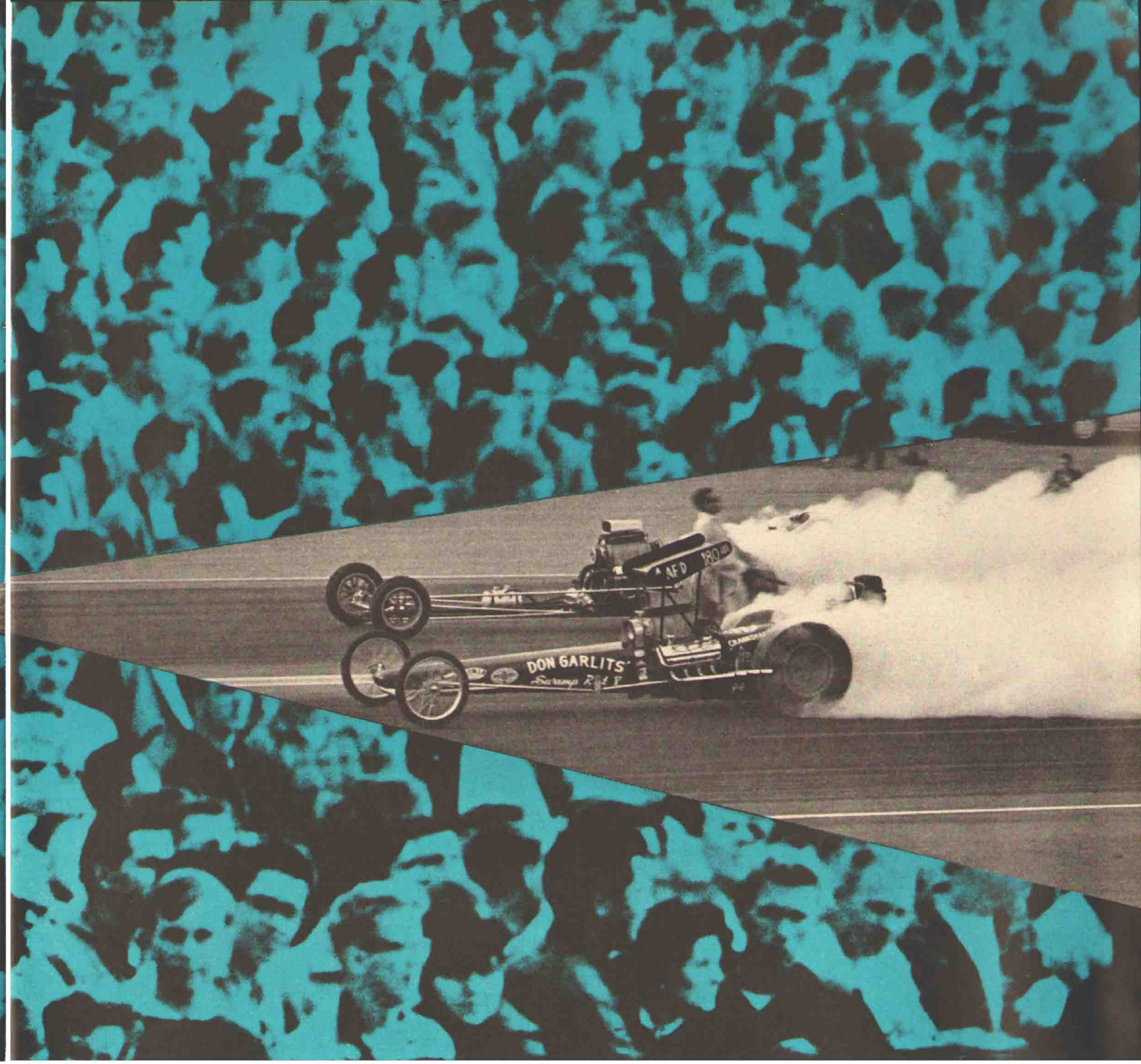
RETURN OF THE PRODIGALS

lots of smoke but little traction in the '63 Winternationals meet

BY BOB PENDERGAST



DON GARLITS drove his "Swamp Rat V" to Fuel Eliminator title and low elapsed time, 8.11 sec., of Winternationals.

EVEN IN straight-away competition, auto racing seems to go in circles—or perhaps we should say cycles. In drag racing, the wave-form has as its limits thrust, at one extreme, and traction, at the other.

Due to the variety of cars running, it is often difficult to tell which of the two factors mentioned is in the ascendancy at any given time. While thrust may be in excess of traction in one class of competition, in another class the reverse may be true.

The dragsters, always the most glamorous division, currently appear to be in the throes of an ascendancy of thrust, with available traction trailing by a considerable margin. The 1963 Winternationals at Pomona, Calif., were very revealing in this respect, since this was the first time in five years that the fuel-burners have been run under record conditions at an NHRA sanctioned event.

At one time, dragsters running special fuel (various mixtures of alcohol, menthanol, nitromethane and even more exotic fluids) were spectacularly faster than those using pump gas. This was during a period when available traction was greater than available thrust. Now, the reverse is true; the best tires on the market can't cope with the thrust the all-out dragster engines are putting out—on either gasoline or fuel.

The top time of the meet at the Winternationals was 188.66 mph. This mark was established by the Weekly-Rivero-Fox-Holding A/FD class fuel dragster. Power for this machine comes from a 335-cu. in. hemispherical head, supercharged Chrysler. An Enderle injector meters fuel to the top-mounted 6-71 GMC blower. Pistons are Forgedtrue and camshaft and valve-train components are Engle; Autolite plugs ignite the mixture. Thrust is transmitted through a Schiefer flywheel and clutch combination.

Low elapsed time of the meet was set by an AA/FD class fuel dragster, Don Garlits' well-known rig. Using one of the last of the late hemispherical-head Dodge engines, he cut the quarter in 8.11 sec. His equipment included Hilborn injection on the 6-71, Crower cam, Forgedtrue pistons, Schiefer clutch and Autolite plugs. The tires on Garlits' car, as on practically every dragster nowadays, are M&H Racemaster slicks.

Now compare these times set by a "gasser": 185.18 mph and 8.36 sec. elapsed time! The car that set both these marks and subsequently wound up as Top Eliminator (gas) was the Peters & Frank entry. Driven by John Peters, the car uses two blown Chevrolet engines totaling 710 cu. in., each equipped with a GMC 6-71 blower. Lest the reader immediately jump to the conclusion that it's unfair to compare single-engine fuel performance against twin-engine gasoline speeds, consider this: NHRA imposes a minimum weight of 2.5 lb./cu. in. on supercharged dragsters so the Peters & Frank machine weighed in at approximately 1800 lb.!

Bearing out the notion that a minimum ratio of engine size to weight somewhat equalizes competition, more than one single-engine gas dragster has exceeded 180 mph in the standing quarter. No, the two engines weren't responsible for the closeness in performance of the top gas and fuel cars; it was lack of traction. And the Los Angeles County Fairgrounds strip, where the Winternationals are held, has as good a "bite" as any strip in the country.

In other words, the drag-racing world is ready for some tires with more "g-r-r-r-i-p" and the next firm to fulfill that desire is guaranteed an immediate backlog of orders.

The Peters & Frank machine used Hilborn injection, Engle cams, Thompson (Mickey) forged pistons, Schiefer clutch (one only!), Champion plugs, M&H tires and Shell gasoline.

In the Stock division, traction is ▶

MARVIN LYONS

"SYNDICATE" OF Vancouver, B.C., won "Best Appearance" award; driver is Jack Williams.

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everybody's business—not because there isn't a tire made that will do the job, as is true with the dragsters, but because the rules don't allow full slicks on the stocks.

This reporter spent the first day of the 3-day Winternational meet literally on his back, crawling under every Super/Stock entry whose owner would give him permission, and we found almost as many different traction bar setups as cars investigated.

These ran the gamut from merely duplicating, on the opposite side, the standard setup which Chevrolet offers, to a multiplicity of bars running both fore and aft from the rear axle. One particular Dodge Ramcharger S/SA (Super/Stock Automatic) was particularly impressive. This is the car run by Bill "Maverick" Golden of Carlsbad, Calif. (which was reviewed in March CL), sponsored by the Southern California Dodge Dealers Association. Though not the fastest or the quickest at the Winternationals, this car is in this writer's opinion the "bitin-est" stocker in captivity.

The traction bars on this Dodge are bewildering to behold, until you realize that they are not all there for the same purpose. First of all, you notice a fairly conventional looking set of traction bars ahead of the rear axle. They are pivoted where they attach to the frame and fasten rigidly to the U-bolts beneath the rear springs. They locate the rear end.

A second set of traction bars is used on this car below and behind the rear axle. These bars are pivoted at *both* ends. At first, when you view this multiplicity of bars, you think someone has made a mistake, since the rear axle housing obviously can't describe two arcs simultaneously. Then you discover that the housing is free to rotate within the U-bolts to the extent allowed by the rear set of bars. This is a matter of no more than a few degrees and results in negligible U-joint bind, if any.

The result is that with the torque converter transmission, it is possible to pre-load the rear axle of this car before leaving the starting line. The torque reaction of the power being transmitted through the rear end pulls the rear end down. You can see this when Maverick comes to the line. Before nodding his readiness to the starter, he punches the L button on the TorqueFlite control panel, simultaneously applying the brake along with a little throttle. The rear bumper of Maverick drops half a foot! And it stays there, too, so that when the brake is released the car leaves the scene without fuss or bother.

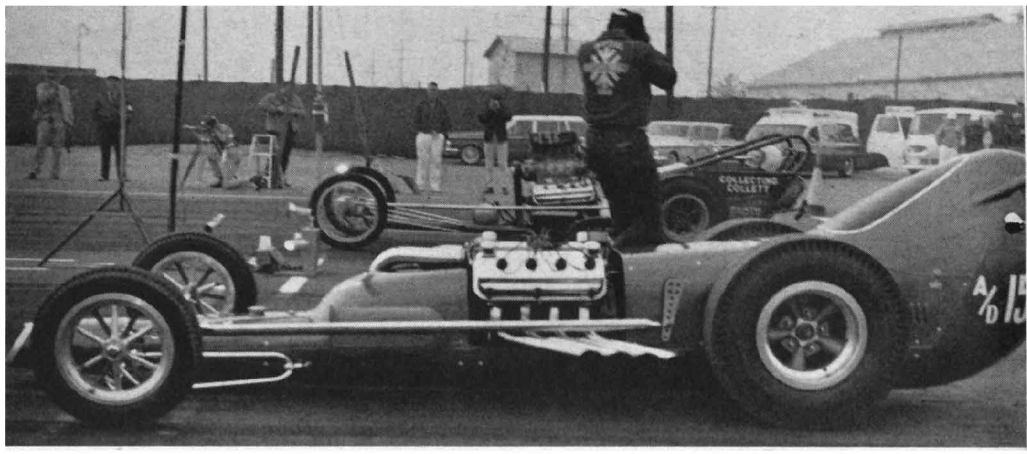
Another approach to traction in the ranks of the Super/Stocks is to use a pair of traction bars on either side, or both, and then to supplement them with a single bar running all the way from the lower portion of the axle housing to the rear transmission mount up front. This bar is mounted at the center line of the car. Once again we find the conventional traction bars reduced to a supporting role, that of controlling the rear springs, while the supplementary hardware (in this case the long central bar) locates the axle and controls rotation. This setup gives the equivalent of torque-tube drive and makes us wonder if one or more of the manufacturers building cars competing in this class may not offer just that as a "heavy-duty" option for the 1964 model year. A good bet along this line would be Ford Motor Company, which didn't abandon torque tubes until 1949 and is very serious about racing these days.

When the smoke had cleared after eliminations in the stock classes, the record book showed that Chrysler Corporation cars had completely shut out the GM and FMC offerings in both the manual-shift and automatic transmission categories of Super/Stock competition. In the stick division, Tom Grove's 1963 Plymouth was both class eliminator and elapsed time record holder: 12.50 sec. Driven by Bob Simmerly, a '63 Dodge prepared by Jim Nelson of Dragmaster took the top speed record in this same class: 115.32 mph.

Among the automatic transmission Super/Stocks, Darrel Ritchie drove dad Tom Ritchie's 1963 Plymouth to a new top speed and elapsed time marks: 115.03 and 12.33 sec. A '62 Plymouth driven by Darrell Hanton was eliminator in this class and a '63 Dodge driven by Al Eckstrand and prepared by the Ramchargers Club of Detroit was overall Stock Eliminator.

The amazing thing about this pre-

ON THE LINE against Gordon "Collecting" Collett; Williams' supercharged Chrysler was eliminated.



ponderance of Dodges and Plymouths among the winners of the hottest stock classes is that for all practical purposes it was a case of 1962 Chrysler Corporation engineering against the best GM and FoMoCo could devise for '63!

We make this apparently loaded statement because the NHRA rules in 1962 allowed a 0.060-in. overbore in stock classes, as they do in '63. However, the 413-cu. in. Super/Stock racing option offered in '62 by Dodge and Plymouth displaces 426 in. if bored that much. The NHRA limit for '63 is 427 in. so the Dodges and Plymouths were running the same size as in '62 for all practical purposes.

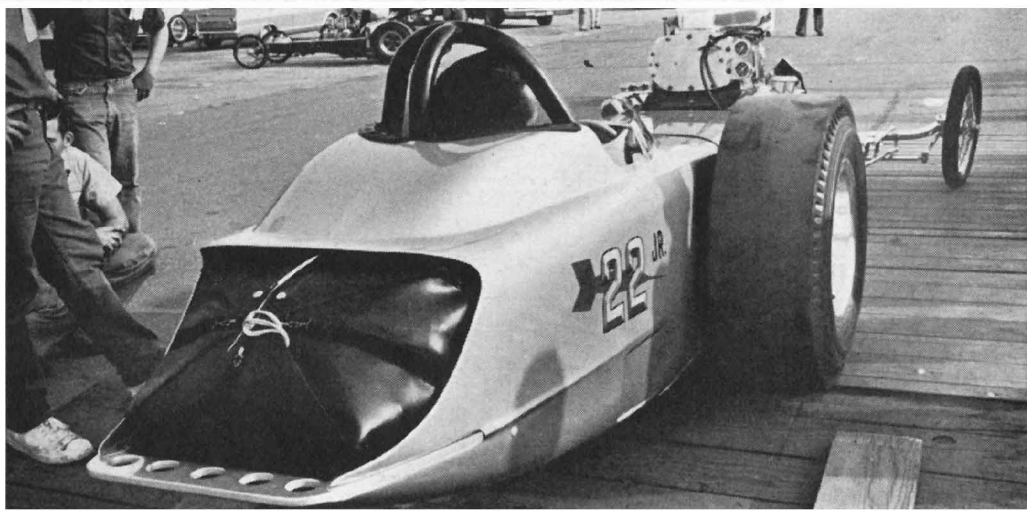
In equipment, the Dodge-Plymouth 426 differs very little from a bored-out 413, which is why we say the '63 GM and FMC offerings were shut down by Chrysler Corporation's '62 engine design. We're not biased—we just stood there and watched them do it, that's all.

General Motors' products dominated stock car competition within the sports car division, however, with the winners of A,B,C and D stock sports car classes all driving Corvettes. Stock sports car competition under NHRA rules is an interesting and little publicized activity that probably deserves greater attention. Rules are substantially the same as for the stock passenger cars, except that slicks are permitted, and magnesium wheels, too. Cars are assigned their class according to their ratio of factory-quoted shipping weight and advertised horsepower. Due to this, Corvettes are found in the top four classes.

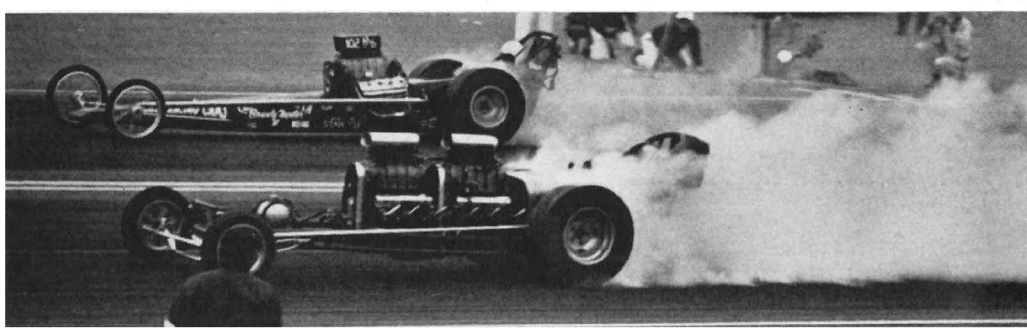
A 1963 with the 360-bhp engine won Class A; another '63 with a milder, 300-bhp engine won Class C. A '61 with the 315-bhp option took B; another '61 with the 270-bhp option took D. And there wasn't a Thunderbird in sight!

Although Chrysler products won all the Super/Stock titles, GM could be proud of its products in the other stock divisions as well as its Corvettes. And, GM products more than redeemed themselves in modified competition—Chevrolet engines outnumbered all others combined among the dragster, competition and altered class competitors. An Olds-powered dragster, entered by Porter & Ries of Pomona, turned top speeds and elapsed times just short of the best marks for fuel. Also, the under-10-sec., near-140-mph single-run sprints of the blown-Olds-powered Willys run by Stone, Woods & Cook in the A-Supercharged Gas division for stock-bodied

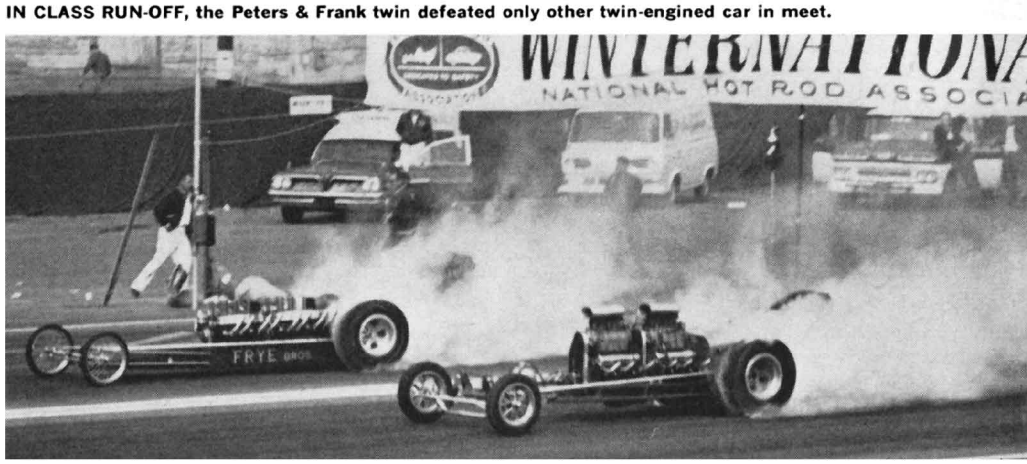
TONY NANCY christened his new Dodge-powered dragster at Pomona in AA/C class.



TWIN-CHEVROLET powered AA/Dragster driven by John Peters won Top Eliminator.



IN CLASS RUN-OFF, the Peters & Frank twin defeated only other twin-engined car in meet.



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hot rods showed Oldsmobile's engine in a good light. Buick engines were in the minority and the rodders have just about given up on Cadillac—Olds engines are cheaper to buy and seem to stand up to the rigors of competition better than the "standard of the world" which, after all, wasn't designed with this sort of thing in mind.

Gas burners in all the modified classes went considerably faster than last year for a variety of technical reasons, all of which could be lumped under the heading of Moderation.

Many entrants claimed they were running a lower compression ratio, less supercharger boost and turning the engine slower than before, yet going faster and getting there quicker. Because everyone in competition cries on the shoulders of the spark plug manufacturers' representatives, we queried Jerry Norek of Autolite about this theory of milder engines going faster. "They were in trouble before—and now we're getting into pre-ignition and detonation," he said. "By cutting down on compression, or boost, or both they have their engines running right for the entire 1320 feet."

Art Chrisman, also an Autolite representative at this meet, was working extensively with the fuel dragsters. We mentioned Norek's opinion about the gasoline engines and he said, "That may be true of *them*, but the fuelers are running lots of compression, lots of boost, lots of nitro and lots of revs. They're all the way to the wall for the entire quarter-mile."

Here's an opinion that is strictly our own: *If* the fuel burners will adopt the more moderate approach to competition engine building that has helped the gas burners lately, and *if* a major breakthrough in tire design is achieved in '63, somebody is going to turn an honest 200-mph time.

The reasons for this statement are not complicated in themselves. We believe that currently the people using gasoline are learning things the fuel-dragsters operators are not. There's a reason for that, too. With a blown, fuel-burning engine in a lightweight dragster, even with the best tires currently available, the driver can break his tires loose at will for the entire quarter-mile. He has surplus power.

The gas burners start out that way, but if the spark lead is too great, or the compression ratio too high, or the boost pressure too much, detonation and/or pre-ignition will occur. This, admittedly, is finding out things the hard way—but it is knowledge gained, nevertheless. When the combustion chamber of a gas-burning engine can be kept calm and cool for the entire 1320 feet, the dragster is approaching the point where it needs those tires with more bite. That's why we feel that the next big breakthrough in tire design may temporarily see the better gas dragsters beating the fuel burners—but for a limited time only.

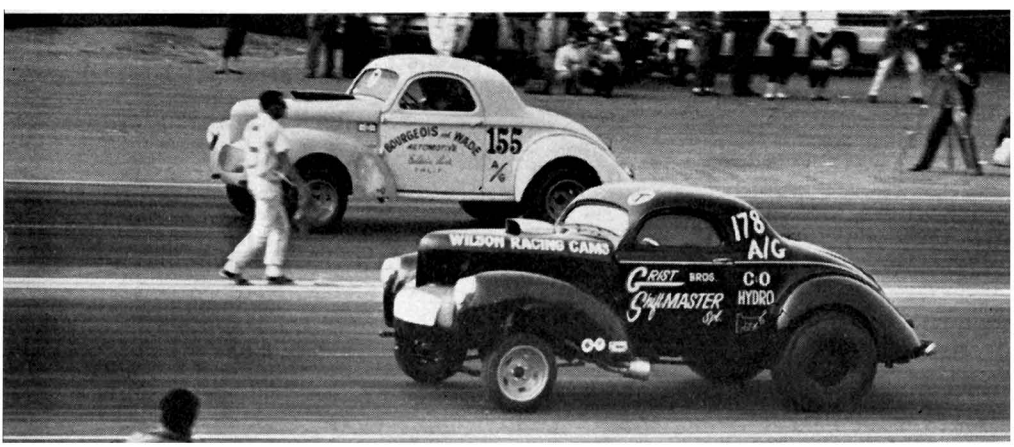
At any rate, the big technical lessons of the Winternationals were:

1. Until better tires are developed the gap between gas dragsters and fuel dragsters will continue to narrow and,

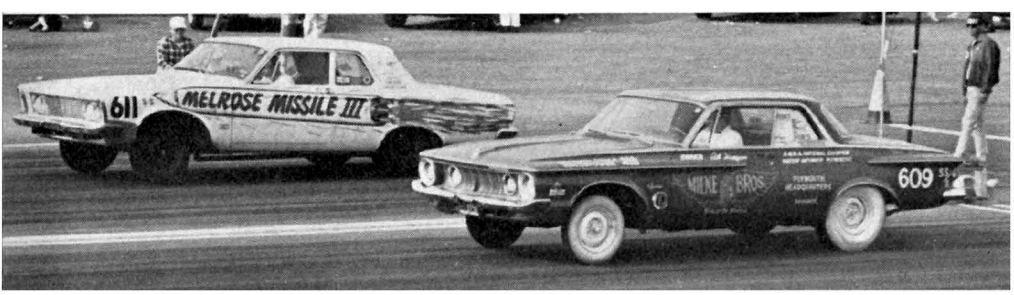
2. The Chrysler Corporation's '62 high-performance options were good enough to stop the GM and FMC Super/Stock charge in '63 and,

3. Chevrolet still builds the only sports car (for drag racing) in America!

See you at the Indianapolis Nationals (Aug. 30–Sept. 2)! ■

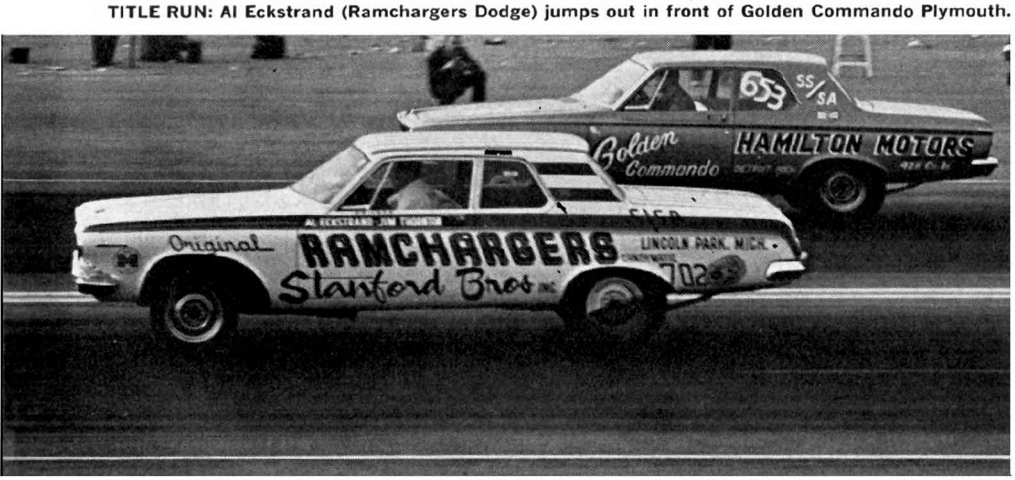


HOT-A-GASSER driven by Dick Bourgeois (155) was Little Eliminator.



MELROSE MISSILE Tommy Grove, S/S winner, put down Bill Hanyon (609), S/SA champion.

TITLE RUN: Al Eckstrand (Ramchargers Dodge) jumps out in front of Golden Commando Plymouth.



WINTERNATIONAL RESULTS

TOP ELIMINATOR—John Peters, Santa Monica, Calif., AA/D, Chevy-powered (2 engines) 8.82 sec., 178.21 mph.

TOP FUEL ELIMINATOR—Don Garlits, Tampa, Fla., AA/FD, Dodge-powered, 8.26 sec., 186.32 mph.

STOCK ELIMINATOR—Al Ekstrand, Grosse Pointe, Mich., 1963 Dodge (automatic), 12.44 sec., 115.08 mph.

COMPETITION ELIMINATOR—Tony Nancy, Sherman Oaks, Calif., AA/C Dodge-powered, 9.62 sec., 152.68 mph.

MIDDLE ELIMINATOR—Doug Cook, Paramount, Calif., A/GS, Olds-powered Willys, 10.02 sec., 139.96 mph.

JUNIOR ELIMINATOR—Hugh Tucker, Ventura, Calif., AA/SR, Olds-powered, 10.30 sec., 138.24 mph.

LITTLE ELIMINATOR—Richard Bourgeois, Baldwin Park, Calif., A/G, Chevy-powered, 11.35 sec., 124.30 mph.