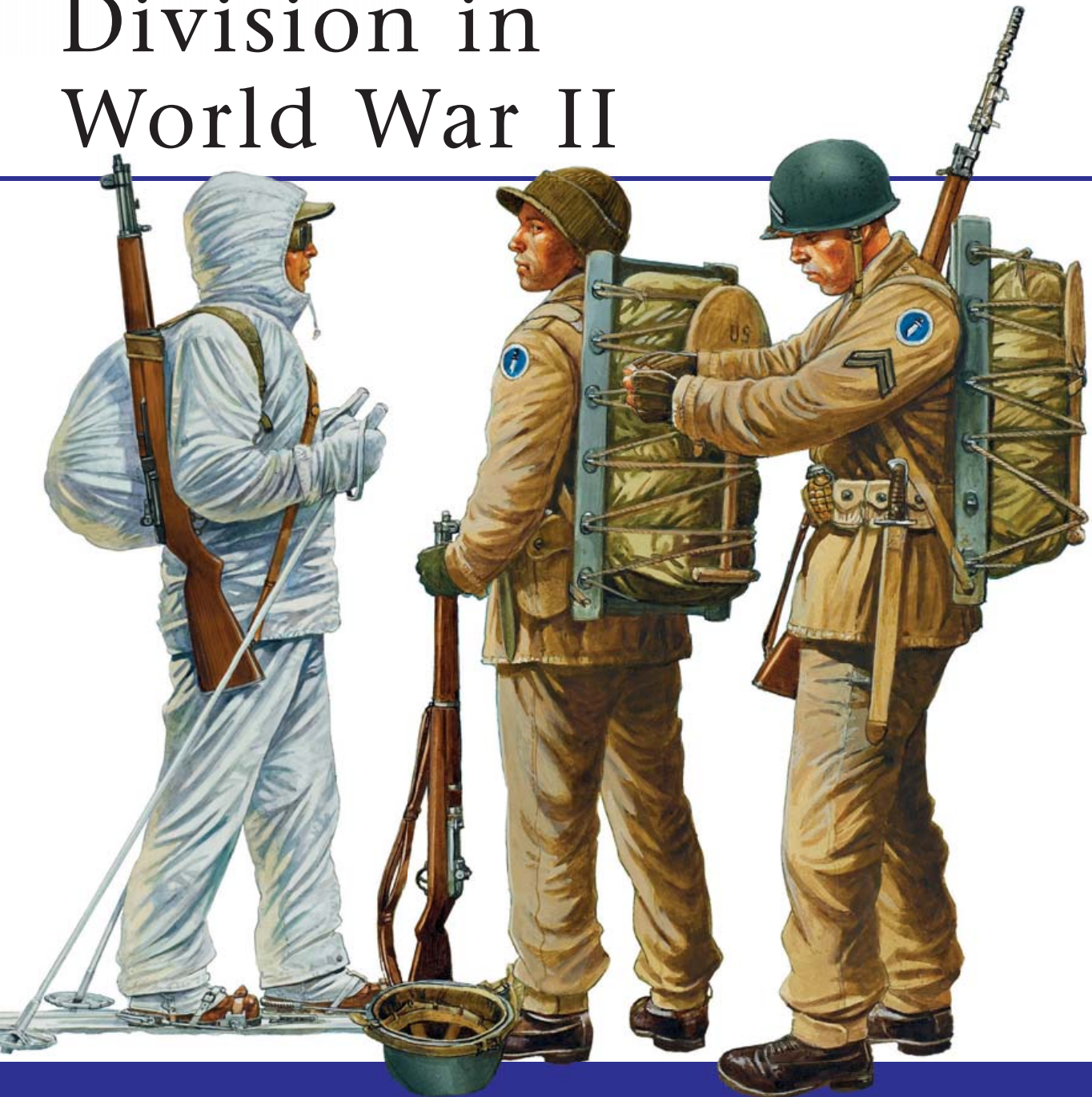


# US 10th Mountain Division in World War II



Gordon L. Rottman • Illustrated by Peter Dennis

Men-at-Arms • 482

# US 10th Mountain Division in World War II



Gordon L. Rottman • Illustrated by Peter Dennis

*Series editor* Martin Windrow

# US 10th MOUNTAIN DIVISION IN WORLD WAR II

## INTRODUCTION

The employment of mountain troops has a long tradition in Europe. The Italian *Corpo Alpini* (Alpine Corps) established in 1872 was the oldest organization of specialist mountain troops; France formed the *Chasseurs Alpins* (Alpine light infantry) in 1888, to counter the Italians if necessary, and Austria-Hungary raised several *Gebirgsbrigaden* (mountain brigades) in 1907. After engaging French mountain troops in the Vosges Mountains in 1914, Germany decided to raise a division-sized *Alpenkorps* to fight alongside the Austro-Hungarians against the Italians in 1916.

After World War I, Germany possessed no mountain units other than three Bavarian regiments with mountain training. These were consolidated into the *Gebirgs-Brigade* in 1935; this expanded into *1. Gebirgs-Division* in 1938, and later that year two additional mountain divisions were organized from Austrian units. No other mountain divisions would be raised until 1940, but by 1944 Germany had ten such formations. Although only one of them fought in Italy (*5. Gebirgs-Division*, from late 1943 to the end of the war), two of the *11 Jäger-Divisionen* (*42.* and *114.*) fought on that front; these, too, were light divisions designed for rough-terrain operations.

The US Army had had little or no historical need for mountain troops, but the advent of World War II changed that perception. It was assessed that there would be a potential need for such units in mountainous and cold-climate areas such as Alaska, Norway, Italy, Romania, and Southern Germany.

### The mountain warfare environment

The challenges of mountain warfare are daunting. Operating at higher altitude means fatigue and diminished efficiency owing to reduced oxygen and the effects of cold. Rapid weather changes – with possible rain, sleet, snow, fog and high winds – slow down movement, already difficult due to steeply inclined terrain scattered with loose rocks and cut by gullies, ravines, rushing streams and rivers. Trees and brush can hamper movement and observation, but provide concealment, and the often abundant trees provide construction materials for bridges, fortifications, and obstacles. At higher altitudes there will be no vegetation; in Europe the tree-line is typically at 6,000–8,000ft (1,830–4,240m) above sea level.

German mountain troops, identified by the *Edelweiss* badge on the right sleeve and on the left of the *Bergmütze* mountain cap, are congratulated during an awards ceremony. The *Gebirgsjäger* divisions, largely manned by Bavarians and Austrians, influenced the American decision to raise mountain warfare units. (Courtesy Concord Publications)





In the early US units much training time was spent on technical rock-climbing skills, mostly by volunteers who already had extensive civilian experience – such demanding techniques could not be taught to the uninitiated in a few weeks. Even experienced mountaineers had difficulty getting used to practicing their art while carrying rifles and military equipment. This alpinist wears a ski-mountain cap, the early-issue ski parka reversible from light olive drab to white, mountain trousers, ski-mountain boots and gaiters. (Tom Laemlein/Armor Plate Press)



Depending on vegetation, and the proximity of ridges or valleys, fields of observation and fire can be either extremely restricted or quite wide.

In World War II movement was often channeled and predictable, to the benefit of defenders, though trained mountain troops might be able to locate and negotiate unexpected routes. Roads were restricted to a few traversing valleys or passes, and even foot and mule trails were scarce, so most movement had to be conducted over rugged, unimproved routes. This limited the amount of ammunition, supplies, fuel, and equipment brought forward. Motor vehicles were virtually impossible to use, making it unavoidable to employ mule- and man-packing, along with some use of handcarts. This slow and exhausting process greatly reduced the amount of materials that could be sent into the frontline. Equally, casualty evacuation was slow and difficult. The ability to construct bridges and culverts, improve roads and trails, and erect tramways and cableways was essential. There were also hazards from avalanches, rockslides, and mudslides. The limited numbers of

avenues of approach – usually narrow – could easily be blocked by a small defending force using mines, machine guns, mortars, and artillery. Attacks were often restricted to the avenue of approach itself, with few opportunities for outflanking or enveloping attacks.

In extreme instances skis and snowshoes were necessary to traverse snow, which further drastically slowed operations; in extreme cold and snow it can take at least twice as long to accomplish even the simplest tasks. High altitudes mean oxygen deprivation: altitude sickness is felt by the unacclimatized above 6,000ft (1,830m), and can be disabling. Mountain troops frequently suffered higher rates of illness, accidental injuries, and weather injuries than combat casualties. Leg and foot injuries were common, and the troops' fitness and health were threatened by hypothermia (lowering of the core body temperature – known as “exposure” in World War II), frostbite, dehydration, immersion foot, snow-blindness, and upper respiratory illnesses.

Most “mountain” troops were not in fact trained in technical climbing – that is, using ropes, carabiners and pitons to climb vertical cliffs. Nor were they trained to use ice picks, crampons – spiked ice-climbers attached to boots – or man-portable oxygen tanks. (Oxygen is necessary above 10,000ft/3,050m, but combat seldom if ever took place at such high altitudes.) Some small specialist units might be so trained and equipped, but they were seldom needed; it was rare for military operations to be attempted under such unreasonable conditions, where nothing much of value could be achieved.

Mountain troops had to be highly conditioned, acclimatized, and motivated to survive and operate in their environment. The levels of physical fitness demanded were far beyond those of regular troops, and they had to be mentally prepared for the challenges. Specialized clothing was necessary, to provide protection from extreme cold and wet conditions while still allowing ease of movement. Such troops also had to carry heavier individual loads than regular troops – extra heavy clothing and sleeping bags, and also ammunition and rations for perhaps several days. The mountain warfare environment could range from sub-zero snow conditions or high winds, fog, sleet and freezing rain, to bright, clear days with mild and even warm temperatures, and the troops had to be clothed and equipped for this whole spectrum of conditions.

**The National Ski Patrol's founder Charles Minot Dole and his staff provided the Army with valuable advice and guidance in the development of equipment, clothing, and skiing and survival techniques. During training, small patrols from Camp Carson and Camp Hale went out into the mountain wilderness to practice movement and bivouacking in severe conditions. Since they had to carry with them everything needed for several days, supplementing their rations with game was desirable; these two troopers have used a snare to catch a white-coated winter hare. They wear fur-trimmed reversible ski parkas, white side out, and carry M1 carbines. (Tom Laemlein/Armor Plate Press)**



## CHRONOLOGY

---

### 1940

- July 18 Charles Minot Dole of the National Ski Patrol urges President Roosevelt to form ski units, and offers to aid with recruiting and development.
- November 5 1st, 3rd, 5th, 6th, 41st, and 44th Divs are directed to form snowshoe and ski patrols.

### 1941

- March 1 National Ski Association designated an advisor to the War Department.
- April A site for a division-size mountain and ski training base is sought in Colorado.
- November 15 1st Bn, 87th Inf Mtn Regt activated at Ft Lewis, WA, where Mountain and Winter Warfare Board is established.
- December 7 Japanese attack on Pearl Harbor; US enters World War II.

### 1942

- February Paradise and Tatoosh Lodges on Mt Rainier leased for ski training.
- April Construction of Camp Hale, CO, commences.
- May 12 87th Inf Mtn Regt redesignated 87th Mtn Inf Regt.
- May 25 HHC, 2nd and 3rd Bn, 87th Mtn Inf Regt activated at Ft Lewis.
- June 7 Japanese forces occupy Attu and Kiska Islands in the Aleutians.
- September 3 Mountain Training Center activated at Camp Carson, CO, under Col Onslow S. Rolfe.
- September 14 126th Engr Combat Bn activated at Camp Carson.
- November 15 Camp Hale completed and opened.
- December 12 86th Inf Regt (Lt) and 1st Bn activated at Camp Hale.

### 1943

- January 11 604th & 605th FA Bns (Pack) activated at Ft Carson.
- May 1 2nd & 3rd Bns, 86th Inf Regt (Lt) activated at Camp Hale.
- June 14 87th Mtn Inf Regt attached to Amphibious Training Force 9 (Kiska Task Force).
- July 15 10th Lt Div activated at Camp Hale under BrigGen Lloyd E. Jones, along with 85th and 90th Inf Regts (Lt), 616th FA Bn, 727th AAA MG Bn, 10th Med Bn, Div Arty, and Div Special Troops. Mountain Training Center disbanded.
- July 29 Amphibious Training Force 9 sails for the Aleutians.
- August 15 87th Mtn Inf Regt is landed on Kiska Island.
- (September 9 Fifth Army landings at Salerno, Italy.)
- October 26 Mountain Training Group formed at Camp Hale.
- December 87th Mtn Inf Regt returns to Camp Carson from Kiska.

## 1944

- February 23 87th Inf Regt relocates to Camp Hale, assigned to 10th Lt Div; 90th Inf Regt detached from 10th Lt Div and departs for Camp Carson.
- March 24–May 6 10th Lt Div undertakes D-Series Maneuvers in Northern California.
- (June 4 Fifth Army enters Rome.)
- (June 6 Normandy landings.)
- (June Three US divisions are withdrawn from Italy for the Southern France invasion, leaving only six divisions.)
- June 20–24 10th Lt Div departs Camp Hale and arrives at Camp Swift, TX.
- (September 25 1125th Armored FA Bn activated in Naples, Italy – later attached to 10th Mtn Div.)
- November 6 10th Lt Div redesignated 10th Mtn Div, and the infantry regiments redesignated 85th, 86th, and 87th Mtn Inf Regts. 10th Mtn Inf AT and 10th Mtn QM Bns activated, and all other divisional units are reorganized.
- November 23 BrigGen George P. Hays assumes command of 10th Mtn Div.
- December 10th Mtn Div departs Camp Swift for Camp Patrick Henry, VA, to prepare for shipping to Italy.
- December 22 86th Mtn Inf arrives in Naples.

## 1945

- January 4–13 Remainder of 10th Mtn Div arrives in Naples.
- January 8–9 86th Mtn Inf enters the frontline near Bagni de Luccani, north-central Italy.
- January 20 All 10th Mtn Div regiments are in or near the front. Small ski patrols are conducted over the next three weeks.
- February 18 Assaults on Riva Ridge and Mt Belvedere-Mt della  
–2 March Torracchia Ridge.
- March 3–6 March Offensive. The division consolidates its positions through the rest of March and into April.
- April 14–16 Spring Offensive to the northeast.
- April 17–20 Breakout toward the Po Valley.
- April 20–26 Po Valley operations. Task Force Duff operational April 20–22.
- April 26–May 2 Lake Garda; divisional elements conduct amphibious operations. Task Force Darby operational April 25–26.
- April 30 Col William Darby killed in action.
- May 2 German forces in Italy surrender.
- May 4 In Resia Pass in the Alps, patrol from 85th Mtn Inf links up with 44th Inf Div advancing from the north.
- May 7 Unconditional German surrender.
- May 15 10th Mtn Div celebrates the war's end.



**Crouched under a hastily-built shelter, a ski trooper cooks a meal using the M1941 one-burner gasoline stove and a mountain cook set. The latter, issued on a scale of one per four men, consisted of two nesting pots with bail handles, and a cover that was used as a frying pan fitted with a pair of folding wire handles. Hot meals were essential in extreme cold, to maintain core body temperature and to fuel the extreme physical exertion of snow skiing, showshoeing, and walking on steep terrain. Boiling an unpunctured ration can in water heated it sufficiently, but it took considerably longer to bring water to the boil at high altitudes. (Tom Laemlein/Armor Plate Press)**





Pack mules haul components of a 75mm M1A1 pack howitzer into the mountains surrounding Camp Hale. In deep snow an unburdened mule would be in the lead, to break a path for the following pack animals. Spare mules were rotated in the lead, since trail-breaking required them to leap and plunge to batter a path through, soon wearing down their strength. (Tom Laemlein/Armor Plate Press)

- May 20 The division moves to Udine, northeast Italy, for occupation duty.
- July 14 The division is ordered to return to the States and prepare for the invasion of Japan.
- July 26–August 2 The division returns to the States and is given leave. (August 15 Japan announces decision to surrender.)
- August 11–16 The division arrives at Camp Carson. (September 2 Unconditional Japanese surrender.)
- September 15 The troops report to Camp Carson.
- November 30 The 10th Mtn Div is inactivated.

## ORIGINS OF US ARMY MOUNTAIN TROOPS

Interest in ski troops emerged in 1940 after the successful employment of skiers by Finland during the 1939–40 Winter War with the USSR, when skis were used to move quickly over deep snow both for scouting and for hit-and-run raids. The US Army was also aware of the German mountain and light divisions. In 1941 Col Albert Wedemeyer of the War Department's War Plans Division – a 1936–38 graduate of the German *Kriegsakademie* – developed the Victory Plan, projecting the Army's expansion in event of a world war. Although fewer than half his forecast number of divisions of all types were raised by 1943, the inclusion of mountain divisions in his plan demonstrates that the need for such troops was recognized. In January 1942 the War Department G-3 recommended that a corps of three mountain divisions be raised, noting that the lack of mountain troops had contributed to the defeats of the British in Norway and the Italians in Albania.

The US Army was not ignorant of cold-weather warfare. Small-scale winter exercises were conducted at Ft Snelling, Minnesota and



elsewhere, and the separate 4th Inf Regt undertook training in Washington state and Alaska. Research was also conducted on cold weather clothing, equipment, rations, and transportation. In May 1940 the American Alpine Club urged that the Army should undertake mountain training; this was followed by a similar request from the National Ski Association in July, pointing out the potential for recruitment among the roughly 2 million skiers in the country. Members of both organizations were soon working with Army officers to develop appropriate clothing and equipment.

In November 1940 the Army directed the 1st, 3rd, 5th, 6th, 41st, and 44th Divisions to form small snowshoe and ski patrols of hand-picked and preferably experienced personnel. The following month the War Dept notified those divisions that accredited representatives of the National Ski Association would visit them to conduct studies and report equipment problems. These patrols, besides undertaking training, tested equipment and conducted lengthy winter expeditions in local mountain ranges. Conceptually, snowshoe, ski, and mountain troops were considered different units, but in practice that called for far too much specialization, and they were merged into all-discipline mountain troops. In March 1941 the War Dept took the unusual step of designating the National Ski Association as an official advisory organization to the Army.



**This skier with a slung M1 Garand rifle wears the two-piece suit of "over-whites" as snow camouflage, with white gloves and white gaiters over his ski-mountaineering boots. (Tom Laemlein/Armor Plate Press)**



**The use of scout dogs in winter and snow conditions was tested, but proved impractical. The long “trail” snowshoes carried by this dog-handler will enable him to cross soft snow, into which his dog – for whom any form of shoe is impractical – will sink helplessly. Dogs also lacked the stamina for this sort of work. (Tom Laemlein/Armor Plate Press)**

It was soon directed that a year-round mountain warfare training site be selected with the aid of the National Forest Service. A site was selected high in the Rocky Mountains in west-central Colorado, between Leadville and Red Cliff near the Continental Divide. The camp would be built at 9,200ft altitude in Eagle River Valley, which was surrounded by high mountains but served by a state highway and a railroad (Pando Station). Construction of the 247,243-acre Camp Hale began in April 1942 and was completed in November. The camp could house 20,353 troops and 11,288 animals, with all necessary troop and administrative facilities, quarters, motor pools, ranges, pack-animal stables, ski shop, ski trails, and, on Copper Hill, the longest T-bar ski lift (1½ miles) in the country. In the event the camp's peak population would be 16,000 soldiers and 3,900 animals.

### **Raising and training the units**

In the meantime 1st Bn, 87th Inf Mtn Regt (Reinforced) was activated on

November 15, 1941 at Ft Lewis, Washington, under command of LtCol (later BrigGen) Onslow S. Rolfe. A first cadre of 13 men were selected on December 4; the battalion was assigned personnel with ski and mountaineering experience, many being reassigned from the 3rd, 41st, and 44th Inf Divisions. On the same date the Quartermaster Board established the Mountain and Winter Warfare Board at Ft Lewis, to field-test clothing and equipment. There were many stumbling blocks; for instance, there was a reluctance to accept proven commercial, woodsman, and Eskimo clothing, and it was found that former European sources of specialist climbing hardware were no longer available.

Recruitment of the 87th Infantry was unique in Army history, in that a civilian organization selected and validated volunteer recruits, who came from ski clubs and schools, college skiing teams, and local search-and-rescue ski patrols. The National Ski Patrol vetted potential volunteers closely, and the National Ski Association aided in selection and screening. This was an era when such diversions as skiing and mountaineering were largely limited to the affluent, and an impressive number of the applicants held winter sports event and climbing records. Many volunteers were athletically inclined college students or graduates, resulting in the recruiting slogan “college boys to cowboys.” It was reasoned that it would be easier to turn experienced skiers into soldiers rather than train soldiers to ski. This gave the 87th and the 10th Lt Div a higher than normal

number of college graduates, often from “Ivy League” universities, making them the most highly educated ground units in the service. This provoked complaints about creaming off potential officers and NCOs for other units, at a time when junior leaders were much needed. (By the time the division went to war the educational level had been watered down to some degree, but it was still higher than average.)

On May 12, 1942 the regiment was redesignated “Mountain Infantry.” Volunteers continued to pour in, and the 87th’s regimental headquarters and 2nd and 3rd Bns were activated on May 25. Since Ft Lewis was on the coastal plain, the Paradise and Tatoosh ski lodges on 14,410ft Mt Rainier were leased. With Camp Hale still under construction and Ft Lewis overcrowded, the Mountain Training Center (MTC) under BrigGen Rolfe was established on September 3, 1942 at Camp Carson, situated at the foot of the Rocky Mountains outside Colorado Springs. The MTC’s mission was to develop training techniques, prepare manuals, test equipment, and oversee the raising of units that would eventually comprise a mountain division. A hundred experienced men were selected from the 87th Mtn Inf Regt to form the MTC Training Detachment, some of these being naturalized Austrians, Norwegians, and Swiss. The 126th Engr Mtn Bn was activated at Camp Carson in September, assigned to the MTC, and began testing aerial cable tramways and suspension bridges. In November the 10th Cavalry Recon Trp was also activated, and assigned to the MTC.

In November 1942 most of the 87th Mtn Inf Regt moved to Hunter Liggett, California for maneuvers, while the 3rd Bn and 601st FA Bn (Pack) moved into the regiment’s new home at Camp Hale. The HHC and 1st Bn, 86th Inf Regt (Light) were activated there on December 26 as a pack/alpine outfit; with volunteers pouring in, two provisional battalions were formed. The bulk of the 87th Mtn Inf Regt moved to Camp Hale at the end of December, as did the 602nd FA Bn (Pack).

Training at Camp Hale began in earnest in earnest in high-altitude winter conditions. Despite the men’s high degree of physical fitness, they experienced health issues aggravated by prolonged living at high altitude.

The “Pando hack” was a respiratory illness caused by the valley’s poor air circulation, which created polluted inversion layers from the coal smoke of steam locomotives and hundreds of stoves. There was little in the way of entertainment, on-post or in the nearest towns, which were somewhat distant. Leadville – at 10,152ft the highest altitude community in the US – was urged to improve its “moral character;” as it was considered rather “low.” Even USO shows avoided the remote camp. Troops were also nonplussed by the endless ski (both cross-country and downhill) and snowshoe instruction at the sacrifice of tactical training. The support

### 10th Mountain Cavalry Reconnaissance Troop

This unique company-size cavalry unit was organized from Trp B, 4th Cavalry Regt (Mech) at Ft Meade, SD. It arrived at Camp Carson on November 2, 1942, and after initial attachment to 1st Bn, 87th Mtn Inf Regt it was assigned to the MTC. In April 1943 the cavalrymen were reassigned to the 87th as mule-handlers. Experienced skiing and climbing instructors were assigned to the troop in their place, and the horses were replaced by jeeps and White M3A1 scout cars. It was planned that in snow country and trackless terrain the otherwise mechanized unit would move by ski, snowshoe and on foot. The troop’s primary mission was training units assigned to the MTC and others – primarily reconnaissance troops – elsewhere in the States. On October 26, 1943 the Mountain Training Group was formed at Camp Hale, and the troop was incorporated into the MTG, spending the next five months training 10th Lt Div units.

On March 21, 1944 the 10th Recon Trp was inactivated, as was the Mountain Training Group, and all personnel were reassigned to spread their expertise among the 10th Lt Div’s regiments. The Provisional Recon Trp, 10th Lt Div was formed as an *ad hoc* unit on September 25, 1944 and disbanded in November; the successor 10th Cav Recon Trp, Horse was activated as part of the 10th Mtn Div at Camp Swift, TX on November 6, 1944 as a horse-mounted unit (155 riding and 27 pack horses). When it got to Italy the troop initially used jeeps, but soon drew mounts from various European sources, and operated mounted to the war’s end. It was inactivated on October 20, 1945 at Camp Carson, CO.



units were largely manned by non-skiers, who complained of excessive ski training at the expense of their specialized jobs. Classified testing of T15 (M28) Weasel full-tracked cargo carriers was also undertaken; these hauled supplies to inaccessible areas, towing supply toboggans and skiers clinging to towropes and aboard sleds.

The 2nd and 3rd Bns, 86th Inf Regt were activated on May 1, 1943. In June the 601st and 602nd FA Bns moved to Ft Ord, California to train for the upcoming Kiska Island landing. The 87th Mtn Inf Regt soon followed, accompanied by other detachments from Camp Hale units. In July the 604th FA Bn (Pack) arrived at Camp Hale from Camp Carson after marching 170 miles in 11 days. Units continued to train at Camp Hale in expectation of the formation of an alpine division. The 99th Inf Bn (Separate), a special unit composed of Norwegians and Norwegian-speaking Americans, undertook ski and mountain training at Camp Hale from December 1942 to August 1943.

### **The light division experiment**

Since the development of the three-regiment triangular infantry division commencing in 1936, the Army had striven to create the most efficient, self-sustaining division possible. The goal was to reduce manpower to the most efficient level, to provide maximum firepower but the minimum amount of motor transport to sustain operations (to minimize the demands on shipping space), and to maximize maneuverability and command-and-control. To tailor divisions for specific missions and increase their capabilities, they could be augmented by specialized units. The newly reorganized infantry divisions were constantly being adjusted.



A posed photo of ski troopers in training, demonstrating two of the most common rifle-firing positions from skis. A squatting position could be achieved quickly and stability could be achieved by angling the skis outwards. Firing prone, with the rifle supported by crossed ski poles, took more practice to achieve without tangling the skis. (Tom Laemlein/Armor Plate Press)

In an effort to take these qualities to the extreme, in early 1943 Army Ground Forces developed a “light division” concept, reduced to the bare minimum in command, service support, firepower, and transport, for employment in jungle, mountain, or amphibious operations. This concept was influenced by the German *leichte Infanterie-Divisionen*, later designated *Jäger-Divisionen* (“hunter divisions”). These two-regiment light infantry divisions were intended to fight in forest and hill country with limited road networks, and their organization was similar to that of the *Gebirgs-Divisionen*.

The different types of US light divisions would be organized similarly to these German formations, with their transport varying according to environment and mission. (It was suggested that the light structure would be suitable for the airborne division, but this was rejected.<sup>1</sup>) With amphibious operations planned in the Mediterranean and South Pacific, the latter followed by long-term jungle operations, LtGen Lesley McNair, commanding Army Ground Forces, gave approval for the light division’s development. This was unusual: McNair was generally opposed to specialized units, believing that standard units could be trained, modified, and re-equipped for unique operations. His acceptance of the light division idea was influenced by their claim to be more flexible in their adaptation to other missions and environments than originally proposed. The concept also chimed with a current emphasis on reducing manpower, and the demands on shipping space. In the spring of 1943 it was proposed that up to ten light divisions be raised by converting standard infantry and airborne divisions.

In June 1943 three light divisions were authorized for testing – the 71st Lt Div (Pack, Jungle), with pack animals; 89th Lt Div (Truck), with jeeps only; and 10th Lt Div (Pack, Alpine) – and soon undertook extensive specialized training. The 89th, activated on July 15, 1943 as Infantry, was redesignated Light on August 1. It was originally intended to be the basis for a mountain division, but was never designated as such. By October 1943 it was proposed that four more light divisions be activated, but the airborne divisions were excluded from the experiment.

The 9,000-plus man light divisions were far too weak compared to infantry divisions with almost 14,000 troops. They relied on either pack mules and horses or jeeps and trailers, with no heavier trucks, and on large numbers of handcarts, to be replaced by toboggan sleds in the snow. In jungle and mountain operations it was envisioned that local porters would be employed. Artillery and other supporting weapons were of light caliber and in reduced numbers. It was hoped that under the circumstances in which it was employed the light division, though weaker than standard divisions, would bring to bear as much firepower as a standard division in a similar situation, while requiring less fuel, rations, and other supplies. If necessary they could be reinforced by combat support units from army and corps pools.

The first opposition to light divisions emerged in early 1943, when the Southwest Pacific Theater declared that standard infantry divisions had no difficulties conducting amphibious operations; that their greater strength was necessary; and that heavier artillery and more motor

---

<sup>1</sup> The “light airborne” division concept saw light divisions outfitted with jeeps for artillery and other transport purposes; they were to be trained for glider assault, with parachute infantry regiments and artillery battalions attached.

transport were essential regardless of the additional demand on shipping space. Additionally, experience with a pack-mule artillery battalion on Guadalcanal showed that mules were totally impractical on tropical islands (mules and horses required a significant volume of forage, which was locally unavailable and demanded a great deal of transportation space to move it to the front).

From February to April 1944 the 71st and 89th Lt Divs were pitted against one another at Hunter Liggett Military Reservation in northern California. Conducted in mountainous terrain and cold, rainy conditions, these exercises yielded bleak results. The divisions had insufficient manpower; neither pack animals nor jeeps could transport enough supplies and ammunition on unimproved roads; the divisions lacked reconnaissance capabilities, obliging the formation of *ad hoc* units; they possessed insufficient engineer and medical support; and the small command staff could not operate 24 hours a day for long periods. There were also deficiencies in communications and supply. Each division had to employ one of its regiments solely to man-pack supplies along mountain roads and trails; the handcarts were completely inadequate, and fatigued the troops. Additional truck and pack transport had to be

**The height of the ski-pole “bipod” could be adjusted easily; here the prone rifleman takes aim at a target on a higher slope. Note the white snow covers for the olive drab rucksacks. (Tom Laemlein/Armor Plate Press)**





provided, as well as more engineer support. The mountain- and winter-trained 10th Lt Div experienced similar difficulties in its own exercises.

The experiment was a dismal failure, and III Corps, which oversaw the maneuvers, recommended that the divisions be converted to standard infantry and their pack-mule artillery and transport units attached to infantry divisions in Italy. No theater commander would accept them under the “light” configuration. In May 1944 the 71st and 89th were reorganized as standard infantry divisions, and shipped to Europe in January 1945 (in spite of the 71st’s extensive jungle training).

However, the 10th Lt Div was considered a valuable resource owing to the time and effort invested in its specialized training and equipment, although it would be necessary to increase its strength and assets to something more closely resembling a standard infantry division. Eight US infantry divisions (3rd, 34th, 36th, 45th, 85th, 88th, 91st, 92nd) and 1st Armd Div were already fighting in Italy in harsh, mountainous winter conditions, without the benefit of specialized training but augmented with winter gear. The 10th would join the Fifth Army in Italy, where it would be a valuable addition, since three divisions (3rd, 36th, 45th) had been pulled out of line in June 1944 to prepare for the August invasion of Southern France. However, in the event the 10th would not go into the line until January 1945.



**Although the Kiska Island landings by ATF 9 on August 15, 1943 led to the discovery that the Japanese garrison had already been evacuated, the 87th Mtn Inf Regt stayed on the desolate island for four months. This painting by an unidentified soldier depicts the small, crowded landing beaches; note the Weasel tracked cargo carrier vehicles. (10th Mountain Division and Fort Drum Museum)**

## **THE 87th MOUNTAIN GOES TO “WAR”**

In May 1943 the MTC and 87th Mtn Inf Regt were secretly alerted for pending deployment, though its destination was classified. The 87th Combat Team, reinforced with other elements, was formed on June 5. They departed Camp Hale by train for Ft Ord, California on June 11, arrived on the 14th, and were assigned to Amphibious Training Force 9, the cover designation of the Kiska Task Force. Amphibious exercises (assisted by the Marines) were carried out, together with tactical training, judo, inoculations, and familiarization with Japanese weapons. The troops had no idea of their destination other than it had to be in the Pacific, but after so many months of training they were ready to go anywhere.

To execute Operation COTTAGE the 34,400-man ATF 9, under MajGen Charles H. Corlett, was composed of a mix of units. Tactical Group 87 and Tactical Group 17 of the 7th Inf Div would land on the island’s central west coast, but preceded by 1st Regt, First Special Service Force (the “regiments” of the FSSF were actually small 557-man battalions). The 13th Canadian Inf Brigade Group of their 6th Inf Div, and the US Tactical Group 184 of the 7th Inf Div, would conduct a demonstration

## The Aleutians

The Aleutian Islands curve 1,200 miles southeast from the Alaskan mainland. The weather conditions are extremely harsh year round, with high winds, sleet, freezing rain, snow and constant fog. The terrain is equally difficult – barren rocky hills and mountains, waist-high scrub, and bottomless muskeg bogs.

The Japanese occupied Kiska and Attu Islands in the Western Aleutians on June 7, 1942, and also occupied Shemya near Attu from June to August. This operation was a diversion for the attempted Midway landing 2,000 miles to the south. The presence of foreign invaders on American soil for the first time since 1814 led to invasion fears in Alaska, Canada and the northwest US. The desert-trained 7th Inf Div assaulted Attu on May 11, 1943 and suffered severely in the brutal weather, for which it was poorly prepared, trained, and equipped. The island was secured on May 29, and many lessons regarding cold-weather operations were learned the hard way. The Japanese lost all 2,650 troops, while US combat casualties totaled 1,700 including 550 dead – but there were also 1,800 weather casualties from frostbite and immersion foot.

To seize the more strongly defended Kiska Island further to the east, Amphibious Training Force 9 (cover name for the Kiska Task Force) was formed in June 1943 with a mix of US and Canadian units. Among these were the 87th Mtn Inf Regt, later to be assigned to the 10th Mtn Div, and the combined US-Canadian 1st Special Service Force (FSSF) – the only other unit then trained for cold-weather, ski, and mountain operations. The Kiska landing would be executed on August 15, 1943, and a vicious battle was expected; but the Japanese had other plans.

off the northeast coast, before landing the next day on the upper west coast spearheaded by the 3rd Regt, FSSF. The 7th Inf Div's 53rd Inf Regt served as the floating reserve, and the 2nd Regt, FSSF waited on Amchitka Island to be delivered by parachute if necessary. Amphibious Training Force 9 also included substantial artillery, engineer, and support units. Frequent aerial and naval bombardment of the Japanese base commenced three weeks beforehand, and three battleships, two cruisers, and seven destroyers provided fire support.

Barren, mountainous Kiska is 22 miles long and 3–6 miles wide; much of the coast is faced by cliffs, and the few beaches are narrow. The extensive and mostly underground Japanese base was at Kiska Harbor on the central east coast, with a secondary base at nearby Gertrude Cove; the Allied landings on the opposite side were designed as a pincer movement. The defenders' strength was estimated at 10,000, but was actually 6,000. Allied casualties were projected at 20 percent, although soldier rumors claimed that "the brass" expected 80 percent.

The reinforced 87th would operate as a 6,000-man "tactical group" under Col Jefferson B. Willis. Tactical Group 87 was composed of HQ 87th Mtn Inf and Battalion Landing Groups BLG 87-2, BLG 184-1, and BLG 53-1. The rest of the 87th was broken up between two other tactical groups, TG 17 and 184. Departing San Francisco on July 29, the troops were told their destination halfway through the voyage. The Force's hundred ships assembled at Amchitka, and then proceeded to Adak Island in the eastern Aleutians. The 87th Combat Team arrived there on August 5, and acclimatized before departing for Kiska on August 13. D-Day and H-Hour on Kiska would be August 15, 1943 at 0630 hours.

The plan was for the 87th's 1st Bn to swing north to clear the Kiska volcano area while the 2nd and 3rd Bns attacked south. Their main mission was to secure the high ground, allowing follow-on troops to land safely. At 0630 hours the assault troops of the 87th ran to shore aboard landing craft; the FSSF element had gone ashore in rubber boats three hours earlier. Not a shot was fired in opposition, but the inshore waters were unexpectedly rocky; the troops were forced to wade ashore, and rushed to secure the high ground. An hour after landing fog closed down. The 1,800ft spine of the island was reached in late morning; that afternoon brought williwaw winds blasting across the high ground, driving rain at 50mph, alternating with fog. Disoriented companies dug in, unable to tie their positions together; headquarters did not know exactly where their units were, and patrols became lost in the dense fog. Shots rang out periodically, but there were no counterattacks, no artillery fire, no contacts with enemy patrols – the only casualties were from friendly fire in the fog. Abandoned Japanese positions began to be discovered, but no resistance was encountered.

Patrols continued to scour the hills in case the enemy was hiding out for a surprise attack, as they had on Attu, and it was a couple of days before the high command accepted that the Japanese had really abandoned the island. They had successfully evacuated almost 6,000 troops using 15 ships, right under the noses of the US Navy – and this has occurred on July 27/28, a full 18 days before D-Day. Even though airmen had reported no enemy activity and received no fire, dozens of trucks were parked in the harbor area without being dispersed, and there had been no radio transmissions for over two weeks, still the high

command had refused to believe that the Japanese had slipped away completely, and convinced themselves the enemy must be underground or hidden in the fog-shrouded hills. Even those who did suspect that the Japanese had evacuated agreed that, if nothing else, Operation COTTAGE would be a good landing exercise. In the event, the Allies suffered 27 killed and 50 wounded from friendly fire; 17 of the dead were in the 87th, four of them being killed by booby traps.

The 87th remained on Kiska for four months as a base was developed – pulling guard duty, patrolling the shores, and training. The regiment finally departed in December in a series of shipments, and arrived at Camp Carson on Christmas Day after a seven-month absence. A small group remained behind to operate the North Pacific Combat School.

While the high command referred to the botched Kiska operation merely as anti-climatic, it had an adverse effect on the 87th's morale due to the needless casualties, lack of real action, and the unproductive boredom of months spent on a desolate island in Spartan living conditions. A verse from the *Kiska Blues* summed up the regiment's experience to date:

*What? No Japs at all? Yes, no Japs at all!  
 We learned how to ski and we learned how to climb,  
 We learned how to stay out in any ol' clime  
 We jumped on our skis when they gave us the call –  
 Then came to an island with no Japs at all!*

## CREATION OF THE 10th MOUNTAIN DIVISION

The 10th Lt Div (Pack, Alpine) was constituted on July 10, 1943 and activated two days later at Camp Hale using the headquarters company of the MTC. Brigadier General (later MajGen) Lloyd E. Jones took command; he had commanded the 76th FA Brigade and led a task force that established defenses at Cold Bay and Amchitka in the Aleutians, but his relationship with his new division was to prove less than affable.

On July 15 the 85th and 90th Inf Regts (Lt) were activated to join the existing 86th (the 87th was not yet part of the 10th Division).<sup>2</sup> The 86th was split into three regimental cadres, augmented by officers and NCOs from the 27th Inf Div shipped from Hawaii. The units began to fill up with personnel recruited with the help of the National Ski Association and National Ski Patrol – 7,000 in all – augmented with men from other units, many of whom had no ski or climbing experience. The 605th FA Bn arrived after marching from Camp Carson in nine days.

The first table of organization and equipment for a mountain division (T/O&E 70) was dated April 1, 1942, but neither the 10th nor any other formation was organized under this scheme. As a light division the 10th was organized under T/O&E 72 dated July 1, 1943 (see Table 2).

**Table 1: 87th Combat Team, Kiska Island, June 1943**

87th Mtn Inf Regt  
 601st FA Bn (Pack)  
 602nd FA Bn (Pack)  
 229th Engr Combat Pack Co  
 (Co B, 126th Engr Lt Bn)  
 389th QM Truck Co\*  
 680th Med Collecting Co  
 1st Plat, 669th Med Clearing Co  
 det, 133rd Signal Co  
 3x air-ground liaison teams

*87th Mtn Inf Regt Battalion Landing Groups landed as part of three tactical groups:*

Tactical Group 87: BLG 87-2,  
 BLG 184-1 & BLG 53-1  
 Tactical Group 17: BLG 87-3,  
 BLG 17-1, plus 5th & 6th Plats,  
 301st Recon Trp  
 Tactical Group 184: BLG 87-1,  
 BLG 184-2 & BLG 184-3

\* Equipped with T15 Weasel cargo carriers & LVT(2) Water Buffalo amphibian tractors.

<sup>2</sup> There had been an earlier Regular Army 10th Div, authorized July 9, 1918 at Camp Funston, KS. Its advanced detachment shipped to France, but the Armistice cancelled the division's deployment, and it was inactivated on March 31, 1919. The 10th Mtn Div does not bear the lineage of this World War I division, nor did the World War II regiments carry the lineages of the 85th-87th Regts of the 18th and 19th Divs of World War I. The 90th Inf Regt did continue the 1918-19 lineage of the 90th Inf, 20th Division.



**Table 2: 10th Light Division  
(Pack, Alpine)  
July 15, 1943–November 6, 1944**

(Some units' activation pre-dated that of the division.)

Unit	Activation date	Strength
HQ, 10th Lt Div	15 July 1943	158
85th Inf Regt (Lt)	15 July 1943	2,059
86th Inf Regt (Lt)	12 December 1942	2,059
1st Bn, 86th Inf Regt (Lt)	26 November 1942	624
2nd & 3rd Bn, 86th Inf Regt (Lt)	25 April 1943	
90th Inf Regt (Lt)*	15 July 1943	624 (each bn)
Division Artillery, 10th Lt Div	15 July 1943	1,912
HQ & HQ Det, 10th Lt Div Arty	15 July 1943	31
604th FA Bn (75mm Pack)	11 January 1943	488
605th FA Bn (75mm Pack)	11 January 1943	488
616th FA Bn (75mm Pack)	15 July 1943	488
727th AAA MG Bn, Mobile	15 July 1943	312
576th AT Btry (Pack)	15 July 1943	133
10th Med Bn	15 July 1943	310
Lt Med & 680th Med Collection Cos		
126th Engr Lt Combat Bn	14 September 1942	421
226th Engr Combat Motorized & 299th Pack Cos		
10th Veterinary Co	15 July 1943	
Provisional Recon Trp, 10th Lt Div**	25 September 1944	159
HQ, Special Troops, 10th Lt Div	15 July 1943	
HQ Co, 10th Lt Div	15 July 1943	209
137th QM Truck Co		70 (each co)
255th, 256th, & 257th QM Pack Cos		
10th MP Plat	15 July 1943	37
110th Signal Plat, Lt	15 July 1943	113
710th Ord Lt Maint Plat	15 July 1943	20

\* Replaced by 87th Mtn Inf Regt in Feb 1944

\*\* During this period the 10th Cav Recon Trp was assigned to the Mountain Training Group.

## Training

Existing and newly raised units were concentrated into the 10th Lt Div, and unit training commenced. Newly assigned personnel had to undertake basic training as well as ski, snowshoe, and cold-weather instruction. In August 1943 the Army asked the National Ski Patrol to redouble its efforts to recruit 2,000 additional qualified personnel, but it was soon apparent that there simply were not enough qualified volunteers.

Both volunteer and non-volunteer specialists would be assigned to bring the division up to deployment strength. While an effort was made to recruit experienced outdoorsmen – foresters, park rangers, trappers, ranchers, lumberjacks, and hunting and mountain guides – nevertheless drafts of basic-trained troops and specialists had to be drawn from the 30th, 31st, and 33rd Inf Divisions. In August the 10th Recon Trp established a rock-climbing school for selected individuals in the regiments. In October the Mountain Training Group was formed, and, with the 10th Recon Trp, provided mountaineer training. In December a detachment of the MTG was sent to Italy to attend the British Army School of Mountain Warfare.

By this time large numbers of troops without ski and mountaineering experience were being assigned, while cadres of experienced personnel were being sent to other organizing units; for example, the 87th lost 600 experienced

troops in exchange for 600 untrained recruits. The MTG conducted two weeks of acclimatization and basic ski and snowshoe training for inexperienced replacements; 20-mile ski marches up to 13,000ft were no easy task, and men were required to pass a proficiency test after six weeks.

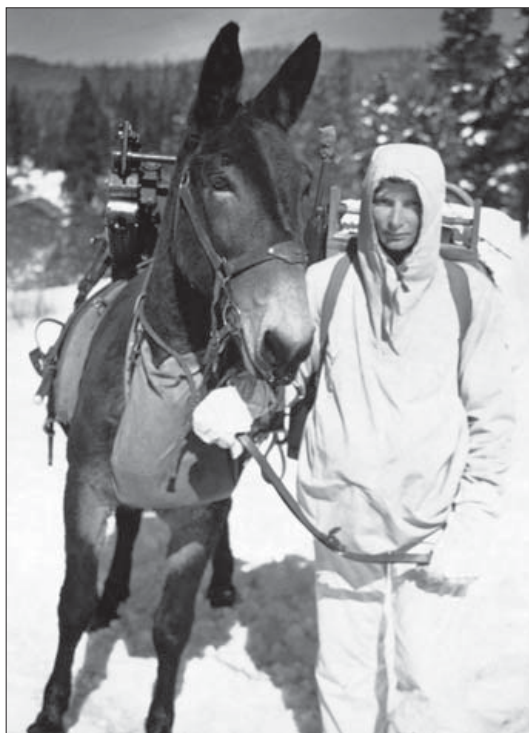
There was a great deal of improvisation in unit tactical training. It was one thing to teach individuals skiing, snowshoeing, technical climbing, and cold-climate survival, but it was another to develop and teach tactics and weapons employment incorporating these skills in extreme terrain and weather conditions. The romantic image of small teams of climbers conquering peaks did not apply to maneuvering and sustaining sizeable combat units in the mountains for prolonged periods. They developed the “zipline” technique: ropes were run downslope and skiers clipped onto the rope with carabiners, leapt off the crest, and ski’d down in a more or less controlled fall, checking their speed by varying pressure on the carabiner. The engineer battalion possessed the equipment to

operate three M2 light aerial tramways; this was a cable-car system capable of carrying 350lb of supplies, material, or casualties for up to 3,000ft slant distance.

## 1944

The 87th Mtn Inf Regt arrived at Camp Hale from Camp Carson on Feb 23, 1944 after returning from the Aleutians; it had been formally assigned to the 10th Lt Div, and would reorganize as a light infantry regiment. That same day the 90th Inf Regt was relieved from the division and departed for Camp Carson; most of its trained personnel were reassigned to the 10th's regiments. (The 90th reorganized as a standard infantry regiment, and in February 1945 it was assigned to the Replacement and Training Command as a training unit.) On March 21, 1944 the 10th Cav Recon Trp was inactivated and absorbed into the Mountain Training Group; the MTG itself was then inactivated, its expert personnel being reassigned to the infantry regiments.

The division was not granted any special insignia, nor could troops wear ski clothing off-post. Some men who displayed on their service dress crossed-ski pins that they had bought at jewelry stores were given a week of work details for the infraction. The division's morale fell further with news of the fighting in Italy; they questioned why they were not there, and whether they would ever be deployed. For three weeks in March and April 1944 the division undertook a grueling sub-zero exercise in the mountains of the 12,000ft California Coast Range. The D-Series Maneuvers pushed them to the limits of their endurance, exposing deficiencies in personnel, equipment, and organization. Training and cold-weather injuries were modest owing to the troops' excellent condition, but it was still a brutal experience for the participants.



ABOVE

**Mules were the key means of transporting heavy weapons, ammunition, equipment and supplies – this one also carries its feedbag slung from its neck. Packing a balanced and secure load was a demanding skill, since the versatile M1924 pack saddle could be configured to take many types of items and containers. On steep terrain packers tried to limit the load to 180lb, but it might typically be 200–210lb – say, four 5gal water cans, or ten cans of .30cal MG ammunition. The “mule-skinners” carried M1 carbines, here provided with a strapped-on canvas muzzle cover to keep snow out. (Tom Laemlein/Armor Plate Press)**



LEFT

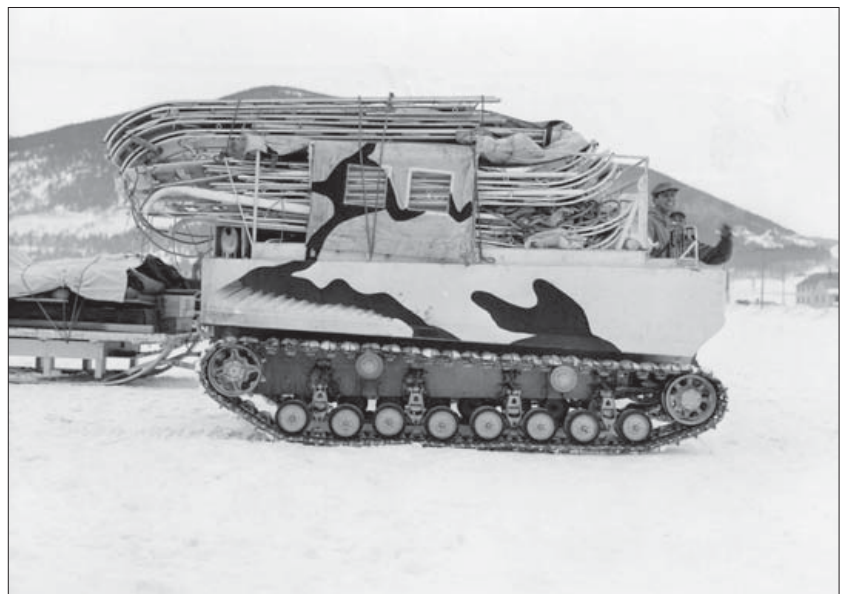
**It was soon learned during unit training that even routine tasks took twice as long to accomplish in snow and extreme cold, and that some equipment did not function efficiently in such conditions. Here an operator mans a BD-72 switchboard at a regimental message center. (Tom Laemlein/Armor Plate Press)**



**At Camp Hale, T15 (M28) Weasel cargo carriers – note the four angled bogie wheels – and a large towed sled being loaded with gear. On either side of the sled – its runners hidden here by a white tarp – are toboggans, which were towed by a skier. (Tom Laemlein/Armor Plate Press)**

With less than two weeks' notice, between June 20 and 24, 1944 the 10th was transferred to Camp Swift, Texas. Central Texas in summertime was a shockingly different environment from the Rocky Mountains. The terrain was gently rolling hills rising 450–500ft above flatlands with scattered clearings among dense forests; it was hot and humid – typically 95–110°F – and full of bugs, snakes, and poison oak. In July the division undertook a 10-mile forced march; heat exhaustion was widespread,

**This T24 (M29) Weasel, identified by its eight wheels, is loaded with toboggans. A toboggan could carry up to 200lb of gear, but was more practical for towing by one skier if the load was limited to about half that weight. The toboggan was the over-the-snow equivalent of the two-wheel handcarts used by the other types of experimental light infantry division. Note too the heavy cargo sled partly visible at left. (Tom Laemlein/Armor Plate Press)**





and weekly forced marches – 25 miles in 8 hours – became routine to improve the troops’ stamina. Rumors abounded that the division would be deployed to Europe, or even Burma. One advantage of the country around Camp Swift was that it allowed a focus on individual and unit tactical training during the division’s five months there. Large numbers of replacements arrived, but it was impossible to train them as mountain troops. Many trained soldiers felt that Camp Swift was a major let-down, and signaled the division’s doom as a special formation.

However, rather than being reorganized as a standard infantry division, the 10th modified its organization and received additional personnel. On November 6, 1944 it was redesignated the 10th Mtn Div and authorized 14,101 men – almost a thousand more than a standard infantry division (partly due to the numbers of assigned mule-packers). The infantry regiments in particular were increased in size, adding 812 troops to the 2,060 of the light infantry regiments. (The 87th Mtn Inf Regt had formerly had 2,755 men.) The infantry battalions now received a heavy weapons company with mortars and heavy machine guns; previously the mortars had been in the HQ company, and there had been no water-cooled heavy machine guns. The formation’s “special designation” – the official term for a nickname – was now the “Mountain Division,” and they were also known as the “Mountaineers.”

The 10th Engr Bn received a fourth company, which infantry division engineers lacked, giving it one motorized (Co D) and three pack companies. The 10th Mtn Cav Recon Trp was reactivated, but was now horse-mounted. The 10th Med Bn now had three collecting, one clearing, and one veterinary companies. The 10th QM Bn consisted of one truck and three pack-mule companies, while standard divisions had only a single QM service and truck company. The 727th AAA Machine Gun Bn with three .50cal machine gun batteries, and the 576th AT Btry (37mm), were consolidated into the 10th Mtn Inf AT Bn with 57mm AT guns. This unit was unique to the mountain division, since the infantry regiments lacked the usual AT companies – though in the event the unit would fight as infantry, with the 10th Recon Trp usually attached. The infantry regiments also lacked cannon companies armed with 105mm pack howitzers.

A major difference between the mountain and infantry divisions was the artillery. Rather than three battalions of 105mm and one of 155mm howitzers, the mountaineers had only three battalions of 75mm pack howitzers. The 616th FA Bn (Pack) was activated when the division was redesignated, from cadres provided by the 604th and 605th. (To augment these light weapons, the 1125th Armd FA Bn would be attached upon the division’s arrival in Italy. Its 105mm full-tracked howitzers could maneuver more easily than truck- or tractor-towed howitzers on mountain trails.)

**Table 3: 10th Mountain Division  
November 6, 1944 to  
November 30, 1945**

(Strength is listed as officer-warrant officer-enlisted.)  
Strength: 673-41-12,745. With attached medical & chaplains: 737-41-13,323.

Unit	Strength
HQ, 10th Mtn Div	44-8-111
85th Mtn Inf Regt	128-5-2739
86th Mtn Inf Regt	128-5-2739
87th Mtn Inf Regt	128-5-2739
Division Artillery, 10th Mtn Div	100-6-1738
HHB, Div Arty, 10th Mtn Div	13-0-72
604th FA Bn (75mm Pack)	29-2-520
605th FA Bn (75mm Pack)	29-2-520
616th FA Bn (75mm Pack)	29-2-520
1125th Armored FA Bn (105mm SP) <sup>1</sup>	32-2-511
10th Mtn Inf AT Bn	18-1-347
10th Mtn Med Bn	47-2-616
10th Mtn QM Bn	19-2-438
126th Engr Mtn Bn	31-2-749
10th Mtn Cavalry Recon Trp	5-0-157
HQ, Special Troops, 10th Mtn Div	2-0-7
HQ Co, 10th Mtn Div	3-0-86
110th Mtn Signal Co	9-4-254
710th Ord Lt Maint Co	8-1-82
MP Plat, 10th Mtn Div	3-0-68
10th Counter Intelligence Corps Det <sup>1</sup>	1-0-5
Attached medical <sup>2</sup>	52-0-578
Attached chaplains	12-0-0

**Notes:**  
(1) Attached, not included in totals.  
(2) Medical detachments attached to div HQ, inf regts, FA bns, and AAA bn.

### The mountain infantry regiment

While 2,872-man mountain regiments were similar to their 3,118-man standard infantry counterparts, there were considerable differences. The 103-man regimental HHC comprised the eight-man regimental HQ (commander and staff), and the HQ company with a 28-man company HQ, 18-man intelligence and reconnaissance platoon (2× squads), and 48-man communication platoon. The 216-man regimental service company possessed a 17-man HQ and 35-man supply and 153-man transport platoons; the latter platoon had three battalion transport sections each with 167 pack mules. The 164-man regimental medical detachment had a 41-man HQ section operating an aid station, and three 41-man battalion medical sections. There were no antitank or cannon companies as organic to standard regiments.

The three 851-man mountain infantry battalions each had an HHC with the four-man battalion HQ, and an HQ company with a 22-man company HQ, 13-man battalion HQ section, and 23-man communication, 23-man ammunition and pioneer (3× squads), and 21-man AT (3× 37mm squads) platoons.

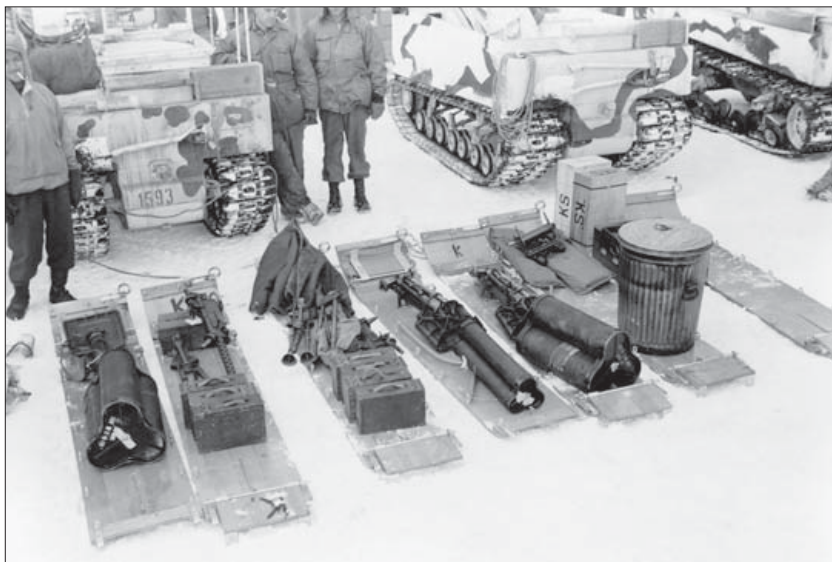
The three 198-man rifle companies of each battalion (1st Bn, Cos A–C; 2nd Bn, E–G; 3rd Bn, I, K & L) had a 35-man company HQ, three 42-man rifle platoons (see Table 4), and a 33-man weapons platoon. The latter had a four-man platoon HQ, a 17-man mortar section with 3× five-man 60mm M2 mortar squads, and a 12-man machine gun section with 2× five-man .30cal M1919A6 gun squads.

The battalion's 163-man heavy weapons company (Cos D, H & M respectively) had a 27-man HQ; 2× 38-man MG platoons with 2× 16-man sections, each with 2× seven-man .30cal M1917A1 water-cooled gun squads; and an 81-man mortar platoon with 3× 18-man sections each with 2× eight-man 81mm M1 mortar squads.

### Weapons and equipment

The 10th Mtn Div was essentially armed with the same weapons as standard infantry divisions, but issued in smaller numbers. Additionally, in April 1945

T24 and (right) T15 Weasels, with a display of crew-served weapons and ammunition to be loaded on toboggans. These include 60mm M2 and 81mm M1 mortars and .30cal M1919A4 machine guns. The “cloverleaves” of three ammo tubes are for the 60mm mortar, each holding nine rounds. The 32gal garbage can at the right was used for melting snow for water. Both types of carrier were used by 10th Mtn Div in Italy, but the relative numbers of each do not seem to be recorded. (Tom Laemlein/Armor Plate Press)



more than 100 troops were trained on M1A1 flamethrowers, valuable for defeating mountain fortifications. (It was also common for infantrymen to use captured Panzerfausts against buildings and fortifications in Italy.)

The greatest difference in armament between mountain and infantry divisions was in artillery and antitank guns. The mountain division artillery possessed only three mule-pack artillery battalions, for a total of 36× 75mm M1A1 pack howitzers, as opposed to 36× 105mm and 12× 155mm howitzers in standard divisions. It is unclear, but it is reported that in Italy the 616th FA Bn converted one battery to 105mm M2A1 howitzers, and one of the other battalions may have done the same. The three mountain infantry regiments each possessed 9× 37mm T33 antitank guns (three per battalion), and 18× 57mm M1 AT

guns were assigned to the two-battery 10th Mtn Inf AT Battalion. To augment the lean artillery strength the 1125th Armd FA Bn was attached, with its 3× six-tube batteries of 105mm M7 self-propelled howitzers. In lieu of the 155mm medium howitzer battalion in standard divisions, for much of its service in Italy the 10th Mtn Div was reinforced by the British 178th (Lowland) Medium Regt, Royal Artillery; this battalion-sized unit had three batteries each of 8× 5.5in (140mm) Mk 3 guns.

Tank and tank destroyer units were sometimes attached. The tanks were the 75mm-gun M4A1/A4 Sherman medium, and 37mm-gun M5A1 Stuart or 75mm M24 Chaffee light tanks. The tank destroyers were the 3in-gun M10.

There was also a disparity in motorized transport. An infantry division possessed almost 1,390 vehicles, almost 400 being 2½-ton trucks. The mountain division had only 425 motor vehicles: 169× ¼-ton jeeps, 29× ¾-ton weapons carriers, 15× ¾-ton ambulances, 27× 1½-ton trucks, 159× 2½-ton trucks, 12× dump trucks, 2× air compressor trucks, 4× water equipment trucks, 2× 4-ton wreckers, 2× 4–5-ton truck tractors with 6-ton animal/cargo semi-trailers, 3× 6-ton prime-mover trucks with 20-ton low-bed semi-trailers for 3× medium bulldozers, and 1× sedan. Trailers included 91× ¼-ton and 143× 1-ton cargo, 3× 2½-ton utility, 4× 250-gal water, 3× two-horse van, and 1× welding trailers. The division artillery possessed eight Stinson L-5 Sentinel observation airplanes.

A considerable number of special motor vehicles were provided to the division: 500× T15 (M28) Weasel full-tracked cargo carriers, 24× Caterpillar Trail Blazer D-6 bulldozers, two snowplow-equipped Caterpillar D-7 bulldozers, and two truck-mounted Klauer Snogo snow-blowers. By the time they reached Italy the 10th Mtn Div had received improved M29 Weasels, but they were not on the T/O&E, nor is their distribution to units known.



**Mountaineers cooking a meal on an M1941 stove outside a two-man mountain tent (see Plate E1). This was provided with two three-section tent poles, but it was quicker to erect it by stringing a ridge cord between two trees. (Tom Laemlein/Armor Plate Press)**



The mountain division relied heavily on four-legged transport. The division possessed 18 draft horses, 45 bell horses (to lead packs), 27 pack horses, 653 riding horses, 736 riding mules, and 4,673 pack mules. Small numbers were provided to the division headquarters, signal and maintenance companies; the engineer and quartermaster battalions had a large number, and the medical battalion had a few. The division artillery had 1,263 riding and pack mules, and the infantry regiments had 48 riding horses, 128 riding mules, and 725 pack mules. The reconnaissance troop was entirely mounted, with 155 riding and 27 pack horses. The division never achieved its full complement of mules and horses, and far fewer were available in Italy. The artillery was hard-pressed to assemble enough mules for even one of the battalions to pack all its howitzers, but at least one was so outfitted.

### A new commander

While the 10th Mtn Div was still reorganizing it received a new commander. Major General Jones had become seriously ill with bronchitis, no doubt aggravated by Camp Hale's bad air, and on November 24, 1944 he was relieved by BrigGen (soon MajGen) George P. Hays.

By this time there was a growing resentment, even hatred among the troops towards most of the division's senior officers. They were accused of going far too much "by the book," of holding unrealistic ideas about high-altitude and extreme cold-weather training, and of ignoring the

advice of experienced skiers and mountaineers. None above the rank of captain had ski or mountaineering experience, but they came to the division with preconceived notions about how training should be conducted and the types of clothing necessary, and they were not fond of ski and snowshoe training. Many wanted to use conventional tactics on steep, snow-covered slopes without the "bother" of skis and snowshoes. One mountaineer said of MajGen Jones that "as far as we were concerned [he] was incapable of handling a Cub Scout Troop." The division's rugged training, first in harsh alpine conditions and then in the Texas summer, had resulted in five times the injuries and illnesses as suffered in other divisions.

As an artillery first lieutenant in 1918, George P. Hays had been presented the Medal of Honor for his actions on July 14–15 during the Second Battle of the Marne, when

**Table 4: Mountain rifle platoon, November 1944**

<i>Platoon headquarters</i>	6	42 platoon total
Platoon Commander	2nd lieutenant	M1 carbine
Platoon Sergeant	tech sergeant	M1 rifle
Platoon Guide	staff sergeant	M1 rifle, M7 GL
Messenger (x2)	pvt/pfc	M1 rifle
Packer & Driver	pvt/pfc	M1 carbine
Pack mule <sup>1</sup>		
AN-M8 pyrotechnic pistol	1	
M9 hand pyrotechnic projector	1	
<i>Rifle squad (x3)</i>	12	
Squad Leader	staff sergeant	M1 rifle
Asst Squad Leader	sergeant	M1 rifle, M7 GL
Automatic Rifleman	pvt/pfc	M1918A2 BAR
Asst Automatic Rifleman	pvt/pfc	M1 rifle
Ammunition Bearer	pvt/pfc	M1 rifle
Rifleman (x7) <sup>2,3</sup>	pvt/pfc	M1 rifle (1x M1903A4, 2x M7 GL)
M9 hand pyrotechnic projector	1	
<i>Total weapons</i>		<i>Company pool weapons</i>
M1 rifle	34	Additional weapons available to rifle platoons. Issue was not balanced between platoons:
M1903A4 sniper rifle	3	
M1 carbine	2	
M1918A2 BAR	3	2.36-in M1A1/M9 bazooka 2
M7 grenade launcher	10	M3 SMG 6
AN-M8 pyrotechnic pistol	1	M1918A2 BAR 6
M9 hand pyrotechnic projector	4	
SCR-536 "handie-talkie" radio	1 (on company command net)	

(1) Mules were usually consolidated at a higher echelon.

(2) Two riflemen per squad designated as scouts and two as grenadiers.

(3) Sometimes, one rifleman per squad designated as sniper, armed with M1903A4 sniper rifle.

CAMP HALE, COLORADO, 1942

1: Corporal, service uniform

2: Private, cold-weather clothing

3: Private first class, mountain clothing

3a



1a



SKI TRAINING

See text commentary for details



B



**SKIER WITH COMBAT LOAD**  
See text commentary for details

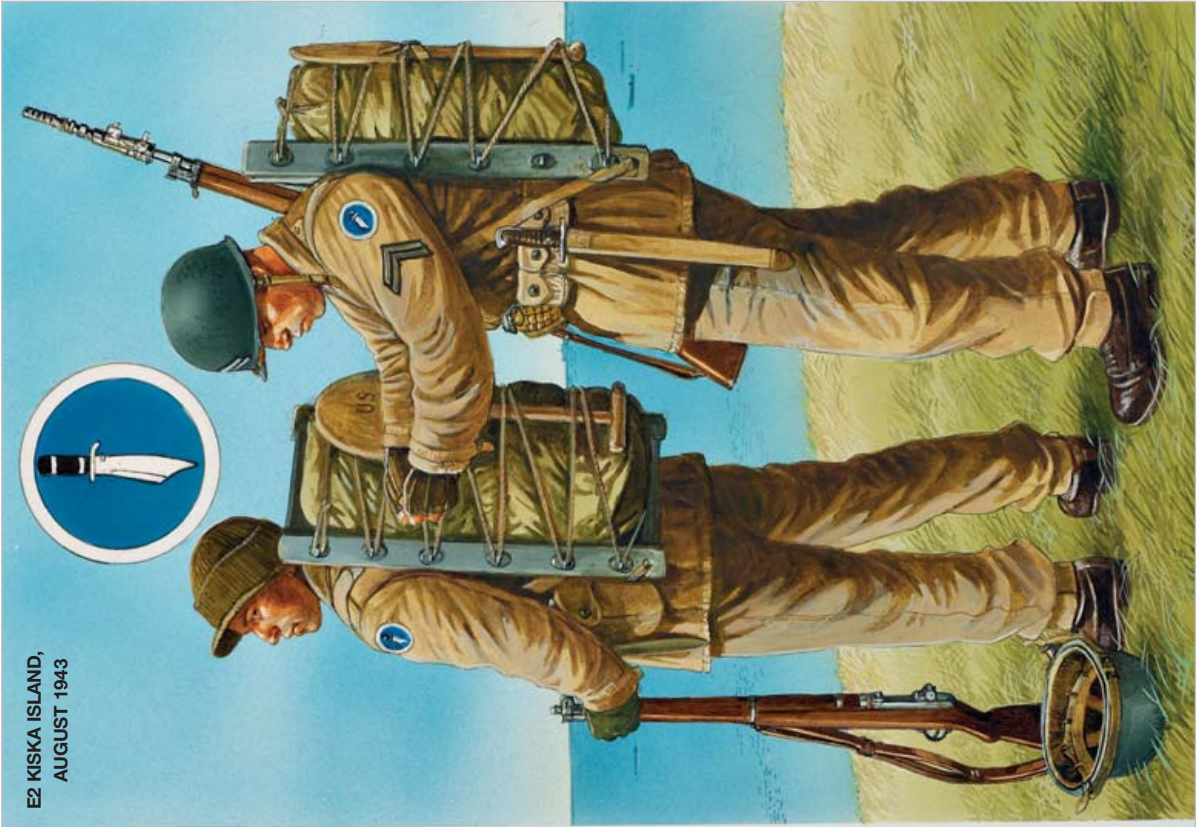


WEASEL CARGO CARRIER, 1943  
See text commentary for details

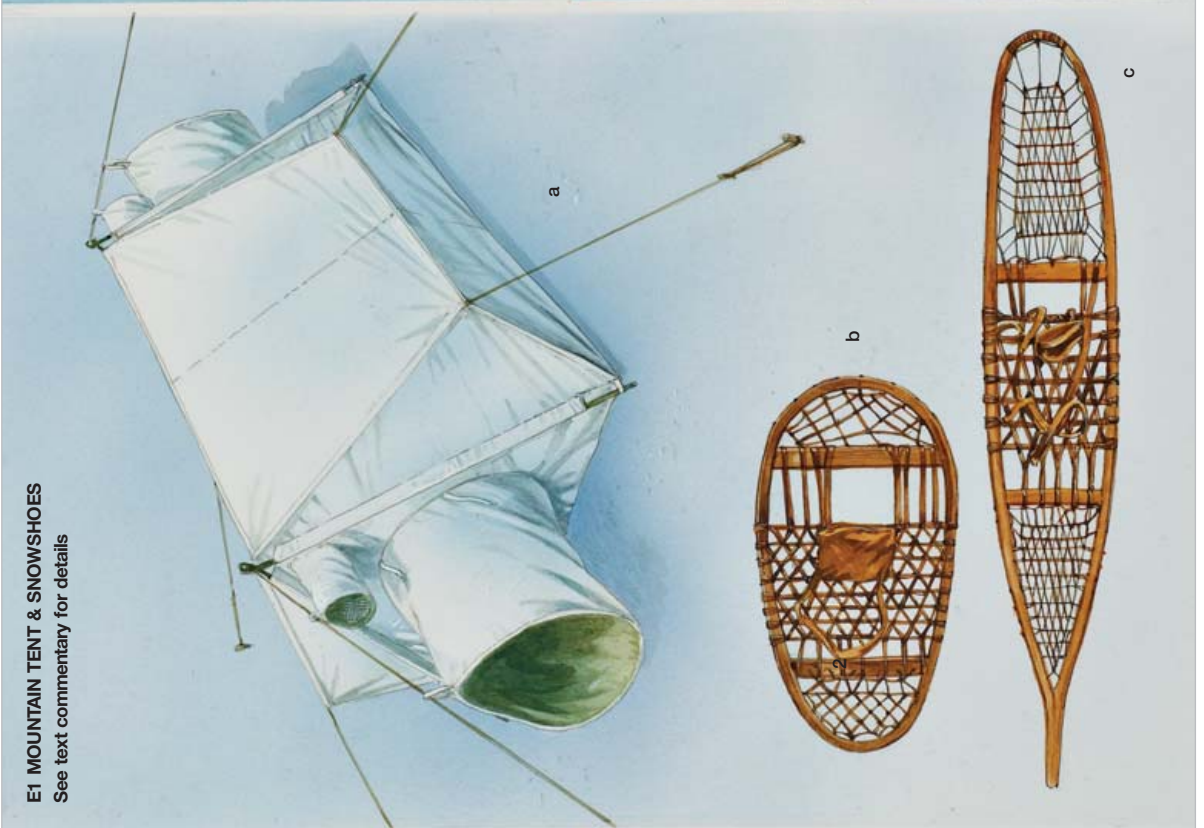




E2 KISKA ISLAND,  
AUGUST 1943



E1 MOUNTAIN TENT & SNOWSHOES  
See text commentary for details





**PACK MULES**

See text commentary for details





**COMBAT IN THE APPENINES**

1: Rifleman

2: Sniper

3: Automatic rifleman (BAR)





AID STATION See text commentary for details







Cutaway demonstration showing the interior of the mountain tent – note its integral floor sheet. Long underwear, mittens and socks are strung on a ridge line to dry, and a three-piece mountain cook set and an M1941 stove stand beside a down-filled mountain sleeping bag. (US Army)

he had seven horses shot under him and was severely wounded. World War I had also brought him two Silver Stars, the Legion of Honor, a Purple Heart, and the French Croix de Guerre. As commander of the 2nd Inf Div's artillery in Britain in 1944 he had been sent to Italy to observe action at Monte Cassino, and temporarily replaced the 34th Div's artillery commander when that officer was wounded. Hays had then led the 2nd Inf Div Arty to Normandy.

The assistant division commander, Col (later BrigGen) Robinson E. Duff, had departed for Naples a week prior to the new commander taking over. Hays achieved a surge in the division's morale owing to his positive attitude and obvious concern for the troops' welfare. Morale had also lagged due to the fear that the division would never see combat. Some troops had been in uniform for almost four years, and most divisions in the States had already deployed overseas. Hays' pep talks to commanders and troops did much to restore morale. They knew they were finally deploying, but to where they did not know – rumored destinations included Alaska, Britain, Italy, Norway, Burma, the Philippines, and even Russia.

## DEPLOYMENT TO ITALY

With new uniforms issued, worn equipment replaced, and endless inspections, the 86th Mtn Inf departed Camp Swift at the end of November, and arrived at Camp Patrick Henry, Virginia for overseas processing. On December 3, 1944 a six-man advance detachment flew into Naples, Italy. Through the last half of December the rest of the division moved to Camp Patrick Henry. The 86th Mtn Inf departed for Italy from Hampton Roads aboard the USS *Argentina* on December 11, and arrived at Naples on the 22nd. The 85th and 87th Mtn Inf departed aboard the USS *West Point* (formerly the luxury liner SS *America*) on January 4, 1945 to arrive at Naples on the 15th. The rest of the division embarked on Jan 6 on the USAT *General Meigs*, and arrived on the 18th. The 10th was the second to last US division to land in Europe.

During their first three weeks in Italy in February 1945 the division conducted many small reconnaissance patrols to study the terrain and locate German positions. These were the only opportunity the veteran "Mountaineers" would have to actually use in Europe the skills that they had spent years perfecting during their specialized training in Colorado. This scout easily negotiates a small gully on skis with the aid of his ski poles. His web equipment worn over the parka includes the new type of ammo pouches, each of which held either two 8-round clips for the Garand rifle or two 15-round magazines for the M1 carbine – the earlier pouch could only take carbine magazines. He also has an M1938 wire-cutter and a canteen on his belt, and his Garand is slung across his back. (Tom Laemlein/Armor Plate Press)



By February 1945 most of the specialized mountain clothing had been turned in and replaced by standard winter gear, but photos taken during those weeks still show some retained items. The ski-mountain cap is seen used alongside the winter cap with pile-lined flaps and visor. At left, note one of the several patterns of reversible parka in white and light OD. This late, coat-length type opened all the way down the front, and had two large flapped skirt pockets below slanted slash side pockets; photos show it both with and without fur trim at the hood and cuffs. At right is the long, collarless white pile jacket intended to be worn under that parka, showing OD edges and knit cuffs. (Tom Laemlein/Armor Plate Press)



Major General Hays had flown into Naples on January 8 and met with LtGen Lucian K. Truscott, Jr, the new commander of Fifth Army and all US forces in Italy. The division would be attached to IV Corps under MajGen Willis D. Crittenberger. Fifth Army occupied the westernmost sector of the Allied front stretching across Italy, with British Eighth Army to its east. When the 10th Mtn Div entered the IV Corps line the units were arranged from west to east: 85th Inf Div, Task Force 45,<sup>3</sup> 10th Mtn Div, and 1st Div Brazilian Expeditionary Force, with II US Corps adjacent to IV Corps' eastern flank. The 8th Indian Inf Div of British Eighth Army was in reserve, and the US 1st Armd Div was available for support.

Facing the Allies was the formidable linear Gothic Position (*Gotenstellung*), snaking 200 miles across Italy through the rugged North Appenine mountains south of the broad valley of the River Po. Having

### Senior officers, 10th Mountain Division, January–May 1945

MajGen George P. Hays	Commanding General
BrigGen Robinson E. Duff (WIA Apr 22, 45)	Asst Division Commander
Col William O. Darby (KIA Apr 30, 45)	Asst Division Commander
BrigGen David L. Ruffner	Commander, Division Artillery
Col Thomas M. Thompson	Chief of Staff
Col Raymond C. Barlow	Commander, 85th Mtn Inf Regt
Col Clarence M. Tomlinson	Commander, 86th Mtn Inf Regt
Col David M. Flower (WIA Feb 22, 45)	Commander, 87th Mtn Inf Regt
LtCol John F. Schmelzer	Commander, 87th Mtn Inf Regt (Col Flower returned Mar 28)

<sup>3</sup> TF 45 was a provisional division-size force built around the 45th AAA Brigade converted to *ad hoc* infantry along with British AA units, and backed by US artillery and support units.

successfully held up the Allied advance south of Rome until May–June 1944, Field Marshal Kesselring, now commanding *Heeresgruppe C*, had ordered the preparation of this chain of defenses by the Organization Todt. Thousands of Italian laborers had been employed to construct antitank ditches, artillery and antitank gun positions; extensive minefields were laid, and bridges, roads and key facilities were prepared for demolition. (In June 1944 the system was officially renamed the Green Line – *Grüne Linie* – so that if the Allies penetrated it, it would not bear such an “imposing” name; the Allies still generally referred to it as the Gothic Line.) Elements of *LI Gebirgs-Korps* faced the 10th Mtn Div’s zone; none of its subordinate divisions were actually mountain troops, but the specialized *Hochgebirgs-Jäger-Bataillon 4* (High Mountain Light Infantry Battalion 4) was present.

Upon its arrival in Naples the 86th Mtn Inf was moved to the division assembly area at Quercianella south of Pisa (where eight men were killed and four wounded by mines – the division’s first casualties). On January 8, 1945 the 86th moved into the front lines relieving TF 45. The 1st Brazilian Div was to the 86th’s right, but there was a gap of more than 20 miles through the mountains on its left. Operation ENCORE, the 10th Mtn Div’s entry into combat, would soon commence.

### **Riva Ridge and Mt Belvedere–Mt della Torraccia Ridge, February 18–March 2, 1945**

The Fifth Army plan was for the 10th Mtn Div to seize Mt Belvedere, a key to the German defenses providing observation over one of the two main routes entering the Po Valley in Fifth Army’s zone. First, a terrain feature codenamed Riva Ridge needed to be seized to deny enemy artillery observation of the objective. This ridge consisted of eight peaks from 3,200ft to 6,000ft high, the high end being in the south.

In the meantime, the 85th and 87th Mtn Inf in Naples were sent by landing craft, an Italian freighter, and trucks to assemble at Pisa and prepare for action. The three regiments were at the front by January 20. During this period a few small ski patrols were conducted, and some technical climbing was required on other patrols. It would be about the only time that any members of the division put their skiing and mountaineering skills to use.

At the end of January the 85th and 87th Mtn Inf relieved the 86th, which moved to Lucca to prepare for the Riva Ridge assault. About 30 percent of the troops had not benefited from Camp Hale training, but the regiment was ordered not to exclude them from the coming action; units would rehearse and conduct the assault utilizing all personnel. On the night of February 18, 1-86th Mtn Inf, reinforced by Co F from 2-86th, made their way up Riva Ridge by five preselected routes. Taking the

Many of the division’s personnel in Italy in early 1945 had never been through the specialized training courses at Camp Hale. Here, men undertake a class on how to bring a casualty down a cliff using a rope “tramline,” under instruction by Italian *Alpini* soldiers of the Co-Belligerent Forces. Not much technical climbing was undertaken in Italy, but the “Mountaineers” did make good use of their ropes. After the fall of the Philippines made the original Manila hemp rope scarce, more effective 120ft-long nylon ropes were adopted. These were stronger than hemp, more supple and resistant to abrasion, and their stretch qualities reduced fall injuries. Incidentally, Italian soldiers also manned the 1st Pack-Mule Bn attached to the division. (Tom Laemlein/*Armor Plate Press*)







ABOVE LEFT

**An automatic rifleman, with the M1918A2 BAR and the M1937 BAR belt holding up to 12 magazines, warily checks the ground ahead. The other two soldiers each have M1943 folding entrenching tools in carriers on their belts. All wear the M1943 sateen cloth field uniform in the greenish OD No.7 shade, which came complete with a button-on hood. (Tom Laemlein/Armor Plate Press)**



ABOVE RIGHT

**Ancient and modern tools of war: a 10th Mtn Div pack mule is led past a Sherman tank of one of the three units attached to the division. These were the 13th Tank Bn detached from 1st Armd Div; the separate 751st Tank Bn; and Co A from another separate unit, the 760th Tank Battalion. (Tom Laemlein/Armor Plate Press)**

enemy completely by surprise, they were atop the ridge by daylight at a cost of only one casualty. The Germans conducted numerous counterattacks, but by the 25th the ridge was deemed secure; the 86th suffered 21 dead and 52 wounded.

At the same time as 1-86th's assault, six battalions were moving into position for the Mt Belvedere attack east of Querciola near the mountain's foot. At 2300 hours on February 19, the 2nd and 1st Bns of the 87th assaulted the west slopes of Mt Belvedere. The 85th Inf led off with the 3rd and 1st Bns to seize the mountain's peak, and over the next several days secured a ring of mountains and hills while alternating its battalions. The 3-86th paralleled the 85th on the eastern slopes of the hills, completing the operation on March 2. The last German counterattacks launched against Mt della Torraccia at the ridge's northern end were defeated on February 25. The 1st Brazilian Div had seized nearby Mt Castello on the 21st to protect the 10th's flank. The seizure of the Mt Belvedere-Mt della Torraccia Ridge cost the division 192 dead and 730 wounded in all.

### **March Offensive, March 3-6, 1945**

This was a series of costly thrusts 4-5 miles to the northeast, to seize a large number of hills between 2,600ft and 3,280ft in height; the final objective was a line of seven hills near Castel d'Aiano. The operation commenced with (from left to right) 1-86th, 2-86th, and 3-87th leading off. After three days of fighting their way through stubborn resistance, 1-86th, 1-87th, 3-87th, 1-85th, and 2-85th secured their objectives. The 10th AT Bn with the 10th Recon Trp seized objectives on the extreme right. With 1-85th taking Mt della Spa, the main German supply line from the Po Valley was cut. Fifth Army was now 15 miles from the critical valley, and 1st Armd Div moved up from reserve on the 10th's right to prepare to thrust into it. Those four days were costly, with 146 dead and 512 wounded. The division consolidated its positions, and conducted aggressive patrolling into mid-April.

### Spring Offensive, April 14–16, 1945

The north-central Italy Spring Offensive was launched on April 14 from Mt della Spa. The 85th attacked high ground to the north, the 87th seized a long ridgeline and followed its spine to the northeast, and the 86th on the right cleared a road system and took its hill objective. The paths of the 87th and 86th crossed, with the 87th seizing Mt Mosca to the east and the 86th taking Monsca. The division was now in position to launch itself into the Po Valley, and the 1st Armd Div could operate in the valley of the Samoggia river. This was the most costly three days in the division's history, with 286 dead and 1,047 wounded. Among the dead was Pfc John Magrath, the division's only Medal of Honor recipient.

### Breakout, April 17–20, 1945

From April 17 through the 20th the division broke out into the Po Valley, the Allies' long-sought objective. The 87th Mtn Inf on the left and 86th on the right attacked northeast in the ridges and hills paralleling the east bank of the Samoggia river. Halfway through the operation the 85th relieved the 86th, but that regiment again took over the right flank advance. On April 18 the 1st Armd Div moved into the Samoggia Valley on the division's left, while the 85th Inf Div advanced on the right. Company A, 85th Mtn Inf Regt was the first Fifth Army unit to set foot in the Po Valley. The Germans were in full retreat, and could not establish defenses; hundreds of prisoners were surrendering, and small pockets of resistance were being bypassed. The division's losses during this phase were 84 dead and 401 wounded.

### Po Valley, April 20–26, 1945

To punch into the Po Valley the division organized Task Force Duff under the assistant division commander. This force comprised: 2-86th Mtn Inf; Co B, 126th Engr Bn; a troop of 91st Cav Recon Squadron; a company of 751st Tank Bn; a platoon of 701st TD Bn, and a platoon of 110th Signal Company. The infantrymen rode on US and captured German vehicles,

### Pfc Magrath's Medal of Honor

Pfc. John D. Magrath (July 4, 1924–April 14, 1945) was assigned to Co G, 2nd Bn, 85th Mtn Inf Regt, and posthumously received the Medal of Honor for his actions and the sacrifice of his life on April 14, 1945 on Hill 909. His citation reads:

"He displayed conspicuous gallantry and intrepidity above and beyond the call of duty when his company was pinned down by heavy artillery, mortar, and small arms fire, near Castel d'Aiano, Italy. Volunteering to act as a scout, armed with only a rifle, he charged headlong into withering fire, killing two Germans and wounding three in order to capture a machinegun. Carrying this enemy weapon across an open field through heavy fire, he neutralized two more machinegun nests; he then circled behind four other Germans, killing them with a burst as they were firing on his company. Spotting another dangerous enemy position to his right, he knelt with the machinegun in his arms and exchanged fire with the Germans until he had killed two and wounded three. The enemy now poured increased mortar and artillery fire on the company's newly won position. Pfc Magrath fearlessly volunteered again to brave the shelling in order to collect a report of casualties. Heroically carrying out this task, he made the supreme sacrifice – a climax to the valor and courage that are in keeping with highest traditions of the military service."



GIs of the 10th Mtn Div advance cautiously along a ridge-side road in the northern Apennines. At left, ready to give instant fire, is a trooper armed with a .30cal M1919A6 light machine gun fitted with a bipod and metal shoulder stock – early-issue A6s lacked the carrying handle and conical muzzle-flash hider. (Tom Laemlein/Armor Plate Press)

The 75mm M1A1 pack howitzer was the division's principal artillery piece, with a range of 9,760 yards and a rate of fire of six rounds per minute; each of its three artillery battalions had 12 guns in three batteries. The full crew was 11 men, all armed with M1 carbines: chief of section (sergeant), gunner (corporal), ammunition corporal, and eight cannoneers. (Tom Laemlein/Armor Plate Press)



and once the three regiments crossed the Samoggia the TF thrust ahead, fast outpacing the regiments and leaving its flanks exposed. On April 22, BrigGen Duff was wounded by a mine, and BrigGen Ruffner, the division artillery commander, took over. The 3-85th relieved the worn out 2-86th,

and reached San Benedetto on the Po. Wasting no time, the 87th crossed the broad river using assault boats at midday on the 23rd. The 86th crossed the next day and expanded the bridgehead, while 1-85th leapt ahead to secure the Villafranca de Verona airport to the north. The new assistant division commander, Col William Darby (the former Ranger Force commander) formed TF Darby on April 25. This had 86th Mtn Inf; 13th Tank Bn from 1st Armd Div; Co B, 751st Tank Bn; Co B, 701st TD Bn; 1125th Armd FA Bn, and part of 126th Engr Battalion. The TF caught up with the 1-85th at Villafranca, then jogged to the northeast, to enter Verona on the 26th – only to find that the 85th Inf Div had mostly cleared the city. On the same day the TF then thrust northwest to Lazise on Lake Garda, where it was dissolved. The 1-87th swung to the northeast to capture Spiazzi. The Germans continued to retreat, but the advance across the Po Valley still cost the division 91 dead and 414 wounded.

### 10th Mountain Division attachments in Italy, January–May 1945

*(Note: Attachments were not for the entire period.)*

13th Tank Bn, 1st Armd Div (M4A1, M24)

84th Chemical Mortar Bn (4.2in)

91st Cav Recon Squadron, Mech (M8 armored car, M5A1)

175th FA Bn (105mm howitzer)

235th Engr Combat Bn

751st Tank Bn (M4A4, M5A1)

1125th Armored FA Bn (105mm SP)

178th (Lowland) Medium Regt, Royal Artillery (British)  
309th, 310th Btry plus 253rd Btry, 17th Medium Regt, RA (5.5in gun)

1st Italian Pack-Mule Bn  
HQ Det; 5th, 10th, & 17th Pack-Mule Cos

Co B, 701st TD Bn (M10)

Co A, 760th Tank Bn (M4A1)

37th QM War Dog Platoon (scout/mine-detecting dogs)

### Lake Garda, April 26–May 2, 1945

The final phase of the 10th Mtn Div's operations was clearing the northern shores of Lago di Garda. At 37 miles long and 2 miles wide in its northern arm, the mountain-edged lake is the largest in Italy. The lake's bordering roads gave access to the Brenner Pass leading across the Alps into Austria to the northeast. The Germans were pulling back to defenses in the





Each of the three battalions of the mountain infantry regiments had three 37mm T33 AT guns; here the barrel and breech assembly, making one of the seven mule-loads into which the gun broke down, is diamond-hitched to a Phillips pack saddle. The gun's T10 carriage was a tripod similar to that of the M1916 37mm infantry gun, on which the T33 was based. It used the same 37mm round as the M1A2 Colt-Browning AA gun and M4 aircraft cannon – a much shorter shell than that of the standard 37mm M3A1 wheeled AT gun that the division had originally used. (National Archives)



Troops wait to advance under the protection of an M10 tank destroyer of Co B, 701st TD Battalion. Foreground left, note the M1942 pack, formerly known as the “jungle pack” – a great improvement over the standard-issue M1928 haversack carried by most of the division's infantry. (Tom Laemlein/Armor Plate Press)



Amid discarded German helmets and a gasmask canister outside a captured enemy trench bunker, a soldier of the division opens a 10-in-1 ration can with his M1 bayonet. The big buttons with cord loops identify his so-called “pile field jacket,” sometimes issued as a cold-weather liner for the M1943 field jacket. At left, note the 12in-high waterproof shoebags. (Tom Laemlein/Armor Plate Press)



A “mule-skinner” tethers his charge for a brief grazing halt. Each of the four platoons of a Quartermaster pack company was supposed to have 17 riding mules and 53 pack mules, with 12 packer-drivers. While in Italy there were usually far fewer animals available, each of the packer-drivers might be responsible for up to four mules. They had to know how to handle them on the march, to check their health and care for them, clean them, feed and water them adequately, and make minor running repairs to their saddles and tack. (Tom Laemlein/Armor Plate Press)

Alps, and it was essential to destroy or capture as many of the withdrawing forces as possible to keep them from manning new defenses on dominating terrain.

The main road along the lake’s east shore passed through a number of tunnels, and the Germans blew up the first six of these. Undaunted, the 86th Mtn Inf bypassed these obstacles, with the 1st and 3rd Bns making their way through the mountains overland and on secondary roads. The 2nd Bn loaded aboard DUKW (“Duck”) amphibious trucks, and followed the shore to reach Torbole at the lake’s northern end on April 30. Elements of the 3-85th crossed the lake and moved up the

west shore, taking Mussolini’s villa and the town of Gargnano. Riva (a town at the lake’s northwest end, not to be confused with the earlier Riva Ridge) was taken on May 1. On the same day the 85th Inf elements on the west shore linked up with the 86th Inf elements on the north and east shores, heading south out of Riva. These final actions saw the loss of 63 dead and 107 wounded. Among the dead was Col William Darby, killed on the 30th; he was posthumously promoted to brigadier general a week later – the only officer so promoted during the war.

Secret negotiations had been ongoing with elements of the German SS high command in Italy since earlier in the year. Finally, on May 1, Generaloberst Heinrich von Vietinghoff commanding *Heeresgruppe C* agreed to terms, and all German forces in Italy surrendered at noon on the 2nd, while German forces in northern Europe continued to fight until May 8. Thus ended the Allied armies’ 20 months of fighting in Italy. It was the 10th Mtn Div’s 114th day in combat.

## THE END OF THE TRAIL

The 10th Mtn Div remained on a war footing. The 3-86th Inf marched to Resia Pass in the Alps on the Italian-Austrian border, and on May 4 they linked up with the Seventh Army’s 44th Inf Div moving south.

On May 17 the division celebrated the end of the war in Europe with champagne and cognac liberated from German stocks. On May 20 the division moved to Udine in northeast Italy, near the city of Trieste on the Yugoslavian border; the right to occupy Trieste was contested by Tito’s Yugoslav Partisans, during a period of tension when an outbreak of hostilities was feared. The division conducted occupation duty alongside British Commonwealth forces into July, but on the 14th of that month it received orders to return to the States.

The 10th was to be reorganized as a standard infantry division, re-equipped, and filled out with replacements. It was planned for it to be employed as a follow-on force after the initial invasion of Japan in 1946, if needed. Most of the troops assigned to the division would remain, since they had a low number of the overseas duty points that qualified soldiers for demobilization.

The division departed from Naples and Livorno in the last week of July to arrive in Virginia and New York: the 86th Mtn Inf aboard the USAT *Westbrook Victory* on August 9, the 85th on the SS *Marine Fox* on the 11th, and the 87th on USS *Mount Vernon* on the 11th. En route to the States the troops were grateful to learn that the first atomic bomb had been dropped on Hiroshima and another three days later on Nagasaki. Shortly after they reached their ports of disembarkation and were given 30 days' leave, Japan announced its decision to surrender unconditionally on August 15.

Camp Hale had been placed in caretaker status when the division departed, so its component regiments arrived at Camp Carson between August 11 and 16, 1945; the units were represented by caretakers who were given leave later. After leave, the Mountaineers reported to Camp Carson on September 15 for discharge processing. On November 30, 1945 the 10th Mtn Div – the only mountain division in the history of the US Army – was inactivated. The regiments were inactivated on November 21 (the 87th), November 27 (the 86th), and November 30 (the 85th).

In its 114 days in combat the 10th Mtn Div had suffered 4,086 combat casualties – 952 dead, 3,134 wounded, and 20 prisoners – plus 15 non-combat deaths (sources are in minor conflict as to the exact casualty count). Of the 19,780 personnel (inclusive of 6,416 replacements) serving in the 10th in Italy, 5 percent were killed and 20 percent wounded, to average more than 1,200 casualties per month; over 30 percent of the men in the infantry regiments became casualties. Members of the division were presented one Medal of Honor, three Distinguished Service Crosses, one Distinguished Service Medal, 449 Silver Stars, seven Legion of Merit Medals, 15 Soldier's Medals, and 7,729 Bronze Stars. The division itself was awarded two campaign streamers for the North Apennines and Po Valley campaigns. The 87th Mtn Inf Regt and attached units received the Aleutian Islands campaign streamer. The division earned no unit awards, which were very sparingly bestowed by Gen Mark Clark's Fifth Army.

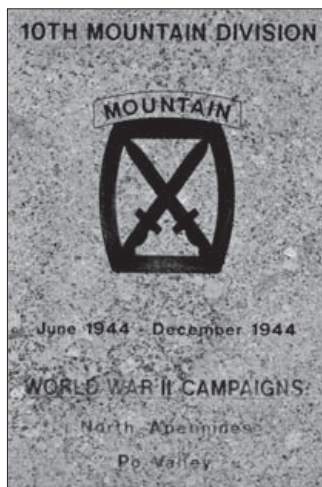
\* \* \*

After the war more than 60 veterans of the division returned to Colorado and other areas to open, manage, or instruct at ski resorts and schools. Camp Hale was closed in 1964, and the land deeded to the Forest Service (the CIA had trained anti-Chinese Tibetan insurgents there in 1959–64). Camp Hale is on the register of National Historic Places, and the Forest Service operates a Camp Hale Memorial Campground at a youth development training center. On the Cooper Hill ski slope is a memorial stone listing the division's killed in action, near a life-size statue of a ski trooper in over-whites.

### **The Mountaineers live on**

The division did not pass into history after its inactivation on November 30, 1945. The "Mountain Division" was redesignated the 10th Inf Div on paper on June 18, 1948, and reactivated as a training division at Ft Riley, Kansas on July 1. In 1954 it was fully manned and equipped as a combat division, using the inactivated 34th Inf Div's equipment. It was deployed to West Germany to replace the 1st Inf Div at Würzburg, remaining





A bronze life-size statue stands at the Camp Swift Texas Army National Guard Training Site, commemorating the division's stay there in June–December 1944. A statue of a trooper clad in over-whites also stands by Mountain Road outside Stow, Vermont, and another near a memorial to the division's dead on Cooper Hill above the site of Camp Hale, Colorado. In 1983 a plaque memorializing the 87th Mtn Inf Regt's fallen was placed on Kiska Island. The 10th Mountain Division and Fort Drum Museum, New York, features exhibits and artifacts commemorating the division in World War II and beyond. Several stretches of highways have also been designated "10th Mountain Division Memorial Highway": Texas State Highway 95 from US 290 to Texas 71; Colorado Highway 24, between Minturn, Red Cliff, and Leadville; Vermont Highway 108, and US Highway 24 in Michigan. (Chris Hunt)



there until 1958, when it was relieved by the 3rd Inf Div and inactivated on June 14 at Ft Benning, Georgia. The 10th Inf Div wore the original patch, but without the "Mountain" tab above.

The 10th would again reappear 27 years later. It was redesignated on paper as the 10th Mtn Div (Lt Inf) on January 22, 1985, and reactivated at Ft Drum, New York on February 12. It must be emphasized that the "Mountain" designation was strictly traditional; the new unit was not and is not mountain-trained, but it does wear the "Mountain" tab. Its "Light Infantry" designation means that it was lightly equipped and manned to make it easily air-deployable, and its training focused on operating on close terrain in hills, forests, and urban areas, as well as in harsh climates – not unlike the 1943 light divisions. The division consisted of the 1st Brigade at Ft Drum and the 2nd Brigade at Ft Benning, which relocated to Ft Drum in 1988. The division's third "round-out" brigade was provided by the New York National Guard's 27th Inf Brigade (Lt) from 1985 to 2005.

In 2004/2005 the division was reorganized as a Modular Force unit, its two brigades became "brigade combat teams," and the "Light

Infantry” designation was dropped. Two additional brigade combat teams were added, the 3rd at Ft Drum in 2004 and the 4th at Ft Polk, Louisiana in 2005 (to relocate to Ft Drum in the future).

Since its reactivation in 1985 the 10th Mtn Div or significant elements have performed combat operations, peacekeeping/enforcement, and humanitarian relief operations during the Gulf War and in Somalia, Haiti, Bosnia-Herzegovina, Kosovo, the Sinai Peninsula, Iraq, and Afghanistan. The division’s original skiers and mountaineers would be proud of today’s 10th Mountain Division.

## SELECT BIBLIOGRAPHY

---

- Baumgardner, Randy W., *10th Mountain Division* (Nashville, TN; Turner Publishing, 2003)
- Essen, Emmett M., *Shavetails and Bell Sharps: The History of the U.S. Army Mule* (Lincoln; University of Nebraska Press, 2000)
- Feuer, A.B., *Packs On! Memoirs of the 10th Mountain Division in WW II* (Harrisburg, PA; Stackpole, 2003)
- Fisher, Ernest F., Jr, *United States Army in World War II: Cassino to the Alps* (Washington, DC; Center for Military History, 1989)
- Hays, J.J., *United States Army Ground Forces: Tables of Organization and Equipment: World War II: The 10th Mountain Division, 1942–45: Volumes 5/I and 5/II* (Milton Keynes, UK; The Military Press, 2008)
- Jenkins, McKay, *The Last Ridge: The Epic Story of America’s First Mountain Soldiers and the Assault on Hitler’s Europe* (New York; Random House, 2003)
- Meinke, Albert H., Jr, *Mountain Troops and Medics: A Complete WWII Combat History of the Tenth Mountain Division* (Victoria, BC, Canada; Trafford Publishing, 2002)
- Sanders, Charles J., *The Boys of Winter: Life and Death in the U.S. Ski Troops during the Second World War* (Boulder; University Press of Colorado, 1995)
- Shelton, Peter, *Climb to Conquer: The Untold Story of World War II’s 10th Mountain Division Ski Troops* (New York; Scribner, 2003)
- Stanton, Shelby, *U.S. Army Uniforms of World War II* (Harrisburg, PA; Stackpole, 1991)
- Wilson, John B., *Maneuver and Firepower: The Evolution of Divisions and Separate Brigades* (Washington, DC; Center for Military History, 1998)

FM 31-15, *Operations in Snow and Extreme Cold*, September 1941

## PLATE COMMENTARIES

---

### **A: CAMP HALE, COLORADO, 1942**

This group of 87th Mtn Inf Regt soldiers in front of their barracks wear common cold-weather clothing items. The sign by the door (shaped like a rucksack) was used by all 10th Lt Div units, with a background in branch-of-service color and incorporating branch-of-service insignia.

### **A1: Corporal, service uniform**

The olive drab wool shirt and trousers could be worn under other winter clothing. The officer version of the shirt had epaulets, and they wore their metal rank insignia on the right collar and that of their branch of service on the left. Prior to the activation of the 10th Lt Div the 87th Inf was assigned to Army Forces Command and the Sixth Army, but did not wear the shoulder patch. Troops bought unauthorized “ski pins” (see 1a – to common scale) from local jewelry stores, and



**Ski training, 1943 – compare with Plate B. Some of the reversible ski parkas had fur trim to the hood, and all had slits in the torso to allow access to the pockets of the shirt and trousers worn underneath. The ski goggles on the cap are a civilian purchase item. Some skiers found it less cumbersome to sling their carbines to hang across the chest. (Tom Laemlein/Armor Plate Press)**

wore them on the front right of garrison caps or above the right breast pocket. These were also known as “sweetheart pins,” since they were also given to girlfriends.

#### **A2: Private, cold-weather clothing**

The mountain units received the standard winter clothing issued to troops for cold climates, but skiing, climbing, and operations in the high-altitude cold required more specialized designs. Initially a wide variety of experimental clothing was to be seen at Ft Lewis, Washington, and Camps Carson and Hale, Colorado. Some items came in several variants, with differences in e.g. pocket design and arrangement. This soldier wears a simple outfit of a later model ski-mountain cap, buttoned high-neck wool sweater over wool shirt and trousers, web leggings, and early-issue ski-mountain boots with uncleated leather soles. The troops were also issued the 1941 Parsons field jacket (see Plate G).

#### **A3: Private first class, mountain clothing**

This soldier wears the mountain jacket developed in 1942, made of two-layer windproof cotton poplin. It had four chest and skirt cargo pockets; a large integral rear pocket similar to that on a hunting jacket, and a hood that could be folded up into the rear collar (see 3a). The weight was supported by integral internal suspenders and an integral web belt. The companion mountain trousers had zippered side pockets plus large cargo pockets, and elastic “stirrups” under the

feet to keep them tucked into the boots and leggings. This trooper wears the later-issue ski-mountain boots with cleated rubber soles, and a whitened pair of ski gaiters – shorter than the standard leggings, and secured by an extra foot strap – to keep out the snow. The ski-mountain cap was influenced by Norwegian designs; a later version (see A2) eliminated the retaining strap.

## **B: SKI TRAINING**

### **B1: Skier in training**

A great deal of emphasis was placed on ski training while at Ft Lewis, Camp Carson and Camp Hale. This trainee wears the early windproof ski parka, reversible from olive drab to white; it might or might not have fur trim on the hood, and its short length allowed the maximum range of movement. It was normally worn over long underwear, a wool flannel shirt and a knit sweater, and this layering allowed the sweater to be removed if conditions warmed up. Ski slopes caught the warmth of the sun even in freezing but low-wind conditions, and excessive sweating had to be avoided; if a skier halted or the temperature dropped, he would begin to freeze. In 1941 OD wool serge ski trousers were issued, with zippers on the slash side pockets to keep snow out (though it still stuck to the wool surface); a deep waistband with three buttons and two belt loops at the front and a broad single belt loop at center rear; and tapered ankles with elasticated stirrups under the feet. White wool mittens are worn here, but any type of gloves or mittens might be used. White ski gaiters and ski-mountain boots complete the trainee’s outfit. As testing and development went on, some clothing items were judged too specialized and were eliminated, and others were combined into more multi-purpose garments; this outfit began to be replaced during 1942 by the clothing shown in Plate A3.

Several makes of modified commercial skis and bindings were issued, all of similar design; this pair are Northland skis with Windco bindings, 82in long by 3in wide. Military skis generally had steel edging to help prevent rock-scrape damage. The tops and edges of skis were painted white, the undersides being left in natural hickory for waxing. It was important to use the correct grade of wax to suit the degree of wetness or dryness of the snow. The 58in-long white-painted poles might be of solid wood, bamboo or steel.

### **B2: Ski-mountain boots**

Military ski-mountain boots, of both early leather-soled and later cleated rubber-soled models, were well designed and of heavy and robust construction. They could be used for both skiing and mountain climbing.

### **B3: Crampons**

10-prong ice-climbing crampons could be attached by rings and straps to the ski-mountain boots.

### **B4: Ski bindings**

The ski-mountain boots of both early and late models had a groove cut around the heel to accommodate ski bindings. This Kandahar-type binding was standard for Army skis; the metal toe bracket could be adjusted for any size of boot.

### **B5: Mountain knife**

This had both long and short blades, a leather punch, a can opener, and a Philips-head screwdriver for tightening ski binding mountings.

### **B6: Ski-mountain goggles**

These filtered ultra-violet, infrared and visible sun rays to



prevent snow blindness – the result of exposure to excessive glare reflected off snow. B1 wears the other of the two issued types.

### C: SKIER WITH COMBAT LOAD

#### C1: Skier in “over-whites”

“Over-whites” referred to the all-white, hooded, thigh-length parka, matching trousers with a drawstring waist, and two-finger mitten-covers. These were made of thin cotton; they gave no appreciable protection from the cold, although early-issue parkas were provided with fur trim. The parka had buttoned openings at the waist to allow access to chest and trouser pockets, and to the pouches of the cartridge belt that was worn under it for weather protection. Soldiers were urged to keep over-whites clean to preserve their camouflage value. In fact, it was not uncommon for only the over-white parka to be worn; and wearing over-white trousers with an olive drab parka or jacket blended well when passing through snow-covered woodland.

#### C2a & C2b: Mountain rucksack, back and front surfaces

Mountain troops were issued many standard equipment items, but a great deal of specialized gear was also provided. Beyond what conventional infantry required, they needed to carry additional items of equipment, clothing, and rations sufficient for several days; fully loaded, a mountain trooper might be carrying up to 90lb. The Norwegian Norse Pac rucksack with a wire frame was issued instead of the much smaller M1928 haversack. It had a large main compartment closed with a drawstring under the strapped and buckled flap, and three smaller pockets on the sides and back. A white cotton cover secured with a drawstring was issued with the rucksack – see C1.

#### C3a & C3b: Packboard, back and front surfaces

Many troops preferred the plywood and canvas packboard for its versatility. Gear, spare clothing, and rations would be rolled up in a poncho and lashed to the packboard. Two

### Ski trooper’s equipment (exclusive of clothing items, weapon & ammo) in US, 1942–44

Snow skis w/bindings	M5-11-17 gasmask w/case
Ski poles	M1910 1-quart canteen w/cup & carrier
3x tubes ski wax	M1932 mess kit w/M1926 utensils
Ice climbers	M1923 cartridge belt
Trail snowshoes	M1942 first aid pouch w/dressing
Ski-mountain goggles	Ammunition carrying pouch
Rucksack with frame, or packboard	Waterproof match tube
Mountain sleeping bag w/cover	Foot powder
Arctic sleeping bag (issued in extreme cold, for use over mountain sleeping bag)	Toilet articles (per 2 men) 2-man mountain tent, w/4x poles & 6x pins
Insulated sleeping pad	(per 4 men) M1941 or M1942 1-burner stove, w/2x 1-quart fuel cans
Barracks bag	(per 4 men) Mountain cook set
M1910 or M1943 entrenching tool, or M1910 hatchet, w/carrier	(per 4 men) Emergency repair ski tip
M1 or M1905 bayonet w/scabbard	
Mountain knife	

removable metal “shelves” were also issued with each packboard. With a shelf fitted to support them, as well as lashings, such loads as ammunition and water cans and ration cases could also be man-packed up to the front.

#### C4: Regimental crest, 87th Mountain Infantry

The 87th was the only unit in 10th Mtn Div to be authorized a crest, but its production was prohibited in 1943. The Latin motto *Vires Montesque Vincimus* translates as “We Overcome Might and Mountains.”

### D: WEASEL CARGO CARRIER, 1943

The full-tracked T15 light cargo carrier was developed in 1942, and the majority of the 766 built were issued to the Mountain Training Center for classified testing. The T15 would be standardized as the M28, but few saw operational service other than in the Aleutians; with only four bogie wheels per side, it was prone to throwing its tracks, and was made limited standard in September 1943. The much improved T24 (as illustrated here) had a more effective suspension with eight wheels and wider tracks; introduced in 1943, it was type-classified as the M29 that September, and 4,476 would be built. (In 1944–45 the amphibious M29C – for Conversion – appeared, with boat-style floatation chambers fore and aft, and 10,647 would be built.)

The 10th Lt Div received 500 T15/M28s and T24/M29s, which differed in more than their running gear. Both had a crew of two, but the M29 could also carry two passengers or 1,000lb of cargo, while the M28 had no passenger seats and a payload of 800lb. Both had 6-cylinder gasoline engines giving a top speed of about 35mph, but the M28 had rear drive and the M29 front drive; the M28 had a range of 115 miles, the M29 175 miles. Both could be fitted with canvas cabs, but seldom were. The 10th Lt Div tested various black/white and olive drab/white camouflage schemes. As



The M1944 insulated shoepacs issued in Italy gave effective protection in wet and cold weather, down to 10° F (–12° C) – although prolonged wear could cause excessive sweating, followed by freezing when the men rested. They had leather uppers above waterproof rubber feet with felt insoles, and came with 10in, 12in or 16in tops. (US Army)



**A soldier in summer khakis, with a mountaineer's ice axe resting over his shoulder, displays the patch authorized in January 1944 for the 10th Lt Div, and the "Mountain" tab authorized for wear above it in November 1944. Since the tab was not actually received until May 1945, it was only worn for four months after the end of the war in Europe before the division was inactivated – though some troops apparently purchased tabs privately before the official issue. (Tom Laemlein/Armor Plate Press)**

well as towing toboggans and large sledges with troops and cargo, they were used to pull columns of skiers gripping tow ropes (actually, with rather larger intervals between the skiers than illustrated here). In the winter of 1944/45 Weasels – mostly M29s – were widely used in Central Europe and Italy by infantry regiment supply platoons, to deliver ammunition, rations and supplies to the front on rugged, muddy terrain impassable by wheeled vehicles and even mules.

### **E1: MOUNTAIN TENT & SNOWSHOES**

The two-man mountain tent (a) had to be roomier than the standard "pup tent" made up from shelter halves, owing to the troopers' bulky sleeping bags and other extra gear. It was reversible from olive drab to white, and had a floor. The tubular entrances and vents at each end helped prevent blowing snow from entering.

Two types of snowshoes were issued to the mountain troopers. The "bivouac" or "bearpaw" type (b), for moving around between the tents in snowbound overnight camps, measured 28in long and 13in wide, while the "trail snowshoe" (c) was 58in long by 10in wide. Fitted with leather bindings, both types could be attached to any kind of boot or shoepac (waterproof winter boots).

### **E2: KISKA ISLAND, AUGUST 1943**

Many men of 87th Mtn Inf Regt in the so-called Amphibious Training Force 9 retained their mountain parkas and trousers. Others (as here) used the Arctic field jacket of windproof, water-repellent cotton with a kersey wool lining, and windproof, kersey-lined cotton trousers. The ATF 9 patch (inset) was typically worn on both sleeves 2–3in below the shoulder seam, as was Canadian practice. Wool shirts and trousers and knit sweaters were worn beneath these outer garments. Ski-mountain caps were worn, as well as wool knit M1941 "jeep caps" (left); senior ranks regarded the latter as slovenly and unmilitary, forbidding its use by officers, or by enlisted men except underneath the M1 steel helmet. High-topped "Blucher" boots made of heavily greased leather were warmer and more waterproof than other types, and roomy enough to allow additional socks to be worn, but they were still inadequate to prevent many foot injuries from cold and wet on Kiska.

In the 87th Mtn Inf, rifle platoons normally had three 8-man rifle squads and an 8-man automatic rifle squad with two BARs, but for the Kiska landing they were reorganized into three 12-man squads each with two BARs and a sniper rifle. The heavy weapons company's two machine-gun platoons normally had four M1919A4 light guns, but for Kiska they had four M1917A1 heavy MGs and two .50cal guns. Riflemen had M1 Garands, along with one Springfield M1903A4 sniper rifle, and the corporal squad leader (right) had an M1903 fitted with an M1 grenade launcher. The upgrade in manning and weapons was prompted by the devastating Japanese "banzai charge" that had hit other troops on Attu Island in May 1943. The troops carried what gear they had on packboards; this was limited to ammunition, a poncho, wool blanket, rain suit (a synthetic resin wet-weather parka and trousers), two K-ration meals, and a D-ration chocolate bar. They were not allowed to take ashore sleeping bags, or any dry clothing other than spare socks.

### **F: PACK MULES**

The division was supposed to have just over 5,000 mules, though in Italy it proved impossible to maintain this establishment. Many claimed that a mule was twice as versatile as a jeep, but ten times as cantankerous, and it took 25 mules to carry the same load as a 2½-ton cargo truck. A mule weighed 1,000–1,200lb, and could carry up to 300lb; but 100lb of this was the weight of the M1924 Phillips pack saddle and the other tack, which included the M1917 bridle halter and M1912 halter tie rope. The 1,268lb 75mm M1A1 pack howitzer used by the division artillery could be broken down into six mule loads, exclusive of ammunition and section equipment. The metal frame of the pack saddle could be fitted with various racks, boxes, bundles and carrying bags. Here, the load is shown as two triple-tube "cloverleaf" carriers each holding six 81m mortar bombs, with a tool roll on top of the saddle holding three each axes and D-handle shovels. The absence of the breast collar (see left detail) from this rig looks strange, but is taken from the original wartime photo and several others of packed mules in the mountains.

Some, but not many "mule-skinners" became attached to their sure-footed and long-suffering animals. A common saying was that "a mule is a fool til he dies," and it took

patience to learn how to handle them – at the constant risk of quite damaging kicks, bites, rope burns, being dragged, and extreme aggravation. Officially the men were designated as pack drivers (specialty serial number 565), packers (712), or packers and drivers (745). The rope lashings fastening the load had to be completely secure, to prevent it shifting or being lost due to rough terrain or even a mule bucking, and one of the packer's key skills was the ability to balance loads properly. Mules had to be trained to accept the different loads, to being led over difficult terrain, to become accustomed to gunfire, and to swim. Men and mules together had to run the "jackass obstacle course," involving ditches, gulleys, streams, rubble, fallen trees and other obstacles.

## **G: COMBAT IN THE APPENINES**

### **G1: Rifleman**

### **G2: Sniper**

### **G3: Automatic rifleman (BAR)**

The rifle squad in the three mountain infantry regiments was armed with one .30cal M1918A2 BAR, one .30cal M1903A4 sniper rifle, and ten .30cal M1 Garand rifles, three of them with M7 grenade launchers. Prior to departing for Italy, the division was issued the new olive drab M1943 field uniform (**G1 & G3**), with a four-pocket water-repellent sateen-finish jacket into which a mohair liner could be buttoned, and loose over-trousers with cargo pockets. This could be worn over herringbone fatigues, or the OD wool shirt and trousers. It was accompanied by the M1943 field cap, and M1943 buckle-top combat boots (thus eliminating the need for leggings), and insulated M1944 shoepacs for cold and wet weather. The aim was to provide a versatile outfit replacing specialized clothing such as the parachutist and mountain uniforms. The order to hand in the mountain clothing was much resented, but Italy experienced an early spring in 1945, and by the first week of February the new uniforms generally gave adequate protection.

Some troops still retained the old 1941 Parsons field jacket, and **G2** illustrates it being worn with the division shoulder sleeve insignia. The 10th Lt Div's patch was approved on January 7, 1944, six months after the division was activated, and it was several more months before it was actually received. Its colors represented the American flag; its shape was that of a gunpowder keg, suggestive of explosive power (some troops called it the "pickle keg"), and the crossed bayonets represented the Roman X for "10". Many had hoped for crossed skis, but that was too unconventional for the Army hierarchy (in protest, some soldiers wore the patch upside-down). The "Mountain" tab for wear above the patch was approved on November 22, 1944, but was not received until May 1945. When reactivated as an infantry division from 1948 to 1958 the 10th did not wear the "Mountain" tab, but when it was once again reactivated as a light infantry division in 1986 the tab was authorized for purely traditional reasons.

## **H: AID STATION**

The 164-man regimental medical detachment had a 41-man HQ section operating an aid station. Commanded by a surgeon (major), this had a medical officer, two dentists and two veterinary officers (all captains or lieutenants). Among the enlisted men who provided the surgical, medical, dental and veterinary technicians were two aid men for the

regimental HQ company and one for the service company. The detachment's three 41-man battalion medical sections had a medical officer (captain), medical assistant (lieutenant), four medical and two surgical technicians, 18 litter/stretcher bearers, and 12 aid men – one for each of the battalion's rifle and weapons platoons. Each of the detachment's four sections had ten pack mules.

Most medics displayed the red Geneva Cross on white discs on their helmets, though some units in 10th Mtn Div used large white squares instead (**H1 & H2**); few wore the red cross armband. The individual medical equipment kit (**H2**) consisted of two expandable pouches containing removable canvas inserts with various pockets and loops, special yoke-type suspenders to carry them, and a pair of litter-carrying straps. There were three versions of the kit for medical privates, NCOs, and officers, and for each of those there were medical, dentist, and veterinarian kits each with different contents. The medical private's kit included scissors, eight field dressings, gauze compresses, adhesive bandages, three triangular bandages (for slings), tourniquet, iodine swabs, burn ointment, eye dressing, and a booklet of 20 medical tags (as held here by H2).

Several types of rigid litters were used, but paratroopers and mountain troops were provided with a collapsible type that folded down to one-third of its extended length. In the mountains it took four men to carry a litter casualty (**H3**). Hot coffee or cocoa was given to casualties to reduce the risk of shock and warm them up. The M1942 one-burner stove, plus two 1-quart cans of gasoline (**H4**), was widely issued for cooking and to boil water for sterilizing instruments (a modified version of this efficient item is still in use today). The lessons of combat showed that medics needed training in unloading weapons and setting them on "safe" (**H5**) to avoid accidents in aid stations.



**A medic tosses a rope to a comrade to allow them to pull a sled-mounted litter up a snow slope. The aid men wear the double-bag medical kits; in the 10th Mtn Div both round and square white backings to the red crosses were painted on helmets – see Plate H. (Tom Laemlein/Armor Plate Press)**



# INDEX

References to illustrations are shown in **bold**

- aid stations 22, **H**(47)  
Aleutian Islands 16, 41  
altitudes, high 3, 5, 11, 24  
amphibious operations 13, 15–16, 40  
Amphibious Training Force 9; 15–16, **E2**(46)  
Apennines 34, **37**, 41, **G**(47)  
attachments, 10th Mtn Div 38  
Attu Island 16  
awards 37, 41
- Belvedere Mt, Italy 35–36  
Brazilian Army 34, 35, 36
- cable tramways 11, 19  
Camp Carson 11, 19, 41  
Camp Hale 8, 10, 11, 12, 20, 41, **A**(43–44)  
Camp Swift 20–21, **42**  
cargo carriers 12, 20, **22**, 23, **D**(45–46)  
casualties 5, 16, 35, 35, 37, 38, 40, 41, **H3**(47)  
chronology 6–8  
climbing 4, 5, 18, 35, **B3**(44)  
cooking 7, **23**, **33**, **H4**(47)
- D-Series Maneuvers 19  
Darby, Col William 38, 40  
dogs 10, 38  
Duff, BrigGen Robinson E. 33, 38
- equipment  
backpacks 14, **39**, **B1**(44), **C2a**(45), **C2b**(45)  
cargo carriers 12, 20, **22**, 23, **D**(45–46)  
cooking 7, **23**, **33**, **H4**(47)  
crampons **B3**(44)  
goggles **B6**(44–45)  
on Kiska Island **E2**(46)  
list of 45  
litters **H3**(47), **47**  
medical **H2**(47), **47**  
mountain knife **B5**(44)  
packboards **C3a**(45), **C3b**(45)  
ropes 35  
saddles 19, **39**, **F**(46–47)  
ski-poles 14, **33**, **B1**(44)  
skis **B1**(44), **B4**(44)  
sleeping bags 33  
tents 23, **33**, **E1**(46)  
testing 9, 10, 11, 12  
*see also* weapons
- First Special Service Force (FSSF) 15–16  
footwear  
boots 4, 9, **A2**(44), **A3**(44), **B1**(44), **B2**(44), **B4**(44), **45**, **E2**(46), **G1**(47), **G3**(47)  
snowshoes 10, **E1**(46)  
Ft Lewis 10, 11  
Ft Ord 12, 15
- Garda, Lake 38, 40  
Germany 3, 3, 8, 13, 34–35, 36, 37–38, 40  
Gothic Position 34–35
- Hays, MajGen George P. 24, 33, 34  
headquarters staff 11, 18, 21, 22, **H**(47)  
health 5, 11  
horses 11, 13, 14, 21, 24  
Hunter Liggett 11, 14
- Italy 7, 8, 15, 33–40, **33**, **35**
- Japan 8, 15–17, 41  
Jones, BrigGen (later MajGen) Lloyd E. 17, 24
- Kiska Island **E2**(46), 15–17, 15
- light division experiment 12–15
- Magrath, Pfc John D. 37  
March Offensive 36  
McNair, LtGen Lesley 13  
Medal of Honor 37  
medical detachments 21, 22, **H**(47), **47**  
medical kits **H2**(47), **47**  
memorials 42  
morale 19, 24, 33  
motorized transport 23  
Mountain Training Center 11, 15, 17  
Mountain Training Group 11, 18, 19  
mountain troops  
origins of 3–5, 8–10  
structure of division 21, 22  
*see also* ski troops  
mountain warfare 3–5, 8–9, 10  
mules 4, 8, 11, 14, 19, 21, 22, 24, **36**, **39**, **40**, **F**(46–47)
- National Ski Association 6, 9, 10, 17  
National Ski Patrol 6, 10, 17, 18
- officers, senior 24, 34  
Operation *Cottage* 15–17
- physical fitness 5, 11, 20–21  
Po Valley 36, 37–38
- rations 5, 7, **39**  
recruitment 10–11, 17, 18  
rifle platoons 24  
Riva Ridge, Italy 35–36
- ski troopers 7, **20**, **33**  
in Italy 35  
origins of 8–10  
recruitment 10–11, 17, 18  
training 5, 9, 10, 11–12, **12**, 17, 18, 24, **44**, **B**(44–45)  
uniform 5, 9, **12**, 14, 19, **44**, **B**(44–45), **C1**(45)  
Spring Offensive 37
- T15 (M28) Weasel 12, 20, **22**, 23, **D**(45–46)  
T24 (M29) Weasel 20, **22**, **D**(45–46)  
Tactical Groups 15–16, 17  
tactical training 11, 18, 21  
Task Force 45: 34  
Task Force Darby 38  
Task Force Duff 37–38  
terrain, difficult 3–5  
toboggans 20, **22**  
training  
amphibious 15  
balance of 11–12, 24  
Camp Carson 11  
Camp Hale 10, 11, 12  
Camp Swift 20–21  
climbing 4, 5, 18, 35, **B3**(44)  
cold weather 8–9, 14, 18–19, 24  
Ft Ord 12  
in the heat 20–21  
lack of 35  
light division experiment 13, 14, 15  
Mountain Training Center 11, 15, 17  
Mountain Training Group 11, 18, 19  
rifle-firing 12  
skiing 5, 9, 10, 11–12, **12**, 17, 18, 24  
tactical 11, 18, 21  
tramlines 35  
uniform 44, **B**(44–45)  
transport platoons 22
- uniform  
climbing 4  
cold weather **A**(43–44), **A2**(44), **A3**(44)  
corporal, service uniform **A1**(43–44)  
drying 33  
field 36, **39**, **G1**(47), **G3**(47)  
Kiska Island **E2**(46)
- medics **H**(47), **47**  
mountain clothing **A3**(44)  
over-whites 9, **C1**(45)  
private **A2**(44), **A3**(44)  
riflemen **G1**(47), **G3**(47)  
ski pins 19, **A1**(43–44)  
skiers 5, 9, **12**, 14, 19, **44**, **B1**(44), **C1**(45)  
sniper **G2**(47)  
standard winter 34, **A2**(44)  
summer 46  
*see also* footwear
- US Army  
1st Armd Div 15, 34, 36, 37, 38  
1st Special Service Force (FSSF) 15–16  
4th Inf Regt 9  
7th Inf Div 15–16  
10th Cavalry Recon Trp 11, 18, 19  
10th Engr Bn 21  
10th Inf Div 41–42  
10th Lt Div 6–7, 10–11, 13, 15, 17–21  
10th Med Bn 18, 21  
10th Mtn Cavalry Recon Trp 11, 21  
10th Mtn Div 7, 21–24, 33–40, 40–43  
10th Mtn Div (Lt Inf) 42  
10th Mtn Inf AT Bn 21, 23  
10th Recon Trp 18, 21, 36  
71st Lt Div (Pack, Jungle) 13, 14, 15  
85th Inf Div 34, 37, 38  
85th Inf Regt (Lt) 17, 18  
85th Mtn Inf Regt 21, 33, 35, 36–38, 40, 41  
86th Inf Regt (Lt) 11, 12, 17, 18  
86th Mtn Inf Regt 21, 33, 35–38, 40, 41  
87th Combat Team 15, 16, 17  
87th Inf Mtn Regt 10  
87th Mtn Inf Regt 11, 12, 21, 33  
Camp Hale 19, **A**(43–44)  
campaign streamers 41  
crest, regimental **C4**(45)  
in Italy 35, 36, 37–38, 41  
Kiska Island 15, 15–17  
89th Lt Div 13, 14, 15  
90th Inf Regt (Lt) 17, 18, 19  
91st Cav Recon Sqd 37, 38  
99th Inf Bn (Separate) 12  
110th Mtn Signal Co 21, 37  
126th Engr Bn 37, 38  
126th Engr Lt Combat Bn 18  
126th Engr Mtn Bn 11, 21  
576th At Btry (Pack) 18, 21  
601st FA Bn (Pack) 11, 12, 17  
602nd FA Bn (Pack) 11, 12, 17  
604th FA Bn (Pack) 12, 18, 21  
605th FA Bn (Pack) 17, 18, 21  
616th FA Bn 18, 21, 23  
701st TD Bn 37, 38, **39**  
710th Ord Lt Maint Plat 18, 21  
727th AAA MG Bn 18, 21  
751st Tank Bn 37, 38  
1125th Armd FA Bn 21, 23, 38  
Fifth Army 15, 34, 35, 36
- veterans 41
- weapons  
ammunition 19, **22**, **33**, **36**  
antitank guns 23, **39**  
carbines 5, 19, 24, **33**, **44**  
flamethrowers 23  
grenade launchers **E2**(46), **G1**(47)  
howitzers 8, 21, 23, **38**, **F**(46–47)  
machine guns 21, 22, **22**, **37**, **E2**(46)  
mortars 21, 22, **22**, **F**(46–47)  
rifles 9, 12, 14, 22, 24, **33**, **36**, **E2**(46), **G1**(47)  
tank destroyers 23, **39**  
tanks 23, **36**, **39**  
water-cooled guns 22  
weather 3–4, 5, 16
- zipline technique 18

## Related Titles - Men-at-Arms Series

---

<b>epub ISBN</b>	<b>PDF ISBN</b>	<b>No.</b>	<b>TITLE</b>
9781780967684	9781780968261	3	Argyll and Sutherland Highlanders
9781780967691	9781780968278	10	The Buffs
9781782001263	9781782001577	14	The English Civil War Armies
9781780967707	9781780968285	15	Foot Grenadiers
9781780967714	9781780968292	32	United States Marine Corps
9781780967721	9781780968308	33	The US Cavalry
9781782001485	9781782001713	37	The Army of Northern Virginia
9781780967875	9781780968414	40	The British Army of the Crimea
9781780965499	9781780965505	45	Napoleon's Polish Troops
9781780963655	9781780963648	86	Samurai Armies 1550–1615
9781849089623	9781846036989	183	Modern African Wars (1)
9781849089616	9781846037009	202	Modern African Wars (2)
9781780961385	9781846037016	209	The War in Cambodia 1970–75
9781849089609	9781849089531	242	Modern African Wars (3)
9781780962399	9781780962481	432	Japanese Special Naval Landing Forces
9781780963402	9781780963396	434	World War II German Police Units
9781780963532	9781780963525	437	The Spanish-American War and Philippine Insurrection
9781780962344	9781780962467	442	Queen Victoria's Highlanders
9781780963341	9781846037955	449	The Royal Hungarian Army in World War II
9781780963600	9781849080965	453	Armies of the East India Company 1750–1850
9781780963662	9781846038945	455	US Armed Forces in China 1856–1941
9781780963631	9781849081825	458	Army of the Republic of Vietnam 1955–75
9781780962375	9781849083270	461	French Foreign Legion 1872–1914
9781780962856	9781849084840	465	Brazilian Expeditionary Force in World War II
9781849088282	9781849084215	468	World War II Soviet Armed Forces (2)
9781849089371	9781849085427	470	Roman Centurions 753–31 BC
9781849089388	9781849084581	471	Adowa Campaign
9781849089395	9781849085083	472	Irish Rebellion
9781849088886	9781849085403	473	New Zealand Expeditionary Force 1914–19
9781849089012	9781849084178	474	The Chaco War 1932–35
9781849089029	9781849085984	475	Spanish Army in North America c.1700–1783

---

**OSPREY**  
PUBLISHING

First published in Great Britain in 2012 by Osprey Publishing,  
Midland House, West Way, Botley, Oxford, OX2 0PH, UK  
44-02 23rd Street, Suite 219, Long Island City, NY 11101, USA  
E-mail: info@ospreypublishing.com

OSPREY PUBLISHING IS PART OF THE OSPREY GROUP

© 2012 Osprey Publishing Ltd.

All rights reserved. Apart from any fair dealing for the purpose of private study, research, criticism or review, as permitted under the Copyright, Designs and Patents Act, 1988, no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, electrical, chemical, mechanical, optical, photocopying, recording or otherwise, without the prior written permission of the copyright owner. Enquiries should be addressed to the Publishers.

A CIP catalog record for this book is available from the British Library

Print ISBN: 978 1 84908 808 4  
PDF ebook ISBN: 978 1 84908 809 1  
ePub ebook ISBN: 978 1 78200 304 5

Editor: Martin Windrow  
Page layout by Ken Vail Graphic Design  
Index by Sharon Redmayne  
Typeset in Helvetica Neue and ITC New Baskerville  
Originated by PDQ Media, Bungay, UK  
Printed in China through Worldprint Ltd.

12 13 14 15 16 10 9 8 7 6 5 4 3 2 1

Osprey Publishing is supporting the Woodland Trust, the UK's leading woodland conservation charity, by funding the dedication of trees.

[www.ospreypublishing.com](http://www.ospreypublishing.com)

TITLE PAGE:

**From a position turned into a mudhole by the thaw of early spring 1945, an 81mm mortar squad lay down a barrage in support of one of their battalion's rifle companies. The long packing tubes indicate that they are firing a high percentage of the heavy type of HE rounds, more effective against bunkers. (Tom Laemlein/Armor Plate Press)**

## Acknowledgements

The author is indebted to Tom Laemlein of Armor Plate Press for his invaluable photographic support; to Jeff Hunt of the Texas Military Forces Museum, and Kent Bolke of the 10th Mountain Division and Fort Drum Museum

## Artist's Note

Readers may care to note that the original paintings from which the color plates in this book were prepared are available for private sale. All reproduction copyright whatsoever is retained by the Publishers. All enquiries should be addressed to:

Peter Dennis, "Fieldhead," The Park, Mansfield, Nottinghamshire NG18 2AT, UK, or email [magie.h@ntlworld.com](mailto:magie.h@ntlworld.com)

The Publishers regret that they can enter into no correspondence upon this matter.

© Osprey Publishing. Access to this book is not digitally restricted. In return, we ask you that you use it for personal, non-commercial purposes only. Please don't upload this ebook to a peer-to-peer site, email it to everyone you know, or resell it. Osprey Publishing reserves all rights to its digital content and no part of these products may be copied, stored in a retrieval system or transmitted in any form by any means, electronic, mechanical, recording or otherwise (except as permitted here), without the written permission of the publisher. Please support our continuing book publishing programme by using this e-book responsibly.

**Every effort has been made by the Publisher to secure permissions to use the images in this publication. If there has been any oversight we would be happy to rectify the situation and written submission should be made to Osprey Publishing.**

### Abbreviations used in this text:

AAA	antiaircraft artillery	Lt	light
AT	anitank	Med	medical
FA	field artillery	MTC	Mountain Training Center
BAR	Browning automatic rifle	Mtn	Mountain
Bn	battalion	Plat	platoon
Btry	battery	QM	quartermaster
Co	company	Recon	reconnaissance
Det	detachment	Regt	regiment
Div	division	SMG	submachine gun
Engr	engineer	SP	self-propelled
FSSF	1st Special Service Force	TD	tank destroyer
HHC	headquarters & headquarters company	TF	task force
HQ	headquarters	Trp	troop (company-size cavalry unit)
Inf	infantry		