

The Man Behind the Bazooka

By Stephen Budiansky

EDWARD UHL was barely out of college and barely into uniform when he found himself constituting 50 percent of the U.S. Army's rocket research program. Along with another engineer, a young major named Leslie Skinner, Uhl was to figure out some way that armor-piercing could hurl an armor-piercing grenade at a target.

The grenades were extremely effective, using a hollow explosive charge to form a focused funnel of gas that cut through armor like a blowtorch. But at nearly four pounds, they weighed too much to throw by hand or be fired from the end of a rifle barrel. So far, the only idea anyone had for delivering it was for some poor sap to run up and stick it directly on the surface of an oncoming enemy tank.

The army had done a few experiments with rocket-propelled projectiles as early as the end of World War I. The catch was finding some way to shield the soldier who fired it from the jet of flame and hot gases that spewed directly back as the rocket took off. Uhl was probably engaging in a little hyperbolic hindsight when he told the story years later of the eureka moment

he had one day in the spring of 1942 that solved the problem: "I was walking by this scrap pile, and there was a tube that was five feet long and 60 millimeters in diameter, which happened to be the same size as the grenade that we were turning into a rocket. I said, 'That's the answer! Put the tube on a soldier's shoulder with the rocket inside, and away it goes.'"



Edward Uhl demonstrates the army's new weapon in 1942

But it was no exaggeration that the firing tube was the solution, and a bril-

liant one at that. The tube was just long enough so that the rocket would finish its 1/50th-of-a-second burn by the time it emerged from the front opening. The whole thing weighed a mere 13 pounds and could easily be carried in the field. It took only two men to operate, one to load the rocket into the back end of the tube and hook up a wire that trailed out of the rocket's tail, the other to aim and fire by pulling a trigger that sent an electric current to the igniter from a battery in the stock of the launcher. It could hit a tank or pillbox from 300 yards, putting a hole through four inches of steel plate.

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Probably the real breakthrough for Uhl and Skinner, though, came shortly afterward. One day in May 1942 they were firing some dummy rounds at a moving tank at Aberdeen Proving Ground in Maryland when Brigadier General Gladeon Marcus Barnes, the head of ordnance research and development, happened to pass by with some other visiting brass. Noticing all of the flames and whooshes, they came over to see what was going on. Skinner saw his chance and—taking a certain

calculated risk—handed the launcher to Barnes and offered to let him take a shot. Barnes nailed the tank on his first try, and pretty soon the visitors had fired off all of the available rounds. The weapon was ordered into production that day; in one of the fastest development contracts in history, General Electric was given 30 days to deliver an initial 5,000 launchers—and finished the order with 89 minutes to spare.

By the end of the war, 440,000 bazookas had reached the field. (The name came from a joke musical instrument comedian Bob Burns has made famous in his 1930s radio shows; made of 3-inch gas pipe and sounding like a "wounded moose," it bore a definite resemblance to the rocket launcher.)

Uhl left the army as a lieutenant colonel in 1947 and went on to become chairman of the giant defense contractor Fairchild Industries, but he never forgot the lesson of what a small team of innovative thinkers can do. "We have gotten into the bad habit of heaping people onto projects," he once said. "The trap we've fallen into is to believe that a thousand incompetents properly organized can do the job of a few dozen outstanding people."