The dull roar of the engines on the lead C-47 drowned out the furious beating of Captain Frank Lillyman's heart. All the training exercises in which he had participated were about to be put to the test. The red light above him turned to green. A sharp blast of cold air signaled that the door was now open. "Stand up, hook up, stand in the door..." these words the jump master had said a hundred times as recruits progressed through training at Fort Benning. Now Benning was 5,000 miles away, and Normandy was directly below. He jumped out into the night, "One-one thousand, two-one thousand, three-one thousand..." a sudden jerk and his canopy was deployed and open. Four seconds, 4 million thoughts and 400 feet later the earth smacked up on him and knocked him to the ground. He released his chute harness, chambered a round into his gun and looked at his watch. It was 15 minutes past midnight. It was D-Day, Tuesday, June 6, 1944.

Captain Frank Lillyman, a pathfinder with the 101st Airborne Division, was the first Allied soldier to land in France as part of Operation Overlord, D-Day. Eighteen other men followed him out of that C-47, and before dawn nearly 12,000 other paratroopers from the 82nd and 101st Airborne Infantry Divisions would join him on the ground and in the

---

The semi-automatic M1 Garand (top) was the principal U.S. infantry arm during World War II. It was chambered for the .30-06 service cartridge and held eight rounds. Some Paratroopers were issued with M1903A4 sniper rifles (bottom). These five-shot bolt-action repeaters were variants of the M1903 Springfield. They were topped with 4X Lyman or Weaver scopes.

By Philip Schreier
marshes west of Utah Beach. Their objective was to seize and keep open vital crossroads, bridges and exit causeways as well as hamper any German counterattacks designed to push the U.S. 4th Division back into the English Channel.

Utah Beach played an important part in the overall success of the entire invasion plan. Utah was the westernmost landing area and as such would be the jumping-off point for the main thrust of the American effort to capture the Cherbourg Peninsula and provide the invasion forces with a suitable port of entry into Europe. Important tasks called for reliable men to accomplish the job. The Airborne forces of the U.S. were selected due to their remarkable fighting record and ability.

The Garand is loaded through the top of the receiver by means of an en bloc steel clip. When the last round has been fired, the clip is ejected from the magazine.

When war broke out in Europe in 1939, the United States did not even have a parachute infantry regiment or an airborne division. It wasn't until 1940, and the lessons learned from watching the German blitzkrieg, that General William Lee was directed to form the first U.S. parachute test platoon and eventually the U.S. Airborne Infantry school at Ft. Benning, Georgia.

Lee formed an elite fighting force within the U.S. Army. Distinctive insignia, boots, uniforms, weapons and equipment all served to establish an esprit de corps that made even Air Corps pilots envious. And not unlike most elite units, they earned their extra pay by fighting and dying in higher
Soldiers were issued with an M5 Assault gas mask in a rubberized cover. These were generally “lost” fairly early during the operation.

percentages than anyone else. By nightfall of D-Day fully three-quarters of the Airborne forces in Normandy were either casualties or separated from their divisions. Their first objective in Normandy was to open the way, a task that they were still engaged in when forced to leave France and regroup in England on July 13, D-Day + 37.

Uniforms
In October 1940 the 501st Parachute Infantry Battalion became the first unit of its kind in the U.S. Army. Its commander, Major William M. Miley, set about the daunting task of creating a new breed of infantryman. For these new soldiers, special uniforms, equipment and firearms would be needed to make them not only effective fighters but distinctive from all other infantry units. Maj. Miley enlisted the talents of Captain William P. Yarborough, who not only designed the paratroopers’ uniform but also the jump wings, jump boots and traditions such as prop-blast punch that remain Airborne institutions to this day.

Yarborough’s design for a new uniform resulted in the distinctive M1942 jumpsuit, a two-piece cotton-twill outfit that was not only comfortable and easy to maneuver in but also practical and generously endowed with plenty of pockets. The suit was so popular and perfect for combat conditions that its design was eventually adopted by

The 1903A4 sniper rifle chambered the standard .30-06 round. While its optics were marginal, it served well enough, though it was not up to par with the British No. 4T or many of the German K98k snipers.

Though intended for use on the wrist, this style of plastic compass was attached to the equipment in a number of creative ways.

WRIST COMPASS
An increasingly difficult item of equipment for collectors to find is the standard airborne trooper’s wrist compass. The green or brown plastic compass was outfitted with either a cotton or leather strap and was small (two to three inches in diameter). It had a magnetic needle coated in iridescent (glow-in-the-dark) paint. Most contemporary accounts rate this as a substandard and fragile article of equipment.
the Army during the 1960s and used extensively throughout the war in Southeast Asia.

Furnished in varying shades, from olive drab to khaki, the '42s were often reinforced with canvas duck salvaged from old Army tents and duffel bags. These reinforcements were performed by the riggers in each regiment. The men who dropped into Normandy were thankful for the extra layers of canvas on stress points such as knees, elbows and pocket seams. Riggers also added lengths of sewn canvas cord to the cargo pockets on the trouser legs in order to allow each man to tie down equipment and items prone to making noise or falling loose while running.

The four-pocket blouse had a falling collar with adjustable snaps, a waist belt and an extra pocket near the collar that held the parachutist's switchblade knife, which enabled him to free himself from his risers if he got hung up. Riggers often sewed extra pockets to the sleeves to add more carrying room for necessities such as grenades or cigarettes. The suits were generously cut to wear with heavier undergarments and had tapered legs and button cuffs to minimize the effect that the wind had on them when they jumped.

The tapered legs on the trousers fit nicely into the paratrooper's most prized possession, his jump boots. Another design by Yarborough, the jump boots were 10-inches-high brown leather, cap-toed boots with stitching and reinforcements to give a paratrooper needed support in the ankle and foot. Yarborough's design had improved upon boots he

Loading the M1 Carbine was as simple as taking a magazine from its pouch, inserting it in the mag well and operating the bolt to chamber the first round.
had seen worn by members of the U.S. Forest Service who wore them while “smoke jumping,” fighting fires in the Pacific northwest. Soon the bloused trouser legs of an Airborne soldier was as distinctive to this branch of service as were their jump wings. The boots were manufactured by numerous companies such as Corcoran, Endicott-Johnson, Georgia Shoe, Herman Shoe & Boot and International Shoe among others. However, to paratroopers they were and still are known just simply as Corcoran’s.

Equipment
When the first Parachute Test Platoon began practicing jumps, attention was immediately turned to securing a safe form of head gear. Sporting-goods stores in Georgia were quickly wiped out of Riddell football helmets, and orders were placed with the company to manufacture more. The stop-gap plastic helmets were fine for training exercises but unsuitable for combat. Designers soon came up with a combat helmet engineered to provide maximum protection from falls and still serve its purpose as combat headgear. The standard M2 helmet was used with a specially designed liner that had extra webbing to protect the neck and a leather cupped chin strap to secure the helmet during the jump. (Note that the chin cup was oval in shape, not the hideous oversize square rig that John Wayne sported in the D-Day cinema classic *The Longest Day.*) Most chin straps were secured by a fixed bale (D-ring) that differed from regular M2

The sights on the M1 Carbine involved a simple flip rear graduated to 150 and 300 yards. The front sight was a simple notch, set within a pair of protective “wings.” Notice the “Inland” markings. Inland was the only manufacturer of the M1A1s.
helmets that had a swivel ring attachment.

Those airborne troopers who jumped into darkness the morning of June 6th tried a number of methods to camouflage their appearance. Helmets were covered with a variety of netting, used not only to secure strips of burlap called scrim that helped break up the outline of the helmet against the skyline, but also served as a handy location to affix the para's first-aid pouch. Some team leaders were given luminous disks, filled with a glowing radioactive material that was common on wristwatch faces, to identify them, and these were often affixed to the back of the helmet.

Paratroopers also carried a special knife to assist in freeing them from the chutes if they found themselves "hung up" on landing. This switchblade knife, officially known as the M2 and made by the George Schrade Co., was kept in a special pocket near the throat of the M42 jumpsuit. Despite modern impressions of a switchblade giving one an edge in a street fight, the M2 was not designed for fighting. Its switchblade operation enabled a trooper to cut himself free and was not rugged enough to be a practical fighting weapon.

The M3 fighting knife, however, was a very fine fighting weapon and was favored by paras. The M3 was usually tied to the leg in a leather or fiberglass scabbard with the tip tucked into the top of the jump boot to provide easy and quick access in a time of need. Nearly one dozen manufacturers are known, with Camillus being the most noted. The brass-knuckled M1918 fighting knife was also highly regarded, and numerous

American-flag distinctions were worn on the left sleeve so that Yanks would be distinguished from other Allied soldiers.

Distinguishing unit patches (82nd Airborne shown) were sewn to the shoulders of the M1942 Jump Jacket.

**ARMBANDS**

During the Allied invasion of North Africa, American troops were issued with gauze or olicloth armbands that had a 48-star U.S. flag printed on them to distinguish them from the forces of other Allied nations. (The thought was that the French defenders would not shoot Americans but might turn their guns on the British.)

Prior to D-Day these armbands were again issued to the men of the 82nd Division, who either attached them directly to their right sleeve with a few safety pins or cut them out and sewed them directly to their M42 jump jacket.

It would seem as though the men of the 101st would have the same need for identification as the men of the 82nd; inversely the same holds true that the men of the 82nd would have use for the armbands that were issued exclusively to the 101st. Why both divisions were not issued the same equipment remains a mystery.
PARACHUTES

On the evening of June 5, 1944, the U.S. Airborne Paratrooper ascended into C-47s in England and descended in 1-5 parachutes into occupied Normandy. The parachute they all used was officially known as the T-5. This chute and its reserve chute was standard among the European theater airborne units. It had a camouflaged canopy that was made of natural silk and consisted of 28 panels, triangular in shape and held together by 28 22-foot-long cables. The harness consisted of four straps, two that ran through the legs and two over the shoulders and all attached at the chest. D-rings on the side of the main chute pack allowed the soldier to attach equipment such as a Griswold bag that held either a Garand or Springfield rifle.

The chute was deployed from a 15 foot static line that was hooked up to the interior of the C-47. The reserve chute, slightly smaller than the main chute by four feet per panel, was deployed by pulling a D-ring ripcord and was attached to the front of the parachutist's harness.

CRICKETS

The 1962 movie The Longest Day highlighted the use of toy "crickets" during the nighttime airborne drop into Normandy. Their use was intended to provide each paratrooper with a way of identifying a friendly comrade in the dark when scattered throughout the Norman countryside.

Many myths have cropped up concerning the use of these "crickets." The most common belief is that the click - counter click idea was a last-minute concept that resulted in the shelves of numerous British toy stores being emptied of the dime store novelties in order to supply the 12,000 American paratroopers. The fact of the matter is that General Maxwell Taylor, commanding the 101st Division, is alone responsible for the concept and it was done with enough forethought so that the clickers were actually manufactured to desired specifications and made in enough numbers to supply all the members of the 101st. The 82nd was not issued the clickers.

The brass and steel cricket measures 2x1x3/8 inches and is perforated with a hole to facilitate its attachment to the uniform or equipment for easy access. Genuine and documented clickets are perhaps the rarest of all airborne equipment items.

The author was recently presented with a toy store cricket that was fabricated to look like a frog. It had a "Made in the USA" makers mark on the reverse and was a museum donation from a member of a U.S. signal corps unit that arrived in Normandy on D-Day +3. Now how a U.S. made toy found its way to England and why a REMF unit would need them continues to be a mystery to the author.
contemporary photographs show that this knife saw a great deal of use as well.

Field gear used by paras was the same issue equipment used by the majority of infantry with a few exceptions. Parachute riggers, in addition to reinforcing jump-suits, also manufactured a number of speciality pouches that served the needs of the paratrooper. Rigger-made ammo pouches replaced the standard 10-pocket style and made it easier to access ammunition. Additional pouches were made up to hold sub-machine-gun magazines as well as grenades.

The pathfinder unit that Captain Lillyman led carried an inventory of special equipment to establish the DZ (Drop Zones for paras) and LZ (Landing Zones for gliders). Eureka transmitters as well as air traffic control lamps and panel markers all were invaluable in the effort to put men on the ground in the right spot.

**Firearms**

Ask a soldier who has seen combat which gun was the most effective and one answer is common: the M1 Garand. General Patton said it was "The finest battle implement ever designed." To paratroopers, the Garand was the most effective firearm that they had in their inventory. The eight-shot, semiautomatic

First-aid kits were carried in a number of places, the most favored being the ankle or on the helmet. Jump boots were peculiar to Airborne.

**BOOTS**

The paratrooper had distinctive equipment that readily identified him as a member of an elite fighting unit. Chief among the distinguishing equipment was the jump boots that most paratroopers wore.

Commonly called Corcoran's, after the best known of the manufacturers, the 10-inch-high brown leather boots had a reinforced toe and heel held firm by 12 sets of eyelets that were laced up, sometimes in elaborate fashion, with cotton laces or leather thongs. The boots were manufactured by numerous companies including Corcoran, B.F. Goodrich, Endicott-Johnson, Georgia Shoe, Herman Shoe & Boot and International Shoe among others.

The common infantry two-buckle boot was also used after it was introduced, but it was never the preferred boot of the airborne divisions.
Bergmann

'Machine Pistol'

Used by Germany in World War I, this rapid-fire 9mm was the most successful submachine gun of the conflict, and it lived on for many years thereafter. • By Philip Schreier

In 1916 the dark storm clouds of war that had covered Europe stalled with no signs of clearing anytime soon. The armies of the Allies and Central Powers settled down into months of stalemate and watchful waiting. Each side feverishly worked on plans to gain an upper hand in the fighting, some secret weapon or approach to the fighting that would give them unbroken open field running through the enemy lines.

Deep inside the German war machine, Hugo Schmeisser was perfecting a new kind of weapon that would eventually revolutionize warfare from its introduction in 1918 through armed conflicts happening today.

Ever since the American Civil War when Dr. Richard Gatling developed a rapid-firing gun,
Theodore Roosevelt, wielding a Model 1892 A&N recovered from the sunken battleship Maine and given to him by his brother-in-law, Navy Capt. W.S. Cowles, fired at two Spaniards at a range of about 10 yards, missing one and killing the other. But despite Roosevelt's (and others') success with the New Army & Navy, some soldiers were having reservations about the .38 Colt's lack of power.

The problem came to a head during fighting in the Philippines. A typical instance occurred in 1905 and was later recounted by Col. Louis A. LaGarde.

"Antonio Caspi, a prisoner on the island of Samar, P.I. attempted escape on Oct. 26, 1905. He was shot four times at close range in a hand-to-hand encounter by a .38 Colt's revolver loaded with U.S. Army regulation ammunition. He was finally stunned by a blow on the forehead from the butt end of a Springfield carbine."

Lest one think the bullets might have been badly placed, LaGarde goes on to note that three bullets entered the chest, perforating the lungs. One passed through the body, one lodged near the back, and the other lodged in subcutaneous tissue. The fourth round went though the right hand and exited through the forearm.

While many tried to blame the problem on the "fanatical nature" of the Moro tribesmen, the Americans were encountering, it was difficult to escape the fact that the .38 just didn't have what it takes. As a result, .45 Single Actions were carried by many men, and M-1902 versions of the 1878 Colt DA with larger triggerguards and longer triggers (said by some to allow the smaller Filipinos to use two fingers to fire the gun) were issued to the Philippine Constabulary.

Much has been made of the Colt Army & Navy's double-action deficiencies, but I must admit over the years I've seen scores of these guns, both military and civilian, and unlike many Lightings I've encountered, their mechanisms generally seemed to be in good order—taking into account the amount of use a particular revolver has been subjected to.

While not as serviceable as later Colts and Smith & Wessons, the Army & Navy was an important weapon for no other reasons, I believe, than it legitimized the use of the swing-out cylinder and, rather backhandedly, caused the U.S. military to go back to .45 caliber, which ultimately resulted in the adoption of the superb Model 1911 Government Model.

By the time production ceased in 1907 (the gun would be kept in the government inventory for several years after that) more than a quarter-million versions of the A&N had been made. Not a bad track record for an arm that many consider something of a failure.
inventors had been looking for ways to make such repeaters a staple of the infantry's muscle. Hiram Maxim, an American living abroad, invented what we consider the first practical machine gun in the 1880s. It was a heavy, belt-fed weapon that fired standard rifle cartridges at a high cyclic rate and was cooled by a water jacket that trapped and recycled escaping steam. They were heavy guns weighing as much as 136 pounds (62 kg) and became a staple of the British Forces (as the Vickers Gun) and the German forces (as the MG.08 Maxim). A lighter, 40-pound (18 kg) and considered more mobile version of the MG.08 was introduced in 1915 as the MG.08/15 light machine gun. Still cumbersome and bulky, this weapon was not the intended "light machine gun" that the infantry had hoped for.

When the First World War broke out in August 1914, an Italian army Major named Abiel Betel Revelli began development of a full-auto weapon that would become the world's first "submachine gun." The terms "machine gun" and "submachine gun" indicate a weapon that fires full auto with rifle ammo (MG) or pistol ammo (SMG).

The gun Revelli developed and patented in 1915 fired a 9mm Glisenti pistol round at an astounding rate of 3,000 rounds a minute and was named the Villar Perosa after the area in the Italian province of Turin where it was designed and manufactured. It weighed in at 14 pounds (6.4 kg) and had twin barrels and a spade-type grip/trigger group. It did not see much use in the First World War as a light infantry weapon in the manner that subsequent submachine guns would be employed. The Villar Perosa was used behind a bullet shield and in a typically defensive manner. Although it technically dates as the premier SMG, the true first SMG, as we currently view SMGs, fell to the Maschinenpistole 18, I (MP18.I) manufactured by the Theodore Bergmann Weapons Factory in Suhl, Germany, and known today as the Bergmann MP18.

In a strange, yet ironic twist of fate, the Bergmann MP18 was actually designed by Hugo Schmeisser and not Theodore Bergmann, for whom the gun is named. The gun that more commonly bears Hugo Schmeisser's name, the Schmeisser MP38/40, was actually a design produced by the Erma Factory in Erfurt, Germany. It was based on Heinrich Vollmer's successful Erma EMP (ERMA Maschinen Pistole) introduced in 1930. It is thought that the reason for the misnomer is due to a badly tran-
A Bergmann MP18.1 showing sling and 32-round trommel magazine.

The rearward sweep of the magazine angle made the MP18.1 slightly awkward and gave it the feeling of being off balance.

The tube-like receiver of the MP18.1 illustrates the rear notch that served as the safety and the simple L-shaped leaf sight that had apertures for 100 and 200 meters.

In 1915 the German Rifle Testing Commission set about trying to find a suitable light submachine gun from its headquarters in Spandau. One of its first attempts was to convert the Mauser 1896 pistol and the P08 Artillery Luger into full-auto function. Both guns were successfully converted but proved to be too difficult to manage under full-auto conditions. Both guns were prone to heating up too fast, as well as jamming due to the excessive fouling that gummed up the workings of the low-tolerance mechanisms.

A different route would have to be explored. Hugo Schmeisser, working at the Theodor Bergmann Weapons Factory in Suhl, had been experimenting with the Bergmann pistol in an attempt to convert it to full auto. He eventually designed a short full-auto rifle with a wood stock that was blowback operated and fired full auto only. Prototypes were tested in the fall of 1917 and early 1918.

The gun worked from an open-bolt position, which helped prevent any rounds from "cooking off" while stationary in the gun's breech. The safety was a simple notch cut into the receiver of the gun that was enabled by drawing the hook-shaped bolt handle rearward and pulling up one-quarter turn, resting the bolt handle into the cut-out. It was fed by a 32-round magazine that was currently being produced for use with the P08 Artillery Luger. Known as the Trommel or drum magazine, it is also known as the "snail drum" magazine. The Trommel magazine was interchangeable with the one manufactured for the Luger, with one exception: The magazine housing on the Bergmann lacked a stopping notch that would keep the magazine from protruding into the breech of the gun. A steel collar was designed that slid down the shaft of the magazine and prevented it from going too far into the receiver. A loading tool