

FORD ON STOCK CAR RACING



Have you ever wondered why Detroit sinks more money into stock car racing than into any other form of racing? If so, tune in as Ford's Special Vehicles Manager (racing chief) Jacquie Passino, tells it like it is!

BY ROGER HUNTINGTON

IT'S ALWAYS been obvious to the more observant hot rodders that the Detroit car companies are more concerned with stock car track racing than they are with drag racing. Anybody can see that they spend a lot more money, time and engineering brainpower on the roaring NASCAR stockers than on drag strip stocks, Super Stocks and dragsters put together. When anything goes wrong on the NASCAR racers, or if there's a hassle over rules or certification of "stock" equipment, you see factory engineers and big wigs running all over the place, jetting back and forth across the country, generally getting all shook up. Drag racing is treated like a poor relation by comparison.

To get the answer to this interesting question—and many others—we slipped over to Ford Motor Company and had a long talk with Jacquie Passino, their Special Vehicles Manager. This means Passino is the head man of the whole Ford racing program. He's been

deep in this program ever since Ford got into racing in a big way in the early 1960's—and he's in a unique position to answer any questions about the relationship of one type of racing to another. The editors of CARS Magazine thought this would be an especially good time to talk to Ford on this question, since GM's "Bunkie" Knudsen has recently taken over as Ford president—and the word is that he has brought some radical new policies on racing and high-performance models. How have these affected Ford's new racing status on both the track and drag strip?

Here's how Jacquie Passino answered our questions.

CARS: Let's get right to the meaty question. Just why do the car companies seem more interested in NASCAR stock car racing than in drag racing?

PASSINO: We don't deny that we're more interested in stock car racing. It's a simple matter of economics. We can get much more nation-wide

publicity in newspapers, magazines and TV from victories in stock car racing than from drag racing. The publicity return per dollar spent is much better in stock car racing. A big NASCAR victory makes headlines from coast to coast. A similar victory in your biggest drag events doesn't get one-tenth of the attention. Many newspapers won't touch drag racing. And yet our last Daytona win in '68 pulled an eight-inch story in the Chicago Tribune. We considered this quite a breakthrough—as they're notorious for staying dead away from auto racing coverage of all kinds.

CARS: Why is this? Why doesn't drag racing pull the publicity that stock car racing does?

PASSINO: We're not sure. But undoubtedly it has a lot to do with the relative spectacle of the two types of racing. Fender-to-fender speedway racing at speeds up to 200 mph would seem to be more colorful and exciting than two cars racing down a drag

Dick Petty driving a Ford Torino copped the first big NASCAR race of the '69 season.



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strip from a standing start—at least from the standpoint of *sustained* excitement. Drag fans may not agree. But consider the spectacle from the standpoint of the general public. And compare the crowds. Crowds of 60,000 to 100,000 are common at many big stock car races during the season. Drag racing doesn't pull like that. This is evidence of the relative public spectacle of the two sports.

CARS: Why are the newspapers and TV more interested in track racing?

PASSINO: Well, of course they have to go along pretty much where the public interest is. But let's face it—it's easier to write an exciting news story or make up a colorful TV program on track racing than on drag racing. It's that matter of sustained excitement again. A drag race is over in 7 to 15 seconds. It's hard to sustain excitement, especially on TV. Also it's hard to explain the dozens of classes to the general public. In a big drag event the only one who gets any degree of national publicity is the top fuel eliminator. Stocks and

Super Stocks are ignored. On the other hand, look at 40 or 50 cars circling an oval track at tremendous speed. The first car to the finish line wins. What could be easier to explain to John Q?

CARS: Will drag racing ever be as popular as stock car racing?

PASSINO: I doubt it.

CARS: Now let's get down to some behind-the-scenes details, like why wasn't Ford's new 429 engine approved for the Daytona 500 this year?

PASSINO: The NASCAR people require that at least 500 engines be installed in cars on an assembly line to qualify as "stock". We were able to build 500 Fairlane Torinos with the "Talladega" front end in time for Daytona. But several things held us up on the engine. The original aluminum heads gave less power than the cast-iron jobs, and that took engineering time to solve. Also we had an outside company cast and machine the aluminum heads, and they were delayed tooling up. We did have over 500 of the 429 engines stockpiled by February 1st—but less

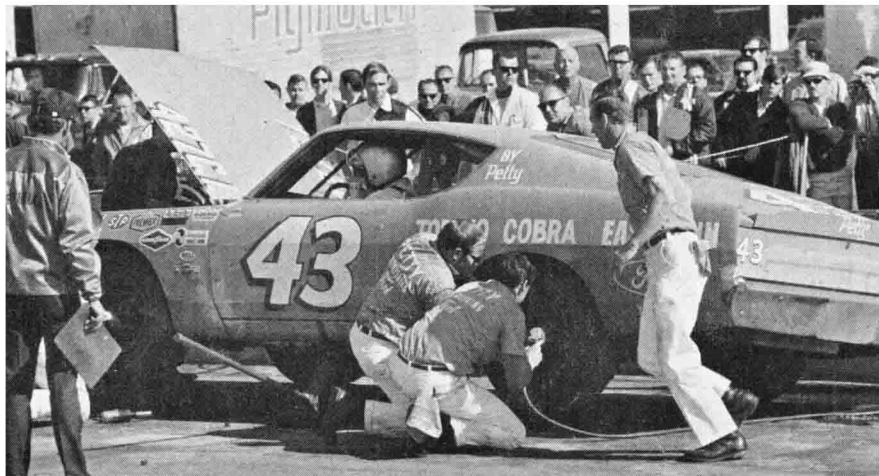
than 100 of them had been installed in Mustangs. It's a hard job that takes time. So the NASCAR people turned us down.

CARS: It seems too bad that the public was denied seeing a hot engine like this run in the big Daytona race. Isn't there some way this could be avoided in the future?

PASSINO: I think NASCAR will come up with a new way of handling these things next year—since it's getting pretty tough to get 500 of these exotic engines installed in cars in January, only a few weeks after new model time. I would like to see a system where a company must post a bond of so much for each of the 500 cars that *are not* built by a certain date. These would have to be built by some stipulated *later* date in the same model year, or the bond would be forfeited, like, say, \$1,000 per car. So if a company came up with only maybe 100 cars assembled in January, the bond would be \$400,000. They couldn't afford to lose that by not building the other 400 cars later on.



A.J. Foyt was second at Riverside in a Ford Torino. Ford had to use the old 427 engines because the new 429's weren't approved as stock. Below, Ford pit crew is one of the fastest in the business. You don't take first, second, and third places at Riverside without being fast.



CARS: You speak of exotic engines for NASCAR racing. Why can't these be based on your standard product engines, so there wouldn't be this problem of producing a few of them by hand at high cost?

PASSINO: The competition in big-time auto racing today is just too tough. We can still use basic production cylinder blocks and crank train parts. But the cylinder heads are the problem. We need bigger ports and valves for racing today than it would be practical to run on the street—at least in bread-and-butter utility cars for the masses. There's no simple way to quickly modify a production head to do the job on the racetrack. It usually has to be an entirely different design and casting. And the racing associations like NASCAR and NHRA consider this a different engine when you use special cylinder heads, even though they bolt on a production block. Thus we have to build at least 500 of them to qualify as "stock". This is the problem.

CARS: Does this mean that Ford will never build very many of the 429

NASCAR engines and sell them at reasonable prices to the public? Rumors say that this engine will eventually replace the current 428 Cobra Jet as Ford's top performance option for the street. Wouldn't this call for volume production and low prices?

PASSINO: Car fans are jumping to conclusions on the 429 NASCAR engine. This will never be a volume engine in the same sense as the current 428 CJ—which is made on basic production tooling and assembled and installed on regular factory lines. It's much too complex and expensive to make, even with cast-iron heads. No, the new 429 NASCAR will be in the same class as the Chrysler 426 Hemi—very limited production. We're not planning on more than 3000 units a year. That's more than Dodge and Plymouth together sell of the 426 Hemi. You can supply the racing people and the well-heeled performance purists with 2000-3000 special engines a year.

CARS: Then what engine will replace the 428 CJ? The basic tooling of the CJ engines dates back to 1958.

PASSINO: There will be big news for super-performance enthusiasts in the 1970 model year. All the basic engines are in the present Ford line-up. Put two and two together.

CARS: We've heard that Mr. Knudsen, Ford's new president has brought in some radical new policies on racing and high-performance models. Could you fill us in?

PASSINO: It's fairly simple. Mr. Knudsen believes that all factory racing activities should be aimed primarily at *selling cars*. And he has a motto: "Race what you build and build what you race." Admittedly Ford has been a little lax in this area in the past. For instance you could never order an overhead-cam 427 engine in a car. You bought it in a crate and installed it yourself. Mr Knudsen frowns on this kind of stuff. This is why we're rushing to tool up the 429 NASCAR engine for reasonable volume production. This engine must be readily available in cars within a few months, even if the price is quite high.

CARS: I think another good example of exotic Ford speed equipment that mysteriously disappeared would be the tunnel-port heads for the 302 block. Whatever happened to them? There was a lot of publicity on them a year ago.

PASSINO: We're a little embarrassed about this. Our original intention was to produce the 302 tunnel-port heads in limited volume for the racing people. The "tunnel-port" concept had worked beautifully on the 427 NASCAR engine, and we had every reason to believe it would make a winner out of the 302 Trans-Am engine. But they just didn't work out as expected. What worked on the big engine fell flat on the little one. It sometimes happens. Apparently the 302 tunnel-port heads had *too much* port and valve area. Some experiments got better all-around performance when the ports were made *smaller*.

CARS: Why didn't you continue developing the 302 tunnel-port heads until you got the full potential?

PASSINO: Just about that time we started development on some new "canted-valve" heads for the 1969 or 1970 351-cubic inch engine. They are similar to the standard heads for the new 429 engine. They gave better breathing than the tunnel-port 302 heads right off the bat, and they would bolt right on the 302 block. Also they were much simpler and cheaper to make. It was foolish to go on developing the tunnel-port heads.

CARS: Does this mean that these new canted-valve heads will be used on the



Cale Yarborough won the Daytona 500 last year in a Mercury Montego, using 427 wedge engine, in car N. 21. Lap speeds approached 190 mph.

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302 Mustang Trans-Am racers this season?

PASSINO: Right. There will be a new "Trans-Am" Mustang model available to the public this spring—which would be necessary to make the model eligible for Trans-Am racing. You have to produce at least 1000 units. The package will be similar in concept to the Z-28 Camaro.

CARS: What are some of the other goodies in the package?

PASSINO: You can about figure it out: the new heads on the 302 block, solid cam, dual-quad carburetion, beefed-up bottom end, heavy-duty suspension, disc brakes, four-speed, special body trim, etc. We hope to attract a new market.

CARS: Will those new canted-valve heads be available on other assembly line models in 1970?

PASSINO: Nothing has been finalized yet. It's possible. However they won't be used on standard models. They will be strictly high-performance heads. Plans are to offer them in a kit for replacement on earlier 289, 302 and 351 blocks. The breathing is pretty impressive.

CARS: Now let's get back to NASCAR racing briefly. Some people have predicted that the new Ford 429 engine has such huge ports that it won't be any good on short tracks. The mid-range torque will be poor. How about this?

PASSINO: No, we plan to go with the 429 engine (as soon as it's approved) in all NASCAR races. There are no plans to switch to the 427 wedge engine for short tracks. We hope everything will work out.

CARS: Who are the Ford factory drivers in NASCAR this year?

PASSINO: Dave Pearson, Dick Petty and Bobby Allison. Cale Yarborough and Lee Roy Yarborough will drive factory Fords early in the season; but they will switch to Mercury Montegos as soon as enough are built with the new "Talledega" front end to make them legal.

CARS: What does it mean to be a factory driver? Do you get a salary? How much factory help do you get?

PASSINO: These teams aren't literally hired and owned by the factory. They're private businessmen being sponsored by Ford. The cars are owned by private car dealers and the teams live on their own winnings. Ford supplies engines and all necessary parts, so the overhead is much lower than for private teams. Our engineers work directly with the teams to develop the cars to go faster. We try to distribute any important developments to all Ford teams, however.

CARS: Do factory cars have an unfair advantage over private cars?

PASSINO: I'm sure there is a substantial advantage. But it's necessary for the factory to have a very close

association with at least three or four teams to do the necessary crash development to keep us with the competition in NASCAR racing today.

CARS: Why did Dick Petty switch over to Ford this year? Some say Ford lured him with big money.

PASSINO: I'm sure it was a matter of bread and butter with Dick. He makes his living from racing. His earnings were down last year from '67. Doesn't it make sense that he would switch to a car with a better chance of winning? I'm sure Dick's economic arrangement with Ford is no better than it was with Plymouth.

CARS: And let's have a few words about other types of racing which use basic production engines. For instance, Chevrolet has been dominating the popular "Cam-Am" sports car racing circuit with their 427 engine. And with the new ZL-1 aluminum block it looks like they're in good shape for the coming '69 season. Is Ford going to take this laying down?

PASSINO: No. We are in the process of developing the 429 NASCAR engine with an aluminum block to compete with the all-aluminum 427 Chevy this year. It will be bored and stroked to 494 cubic inches and will weigh less than 550 pounds. Early dyno tests are very encouraging. We hope it will do the job.

CARS: Will this all-aluminum 494
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be available to the hot rodders in the crate this summer?

PASSINO: It's hard to say this early. But remember our new policy is to race what we build and build what we race. It would be logical to expect that this engine would be available to the public as soon as possible.

CARS: The new 1969 Indianapolis rules allow stock-based pushrod engines up to 320 cubic inches. Will Ford be preparing any engines for this category? We remember that Dan Gurney won 2nd at Indy last year with his "Gurney-Weslake" heads on a 302 Ford block.

PASSINO: Yes, we're very interested in this new area of Indy racing, and our engineers are at work. We're experimenting with both the Gurney heads and our own new canted-valve heads on stroked 302 blocks. The final layout is far from settled yet. But right now it looks like Dan Gurney, Smokey Yunick, and maybe a few others will be running these engines at Indy this year.

CARS: Ford's famous four-cam 225-

cube Indy engine has been taking it on the chin lately from the turbo-supercharged four-cylinder "Offy". Last year you de-stroked the 255 engine and fitted it with a turbocharger. It didn't work too well. Do you plan to continue with development of this engine this year?

PASSINO: Yes—but not on a big scale. There won't be any appreciable development work done in Ford labs. We're farming the work out, with a small team of Ford engineers to work with these outside researchers. Process to date has been quite encouraging. We expect that at least 10 or 12 cars will use the latest turbocharged Ford engine in this year's Indy race. We're building 25 engines in all.

CARS: Will Ford's racing program continue in the future at the same fast pace that it has in the last two or three years?

PASSINO: It's hard to say. Our plans change continually. One year we may decide to emphasize one type of racing and de-emphasize another, as it best seems to benefit the corporation. But the overall policy remains that racing helps develop and sell cars—so I'm sure Ford will be deep in the sport for some time to come.

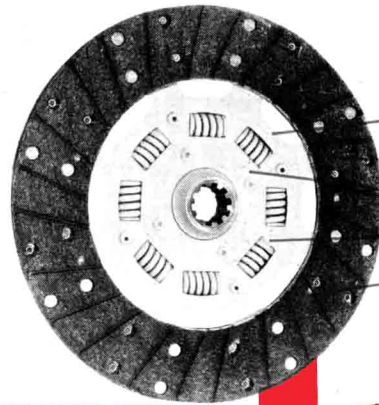
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