do not attempt* to make this trip unless you have a four-wheel vehicle. Follow the road east and south for approximately 18 miles to the fortifications that remain there. Watch for nails, barbed wire, and so on that will cut through modern tires!

Stop for a moment under the power line on route 177 and look south for a magnificent panoramic view and let your imagination bring forth the memory of men and equipment maneuvering in the hot climate.

*Camp Iron Mountain* and *Camp Granite* are just east of where route 177 intersects with route 62 (the Twentynine Palms road). The 3rd Armored Division trained at Camp Iron Mountain and you can enter by following the power line road or by going to the Iron Mountain Pumping Station road eight miles east. Approaching the aqueduct, Camp Iron Mountain will be on your left and Camp Granite on your right. Both are readily visible from the highway. Camp



*Camp Granite sign with GI awaiting streetcar.*

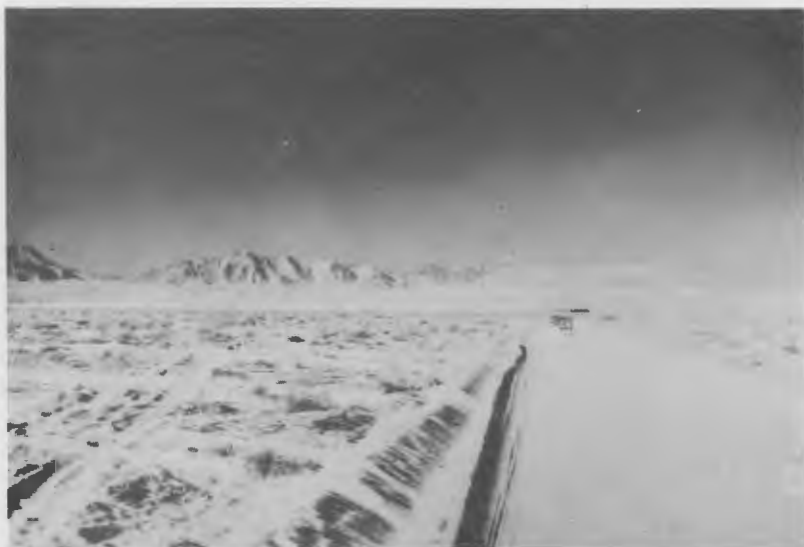
*Aerial shot of Camp Grant around 1943 when post was active.  
Significance of inked numbers is not known today.*



*Troop quarters at Camp Granite. Note the carefully sanded street.*

*Engineer road equipment at Camp Granite from a contemporary photograph. Iron Mountains in distance.*





*The 1943 road to Iron Mountain Camp, in all its glory.*

*3rd Armored Division service company street, Iron Mountain.*



*Chow line for 3rd Armored Division troopers on field problem near Iron Mountain in October, 1942.*

*What remained of Iron Mountain Camp in 1981.*





Cross before a skelton structure with vacant windows marks site of Camp Iron Mountain today.

Iron Mountain has been fenced by the Bureau of Land Management to keep vehicles out, but there are pedestrian gates at several points. The post chapel is on the furthestmost northwest corner and a large relief map of the DTC is inside the chain link fence on the northeast part of the old post. Look south across Camp Granite where there were ranges and additional maneuver areas. *Camp Granite* was first used by the 76th Field Artillery Brigade and later by the 90th Infantry Division when the permanent camp was completed.

The *Freda Railhead* is 12 miles east along route 62 and worthy of a visit. You will cross the California Aqueduct and turn right (south) along the road just after you cross. Follow this road approximately 150 yards until reaching the 484th Quartermaster Battalion compound. The area and unit insignia are in remarkable condition. Continue east towards Rice, California and observe the areas on both sides of the highway which were a large quartermaster depot.

*Rice Army Airfield* is just east of town on the south. Enjoy your visit here; immediately adjacent is a large military complex where you will find additional adventure in recalling activities of the 5th Armored Division.

*Camp Ibis*, California is 15 miles northeast of Needles. Follow Interstate 40 to California route 95 and go north to the railroad tracks. The post is east of where you cross and look for the area where the railroad tracks bend north. The 4th Armored Division moved out of Camp Ibis in June, 1943 and the 7th Armored simultaneously moved in. The 11th Armored Division closed Camp Ibis.

*Camp Clipper*, California was also known as Camp Essex. The post is approximately 42 miles west of Needles on Interstate 40, northwest of Essex and adjacent to the Interstate. There were two posts in the area. The temporary camp was occupied by the 33rd Infantry Division and the 93rd moved into the permanent camp when it was ready.

The posts in Area "B" can easily be toured. We used Gila Bend, Arizona for a starting point.

*Gila Bend Army Airfield* is still active and is used to support the massive gunnery range south of Interstate 8.

*Camp Hyder*, Arizona is where the 77th and 104th Infantry Divisions trained. Take Interstate 8 west to the Sentinel intersection and go north approximately 15 miles to the "T" with an improved dirt road. Turn left southwest and watch for the stone gates on your right just across the railroad tracks. Cross over and either take the road directly in front or follow the road going off at 45 degrees to your left. If you follow the road going north where the road makes two sharp turns you are at the eastern edge of the camp. Be sure and visit Aqua Caliente, now a ghost town. The swimming pool there was built by the 77th.

*Camp Horn*, Arizona can be reached by following the improved farm road southwest and from Hyder keep straight on after passing Horn, watching for the 81st Infantry Division pyramid on your right just across the tracks. The 104th Infantry Division was here briefly prior to going to Palen Pass. Red Mountain Farms, Inc. has reclaimed the land, turning swords into plows and only the southwest portion of Camp Horn remains at this writing.

Return to Horn, Arizona and proceed south watching for *Datelan Army Airfield* on your left as you approach the Interstate. Incorrectly named by the War Department, the field was a Yuma Army Airfield Auxiliary in their twin-engine pilot training program. There are numerous building foundations and the Interstate separates the flight line from the barracks area. Datelan pilots fondly recall buzzing the troops which was strictly against the rules. The troops protested by throwing rocks at the low flying B-25 aircraft. There are no reports of damage to either parties.

*Yuma Army Airfield*, Arizona is now an international airport and a Marine Corps Air Station. The 83rd Flying Training Group was here and the base later became Vincent Air Force Base, an Air Defense Command training base before becoming a Marine Corps Air Station.

*Camp Laguna*, Arizona is on the site of the present day Army Proving Ground complex. Old timers in Yuma still remember when the 6th Armored first came to town. The 3rd and 9th Armored plus the 79th Infantry Division trained at Camp Laguna. The Special Bridge Test Section (later the Yuma Test Branch) of the Engineer Board tested on the Colorado River all floating equipment used by the engineer troops. Italian Service Units organized from prisoners of war left tangible evidence of their time in the desert, a very ornate stone paint locker shaped like a castle!

*Camp Pilot Knob*, California (Area "A") is west of Yuma. Take In-

terstate 8 west passing of Fort Yuma and exit at the Ogilby railhead where the 85th Infantry Division trained. Also in the immediate area are the remains of the Ogilby townsite and a portion of the old pre-war plank road.

*Camp Bouse*, Arizona, the home of the top secret 9th Tank Group, can best be reached from Wenden, Arizona (between Wickenburg and Quartsite on Arizona Route 60), going north on the Alamo State Park highway. After clearing the Havacur Mountain pass, follow the power line road on your left approximately 10 miles along a very rough road until reaching a gate. Go to your right and you will come to the old reservoir at the southeast edge of the post. Observe the warning signs enroute to Camp Bouse.

Other major installations that supported the Desert Training Center were located at Banning, San Bernardino, Claremont, Colton, Sparda, Cherry Valley, 1000 Palms and Needles, California. Banning for example was the Communications Zone Headquarters with a 1,000 bed hospital, landing strip and range complex.

We cannot ignore *Kingman Army Airfield*, Arizona which was a combat crew training base and now is the local airport. The base was used for military aircraft storage and disposal after the war and still serves in that function for tired airliners. One of Kingman's auxiliary fields, Site 6, has blossomed into Lake Havasu City, present home of the London Bridge. The former military airfield is the city airport. *Laguna Airfield* is the former Ford Motor Company's test facility.

#### ACKNOWLEDGEMENT

*To name all of the respondents who answered our requests for data on their Desert Maneuver experiences would be redundant; to omit one name would be a discourtesy. To all of you, our debt for sharing your experiences with us is gladly acknowledged!*

*Thanks!*

#### THE AUTHORS

*The three who wrote the above article in its various parts need little introduction to CAMP readers. A retired Army Reserve colonel, Dr. John Kennedy specializes in military medical history; retired Air Force Lieutenant Colonel John Lynch is CAMP membership secretary, and Robert L. Wooley, is a student of military history and Indian anthropology.*

# Farewell, Farewell -- or, Block that Acronym!

BY ROBERT A. WEAVER, JR.

It was a sad day for the ponderous proliferators of pompous prose when those Army writers who sleep with a thesaurus under their pillows forgot to forever remember and mourn the departure of the two great mothers of vernacular virtuosity — now gone from the glossary of superflous super-numeraries.

CONARC and CDC are now residing in that great unabridged repository in the archives. And the mundane will never know their equal. Mostly, we will never forget that great contribution to vocal vicissitudes, USA CDC Pamphlet No. 310-9, a compilation of acronyms and a source of jewels and gems too rare to be passed without noting.

To start with, we find "ADOLPH", which the thirsty will be happy to know means, "Aerial Delivery of Liquid Provisions by Hose." We also like "BALTRAC", which the Pamphlet states can stand for, "Ballistable Tractor, Light and Medium", and sounds like a tractor fired from guns! And, here are a couple of little gems, "CG" stands for "Center of Gravity", but "CGN" stands for "Commanding General's Notes." Just so our women members won't feel left out, we hasten to mention "DACOWITS" which CDC said can stand for, "Defense Advisory Committee on Women in the Services." As the reader may have noted, the list is almost endless, over 100 pages, but just to narrow the field the writer will extract a few of the most memorable examples:

- "JOVIAL — Jules Own Version of the International Algorithmic Language.
- "NEATO — Northeast Asia Treaty Organization.
- "PA — Probability of Arrival.
- "PUK — Pivotal Unknowables.
- "ROAR — Return of Army Returnables.
- "SANO — Special Assistant for Night Operations.
- "SATAN — Simulation for Assessment of Tactical Nuclear Weapons.
- "SATIRE — Semi-Automatic Technical Information Retrieval System.
- "SOURCE — Stimulation of Utilization, Resources, Cost, and Efficiency.

“TAILS — The Army Information Logistic System.”

After ROAR, SANO and TAILS, perhaps the reader will be willing to skip “TIPSY”, but no recounting would be complete without that pinnacle of the lexiconer’s nightmare “RAMMIT!” Which in case you couldn’t guess, stands for, “Reliability Maintenance Inability Machine Integrated Totals.” Is it any wonder that CDC will live forever in the world of lexicography?

And what of CONARC, that prominent proboscis on the promontory? Without doubt, no greater tribute to the redactive reactions of this repository exist, than those refined by the staff officers thereto assigned, to wit:

The First Indorsement Headquarters

The Rookery

The Eagle’s Nest

The Eagle’s Roost

The Chicken Roost

Where the Eagles Go to Die

The Land of a Thousand Sleeping Eagles

Where the Elephants Go to Die

The Land of a Thousand Sleeping Chickens

The Sea of Tranquility

Slumberland

The Old Colonel’s Home

The Old Soldier’s Home

The Sleeping Giant

The Retirement Headquarters

The End of the Road

The Do Nothing Headquarters

The Largest Bird Sanctuary East of the Mississippi River

With this enduring tribute we close. Farewell, Godspeed, good-by, and a new Roget’s to you all!

— Reprinted from *ARMOR*; Copyright  
U.S. Armor Association, 1973.

PATTON'S DESERT TRAINING CENTER

ERRATA

Page 6. Shavers, Summit Airfield.

Pages 29 & 30. Picture captions are reversed.

Page 33. Cartographer map arrow is pointing west and not to the north. Picture view is southeast.

Page 35. Delete (Medium) (Special) after 526th AIB.

Page 38. Change 7940 to 749th.

Page 39. Storehouse rather than stonehouses.

Page 42. SHAEF rather than SHAPE.

Page 43. 526th, not 426th.

Page 48. Picture is Camp Granite, not Camp Grant.

Page 52. Camp Ibis; 4th Armored leaves and 9th moves in.

Page 53. Camp Hyder, Turn left (southwest).

Page 54. Laguna Airfield is the-~~former~~-Ford Motor...

Corrections are solicited. Please send them to  
John Lynch, 518 W. Why Worry Lane, Phoenix,  
Arizona 85021