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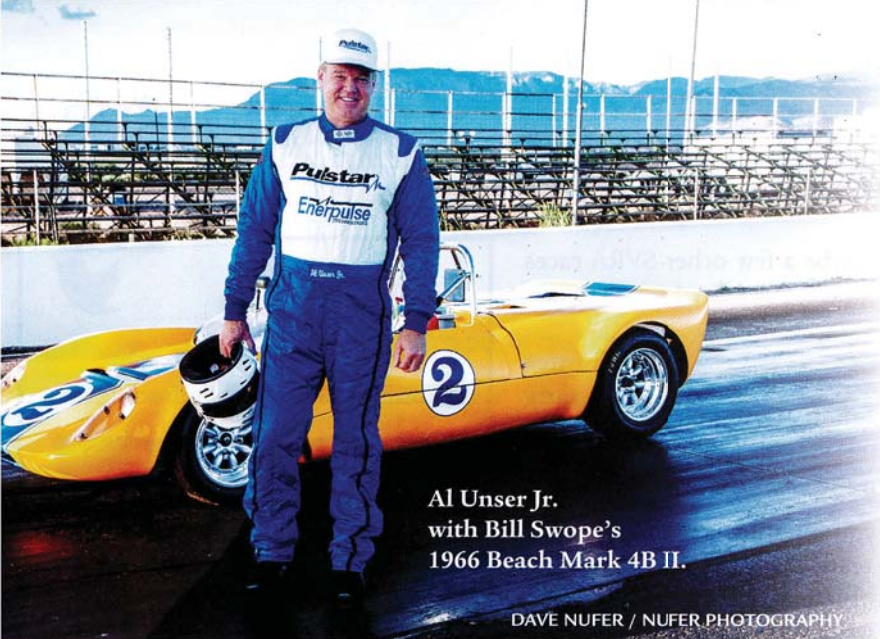
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DESTINATIONS:
Homestead
Indianapolis
Auto Club Speedway

INTERVIEWS:
Ellen Bireley
Donald Davidson



Al Unser Jr.
with Bill Swope's
1966 Beach Mark 4B II.

DAVE NUFER / NUFER PHOTOGRAPHY

Still Looking for an Edge

by David Swope

Growing up in New Mexico, the Unser name was always associated with winning, whether I was watching Al Sr. win in 1987 and Al Jr. in 1992 and 1994, or hearing stories of brothers Al and Bobby's Indy 500 victories from before I was old enough to remember. At a recent event at the Unser Racing Museum, Eddie Cheever was quoted as saying, "I

Which brings us to Al Jr., who will always be the freckled, redhead with the audacity to think he could beat his Dad in an Indy Car – and then did. Little Al has now taken to vintage racing, and he returned to Indianapolis last June for SVRA's Indy Legends Pro-Am, where he and television host Peter Klutt raced Klutt's 1969 Corvette to victory.

After his win, I asked Al if he might have interest in checking out our vintage Sports Racer. My father, Bill Swope, takes as much pride in working on his car as he does driving it. The 'Spirit of USRRC,' a 1966 Beach Mark 4B II, has a Lotus power plant and features mid-1960s technology which is plenty quick for the era and delivers plenty of fun even today.

All racers are looking for an edge, of course, and Little Al said he had just the thing. He had recently partnered with a local company that manufactures a new kind of spark plug. The spark plug features an internal capacitor and was developed with the help of Sandia National Laboratories. Al had tested Pulstar Spark Plugs in his 2011 Suburban LTZ before signing on to verify their performance claims. He gained 5 hp and 5 ft. lbs of torque, improved his fuel economy, and was blown away by the throttle response. He

couldn't wait to see what this technology would do in our CSR.

We were skeptical, so we took the plugs and the car to local performance experts, Motiva Performance and put the car on a dynamometer to run some ABA tests while the Motiva professionals monitored engine and oil temperature to ensure data integrity. Comparing the best run of each spark plug over multiple runs, Pulstar increased peak torque by more than 10 ft. lbs., going from 100.2 to 110.19. Peak horsepower was also increased by nearly 8 points, to 128.3 with Pulstar.

Enerpulse Technologies, which makes Pulstar Spark Plugs, claim this works because it creates plasma-assisted combustion – a science race teams have used for years, primarily in Formula 1, but at the cost of nearly \$2,000 per cylinder. Luckily, Pulstar retails at most major distributors for close to \$16 a plug. Apparently, Pulstar's capacitor stores and compresses energy from the ignition coil prior to spark formation. It forms a 5MW nanosecond pulse of power when released that saturates the fuel with plasma, making the fuel mixture ignite immediately, consistently, and burn rapidly.

We were able to show an increase in horsepower of more than 7% by simply changing the spark plugs to Pulstar. We can't wait to see how that translates on the track. You still can find an edge, even in a vintage race car, without major changes or expense. **Q**



Testing the Beach for gains in performance.

ANDREW MOSER

came to New Mexico to find out if there is something in the water here that makes the Unsers so fast."

I don't think Eddie ever found the Fountain of Speed but what can be found is evidence of a deep, mechanical understanding of the automobile that dates back generations.

Even race car drivers get older, and some of us get referred to as vintage.