



In World War II, troops came on parachutes and in gliders, and the pathfinders helped them get there.

# From Air to Ground

By Bruce D. Callander

**I**n the July 1943 invasion of Axis-held Sicily, the Allies made their first large-scale use of airborne forces—paratroopers and glider-delivered soldiers. It also was nearly the last use of such forces. Everything that could go wrong did go wrong.

High winds on the first attempt made the flight from North Africa difficult. Many units missed their drop and landing sites. On other attempts, anti-aircraft gunners mistook friendly aircraft loaded with paratroopers for the enemy and shot them down.

Afterward, Army officials in Washington, D.C., wanted to scrap the idea of mass airborne assaults and only use such troops in small engagements. Gen. Dwight D. Eisenhower, Supreme Allied Commander Europe, ordered an investigation. It concluded that the airborne concept was sound, but it called for more training of the units, better communications, and improved systems for identifying drop and landing zones.

Airborne troops got their second chance in the September 1943 Allied assault on mainland Italy. For this, the Army created small units of

paratroopers called “pathfinders.” It was their job to jump in ahead of the main force and mark landing and drop zones with colored lights, flares, panels, and smoke.

These pathfinders were equipped with a new type of radar unit, called “Eureka,” which sent signals to a new receiver type, called “Rebecca,” which was located in the lead aircraft of a troop carrier armada. Eureka acted like a beacon and guided the aircraft to the proper landing area.

The success of the Italian operations helped save the entire airborne approach from oblivion.

## Pathfinders Pave the Way

The use of these pathfinders continued throughout the war. They made it possible for the gliders and

paratroopers to operate successfully.

On D-Day, the Allies’ vast June 6, 1944, invasion of Nazi-held France, airborne elements went in before the main force hit the beaches in landing craft. Pathfinders preceded the other airborne forces by 30 minutes to direct the jumps and glider landings.

The airborne forces were routed around the Allied naval forces in the English Channel to avoid losses to friendly fire. On the ground, the troopers wore small US flags on their uniforms and carried small clickers or “crickets” to identify themselves to each other. Other efforts were made to improve communications between the individual aircraft carrying troops and towing gliders.

However, weather was marginal





*Above, gliders land with loads of troops and equipment behind enemy lines in Holland during Operation Market Garden in World War II. At right, soldiers survey a glider that cracked up during the operation, which was the largest airborne assault in history. Pathfinders preceded these troops into the area, fighting off German assaults, to aid the glider landings.*





**Members of the 1st Air Commando Group in India gather for a photo before taking off on a glider mission in Burma. Among well-known commandos was actor Jackie Coogan, kneeling at right with a gun on his left arm.**

and visibility was poor. Pathfinder teams from the 82nd and 101st Airborne Divisions that tried to drop into France were hampered by cloud cover and heavy anti-aircraft fire. In addition, many of the transport pilots were inexperienced. Several pathfinder groups were dropped in the wrong places and some of their equipment didn't work.

The result was that many of the paratroopers in the main force landed miles from their intended zones, and many of those delivered in gliders also turned up in the wrong places. Those who survived, however, formed into small groups, did what damage they could, and eventually worked their way back to their units.

Three months after Normandy, troopers of the 82nd Airborne Division and the 101st Airborne Division jumped into Holland as part of Operation Market Garden, the largest Allied airborne assault in history. Again, the main forces were preceded by pathfinders. US paratroopers made it to their targets, but British and Polish forces ran into trouble, as did the overall operation.

Later that winter, airborne troopers went to relieve the American troops pinned down by German forces in the Battle of the Bulge. Though short of cold-weather gear and other equipment, they managed to stop the German attack.

In the China-Burma-India Theater,

paratroopers and gliders were used less for large invasion operations and more for smaller strikes, organized into newly formed air commando units. In Burma, for example, Lt. Col. Philip G. Cochran helped form the 1st Air Commando Group, which eventually had more than 300 aircraft, ranging from P-51s to B-25 and from C-47s to CG-4 gliders.

In March 1944, Allied troop carrier units and an Army Air Forces air commando group landed gliders behind enemy lines in central Burma. They brought in 9,000 British raiders, 1,300 pack animals, and 254

tons of supplies and airfield construction equipment.

If the early use of airborne forces had been largely experimental and replete with mistakes, by 1944, it had become well defined. That year, *AAF: The Official Guide to the Army Air Forces* was able to describe how such operations were conducted or, at least, how they should be.

### Jointness

The World War II airborne warfare operations provided an early example of close "joint" cooperation between air and ground forces. Troop carrier and glider pilots belonged to the Army Air Forces. Their customers, the troops who jumped or glided into combat, were the Army ground forces or, in some cases, members of the British or other Allied forces. The components cooperated toward a common end.

As the operations became more clearly defined, the training of airborne forces also became standardized. Such was the case with glider pilots.

Unlike those who trained to be fighter and bomber pilots, those destined to fly gliders trained as enlisted men. They had to be males between the ages of 18 and 26. The other main requirement listed in *The Official Guide to the Army Air Forces* was for "125 hours flying either in a glider or power aircraft."

The flying-time requirement was not as stringent as it sounds today.



**During World War II, troops at Ft. Benning, Ga., load a 155 mm howitzer in the back of a CG-14, the Army Air Forces' largest glider. Pathfinders and gliders, carrying equipment, supplies, or troops, became key Allied tools in the war.**



Many young men had time in recreational gliders and private airplanes or even in pilot training. The six-month-long glider course began with ground training. This phase began with a month of commando-type schooling in personal combat and weapons. If the trainees were not already aware of it, this should have alerted them to the fact that, once landed, they were expected to fight.

Another month covered glider repair and maintenance. Then followed a month devoted to flying light powered aircraft, including instruction in making power-off dead-stick landings. It was not until the fourth month that students began to fly actual training gliders. At the same time, they studied meteorology, navigation, and selected academic subjects. The final month covered advanced glider



**An L-1A tows three gliders at once during training. Glider pilots underwent the same training as other transport and bomber pilots, then picked up their glider skills with their units.**



**During the Vietnam War, a Combat Control Team member directs air traffic from his jeep at an isolated strip. CCTs were among the first US troops sent in, performing as either ground or airborne forward air controllers.**

flying, the trainees building proficiency in tactical uses of the aircraft.

Early in the war, enlisted men with no flying experience at all had been trained in whatever rank they held at the time and graduated as staff sergeants. Later, newly minted glider pilots were appointed flight officers or commissioned second lieutenants and sent to troop carrier units for training as team members.

At first, the AAF was critically short of training gliders. To fill the gap, aircraft builders removed the engines from light, two-seat powered airplanes called “Grasshop-

pers” and converted them into three-place gliders. The Aeronca L-3, for example, acquired a bulbous nose and became the TG-5 trainer. The Taylor-Craft L-2 and the Piper L-4 underwent similar surgery and emerged as the TG-6 and TG-8, respectively.

With time, the Army acquired some Frankfort and Schweizer models purpose-built as gliders. It experimented with a number of other models but bought only a few copies.

Typical of the paratroop-glider forces, the 101st Airborne Division was made up of three major ele-

ments: the 502nd Parachute Infantry Regiment and the 327th and 401st Glider Infantry Regiments. Some months after its founding, the division gained a second parachute infantry regiment, the 506th. It also had three artillery battalions, the 377th Parachute Field Artillery and the 321st and 907th Glider Field Artillery.

### **Land and Fight**

In October 1942, the 101st Airborne Division, known as the “Screaming Eagles,” reported for training in how to jump out of airplanes and fight a war when you land. The soldiers first had to learn basic infantry skills and then the techniques of getting into battle by unconventional means.

For a time, parachute troops and glider troops trained separately, but, by early 1943, they were training as a division. By September 1943, they were on their way to England.

The 82nd Airborne Division went through a similar training process. In April 1943, the 82nd went to North Africa as the first US airborne division to go overseas.

In addition to training basic airborne troops, the 82nd picked and trained the pathfinders, who needed not only parachuting and infantry skills but the added communications and operational skills to be the first troops to reach the battle.

Early on, the Army was able to recruit airline pilots already familiar with the C-47 as a transport, but,



**Combat controllers set up operations after a jump during an exercise near Hurlburt Field, Fla. Today's CCTs continue the World War II pathfinder tradition of being "first there."**

as the war wore on, it had to train its own.

The pilots who carried paratroopers and towed gliders underwent the same undergraduate training as other transport and bomber pilots. Typically, such men trained as aviation cadets, going through 10 weeks of preflight, taking another 10 weeks of primary flight training in a contract civilian school and 10 weeks of basic flight training under a military instructor. In advanced training, another 10 weeks, some students went to single-engine (fighter) schools and others to twin-engine (bomber-transport) training.

After graduation, pilots went through a month of transition training in combat type aircraft and then to units, where they learned skills such as low-altitude flying, glider towing, and parachute landings of both men and equipment.

Glider pilots wore wings like those of fixed-wing pilots but overlaid with the letter G. Parachutists also had a distinctive badge and, like glider pilots, received hazardous duty pay.

### Hazardous

Troops that rode gliders had a badge similar to that of the paratroopers but, early in the war, were not paid extra for it. After a few operations, however, it became apparent that riding in gliders was often more hazardous than jumping from aircraft because of their fragile

nature and lack of control in bad weather. Glider troops began to receive additional money, although it was less than the paratroopers received.

In 1941, the Army let contracts for two types of experimental troop-carrying gliders. The first called for an eight- or nine-seat transport. The second was a larger, 15-seat aircraft. Four companies were to make prototypes.

In the end, Waco Aircraft Co., of Troy, Ohio, won both competitions. It went into production first with the nine-seat CG-3. Relatively few were made and these were used largely as a trainer.

Waco's larger model, the CG-4, became a workhorse for combat operations. It was made of wood and metal with fabric covering. It had a high wing and a hinged nose section that swung upward to allow direct loading of jeeps, small trucks, or howitzers. The gross weight was as much as 9,000 pounds.

More than 12,000 CG-4s were produced by more than a dozen companies. Because of its relatively simple construction, it could be assembled by a variety of plants. Among the builders were Cessna, Ford, Gibson Refrigerator, and Ward Furniture Co. Waco refined the glider as the CG-

15 and delivered more than 400 of these.

Late in the war, one CG-15 was fitted with two radial engines and tested for use as a low-cost troop or cargo carrier, but it did not go into production. This was the reverse of an earlier experiment in which the engines were removed from a C-47 and it was tested as a glider. It had the flattest glide of any glider that had been tested at the time, but it, too, did not go into production.

The airplanes that delivered paratroopers and towed gliders most often were the durable C-47, derived from the DC-3 commercial airliner. A second troop carrier, the C-46, was added later, a few going to Europe but most to the Pacific.

### Modern Pathfinders

After World War II, the Army faced a severe drawdown and decided to disband most of its own pathfinder units. That was OK with the Air Force, which wanted only airmen to serve as forward air traffic controllers. With the establishment of an independent Air Force in 1947, USAF decided to build its own version of these specialized forces. However, it would be October 1952 before USAF sent its first 10 pathfinders to jump school. In 1953, the Air Force officially designated a Combat Control Team, or CCT.

Initially, CCTs received formal training only for the technical aspects of their work—air traffic control and radio maintenance—and attended jump school. Their specialized combat-related skills were picked up on the job or from experienced controllers.

Combat controllers have fought in conflicts from the Korean War to Operation Iraqi Freedom. Today, they work in what are called Special Tactics Teams with other Air Force special operations elements—pararescue jumpers and combat weathermen.

While the glider and glider pilot are long gone from today's combat force, the spirit of the pathfinders lives on. ■

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