

Otto Zachow and William Besserdich

<http://www.fourwheeler.com/project-vehicles/129-1206-june-2012-backward-glances/>

At the dawn of motorized transport, new ideas were rolling down America's roads like leaves on a windy day in the fall. In the winter of 1906, a Clintonville, Wisconsin, machinist got his new 1906 Reo mired to the hubs for the umpteenth time and added a couple of new ideas that would make history.



When it emerged in October of 1908, Otto Zachow and William Besserdich's steam-powered 4x4 only hinted at things to come. Zachow, in glasses, can be seen standing behind the driver, William Besserdich. Neither Zachow nor Besserdich had much to do with the company after it went public in 1910. Zachow sold his stock in 1911 and went back to his machine shop. Besserdich went on to found another great four-wheel-drive company, Oshkosh Motors, in 1917.

Otto Zachow ran a machine shop with his partner and brother-in-law, William Besserdich. Intending to open an automobile sales and repair side to the business, they brought the very first car to Clintonville, population 1,837. Zachow spent a lot of time on the road, thinking he should understand the needs of his future customers. Pretty soon, he was up to his own knees in "research," and that started Zachow's creative juices flowing. He is reputed to have said to Besserdich, after a particularly vexing two-wheel-drive predicament, "Who is it who ever heard of a mule walkin' on just two legs?" The duo then proceeded to design and build a "four-legged" mechanical mule.

When the creative smoke cleared in October of 1908, the skeleton of a four-wheel drive car emerged. It was powered by a cranky steam engine but the four-wheel-drive layout would become the American standard for the next century. It was soon clear steam power wasn't cutting it but the four-wheel drive worked well. When the car emerged again the following year, it had a curvaceous maroon body and was powered by a 452ci Continental four-cylinder gas engine. It had also gained a corporate home, the Badger Four Wheel Drive Auto Company, as well as a name, Battleship, because nothing could stop it.



The Battleship in 1909 after being fitted with a plush, maroon touring car body and a powerful 452ci twin-plug Continental Four. For a couple of years, the Battleship traveled the Midwest flaunting a challenge: The driver of any car that could follow the battleship for 10 minutes on rough ground could earn a \$1,000 prize. In the summer of 1911 alone, 116 cars tried and none succeeded.

Between 1909 and 1912, Badger went public, reformed itself into the Four Wheel Drive Auto Company and built at least seven more four-wheel drive touring cars. It also became clear that the company could not survive on four-wheel drive touring cars, the cost of which was about 40 percent more than a similarly equipped two-wheel drive. The commercial and military markets looked more lucrative and FWD, an abbreviation the company eventually became known by, used the cars to promote a new line of 1½- and 3-ton trucks.

In a stroke of luck, FWD was able to demonstrate one of its touring cars to a U.S. Army officer doing research on the military use of motor vehicles. Captain A.E. Williams was impressed and astute enough to know that if the U.S. Army was going to motorize, four-wheel-drive had best be a part of the picture. As a result, FWD sold the army its first 4x4 vehicle in late 1911 for use in a 1912 cross-country test from Washington D.C. to Ft. Benjamin Harrison, Indiana. The army bought a stripped touring car chassis, fitted it with an escort wagon rear body and called it a

truck. Loaded with up to 2,000 pounds of gear, it finished that 1,500-mile torture test in 1912, proving the utility of four-wheel drive.



The Battleship in recent times, still running and driving. Sorry folks, the \$1,000 challenge has expired. The Battleship is as yet unrestored, but was freshened up a little for FWD's 50th Anniversary Celebration that took it all over the country in 1960.

Later in 1912, the Scout Car participated in another army test; this time with two of FWD's newly minted trucks. A variety of truck types were tested in supply roles against horses and mules during actual army maneuvers. Primitive and unreliable as they were, the motor trucks proved themselves superior to the horse-drawn equipment, delivering more cargo and doing it faster. There was still a lot of internal army resistance to motor trucks in 1912, but the wall was weakened and when it was finally breached, FWD was there to build 4x4 army trucks.



The FWD Scout Car arriving in Atlanta, Georgia, on one of the hardest legs of the 1,500-mile winter U.S. Army torture test. To make it a “truck,” the Army added the bed of an escort wagon. They also added 42-inch wheels with solid rubber tires to replace the factory 36x4.5-inch pneumatics. The Scout Car was last seen in 1915 around San Diego being used by the Signal Corps.

Research yields that 12 4x4 touring cars were authorized but only seven are listed as being having been assembled, eight including the Battleship prototype. Besides the Battleship, FWD kept one car, reputedly the last built, first using it as a demonstrator and then as a factory delivery vehicle. Of the other six, two were sold to local private owners, one was configured as a Depot Hack and sold to a Clintonville hotel, one was shipped to Colorado, two went to Chicago, one to Lincoln Park, and the other to the Pinkerton Detective Agency. The fate of these six cars is currently unknown, but the Battleship and that final test car, now called Nancy Hank, are still held by FWD-Seagrave in the Pioneer Park Museum and are in operating condition.



The Nancy Hank in recent times, restored back to a condition similar to when it was FWD's demonstrator. This was the car in which Captain Williams was taken on that "Wild Ride in the Countryside" that convinced him the army needed four-wheel drive, so it's special to the company. There are a number of design differences between the Battleship and most of the other touring cars. They included a 389ci Wisconsin T-head Four in place of the Continental, a redesigned suspension, and a redesigned powertrain.

The FWD touring cars weren't the first 4x4s, nor the first SUVs, but they were the first vehicles in America to show the basic four-wheel-drive layout that would become standard the world over. FWD is still in business, though they're now building the legendary Seagrave fire trucks, a line FWD acquired in 1963. FWD-badged trucks haven't been built since the '90s, but there's no reason they couldn't be if demand arose.



When the capabilities of four-wheel drive was demonstrated to Captain A.E. Williams, it led to the U.S. Army's purchase of a similar car. The original caption of this photo indicates it was taken during that demonstration in December of 1911.