



The Dawn of
a New Era on the

SALT FLATS

**THE CHRYSLER HEMI®
AT BONNEVILLE PART 2**

THE REST OF THE STORY

STORY BY: ROGER MEINERS

Chuck Walbridge's No. 393 fuel altered coupe from Ft Wayne, Ind. belches alcohol from an exhaust pipe. The supercharged 392 Hemi sprayed Mopar's brave photographer and shattered his eardrums. He loved it. (Photo: Roger Meiners)



Al Teague with the world's fastest piston-powered car. It went 409.986 mph in 1991, powered by a supercharged Keith Black Hemi engine. That's him in the inset photo with his famous Saad, Teague & Bentley blown Chrysler '29 Ford. It was once the world's fastest roadster, at 268 mph one-way. (Photos: LandSpeed Productions)



The Burkland Family Streamliner, otherwise known as Burkland 411, has been gunning for Al Teague's F.I.A. record since 1996. They already have a one-way run of 438.815 mph. From left, Gene, Betty and Tom Burkland are all members of the Bonneville 200 MPH Club. (Photo: LandSpeed Productions)



NASCAR champion Bobby Isaac drove Nord Krauskopf's Hemi-powered Dodge Charger Daytona to 28 stock car records in 1971, including a record average speed of 217.368 in the measured mile. Many of Isaac's records still stand. (Photo: Harold Sullivan collection)



Bob (L) and Bill Summers with the Goldenrod, powered by four 426 Hemi engines supplied by Chrysler. They took the land speed record from Donald Campbell in 1965. Inset photo shows Bob Summers strapping in for a run. The car's restoration was completed last year, and Chrysler again donated the Hemi engines. The Goldenrod is now on display at The Henry Ford in Dearborn, Mich. (Inset photo: The Henry Ford)



It's not a Hemi, but we think it deserves recognition: The No. 595 Edgy Engineering '32 Chrysler Bonneville Spitfire (above, in 2005) shares the spirit of The Salt with the more well-known Bonneville stars in this story. (Photo: Johanna Kinsler.) Earl Edgerton, of Santa Rosa, Calif., built the car himself. Its 1952 Chrysler six (right) features his one-off cylinder head, camshaft, and six-port fuel injection system. (Photo: Roger Meiners.)



Last month the story was all about the Chrysler FirePower Hemi. How the 392 version became the engine to use for land speed racing. That hasn't changed in the last 50 years. Bonneville racers continue to use the 392 (see our story on the 392 in this issue). They began using the 426 Hemi as soon as it was available. Land speed racers who use these two Chrysler engines are too numerous to mention. We will, instead, talk about a few who represent the best of the Bonneville breed.

1965: THE SUMMERS BROTHERS

Bill and Bob Summers were already Bonneville veterans in 1964 when they decided to go after Donald Campbell's 403.10 mph land speed record, set that year on July 17 in his Bluebird, a huge turbine-powered streamliner.

The Summers brothers had already achieved high speeds with a streamliner running a single Chrysler

Hemi. That car topped 323 mph in 1962. For the new car, they decided to go with four engines and four wheel drive. Floor shifter king George Hurst helped them search the automotive industry for sponsorship, and they found support from Chrysler. The word came down to Bob Cahill, who assigned Pete Dawson, a young engineer in product planning, to ride herd on the project.

Dawson told us that Chrysler agreed to loan five copies of the new 426 Hemi engine, with special dry sumps and fuel injection. Firestone Tire Company (Bridgestone/Firestone), Mobil Oil (Exxon-Mobil) and Hurst gave money to build the car, which reportedly cost \$250,000 to build.

The engines were built in the Chrysler motor room, according to Dawson. He said Chrysler guaranteed a

total of 2400 horsepower from the engines, but exceeded that by 100 hp, because each Hemi actually produced 625 hp, at 6800 rpm on alcohol. There was no plan to run nitro.

The team took the Goldenrod to the salt in November 1965 to run for the record. They would make two runs, one in each direction, the second within an hour after the first. As they got ready for the record runs, Dawson said, "The Goldenrod made the first few passes on gasoline, then they switched to alcohol fuel." Then, on November 12, 1965, Bob Summers successfully made the required two way runs to get the new record. The new standard for wheel-driven cars was now 409.771 mph.

The Goldenrod never ran again. It did not have to, because nobody threatened its record. Not until more than 20 years later.

1991: AL TEAGUE

Al Teague is a popular figure around Bonneville and the California dry lakes—anywhere the entrepreneurs of speed gather to do business. In the Southern California Timing Association's (SCTA) first 50 years at Bonneville, Teague had Top Time of the Meet 11 times.

"Landspeed" Louise Noeth, the award-winning writer about all things Bonneville, calls him, "the quiet scientist." She says, "he figured out when he was very young that you learn more by listening." And he is always willing to share that knowledge.

We spoke to Teague just as he was leaving for England to be honored this summer at the world-famous Goodwood Festival of Speed, along with his record-breaking streamliner.

His first successful straight liner was the now-famous Saad, Teague & Bentley 1929 Ford roadster. The car ran a 354 Hemi with a 6-71 blower. Teague made it the world's fastest roadster in 1973 with a 268 mph blast.

Figuring that the roadster was maxed out, Teague, with help from George Bentley, commenced building a new Chrysler-powered lakester (a streamliner with exposed wheels) on New Years Day 1975. The new car was completed in 18 months and ran August 1976 in the B/Lakester class at Bonneville. Despite fueling problems, it went 261 mph on a course shortened because of poor salt conditions. The class record at that time was 287.

After a rainout and more problems with the salt limited speeds for the next few years, Teague finally got past 300 mph in 1981 with a 311 mph one way run. His two-way average was a new A/Lakester record of 308 mph.

A few years later, Teague converted the lakester into a streamliner by enclosing the wheels. And, in 1986 he put the car's faithful 392 Hemi out to pasture in favor of a Keith Black Supercharged Chrysler 426 Hemi with Stage 5 heads. The new engine pushed the streamliner into the 370 mph range. Three years later, in 1989, the car went 392 mph at the Utah Salt Flats Racing Association World of Speed meet. "We were knocking on the door," Teague said.

In 1990, Teague went over 400 mph for the first time, but, "We ran out of gear," he said. The car's final drive ratio was too 'short,' and the engine ran to its maximum speed before the car could reach record-breaking speed.

Finally, in 1991, it all came together: Fifteen years of continuous development, combined with the right gear ratio and ideal salt conditions allowed the Teague streamliner to run 407 mph right off the trailer, only 2 mph off the record. The once-in-a-lifetime opportunity had arrived. On August 21, 1991, Teague made the ideal run: 425 mph in the mile, topping out at 432 mph exiting the speed traps. The return run was just fast enough to get an average speed of 409.986 in the measured mile.

Bob Summers' land speed record in the flying mile was finally exceeded after 26 years.

That's not the end of the story. The Goldenrod's record still stood. How could that be? The answer is that the FIA had changed the world record supercharged categories. There was now a record for supercharged cars and a separate record for unsupercharged cars. Teague's Hemi was supercharged. The Goldenrod's four Hemis were not. Both drivers were in the record book. But Teague had the title: "World's Fastest."

TODAY: THE BURKLAND FAMILY STREAMLINER

The Burkland 411 streamliner, out of Great Falls, Mont., is powered by two vintage (i.e. "used") supercharged Donovan aluminum 392 Chrysler Hemi engines running on alcohol. The engines each displace more than 450 cu. in.

The car first ran in 1996. It is still in development, with lots of potential, and already running faster than Teague's FIA record. The Burklands currently hold the SCTA Bonneville Nationals mark, 417 mph, but it isn't recognized as the world record. They need to make their runs under FIA sanctioning to do that.

The Burkland streamliner has four wheel drive and two engines, where Teague had one engine and two wheel drive. Even so, any veteran will tell you there are no sure things. The car will be making runs at Bonneville this August. Check out the SCTA/BNI Web site (<http://scta-bni.org/>) to see how fast they are going. Look for car number 411.

To learn all about Bonneville and its history, read Louise Noeth's book, *Bonneville Salt Flats*. It's available for \$35 from LandSpeed Productions, 1761 Dwight Avenue, Camarillo, CA 93010. "Landspeed Louise" will autograph it for you, and you can even tell her what to say. See also, www.landspeedproductions.biz.

DRIVING THE SALT WITH AL TEAGUE

"I used to just stand on it and hold on," said Bonneville legend Al Teague. "But in the last 10 years the salt got slipperier, so I would short shift and get into high gear as soon as possible. Chryslers on nitro like to lug down." He said the exotic fuel builds so much heat that it accelerates the car mercilessly from low engine speed.

"Get it lit, and get it moving as soon as possible," instructs Teague.

He takes off in low, and as soon as he feels the tires spin, he shifts to second. He likes to be in third before the first mile and shift to high before the quarter. That gives him 2 1/2 miles in high gear before the first timing mark. "If the car gets loose and you have to back out of the throttle, it takes a half mile to get back to speed. That ruins the run," he cautions.

"Make the car heavy, for traction," Teague says. "Then it doesn't float when it's at high speed." High speed, to Teague, is 400 mph. For mere mortals, high speed might be 80 mph!

Teague says that Bonneville can fool you, make you think the car has a handling problem, when it is only wind conditions. "At Bonneville," says Teague, "when you look at the mountains [northwest of the course], you see a dip and there's always a crosswind in that gap. It can trick you into backing out of the throttle, as if the car is losing traction. You have to stay in it, or you lose your run." Easy for him to say. ■