sk any "Old Salt" racer and you'll be told that the seemingly endless expanse of natural salt to the east of the Wendover, Nevada, city limits is a little on the strange side. It's a place where the mountains don't even touch the ground. They just hang out there above the horizon. And the people? During Speed Week, at least, you know everybody in town. Virtually every vehicle that passes down Main Street is a dualie with the appropriate hauler hanging off the back porch. Everybody in the temporarily doubled population is there to play on the salt, and every conversation is about cars, engines, or their related problems. You are immersed for a week in the talk of guys who know what to do with a rearend gear that is numbered in the high twos. Speed Week at Bonneville has a weirdness all its own-and it seems to fit one particular team's record attempt.

While most sane folks were sitting at home watching reruns of this country's 20-year-old moon landing in July, one of the guys who made that historical event possible, Don Gothard, had the top guns from GMC Truck's Pegasus (Advanced Vehicle Engineering) Group on the salt with an S-15 pickup. Gothard was an important part of the team responsible for the control systems in both the command module and the Lunar Insert Module (LIM) when Aldrin and Armstrong set their vehicle down on a surface about as desolate

and imposing as the salt. In terms of challenges, Gothard had chosen another one that sounded about as tough as landing on the moon.

This new project, code-named Pegasus 3, was intended to garner a world record in two classes for the GMC Truck folks. What had started as a three-way conversation at the Los Angeles Car Show in January 1988 became a reality on the salt by July 1989. That didn't make it any less unreal. Nobody, but nobody, thinks in terms of a truck when you're talking world top-speed records.

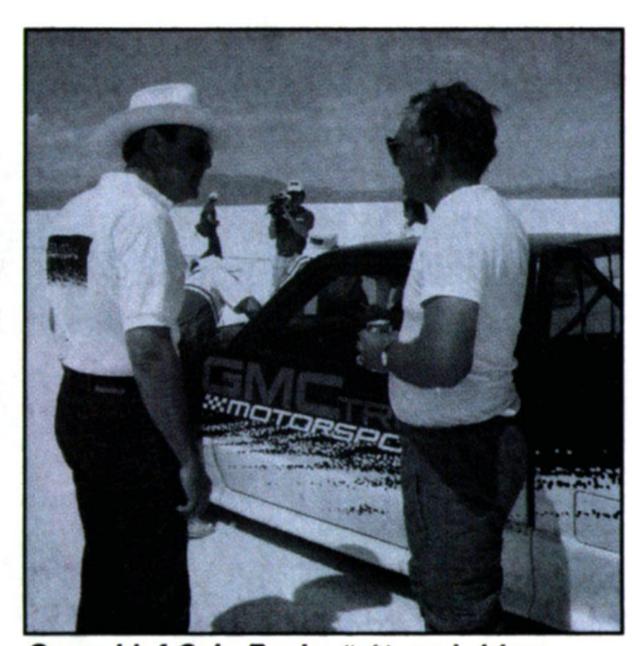
Even though Tim Richmond had blown off a Porsche at the Ohio proving grounds with a NASCAR Chevrolet, that doesn't mean that a pickup truck should have been after another Porsche record. That German sports car in Ohio had been driven by one of the best, the late Al Holbert, whose high-speed portfolio included the world records for E Production vehicles in the flying mile and the flying kilometer.

It may be a bit of a stretch to imagine a GMC S-15 mini-truck in the same class as a Porsche 928, but an investigation into FIA, IMSA, and SCTA weights and wheelbases shows that the two are, in fact, very compatible. We wouldn't recommend the two on the same road course, but on the salt they do stand fairly equal. Since the U.S. National record for pickups already fell conveniently close to the international records, the GMC folks

were shooting specifically for the Class E stuff, and they'd take whatever incidental fallout might occur.

Once the goals were clear, all that was left was to build the gun meant to shoot holes in the old records. What GMC took to the salt (besides a hefty checkbook) was definitely a quick-draw special that would tame the Old West in short order.

From the outside, and strictly by the rules, the truck needed to appear stock. The attached body fairings, for example, were available at any GMC dealer just by checking off the proper box on the option list. Most of the areas, in fact, that some teams use to,



Crewchief Gale Banks (left) and driver Don Stringfellow (right) discuss the next step in the pickup's record-setting effort.

# GMC'S PROJECT PEGASUS S-15 TAKES A SHOT AT THE SALT

By Bill Auda



shall we say, gain an edge, were ignored. (For international records the headlights are allowed covers, but for national records during Speed Week those covers are removed.) None of the 'glass was flush mounted, the roofline didn't display the common "ducktail" treatment, the windshield wasn't laid back, and the hood wouldn't "accidentally" develop a depression at speed. In short, this is not a NASCAR-style "stock" body.



Conversely, the powerplant is exactly that. The rules call for an engine that looks like the stock unit and is essentially similar. That's almost NASCAR talk for "build it any way you like as long as it looks legal." The Katech-built 5.0L V6 engine that powered the Pegasus S-15 was based on the 90-degree Bow-Tie, cast-iron cylinder block normally sold as a 4.3L production unit. Instead of the even-firing crankshaft found in the stock unit, the race motors were equipped with odd-firing Moldex cranks carrying Oliver rods and Diamond pistons. For superior breathing, Brodix aluminum heads were used.

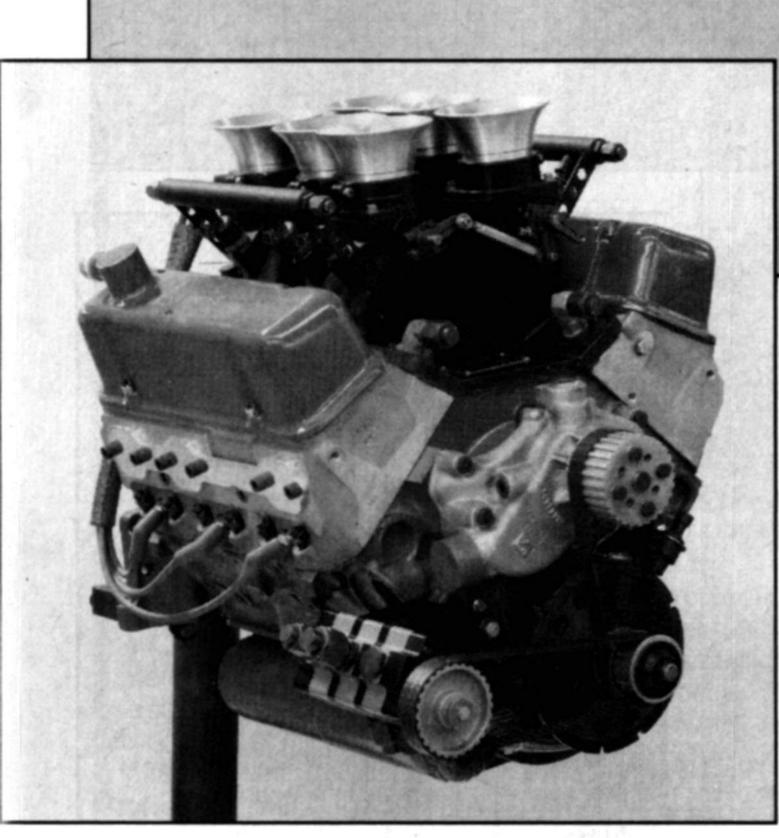
The valvetrain was built on a Competition Cams steel-billet roller and Iskenderian lifters with a Katech rev kit. Falconer provided the needle bearing

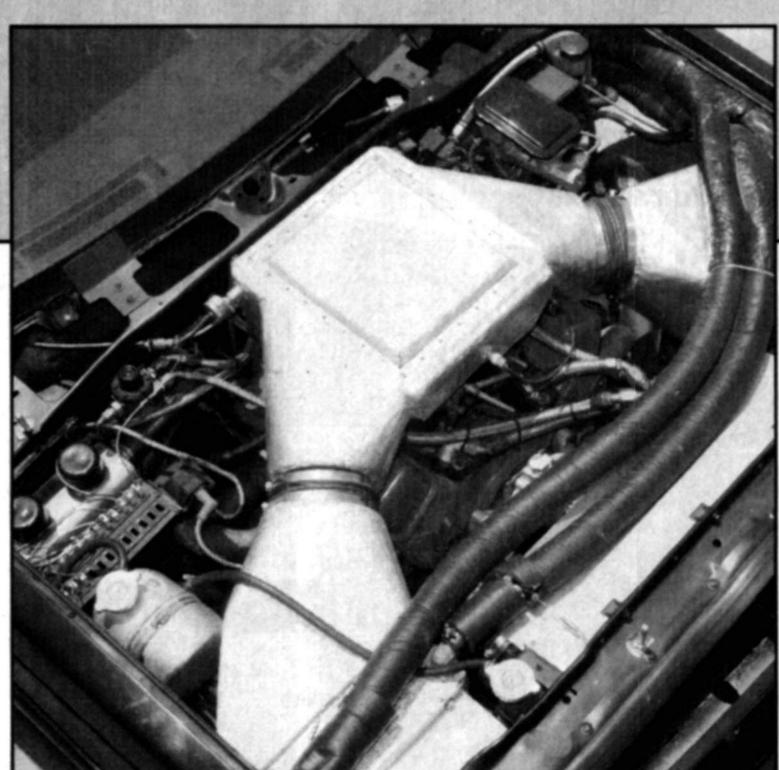
The interior of the truck, by the rules, must resemble a stock pickup. But don't look for Recaro seats, a roll cage, or all that instrumentation at your dealer's showroom.

rockers that depress titanium valves. The oil tank in the cargo bed is fed by a Weaver dry sump pump. Kinsler fuel injection is fed by an AC/Rochester fuel pump, regulator, and injector nozzles, while the fire comes, naturally, from a Delco capacitive discharge unit.

A Delco Gen II electronic control module monitors throttle position, intake air temperature, coolant temperature, crankshaft position, and engine speed. From that information, the Gen II determines ignition timing and fuel-injector nozzle timing. Although Gale Banks Engineering took care of the final preparation and on-the-salt care and feeding of the truck, it does not employ turbochargers. Despite that, the truck does employ intercoolers.

All intake air is precooled by a super high-tech system. Defined as an "intake-charge cooling system with a finite usable lifetime," it is an excellent example of plain old American hot rodding. Since a reduction in inlet air temperature correspondingly results in add-





While the GMC S-15 salt scorcher looks like something you could see on the street, it is the fastest mini-truck in the world.

The Katech-built V6
engines—in either
the 5.0L or 4.26L versions—look exactly
the same. The
change in displacement comes from a
stroke increase.
Kinsler injection,
Brodix aluminum
heads, and a Competition Cams roller cam
help make the power.

#### HAULIN' SALT

ed power, these intercoolers act just like units normally found on turbo-charged engines. The intake-air radiators were plumbed to a full ice chest in the truck's cargo bed for each run. When a run was completed, the ice was replenished during the turn-around procedure.

The 5.0L engines used during the FIA runs were rated at 523 hp at 6800 rpm and credited with delivering 414 lbs.-ft. of torque at 6400 rpm. The engines to be brought to Speed Week are 4.26L units that are expected to provide 470 hp at 7800 rpm and 355 lbs.-ft. at 7000 rpm. The smaller engines use essentially the same parts lineup as their bigger cousins.

The drivetrain behind either engine starts with a Tilton triple-disc clutch and a Weisman quick-change, 5-speed tranny. A carbon-fiber driveshaft transmits the power to a 9-inch full-floating rear constructed with Strange Engineering parts. The rearend ratios are relatively high at 3.10:1 and 3.25:1. The rear brakes are discs with slotted rotors and JFZ four-piston calipers. No front brakes are available to driver Don Stringfellow.

But Stringfellow wasn't looking for more brake. Already a member of the 200 Mile Per Hour Club, Don had high hopes of repeating that speed with the black and white truck. He very nearly succeeded during the FIA runs.

On the first set of official runs he averaged 187.677 for his two-way effort. While this effort was a new record right out of the box, anybody who has ever survived the rigors of a development program knows that the next two steps

The truck carried its dry sump tank, the intake-air cooling system, and its data transmitter in the bed. Wind-tunnel testing proved that a partially flushed bed was aerodynamically better than a full tonneau.

The converted motorhome is equipped

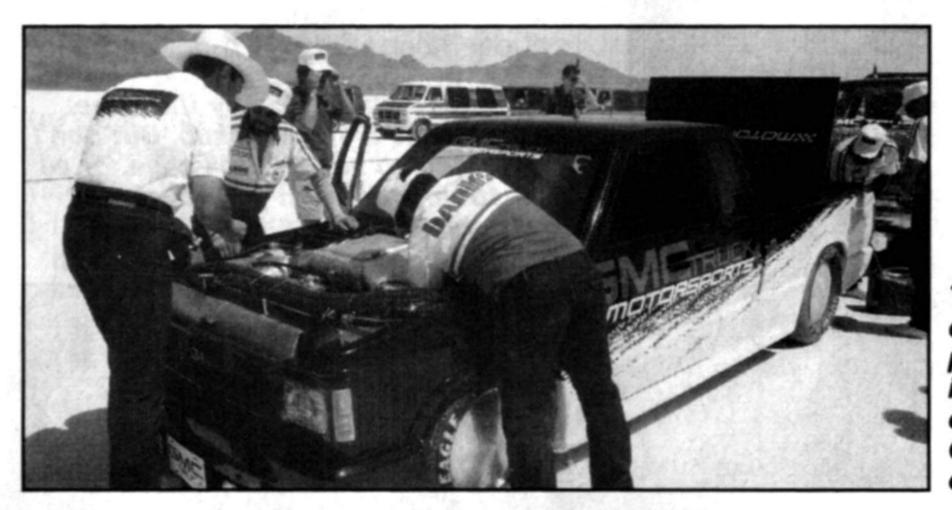
are usually backwards. But not for this team.

The second day's runs set another new timing mark with an average of 192.545 mph for the flying mile and 311.975 kph (193.861 mph) in the flying kilometer. Not a bad warm-up for Thursday's announced record attempt.

Thursday morning brought the press to watch, and Stringfellow uncovered a few secrets he hadn't found the first two days. His first run from west to east was better than any he had made in that direction at 189.304 mph, and the return at 197.897 mph yielded another new record. After one false start, another west-to-east pass at 191.683 mph was to be the last for the

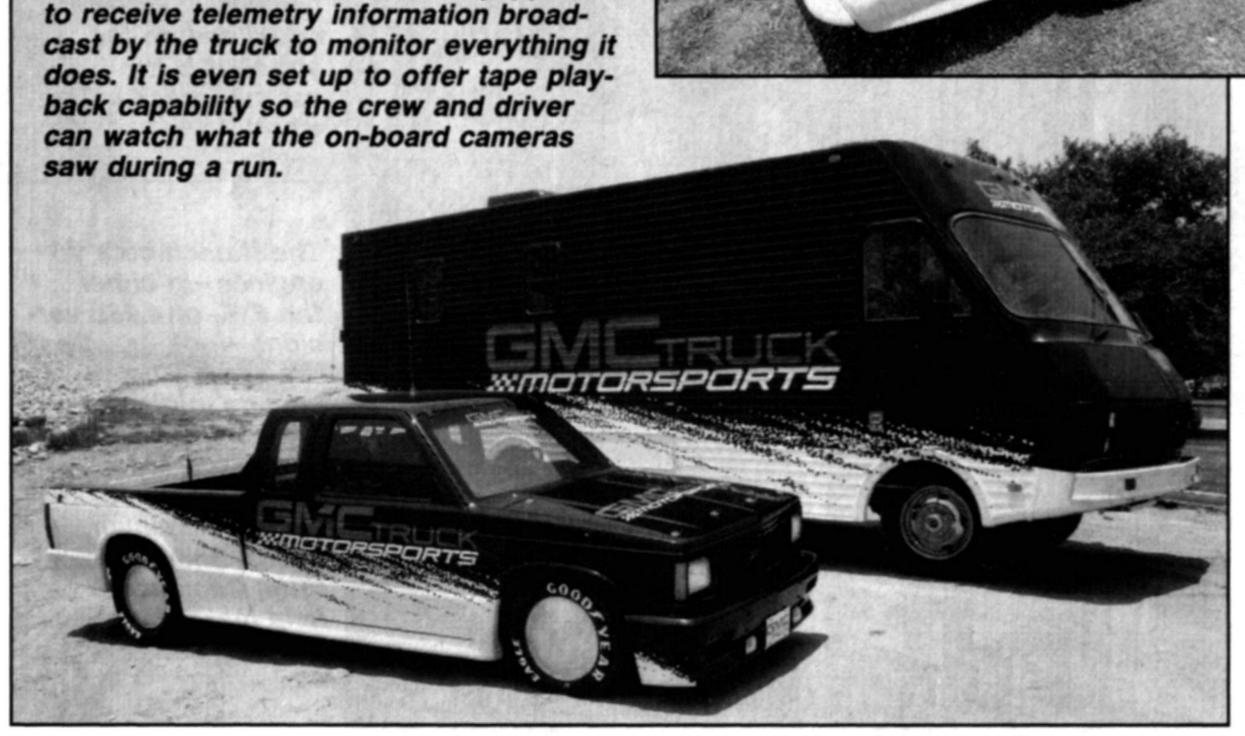
session as the weather closed in and shut down the course.

If Stringfellow was disappointed with the fact that the truck hadn't quite carried him over the 200 mark, it was the only unattained goal in the entire effort. The GMC Pegasus S-15 established a new record average speed of 194.770 mph in the mile and 313.555 kph in the kilometer, and therefore captured both the Category A (Group 2, Class 9) and Category E (Group 2, Class 9) standards. GMC Truck had its records, Gale Banks wrapped up another successful trip to the salt, and Don Stringfellow brought back a whole truck that would see duty again shortly when Speed Week rolled around. HR



The truck received its final preparation and its on-the-salt care from the Gale Banks organization.





#### SPEEDFLASH!

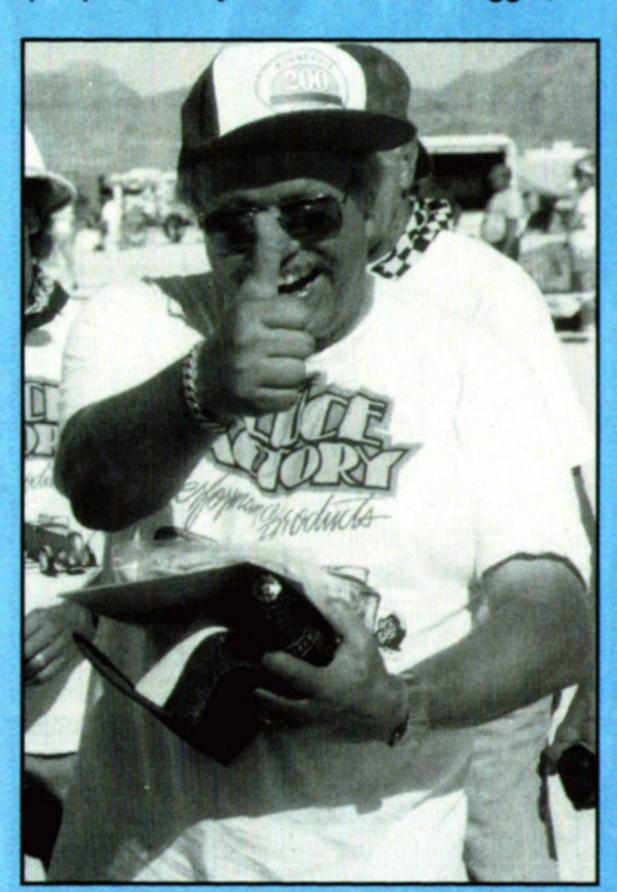
UPDATE: The GMC S-15 was returned to the salt during the annual running of the SCTA Speed Week event with the intention of attacking two records. The existing record for SCTA's Production Coupe and Sedan Category in Engine Class E was captured with a speed of 183.942 mph with the 4.26L engine shortly before the rains shut down the event. Current plans call for a return to the salt, possibly during a World of Speed session, to go for the same class record with the 5.0L engine, which will qualify the truck for Engine Class D. Stay tuned.

## THANKS TO MURPHY'S LAW, SPEED WEEK BECAME SPEED WEAK

By Gray Baskerville

bad Bonneville; it's just that some Speed Weeks are better than others. Take the 41st running of the National Speed Trials, for instance. What promised to be the finest Nationals of all time—more entries, more media coverage, two cars with 400-plus-mph potential, GM factory involvement, Federation Internationale de l'Automobile (FIA) recognition, ad infinitum—almost ended in near disaster.

On the good side of the ledger was the fact that the racing surface—thanks to the preparation of the 100-foot-wide, 11-mile-long course by the Utah Salt Flats Racers Association (USFRA)—was superb. Moreover, the pits were doubled in size and located within walking distance of the asphalt access road that fingers its way from Interstate 80 to the actual salt flats. The Bonne-ville Nationals, Inc. (BNI) and Southern California Timing Association (SCTA) people, led by President Les Leggitt,



So you really want to know what Bonneville is all about? Just ask "Deuce" Roy Fjastad after he got into the 200 MPH Club with his 226-mph B/Alt.



ganize the meet. They even stepped up to publish a professional-looking program, edited by Petersen Publishing Company's own librarian, "Jungle" Jane Barrett. Even the National Hot Rod Association (NHRA)—whose founder, Wally Parks, was one of the prime movers in the formation of Speed Week 40 years ago-returned to the salt. The NHRA, under the care of Dave Danish, the NHRA's National Tech Director, was there to approve any international world record runs sanctioned by the FIA, which happens to be the world governing body for worldwide motorsports. In other words, for the 255-plus entries on hand, things were looking good.

That was the good news. Then the bad stuff started to happen. First, Mutha Nature wasn't having any of that positive vibes stuff. She sent down a series of unseasonal cold fronts from Canada, which brought with them low temperatures, wind, and rain. The effects were disastrous. Monday, Tuesday, and Wednesday were buffeted by afternoon winds that culminated in Wednesday night's deluge. There was enough standing water on the salt's surface by Thursday to put the kabosh to the event. So remember this: Even though the Speed Trials are scheduled for a week's worth of running, don't count on it. Bad weather is always one deterrent, but there are others, too. For instance, the flats attract sodium-inclock gremlins. These salt-heads specialize in raising hell with the timing equipment. And when afternoon thunder and lightning comes, as it always does, the combination plays havoc with these clocks' sensitive photoelectrical cells. Naturally, precious time was lost fixing these malfunctioning orbs. Then there was the slow pace of the meet.

After a 41-year hiatus, Fran Bannister returned to the salt in a near duplicate of the 4-banger-urged '32 roadster that he drove back in 1948.

2A/Street Roadster was the killer class for '89. Paul Winson's '27 T ran 216 on his own 209 record. However, Tony Piner's 218-mph '28 A was looking strong.

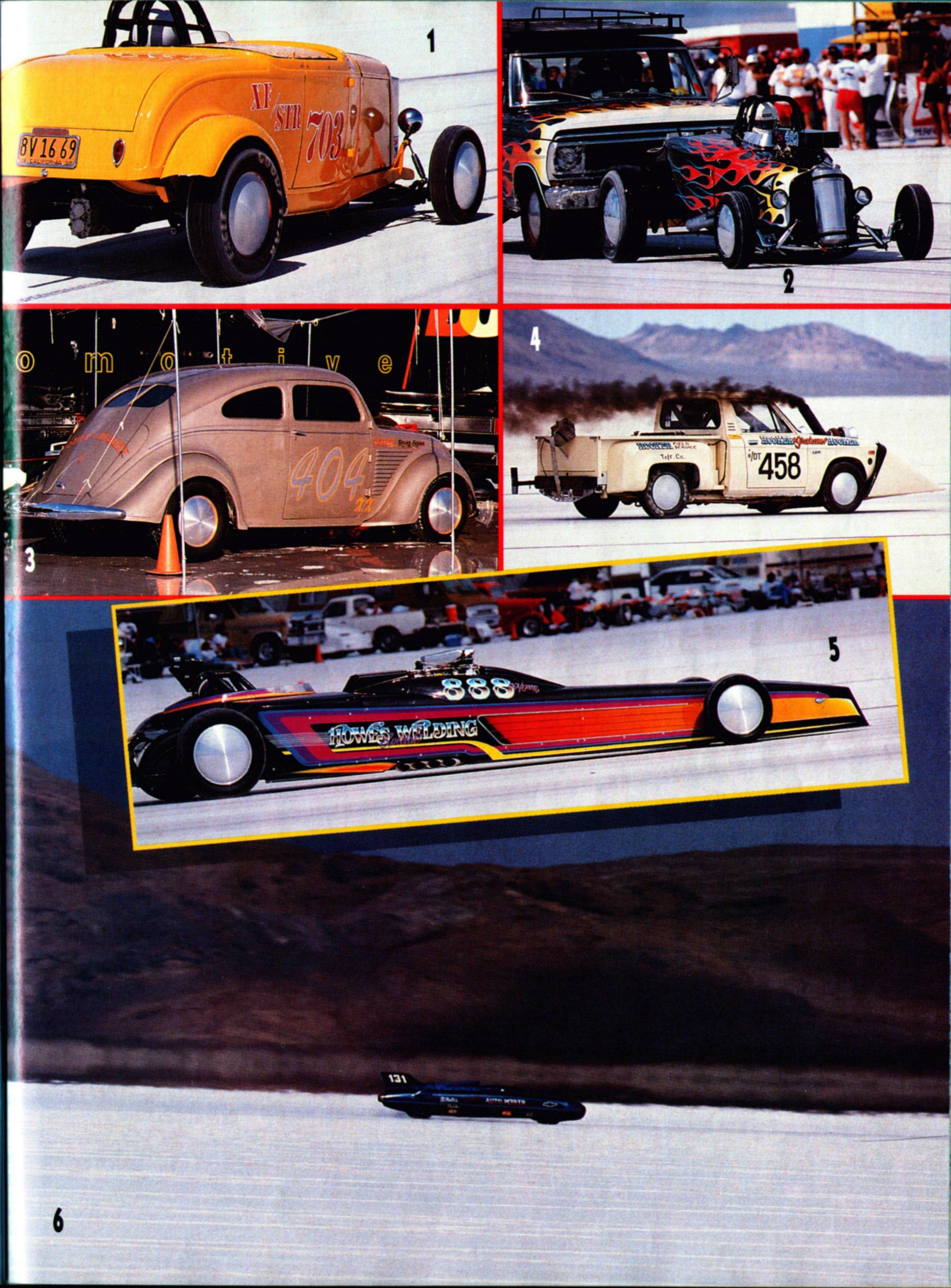
Dave Dozier and Ed Hegarty teamed up to field this '34 Chrysler Airflow two-door sedan. A B&M-blown Chrysler inline powered 404 to a 140-mph average.

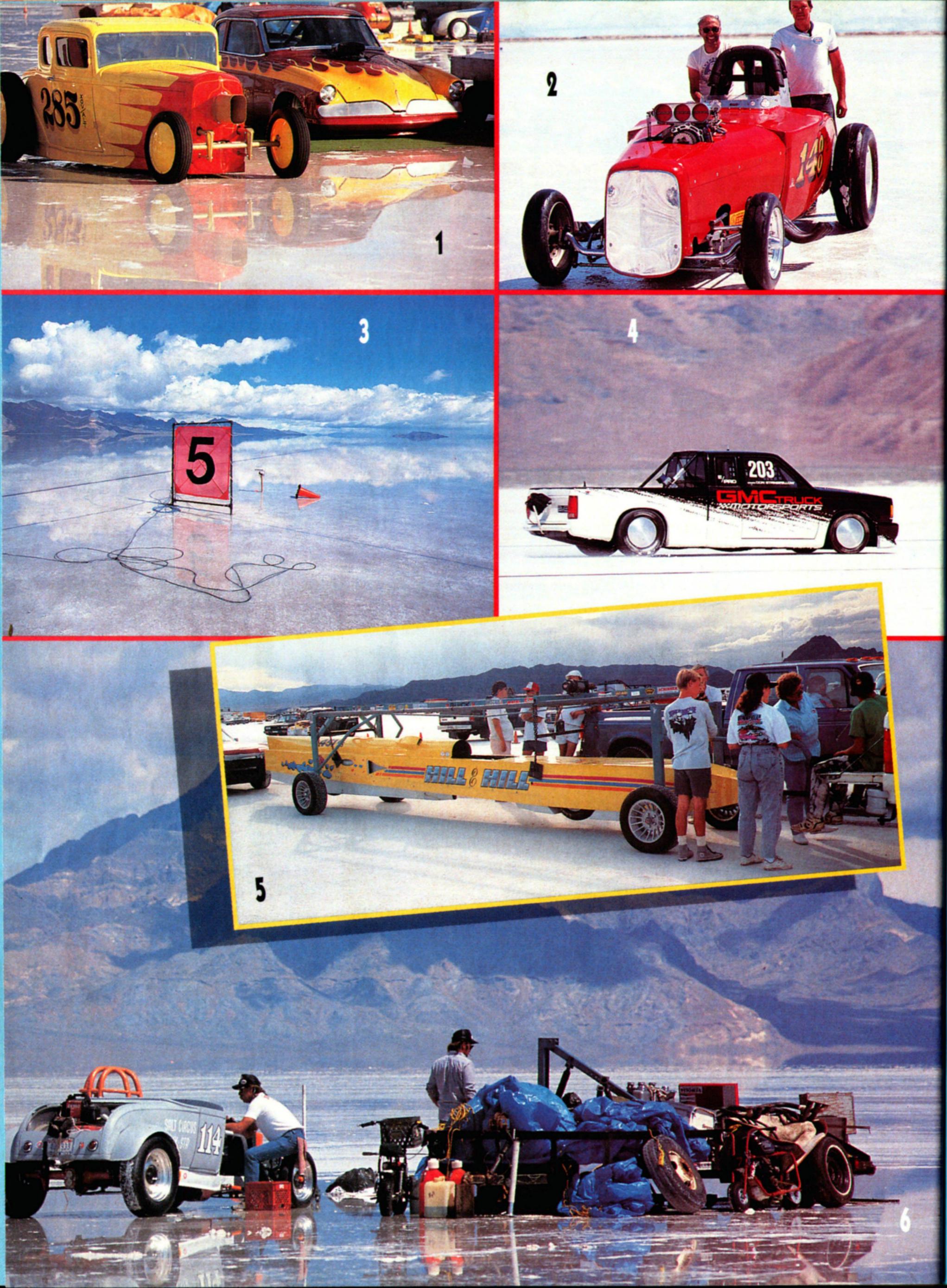
Jim Hooker's '72 Luv is powered by a twin-turbocharged, single-super-charged, 318-inch Detroit Diesel. Still, the plumber's nightmare smoked in a 172-mph pass.

Thanks to Art Himsl, Jim Howe's AA/ Fuel Modified Roadster—horsed by a blown, fuel-burning KB—was the most colorful car at Speed Week.

Nolan White set fast time at Bonneville '89 when his blown, alcohol-burning, 489-inch, Rat-attacked A/Streamliner was timed at 367.833 mph.

We understand that many competitors waited in line for over four hours to make a pass. There is now talk about dragging a parallel course, adding more staging-lane personnel and tightening up on the turn-off procedure. All I know is that the racers would appreciate a faster-paced meet. Lastly, the Speed Trials ended just before the wind and rains came with a near-tragic crash. Randy Scoville, driving the immaculate Noice/Scoville "Noicemaker" four-wheel drive, AA/Gas Roadster, survived a 260-plus-mph rock and roll. Although the aircraft-quality '29 highboy





Water provides photo opportunities such as the 162-mph Berg, McAlister, and Robinson Deuce parked next to the Lynes, Mesler, and Trobee 223-mph '53 Stude.

2Bob Eaton's (left) and driver Tom Perris' AA/Fuel Roadster averaged a 276 for the flying mile, making it the fastest brick in history. More later.

It's beautiful now, but not for long if we rodders don't send money to the USFRA and letters to our representatives to put a stop to Reilley Tar.

Detroit's involvement included both Oldsmobile and GMC Truck. Here, Don Stringfellow takes his Katech-prepared V6 S-15 for a 183-mph ride.

Forget that Hill & Hill's V6 Buickburped 'Liner went 262.125 on a 216mph record. Check out the neat cradle they use to cart it around with.

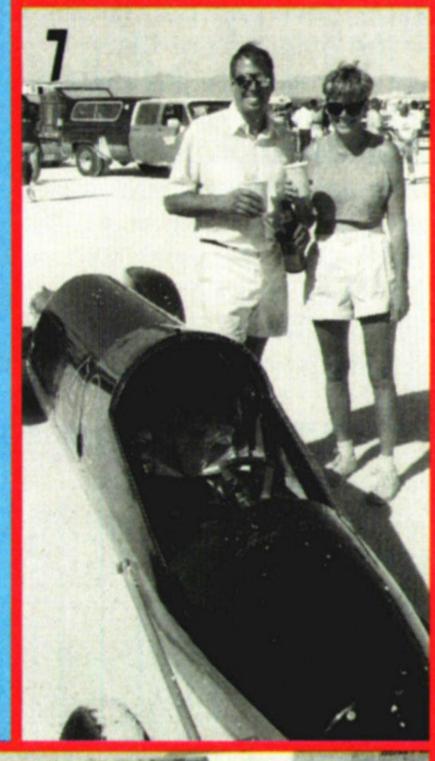
No 18-wheelers or fancy pit vehicles for real salt racers. Teams such as Salt Circus, from St. Louis, Missouri, just stack their stuff in a pile and get with it.

Roy Creel (left) and Terry Burian proved that a "banger" could go faster than 200 mph when their 216-inch Gemsa/B ran 216.077, which got Roy into the "2-Club."

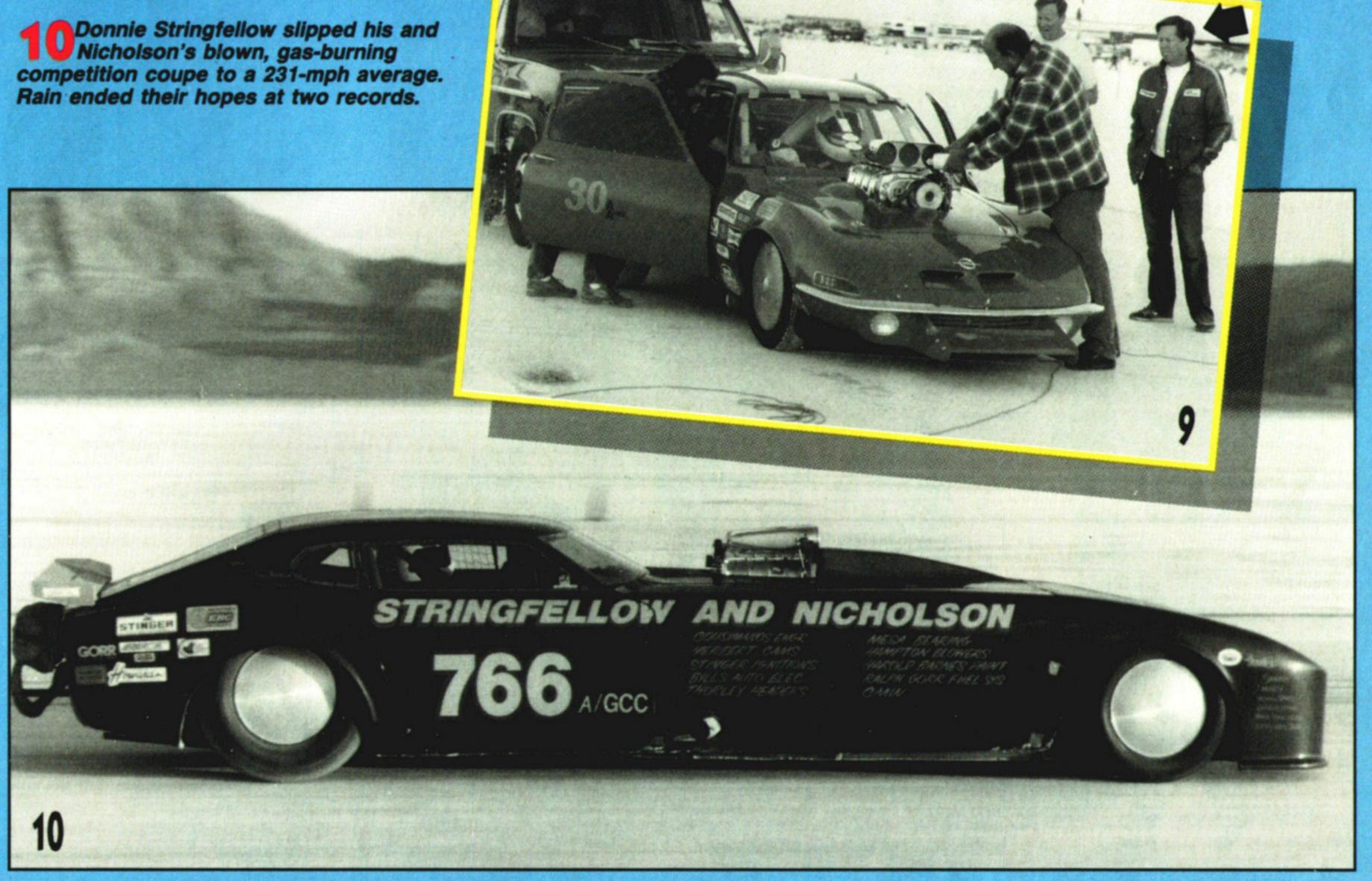
Reese Adams, driving the 207-mph Rat Sass Camaro, got into the 200 MPH Club by breaking California Willie's 203-mph record. Willie will be back.

While "Curly" Bill Ward fires his 241mph Opel GT, the famed drag racer Jimmy Scott (arrow) looks on. Driver John Paxson got into "2-Club," too. was reduced to junk, his crew would like to thank car builder Jim Hill for welding up such a bulletproof chassis.

You've read both the good and the bad. Now it's time for the ugly. Since the turn of the century, Bonneville's 96,000-acre salt flats have been mined (for potassium and potash) by digging miles-long ditches. These huge, open canals have been used to channel the rain-produced, mineral-rich brine to collecting basins for subsequent refining. The upshot of this nine-decade exploitation is visible. What was once 96,000 acres of pristine salt has now been reduced-thanks to Reilley Tar's drain of the salt flats-to less than 26,000 acres. This continued reduction of the size and quality of the salt's surface obviously has the land-speed rac-







### GOOD, BAD, AND UGLY

ers in a massive Save Our Salt (SOS) mode. Under the guidance of Mary West, secretary for the USFRA (540 E. 500 North, Pleasant Grove, UT 84062, 801/785-5364), rodders throughout the world are being asked to petition the Bureau of Land Management (BLM) by sending an SOS letter (provided by the USFRA) to their elected representatives in Congress. The USFRA's goal is to have the BLM receive enough pres-

sure so that Reilley Tar is ordered to cease its ruination of the salt. It should be clear by now that if the ugly continues, there will be no good or bad.

Meanwhile, not all is lost this year. The USFRA is conducting its annual World of Speed, a 100-car invitational, during the latter part of September, and HOT ROD Magazine will be there en masse. Good, bad, or ugly, we still have unfinished business to settle. HR

Mike Cook's 234-mph A/Fuel Coupe is really a slightly altered(?), all-steel, '89 SC T-Bird. Power is by 500-plus inches of blown JP1. Much more later, too.

2Not only did Mark Lingua get into the 200 MPH Club by the narrowest of margins—200.9 on a 184-mph record—he did so with a 28-inch, 4-cylinder Honda.

3 Doc Jeffries got into the "2-Club"— 201 on a 188 record—but his tuner, Jack Dolan, lost the laundry just off the starting line on an FIA record attempt.

