Behind a nondescript garage door in an industrial park not far from the idyllic surf of Huntington Beach, Calif., is a time machine. Crafted by hand decades ago by racer extraordinaire Mickey Thompson, this slender mechanical beast is being resurrected, modified and improved by Thompson’s son, Danny. He’s a successful race driver in his own right against his father’s initial wishes.

“That’s because of the 10 guys who were closest to him, eight died racing,” recalls Danny Thompson, who has won the Baja 1000 as well as a number of Indy Car races, Supervees and CRA Sprint Cars. Racing is a dangerous sport and Danny has broken his neck, both legs and his back — three different times.

Even race fans may not know much about the successes of Danny Thompson because his father’s larger-than-life character, engineering innovations and racing victories cast an impossibly large shadow. The older Thompson developed many things taken for granted in motorsports such as wise slick tires and air jacks to raise a car. A successful builder of Indy cars, drag cars and off-road trucks, Thompson was also a race promoter and track owner. He brought motocross racing out of the desert and into big city stadiums, creating a whole new sport.

Back in 1959, Mickey was looking to break a land speed record of 394.19 miles per hour (634.39 km/h) set by Great Britain’s John Cobb on the Bonneville Salt Flats, and he built the famous Challenger I. Unfortunately early fall rains in the northwestern Utah desert softened the usually pavement-hard surface
of the salt flats, spoiling Thompson’s initial efforts. He had to be satisfied with 367.83 mph.

He did achieve international fame during his second effort in 1960, as the first American to surpass the 400 mph barrier, hitting 406.60 mph, which also broke Cobb’s one-way record of 402 mph. However, the rules of Bonneville required a return run in the opposite direction within one hour, and the average of both represented the official speed record. The Challenger I broke an axle on its return run so no official record was set.

Mickey went back to the drawing board and came up with the Challenger II and raised his sights to the 500 mph mark. By this date the target had been reached but by cars powered by rocket engines. Thompson was determined to do the same but with a wheel-driven car.

At the time, Sports Illustrated hailed it “a rolling textbook in sophisticated automotive design.” An article in Dragzine stated: “Compared to the blunt Yankee hot rod character of the Challenger I, the Challenger II was a technological tour-de-force. ... The two-engine vehicle, cigar-shaped and clad in a skin of hand-formed aluminum, was built at a blistering pace and rolled out the back doors of Mickey’s shop after just five months of construction. Early function testing proved extremely propitious, and the crew celebrated trial speeds approaching 400 mph.” Unfortunately when it came time to make his record attempt, heavy rains turned the salt flats into a lake.

Mickey had every intention of returning the next year, but support from his sponsors — Ford Motors, Gulf Oil and Reynolds Aluminum — disappeared with America’s big three auto manufacturers pulling out from racing in 1969. Thompson, who by then was consumed with his thriving businesses plus the drag-racing and off-road scenes, quit racing and mothballed the land-speed project.

Challenger II remained in storage for the next two decades. Then, in late 1987, Mickey contacted Danny, who by then was a successful racing driver of his own, to say he wanted to go for the land-speed record. With Mickey’s declining health preventing him from driving the car himself, he agreed to take care of the financing and engineering, and Danny would pilot the car and keep the record in the family.

The plans were set, but just three weeks later on the morning of March 16th, 1988, Mickey was stopped at his Bradbury estate by an intruder, who shot and wounded him and dragged him into the driveway. A second gunman came out from nowhere to shoot and kill his second wife, Trudy, then walked back up to Mickey, who was being watched over by the first shooter, and executed “The Speed King“ with a final bullet to the head. Mickey’s former business partner, Michael Frank Goodwin, would ultimately be tried and sentenced in the murder plot.

Mickey’s son stayed away from the salt flats for decades until Danny was invited in 2003 to drive a newly restored smaller streamliner that had once belonged to Mickey. He’d go on to become a world-record
holder in multiple classes. In 2007, Danny built and piloted the world’s fastest Ford Mustang in partnership with Hajek Racing.

The 50th anniversary of Mickey’s remarkable 406.60 mph run in the Challenger I came in 2010, and Danny came up with the idea to bring Challenger II back to the flats. With all the advancements in engines, materials and technology, it would have been easier to build a new car from scratch, but Thompson wanted to honour his father’s faith in the streamliner. Danny left his home in Colorado and set up his shop in Huntington Beach for the Challenger II rebuild.

“I’m getting goosebumps just talking about it. I want to do it for him,” he says, nodding toward a large black-and-white portrait hanging in the garage of his father at Bonneville. “I want to finish what he almost did when he went 406.6 mph in 1960. Now, we’re going to do it.”

“I’ve done all sorts of other things,” he says. “I’ve driven Formula cars, off-road stuff, motorcycles. I drove a Ford for three years as a paid driver. But I came back to Bonneville. It’s like where a son was born, and a father died. I kind of stopped going there voluntarily after my dad died but I asked myself, ‘What do you do now?’ As I got older, I started thinking about Bonneville again.”

Danny began the Challenger 2.5 project on his own, but has since been joined by a small but dedicated team of two Orange County fabricators in his garage plus two machinists from San Diego County who drive up at least twice a week. Specialists from other nearby shops get some of the work when specialized CNC machining is needed. Tim Gibson, a retired aero engineer at Boeing and later a crewman for former drag racer Kenny Bernstein, has stepped into Mickey Thompson’s position as the project engineer.

The new version of Challenger II is about three feet longer and a larger vertical stabilizer has been built for the higher speeds. The power will come from a pair of dry-block, nitro-fueled Hemi V8 engines in an all-wheel-drive configuration. The engines are dry blocks or waterless, so most of the cooling is provided by the fuel. Overall horsepower will approximately double that of the original Ford SOHC 427 motors, from 600 front engine and 1,200 rear engine to an even 2,000 each. The Challenger II was 1,800 horsepower; the 2.5 has 4,000 horsepower.

“It’s estimated that to go 10 mph faster requires 110 more horsepower”, Danny explains. “We’re trying to pierce a hole in the wind. The car will weigh about 5,500 pounds when we are finished. That calculates to 515 mph.”

Whereas his father drove the original with a “split gas pedal and Mickey’s intuition” mechanism to throttle each engine separately, the Challenger 2.5 will have a conventional throttle pedal. Danny then holds up the original pedals and shows how, with his feet, Mickey would use “feel” to control the Challenger II.
"There’s no way I would get in there with that," Danny says with a laugh. The tires are naturally custom-made by Mickey Thompson Performance Tires, a prototype nylon weave backed with banded steel. There is only 1/32 of an inch of rubber on the tread, as any more would spin off due to heat expansion and centrifugal force.

“They will expand three-quarters of an inch in diameter during a high-speed run,” Thompson explains.

Primary stopping power is provided by a main four-foot parachute and a reserve chute. Four carbon-fibre disc brakes are in place “just in case.”

Thompson is aiming for a test run in October with a goal of 320 mph. The run for the record-breaking 450 mph, if all goes well, will be during Speedweek at Bonneville in August 2014.

About 80 per cent of the original car has been kept with the rest modified to meet today’s Southern California Timing Association safety standards and to improve performance such as the new engines.

The biggest engineering hurdles have been accomplished and the majority of the fabrication is done. The newly formed body panels and some of the originals stand at the side of the shop awaiting paint by the talented local paint guy, Chip Foose. The biggest hurdle facing Danny and his team is the perpetual struggle of all racers: sponsorship money. There is still a $200,000 shortfall in the $4-million budget and Danny has sold off several of his historic Mickey Thompson cars to finance the project.

“I need to finish what he started,” Danny says of his father’s quest. “Plus, I want to go fast really bad. I’m six years older than he was when he ran the Challenger II, but I’m full of piss and vinegar.

“When I run the Challenger II, it will be entered as an AA Fuel Streamliner... but I don’t really care about winning the class. I just want to be the fastest person out there on the salt, period.” For more information, visit: http://www.thompsonlsr.com