Eddie Rickenbacker, famous fighter pilot of World War I, was well known as a racecar driver before the war. He went to France as a driver but transferred to the aviation division. He learned to fly on his own time and eventually joined the U.S. Army Air Service. Rickenbacker repeatedly fought the dreaded Flying Circus—a German air squadron led by the “Red Baron,” Manfred von Richthofen.

**A Personal Voice EDDIE RICKENBACKER**

“I put in six or seven hours of flying time each day. . . . My narrowest escape came at a time when I was fretting over the lack of action. . . . Guns began barking behind me, and sizzling tracers zipped by my head. . . . At least two planes were on my tail. . . .

They would expect me to dive. Instead I twisted upward in a corkscrew path called a ‘chandelle.’ I guessed right. As I went up, my two attackers came down, near enough for me to see their faces. I also saw the red noses on those Fokkers [German planes]. I was up against the Flying Circus again.”

—Rickenbacker: An Autobiography

After engaging in 134 air battles and downing 26 enemy aircraft, Rickenbacker won fame as the Allied pilot with the most victories—“American ace of aces.”

**America Mobilizes**

The United States was not prepared for war. Only 200,000 men were in service when war was declared, and few officers had combat experience. Drastic measures were needed to build an army large and modern enough to make an impact in Europe.
RAISING AN ARMY  To meet the government’s need for more fighting power, Congress passed the Selective Service Act in May 1917. The act required men to register with the government in order to be randomly selected for military service. By the end of 1918, 24 million men had registered under the act. Of this number, almost 3 million were called up. About 2 million troops reached Europe before the truce was signed, and three-fourths of them saw actual combat. Most of the inductees had not attended high school, and about one in five was foreign-born.

About 400,000 African Americans served in the armed forces. More than half of them served in France. African American soldiers served in segregated units and were excluded from the navy and marines. Most African Americans were assigned to noncombat duties, although there were exceptions. The all-black 369th Infantry Regiment saw more continuous duty on the front lines than any other American regiment. Two soldiers of the 369th, Henry Johnson and Needham Roberts, were the first Americans to receive France’s highest military honor, the Croix de Guerre—the “cross of war.”

The eight-month training period took place partly in the United States and partly in Europe. During this time the men put in 17-hour days on target practice, bayonet drill, kitchen duty, and cleaning up the grounds. Since real weapons were in short supply, soldiers often drilled with fake weapons—rocks instead of hand grenades, or wooden poles instead of rifles.

Although women were not allowed to enlist, the army reluctantly accepted women in the Army Corps of Nurses, but denied them army rank, pay, and benefits. Meanwhile, some 13,000 women accepted noncombat positions in the navy and marines, where they served as nurses, secretaries, and telephone operators, with full military rank.

MASS PRODUCTION  In addition to the vast army that had to be created and trained, the United States had to find a way to transport men, food, and equipment over thousands of miles of ocean. It was an immense task, made more difficult by German submarine activity, which by early 1917 had sunk twice as much ship tonnage as the Allies had built. In order to expand its fleet, the U.S. government took four crucial steps.
First, the government exempted many shipyard workers from the draft and gave others a “deferred” classification, delaying their participation in the draft. Second, the U.S. Chamber of Commerce joined in a public relations campaign to emphasize the importance of shipyard work. They distributed service flags to families of shipyard workers, just like the flags given to families of soldiers and sailors. They also urged automobile owners to give shipyard employees rides to and from work, since streetcars were so crowded. Third, shipyards used fabrication techniques. Instead of building an entire ship in the yard, standardized parts were built elsewhere and then assembled at the yard. This method reduced construction time substantially. As a result, on just one day—July 4, 1918—the United States launched 95 ships. Fourth, the government took over commercial and private ships and converted them for transatlantic war use.

**America Turns the Tide**

German U-boat attacks on merchant ships in the Atlantic were a serious threat to the Allied war effort. American Vice Admiral William S. Sims convinced the British to try the **convoy system**, in which a heavy guard of destroyers escorted merchant ships back and forth across the Atlantic in groups. By fall of 1917, shipping losses had been cut in half.

The U.S. Navy also helped lay a 230-mile barrier of mines across the North Sea from Scotland to Norway. The barrier was designed to bottle up the U-boats that sailed from German ports and keep them out of the Atlantic Ocean.

By early 1918 the Germans found it increasingly difficult to replace their losses and to staff their fleet with trained submariners. Of the almost 2 million Americans who sailed to Europe during the war, only 637 were lost to U-boat attacks.

**FIGHTING IN EUROPE** After two and a half years of fighting, the Allied forces were exhausted and demoralized. One of the main contributions that American troops made to the Allied war effort, apart from their numbers, was their freshness and enthusiasm. They were determined to hit the Germans hard. Twenty-two-year-old Joseph Douglas Lawrence, a U.S. Army lieutenant, remarked on the importance of American enthusiasm when he described his first impression of the trenches.

**A Personal Voice**  
*JOSEPH DOUGLAS LAWRENCE*

“I have never seen or heard of such an elaborate, complete line of defense as the British had built at this point. There was a trench with dugouts every three hundred yards from the front line in Ypres back four miles to and including Dirty Bucket. Everything was fronted with barbed wire and other entanglements. Artillery was concealed everywhere. Railroad tracks, narrow and standard gauge, reached from the trenches back into the zone of supply. Nothing had been neglected to hold this line, save only one important thing, enthusiasm among the troops, and that was the purpose of our presence.”

—*Fighting Soldier: The AEF in 1918*
Fighting “Over There”

The American Expeditionary Force (AEF), led by General John J. Pershing, included men from widely separated parts of the country. American infantrymen were nicknamed doughboys, possibly because of the white belts they wore, which they cleaned with pipe clay, or “dough.” Most doughboys had never ventured far from the farms or small towns where they lived, and the sophisticated sights and sounds of Paris made a vivid impression. However, doughboys were also shocked by the unexpected horrors of the battlefield and astonished by the new weapons and tactics of modern warfare.

NEW WEAPONS

The battlefields of World War I saw the first large-scale use of weapons that would become standard in modern war. Although some of these weapons were new, others, like the machine gun, had been so refined that they changed the nature of warfare. The two most innovative weapons were the tank and the airplane. Together, they heralded mechanized warfare, or warfare that relies on machines powered by gasoline and diesel engines.

Tanks ran on caterpillar treads and were built of steel so that bullets bounced off. The British first used tanks during the 1916 Battle of the Somme, but not very effectively. By 1917, the British had learned how to drive large numbers of tanks through barbed wire defenses, clearing a path for the infantry.

The early airplanes were so flimsy that at first both sides limited their use to scouting. After a while, the two sides used tanks to fire at enemy planes that were gathering information. Early dogfights, or individual air combats, like the one described by Eddie Rickenbacker, resembled duels. Pilots sat in their open cockpits and shot at each other with pistols. Because it was hard to fly a plane and shoot a pistol at the same time, planes began carrying mounted machine guns.

But the planes’ propeller blades kept getting in the way of the bullets. Then the Germans introduced an interrupter gear that permitted the stream of bullets to avoid the whirring blades.

Background

When the U.S. entered the war, its air power was weak. Then, in July 1917, Congress appropriated a hefty $675 million to build an air force.

Main Idea

How did World War I change the nature of warfare?

Technologies at War

Both sides in World War I used new technology to attack more soldiers from greater distances than ever before. Aircraft and long-range guns were even used to fire on civilian targets—libraries, cathedrals, and city districts. The biggest guns could shell a city from 75 miles.

Machine Guns

Firepower increased to 600 rounds per minute.

Airships and Airplanes

One of the most famous WWI planes, the British Sopwith Camel, had a front-mounted machine gun for “dogfights.” Planes were also loaded with bombs, as were the floating gas-filled “airships” called zeppelins.

Science & Technology
Meanwhile, airplanes were built to travel faster and carry heavy bomb loads. By 1918 the British had built up a strategic bomber force of 22,000 planes with which to attack German weapons factories and army bases.

Observation balloons were used extensively by both sides in the war in Europe. Balloons were so important strategically that they were often protected by aircraft flying close by, and they became prime targets for Rickenbacker and other ace pilots.

**The War Introduces New Hazards**

The new weapons and tactics of World War I led to horrific injuries and hazards. The fighting men were surrounded by filth, lice, rats, and polluted water that caused dysentery. They inhaled poison gas and smelled the stench of decaying bodies. They suffered from lack of sleep. Constant bombardments and other experiences often led to battle fatigue and “shell shock,” a term coined during World War I to describe a complete emotional collapse from which many never recovered.

Physical problems included a disease called trench foot, caused by standing in cold wet trenches for long periods of time without changing into dry socks or boots. First the toes would turn red or blue, then they would become numb, and finally they would start to rot. The only solution was to amputate the toes, and in some cases the entire foot. A painful infection of the gums and throat, called trench mouth, was also common among the soldiers.

Red Cross ambulances, often staffed by American volunteers, carried the wounded from the battlefield to the hospital. An American nurse named Florence Bullard recounted her experience in a hospital near the front in 1918.

**A PERSONAL VOICE  FLORENCE BULLARD**

“The Army is only twelve miles away from us and only the wounded that are too severely injured to live to be carried a little farther are brought here. . . . Side by side I have Americans, English, Scotch, Irish, and French, and apart in the corners are Boche [Germans]. They have to watch each other die side by side. I am sent for everywhere—in the . . . operating-room, the dressing-room, and back again to the rows of men. . . . The cannon goes day and night and the shells are breaking over and around us. . . . I have had to write many sad letters to American mothers. I wonder if it will ever end.”

—quoted in Over There: The Story of America’s First Great Overseas Crusade

In fact, the end was near, as German forces mounted a final offensive.
American Troops Go on the Offensive

When Russia pulled out of the war in 1917, the Germans shifted their armies from the eastern front to the western front in France. By May they were within 50 miles of Paris. The Americans arrived just in time to help stop the German advance at Cantigny in France. Several weeks later, U.S. troops played a major role in throwing back German attacks at Château-Thierry and Belleau Wood. In July and August, they helped win the Second Battle of the Marne. The tide had turned against the Central Powers. In September, U.S. soldiers began to mount offensives against the Germans at Saint-Mihiel and in the Meuse-Argonne area.

AMERICAN WAR HERO During the fighting in the Meuse-Argonne area, one of America’s greatest war heroes, Alvin York, became famous. A redheaded mountaineer and blacksmith from Tennessee, York sought exemption as a conscientious objector, a person who opposes warfare on moral grounds, pointing out that the Bible says, “Thou shalt not kill.”

York eventually decided that it was morally acceptable to fight if the cause was just. On October 8, 1918, armed only with a rifle and a revolver, York killed 25 Germans and—with six other doughboys—captured 132 prisoners. General Pershing called him the outstanding soldier of the AEF, while Marshal Foch, the commander of Allied forces in Europe, described his feat as “the greatest thing accomplished by any private soldier of all the armies of Europe.” For his heroic acts, York was promoted to sergeant and became a celebrity when he returned to the United States.

THE COLLAPSE OF GERMANY On November 3, 1918, Austria-Hungary surrendered to the Allies. That same day, German sailors mutinied against government authority. The mutiny spread quickly. Everywhere in Germany, groups of soldiers and workers organized revolutionary councils. On November 9, socialist leaders in the capital, Berlin, established a German republic. The kaiser gave up the throne.
Although there were no Allied soldiers on German territory and no truly decisive battle had been fought, the Germans were too exhausted to continue fighting. So at the eleventh hour, on the eleventh day, in the eleventh month of 1918, Germany agreed to a cease-fire and signed the armistice, or truce, that ended the war.

THE FINAL TOLL World War I was the bloodiest war in history up to that time. Deaths numbered about 22 million, more than half of them civilians. In addition, 20 million people were wounded, and 10 million more became refugees. The direct economic costs of the war may have been about $338 billion. The United States lost 48,000 men in battle, with another 62,000 dying of disease. More than 200,000 Americans were wounded.

For the Allies, news of the armistice brought great relief. Private John Barkley described the reaction to the news.

A PERSONAL VOICE JOHN L. BARKLEY

“About 9 o’clock in the evening we heard wild commotion in the little town. The French people, old and young, were running through the streets. Old men and women we’d seen sitting around their houses too feeble to move, were out in the streets yelling, ‘Vive la France! Vive la France! Vive l’America!’ . . .

Down the street came a soldier. He was telling everybody the armistice had been signed. I said, ‘What’s an armistice?’ It sounded like some kind of machine to me. The other boys around there didn’t know what it meant either.

When the official word came through that it meant peace, we couldn’t believe it. Finally Jesse said, ‘Well kid, I guess it really does mean the war is over.’ I said, ‘I just can’t believe it’s true.’

But it was.”

—No Hard Feelings

Across the Atlantic, Americans also rejoiced at the news. Many now expected life to return to normal. However, people found their lives at home changed almost as much as the lives of those who had fought in Europe.