The Corsair Speed Car

A College of the Redwoods Success Story



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When the Corsair No. 671 arrived at the Bonneville Speedway (also known as the Bonneville Salt Flats Racetrack) in Utah in August of 1971, it was dubbed "one of the more interesting entries" by the Salt Lake Tribune. The diesel streamliner had been constructed by members of College of the Redwoods Diesel Heavy Equipment Club and was one of the heaviest and largest at the track, weighing in at nearly three tons and over 26 feet long. The unusual vehicle with an unusual team caught attention as they prepared to participate, but CR's students weren't there just to run the course. The young men planned to break the diesel vehicle land speed record. And they did.

The Beginning

The 1971 event was the culmination of three years of effort spearheaded by College of the Redwoods diesel mechanics instructor Bob Havemann. Havemann came to College of the Redwoods in 1970 after working in the automotive industry for 20 years. He was a veteran motorcycle, hardtop and stockcar racer with a local championship under his belt and apparently still had speed on his mind. He was searching for a way to motivate his students and keep himself engaged when a student discovered that the diesel speed record was 169 mph. The club started wondering if they could build a vehicle to beat the record and the idea gained traction. Unfortunately, when Havemann pitched the idea to college officials, they balked, concerned about liability. The determined Havemann found a work-around –and after promising to rely strictly on donations and sponsorships instead of college funds, the college green lighted the project.

Students researched racing rules and regulations and dug through magazines for design ideas, then started developing design ideas of their own, brainstorming potential challenges and solutions as they went along. When they thought they had a winner, literally, they chalked a design on the shop floor, scaled it down for blueprints and built a model.

Havemann shared the model at a motor vehicle maintenance conference – and Detroit Diesel contributed a used racing boat motor to the cause. Once club members had secured the engine, according to an interview Havemann did in 1972, everything else fell in line. Havemann implemented what he called the "cut and try" method and students went to work. Given the 5,000 plus decisions that had to be made, Havemann acknowledged some had to be wrong. "Luckily," he added, "It turned out pretty well."

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Students designed and built all but the most specialized parts on campus. Vocational art students did sheet metal work, welding and used their new machining skills to build the metal frame, roll bars and attach a riveted aluminum skin. They learned to work with fiberglass as they framed and built the nose and honed painting and other autobody skills as they went along. Even some of the intricate, customized parts were built by students like 1970 Eureka High School graduate and then CR student Rex Hunt. "I learned more working on our race cars than ever did in class," he said in a 2023 interview. "I made custom parts in the machine shop and welded the frame. I was not always working in the class, but I got As because the teachers checked my welds on the vehicle. They had to be good—better than good, actually."

The resulting bullet-shaped vehicle came in at 5,500 pounds, stretched 26 feet long and 40 inches wide and was just under three feet high. The students also boosted the donated 426 cubic inch 200 horsepower marine engine to 746 horsepower and put it under the hood. In August of 1971, the final product, which had taken \$15,000 and about 2,000-man hours to build, was loaded on a truck and trailer borrowed from Alto Bros trucking and Havemann and six students headed to Utah.

Speed Trials

Many of the world's land speed records between 1935 and 1970 were set on the Bonneville Salt Flats. The students arrived safely that summer for the Bonneville National Speed Trials but, according to an article published in the Humboldt Historian, they had to successfully navigate other challenges before they were ready to race.

"There was no way to unload the borrowed trailer which took Corsair to Bonneville. So, the students dug a pit in the nail-hard salt, dropped the trailer wheels into it and rolled the racer off. Nights they huddled in sleeping bags on the ground. Days they ate hot dogs out of the Havemann family trailer. One of the best engine men in the class had to leave "camp" because he got a job. The fire-suit had holes in it. The stop-parachute was too small—they had to find a bigger one. And so it went." Humboldt Historian, Feb 1983

Once the vehicle was successfully on the ground and ready to go, the students faced mixed expectations. Havemann warned spectators that the vehicle had "never been on the ground before" and cautioned fans not to be too optimistic but student crew member Rex Hunt said he wasn't concerned. Though the vehicle was made to go straight and there had been no place in Humboldt County to test it, "I was still pretty confident," he recalled, "and there was no reason to think it wouldn't do well."

Hunt was right. Havemann got behind the wheel knowing he needed to get the huge vehicle up to 175 mph to qualify for a crack at the record but during the qualifying run the car left the starting line in a cloud of smoke, eliciting laughs from the audience. Fortunately, the laughter was squelched when the car reached 176 miles an hour by the fifth and final mile, qualifying the Corsair to challenge the record. Havemann, though pleased, later admitted that driving that fast was a "little hairy. You just step on the pedal and hang on," he said.

And he did. During the official speed trials, the student-built vehicle hit 166 mph by the end of 2 ¼ miles and 209.799 mph at five miles for an average of 190.394 mph, smashing the old record of 169.1. "I expected the thing to work," Hunt remembered. "But I didn't expect to break speed record, and certainly not by as much as we did." Later Havemann admitted that he was actually "amazed the thing worked" at all.

Unfortunately, because the students didn't have the funds to register their car through the US Auto Club, their speed at the trials in 1971 didn't make the official record books but the happy crew headed back to Humboldt already strategizing on how to reach 200 mph in 1972. "We came home and took the car apart. Made some improvements," Hunt remembered. The crew also secured 2 engines so they could switch them in and out of the vehicle, allowing them to

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compete in different classes. They also found an old Ford Falcon to add to their racing fleet. After their success in Utah, the project also picked up sponsors, including Thermo King, who put up the 1972 \$1200 entry fee and donated an engine to the club.

2nd year

The summer of 1972, college officials allowed the club to use the school's truck and trailer to haul their creations back to Utah, where a local reporter told fans to watch for the "flying toothbrush." Fortunately, the Corsair's resemblance to a stationary object didn't slow it down. That year it took twelve attempts, but the Corsair finally reached an average speed of 204.912 mph over a measured kilometer, setting a new international record. The vehicle's top speed had been 233.918 mph.

Later years

Havemann continued as faculty adviser for the Heavy Equipment Club, which held onto sponsorship support after their impressive performances and club members continued to build racing vehicles. In 1973, Havemann and eleven students came home from Bonneville with records in four running classes. In one run they had reached a top speed of 267 mph, "which even amazed the driver".

Their success was noticed. Thermo King was "tickled to death" that one of their motors got a record and kept working with CR. Havemann also insisted on more respect for the student's creation. In a 1973 interview with the Times Standard Havemann noted that their car was "not a freak or conversation piece. It is a car of professional caliber and quality... the car was conceived and built with much more determination and obstacles than any other car. It is a tribute to its designer and building and to the students at the college who worked on it and also to those who believed in it enough to back it in some way." After participating in the project, graduating students had an easier time finding employment and at least a few, like Hunt, went to Thermo-king.

In the following years, Havemann continued to work with CR students building cars and breaking records and in 1977, Havemann gathered a group of former CR students and worked on Sally, a 1951 International pickup truck he bought for \$500. That year, Sally set the American street stock truck record of 156.7 mph.

The program eventually ended, but its impacts were felt for years. By 1973, Havemann could boast a 50 percent job placement rate for his students – and Rex Hunt was one of them. After graduating from CR, Hunt went to work for Thermo King in their experimental lab where he was tasked with making a street legal '69 El Camino powered by a Thermo King refrigeration engine, which would be used in company promotions. He then moved to Oregon where he ran his own garage for twenty-four years.

In 1978, Havemann went to work as an Engineer for Thermo King Corporation where he received ten patents and two engineering awards for his work in transport refrigeration and diesel power. He retired in 1990 and passed away in 2005.

"The [speed car] project was a great personality expander and developer," Havemann said in 1973. "The fellows found out they could do something they didn't know they could do."