



One steel cable is serving this jeep as a suspension bridge.



Here's an agile army "peep" taking to the air—as passenger.

OUR AMAZING BLITZ BUGGY

A TOOTHY Jap sniper had winged Corporal Jamie O. Sarver in the chest. Things looked mighty bad for Jamie. The marine outpost on Guadalcanal was miles from the field hospital—too far for any of his buddies to carry him back—and the jungle as tangled as an Ozark brier patch, so thick that a truck couldn't get through.

What to do? The C. O. did what any officer faced by an "impossible" transportation problem would do. He called for a jeep. Jamie was put aboard. It twisted back to the field hospital through shell holes and undergrowth—and Jamie lived to tell about it.

His story and hundreds like it have come to me since the first jeep rolled down the assembly line at the Willys-Overland plant in Toledo. Most of the stories say the same thing. From grub-toting to lightning stabs at enemy sore spots, the jeep is filling one of the greatest needs of the war. Neither we nor the army officers who worked with us in developing it ever visualized the thousand and one jobs it would do in this war.

It is unlike any other combat vehicle. This baby of the blitz has a wheel base of only 80 inches and is slightly more than three feet high. With 63 horsepower under its hood, it travels in two completely different sets of gears. One, similar to the average passenger car's, enables it to roar along a smooth road at 75 miles per hour. The other, a low-low with four-wheel drive, enables it to climb a 65-degree hill without faltering, charge through dense underbrush, cross streams half submerged, conquer the toughest desert sands, the snow on Russia's steppes, and the swamps and bogs of the jungle.

Its uses range from reconnaissance to antitank combat. With a .30- or .50-caliber machine gun mounted on it, the vehicle becomes a highly mobile and effective weapon against ground troops and planes. It will pull

Official name, General Purpose Car, but Jeep to doughboys of all nations. The fighting exploits and future uses of the vehicle which has become a symbol of U. S. might abroad

BY JOSEPH W. FRAZER

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a 37-millimeter antitank gun and get fire power quickly to places where a concentration of fire power is needed. With a few changes it makes a first-rate field ambulance that will haul four casualties and, because of its speed, save the lives of such fighting men as Jamie O. Sarver.

The jeep also acts as a "guinea pig" on doubtful terrain for half-tracks, tanks, and other heavy units. Army officers figure they can quickly retrieve a bogged-down jeep, but a heavier unit might be permanently lost. It spreads a smoke screen for attacking troops, supplies outposts with food and medical equipment, and is the only four-wheeled mechanized unit which has been successfully transported through the air.

In Australia, American doughboys were faced with the urgent task of laying an underground cable at an airdrome without interrupting field operations. Normally, it would have taken several days. But the jeep performed its usual magic. It was hitched to a plow and the ditch was dug at ten miles an hour. Close behind it came another jeep towing a roller that covered the cable and leveled the ground. The job was completed within two hours.

In Burma the British forces use the jeep for liaison work behind the lines. With its four-wheel drive, it can bounce over the roughest rice paddies and plunge across irrigation ditches. The British report the jeep excellent for night patrol work and for towing smashed planes from bomb-pocked airfields.

The last guard at Rangoon was evacuated to Lashio in jeeps. They rolled along the bumpy roads at forty to fifty miles per hour, and pulled many a three-ton lorry from the ditches along the highway. One reporter, after watching them perform in China, said they would have been a tremendous asset in the mountains and mud-bogged valleys of Greece and Albania. I think they may yet get that chance!

Recently John D. Dun, former editor of the Toledo Times, returned from a year's service as an ambulance driver with the British and Fighting French, told me he never felt completely away from home as long as he was driving our jeeps through the sands of Egypt and Libya.

"When the American four-wheel-drive vehicles arrived in great number," he said, "British generals and colonels lost no time in trading their British-made station wagons for the American cars. The jeep's ability to negotiate the desert terrain far surpassed that of British vehicles, and it was not unusual for a jeep to be called upon to rescue a three-ton truck stuck in the sand. The British used their jeeps in groups of fifty to sixty for sorties around the Rommel lines in raids which took the enemy completely by surprise. The jeep caravans," Dun added, "were able, because of their low silhouette, to hide behind sand dunes and in wadis, undetected by the enemy."

The jeep has been outfitted as a self-contained fire-fighting unit for use in defense against incendiary bombs. It can be equipped with a snow plow to clear military roads



An amphibian jeep climbs over an obstacle.



See what army jeeps can do as plow horses!



Fording a stream. No pontoon bridge needed.



These three "sightseers" taking a jeep ride on Guadalcanal are Secretary of the Navy Knox and Admirals Halsey and Nimitz.

and landing fields. With a few changes it can serve as a field telephone unit, a field radio station, a searchlight mount, and a mobile anti-aircraft unit.

Lieutenant Colonel Raymond S. Scollin of Coronado, California, tells us that "jeeps transport small quantities of vital ammunition to marine fighting outposts in lightning trips which no other vehicle can accomplish because of the almost impassable terrain; they seem ideally suited and well-nigh indispensable to operations in such areas as the Solomons."

At Henderson Field on Guadalcanal, jeeps rushed pilots to their planes for hurried take-offs when the alarm sounded warning of approaching Jap planes. Observers were whisked to their posts and reliefs secured in jeeps.

Effectively camouflaged, the scout cars were easy to hide in convenient bush clumps when an enemy force was detected. Jeeps journeyed to water holes, huts, streams, or wherever the precious fluid was to be found and, as mechanized Gunga Dins, returned in comparative safety with full canteens for all hands. Men afoot would have been all too often picked off by hidden snipers, who were foiled by the agility and speed of the jeeps.

To make the jeep even more effective in tropical areas, radio apparatus on blitz buggies has been given a "louder voice and longer ears," thus assuring the maintenance of the long lines of communication required in this type of warfare. Special generators permitting mechanized scouting parties to transmit and receive short-wave messages from command posts miles away are now being placed in these jeeps on a mass-production basis.

When evacuation of Rangoon became necessary, there were several hundred jeeps on the docks ready for delivery to the Chinese and British. It seemed probable that they all would be lost because of a lack of experienced military drivers. So officials turned jeeps over to any one

who could drive in order to get them north. In this fashion war correspondents in Burma acquired jeeps, with the understanding they were to be returned to the army after the escape from Burma. As a result, the world received speedy news, which otherwise would have been impossible, of the progress of the Burma campaign.

For instance, when the retreat reached Mandalay, that city was on fire. Correspondents visited the flaming town every day by jeep and drove back fifty miles over terrible roads and through rain to file stories from Maymyo.

Meantime jeeps were employed by the British and Chinese armies in rear-guard actions, for quick transport of machine-gun and tommy-gun crews over difficult terrains, and for sudden sallies.

JEEPS also were used as staff cars by General Sir Harold R. L. G. Alexander, Lieutenant General Joseph W. Stillwell, and lesser senior officers for maintaining constant communications. Some of these jeeps followed the Burma Road to China and now are in action there. Others managed to cross jungle and hills to India, where they now are playing an important defensive role.

The value of the jeeps in India increased enormously with the advent of the monsoon, when the whole eastern frontier was swamped. Activity at vital airfields and other strongholds might have come almost to a standstill without the sturdy four-wheel drivers, which plowed through deep mud, hauled planes to hangars and to runways, and kept supplies moving in. When the end of the rains increased the danger to the Indian frontier, the jeeps played an important role as a new type of motorized cavalry, permitting concentration of fire power where needed.

Correspondent George Lait of International News Service sent us a special dispatch a few weeks ago in which he said: "What camels were to Alexander the Great, American-



Chinese in Chungking get a close-up of the famous jeep—and like its looks!—as Yanks drive in to visit a temple.

made jeeps have proven to be for General Alexander."

Prior to the time the first jeeps arrived in the western desert, he relates, it was almost impossible for dispatch riders and messengers to travel from unit to unit by motorcycle, but today, with a thousand leaping jeeps available, British army communications are perfect.

Lait told me of an incident in North Africa which filled the hearts of Willys engineers with genuine pride. A senior officer of the Highland Division in a recent battle was caught in a Stuka raid while rushing in a jeep from one of his units to another. A 500-pound bomb landed ten yards away, overturning the jeep, riddling it with shrapnel, and killing the driver. The officer was knocked out but regained consciousness. Soldiers rushed up, vainly attempted to revive the driver, and righted the battered jeep. The officer jumped behind the wheel, stepped on the starter. The motor coughed a couple of times, then purred. The officer drove off to continue his mission.

Every Tommy on the western desert has expressed a wish to own a jeep after the war is over, Lait tells us, and so has every war correspondent.

There are thousands of other stories, too numerous to tell—stories of the jeep's part in the bloody Battle of Stalingrad, in Iceland, the Aleutians, Tunisia, and everywhere around the world where men and machines are clashing in this war.

WHEN we first considered the military advantages of the scout car—about two years before the sneak attack at Pearl Harbor—it was generally agreed among us that such a vehicle, in order to meet the rigid demands of the modern battlefield, would have to embody more power and performance, pound for pound, than any known mechanized weapon.

This idea began to crystallize in March of 1940, when representatives of several automobile manufacturers were invited by the army to Fort Benning, Georgia, to witness the demonstration of a motor-driven platform on wheels known as the "belly flopper."

This strange-looking contraption, reminiscent of the toy cars entered in the Soapbox Derby, carried a machine gun and was propelled through tall grasses and marshland with two soldiers lying flat on their stomachs. It was crude, terribly crude, but it stimulated thought. It was in reality the embryo of the jeep. The low silhouette had definite advantages for reconnaissance work, but the vehicle itself was too flimsy, too slow. To serve as an effective scout car, it would have to be stronger, more durable, more powerful, yet light, fast, and low.

The army recognized the need for such a vehicle, but its exact form and shape were still nebulous. They handed our engineers a miniature sketch, with a maximum weight spec-

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OUR AMAZING BLITZ BUGGY

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ification of 1,400 pounds and a desired carrying load of 625 pounds. In effect they told us: "Gentlemen, here is a job which we know cannot be done, but we'd like to see what you can work out."

Each firm was asked to build seventy-five experimental models. We rolled up our sleeves and went to work. Our long experience in building light-weight motor vehicles was a definite advantage, since we were able to use the same basic power plant which we developed for our automobile. Our engine was considerably heavier than the one called for in the army specifications, but it met every test with flying colors and the army asked us to deliver 1,500 of our jeeps if they could be built with a weight not to exceed 2,175 pounds.

We carefully studied every nut, bolt, and individual part in an effort to lighten the weight of this model without sacrificing any of its durability. We were determined to preserve its basic ruggedness. After careful study another model was submitted. This was the day the jeep as we know it today was actually born. After more rigid tests under simulated war conditions, the army accepted this model as standard, and today thousands of these vehicles are fighting on battle fronts from New Guinea to Kharkov.

When it became apparent that the jeep was to play an important role in Allied Nations strategy, the army decided to establish a second source of supply in case bombs or saboteurs interfered with our production. We were asked to turn over our blueprints and specifications to the Ford Motor Company, and we were happy to comply with this request, without compensation, as one of our many contributions to the war effort. Now the vehicles are rolling from the Ford assembly lines in Detroit, as well as our own in Toledo.

AND that's the history of the blitz buggy we know as the jeep. Or, better, the history of its development. The history of its performance is being written daily in dispatches from every corner of the world.

But after the smoke of battle has cleared, what of this vehicle's place in the postwar pattern? Will it be forgotten? Or have the engineering principles it embodies made a lasting impression on our lives?

I think it will be with us for a long, long time. After the Civil War it was "Forty acres and a mule." This time, why not forty acres and a jeep? The answer to that question lies in a recent report issued by R. B. Gray, an official of the Bureau of Agricultural Chemistry and Engineering of the U. S. Department of Agriculture. Gray and his associates put a jeep through stiff farm tests and found it

to be an economical new power unit with great potentialities for agriculture. He said the vehicle showed itself to be "highly useful in plowing, harrowing, and other field work." During one experiment conducted by the Department, the jeep pulled a 16-inch plow, cutting a 7-inch furrow in an acre of cotton bottom land in 1.72 hours per acre, using 2.32 gallons of gasoline.

The job was done in the blitz buggy's low-low gear with four-wheel drive. After the test, the buggy was placed in regular gear ratio and driven into town for a sack of feed at passenger-car speed.

The government farm experts then tested the jeep on their dynamometer (a device which shows the draft of various plows in different soils) and its 63-horsepower engine, with four-wheel drive, pulled as much as 1,300 pounds without wheel slippage. Which, I am told, is good news to any farmer.

In another test a Willys-built jeep was used to cultipack and harrow a 24-acre field in one operation, repeating the performance three times. This experiment required only 6 hours and the jeep used only 2.125 gallons of gas per acre.

The scout car was also used to haul a 16-disk drill (three-horse) over a 20-acre field, the work having been accomplished with 10 gallons of gasoline, a half gallon to the acre. In previous years this job had required a heavy tractor and the gasoline consumption was 3.3 gallons to the acre, or a little more than six times as great.

FROM these facts it can be readily seen that the jeep has a great deal of farm blood in its mechanical veins. With a few changes it can be converted to a power unit to operate machinery for milking cows; it can be utilized for cutting wood, clearing land, herding cattle. Its dual role of either tractor or automobile makes it the perfect all-purpose vehicle for small farms. During the day it can plow the fields, furnish power for milking and, in general, take the strain off the farmer's back. At night the plow or power take-off can be unhitched and the family can ride into town to see a movie.

Naturally, the jeep will be refined for postwar use. But these changes will be made as the need becomes apparent. In its present unadorned state the scout car can jump from the battlefield to the cornfield without too much change. In fact, it is doing just that at a United States Army base in central England, where many of Uncle Sam's soldiers are sharing the job of growing their own food on some 12,000 acres of British land. This land is hard and clayey, and the Yanks find the jeep a perfect answer to the difficult job of plowing and cultivating such stubborn soil. It's no novelty, I'm told, for a jeep to do a plowing job in the morning and then to take part in maneuvers the same afternoon.

The jeep should be excellent on ranches, where it can take out across the pasture like a horse. Ranchers have been using pick-up trucks for all sorts of ranch work, but the jeep, with its four-wheel drive and high clearance, can go blithely over rocks and brush and climb hills almost anywhere a horse can go.

Rural Free Delivery mail carriers have been trying to buy jeeps for use on their routes where an ordinary auto takes plenty of punishment, and officials of some of the country's most exclusive hunting lodges have indicated they'll buy jeeps as soon as they can to accommodate sportsmen. I have had a flood of letters from garage owners who want jeeps for tow cars and from railroads seeking them as vehicles for track-maintenance workers.

If you want to get an enthusiastic response, ask a real fisherman or hunter if he could use a jeep in his sport. Anglers say the car would be perfect to reach the far-back trout streams, the isolated bass waters—river or lake. In its low-low gear it could reach those distant pastures which are always too far for the fisherman on foot.

It would afford a quick sure ride over back trails to some long-tempting lake country. It would be the long-awaited "magic carpet" to the rich hunting areas in the Florida scrub and Everglades, or the rocking slopes of the Western mountains where the game is cagey and the distances are long. And for those thousands of persons interested in following the bird dog—but not interested in riding a horse—the jeep should provide a ready answer.

Deer hunters who have caved auto fenders and smashed oil pans trying to reach their favorite lodge far off the main road will welcome the jeep

as a quick and certain means of transportation. The game warden, too, should welcome the jeep to cover the miles of trails and back country under his jurisdiction.

It doesn't take much imagination to see how this vehicle could be utilized in fighting forest fires in the great Northwest. Forest rangers could spot a fire from their lookout towers and flash a signal to the nearest center where fast-moving jeeps, equipped with fire-fighting paraphernalia, would be dispatched to the scene of the blaze. The vehicle's power and speed would enable it to make a beeline for the fire, thus saving valuable time and timber.

The jeep would come in handy, too, for use in the construction of new highways over difficult terrain, as it did in the building of the Alcan Highway. Men who watched it perform on this Alaskan construction job tell me that its future in road building is guaranteed. Others feel it will prove useful for insect control in swamp and bog areas.

And what Boy Scout master wouldn't like a jeep to take his troop to some more interesting camping ground?

WHEN the war is over and America once again resumes its millions of miles of touring, I believe thousands of vacationists will roll from Alaska to the Isthmus in some adaptation of the jeep. For what tourist wouldn't like to have the power of a tractor and the speed of a passenger car to explore those beckoning side roads that disappear into a forest off the main road?

Six months after Pearl Harbor the word jeep found its way into the American dictionary, and I'll bet it's there to stay!

THE END



"Well, now, ain't that nice—Smitty got another present from home."