# LONG BEACH F-1 PREVIEW

# FORMULA

AMERICA'S INTERNATIONAL AUTORACING MAGAZINE

Vol.3 No.3 April 1976

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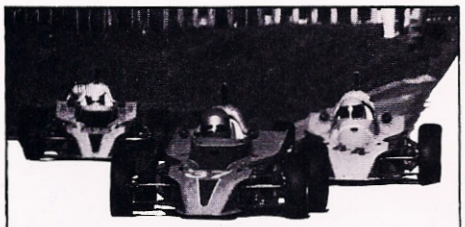

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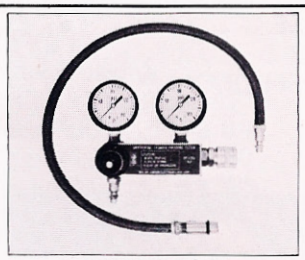
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# FORMULA



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Vol. 3 No. 3 April 1976


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COVER PHOTO: Ronnie Peterson at the wheel of the new Lotus 77 during the Brazilian Grand Prix. Jeff Hutchinson Photo.

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# From The Driver's Seat

by Hugh Mooney

## Back To Long Beach

Formula 1 cars through the streets of Long Beach, California: that's what the United States Grand Prix West is all about. The USGP West marks the first time one country has been allowed two championship Formula 1 events in the same season, and it is the only FIA-sanctioned event run on public streets in America. The USGP West is not just another race — it is in fact, the "premier" event. Second to none. Not even Indy will be able to match the excitement and charisma that will be created at Long Beach.

It has been sixteen years since the West has been treated to a Formula 1 race. Much too long in my estimation. We did get a glimpse of F1 cars in 1971 when they ran at Ontario Motor Speedway in the Questor Grand Prix, an event matching the F1 cars against F5000 machinery — the international stars against the Americans. But Long Beach will be different. The USGP West will be for real; everyone will be there, all the international stars, teams and cars.

## IMSA

The response to my article in the February issue in reference to *Formula* expanding its road racing coverage to include IMSA has been amazing. I've been on my soapbox for over a year about this situation or that, but have had less feedback than I expected. I was beginning to wonder if anyone ever read my column and I'm glad to see that I finally hit on something that made you readers respond. It seems as if racers don't write much or sound out their feelings as some other groups do.

I wish we had more room to list the letters we've received on the IMSA subject, but as you can see we don't have what you would call a lot of excess space. It's been about 50/50 for and against, which is somewhat different than I expected considering that a majority of our readers are die-hard formula car freaks.

The main concern seems to be the possibility of our open wheel racing coverage suffering from the addition of IMSA racing.

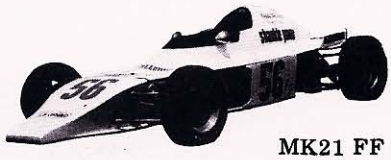
I can assure all our readers that open wheel racing will remain our prime concern and will continue to be reported in the same complete, concise and professional manner as before. We will still have the very best Formula 1, Formula 2, Formula Atlantic, Formula Super Vee, Formula Ford and Formula Vee coverage available. You will still find the best photos around, and more color too. In effect what I am saying is that there will be more and better formula racing coverage in 1976, plus the addition of IMSA GT and RS. I'm positive you won't be disappointed.

## Amateur Coverage

Our amateur racing coverage for the 1976 season will start in the May issue. We will have full reports from the Riverside National held February 15 and from the Palm Beach National and Pro Formula Ford race February 22. ■


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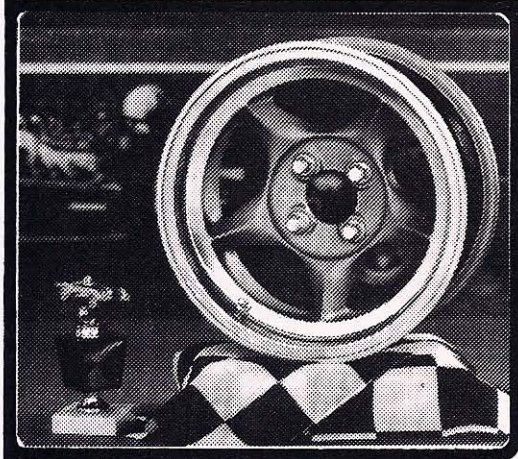
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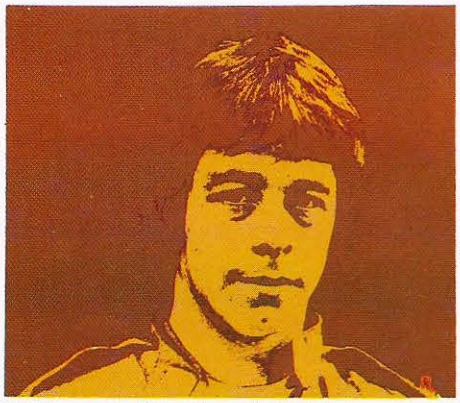
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## Howdy's Column

**by Howdy Holmes**

The 1976 season started on a sour note for the E-Z Wider and the Jiffy Mixer. Entered in the Goodrich Radial Challenge Series and the Bosch VW Gold Cup events at the Daytona IMSA opener, both the Amos Johnson Levi's Team Highball Pacer and the Bill Scott Racing Super Vee Lola T324 encountered problems which relegated us to the middle of the pack and the dead end of the field respectively.

We started the week well with the Jiffy Mixes Lola being fastest in Wednesday's unofficial practice preceding Saturday's race, but it was all downhill from there. Amos Johnson and crew were still in Raleigh, North Carolina at 10:00 p.m. on Wednesday and practice had started at 2:00 p.m. the same day. Nevertheless they did an excellent job in completing the Pacer for E-Z Wider and myself. When the RS machine arrived, we immediately encountered brake problems which permitted only 25% stopping power. After that gremlin was banished, we began to have fuel feed problems so that our qualifying position was an electrifying 18th.

The Super Vee effort wasn't going much better. The special engine which Ric Brady of BSR assembled for Daytona blew spectacularly between the third and fourth turns on the banking. For a moment I thought I was Richard Petty groping with a four wheel drift! The VW power unit had a hole in both the top and bottom of the block, so that you could see daylight from one end to the other. Our secret recipe failed, so to speak.

Having completed but a lap of qualifying, we were allowed last place on the grid. That would have been okay had the grid been inverted for the start, but try as I might, my efforts to turn the grid around were to no avail.

Several hours after qualifying was over for the Jiffy Mixes SV Lola, the E-Z Wider Pacer was pushed to the line for the twilight start of the Goodrich Challenge race. With the car painted a very dark brown, the only identifiable features were the E-Z Wider trademark and myself. Someone compared that to the little man riding a pack of rolling papers, as is shown in all of the advertisements. Having been nicknamed the E-Z Wider by my competitors, I suppose they would have been given a thrill if I had zoomed past on a four-wheeled pack of my sponsor's product.

Such was not to be the case however. Rushing from 18th to 10th, my hopes were dashed for a possible sixth or seventh when the fan belt broke on the 12th lap. Down two laps after pitting for a replacement, the E-Z Wider Pacer did a slow burn to a resounding 25th position.

The Bosch VW Gold Cup started much better; I even thought I had a chance for the win. Starting from the back, you have two or three laps to catch the leaders if you want a shot at a high placing. If you haven't caught them by then you never will. That task was easily accomplished when the Jiffy Mixes Lola caught the group of cars competing for third place. Within a lap I felt I would be third and closing on Tom Bagley and Herm Johnson, the eventual first and second placed drivers. But my best laid plans were not to be, for once again Howard S. Holmes achieved something new in the archives of DNFs. The accelerator linkage between the two carburetors worked loose, so that one carburetor was at one-half throttle and the other full; consequently the mixture was much too rich and the motor wouldn't rev over 6500 rpm. So for two races this year, the score stood: Machines — 2 Humans — 0.

The most memorable moment of my Daytona weekend came in an event I wasn't even entered in — the 24 Hours of Daytona. Amos Johnson, preparer of the E-Z Wider, had asked Tom Creacy (Director of Advertising for E-Z Wider) and myself to meet him at the TV tower during the period of time he was responsible for driving the pace car for the international race. When we arrived, he greeted us with the invitation, "Gentlemen, step into my office". We stepped into the pace car and were discussing business when an official knocked on the window and signaled us to the pit lane, in case Amos' skills were needed to slow the field. As fate and luck would have it, the E-Z Wider nearly led a race in which it wasn't competing. After my previous results over the weekend, somehow that seemed fitting. ■

# LETTERS TO THE EDITOR

## IMSA Yes or No?

Gentlemen:
In regard to your February issue on the idea of covering the IMSA races I will have to vote no. The reason I received your magazine is your unique coverage of only formula classes. I request that you do not change your format. Your color coverage is great. Keep up the good work.

Steve Moore, Newton Falls, Ohio

Dear Sir:
In response to your invitation to comment on the merits of FORMULA covering other types of road racing, I would like to say I am not in favor of it. There are just too many avenues available to improve and expand your current product. Why become just another racing magazine? I feel that if there is a need to expand into other types of racing, then open wheel oval track cars should be considered. Midgets, for instance, are getting real interesting. Just look at the engines that are being tried. I am a road racer, but in the technical sense, open wheel oval track cars have a lot to offer in increasing one's technical knowledge and stimulating one's imagination. Coverage of this particular type of car in a true quality and technical manner would surely give you a whole new market. Thank you for your time and the opportunity to express some of my ideas.

Gerry Valentini, Sacramento, California

Dear John, Hugh, Paul, DeDe and everyone:
Congratulations on a truly great year of fine race reporting and excellent photography. I am looking forward to another one and anxiously await your expanded coverage of IMSA and Champ Makes events. If you can cover these events as completely as you have the various formulae and not change your format, then your magazine will be worth twice the price. It is very refreshing to get a racing magazine that has resisted the temptation of using blurred artsey-craftsey photographs. I get more than enough of that stuff with the various trade publications I get. Again, congratulations on an A-plus effort.

Tucker Conley, Richmond, Virginia

Dear Sir:
I hope you do go with the coverage of Makes and Camel GT & RS races, maybe even A/SR & B/SR in the National scene. I never thought any publication could be better than Autoweek, but FORMULA certainly is America's number one racing magazine.

Paul Castoro, San Jose, California

Dear Mr. Mooney:
This letter is in response to your article in the February issue of FORMULA and, in particular, the proposal that FORMULA expand its coverage to include all forms of road racing. Road racing coverage would indeed be an excellent idea so long as FORMULA, with its recent expansion into newsstand distribution, does not try to please every auto buff. FORMULA has a place and it is unchallenged as a road racing publication focusing on the technical aspects of road racing. This is an area FORMULA has not fully explored and I look forward to articles describing the latest pro racing tricks in detail, outlining them in such a way that I may apply them to my own racing plans. An example of this would have been a more detailed analysis of the USAC style skirt which appeared on the Tyrrells at the U.S. Grand Prix. In conclusion, FORMULA, as a road racing publication focusing on the technical side of road racing, has my support, yet as another auto magazine appealing to everyone at the newsstand, I would rather pass it up just as I now do Autoweek.

David Wilce, Santa Cruz, California

Dear Sir:
I think your magazine is great. I particularly appreciate Peter Halsmer's Technically Speaking column. He is the first technical writer my non-mechanical mind can understand. I hope the expanded how-to technical articles are that easy to comprehend. I rather like the format of a pure formula car racing magazine. However, the Championship of Makes coverage would be rather nice as they are pure racing cars and the magazines coverage is limited. As far as IMSA goes, I can read about that all over. I am looking forward to your improvements of an already great magazine.

Ray Reimer, Middlebury, Indiana

# matters of the moment

## Briefly:

- **U.S. Borax** will be the major sponsor of the Haas/Hall Formula 5000 effort of this season. Two time series champion Brian Redman will again pilot the Haas/Hall Lola. The odds of the team repeating their performances are excellent.

- **Don Breidenbach,** the FB SoPacDiv National Champion in '75 has introduced racing to two new companies. Don was sporting sponsorship at the recent Riverside Nationals from Monster Custom Tee Shirt Company and the Ralph Knudtsen Nuclear Steel Corp. both of San Jose, California.

- **Ted Slatten of Import Auto Electric,** Tacoma, Washington will sponsor the Lola T342 Formula Ford of James L. Kalie. They will supply Kalie with their latest Cortina V engines for all Nationals and professional FF events.

- **The Jim Russell International Racing Drivers School Ltd.** which operates at England's famed Silverstone circuit has received approval from the Sports Car Club of America.
  With SCCA approval, graduates of the school will be waived one of the two required SCCA driver schools necessary before obtaining a race driving license.

- **North American Motorsport,** the midwest Crossle distributor, is now under new management of Mike Berryhill. Crossle sales, car and engine preparation are available in their new facility located at 1100 3rd St. SE, Cedar Rapids, IA 52406.

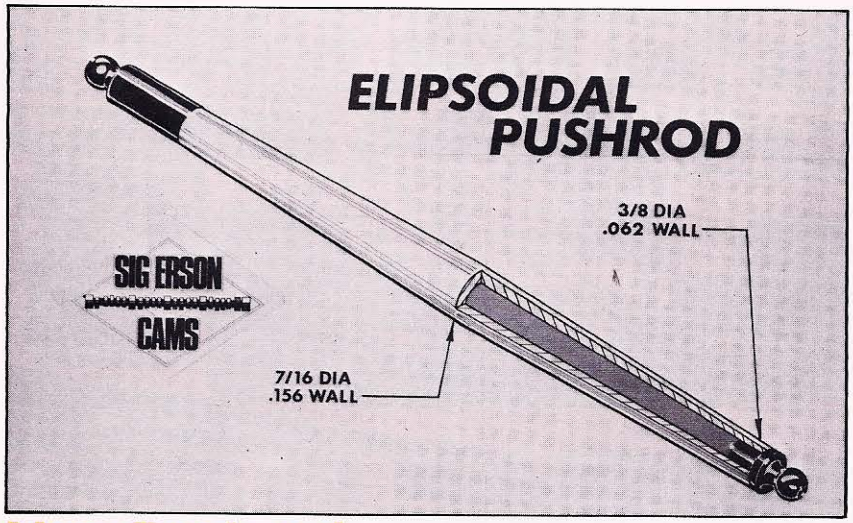
- **Tom Gloy** of Concord, California will carry Stereo Warehouse sponsorship for the Formula Atlantic race at Laguna Seca, California on May 2. The event will run with IMSA's GT and RS show. Gloy competed in a number of Canadian Atlantic races in '75 with a Lola T360.

- **The Bob Bondurant School** of High Performance Driving is finalizing negotiations between Crossle Cars Pacific to purchase four 1976 Crossle 30F Formula Ford chassis. The cars will be used as part of the track instruction in Bondurant's race driving course.

- **Autohouse America,** the Southern California Lola dealer, and North American Racing Werks have joined together and will enter a Lola T342 to promote the sale of Lola cars in this area. Autohouse is supplying the chassis while NARW will supply the preparation and maintenance. Chuck Pittenger is the driver and sponsorship is from Donald Brothers and Shankle Engineering.

- **The Sports Car Club of America** announced a schedule change for the 1976 Champion Classic. Originally scheduled for Oct. 31 through Nov. 6, the date has been changed to Oct. 24 through Oct. 31. Ron Zimmerman, director of club racing for the SCCA, stated that a date conflict with a NASCAR event for that week-end was the reason for the change.

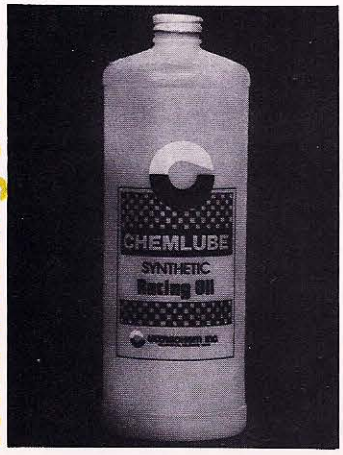
- **Bobby Rahal** will carry Swing Orange Crystals' sponsorship on his March in the Atlantic series in addition to Red Roof Inns.




## New Pushrod

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## New Racing Oil




Ultrachem Inc., Wilmington, Delaware has introduced a new synthetic racing oil for the high performance market. CHEMLUBE is a 30 weight synthetic motor oil with the protective qualities of a 90 weight gear oil but is light in viscosity to reduce internal friction according to the manufacturer. Quicksilver Racengines are distributors and have been doing dyno testing over the winter with favorable results. For more information contact Quicksilver Racengines, 1101 Gude Drive, Rockville, MD 20850. (301) 340-2700.

## NEW!

- **The model E2A** differential cylinder pressure tester (leakdown tester) allows easy diagnosis of engine problems such as worn or cracked rings, defective intake or exhaust valves, stripped spark plug bushings or leaky head gaskets. The tester sells for $54.95. For more information contact Viking Competition Ltd, 2351 Dorval Road, Wilmington, DE 19810. (302) 774-5885.

- **Grand Prix Products** of Arlington Heights, Illinois has the ideal umbrella for the racer and the race fan. The umbrella is of the golf type variety and features a 56 inches diameter. The nylon panels feature all the various colors of racing flags. The umbrella sells for $18.95 plus $1.00 shipping. Contact Grand Prix Products, 1730 N. Kennicott, Arlington Heights, Ill. 60004. (312) 255-1735.

- **Polarized face shields** now available from Halo Products. The glare getters, these polarized face shields eliminate glare, eye strain, squinting and reduce fatigue according to the manufacturer. The shield fits all full protection helmets, comes with all necessary hardware and retails for $18.95 for the Bell helmet model. Contact Halo Products, 1538 MacArthur Blvd, Oakland, CA 94602. (415) 531-2211.




## STERLING EFFORT

For the third straight year Different Drummer Racing will offer a substantial contingency award program to assist competitors using its Sterling Mag wheels, according to DDR president Greg Sorrentino.
The contingency award program will include SCCA regional and national races, national divisional champions, the Champion Classic, all pro Formula Ford events, Formula 5000, IMSA GT and GTU, TramsAm and Formula Super Vee. Competitors wishing to take part in the award program must register with Different Drummer Racing.



# RISING RATE SUSPENSION

## By Gerald Black

*Due to a testing accident that J. Peter Halsmer was involved in January 31 he was unable to complete his Technically Speaking column before our deadline. We have replaced Peter's regular column with an excellent technical feature on rising rate suspension by Gerald Black. Next month we will continue with Peter's regular column.*

The major innovation in racing car suspension in the last few years, aside from wild aberrations like Tyrrell's six-wheeled car and the renaissance of DeDion rear suspension on the new Ferrari, has been the development of variable-rate springing systems. As happens with many features of racing cars, a certain amount of magic has become attached to the words "rising-rate suspension", but track results have not entirely supported these beliefs because conventionally-suspended cars are going as fast as, and in some cases faster than, variable-rate cars. In this article we'll look briefly at some ways of achieving a variable spring rate and the resultant advantages and problems.

There are two basic ways to get a variable spring rate at the wheel — with the spring itself or with a system of links and levers. Possibly the easiest method is to use progressively wound coil springs (assuming one has the ability to design the springs and can find someone to wind them). The rate increase is achieved by the reduction in the number of active coils as the spring is compressed — the more closely wound coils bottom and become inactive. They have been used on a few production cars and on various racing cars. Another way to get a variable-rate in the spring itself is to use a lump of rubber, as in the original Mini and the MG 1100. The Huffaker Indy car used MG 1100 units, and the Hesketh (now Williams) F1 shows some new thinking along this line.

Currently, however, the most popular way to get a variable-rate is with a linkage system. The monocoque BRM Type 61 1.5-liter F1 introduced this type of suspension in 1963 but soon dropped it, and it was left to Colin Chapman to popularize variable-rate suspension on the Lotus 72. McLaren followed shortly after with the Ralph Bellamy-designed M19, on which the front suspension recalled the original BRM layout. The trend has gathered momentum so that now we find variable-rate suspension on everything from F1 to FF to F5000.

There are two major considerations which would lead one to consider variable-rate suspension (VRS hereafter) for a racing car: the effects of aerodynamics and the desirability of maintaining the tire tread flat on the ground. Of the two, the first is the most important. With the tremendous amounts of downforce currently being used, just keeping the chassis off the road at high speeds is difficult. VRS helps to maintain the chassis height under high downforce (thus leaving some suspension travel to better absorb bumps) without stiffening up the static wheel rates so severely that wheel hop on rough surfaces becomes a problem. Also, VRS reduces the car's pitch angle under the forces of braking or acceleration. The aerodynamic pitching moment of a racing car (and the resultant front-to-rear distibution of downforce) changes as the car's pitch angle varies. Thus, reducing the pitch angle variation will make the aerodynamic forces and moments acting on the car more constant. Obviously, the mechanism which reduces pitch also reduces roll, which makes easier the task of keeping the tire upright. The result of all this should be better overall behavior. However, realization of these theoretical advantages is not an easy task. A rate (how stiff the spring is) vs. deflection (how much the wheel moves up and down) diagram for an ideal

**Fig. A**

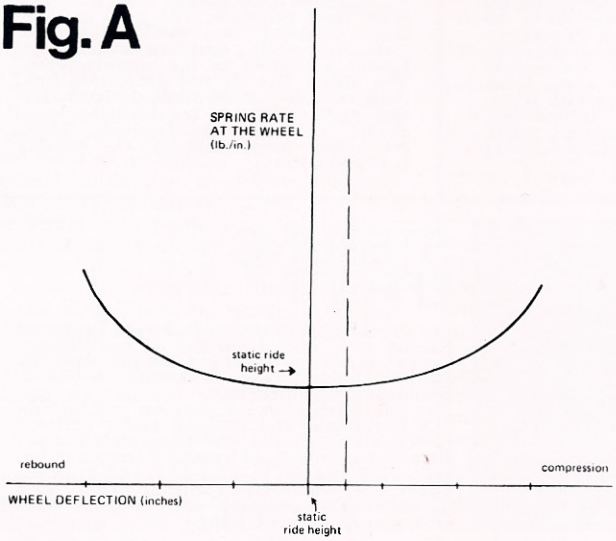



**Fig. B**

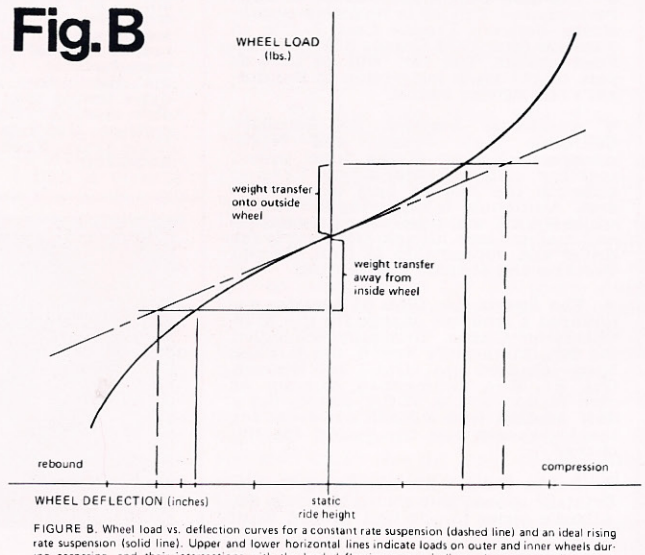
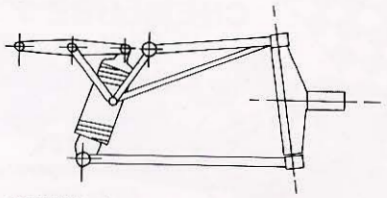
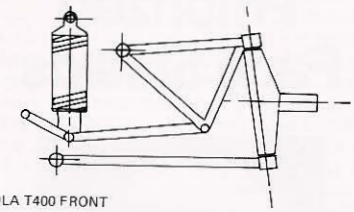



FIGURE B. Wheel load vs. deflection curves for a constant rate suspension (dashed line) and an ideal rising rate suspension (solid line). Upper and lower horizontal lines indicate loads on outer and inner wheels during cornering, and their intersections with the load deflection curves indicate the corresponding wheel deflection.

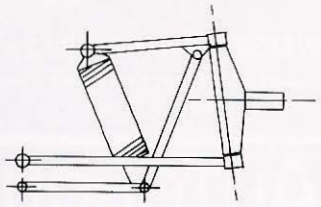
## Fig.C



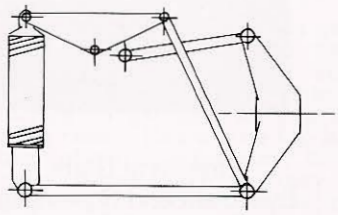
BRM TYPE 61 F-1, McLAREN M19 & M23 FRONT



LOLA T400 FRONT



EAGLE 75A FRONT, LOLA T400 REAR, WHEATCROFT



McLAREN M19 REAR, TYRRELL 007 FRONT

variable-rate suspension would look like Figure A. The rate increases symmetrically on either side of the static ride level. In other words, the spring rate gets harder the more it's either compressed or extended; it's at its softest when the car is sitting stationary at racing weight (with driver and gas in it).

The corresponding load vs. deflection diagram as seen in Figure B. For purposes of comparison, the load-deflection characteristic of a constant-rate suspension is also shown in Figure B. As can be seen, weight transfer in roll produces equal compression and rebound deflections which are less for VRS than the deflections for a constant-rate suspension. Two difficulties arise immediately however.

First, if the increase in wheel rate as the wheel moves is different at the rolls. This is important because the roll rate distribution plays a large part in determining a car's understeer-oversteer characteristics. An extreme case would be a constant-rate front suspension in conjunction with a rear suspension having the characteristics of Figure A. In this case, the rear suspension, and in particular the outside rear wheel, will pick up an increasing proportion of the loading as the roll angle increases, with consequent effects on transient and steady state behavior. Second, if a change is made to the ride height (see dotted line in Figure A) the symmetry is lost and complications with compression and rebound rates follow. Downforce changes the ride heights, of course, and not necessarily by the same amount front and rear.

# Existing Systems

The rate curve of Figure A can be approximated with a torsion bar system. It is, however, very difficult to achieve using a coil-shock system. Schematics of several existing coil-shock systems are shown in Figure C. The first three are actually variations on a single theme — using the suspension arm as a bell crank to operate an auxiliary shock actuating arm through a tension link.

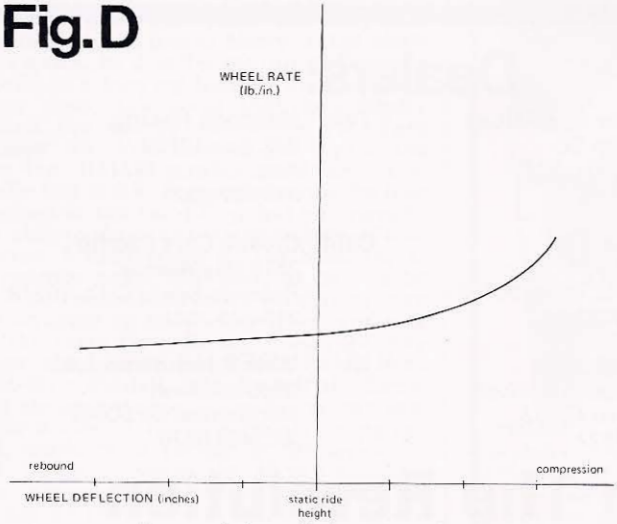
All these systems have rate curves similar to that in Figure D. Here the rate increases on the compression side, but is essentially constant on rebound. You have to live with this with one of these systems — it's not the ideal as shown in Figure A.

# Weight Jacking

Now things really start to get interesting. If both front and rear have characteristics like Figure D, then, under braking, deflection due to weight transfer, is reduced at the front but not at the rear, compared to a constant-rate system. Thus, the pitch angle is not reduced as much as with the idealized system described earlier, where both front and rear deflections would be reduced. Roll brings further peculiarities. For a given roll weight transfer, the outside wheel deflection ("O" in Figure E) is less than the inside wheel deflection ("I" in Figure E). The undesirable result is not that the chassis is pushed upwards, a phenomenon called jacking. With suspension geometries commonly used, jacking increases the positive camber of the wheels, which defeats the intent to maintain the outside wheels upright; this reduces the total cornering force available. Also, the overall height of the chassis is raised, resulting in increased weight transfer. In addition, we still have the difficulties of front-to-rear proportioning and ride height variation described earlier. The result is to introduce so many additional variables into the car that the chances of achieving the optimum set-up and getting full benefit from a variable-rate suspension are greatly reduced.

Some design guidelines can be given to avoid the larger pitfalls with variable-rate suspension. In general, the front rate increase should be greater than the rear. Systems which have very large or sudden rate increases should be avoided. Effects of off-design conditions (ride height variations, etc.) should be investigated. Roll rates, roll rate distribution, and wheel loadings should be calculated for combinations of down force and acceleration, and down force and braking at various speeds and cornering attitudes. Ideally, a computer simulation should be used to get more complete information on steady-state and transient behavior and tire loadings. While an improperly done variable-rate suspension can be a serious detriment to a car's performance, a well designed and carefully developed system should help give the few hundredths of a second so hard to find in today's closely matched racing. ■

## Fig.D




The corresponding force vs. deflection curve is seen in Figure E.

## Fig.E

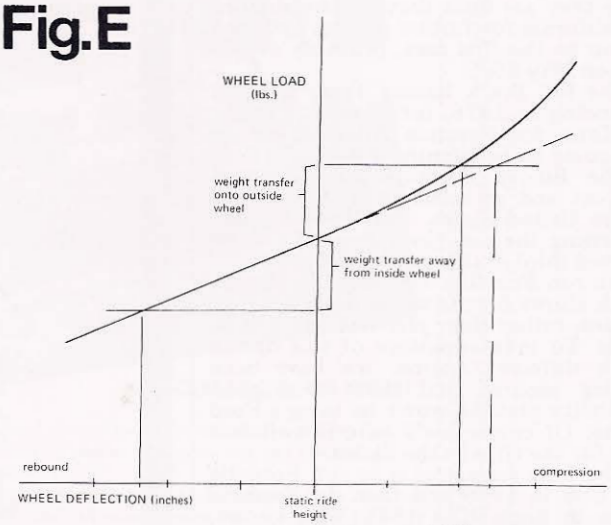



FIGURE E. Load vs. deflection curves for a typical rising rate suspension (solid line), and a constant rate suspension (dashed line).



# Brack's Column

by Bill Brack

The big news from the STP racing team for 1976 is that we will be running a second car in the Player's Challenge Series. The car will be an identical Chevron B34 to the one I ran in South Africa, and it will be driven by Kevin Cogan from Los Angeles, California.

Kevin, a kart racer who spent some time last year racing a Formula Ford, was suggested to us by Vel's Parnelli Jones Racing Team as a young driver with a bright future ahead of him.

It certainly is a feather in our cap that we were contacted to take Kevin on by the Vel's Parnelli Jones people. I think it also says a lot for the series when people like those at Parnelli Jones think that running Atlantic in Canada can be a good stepping stone for a young driver interested in eventually racing in Europe.

Again this year we will be using Brian Hart engines, and both cars will display both STP and Valvoline sponsorship. Our goals are very simple, to win the Canadian Championship for the fourth straight year, and to take the Rookie of the Year award as well.

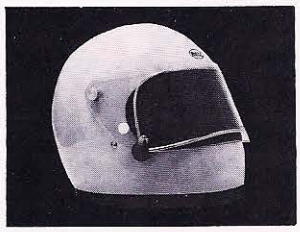
The cars are now being built, as Doug Crosty and his brother Jim flew to England right after our race at Welkom. Once they are built they will be shipped to California for further testing, and then it's on to the first race, probably at Calgary on May 23rd.

The Bill Brack Racing Team is really expanding in 1976, for as well as taking on Kevin for Formula Atlantic, we are also going to be running a Formula Ford in the Bulova Formula 100 series at Mosport and at selected pro FF events in the United States. Don Sobering will be driving the car, likely a new Lola. He finished third in this year's series.

We run Formula 100 rules in Canada which allows for the use of other 1600 cc engines, rather than just restricting it to Fords. To take advantage of this option for a different engine, we have been looking around, and there is a good possibility that we won't be using a Ford engine. Of course we'll have to switch it back for the trips to the States.

The long term goal is to run Formula 100 here in 1976 and then do Formula Three in England in 1977. Who knows, perhaps we might have a two car F3 team, with Sobering and Cogan doing the driving, in 1977? ■


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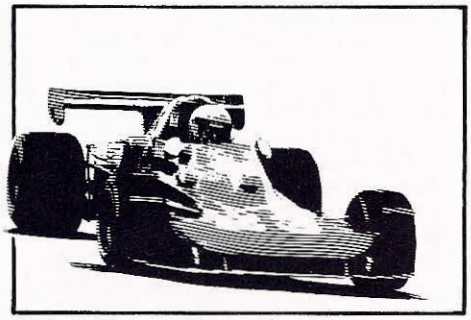
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# Rahal's Column

**By Bobby Rahal**

Who are the ten best up-and-coming American drivers? Who has the chance of taking that one-in-a-thousand step into Formula One? Who will be on the American scene for years to come?

This is something I've had to consider recently in my quest for an F1 berth. Just who is my competition for the one or two positions available to Americans in a highly internationalized sport? My rating of young American drivers accounts for those who have a chance. I consider how they would do in F/Atlantic, because F/Atlantic is the real classifier in North America. The premium in that series is driving ability — the driver's ability to not only drive a car quickly, but to also set up the chassis properly to ensure correct handling. Consistently pressing is the name of the game in F/Atlantic, and not even Super Vee competition teaches you that.

Two groupings can be distinguished among those top ten: those who definitely may be given the opportunity in F1, and those who lack one quality or another which prevents a higher rating. The first group in no particular order includes familiar names like Miller, Holmes and Bagley. Eddie Miller, 31: A force. He may well be a surprise in F/Atlantic this year. Eddie had things his own way in Super Vee last year. He's definitely a very good driver, a deceptively fast driver. Smoothness is what causes the deceptiveness; he doesn't appear to be really trying, while in reality he's going quite well. Howdy Holmes, 28: Very near the top. Howdy's one who has to make tracks fast; he's not getting any younger. He's actually close to that magic age of 30. Marty Loft, 26: Obviously very quick. Marty's going to be my teammate this year. The only real impression I've had of Marty is that while he's quick, he'd better get out of Formula Ford; he's burying himself in that small bore class. It's good that he's finally found the money to escape FF. Tom Bagley, 35: You have to put him in the top ten. He's very, very good, and especially fast in SV. Some say he has the best engines in the Gold Cup, but you have to be able to drive to take advantage of that bonus. I understand he has Kent Oil as a sponsor again this year, so he will be able to concentrate more on driving than on scraping up the money to eat and race at the same time. Bobby Rahal, 23: I've been in long discussions with Robin Herd and Ray Wardell (after he left the factory) about my progress so far vs. my age. This is one of my plus points, being age 23, while most people in the series are 28, 29 or 30 years old. If you consider the careers of Scheckter or Fittipaldi, at age 22 they were in F2, and at age 23 or 24 in F1. So we're close to keeping in step with that. I've tried to gauge my progress to these people in particular.

The age consideration cannot be taken lightly. The F1 teams with whom I've talked will not hire a driver over 30 years old. In fact they would rather have a driver in his early 20's, a moldable driver, so that he will have four, five or six good years in F1 before being farmed out. Many teams consider that it takes two years to become an F1 winner. It took Lauda three years. They must have someone quite young so that when they're 26 years old they'll have begun winning GPs. The trend or premium these days in F1, besides obvious driving ability, is youth. That's become the overriding consideration.

Other driver's, however, also require mention: Bruce MacInnes, 30: One of the better drivers. Financial support seems to elude him. Bruce is a hard luck case trying to get something going in American racing. He's a little too late for F1, but not too late for other forms of American racing, such as Indy. Don Briedenbach, 22: Another hard luck story with a lack of finances. At the first two races last year, Don was right up front. Definitely someone to consider. He's my age and he needs money and experience. Elliott Forbes-Robinson, 29: There's no way you can forget him. Elliot is the original young lion. He's one of those drivers who came close, but for some reason seems to have lost his chance in F1. Right now he has age going against him. Gilles Villeneuve, 24: He's Canadian, so he can't necessarily be rated with the foreigners. He's my arch-nemesis this year. There's no doubt about it. Tom Klausler, 29: An interesting case. Tom undoubtedly did himself more harm than good last year by not winning any races. You must win to progress. Fred Phillips, 28: It's tough to rate him. On his day, he's fast. Fred exhibited that at Brainerd by taking fourth on the grid. He's getting up there in age though; he's almost 30. He's getting old.

Other drivers to consider are Tom Gloy, 27, and Jim Crawley, 22. Tom was very quick but his machinery let him down. Jim reminds me of myself two years ago, very brave but very messy. In my mirrors at the runoffs he had that Chevron at all sorts of strange angles. He'll see that the premium in racing is smoothness. Definitely someone to consider in the future. Both Tom and Jim are knocking on the door to the top ten, but have yet to crash through. Other well-known names, like Hurley Haywood and Al Holbert, have been omitted since I haven't competed against them in formula racing.

The age factor cannot be emphasized enough. You can see the emphasis now, Tony Brise being the foremost example. From my talks with F1 people, the most important quality he had was his youth. Tom Pryce was young when picked up by Shadow, and Jody Scheckter was nearly in his cradle. Of the ten or twelve mentioned, five have a chance. But realistically, due to the age problem, only two or three will contend for those select spots.

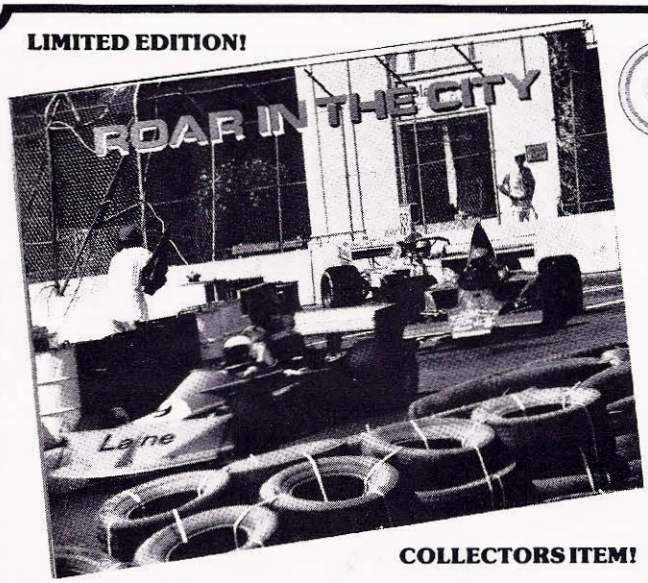
I don't know of any others who attack racing with a serious mind and who are dedicated to the struggle of achieving excellence. Most drivers would like to progress to F1, but some facet in their makeup is lacking.

*PUBLISHER'S NOTE: Bobby Rahal, brilliant newcomer to Formula Atlantic that he is hasn't raced against every good driver in the U.S. Thus he left out quite a few people from his list of potential F1 drivers — Bob Earl, Danny Ongais, Richard Shirey and Tom Wiechmann. Though these four come readily to mind, I'm sure there are still others who should have been included as well. As far as age is concerned, it should be kept in mind that George Follmer got his first F1 ride when he was over 35. . .* ■


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# LAUDA! WINS THE BRAZILIAN GRAND PRIX

## It Looks Like The Ferraris Are Here To Stay

*by Jeff Hutchinson*

There was scorching heat on the 17 neck-breaking turns of the 8-kilometer Interlagos track. Multiplied 40 times, it made a total of almost two hours of intense concentration and physical effort — conditions that would leave the average man drained — just sitting around. Just to watch this race would be tough, never mind actually racing with another car.

For a while it looked as though we were going to be in for an exciting race. Marlboro McLaren's new star James Hunt pushed Lauda off his usual pole position by just 2/100ths of a second, and sitting behind them was Jean-Pierre Jarier's Shadow, unofficially quickest in practice during the third, now untimed, session designed to encourage all teams to carry out full-tank tests before the race. Regazzoni shared the second row of the grid, while dark horse of the third row was none other than local favourite Emerson Fittipaldi in the new Copersucar. He had been quicker in private practice, but an upset stomach had slowed him during official practice. He wanted to win this one.

When the green light set the 22 screaming F1 cars off to work, the pace was as hot as the weather, but 40 laps later Lauda and his familiar 312T were able to breathe easy, for he took the chequered flag 22 seconds ahead of his nearest rival, which ended up being Patrick Depailler's Tyrrell 007. A now familiar story.

For most of the race, Lauda's breathing space had been no more than a few seconds; he had been hounded by Hunt and Jarier right from the start.

Hunt was the first to go, crashing because of a stuck throttle. His accident left a great slick of oil across the track from the damaged radiators. On the next lap Jarier, driving at ten-tenths and now only two seconds behind the Ferrari, found that oil. He slid straight off the road and badly damaged the front of his Shadow.

Right behind Depailler was the second Shadow of Tom Pryce. He had fought to hold off the Tyrrell the entire race, but finally lost the battle just four laps from the end. He had been nursing his tyres throughout, but in the end they proved to be too much of a disadvantage. "I think I overdid it at the beginning, because right from the start the car was oversteering badly. I could pull away from Depailler, but then it got worse and I was forced to back off again. It was like that all the race, bloody hard," said Tom.

For others it was even harder. Jochen Mass had his McLaren's nose bent up by a sliding Jarier on the second lap, and then tigered his way back from last to sixth place by the finish. Regazzoni managed to lead the race for the first eight laps, but then he was forced to the pits with a punctured front tyre and finally finished up in seventh place.

Few of the teams went away from the track on Sunday night with much to be happy about, but then Interlagos is one of those tracks where not many do. It's a place where everything either goes right or it goes wrong — mostly wrong.

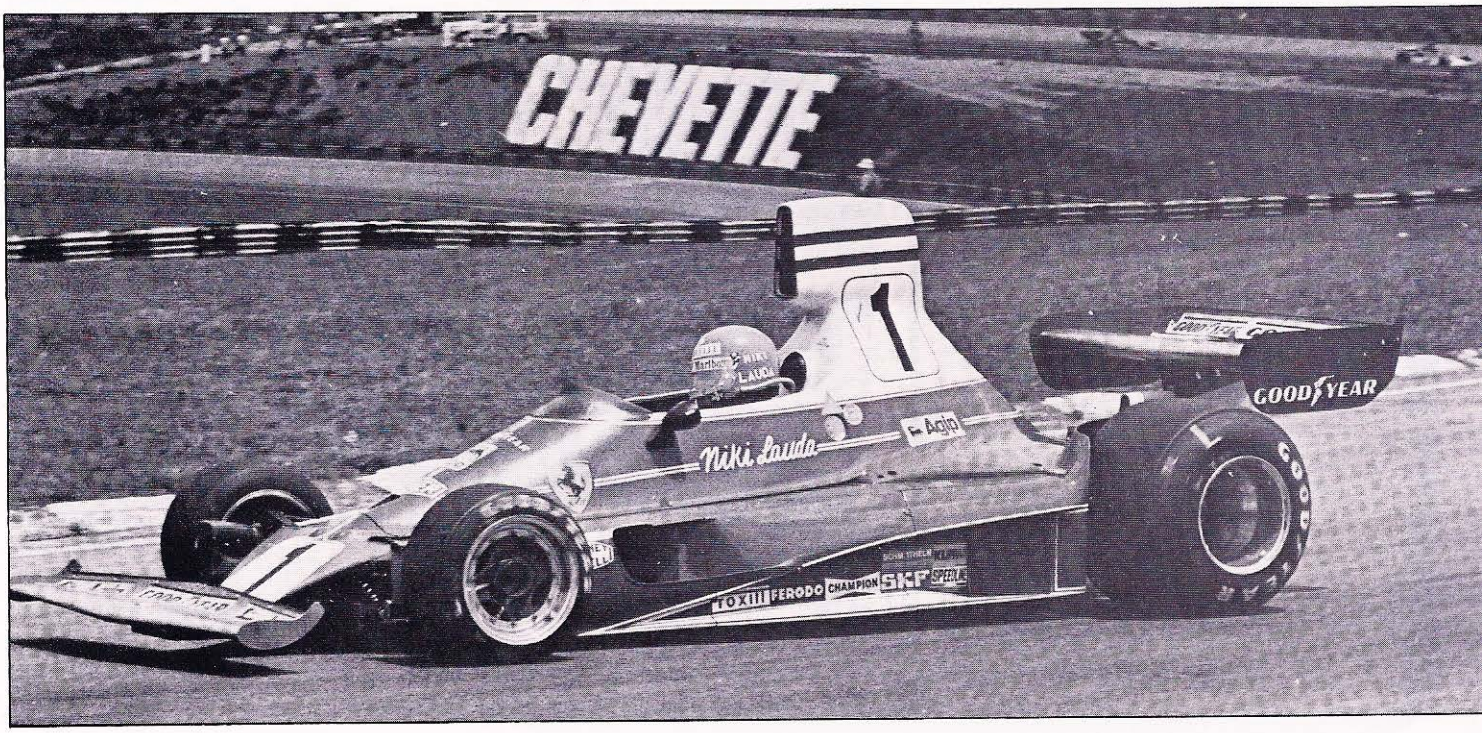
### entry & practice

Perhaps it's because it's the first race of the season, in a strange country, in unfamiliar weather and that big invisible spring that keeps the F1 circus running around from January to October is still being wound.

Perhaps it's all the familiar faces in unfamiliar places, but whatever it is, the first race of the year always seems a little ragged. The Interlagos track does not make things any better. It's a series of fast, slow and medium speed corners, both left and right hand, which make the job of setting up the cars very difficult indeed. No matter which driver you speak to, each has his own problems. "My car oversteers too much." "Mine understeers." "Mine is good on the fast corners but bad on the slow ones." Even between the cars in the same team the drivers often complain about opposite things. It's that kind of track. For the spectators it could not be better — for nearly all of

*(BELOW) As in 1975, Niki Lauda had things going his way in Brazil.*

Jeff Hutchinson Photos



its 8 kilometers can be seen from one place and the track twists and turns around a natural basin. No doubt, in time, every driver would have been able to arrive at the point where he felt his car was well balanced, but time is what they don't have. Especially this year, for at the first F1 Constructors' Association meeting of 1976 it was decided that the third session of practice should be left untimed to encourage all teams to try out full-tank tests well before the race. This meant that there were just three and a half hours of timed practice, which was a lot less than most of the drivers needed.

As it turned out, they were lucky to even get that much, for Friday morning was the first bright day after two days of heavy rain which, had it continued, would have made practice impossible. After two days cooped up in the Sao Paulo Hilton everybody was keen to get to work.

The track was still damp in patches, but by the end of the first session it was totally dry and the times were beginning to tumble.

Last year's sub-2:30.0 pole position time set by Jean-Pierre Jarier was now an impossibility because of a new pit exit safety wall around the inside of the first corner. This used to be the fastest turn on the track; the slower entrance speed into the main straight counted for a loss of around three seconds a lap.

It was the two Ferraris, benefiting from a day's practice earlier on in the week, that set the pace. Lauda was quickest at the end of the first session, with a best time of 2:32.68. In the second session he improved to 2:32.64, but was given an idea of what to expect in the final hour when Jarier lapped in 2:32.38 Saturday morning. Fortunately for Lauda, this was the session deemed 'untimed' for grid positions.

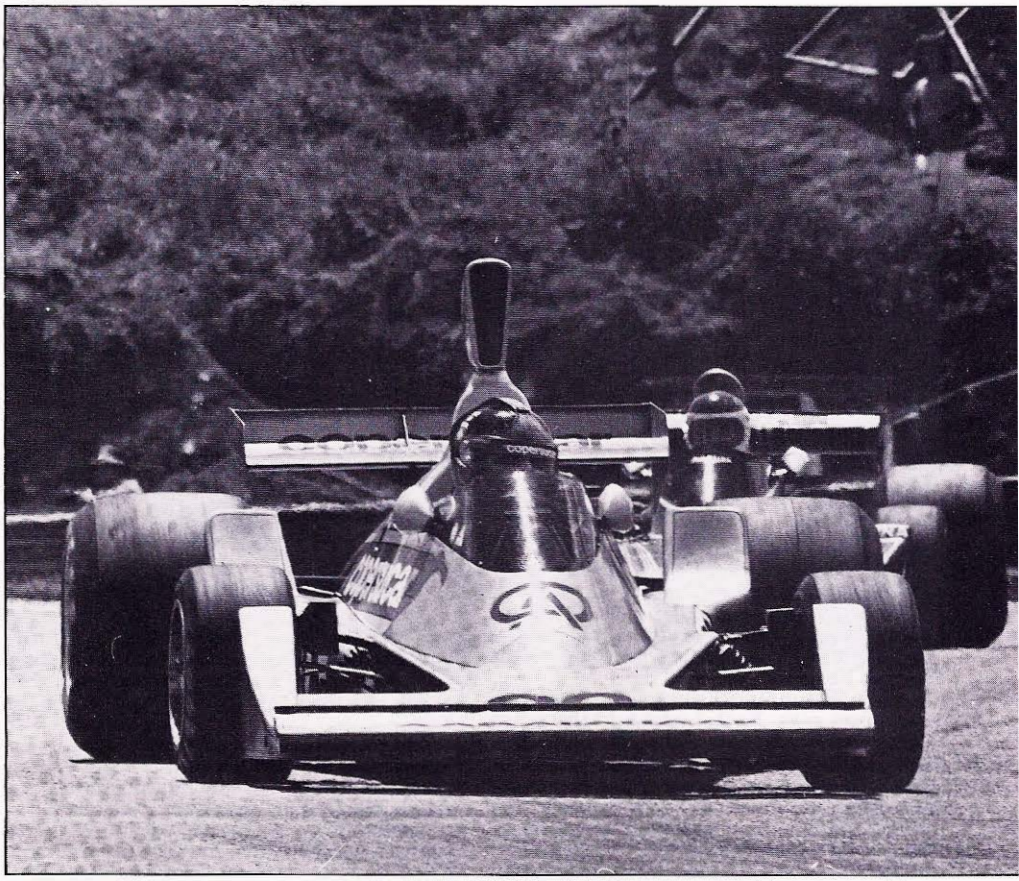
Shortly before the end of the final and crucial hour it was not Jarier but Hunt who took the pole with a best of 2:32.50 . . . a fantastic effort considering Saturday was effectively the first time he had driven the McLaren in anger. In fact, it was not until then that he found the Emerson-sized cockpit was too small to allow him to get on some opposite lock in a hurry. "I had a very embarrassing moment when I got all crossed up — and then tied up!" said James. His superiority over the other Ford-powered cars was also helped by the use of a new Hewland gearbox which had been modified to six speeds by team manager Alistair Caldwell. The familiar McLaren had also lost around 30 pounds in weight over the winter.

Lauda had to be content with the outside of the front row, just 2/100ths slower than the McLaren, his practice smooth and trouble-free.

Jarier failed to match his morning time in the afternoon, although he was still quick enough to head the second row of the grid ahead of Regazzoni who never did improve on the time which he set in the cooler first session. Besides detail modifications, both the Shadows and the Ferraris remained the same as they were at the end of last year. The plain black Shadows carried a couple of local one-off sponsor deals while they waited for a deal with Monsieur Rochas perfumes to be finished.

Emerson Fittipaldi was the last person one would have expected to contract a dose of 'Brazil-Belly', but that's just what he had throughout Saturday's practice. At one stage it was so bad that he was forced to come into the pits and — rest.

With some 1700 miles of testing on the new Copersucar FDO4 since it was announced in mid-December, practice was just a case of fine adjustment while the others were busy sorting out basic things like gear ratios for the revised circuit. Emerson set the third fastest time in the very first session and this was the time that was still good enough to make him fifth quickest overall despite his miserable Saturday.



*Emerson proved the new Copersucar is going to be a competitive proposition, qualifying on the third row of the grid.*

## Emerson The Test Driver

The team was confident that Emerson could have been up among the quickest times were it not for that. Certainly Emerson's performance in the new car surprised a lot of people and delighted his home fans. It shut up his critics, who had hammered him for going to an uncompetitive team just for the money, while at the same time it impressed his supporters even more. To have got a brand new car to that state of competitiveness in "just three full days' testing" showed just how good his car sorting ability is. "Working with Emerson is just fantastic," said the car's designer Ricardo Divilia "I remember one of the first days we got down to some serious testing. We had several adjustable positions for the suspension pick-up points at the rear, one of them we had never used, and which I had never drawn on paper. Emerson said, 'Let's try it on that position', so we did. After a few laps he came in and said the car had a sinking feeling at the back under certain conditions and when I got home that night I drew up the geometry to check the roll centre angles. It was exactly as Emerson had described it. His feel for the car is fantastic."

Next to Fittipaldi on the third row of the grid was the second McLaren of Jochen Mass. His best time was set during the first day, for after that all the adjustments that the team made the second day made the car worse as far as Mass was concerned. Mass was not happy at the end of practice, but after putting the car back to the original adjustments during the unofficial warmup during race morning, things were looking up.

Vittorio Brambilla was the quickest of the three works Marches at this race, all the cars brand new type 761s which were developed from last year's car. A new stronger foot well, revised bodywork and radiators (slightly bigger on Brambilla's car) are the main differences between the old and new cars. Brambilla's fastest time was set during the first session, for in the final session he was all set to go for a front row grid position on almost empty tanks, but got stuck out on the circuit when the car ran out of petrol. Hans Stuck, in the second March, also ran out of petrol and his first session was lost because of a broken oil pump belt; thus the German was a disappointing 14th on the grid.

John Watson soon got going quickly in the latest Penske, a brand new chassis based on last year's, but with revised suspension and the fuel tanks relocated nearer the centre of the car. Watson set his best time in the untimed third session, and it would have put him on the second row of the grid. In the final session he got stuck out on the circuit with a dead engine caused by vapour lock and was forced to jump into the T car in which he eventually set his grid time.

Heading the fifth row of the grid was the first of the two familiar Tyrrell 007s for Patrick Depailler and Jody Scheckter. Like last year, the Tyrrells were not very ➤

# Brazilian G.P. *continued*

competitive around this track, Depailler managing the best time with a 2:34.49. Scheckter was in a state of despair trying to sort out a bad oversteer and understeer problem, which only got worse the more he tried. He was stuck back on the seventh row of the grid.

## Brabham - Alfas Unready

Beside Depailler on the fifth row was the first of the two new Brabham-Alfa Romeo BT45s driven by Carlos Pace and Carlos Reutemann. Pace's best time of 2:34.54 during the second session was the result of a super effort, for both the Martini Brabhams were plagued with teething troubles.

After the first day's practice a tubular cross-member had to be fabricated between the two rear top suspension pick-up points, which were mounted separately off either side of the engine, because it was discovered they were twisting under hard cornering and acceleration. The main problem centered around the engines however.

They would not run cleanly or pull maximum revs. Both Lucas and the much bigger and heavier Alfa Romeo type fuel injection units were tried, but there was little difference between the two. By the end of practice it was generally thought to be an installation problem, the confined space of the engine bay in the Brabham causing everything to get so hot that the engines simply could not breathe. Temporary air scoops were added, but they were not enough to cure the problem in the Brazilian heat and the team had no choice but to start the race with the engines probably producing less power than a Cosworth. To make matters worse, bigger brakes, different roll bars and a steel exhaust system made the car even heavier to a total of 85 kilos over the maximum weight!

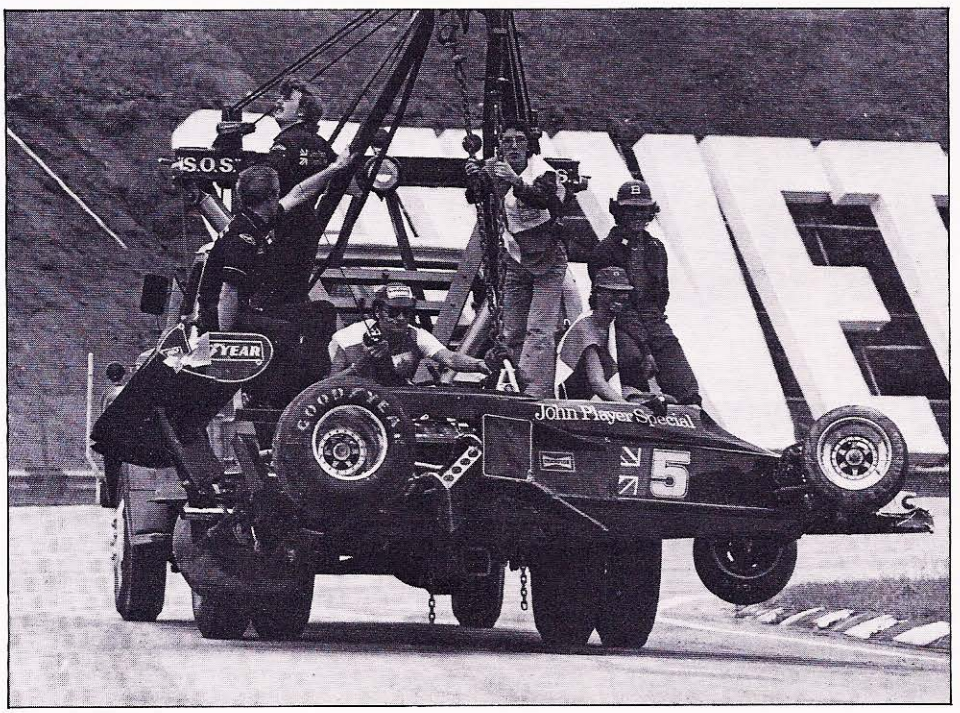
At the mid-way point on the grid was the new Ligier-Matra JS5 of Jacques Laffite, which had started the first day's practice with a good time despite the fact that the team was still trying to find the best combination of gear ratios. He improved on his unofficial practice time and he was all set to make a good time in the final hour when disaster struck. As he rounded the fast fourth-gear right-hander behind the pits, the centre sheared on the left rear wheel.

The now three-wheeled Ligier headed straight for the barrier, but Laffite was able to steer it around slightly, so that when the crash came it was not as violent as it might have been. The left side suspension was damaged, but repairable in time for the race. The real problem was the fact that the team had nothing but the German-made BBS wheels and he thought it would be foolish to race the car on those and invite another disaster. The problem was eventually overcome with the aid of the Copersucar team who made up four thick alloy discs to fit the Ligier hubs, so as to form a sandwich to strengthen the wheels. "These upset the balance a bit at the rear," said Laffite after trying the car out Sunday morning, but at least he was back in the race.

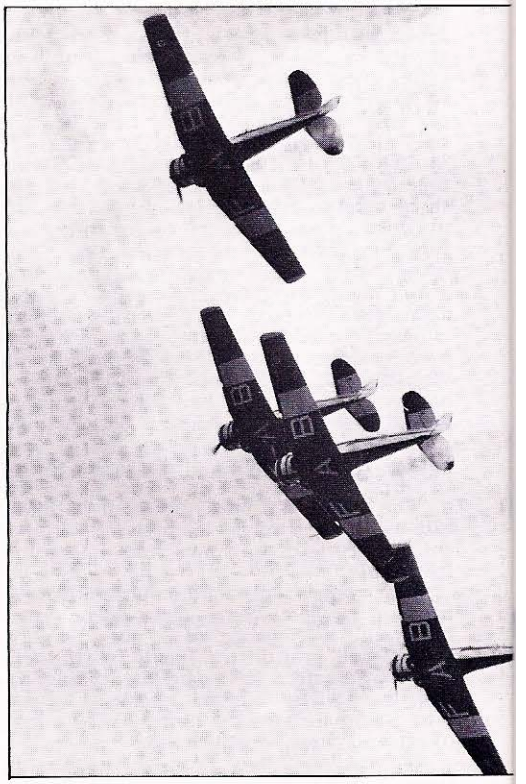
Sharing the sixth row with Laffite was the second Shadow of Tom Pryce, who after setting a fast time in the third session was almost two seconds slower in the final session when his engine suddenly lost power. He had no choice but to stop and leave the mechanics to fit a fresh one and hope all would be well for Sunday.

Scheckter and Stuck filled the seventh row, while Reutemann headed the eighth row in the second Brabham, also ailing like Pace's.

Alongside Reutemann was the first of the two new Lotus 77s, which proved to be the biggest disappointment of the weekend. Things went wrong right from the word go for the black and gold cars,




*Peterson's wrecked Lotus 77 is hauled in on the hook; damage was extensive considering Peterson never touched armco.*



*The Brazilian Air Force?*

for on his second lap of practice Ronnie Peterson ended up planted in the catch fencing when a water pipe came adrift and sprayed a rear tyre with water half way through a corner.

Despite the fact that the car never actually came into contact with the barrier, the damage was extensive. It needed most of the right-side suspension bits replaced, while a small kink in the monocoque also had to be dealt with. Because of a lack of some of the necessary spares, repairs took longer than usual and Peterson did not get back on the track until the final hour.

## A March For Ronnie?

Throughout most of his resultant spare time, the Swede avoided giving the press answers to the rumours that he has finally had enough of JPS Team Lotus and will be switching to a March, paid for by Count Lavazza who is currently backing Lella Lombardi. Perhaps it was significant that the new Lavazza colours on Lella's March at this race were yellow and blue — Sweden's national colours.

An indication of the new Lotus' performance was the fact that Mario Andretti ended up only 1.1 seconds faster than Ronnie despite spending the entire practice trying to get the car to work. "It's got a basic tendency to oversteer and just won't get the power down," said Andretti, whose miserable expression reflected what he thought of the car. He has been offered a permanent drive with Lotus, but after this race he was not ready to say yes until he found out what other possibilities were available.

Between Andretti and Peterson was the young newcomer Renzo Zorzi, who in his second ever Grand Prix was going well in the old Williams FWO4, vacated by Laffite at the end of last year. He was doing a better job than team leader Ickx, who came next with the Hesketh 308C, now re-named the Williams FWO5. The

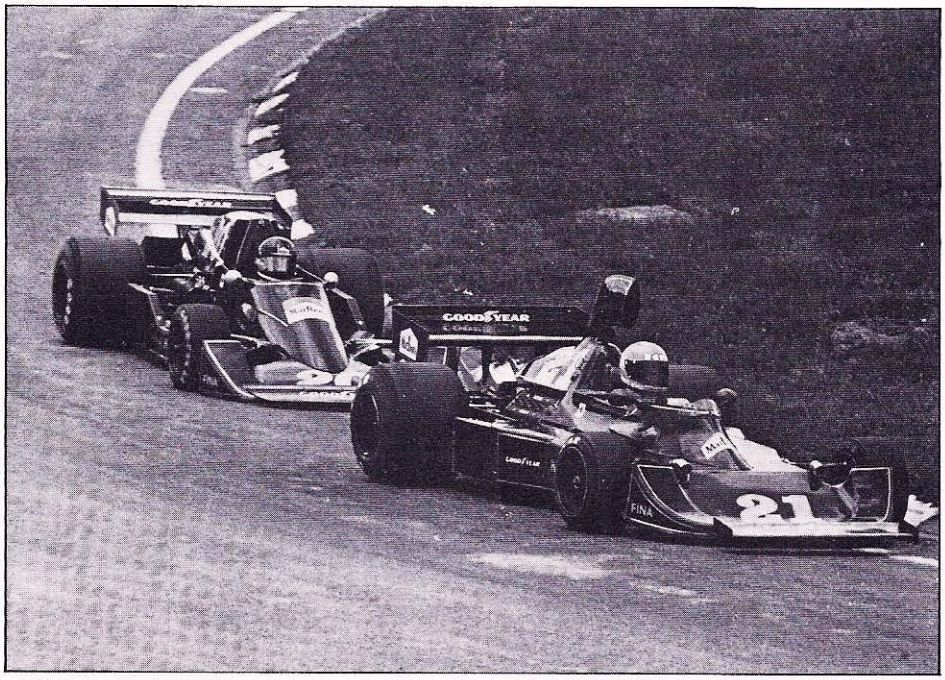
car now features a four inch narrower monocoque to aid air flow to the side mounted radiators, while new rear uprights altered the rear suspension geometry and the steering rack had been relocated at the front end. Ickx complained that the car was not handling very positively around this track, and that for the first two sessions he was having to hold fifth gear in position because it kept jumping out. Even so, his times with a car that has already proven itself a Grand Prix winner were very disappointing.

Sharing the second to last row with Ickx was the second, old-type, Copersucar of Ingo Hoffman, who acquitted himself well in his first ever Grand Prix. All his best practice times in each of the four sessions were within half a second of each other.

Heading the back row was Ian Ashley, latest recruit to drive the ailing BRM which despite considerable modifications in the chassis layout (a four inch narrower rear track, outboard front brakes and front mounted radiators with a Brabham type nose being the major changes) was still no more competitive than it had been last year. A replacement engine fitted Friday night blew up on Saturday and so the Friday engine was put back in for the race.

Bringing up the rear was little Lella Lombardi in the third March, who was finding it hard work learning her way around the track and driving in the extreme heat.

Jeff Hutchinson Photos




*Ickx was just plain slow in the new Williams, so slow that teammate Zorzi outqualified him in the teams clapped-out second car.*

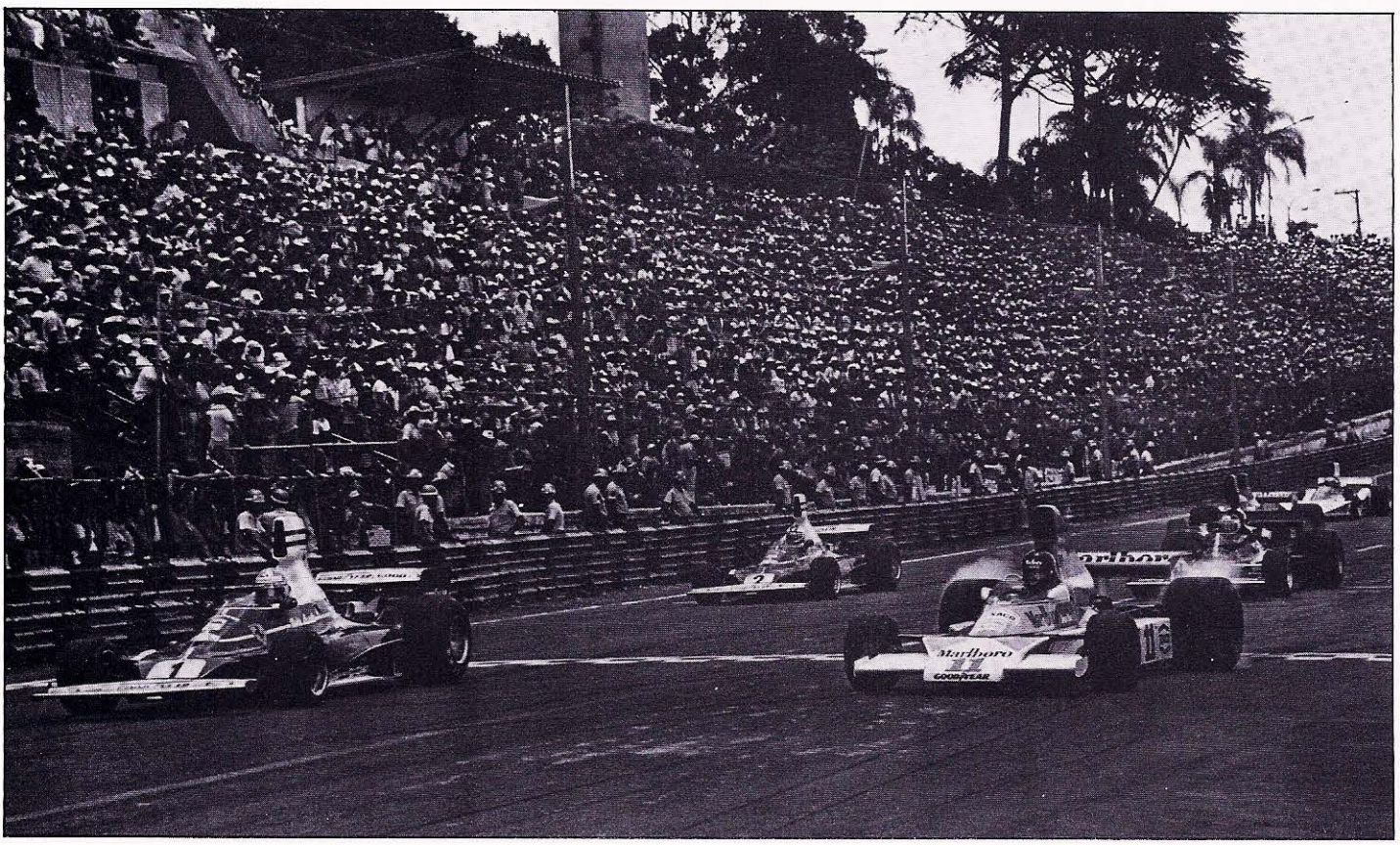
## race

By 9 a.m. Sunday morning the 200,000 crowd were already being sprayed with water to cool them as they chanted slogans in the scorching hot sun. The 30-minute unofficial practice went off without undue drama and the mechanics made the final preparations for the 12:30 p.m. start, although everything stopped for half an hour while the Brazilian Air Force provided a spine-tingling display of acrobatic flying in half a dozen old American Harvard trainers.

A new electric light system got the field off to a good start, Regazzoni timing things beautifully and moving ahead of his teammate Lauda, while Fittipaldi took third place from Hunt who overdid the wheelspin. Within a couple of hundred yards the whole field was lost in a great cloud of brown dust that erupted from the track as the leading cars picked up speed. The race was on.

Regazzoni held the lead onto the main straight with Lauda right behind making it Ferrari one-two, but behind them Fittipaldi was already in trouble. Hunt, Jarier, Brambilla and Mass all swept past the Copersucar on the straight as Emerson's car began to misfire. It was a sad start to the race for the patriotic crowd, which sat stunned at the sight of their ➤

*(BELOW) Hunt blows the start.*



# Brazilian G.P. *continued*

hero gradually dropping farther and farther back. Later Emerson stopped to have all the electrics changed; that made no difference, but he bravely pressed on to the delight of his fans, even though his chances of placing well were completely gone.

Ashley and Lombardi were also in trouble on the first lap. Ashley's car limped slowly around with a fuel vapourisation problem, while Lombardi was also cruising around after the throttle slides had become partially jammed by all the dust at the start.

Lap two, and Ashley retired for good when, as the engine started to clear itself, it shed its oil pump belt; so that was that. Up front, the race was a lot more exciting. Regazzoni still had Lauda and Hunt right behind him, while fourth place had been taken over by a hard driving Brambilla who moved ahead of Jarier when the Shadow went into a lurid slide around the dusty edge of the hairpin. On the third lap Jarier did exactly the same thing again, only this time when he corrected the slide and pulled back across the track, he took the front spoiler off Mass' McLaren.

The unfortunate Mass was forced to stop at the pits for a new nose section, rejoining the race in last place. Little could he have guessed that it would be the start of a fine drive that would see him back in the points by the finish.

*(BELOW) Hunt and Jarier chasing Lauda.*

By lap five the leading half dozen cars were still nose to tail, led by the two Ferraris, and Jarier had managed to retake Brambilla for fourth place. The Italian was having problems, for the next time around the front four cars had pulled out a few seconds, while Pryce was waiting his chance to take Brambilla as well. That chance came on lap seven and two laps later Depailler had also moved ahead of the Beta March.

## Penske in Flames

And we were also missing three other cars! The unlucky Penske team ended their day when Watson spluttered into the pits and stopped, whereupon the back of the car immediately burst into flames. The first John knew of the fire was the mechanics hauling him out of the car! "After that I didn't need to tell them I could smell petrol," said John. A fuel union from the mechanical fuel pump had actually broken in half. Some days you just can't win.

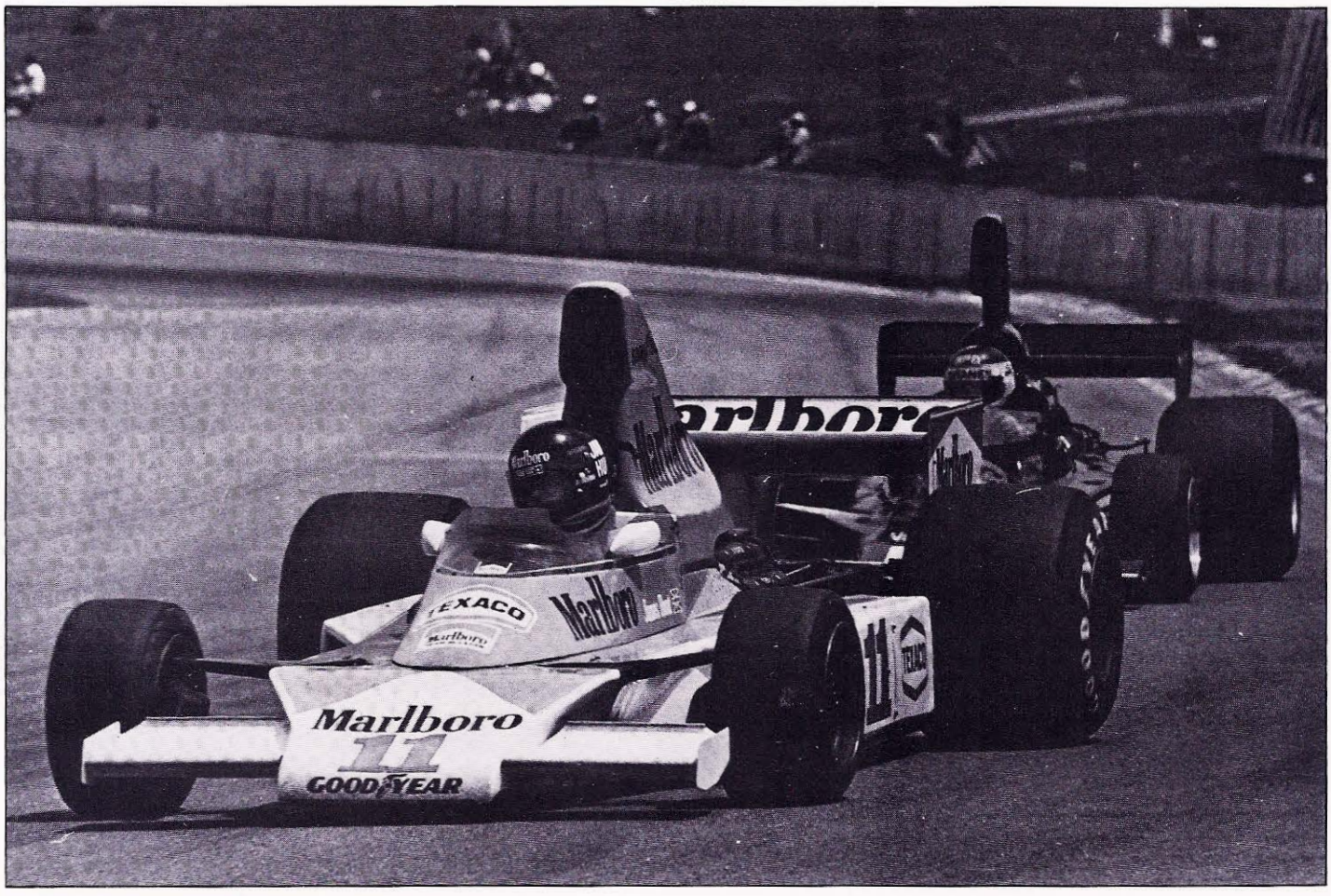
Lap six saw the demise of the two works Lotuses. Andretti had been trailing Peterson whose car was suffering from almost undriveable understeer. After a few laps of this, Andretti decided to move ahead in a corner, thinking that Ronnie had seen him coming through. Instead, he kept his line and there was a crunch of Lotus hitting Lotus. Andretti limped back to the pits with bent suspension and was out of the race, while Peterson was also forced to stop at the pits, but only to replace a damaged wheel. Four laps later he was out for good anyway, for the motor had gotten too hot in all the excitement and the oil pressure started to drop.

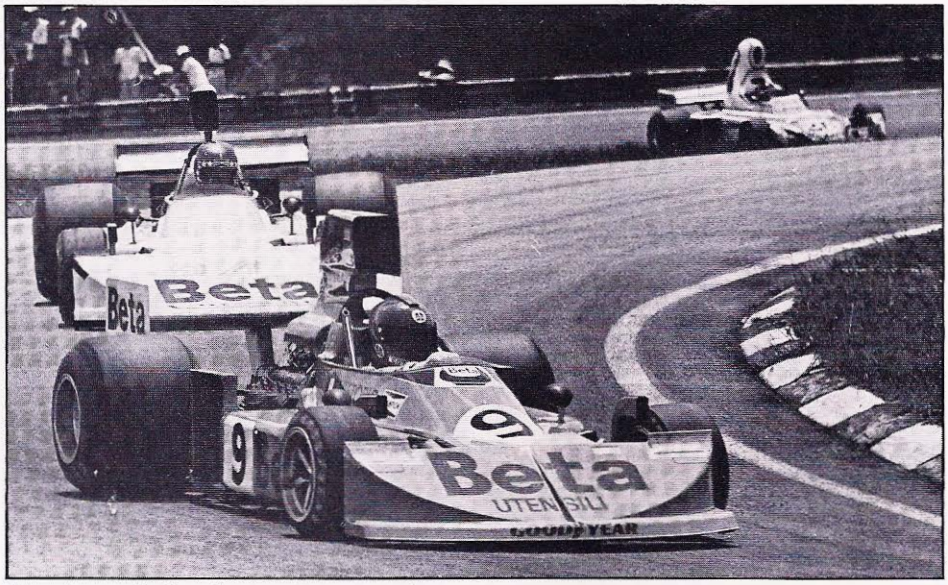
The next in trouble was Regga's leading Ferrari. After some ragged driving, which saw him put a wheel off the road several times, it was hardly surprising when he dropped out of the fight and into the pits with a punctured front tyre. Like Mass, he had to start again from the back of the field, but this time at his own pace and not under the pressure of his teammate from behind.

With Regazzoni out of the way, Lauda was able to pull out a few seconds on Hunt and Jarier, but the extra effort in pulling out those few seconds had sent his tyres "off" slightly and he couldn't extend his lead. Fortunately for him Hunt couldn't do much about closing the gap, so that was the way it stayed. The tightest battle was between Jarier pressuring Hunt, about which more later.

Running about ten seconds behind the first three cars was Tom Pryce. He had overcooked his tyres in the opening laps, and now it was a case of maintaining a careful balance between nursing his tyres and going fast enough to hold off the Tyrrell. Brambilla had fallen back to a distant sixth ahead of his teammate Stuck, but on lap 14 his problem became apparent when he stopped at the pits for good with failing oil pressure. Stuck was by this time a lonely sixth, with Scheckter well back in seventh place, with little prospect of moving up unless the cars ahead had trouble.

Jacques Laffite had been filling the gap between Stuck and Scheckter, but the Frenchman's luck ran out once again






*March men in Brazil: Brambilla DNF'd, Stuck finished fourth.*

when he was forced to stop with a broken union half way along the gear linkage.

Behind Scheckter was Emerson Fittipaldi, his progress a bit like a yo-yo as his engine ran better some laps than others. It was good enough, for a while at least, to hold off Reutemann and Pace in the two Brabhams, Reutemann having caught and passed his teammate as Pace's engine took on a high-speed misfire.

But what's this red and white streak pulling in car after car? It's Jochen Mass, oversteering widely but driving beautifully back up through the field and a joy to watch.

By half distance, Mass was ready to pounce on Reutemann, while the situation amongst the leading cars remained identical, each waiting for the other to make a mistake.

## Hunt Blows Up

When the change came it was heralded as a slight misfire in Hunt's engine, but the next time around only seven out of his eight cylinders were working, so that it was an easy task for Jarier, Pryce and Depailler to move ahead. It would only be a matter of time before Stuck also moved by. But with just eight laps to go he was saved the effort. . .

Hunt had the throttle slide stick open at exactly the same point Laffite had crashed. He put the McLaren into a spin and neatly trimmed the nose and rear wing off along the catch fencing. With the motor still running and the car driveable he then proceeded to limp back to the pits. He never got there, for unbeknown to him the oil radiators were damaged and spewing oil over the track — the first he knew of it was when a great cloud of smoke appeared in his mirrors and the oil pressure vanished.

Up front, Jarier was really piling the pressure on Lauda for the lead. He had closed the gap to two seconds and looked like making it an exciting finish. But it was not to be. He came upon the scene of Hunt's accident, driving at ten-tenths, and there were no oil flags to mark the oil that Hunt had dropped, for all the flags were farther up the track where the McLaren had come to rest.

The first Jarier knew about the oil was when the car whipped away from under him and slammed head on into the barrier. He leapt out without a backward glance, jumped the barrier and sat down to watch his victory attempt slip away for the second year in succession.

At that point it was all over. Lauda eased off to a comfortable victory, for by this time he was well ahead of everybody else. All that remained to be fought for now was second place.

Pryce was finding it harder and harder to stay ahead of Depailler as the Frenchman piled on the pressure for the finish. His car was oversteering badly and Depailler slipped by five laps from the end; he was helpless to stop him. He took third place, with Stuck driving a sensible race to finish fourth, well out of touch. Even farther back Scheckter took fifth place, although he had to work hard the last few laps as the flying Mass closed to within two seconds at the finish.

Mass scored one well earned point for his efforts, while behind him Regazzoni took seventh after a similar drive, the Swiss just short of being lapped by his teammate.

Reutemann lost eighth place to Ickx when his Brabham ran out of fuel three laps from the end after "the hardest race of my life," as he said later.

Zorzi took ninth spot in the second Williams after a good drive which had seen him leading Ickx for most of the race. Tenth went to a frustrated Pace, who for half the race could not muster more than 9,500 rpm (as opposed to its usual 11,500 rpm) out of his Alfa engine.

Hoffman took eleventh place, also a lap down, having driven a steady race despite no clutch throughout and only fourth and fifth gears in the closing laps.

Reutemann was classified twelfth and Fittipaldi was thirteenth, a suitable position for his luck this day.

Final runner at the finish was Lombardi, four laps down and feeling pretty bruised after her seat belts had come loose and she had been bumped around inside the cockpit.

So once again it was Lauda carried shoulder high by the "Polizia Militaire" to the winner's rostrum and the first laurels of 1976. Hopefully he will have someone else to share them with before the year is over, although it's going to take a lot of work, or luck, by the opposition before that happens. ■

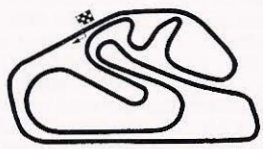
### BRAZILIAN GRAND PRIX GRID

| | | |
|---|---|---|
| James Hunt<br>McLaren M23/10<br>2:32.5 | Niki Lauda<br>Ferrari 312T/023<br>2:32.52 | |
| Jean-Pierre Jarier<br>Shadow DN5B/1A-6<br>2:32.66 | | Clay Regazzoni<br>Ferrari 312T/024<br>2:33.17 |
| Emerson Fittipaldi<br>Copersucar FDO4/1<br>2:33.33 | Jochen Mass<br>McLaren M23/6<br>2:33.59 | |
| Vittorio Brambilla<br>March 761/1<br>2:33.63 | | John Watson<br>Penske PC3/2<br>2:33.87 |
| Patrick Depailler<br>Tyrrell 007/4<br>2:34.49 | Carlos Pace<br>Brabham BT45/1<br>2:34.54 | |
| Jacques Laffite<br>Ligier JS5/1<br>2:34.67 | | Tom Pryce<br>Shadow DN5B/2A-5<br>2:34.84 |
| Jody Scheckter<br>Tyrrell 007/6<br>1:35.02 | Hans Stuck<br>March 761/2<br>2:35.38 | |
| Carlos Reutemann<br>Brabham BT45/2<br>2:35.97 | | Mario Andretti<br>JPS-Lotus 77/1<br>2:36.01 |
| Renzo Zorzi<br>Williams FW04<br>2:37.07 | Ronnie Peterson<br>JPS-Lotus 77/2<br>2:37.19 | |
| Jacky Ickx<br>Williams FW05<br>2:37.62 | | Ingo Hoffmann<br>Copersucar FDO2<br>2:40.25 |
| Ian Ashley<br>BRM P201/4B<br>2:40.94 | Lella Lombardi<br>March 761/3<br>2:40.95 | |

### BRAZIL G.P. PRACTICE

| | First Session | Second Session | Third* Session | Fourth Session |
|---|---|---|---|---|
| James Hunt | 2:33.87 | 2:33.78 | 2:33.87 | **2:32.50** |
| Niki Lauda | 2:32.68 | 2:32.64 | 2:32.87 | **2:32.52** |
| Jean-Pierre Jarier | 3:25.76 | 2:33.74 | 2:32.38 | **2:32.66** |
| Clay Regazzoni | **2:33.17** | 2:33.28 | 2:33.43 | 2:34.34 |
| Emerson Fittipaldi | **2:33.33** | 2:33.45 | 2:33.22 | 2:33.85 |
| Jochen Mass | 2:34.58 | **2:33.59** | 2:34.82 | 2:34.74 |
| Vittorio Brambilla | 2:34.61 | **2:33.63** | 2:35.86 | 2:34.72 |
| John Watson | 2:34.75 | 2:35.05 | 2:33.00 | **2:33.87** |
| Patrick Depailler | 2:34.78 | 2:34.82 | 2:35.05 | **2:34.49** |
| Carlos Pace | 2:35.66 | **2:34.54** | 2:38.93 | 2:37.70 |
| Jacques Laffite | **2:34.67** | 2:35.82 | 2:35.79 | 2:35.89 |
| Tom Pryce | **2:34.84** | 2:35.58 | 2:33.12 | 2:34.99 |
| Jody Scheckter | 2:35.69 | **2:35.02** | 2:34.68 | 2:36.30 |
| Hans Stuck | 2:42.00 | 2:35.84 | 2:35.84 | **2:35.38** |
| Carlos Reutemann | 2:36.19 | **2:35.97** | 2:36.03 | 2:37.88 |
| Mario Andretti | 2:39.15 | 2:36.15 | 2:36.56 | **2:36.01** |
| Renzo Zorzi | 2:41.30 | 2:39.58 | 2:39.88 | **2:37.07** |
| Ronnie Peterson | 2:57.06 | —— | —— | **2:37.19** |
| Jacky Ickx | 2:38.49 | **2:37.62** | 2:39.20 | 2:37.73 |
| Ingo Hoffman | 2:40.86 | 2:40.67 | 2:40.49 | **2:40.25** |
| Ian Ashley | 2:45.47 | 2:41.80 | 2:41.10 | **2:40.94** |
| Lella Lombardi | 2:42.02 | 2:41.40 | 2:40.31 | **2:40.95** |

* The third practice session did not count for grid positions. A motion voted by the Constructors Association to encourage all teams to carry out full tank tests before the race.



**Brazilian Grand Prix**

Interlagos - 4.95 mi.

# Results

**5th Grand Premio do Brasil**
**Interlagos, Sao Paulo**
**January 25, 1976**
**40 Laps, 318.415 Kms.**

1. Nikł Lauda, Ferrari 312T, 1 hr 45 min 16.78 sec, 181.468 kph
2. Patrick Depailler, Tyrrell 007, 1 hr 45 min 38.25 sec
3. Tom Pryce, Shadow DN5B, 1 hr 45 min 40.62 sec
4. Hans Stuck, March 761, 1 hr 46 min 44.95 sec
5. Jody Scheckter, Tyrrell 007, 1 hr 47 min 13.24 sec
6. Jochen Mass, McLaren M23, 1 hr 47 min 15.05 sec
7. Clay Regazzoni, Ferrari 312T, 1 hr 47 min 32.02 sec
8. Jacky Ickx, Williams FW05, 39 laps
9. Renzo Zorzi, Williams FW04, 39 laps
10. Carlos Pace, Brabham-Alfa Romeo BT45, 39 laps
11. Ingo Hoffman, Copersucar FD04, 39 laps
12. Carlos Reutemann, Brabham-Alfa Romeo BT45, 37 laps
13. Emerson Fittipaldi, Copersucar FD04, 37 laps
14. Lella Lombardi, March 761, 36 laps

Retirements:

Jean-Pierre Jarier (Shadow DN5B) accident lap 33; James Hunt (McLaren M23) accident lap 32; Vittorio Brambilla (March 761) oil pressure lap 15; Jacques Laffite (Gitanes-Ligier-Matra) gear linkage broken lap 14; Ronnie Peterson (JPS Lotus 77) oil pressure too low lap 10; Mario Andretti (JPS Lotus 77) accident lap 6; John Watson (Penske PC3) broken fuel union lap 2; Ian Ashley (BRM P201) oil pump belt broken lap 2.

Fastest Lap:

Jean-Pierre Jarier, Shadow DN5B, 2:35.07, 184.803 kph

# POST RACE: BRAZIL

## By Jeff Hutchinson

Although the Grand Prix of Brazil did not see the appearance of the new Ferrari or Tyrrell 008 (nee Project 34), there were enough new cars and changes to existing old cars to make a tour of the pits extremely interesting.

In the **Ferrari** pit sat three of the familiar 1975 312T chassis; not surprisingly, the Italians were playing it safe and not bringing their new 312T2 to a track like Interlagos where even a familiar car can prove difficult to set up. Ferrari's new boss, Daniel Audetto, was setting himself into the difficult position of taking over a team at the top and carrying on the good work of Luca Montezemolo. A narrower rear track and the new 1976 regulation roll bar above the driver's knees were about the only changes to the cars; the 312T will also be used at Kyalami. The first race for the new T2 chassis is expected to be at Brands Hatch at the non-championship Race of Champions.

Brands is a circuit which should really show up whether or not Ferrari have improved upon the 312T. Lauda will be the sole driver at Brands.

Moving along to the **JPS-Team Lotus** garage there was plenty to look at. The new Lotus 77s were considerably altered since they were first shown to the press late last year. "There is not very much we have not changed," said Lotus development engineer Nigel Bennett, formerly Chief Engineer with Firestone.

Both cars — the original (JPS 11) for Mario Andretti and a brand new one (JPS 12) for Ronnie Peterson — were running narrower tracks and shorter wheelbases which had proved to be better in testing, with the resultant changes in suspension and geometry "although the principle is still the same". Stiffer front brake calipers had been fitted because the other proved incapable of taking all the suspension loadings, and the oil radiators had been moved to the back of the car beside the gearbox.

One of the most noticeable changes was the introduction of a Ferrari-type top section with air scoops in front of the cockpit to feed air to the engine. The two cars were identical except for the top radius-rod pick-up point on Peterson's car which was on the engine instead of at the back of the monocoque. Both cars ran 1975 wings to 1975 height regulations as did all the field.

Judging by the cars' performance in the race it would seem that Lotus have more work to do before they can be considered really competitive. One change that will certainly be made before Spain is the addition of a stronger footwell, for more than one driver was heard to say "rather them than me" when they saw the Lotus with the nose removed.

**Team McLaren** were relying on their familiar M23 chassis for this race while their new car is still in the process of being built. As a stop-gap measure some 30 pounds had been shaved from the car by changing the parallel link rear suspension to wishbone type (done for weight saving purposes only), while the rest had been pared off the bodywork which was now a lot lighter and sported a bright new day-glow orange paint scheme.




*The Gitanes-Ligier-Matra, a potential front runner?* Jeff Hutchinson Photos

But the most significant change was the addition of a new McLaren-designed 6-speed transmission. This was the work of team manager Alistair Caldwell, although it was actually built in conjunction with Hewland. There were no problems with it in either practice or the race and both drivers agreed that it "certainly helps to fill the gaps".

**Elf Team Tyrrell** relied on their familiar chassis, which according to Jody Scheckter is now a long way off the other chassis. "Our cars weighed in at 118 pounds over the weight limit without a drop of petrol in the tanks," said Jody. He felt that the weight problem was half the reason for his times, slow despite some detail improvements made to the car during back-to-back testing with the Project 34 at Paul Ricard.

"We have to carry out a lot more testing on the six-wheeler in the spring," was all Ken Tyrrell would say in regard to when he will run the new car. But if the car does not show up any better in South Africa, Tyrrell might run it at Brands Hatch.

Besides minor aerodynamic changes, the new **Ligier** was in very much the same trim as when it was first shown to the press — and going very well indeed. One thing that will no doubt be changed before its next appearance will be the German BBS wheels which failed during practice, almost causing disaster. Strangely enough, they reliably carry the weight of the much heavier works Capri saloon. They were chosen because of Guy Ligier's fanatical insistence on weight saving. "He even changed my favourite steering wheel for another that was 150 grams lighter than mine," said Laffite, who must be glad that he himself doesn't weigh much. Work is already underway on a new lower airbox; the current box visually dominates the current car but it will be outlawed by the new regulations which come into force for the Spanish GP. "We think it will be just as effective as the present one," said Ligier, who was very pleased the way his new car was making out against the more established competition.

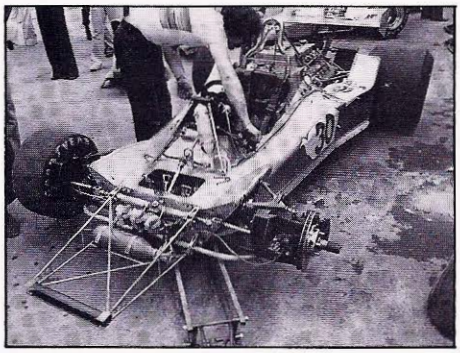



*The new nose on the BRM didn't help enough . . .*

The **Stanley-BRM** team had resorted to a heavily modified P201 chassis, now renamed the P201B. They also have a new driver for 1976, but it seems as though their old problem — the V12 engine — is still the cross that weighs them down.

The chassis featured a front radiator layout complete with a new Brabham-type nose section, as well as outboard brakes instead of inboard at the front and a 4-inch reduction in the rear track with geometry changes to suit. The resultant changes — including lighter fiberglass bodywork — made a weight saving of around 60-70 pounds over last year; however the car seemed even less competitive

than in 1975. It was difficult to tell whether the lack of speed was due to the car or to the new driver Ian Ashley. What did come to light is that the BRM engine is no better or more reliable than it was last year. In the course of the weekend the team broke two belts and blew up one engine!



*The neat Copersucar FD04, sans body.*

The **Copersucar-Fittipaldi** FD04 bore little resemblance to its predecessor. In the words of its designer Ricardo Davilia, "About the only part that's basically the same as last year's car is the back end". The monocoque is completely new — it's more rigid, lower and a lot shorter than last year's. The fuel tank distribution is similar, but the front suspension pick-up points are now fabricated "ears" at the front of the chassis, with a much-altered geometry to give a better average between the front and rear roll centers. The new front has also eliminated excessive camber change, which was a problem with the old car. The new bodywork and aerodynamics are also much on the lines of other cars. In short, Davilia has produced a car that's as good as, or better than, the other Ford-engined chassis around, and there's every reason to think it will get better still as Emerson continues to sort it. "The car is racing here just as it came off the drawing board. We still have to try new wings, air box and different length wheelbases," said Davilia; he added that with Fittipaldi doing the testing they had made more progress by the time of the first 1976 race than they had during the whole 1975 season.

While there was comparative joy in the Copersucar camp, there was near despair at **Brabham.** They just might have been too hasty in selling off their Ford engines and BT44 chassis in favor of the new Brabham-Alfa Romeo BT45. "Even if we wanted to go back to last year's car it would take us until midsummer to be ready for that," said worried looking Brabham designer Gordon Murray. "It would be easier to say what's not wrong with the new car," he shrugged. "We've had to add heavier front brakes, bigger springs, heavier roll bars and a heavier steel exhaust system after the titanium set broke in testing. All that means an overall weight of something like 85 kilos over the minimum."

To make matters worse, the Alfa Romeo engine will not run right in its present installation; the engine apparently runs too hot for the fuel system. Over a



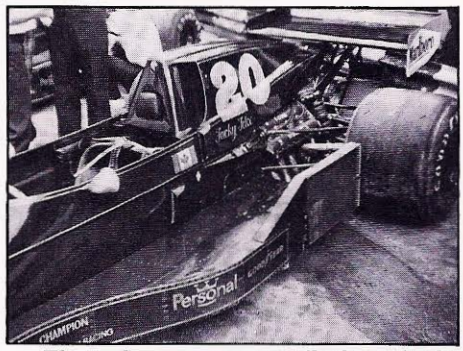

*Murray and Reutemann — a problem.*

certain rev-limit, the injection (both Alfa Romeo and Lucas types that were tried) cannot cope. A special crossmember had to be fabricated across the two rear suspension pickup points to stop the rear of the car flexing, but that proved to be one of the least important problems discovered at Interlagos.

"It took Ferrari three years to build a good enough car around their engine and we have tried to do it in three months," added Murray, who rushed to catch the Concorde back to London midway through the race in order to start working out a solution to the problem.

Too much weight is the real problem and that can only be cured by building a new chassis — a job which will take the team an absolute minimum of nine weeks. Until then the team will use a series of stop-gap measures, but it doesn't look as if they will be effective enough to get the new Brabham up amongst the front runners.

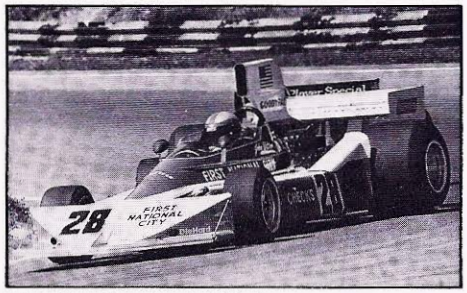
One team not willing to change their successful 1975 formula too much was the **March** equipe. Their three new March 761s were new chassis, but were very little changed from the previous ones. A stronger footwell, revised aerodynamics and radiators were about the only major changes.




*The radiators are now flush with the tub on the Williams FW05 (Hesketh 308C).*

The **Williams** team has grown over the winter into one of the major entries in F1 thanks to a large cash injection by new backer Walter Wolf, who it seems is having a large say in the policy and was very much in evidence in Brazil. The team was running last year's FW04 for young Italian newcomer Renzo Zorzi, but most of the effort went into its newly acquired Hesketh 308C, now officially renamed the Williams FW05. An F1CA meeting allowed the Hesketh to become a Williams, but it seems that in the future a new name will have to mean a 100% new car before it can be recognized as a real Williams.

Changes to the Hesketh to make it a Williams have been limited to new rear uprights and revised suspension geometry, plus a four inch narrower monocoque, two inches having been taken off either side "to improve air flow to the rear radiators," said Harvey Postlethwaite. It was perhaps an omen that the team's new driver, Jacky Ickx, spent most of his time following the older FW04 of Zorzi. A second Williams is now well under way and it is hoped that both drivers will be in FW05s at Long Beach.



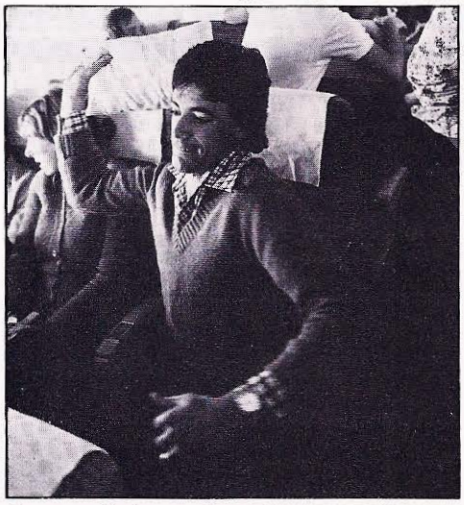

*The Penske: Fast at last.*

The **Penske** racing team looks all set for a good year, but through no fault of its own the season did not start well. The team arrived at Interlagos with the Watkins Glen chassis and a brand new one which had been slightly revised. The fuel load had been moved to the middle for better weight distribution and suspension geometry had been altered during winter testing. Don Cox joins the team from America to supervise race-to-race alternations; at the same time he is feeding back information to Geoff Ferris who, with Cox, is already designing a new car. Like others, the team is using computers to try and head their findings in the right direction in the shortest time, but as Don Cox pointed out, "The art is more important than the science. We don't yet know all the possibilities and the real key to success is understanding what the tyres want."

Tony Southgate had carried out a series of detail changes on his pair of **Shadows** over the winter, most of these taken from the new DN8 chassis which is currently under construction. The present cars feature a new wing mounting for improved airflow, repositioned oil cooler and a neat, more reliable, throttle linkage system. Narrower front track and new brake ducts were also among the changes; the new car will feature a slightly revised monocoque and bigger front brakes.

"The present car is still around 70 pounds overweight — which I could get off quite easily, but the expense in using titanium instead of steel, making special, more delicate bodywork, etc., is just not worth it. The car we have at present could run the whole year, it's so strong, and with the shoe-string budget we have at the moment that's the best way to be," said Tony. ■

Jeff Hutchinson Photos



*Pryce — lining up for action.*

# Pillows...
## (or how Pryce got his revenge)

### By Jeff Hutchinson

Question: If you confine some 140 mechanics, racing drivers, team managers, sponsors, press and friends on a Douglas DC8 jet for 14 hours, what do you get?

Answer: Chaos.

Varig Airlines of Brasil were kind enough — or stupid enough, depending on whom you ask — to supply a charter plane to take almost the entire Grand Prix 'circus' to Brasil and back.

To each of the pretty Brasilian stewardesses should go a motor racing equivalent of the Purple Heart medal. The plane hardly had time to reach the end of the runway for take off before the cabin crew, checking that all seat belts had been fastened, were covered from head to foot in motor racing stickers that were slapped on their backs and other, more interesting places.

At the same time 20 or more seat call buttons were pressed, with their occupants complaining that it was impossible to do up their seat belts. Some joker had changed the belts around leaving them with either two male or two female ends in their hands.

With everyone still struggling to sort out that mess and with the plane edging its way skywards, those still left standing were reminded to sit down by a barrage of seat cushions. Within minutes, there was a pillow fight that made Tom Brown's school days look like kindergarten.

The crew retreated to the front and rear galleys until a truce was called to allow them to serve drinks.

After eating, during which relative calm was established and only an occasional bread roll bounced off somebody's head, the plane quieted down as the lights were dimmed in anticipation of the long night ahead. Just as everybody was on the verge of sleep, a shrill police whistle jerked everybody back to consciousness again with the cry "Abandon ship", which some were just about ready to do.

A second pillow fight ensued, led by Tom Pryce, who took his revenge on Patrick Depailler for taking second place from him in the race. But Depailler, not to be outdone, found that a blanket tied in tight knots proved an even more formidable weapon.

By morning the battle had subsided as the plane touched down in Lisbon for a change of crew and re-fueling — a stop which the ground crew sent in to clear up the mess will probably never forget, especially one poor lady cleaner whose sole amount of English consisted of "It's my day off". By the time we left she must have wished it was.

During a split-second glance in the wrong direction, somebody managed to remove the brush from the end of her vacuum cleaner. She staged a walkout but was eventually persuaded to return only to find that her brush had been replaced and that three feet of extension tube was now missing, which meant that she would have to finish the rest of the cleaning on her knees.

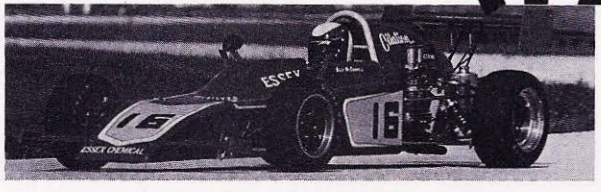
That was enough for the poor girl, who wisely took what was left of her vacuum cleaner and beat a hasty retreat with only the first few rows of seats cleaned.



*Depailler lets fly at Pryce.*

If one day you should ever be flying on a Varig jet and feel three feet of aluminum tubing digging you in the back from behind your seat, fear not. It's not part of the aircraft, but part of a vacuum cleaner instead, which a young lady with a black woolen hat from Lisbon Airport would be very pleased to have back. You can't miss her; she is the one with the permanent stoop. That is, if she is not on sick leave.

I wonder just what that mechanic was doing with a large adjustable wrench at the back of the aircraft for most of the flight?

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Vol. 3 No. 3 April 1976



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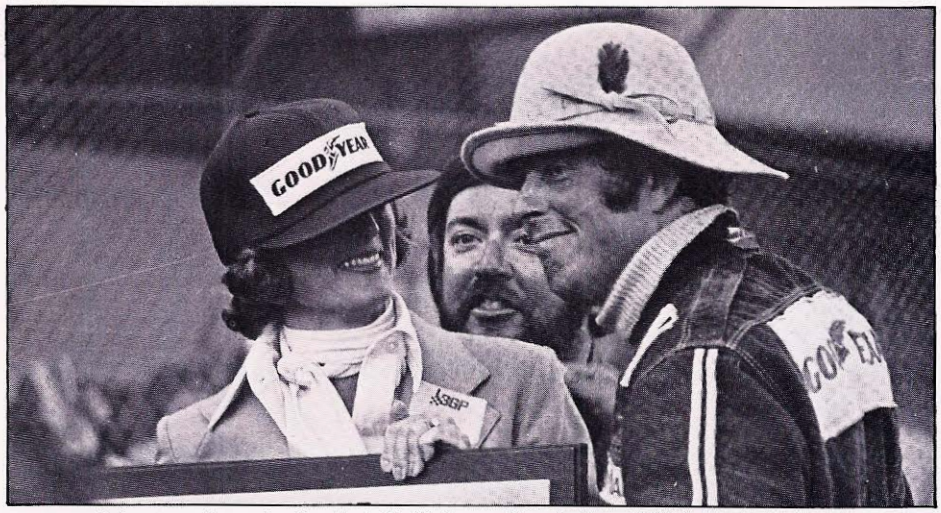



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Jeff Hutchinson Photos




*Brian celebrates after winning last Fall's Long Beach Grand Prix.*

# A LAP AROUND LONG BEACH

## With Brian Redman

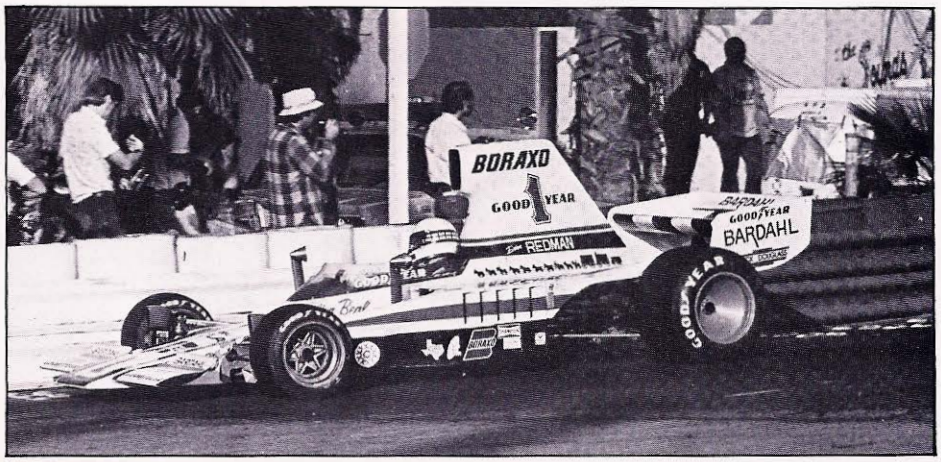
Last September I won the first Long Beach Grand Prix and by winning the race I also won the American F5000 Championship for the second time, so it was a particularly memorable event for me. The track itself is a tiring proposition because it has so many tight corners which are hard on both the car and the driver so that you have to concentrate not just on going as fast as you can but also on bringing the car to the finish in one piece. Obviously it is a very satisfying race to win.

When we were there for the Formula 5000 race we were often asked to compare the circuit to Monaco and though like Monaco it is close by the ocean and there are buildings in the vicinity of the track, there isn't much resemblance in any other way. Whereas Monaco has quite a lot of fairly fast corners, Long Beach is pretty well entirely made up of slow turns, and in fact it's a rather peculiar circuit because you've got two sets of very tight corners which are connected by a very long straight alongside the ocean and a shorter straight in front of the pits. In other words you've got a very high top speed but the corners are all slow.

I don't think Long Beach requires as much concentration as Monaco because the road is generally much wider and you have, in at least four instances, very adequate escape roads; these ease the driver's task because he knows he has a little room to recover from a mistake, whereas at Monaco you really don't have any room at all.

From the startline at Long Beach you have about a quarter-mile straight which leads into turn one, a corner which is perhaps the most difficult on the circuit even though it's just a ninety degree right-hander. The reason for this is that as you reach the apex of the corner the road falls away very sharply, enough in fact for the car to leave the road, so that a lot of strain is placed on the transmission and suspension. You've got to take care to avoid this by driving through at a little less than the speed you would normally use to take this type of corner. It may be necessary for some cars to be set higher on their suspension settings in order to avoid bottoming here, although with our F5000 Lola we were able to leave the settings normal.

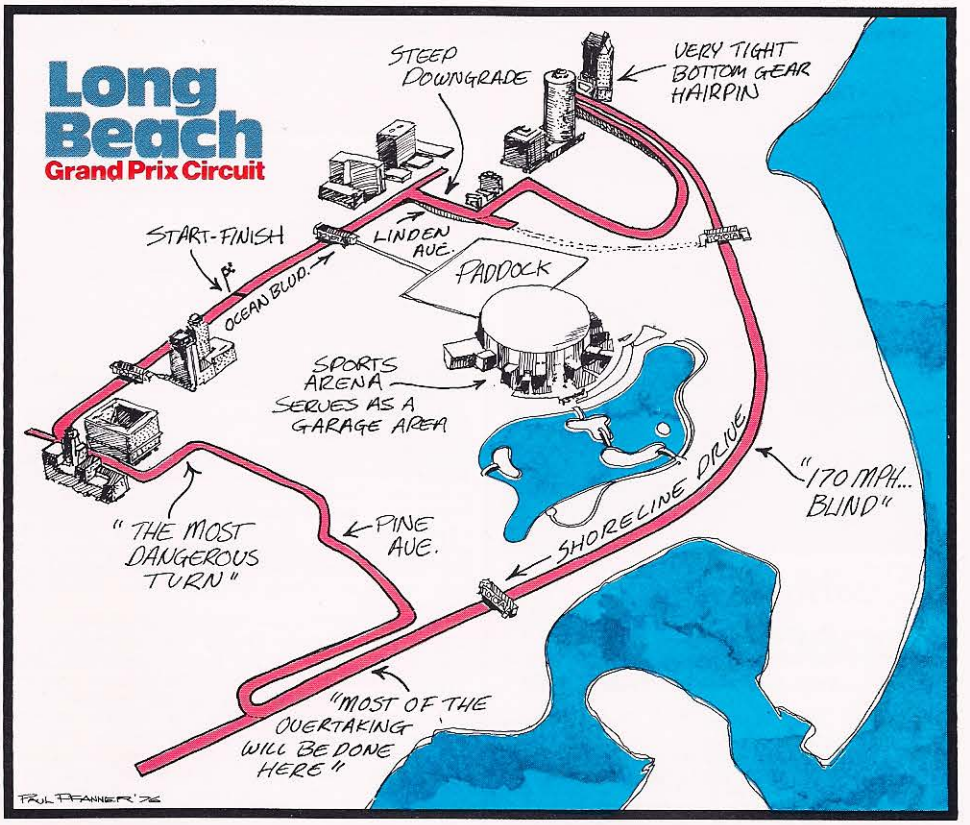
*Brian's Boraxo Lola on its way to victory.*



Just after the car exits turn one you're faced with another ninety degree turn, this time to the left. As you come down the hill there is an escape road ahead of you so that if you make a mistake — and that's easy to do because as you begin to brake the car is still on the downgrade — you have room to sort it out. The entry into this turn is fairly important because as soon as you're through turn two you're into turn three, which is another ninety degree righthander so you have almost an ess situation through the first three corners. In other words, even though there are two escape roads you can't allow yourself to be lured into feeling overconfident through this section because any mistake will lose you a lot of time.

Coming out of turn three the road is very wide so you're able to accelerate hard into turn four, a long left-hander in which the road surface changes and decreases in width. This isn't to say that the road becomes at all narrow because it's still of the same extraordinary width as the exit of turn three; and it is possible that you might be able to pass another car coming into the corner if the other car runs slightly wide of the apex. Also it's quite possible that if you made a mistake there you wouldn't hit anything due to the width of the road.

Turn four brings you into another short straight of perhaps 150 yards which is followed by a sharp, bottom-gear hairpin to the right. This turn also has plenty of escape road and is of extraordinary width, completely different than any similar situation at Monaco, and it is possible to overtake on braking here — but it's not too easy to do because cars can very easily get tangled up with each other.




## THE STRAIGHT: 170 MPH BLIND

Exiting this hairpin you accelerate out onto the main straight and along the seafront. In the middle of this straight there's a curving right-hand corner which doesn't require you to lift off the throttle in any way but at the same time it is blind and this can present some difficulties. If there's an accident ahead for instance you can't see it and you're going very, very fast. I expect the Formula One cars to be running at about 170 mph through there.

It's quite feasible to pick up a tow and go all the way through this fast curve in the two and outbrake an opponent into the next corner. This is another hairpin, an absolute bottom-gear hairpin to the right. Again, there's a good escape road here and the road is very wide. Probably most of the overtaking that will be done in the Grand Prix will be done right here.

This is another place with excellent escape road facilities and as it happened I involuntarily tested them during practice for the Formula 5000 race. I was lining up to pass two slower cars at the end of the straight but when I stepped on the brakes something went wrong and I wasn't able to stop. How I missed the other two cars I'm not quite sure because I was all the way inside them at the time and it got to the point where I had my eyes shut! What had happened was that the aluminum "hats" which hold the rear brakes onto the driveshafts had broken off completely because of the heavy braking all around the circuit and I had no rear brakes at all.

It says something for the planning of that escape road that I was able to stop quite easily. In fact, I think that you could suffer total brake failure there and still get away with it because there are, in addition to the road itself, a considerable number of rubber tire barriers which are used extensively all round the circuit.

Anyway, assuming you do manage to get through this hairpin properly you can let the car drift out to the full extent of the road on the left side but at the same time you're turning the car back to the right in order to get back to that side of the road for a ninety degree left-hand bend which the Formula One cars will probably take in second gear. This is another fairly straightforward corner which leads onto another short straight and into a rather awkward ess bend to the right and left. This ess is reasonably fast in either second or third gear and you'll probably see the Formula One cars using a high second gear to get through. Last September this ess was marked out by studs in the road which were totally ignored by the drivers, and I'm sure this method of marking will be changed for the Grand Prix.

## THE MOST DANGEROUS TURN

After this ess you have another very short straight before you come into what is probably the most hazardous section on the circuit. Although the actual speeds are not very high (you're still in second gear doing something like 100 mph) the ninety degree left-hander which comes up is particularly tight and for once there's no extra road width whatsoever. The whole track suddenly narrows down like a funnel and the apex of this corner and the similar right-hander which follows directly after are formed by armco barrier. This barrier put one or two drivers out of the F5000 race because it's very,very easy to clip the armco with your right rear wheel and send the car straight into the next barrier which is dead ahead. There's no escape road to save you there. This is a place which will undoubtedly catch some drivers out in the Grand Prix.

As soon as you come away from the apex of the right-hander the road begins to rise fairly sharply toward another tight, second-gear ninety degree righthander. Now last September this section of the track probably did more damage to driveshafts and transmissions than any other part of the track because the road was extremely bumpy and though the cars weren't bottoming they were bouncing badly from bump to bump. At the top of this short hill the road flattens out and turns onto the pit straight which is of reasonable length for there to be a slim possibility of overtaking on braking for the first turn. Again there's a good escape road if you don't happen to make it.

As you can probably imagine Long Beach is quite hard work, although you do get a rest on the main straight. But at most other parts, due to the fact that the car is in the lower gears all the time, quite a lot of strain is placed not only on the car but also on the driver because when the car goes into a slide it does so more quickly and in a couple of places you have very little room to maneuver. I think this situation will be even worse in the Formula One cars because they will probably be using first gear more than we did in the F5000s as they have considerably higher power bands than our Chevrolet motors.

Whoever wins the Long Beach Grand Prix will be a very deserving winner because the race distance will be about twice as long as it was for the F5000 race and there is quite a lot of mental strain on the driver due to the tightness of much of the circuit. Also the winner will have to be very careful with his car — this was the worst car-breaking circuit we saw in America last year and even though the road surface has been improved on the short straight before the pits I think it will be a hard circuit on the cars. ■

# THE TEAMS & CARS

Text and Photos By Jeff Hutchinson





*(TOP) Ingo Hoffman in the '75 Copersucar. (BOTTOM) Fittipaldi in the '76.*

## Copersucar

**Copersucar-Fittipaldi Cars, Sao Paulo, Brazil.**

After a disappointing first year with the first of the Ricardo Divilia-designed Copersucar chassis driven by Wilson Fittipaldi, the team looks like being in for a major change of fortune this year.

The big difference is the addition of Emerson Fittipaldi to the team; he is already bringing major signs of improvement.

The latest (fourth) Copersucar chassis looks like being a serious challenger in Fittipaldi's hands, the two-time World Champion putting it right up at the front of the field in his first race with the car.

His experience in other directions is also helping to mold the team into a solid, workmanlike unit, with the experienced team manager Jo Ramirez forming the backbone of the team. Overall direction of the team still lies in the hands of Wilson Fittipaldi, Jr.



## McLaren

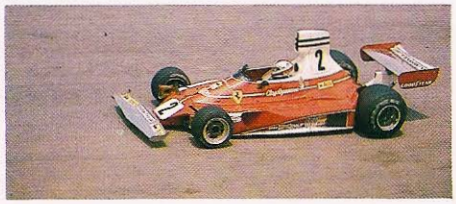
**Team McLaren, Colnbrook, Bucks, England.**

Founded in 1963 by the late Bruce McLaren, the team has grown in strength, culminating in 1974 when the marque won motor racing's Big Three in the same year: the Indianapolis 500, the World Driver's Championship and the Constructor's Championship.

McLaren Racing, now under the direction of founding member Teddy Mayer, is one of the few teams to have run a successful operation on two continents at the same time. Americans are familiar with the McLaren name because of their endless string of successes in the now defunct CanAm Championship and, of course, their exploits in the USAC Championship.

Although both Denny Hulme and Emerson Fittipaldi, who between them have scored twelve of the team's total of fifteen Grand Prix victories, have now left the team, their current drivers, James Hunt and Jochen Mass, seem set to keep McLaren in the limelight, Mass having already scored his first win in 1975.

James Hunt started off the 1976 season with pole position first time in the car, which is still proving competitive although it is about to be replaced by a new Gordon Coppuck-designed chassis.



## Ferrari

**Scuderia Ferrari, Modena, Italy.**

1975 saw Enzo Ferrari's famous prancing horse symbol achieve its best F1 results in over a decade, clinching the Constructor's and World Driver's Championships with Niki Lauda and Clay Regazzoni. Regazzoni's win in Italy not only clinched the Constructor's title, but gave the Italian cars a total of 58 World Championship victories, which put them one ahead of Team Lotus.

Ferrari owe their current success to two major factors: the return of chief designer Mauro Forghieri to the racing team and the organizational ability of young Roman lawyer Luca Montezemolo, both signing on after the team's disastrous year in 1973. Hard work by the whole team, plus constant testing around their ultra-modern Fiorano test track, complete with closed circuit television soon began to pay dividends. In 1975 the team was virtually invincible.

A new chassis for 1976 (still being tested) plus their powerful flat-12 boxer engine looks like keeping them out in front this year. Montezemolo has moved on and handed coordination of the project to ex-Lancia competitions boss Daniele Audetto. His first time out with the team, in Brazil, produced the first Ferrari win of 1976!





*(TOP) Zorzi in the old Williams. (BOTTOM) Ickx in the new.*

## Williams

**Wolf-Williams Racing, Reading, Berks, England.**

Another private entrant turned constructor is Frank Williams, who has been chasing his first Grand Prix win since 1969, usually on a shoestring budget.

This year should see a change in the Williams' fortunes, for with financial backing from wealthy industrialist Walter Wolf, the team is presenting its strongest front yet. It has acquired the ex-Hesketh 308C chassis and its brilliant young designer Harvey Postlethwaite to go with it.

Jacky Ickx has been signed to lead the team, while young Italian Renzo Zorzi takes the number two seat. If these two drivers do as well with the car as James Hunt did, then Frank Williams should get that win that he has waited so long for.



## elf/Tyrrell

**Elf-Team Tyrrell, Ockham, near Ripley, Surrey, England.**

Since forming his Tyrrell team in 1960, Ken Tyrrell, a former timber merchant who operates his racing team from his timber-yard premises, has been the sport's most successful private entrant. He became a constructor with the first Tyrrell car in 1970, two years after entering his first F1 race in 1968. His now world-famous partnership with Jackie Stewart saw the team win the World Driver's Championship in 1969, '71 and '73, the Tyrrell marque taking the Constructor's title in '71. After the death of Francois Cevert and the retirement of Jackie Stewart in 1973, the strength of the Tyrrell team could not have been better underlined by the fact that they were still challengers for the title right up until the Canadian Grand Prix the following year.

The two-year-old Tyrrell 007 chassis, which Jody Scheckter and Patrick Depailler have been driving for the past two years, is now falling behind even its Ford-powered opponents, but waiting in the wings is the new Tyrrell Project 34 car with its revolutionary four front wheels. It is unlikely that this car will be seen at Long Beach, but it provides an exciting prospect for the future of the Tyrrell team who will, no doubt, soon be adding to the 19 Grand Prix wins so far scored by Tyrrell cars.



## JPS/Lotus

**Team Lotus, Hethel, Norwich, Norfolk, England.**

Although Team Lotus was first formed in 1954 by its 'human dynamo' Chairman Colin Chapman, it was not until 1958 that the team entered its first Grand Prix, at Monaco. Since then, they have been the most successful of all the Grand Prix teams scoring a total of 57 wins during the past 15 years, an all-time record number of wins which Ferrari have only recently managed to top. During that time they have won the Constructor's Championship six times and Jim Clark, Graham Hill, Jochen Rindt and Emerson Fittipaldi have earned World Championships driving for the team.

Last season was the worst in the history of the team. Their trusty Lotus 72 chassis, the most successful Formula One car ever built, was not suited to the enforced switch to Goodyear tyres.

The first race this year saw the debut of the team's new type 77 chassis penned by Lotus designer Ralph Bellamy. Like most of the things that come out of the Lotus workshops, it's very different from the average Grand Prix car. It has yet to prove itself, but knowing Chapman's determination he will soon have his cars back at the top.

Racing cars are, of course, now a small part of the Lotus empire which includes a sophisticated range of up-market sports cars and boats.



# Shadow

**Shadow Racing Team, Northampton, England.**

Despite losing major sponsor UOP during the winter months, Shadow boss Don Nichols is continuing his fourth season of Grand Prix racing with his competent Shadow team, run under the direction of ex-March co-director Alan Rees.

Although the team is still waiting for its first Grand Prix victory, the Tony Southgate-designed Shadow DN5 chassis has been a major threat since the first race of 1975, particularly on tight circuits like Monaco.

A reliability record combined with the inexperience of the team's two young drivers, Tom Pryce and Jean-Pierre Jarier, produced poor results last year, although the cars were often front runners. This year must surely see the team's first Grand Prix win.



# Penske

**Penske Racing, Reading, Pennsylvania, USA and Wimborne, Dorset, England.**

Roger Penske Racing, formed in 1966 by the shrewd businessman whose name the team bears, needs little introduction to American fans.

Backed by the First National City Bank, the team started its Formula One operation in 1974 with their Geoff Ferris-designed Penske PC01 car built at their British F1 headquarters.

During a troubled first full season in 1975, the new car proved difficult to sort out and was eventually replaced by a March-based chassis. Just when things were beginning to come right the team lost its long-time driver Mark Donohue because of a tyre failure while practicing for the Austrian GP. Despite this tragic loss the team has re-grouped their forces, built a new car and taken on the talented Irish driver John Watson.

Having learnt a lot from their first season of Formula One, it probably won't be long before team manager Heinz Hofer and his experienced crew put the Penske in the winner's circle.



# Stanley-BRM

**Stanley-BRM Cars, Bourne, Lincs, England.**

Since the formation of the BRM team immediately after the war by joint directors Louis and Jean Stanley, they have been familiar figures around the race tracks of the world, usually strolling languidly side-by-side along the pit front like owners at a horse race.

From their 1962 heyday when BRM won the World Driver's and Constructor's Championships, the team has never really shifted into line with the ultracompetitive '70s. The Mike Pilbeam-designed P201 chassis has proved competitive since its introduction in 1974, but the BRM V12 engine is the real problem. It lacks power and as a result the car has spent the last couple of years as a tail-end runner, Stanley changing drivers at regular intervals hoping this would change his fortunes, when a change of engine, along with management stability, is what's really needed.



# Brabham

**Brabham Motor Racing Developments, Ltd., Byfleet Road, New Haw, Weybridge, Surrey, England.**

1976 is the fifteenth anniversary year of the Brabham marque, one of the most famous and established of the Formula One constructors. Since it was bought by Bernie Ecclestone following Jack Brabham's retirement in 1970, the company has ceased producing cars for general sale. Aided by brilliant young South African designer Gordon Murray, Brabham had its best year to date under Ecclestone last year when they took two wins and second place in the Manufacturer's Championship with their neat BT44 chassis.

The shrewd Ecclestone, realizing that Ferrari held the ace card with their flat-12 cylinder boxer engine, negotiated a deal with Alfa Romeo to run their flat-12 boxer in a Brabham chassis, forsaking the chances of even keeping the old Ford-powered cars as a back-up should things not work out well with the new BT45 project.

So far the results have not been too promising, but with Brabham's reputation for getting the job done, they could well be in the enviable position that Ferrari are now in by the end of the season.



# Ligier/Matra

**Ligier Cars, Paris, France.**

Despite producing some of the world's best racing drivers of late, France has not had its own Formula One car since the dissolution of the Matra team in 1972. To say that Guy Ligier's Ligier JS5 project is an all-new French hope is a bit of an overstatement, for the car is almost a 'cover' for Matra's return to Formula One. It was built, designed and powered by the same people and engine that were behind the orginal Matra chassis and later the Matra sports car chassis. The distinctive looking car — backed by Gitanes Cigarettes — bears Guy Ligier's name, but that's where the Ligier part of it stops; the rest is all Matra.

So far the prospects for this team (run by former Matra sports car team manager Gerard Ducarouge) look very good indeed. With the talented Jacques Laffite at the wheel the Ligier project, announced at the end of 1975, could soon start to give some much-needed opposition to the Ferrari domination. Its biggest hopes of beating the Ferraris center around its V12 engine which was rejected last year by the Shadow team, who said its expense did not justify the slightly better performance over the Ford Cosworth engine used by most of the teams. The Matra-men hope otherwise, however.





*(TOP) Lella Lombardi in the March Ronnie Peterson will drive at Long Beach. (BOTTOM) Brambilla's Beta Tools sponsored version.*

# March

**March Engineering, Ltd., Bicester, Oxford, England.**

Formed in 1969, the March chassis first appeared on the grid in South Africa in 1970 — both cars on the front row! One of those was Jackie Stewart in a Tyrrell-run chassis and the other was Chris Amon in a works car. In the next race Stewart took the March chassis to its first Grand Prix win, but the team had to wait five years until the Austrian Grand Prix in 1975 for its second victory, this one at the hands of Vittorio Brambilla.

Their neat, compact little March 751/6 chassis, based on their F2 car, took the Grand Prix world by surprise in 1975, and with four cars being run in this year's Championship they can expect their most successful ever year in 1976. March director Max Mosley will be running one team for Brambilla and Ronnie Peterson, while March designer Robin Herd will run the other two cars for Hans Stuck and Arturo Merzario. Long Beach should suit the March chassis well.



*The Ensign at Watkins Glen in 1975.*

# Ensign

**Ensign Cars, Chasetown, Staffs, England.**

Since its formation in 1971 by Morris (Mo) Nunn to build a Formula 3 car, Ensign has grown from strength to strength. Their F3 car won the major British F3 Championship in 1972 and in 1973 Nunn was commissioned to build his first F1 car by Rikky von Opel.

The car made a shaky debut in 1974 and von Opel pulled out in mid-season, leaving Nunn to hire the car out to several different drivers.

1975 was a better year for Nunn, who with backing from Dutch sponsors built a more sophisticated car which picked up its first championship points in the hands of Gijs van Lennep who took sixth place at the German Grand Prix.

At the end of the year, Chris Amon drove the car in three races and, for 1976, with another new car based on last year's version and a new sponsor, Nunn hopes for even better things.

# THE DRIVERS

Text By Jeff Hutchinson / Photos By Bob Lloyd • Gerald Kennedy • Jeff Hutchinson

## Lauda



For 27 year-old Niki Lauda it must have been a satisfying moment when he collected the World Champion's Trophy in Paris last December.

Just eight years previously he had made his competition debut hill-climbing a Mini around his native Vienna. From that humble beginning his rise to the top was meteoric, aided by an understanding father, a generous bank manager and, most of all, his partnership with Ferrari just at the time they were set to sweep all before them.

His first full year of Formula One was a rent-a-drive March in 1972, and Lauda's future did not look very promising. He scored no points, did not finish higher than seventh and had a bank overdraft to look forward to at the end of the year.

In 1973 he was offered a drive with the declining BRM team — he had no choice but to accept it if he wanted to stay in F1. A fifth place and two points was the best he had to show for that year, although his performances in the uncompetitive BRM were promising, and in 1974 he and BRM teammate Clay Regazzoni were offered places in the works Ferraris.

From then on, the combination of Lauda's skill and the Ferrari chassis has been the combination to beat. He took his first win in Spain in 1974 and soon followed that with a second win in Holland. He had matured overnight into a tough, intelligent opponent, scoring no less than nine pole positions during his first year. Mechanical problems kept him from taking the title that year, but in 1975 nothing went wrong; he set another nine pole positions and took five wins on his way to the world title, which he won by a comfortable margin. The buck-toothed Austrian has plenty to smile about, for so far it does not look as though any of the other teams have come up with a Ferrari-beater for 1976. But the year is young . . .



## Reggazoni

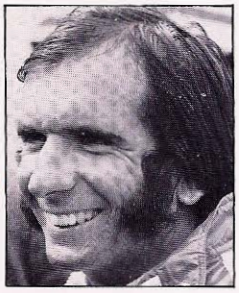
At 36 years of age Swiss-born Clay Reggazoni is now the second oldest of the current Grand Prix racers. Although put in the shade of late by exploits of his younger Ferrari teammate, the Italian-speaking Swiss continues to be a force to be reckoned with. Since leaving his Father's coach-building business to take up full-time racing in 1968 in a works F2 Tecno, Clay has spent most of his professional racing career with the Ferrari team; he drove F2 for them in 1969 before being given a chance in Formula One in 1970. He scored his first Grand Prix win at the Italian Grand Prix, only his fifth F1 race.

His early racing career was punctuated by numerous accidents, the most notable being a crash with Jackie Stewart at the 1972 German Grand Prix. He left Ferrari for a season with BRM in 1973, and then to everyone's surprise was invited back to the Ferrari camp in 1974.

That was his best season up to that point, for a win at the German Grand Prix plus points in ten of the other 15 races that year placed him in contention for the World Championship title right up until the last race, where Emerson Fittipaldi pipped him for the title. 1974 revealed a more mature and relaxed Regazzoni, his consistency making him an ideal partner for Lauda.

In 1975 he took his third GP win, again at Monza, plus winning the non-Championship Swiss GP (of course). Two thirds, two fourths, and a fifth put him fifth overall in the 1975 points standings. Although Clay now seems content to follow in Lauda's wake, the old "Regga" fire can still be seen when the moment calls for it, the Swiss setting four fastest laps last year to prove it.

## Fittipaldi



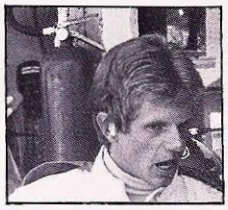
The youngest ever World Champion at 25, when he won the title for John Player Team Lotus in 1972, Emerson Fittipaldi took the title again for the McLaren team in 1974. At 29 years of age Emerson is a national hero in his native Brazil — reputedly the highest paid racing driver and possibly still the best in the world.

After graduating from soap-box derbies to homemade go-karts, then Super Vee (he was Brazilian Champion in 1967), he first arrived in Europe in 1969. One year later, after lightning progress through Formula Ford and F3 in Europe, he found himself leader of the Lotus team following the tragic death of Jochen Rindt.

In the fourth Grand Prix start of his career he walked off with the American Grand Prix, and has since scored a total of 14 wins and two world titles.

A recent sudden switch to his brother's Brazilian-backed Copersucar F1 team, following the team's first and not very successful year with Wilson Fittipaldi, Jr. at the wheel, brought him a lot of criticism. People were saying that it was just for the money. Emerson proved them all wrong at the opening race of the 1976 season at his home Interlagos track. He qualified fifth fastest in practice despite stomach trouble and a stiff arm, and was doing well in the race until engine problems put him out of the running.

Whatever he drives, Emerson Fittipaldi has proved, and will no doubt prove again, that he is a winner.



## Hoffman

Twenty-two year-old Ingo Hoffman has jumped into his racing career at the deep end. After performing well in Brazilian Super Vee races and some F3 races in Europe, Ingo has been taken under the wing of the Fittipaldi brothers as number two to Emerson in the Copersucar team.

His Grand Prix debut was at the Brazilian Grand Prix where he acquitted himself well in the old-type Copersucar chassis. It's too early in his career to make predictions for the future, although with a teacher like Emerson Fittipaldi he should get off to a good start.



## Peterson

There will be few people who will disagree with the fact that 32 year-old Ronnie Peterson is the fastest driver in the world, but his disappointing 1975 season total of just six points (twelfth place in the World Championship) hardly tells the same story.

In his first year he won four Grands Prix and wound up in third place in the points standings. In '74 he scored three more wins and fifth place in the Championship, while in 1975 he was lucky to finish in the top six and did so only three times.

His F1 career started in 1970 after rocketing to the top of the then ultra-competitive F3 ranks in 1969. His first year of F1 was spent learning the ropes in the nine races he entered, but in 1971, with a works March 711, he took a string of good placings to finish second in the Championship to the all-conquering Stewart, while in F2 he dominated and won the European title.

1972 was a disappointing year for "Super-Swede", for the new March 721X simply didn't work, his best placing being a third with a lowly ninth in the points by the end of the year.

Thinking that his career was at a halt with March, Peterson accepted, amongst many offers, to drive for Lotus who at the time had just won the world title for Emerson Fittipaldi. Still using the type 72 chassis, which had won Rindt the title in 1970; Peterson and Fittipaldi took seven more wins for the JPS team.

Now, after two difficult years with Lotus, during which time their replacement Lotus 76 proved a failure, Peterson has found little hope with the latest Lotus 77 chassis following its debut in South America. Relations with Lotus boss Colin Chapman are strained, and Peterson has found his way to his former employer: March.

Now with a competitive car Peterson will be a hot favourite for the World Title.

## Brambilla




At 38 Vittorio Brambilla is the oldest F1 driver, but his age doesn't show when he's behind the wheel of the works March F1 car. The highlight of his career to date was a magnificent victory in the shortened, wet Grand Prix of Austria. It was his first Grand Prix win and the first for the works March F1 team.

After taking up racing late in life with go-karts, he graduated to F3 with a homemade Birel F3 car left to him after his racing brother Tino, for whom he wrenched, was offered a drive in a works F2 Ferrari. Vittorio had also been an ace motorcycle rider and spent most of his working life in his father's garage business next door to the Monza track, so he was no stranger to the racing game. He graduated to F2 in 1971 and after some spectacular car control demonstrations, plus some big accidents, he earned the nickname "Monza Gorilla".

After some good performances in 1973 with his March-BMW F2 car, people were beginning to take Vittorio more seriously, but it was not until he drove an F1 car in 1974 that his talents were really appreciated. He scored only a single point in Austria, but with the much improved 1975 March he shot into the headlines from the word go. He was always well placed on the grid and took pole position in Sweden. By the end of the year, despite a lot of bad luck, he had won his first Grand Prix and finished in the points in two more, to put him eleventh in the Championship.

## Stuck



Having been catapulted to the top by BMW just as Mass was by Ford, 25 year-old German Hans Stuck, Jr. nonetheless began his career by following the footsteps of his famous racing father from an early age, starting with a go-kart. His first car races were with a private BMW 2002 and he was soon driving for the well-known Alpina team, winning the Nurburgring 24-Hour race at the tender age of 18. Jochen Neerpasch took him under his wing at Ford, where he shared victories with Mass before returning to BMW when Neerpasch took over as competitions manager. From then on, he won several major saloon races and tried his hand at single-seaters with a couple of F3 drives.

He moved on to F2 in 1973 and showed enough promise to be invited to join the works March F2 team in 1974, finishing second in the championship to Depailler. Perhaps rushing things a little, Stuck also ran in the works F1 car in 1974, but a disappointing set of results saw him leave the team at the end of the year.

Neerpasch sent him to compete in the American IMSA series in a works BMW for the first half of 1975, but then the Marches started to go well and he returned to finish out the F1 season with March.

A series of crashes and mechanical failures kept him out of the results, but undoubtedly it will not be long before he starts to figure among the leading points scorers, his driving already showing more maturity this year than in the past.




## Merzario

Pint-sized Arturo Merzario, born in Como, Italy in 1943, gets his chance to show just what he can do with a privately backed works March this year after a frustrating couple of seasons getting nowhere with the Frank Williams team.

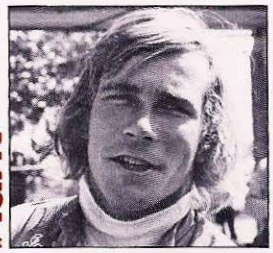
Merzario first made his name driving sports cars for Abarth, both on circuits and in hill-climb events. He drove for the Ferrari sports car team in 1970 and had his first taste of single-seater racing in an uncompetitive Tecno in 1971.

Things first went right in 1972 when he shared the winning Ferrari in the Targa Florio with Sandro Munari and shared another victory with Clay Regazzoni in Kyalami at the end of the year. He also scored several wins with a 2-liter Abarth sports car and got his big chance with a one-off F1 drive for Ferrari at the British Grand Prix. He finished a storming sixth and won the inaugural Jo Siffert award for his efforts.

The following year, as well as racing sports cars with considerable success, he was given eight more drives for Ferrari and scored two fine fourth places. But the excitable Merzario could not put up with the politics that were surrounding Ferrari's racing at this stage and he moved on to drive Frank Williams' new Iso F1 car. That went badly, and after a long series of mechanical retirements he ended the year with just four points from two fourth places. Another bad year with the Williams team followed in 1975 and halfway through the year he left the team, keeping his hand in with four long distance sports car wins, helping Alfa Romeo win the World Manufacturer's Championship.

With a new March from South Africa onwards, Merzario could well pull out a lot of surprises in 1976.

## Hunt



Lanky, blond James Hunt was making headlines long before he ever sat in an F1 car. Usually they were accompanied by a picture of him escaping a horrifying-looking accident; this was a frequent occurrance in his early F/Ford and Formula 3 races in 1968/69. He soon got the nickname "Hunt the Shunt", but his frightening experiences did not dampen his enthusiasm for racing. For a while it looked as though his career was over before it had really started, but a meeting with Lord Hesketh in 1972 changed all that. Before Hunt knew what had happened, he had a March F2 car; after a few successful races he was given a chance in an F1 race with a hired Surtees for the Race of Champions. After an impressive performance in that event, Hesketh Racing was formed. They bought a new March and hired the talented March designer Harvey Postlethwaite to go with it and improve it, all the time looking towards building their own car in the future.

1973 was the team's first full year of Grand Prix racing and after a ninth at Monaco, Hunt went on to place sixth in France, fourth in England, third in Holland, seventh in Canada and then a brilliant second to Peterson at the USGP. They had arrived, the team's Lordly connections and flamboyant approach making Hunt and the Hesketh team the center of attraction in their first year of Formula One.

Sorting the new Hesketh took some momentum out of the team in '74, but a third, fourth and third place to round off the season saw Hunt again placed eighth in the points table.

1975 started with a fine second place after a spin while leading the Argentine Grand Prix, and the team reached its zenith at the Dutch Grand Prix where Hunt out-drove Lauda for his first Grand Prix victory. He had placed fourth by the end of the season, but by then Lord Hesketh had found other amusements and the team was disbanded.

Hunt was left out in the cold, but then along came the McLaren deal and with it his first pole position in his first race for the team. A bright start to what must be an even brighter future.

## Mass



The 29 year-old German teammate to James Hunt can usually be found at the head of a long line of female admirers. He has become motor racing's sex object. He is almost certainly one of motor racing's future champions.

After being 'discovered' by Ford of Germany when he trounced the works cars in a privately entered Alfa Romeo in German saloon car races, he was snapped up by the works Ford team. With Ford backing, he was elevated to Formula 3 where he had instant success. He became European Touring Car Champion in 1972 and then headed the works F2 Surtees attack in '73, finishing second overall in the European Championship.

His first taste of F1 came in the Surtees at Silverstone (where he got involved in the massive first lap pile-up), followed by a ride in the USGP before signing for a full year in 1974. Like Pace, Mass left the Surtees team after a miserable year and finished the final two races of the season at the wheel of the Yardley McLaren vacated by the injured Mike Hailwood.

Impressed, McLaren signed him up as number two to Emerson Fittipaldi in 1975, where he soon proved to be a front runner and scored his first Grand Prix win at the shortened and tragic Barcelona race. Other good placings throughout the year gave him seventh overall in the points standings. Besides motor racing, Mass' other big love in life is the sea. An ex-merchant seaman, he now has a large yacht which he plans to use for charter work when his racing days are finished — hopefully, not for a long while yet.



## Scheckter

After making a name for himself in a Renault saloon and Formula Fords in his native South Africa, Jody Scheckter arrived in Europe as South Africa's Driver to Europe award winner. He bought the ex-Fittipaldi Merlyn FF and soon became one of the stars in this class during 1971.

Promotion into F3 followed the next season, by which time he had caught the eye of McLaren's Hulme, the two becoming close friends and, having the same build and nature as Denny "the Bear" Hulme, Jody soon became known as "Baby Bear".

McLaren gave Scheckter a ride in their new F2 McLaren and he promptly won the Crystal Palace race for them, for which he was rewarded with an F1 drive at the USGP the same year. He finished a fine ninth after holding third place in the opening stages.

People were beginning to talk and no sooner had Jody returned to England than he was back in America driving Sid Taylor's F5000 car in the L&M Series, which he won, picking up a strong American fan club in the process.

He was also offered more 'one-off' drives with the McLaren team in F1, finishing ninth in his home race, but then he started in on a series of spectacular crashes, usually while dicing for the lead! Scheckter's raw talent was harnessed and molded by Ken Tyrrell when he signed him up for the Elf-Tyrrell team in 1974. With the aid of Jackie Stewart he turned Scheckter into a serious challenger, and by the end of his first full season of F1 Jody had won two Grands Prix and finished third overall in the points standings.

Like the rest of the Ford runners last year, the Tyrrell team suffered under the weight of the Ferrari avalanche, their ageing cars also losing out to the newer ones introduced in 1975. Even so, Jody scored the finest win of his career at his home South African GP and with several other good placings ended up joint seventh with Mass.

Jody's hopes for 1976 lie with the new 6-wheel Tyrrell which will be run as soon as it proves competitive.




## Depailler

With Tyrrell backed by Elf-France, it is expected that the number two driver be a Frenchman. Patrick Depailler was coming up through the French ranks as a promising F3 and F2 driver, having taken the French F3 Championship in 1971. He raced F2 with some success in '72 and also took time off to win the F3 Monaco race, which as in the case of so many drivers before and since, brought the quiet Frenchman to the notice of the F1 fraternity. He got his first chance at F1 in 1972 when Tyrrell invited him to drive the traditional third car at the two North American races. He drove a steady first race and finished seventh in the second, impressing Tyrrell with his driving. He should have driven a third car in '73, but a broken leg after a motorcycle accident almost ruined his career.

Francois Cevert's death left a place in the team for 1974 however and, complete with walking-stick, Depailler arrived in Argentina for his first full season of F1, finishing a fine sixth despite his weak leg. He took the pole in ➤

# THE DRIVERS

Text By Jeff Hutchinson/Photos By Bob Lloyd • Gerald Kennedy • Jeff Hutchinson

Sweden and followed Scheckter all the way to the flag for second place, his best finish of the year. During 1974 his main success was winning the European F2 Championship.

Depailler and Scheckter shared a similar year in 1975, the Frenchman right behind Scheckter in the points scoring at the end of the season, but still waiting for his first Grand Prix victory, which is not likely to come before the team gets the new Tyrrell 008 onto the track.




## Laffite

The 33 year-old Frenchman might not have started his racing career until the age of 27, but since then he has been making up for lost time. He started with French National Formula Renault races and won that championship, moved on to International F3 and F2 racing and won both those championships in 1973 and 1975 respectively. To underline his ability, he helped Alfa Romeo win the World Sports Car Championship in 1975 with three wins out of three starts.

He was given his first chance in Formula One by Frank Williams, for whom he drove until the end of 1975. Although the car was uncompetitive he was grateful for the chance to 'learn the ropes', paying back Williams' faith in him with a fine second place and his first Championship points at the Nurburgring in 1975, exactly one year after his F1 debut.

Now, with the Ligier JS5, the possibility of Jacques winning the Championship is a reality — although with a brand new car results are difficult to predict. The car went well in Brazil until teething problems put it out of the race; however he could conceivably have a chance.

## Jarier




At 29, Jean-Pierre still has a lot of time to claim his first Grand Prix victory and World Championship title, but the casual spectator would be right in thinking that he is in a hurry to get there.

When the track suits his Shadow he is amongst the fastest half-dozen drivers racing today, but after two full seasons of trying he is still chasing that elusive first victory. Several times it has been within his grasp, but each time it has slipped out of his hand through either mechanical failure or his own overexuberance. After missing his chance again in Brazil where he was the only driver to seriously challenge Lauda, he sees Long Beach, Madrid and Monaco as his three best chances of victory. Long Beach could be the start of something big for Jarier whose first win cannot be far away. He was European F2 Champion in 1973 and the following year partnered Jean-Pierre Beltoise to five World Championship sports car victories and the World Title for Matra-Simca.

## Pryce

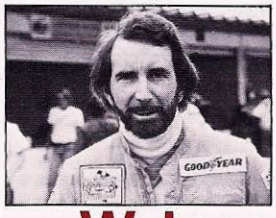


Beneath the shy, quiet exterior of this likeable Welshman lies one of the most competitive spirits in present Grand Prix racing. Twenty-six year-old Tom, son of a police detective and trained as an agricultural engineer, prefers to remain in the background — until he gets in the cockpit of his Shadow.

After making his Grand Prix debut at the Belgian Grand Prix in 1974 with the Token F1 car, he was refused an entry for Monaco. He still went to Monaco however, not with a Formula One car but with an F3 car instead, racing it in the supporting event. He scored a runaway victory and, with the entire F1 world amongst the spectators, it was not long before offers started to pour in.

Monaco happened to be Brian Redman's last race for Don Nichol's Shadow team, and it was Don's offer which Tom accepted. To date he has scored the team's only F1 win, at the non-Championship Brands Hatch race in early 1975.

For those who remember his race in the F5000 Shadow at Long Beach last September, his lively driving style will come as no surprise. For those who missed it, don't miss it this time, get to an interesting corner, watch out for his black and white helmet and remember not to let your mouth hang open too long!




## Watson

If ever a driver deserved to succeed through sheer determination, it's 29 year-old John Watson, who hails from Belfast in Northern Ireland. With the aid of his father, Ireland's first ever saloon car race winner, John progressed through Irish club racing until he was Ireland's top single seater driver in the late 1960s. Spurred on by his success and ability John took the plunge into big time racing in F2 in 1970, but a nasty crash resulting in a broken leg halted his career.

Undeterred, John tried again in 1971 and, although underfinanced, he was able to show enough talent to earn contracts with both Brabham and the Gulf Sports car team for 1973. But once again his progress was slowed when he broke the other leg when the throttle stuck while driving the prototype Brabham BT42.

Once again he fought his way back into racing, driving for Gulf and Chevron sports car teams plus a few F2 races. He showed he was as fast as ever and was offered a drive in a privately run Brabham BT42 in which he proved to be hot property, earning points in three races. John Surtees signed him up for 1975, and although the Surtees project fell apart because of financial problems before the end of the year, Watson put up some fine drives in the uncompetitive chassis. This led to a drive with the Penske team for 1976, a year which should see him well up among the front runners.



## Reutemann

When you first see tall, bronzed Carlos Reutemann walking down the street, you know that John Frankenheimer missed a bet when he cast James Garner for the lead in his movie "Grand Prix". Reutemann looks more like the ideal image of a racing driver than any actor ever could.

Thirty-three year-old Reutemann got his chance in International motor racing when he won the 1970 Argentine driver-to-Europe scholarship. He bought a Brabham F2 chassis but things did not go well. Learning from his mistakes he returned the following year to finish second to Ronnie Peterson in the close-fought European F2 Championship.

He was instantly signed up for a season of Formula One by Brabham boss Bernie Ecclestone, and in his very first Grand Prix, on his home track, he rewarded his countryman's faith in him with pole position! He continued to show strong form, but after some cruel luck had to wait until 1974 before he scored his first win at the South African GP. He followed that up with two more wins in Austria and America.

He joined the short list of drivers who beat the Ferraris in 1975 with a win at the German GP, and that performance plus other good placings put him third overall in the World Championship standings.

In a bid to overcome the Ferrari domination, the Brabham team has switched to Alfa Romeo power, a move which has yet to prove a winning combination. If it does, then Reutemann could become the next "Lauda".

## Pace



Although there is a strong rivalry between Argentina and Brazil in South America, Reutemann and his 31 year-old Brazilian teammate Carlos Pace complement each other well. After coming to England in 1970 with Wilson Fittipaldi, Pace put up some impressive performances at the wheel of an F3 Lotus and later an F2 March, entered by Frank Williams, who gave him his first chance in F1 with a March in 1972. His best result that year was an impressive fifth in Belgium and for the 1973 F1 season he signed up with John Surtees, setting the lap record and third place in the Austrian GP and coming in fourth in Germany, despite a year fraught with mechanical problems.

After a disappointing start to the 1974 season, Pace switched to the Brabham team and immediately began to show his potential, finishing the season with a fine second behind Reutemann in America.

He scored his first, and what will probably be his most memorable, GP win in front of Emerson Fittipaldi and his home crowd in Brazil last year, and he had a string of other good placings to finish sixth in the points table. He and Reutemann also took Brabham to second place in the Constructor's Championship behind Ferrari.



## Amon

Although only 32 years old, it's easier to say what New Zealander Chris Amon hasn't done in his racing experience, which in Grand Prix racing alone stretches back over 13 years. He started racing 15 years ago, aged 17, at the wheel of an Austin A40. Reg Parnell spotted him and brought him to England for his first European race at Goodwood in 1963.

Since then, Chris has driven for practically every major F1 team, including his own, but after some 89 Grand Prix starts, five pole positions and three fastest laps, Chris Amon is still waiting for his first Grand Prix victory, although managing to score two non-Championship wins as consolation during that time.

More recently, after his own F1 project (the Amon) failed, he had virtually given up any chances of running F1 again, but Mo Nunn invited him to drive his neat Ensign F1 car at the end of last year and Amon showed that he is still a force to be reckoned with.

But the bad luck which has dogged him on the track, like running out of petrol with victory in sight one time and another time losing his visor while leading, followed him off the track at Long Beach in October. After finishing in fourth place in the Talon, Chris was involved in a road accident while sitting stationary in the back seat of a car at a traffic light. He was rammed by a stolen car which was being chased by police and broke his foot in the accident.

That put him out of the U.S. Grand Prix and the opening round of this year's season. Hopefully things will go better in 1976.



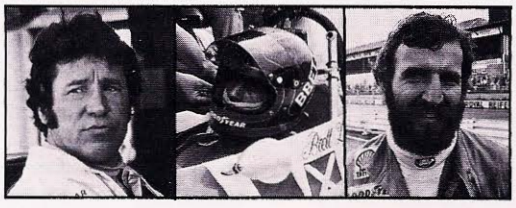
## Zorzi

Italian Renzo Zorzi is embarking on his first full year of Formula One as number two to Jacky Ickx in the Wolf-backed Williams team. Sharing the same birth date with Emerson Fittipaldi, Zorzi hopes to share the Brazilian's success, having made his F1 debut at his home Italian Grand Prix in a rented Williams.

Frank Williams was impressed enough with Zorzi's performance to include him in his team for 1976 despite the fact that Zorzi is a relative newcomer to racing. He started in 1971 in 850 Italian Fiat cars and then progressed to the Italian FF and F3 Championships, his most notable success to date being victory in the Monaco GP F3 race last year. As well as learning the art of F1, he is also hard at work learning English!

# Late News

*(L to R) Andretti Lunger Ertl*



There have been several last minute entries and driver changes for Long Beach. **Mario Andretti** has left the **Lotus** camp after a very unhappy time in Brazil and will be behind the wheel of a revised **Parnelli** sporting new bodywork and suspension. With Andretti's departure **JPS-Lotus** was without drivers (**Ronnie Peterson** went to **March**) and have signed Formula 3, Formula Atlantic sensation **Gunnar Nilsson** (Sweden) and former **BRM** shoe **Bob Evans** (Great Britain). America's own **Brett Lunger** will drive one of **John Surtees'** new cars, with a second driver to be announced. **Jacky Ickx** has been given his walking papers by **Frank Williams** after his poor performance in Brazil. French Formula 2 star **Michele Leclere** has been inked to take his place. Long Beach will be Leclere's second Formula One race, his first being the 1975 U.S.G.P. at Watkins Glen in the third **Tyrrell**. An entry has also been received for Austrian journalist **Harald Ertl**. He will pilot the same **Hesketh 308B** he drove last year and his effort will be headed by Hesketh team manager **Bubbles Horsley.**

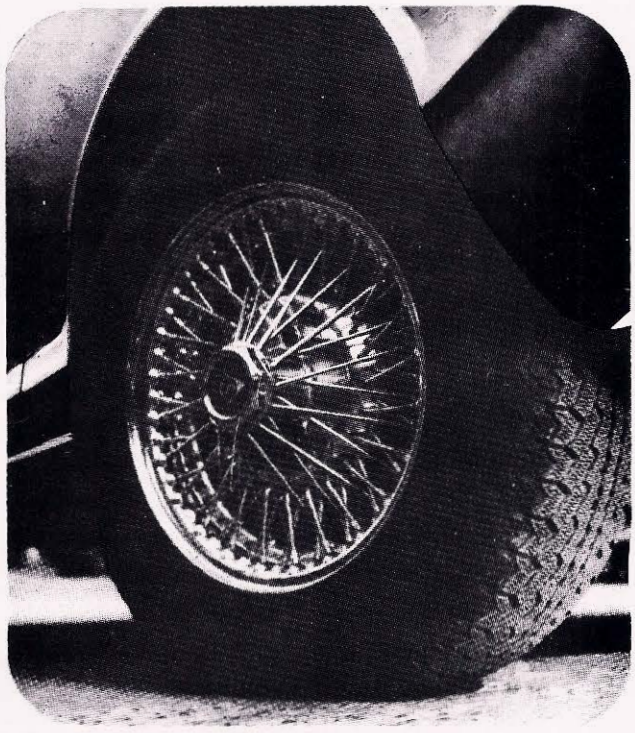
# Entries

| | | |
|---|---|---|
| 1. Niki Lauda | Austria | Ferrari 312T2 |
| 2. Clay Regazzoni | Switzerland | Ferrari 312T2 |
| 3. Jody Scheckter | South Africa | Elf Tyrrell 007 |
| 4. Patrick Depailler | France | Elf Tyrrell 007 |
| 5. Gunnar Nilsson | Sweden | John Player Lotus |
| 6. Bob Evans | England | John Player Lotus |
| 7. Carlos Reutemann | Argentina | Martini-Brabham BT45 |
| 8. Carlos Pace | Brazil | Martini-Brabham BT45 |
| 9. Vittorio Brambilla | Italy | Beta Team March 761 |
| 10. Ronnie Peterson | Sweden | Beta Team March 761 |
| 11. James Hunt | Great Britain | Marlboro McLaren M23 |
| 12. Jochen Mass | Germany | Marlboro McLaren M23 |
| 16. Tom Pryce | Wales | Shadow DN5 Racing |
| 17. Jean-Pierre Jarier | France | Shadow DN5 Racing |
| 18. Brett Lunger | USA | Surtees TS19 |
| 19. To be named | | Surtees TS19 |
| 20. Renzo Zorzi | Italy | Frank Williams Racing |
| 21. Michele Leclere | France | Frank Williams Racing |
| 22. Chris Amon | New Zealand | Ensign MNO5 |
| 24. Harald Ertl | Austria | Hesketh Racing |
| 27. Mario Andretti | USA | Vels-Parnelli Racing |
| 28. John Watson | Ireland | First National City Bank Penske |
| 30. Emerson Fittipaldi | Brazil | Copersucar-Fittipaldi FD04 |
| 31. Ingo Hoffman | Brazil | Copersucar-Fittipaldi FD03 |
| 34. Hans Stuck | Germany | March 761 Engineering |
| 35. Arturo Merzario | Italy | Ovoro March 761 |
| 36. Jacques Laffite | France | Ligier-Gitanes |


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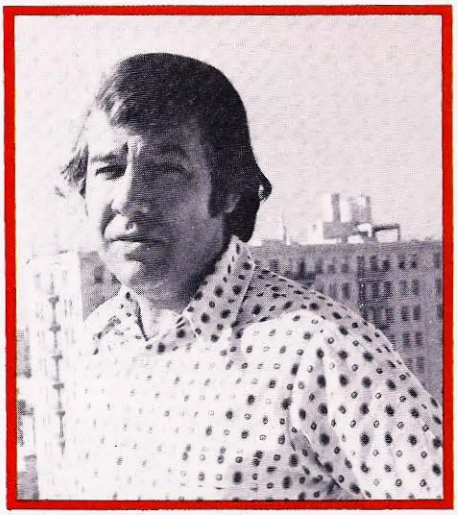
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# Chris Pook

## View From The Penthouse

By Jim Gilbert

Towering above the ebb and flow of downtown Long Beach traffic, Christopher R. Pook does one slow lap on the terrace surrounding his LBGP penthouse offices and gazes down on the product of several years' work. His view below is of city streets awaiting metamorphosis into a racing circuit. Two clicks higher on the horizon is the Queen Mary, and between the two sits the Sports Arena. Pook doesn't spend much time looking at the view. His hectic schedule doesn't allow it, for Pook is the titular leader of the vast organization responsible for the United States Grand Prix West, the Monaco-like through-the-streets Formula One race which will place Long Beach on the international motorsport map.

Most everyone knows how Pook put the package together, how he took an idea everyone thought was crazy — "but interesting" — and greased the gears to put it in motion. The fact that no one had ever dreamed of a race through the placid streets of Long Beach didn't stop him, it only encouraged him more. Pook describes himself as "a fairly aggressive promoter," so persistence in the face of the enemy was his cup of tea and it didn't bother him at all.

After he proved himself with the successful Formula 5000 race last September, even the nay-sayers had to admit that he might have something going for him after all.

The F5000 was, indeed, a test of major proportions. It was run because Pook believes it a very viable form of racing, but mostly because the Commission Sportive Internationale requires a non-championship event to qualify the track for F1 racing. And what Pook wanted more than anything else was a Formula One world points race for Long Beach.

So there he was, Christopher Pook, erstwhile clever promoter, Sorbonne and University of London graduate, ex-Formula Junior racing driver, and successful Long Beach businessman smack in the middle of the greatest F5000 drivers and cars running for the biggest purse in the series, CBS' cameras beaming away, 65,000 people looking on, and Pook is doing what he apparently does best: solving problems.

"It was pretty tough on the nerves," Pook admits. "We were shooting from the hip almost all the way, making really important decisions every thirty or forty seconds and without the benefit of fully evaluating their consequences."

Yet there's the strong impression that the really tough decisions, the real cold sweat going down the spine, and the major battles of the campaign were fought — and won — long before the first car set wheel to track. That was when the LBGPA was in its infancy, and there were city officials to be convinced, commissions to be satisfied, $600,000 to be raised, and almost every meeting or phone call or consultation could bear the seeds of utter and total collapse of the entire project.

"Jeez," says Pook at the suggestion, "that period was really a nightmare. We were literally at their mercy, our fate in their hands and we couldn't do anything about it. There's always one more hurdle to jump."

But all the demands were met and everyone was won over to his side, albeit some hesitantly. The struggle taught Pook a lesson, and at the encouragement of his racing colleagues, he by-passed what he calls "the sour grapes group" in American racing and went straight to CSI for their blessings.

Now all that is history, as is the F5000 race (which won't be repeated in Long Beach unless something unforeseen happens) and the stage is set for Formula One.

In the light of all that, it's tempting to brand Pook a miracle worker, or at least an alchemist incarnate who has discovered the secret of turning asphalt streets into gold bullion. But he dispels those ideas immediately. He's a hard worker who has his finger in every LBGPA pot and thinks of himself as a combination arsonist/fireman: he starts the fires where they should be and puts them out where they shouldn't.

"I'm just the cook who watches the cake being baked," he modestly claims. "I get a lot of credit for work other people do here," he says, "and that's unfortunate."

He's probably right. The LBGPA is staffed with a coterie of people relatively new to racing, but not to business. They seem to know what they're doing and have injected a lot of fresh thinking into the production of an auto race.

That's the core of Pook's thesis, his concept of auto racing as product. "We wouldn't do anything differently if we were making chairs or typewriters. We just happen to be in the business of making cars go fast through the streets of Long Beach. It's mostly a business proposition."

When they get too caught up in the glamor of the event, Pook guides them back to square one, back to the problems of selling 91,000 grandstand seats, back to the problem of attracting a crowd which covers the sports spectator spectrum, and back to the reality of raising $1,000,000 to finance the event.

More new blood has come in the form of corporate participation, from the likes of Sears Roebuck, Eastman Kodak, Nike Shoes, Stewart-Warner, Miller Brewing, PSA Airlines, Kawasaki, Toyota and others yet to be named.

CBS will do a live 15-minute segment at the start, and have a full tape replay of the race the following week as part of their continuing Grand Prix coverage.

Yet to be decided are the minor changes requested by the CSI, which mainly concern increasing the radius of a couple of turns to make them faster. Pook explains that this stance is "exactly 180 degrees from their former thinking," but the changes only require replacing some curbing, mostly at the pit entrance turn.

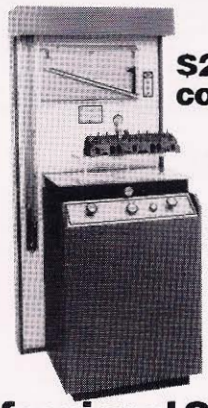
Phil Hill and Dan Gurney are thick into the project, and their concern is mainly oiling the surfaces between teams, SCCA, FIA, et al. and ensuring the racing part of the event goes well.

There's plenty of hoopla planned, attractions which include Olympic bicycle trials, a 10,000 meter foot race, exhibition runs by Kawasaki road racing bikes and historic F1 cars. The Arena will house the teams, and there will be special interviews with drivers and celebs, all of which will benefit the newcomer as much as the experienced enthusiast. And the whole affair is beginning to take on the appearance of a happening.

The pressure is on, of course, and Pook is spending 15-16 hours a day in the penthouse offices, seven days a week. There's the unmistakable feeling that he likes it. Naturally, the challenge is enormous, and he's about to pull off something which no one has ever done in America. It's become all-consuming, by nature if not by choice, but Pook takes it one lap at a time.

Despite all his claims that he relies upon business principles to get the job done, maybe Chris Pook remembers a little more from his racing days than he lets on. ■


FLOW-BENCH



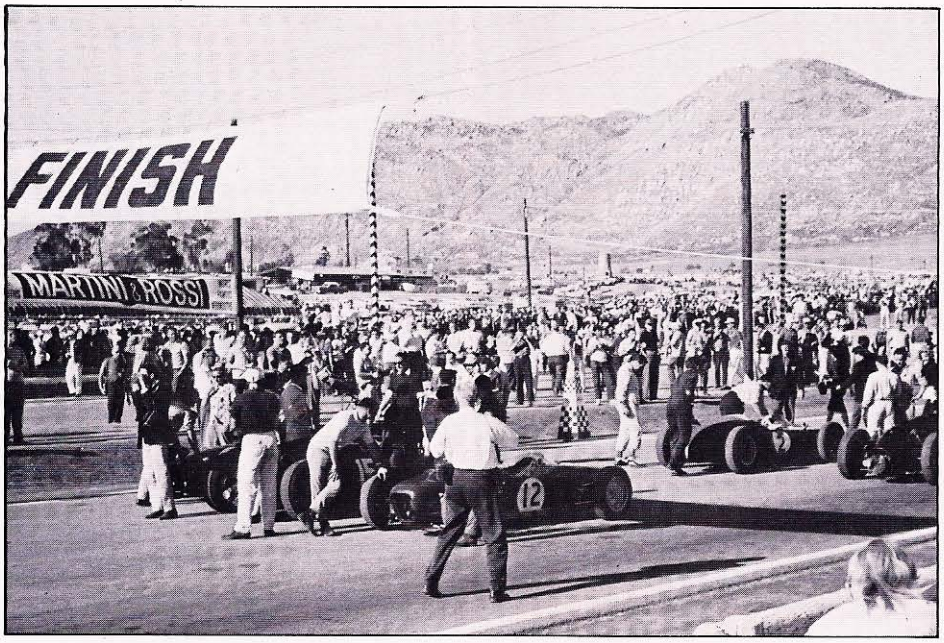
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*The prerace line-up with Brabham, Moss and Clark in the crowd.* Jim Gilbert Photos

# The First U.S.G.P. West

## November 20, 1960

**By Jim Gilbert**

Sixteen years is a long time to wait for the second race to start — a long time to wait for the other shoe to drop. Yet patience is a virtue, and the waiting is almost over as the Grand Prix circus winds its way down the freeways from Riverside to Long Beach.

Their first Southern California appearance was November, 1960 at Riverside International Raceway, a 3.3-mile road course in the high desert that has since become a major center of automobile racing. It was a far cry from the Monaco-like through-the-streets thing that Long Beach represents.

Still, it was a more significant race than most. It was the first championship points Grand Prix ever held on the west coast, and it attracted every major team but one. The first was also the last — as sometimes happens — and there was more than a normal ration of emotion attached to the passing of the 2.5-litre formula, and Riverside ended that series. When the last car took the checkered, it brought to a close the days of Mercedes-Benz' blitzkrieg, the middle years' domination by Ferrari and Maserati and, finally, the almost complete command of the sport by the men and cars of the British Empire. It was truly the end of an interesting era.

The formula's demise was controversial. Stirling Moss, the uncrowned king of international motor sports, was vitriolic about it, claiming it an arbitrary decision which would reduce GP racing's speed and spectacle, yet do nil to advance racing safety (the proclaimed reason for switching from 2.5-litres to 1.5 engines). Further, Moss contended, it played favorites by helping Ferrari and Porsche (two which had done little to advance 2.5), and the other teams would have to scrap tens of thousands of dollars' worth of R&D and rolling stock and start over. Moss, of course, was chauvinistic to the core but, beyond that, he was proven pretty much correct in his thesis.

The Riverside grand epreuve was the second USGP (the other on the east coast), both of which were promoted by Alec Ulmann, the majordomo of Florida races, who faced an awesome task getting the Southern California sports dollar. It fell on the heels of two successful sports car events, both heavily publicized by the two sponsoring newspapers, so the satiated crowds stayed away and the GP drew only 20 - 35,000 spectators. This single factor killed the chances for a second USGP West, and that's why it has taken sixteen years for another Grand Prix to appear.

But all that is history.

## entry & practice

The Riverside sun and wind alternately broiled and chilled the GP entrants. Unlike any other course on the schedule, RIR's 75-lapper would provide a fitting location for the end of an era.

Only Ferrari failed to show. Their lackluster GP car was no competition for the dominant Lotus, Cooper and BRM monopostos, so Sr. Enzo Ferrari stayed home to refine the 1.5-litre '61 racer and 120-degree V6 engine. This left Phil Hill and Count Wolfgang von Trips to their own devices, but Ferrari obligingly released them for this one race.

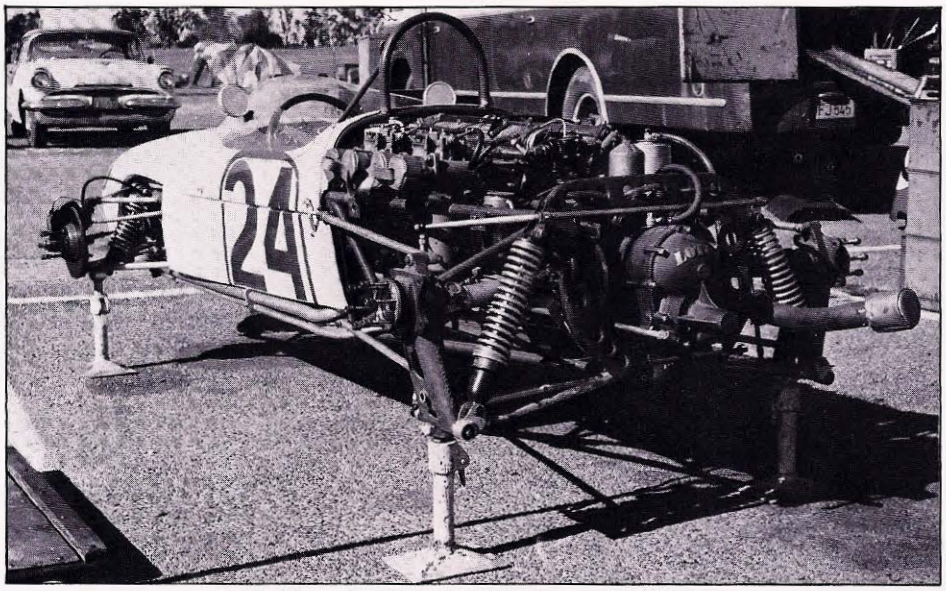
Sterling Moss had two identical Rob Walker Lotus-Climaxes prepared by Alf Francis. Moss, often called a car-breaker, hoped his matched pair might silence that talk. Indeed, he was having his share of "best-car-in-the-field" doing first lap wipeouts, but he was still the odds-on favorite.

Three cars were entered by John Cooper, a man upon whom racing fortune had smiled rather heavily. His number one was Jack Brabham, who had already wrapped up his second World Championship before this final race. Cooper's young-man-on-the-way-up was 22 year-old Bruce McLaren, who was second in world standings. They were a potent one-two punch for the pioneer of the revolutionary rear-engined Formula One cars which won John the F1 Constructors' Championship as well.

Colin Chapman was building for the future. His Lotus Formula One cars hadn't paid off like his recent sports car offering, the XIX, with which Moss and ➤

*(BELOW) Trintignant's Cooper-Maserati.*







*(ABOVE) Jim Hall's "homebuilt factory Lotus-Climax" is exposed showing FPF four-cylinder Coventry Climax engine and new double transverse link rear suspension. (RIGHT) The Scarab's incredibly complex fuel tank.*

# The First U.S.G.P. West *continued*

Gurney had rattled Birdcage Maseratis (the hot set-up) and sundry Ferraris. Colin's potent Formula Juniors owned that class, and the co-champion in F Jr., Jimmy Clark, had signed for Formula One. Joining him was another young driver with the look of stardom, '59 and '60 World Motorcycle Champion John Surtees, who had already finished an impressive second to Brabham in the British GP.

Leading Team Lotus was Innes Ireland, a rough-hewn character cut from a different brand of cloth than Clark and Surtees, and imbued with a strong sense of military-inspired teamwork. He was fighting a three-way battle with Moss and Phil Hill for third place in the final standings.

Surtees and Ireland had identical Lotus-Climaxes, the FPF four-banger DOHC producing 240 bhp at 6800 rpm; Clark had the same except his had outboard disc brakes (as specified for '61).

BRM had Dan Gurney, Jo Bonnier and Graham Hill. Riverside was considered Gurney's home track, and many observers reckoned his sturdier BRM could be the class of the field. BRM's newer car (introduced at Snetterton) remained in England for 1.5-litre engine fittings. The Riverside cars were older rear-engined versions with a single disc brake on the rear acting on the transmission mainshaft.

A lot of interest was generated by Lance Reventlow's Scarab project. Even with massive dollar doses, the front-engined, all-American attempt was hopelessly outmoded by the lighter, faster Cooper and Lotuses. Already a new spaceframe rear-engined car was on the boards, but the Tom Barnes, Phil Remington and Chuck Daigh effort was determined to put on a good showing with America's only Grand Prix car. Alas, it had thus far failed to finish a race.

Among the independents was Italy's Centro Sud's year-old Coopers fitted with various reworked Maserati engines. Maurice Trintignant and Ferrari's von Trips had Masers developed from the 200SI 2.5-litre sports car engine, while Ian Burgess had one equipped with a Birdcage-type cylinder head and different valve layout.

England's Yeoman Credit had year-old Cooper-Climaxes with the latest Colotti gearboxes (Yeoman had precisely one-fourth of the world's supply of Colottis: 3). Managed by Ken Gregory, Yeoman Credit featured Olivier Gendebien, Tony Brooks and Henry Taylor, with a guest appearance by Phil Hill. Hill, unfortunately, was given the team's mule. Since he was looking third place in world standings square in the eye, he was less than pleased driving a clapped-out Formula Two Cooper with a cast-off F1 engine and a Citroen-type gearbox.

Roy Salvadori had another Cooper-Climax, entered by owner Jack Atkins and mechanic Harry Pierce, the pair responsible for developing the Cooper-Maser hybrid. But they chose Climax this time.

Brian Naylor drove a built-from-scratch JBW with wishbone suspension, and Maserati 200SI-based engine mated to a 250F GP Maserati gearbox. Interesting but uncompetitive.

West coast sports car driver Pete Lovely had been working for a year putting together a '59 Cooper chassis with a type 625LM Ferrari engine. It was a beautiful backmarker.

Jim Hall, the wealthy Texan, had wheedled a 1960 factory Lotus, except it didn't have an engine. He bought a complete Cooper Monaco sports racer, pulled the FPF Coventry Climax (identical to the F1 breed), dropped it in the Lotus and went racing.

Ron Flockhart had Cooper's third car, an older model and not much more than a ride.

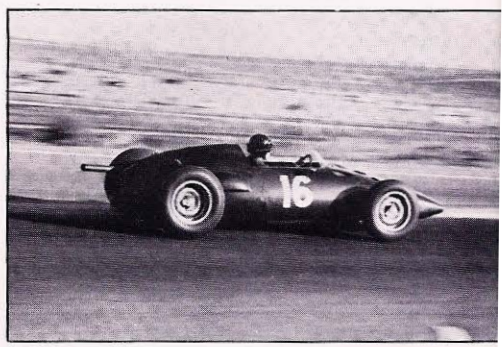
The second front-engined car (some called it traditional) was a 250F Maserati (a "Piccolo" model) driven by Bob Drake. Clearly out-moded, it was — nevertheless — a touch of racing days long gone.

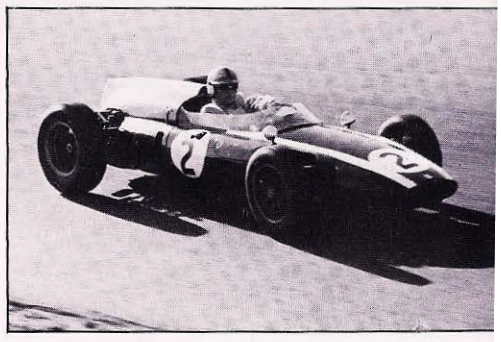
Gurney held the 2:00.93 track record in a Lotus XIX sports car and Moss predicted it would fall to 1:50 with F1 cars.

Dan agreed and wanted to be the first to do it. He did, lowering the standard to 1:55.8 on the first day, later making it 1:55.4. Moss, in the Rob Walker Lotus, cut this to 1:55 flat.

Gearing changes on Friday helped World Champion Brabham get in the fray with 1:56.0, and both Ireland and Surtees lapped in the 1:57s. Clark put the third Lotus ahead of his teammates with a 1:55.6 sprint which equaled Bonnier's best Thursday time.

Moss blew them all in the tumbleweeds with a 1:54.6 FTD in his backup Lotus. He had stripped the ring and pinion of the other car whilst accelerating from the pits. So much for car-breaker myths. However, Surtees had





*(ABOVE RIGHT) Dan Gurney's BRM lasted two laps more than his number. (RIGHT) Jack Brabham threads his way through the esses.*

done the same in his Lotus, and the combination of the two failures worried Moss no little bit.

BRM was concerned when they began having valve spring problems, something of a plague all season. They pulled the cars from practice and made repairs.

On Saturday, Gurney did 1:55.2 for the outside front row position. Brabham managed another second off and made front row center with 1:55.0. Moss had the pole with 1:54.4.

Neither Clark nor Bonnier improved their times, so they shared the second row side-by.

Surtees was still off Clark's pace with a 1:56.6, but he was .40 of a second faster than Ireland. They were joined on the third row by Gendebien's 1:57.2 in the Yeoman Cooper-Climax.

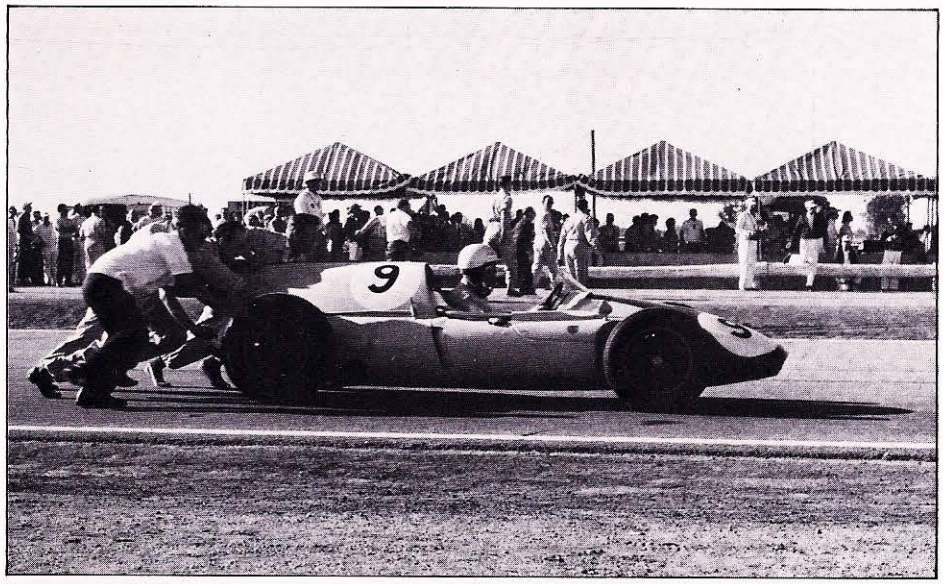
Brooks did an identical time, but was one row back with McLaren's Cooper alongside at 1:57.4.

Behind them came a Hill-Hall-Hill row with Graham soldiering along at 1:57.6 next to Jim Hall's 1:58.2 in the Lotus, impressive for a first time F1 ride. On the outside was Phil Hill, who had swapped cars with Taylor and now had an F1 Cooper-Climax with Colotti box. Phil had bettered Taylor's time in it, so Ken Gregory made the switch. Taylor, though, put the cast-off car only .20 of a second behind Hill, Phil doing a 1:58.8, Taylor 1:59.0.

Salvadori was next with 1:59.6, while the remaining drivers fleshed out the pack with off-the-pace two-minute timings.

In all, fifteen cars bettered the track record with Moss' 1:54.4 fastest, but none came close to making his 1:50 prediction come true.

*(BELOW) Moss in total control.*



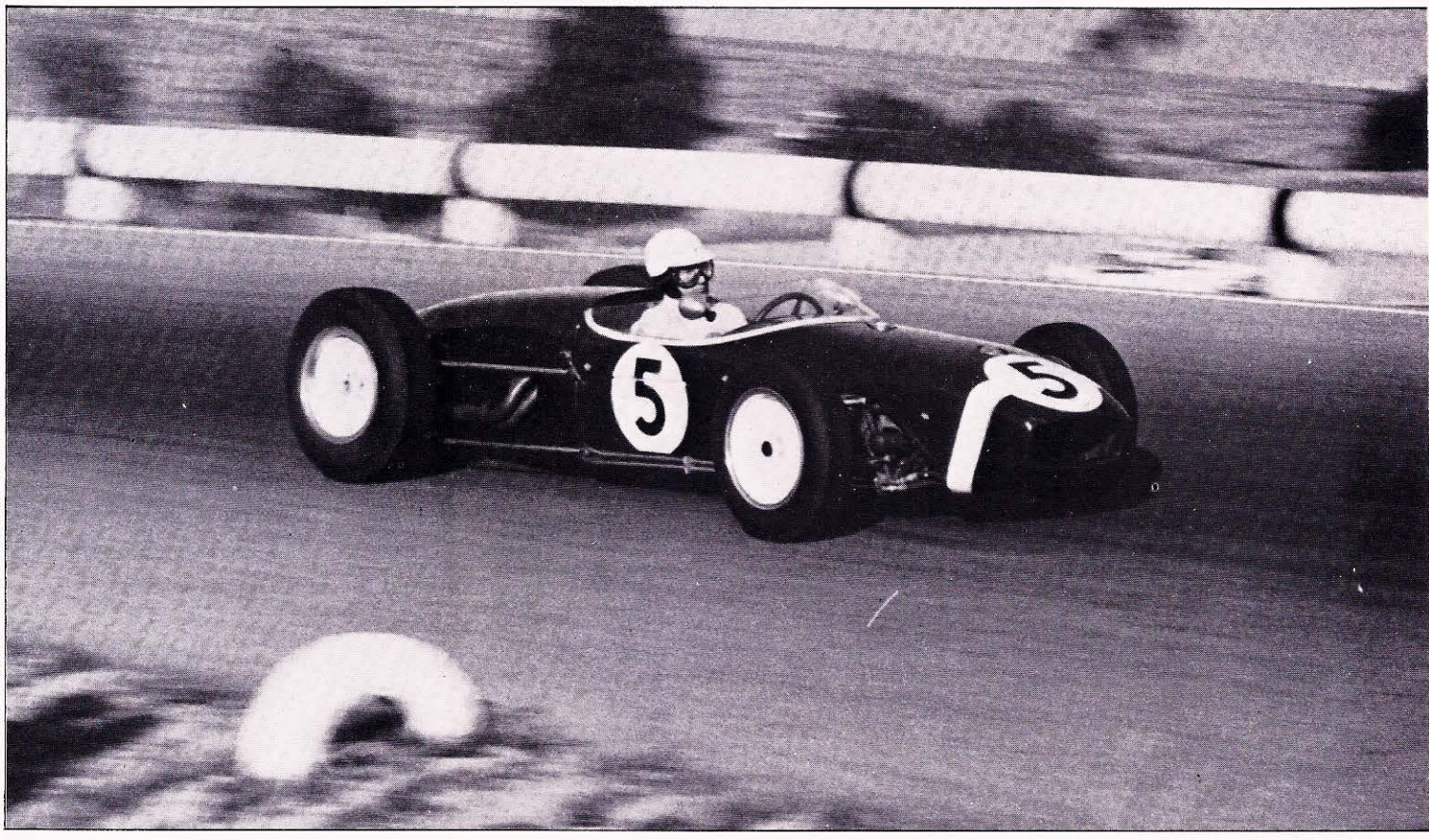

*Luckless Phil Hill gets a push start after stalling at the flag.* Jim Gilbert Photos

## race

With the cream of the racing world on the front row — Moss in the Rob Walker Lotus, World Champion Brabham in the works Cooper, and young charger Dan Gurney in the BRM — Sunday's inaugural USGP West had everything except a large crowd. Hot and dry with occasional wind gusts, the weather was typical for Riverside and prompted Phil Hill to douse himself with water before climbing in the Cooper.

The start was on the traditional up-down flag wave, but Brabham pulled a holeshot during the up-swing, and the rest of the pack was gone before the flag was half down. All, that is, except Phil Hill and Gendebien. They stalled on the line, but crews push-started them into action, both valiantly chasing the pack.

Brabham had the lead after his convincing start, followed by Gurney and Moss nose-to-tail, with Bonnier (BRM) and the Lotus trio of Ireland, Clark and Surtees. Halfway 'round the first lap, Gurney's shift linkage bound up giving him first instead of third in a downshift, and Moss nipped ahead. ➤



# The First U.S.G.P. West *continued*

Burgess spun but jumped out, pushed the car, jumped back in and motored on, much to the crowd's pleasure. Brabham was putting distance between himself and Moss, and Gurney's engine started sounding rough. Bonnier, Ireland, Clark and Surtees hounded the leaders.

On the fourth lap, as Brabham entered the sweeping Monza-style Turn 9, his car exploded into flames, scorching the backside of his driving suit. He immediately pitted (handing the lead to Moss), but the Cooper crew could find nothing and sent him back, the excursion having dropped him to ninth place.

While this was going on, Clark and Surtees put the Team Lotus attempt to ruin. Surtees was passing Clark, but spun in front of him and Clark hit him, knocking John's car in the air and on top of Clark's car. Both limped to the pits. Surtees' front suspension was damaged enough to retire him, but Clark had only broken bodywork and a leaking water pump. The fiberglass nose from Surtees' car was put on Clark's, and Jimmy returned to the race dead last. The water pump leak forced Clark to make numerous stops and effectively ended his chances.

Four laps later, Brabham had another flash fire. This time the crew found a leaking fuel line which dropped gas into the Cooper's bellypan. When enough had collected, the exhaust system would light it off. This was why they hadn't found it the first time — he had immediately pitted and the gas had burned off and none had yet started accumulating. The leak was fixed and Brabham returned a lap down.

Moss, comfortably in the lead, was ticking off 1:57 - 1:58 laps while pulling away from Gurney. Dan was having a ding-dong with Bonnier, who passed his teamy twice. Gurney recovered his position, but was still having shifting problems.

Flockhart retired on lap 11 with brake problems. Brabham had passed Drake, and Gurney had a firm hold on second. Seven laps later, Gurney felt hot water spraying on his shoulder and retired the BRM with a blown core plug. It spelled finis to his fine effort.

Phil Hill, unnoticed at the back of the pack, had worked himself from 19th to eighth in seven laps. Brooks spun his Cooper-Climax on Turn 7 and retired, thinking he'd spun in his own oil.

Moss was long gone by lap 20. Brabham had passed Lovely and Daigh in his bid to unlap himself. Naylor busted the JBW's suspension and retired with wheel akimbo.

Brabham passed von Trips, then Burgess' trans packed it in for him, as Jack put the Cooper in tenth position.

When lap 35 was reached, Graham Hill had had it, managing to stick the BRM in two gears at once, and retired.

All eyes were on the World Champion, however, as he passed Salvadori and moved into eighth. Bonnier was well in second, but Ireland was waiting in the wings.

Ten laps later, lap 45, Bonnier's BRM soured, the suspicion being a valve spring, and he started slowing; Ireland moved closer. Behind them, surprisingly enough, was Jim Hall in a steady fifth and lapping at 1:59 - 2:00, the highest placed American driver.

Ireland caught Bonnier on lap 55. But he had his hands full — not with Jo's sick BRM — but with the hard-charging Brabham, who had just ripped off the fastest lap of the race, 1:56.3 and 101.3 mph. Jack was flinging the tail out on Turn 9, sprint-carring it around Ireland, who caught him on the straights. The second time Brabham did it, Innes figured what the hell and let him go. He was still a lap down.

And go he did. By lap 58, he'd passed Hill and was closing on Hall. McLaren started to put on a run for it and took Bonnier for third behind Ireland.

Brabham now had everyone's attention as he rapidly closed on fifth place, the parade being Moss, Ireland, McLaren, Bonnier and Hall.

On the 67th stanza, Black Jack eased by Hall and then tacked Bonnier to his trophy wall. Hall, following Brabham's wake, passed Bonnier to regain his fifth position.

Then, with one lap remaining, Hall's ring and pinion went away. He coasted to the finish line, but not before Bonnier and Hill had regained their places.

The checkered fell on Moss with a 38 second lead. He won $7500, plus another $2000 in endorsements for the 246-mile cruise. Second was Ireland, who held a 44 second edge on McLaren's Cooper. Brabham finished fourth with his brilliant driving.

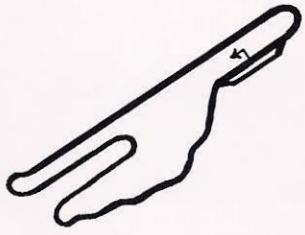
Bonnier was fifth, Hill sixth and Hall salvaged seventh. Back in tenth was Daigh nursing the Scarab to its first GP finish.

And that was how an era ended. Brabham's 43 points gave him the Championship for Australia, New Zealand's Bruce McLaren had second with 37 points, and England's Moss moved into third with 19, one point ahead of countryman Ireland's 18. America's Phil Hill, who could have been third, was fifth with 16.

Everything changed after Riverside. The GP cars never came back, and perhaps it's just as well because we'd never have the Long Beach Grand Prix, a race which should prove infinitely more interesting. The day of the Gentleman Grand Prix Driver, the rich hobbyist, was just about over, replaced by a scientifically-bred group. Moss was right about the 1.5-litre change, and Ferrari ruled in '61, but it was an American, Phil Hill, who won the World Championship for them. Von Trips died in the race that clinched it. Surtees, Graham Hill and McLaren went on to championships. Moss never did win the title and retired after crashing badly. Clark took another year to sort himself out before becoming a legend in his own time. Gurney was superb, finishing in the top six almost every year, finally building the Eagle to become the first American to put an American car in the victory circle.

Both Phil Hill and Dan Gurney hold prominent roles in the Long Beach Grand Prix. It would be nice to think they both held on to the dream of what might have been when the Grand Prix first came west.

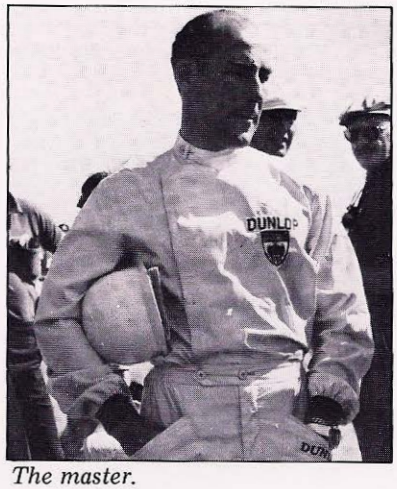
It would be nice, but not necessary. ■



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3.3 MILES IN LENGTH

## US GRAND PRIX WEST GRID

| | | |
|---|---|---|
| Stirling Moss<br>Lotus-Climax<br>1:54.4 | Jack Brabham<br>Cooper-Climax<br>1:55.0 | Dan Gurney<br>BRM<br>1:55.2 |
| Jo Bonnier<br>BRM<br>1:55.6 | Jimmy Clark<br>Lotus-Climax<br>1:55.6 | |
| John Surtees<br>Lotus-Climax<br>1:56.6 | Innes Ireland<br>Lotus-Climax<br>1:57.0 | O. Gendebien<br>Cooper-Climax<br>1:57.2 |
| Tony Brooks<br>Cooper-Climax<br>1:57.2 | Bruce McLaren<br>Cooper-Climax<br>1:57.4 | |
| Graham Hill<br>BRM<br>1:57.6 | Jim Hall<br>Lotus-Climax<br>1:58.2 | Phil Hill<br>Cooper-Climax<br>1:58.8 |
| Henry Taylor<br>Cooper-Climax<br>1:59.0 | Roy Salvadori<br>Cooper-Climax<br>1:59.6 | |
| Wolfgang von Trips<br>Cooper-Maserati<br>2:01.4 | Brian Naylor<br>JBW-Maserati<br>2:02.2 | Chuck Daigh<br>Scarab<br>2:02.6 |
| M. Trintignant<br>Cooper-Maserati<br>2:03.2 | Pete Lovely<br>Cooper-Ferrari<br>2:03.4 | |
| Ron Flockhart<br>Cooper-Climax<br>2:04.4 | Bob Drake<br>Maserati 250F<br>2:05.4 | Ian Burgess<br>Cooper-Maserati<br>2:06.6 |



*The master.*

# Results

**United States Grand Prix West**
**Riverside, California**
**November 20, 1960**
**75 Laps, 247.5 Miles**

1. Stirling Moss, Lotus-Climax, 2 hrs 28 min 52.2 sec, 99 mph
2. Innes Ireland, Lotus-Climax, 2 hrs 29 min 30.2 sec
3. Bruce McLaren, Cooper-Climax, 2 hrs 30 min 14.2 sec
4. Jack Brabham, Cooper-Climax, 74 laps
5. Jo Bonnier, BRM, 74 laps
6. Phil Hill, Cooper-Climax, 74 laps
7. Jim Hall, Lotus-Climax, 73 laps
8. Roy Salvadori, Cooper-Climax, 73 laps
9. Wolfgang von Trips, Cooper-Maserati, 72 laps
10. Chuck Daigh, Scarab, 70 laps
11. Pete Lovely, Cooper-Ferrari, 69 laps
12. Olivier Gendebien, Cooper-Climax, 69 laps
13. Bob Drake, Maserati 250F, 68 laps
14. Henry Taylor, Cooper-Climax, 68 laps
15. Maurice Trintignant, Cooper-Maserati, 66 laps
16. Jimmy Clark, Lotus-Climax, 61 laps

**Retirements:**

Brian Naylor (JBW-Maserati) broken front suspension; Ian Burgess (Cooper-Maserati) spin; Graham Hill (BRM) transmission failure lap 35; Dan Gurney (BRM) blown core plug lap 18; Ron Flockhart (Cooper-Climax) brake failure lap 11; Tony Brooks (Cooper-Climax) spin; John Surtees (Lotus-Climax) accident lap 4.

**Fastest Lap:**

Jack Brabham, Cooper-Climax, 1:56.3, 101.3 mph

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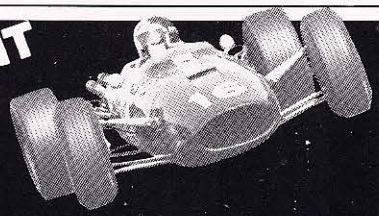
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# Tasman
## Round 1, Pukekohe New Zealand
### By Sandy Lewis

*Brian Redman leads the opening lap (note inside front wheel lifted).* Sandy Lewis Photos

Cigars, cigarettes? Racing seems to be the place to find them these days. Marlboro, Winston, Camel, John Player, Rothmans and Peter Stuyvesant all are involved in motor sports sponsorship. From personal contracts with drivers like Niki Lauda to backing for McLaren and the Grand National stock car circuit, smoking is in.

This trend continued as the long-time Tasman Championship underwent a change in 1976 to become the Peter Stuyvesant series in New Zealand and the Rothmans series in Australia. The demise of the Tasman came last fall when the Aussies and the Kiwis decided to agree to disagree on race dates and series format. Thus two new four-event championships came into being. Actually, 1976 was the second year of involvement for Peter Stuyvesant as they had sponsored the New Zealand half of the Tasman last season.

Whatever the name, the first race was the New Zealand Grand Prix at Pukekohe on January 3. The promoters, hoping for larger fields than they had in the past, opened up the championship to Formula Two and Atlantic machinery. They were disappointed as only 12 cars lined up for the start.

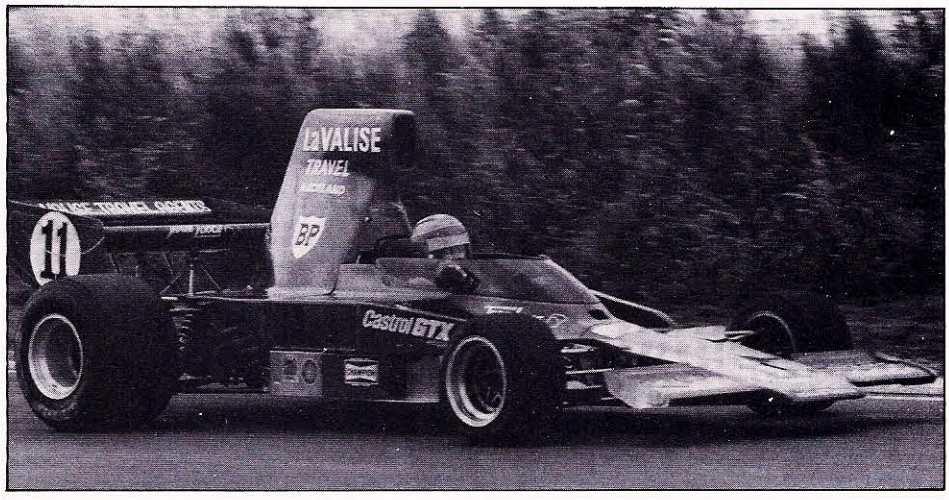
In spite of the small grid, most of the top contenders were present. Heading the list was 1975 Tasman runner-up Graeme Lawrence. Lawrence, a New Zealander, had a Lola T332-Chevrolet. Facing him in a Lola T400-Chevy was arch rival Aussie Max Stewart. A similar car was provided for Stewart's Sharpe Calculator teammate Paul Bernasconi. A third T400 went to yet another Australian, Kevin Bartlett. Two more Aussies were among the pre-race favorites, Bruce Allison and John McCormack. Allison had a T332, while McCormack was in an Elfin MR6. Other Kiwis entered were Ken Smith's T332 and Jim Murdoch's Begg 018.

Missing at Pukekohe were current Tasman champ Warwick Brown and past Tasman title holder Graham McRae. However, there was one other contender present who promised to make up for the absent champions: F5000 king Brian Redman. Redman was to have had one of the big stock blockers, but the deal had fallen through. Then American Fred Opert came to the Britisher's rescue with an ex-factory Formula Two Chevron B29. Motive power for the little white car was a standard F2 BMW. Both Opert and Redman were counting on the Chevron's reliability rather than its speed to keep it in contention.

Built around a horse racing complex, Pukekohe is located about 30 miles south of Auckland, New Zealand's largest city. Two courses are available; one of just over 2.1 miles in length, the other 1.75 miles long. For the Grand Prix weekend the shorter track was used.

Lawrence quickly got under McRae's old lap record of 1:01.6 during the combined practice and qualifying sessions, finally grabbing the pole with a 1:00.9. Sharing the front row with his ➤

*(BELOW) Pukekohe winner Ken Smith in his Lola T332.*



# PUKEKOHE N.Z. TASMAN continued

fellow countryman was Smith, who had also broken the old lap mark with a 1:01.4. Stewart and McCormack held down the next slots, turning times of 1:01.7 and 1:02.8 respectively. Allison was fifth, also with a 1:02.8, while Redman's 1:03.0 was good for sixth. Seventh was Murdoch at 1:03.1 and eighth went to Bartlett with a 1:03.4.

Qualifying, which was reasonably uneventful, was provided with a humorous moment when Redman found his throttle linkage had broken, stranding him on the far side of the track. The ever resourceful Britisher quickly removed a shoelace and after tying the offending part back together, proceeded to the pits to vent his feelings concerning good old German craftsmanship.

Redman again attracted the crowd's attention on race day when he jumped the field at the start. On dry tires and under a murky sky, Redman seemed to be trying to complete the 58 laps as fast as possible before any change in the weather occurred. Lifting the inside front wheel on his Chevron, he manfully tried to stand off the pursuing pack of rumbling F5000 machines. He was not successful.

By the second lap Stewart, Lawrence, Allison and Smith had all pushed past the Chevron, leaving Redman to battle with McCormack and Bartlett.

Attention now centered on Stewart and Lawrence as the pair kept the distance between the two Lolas down to just a matter of a few inches. Running third was Smith who looked hungry. Smith's chance for a meal occurred on the 27th lap when both Lawrence and Stewart headed into the pits at the same time, much to the dismay of their crews. A quick check was made of Lawrence's motor and he was sent back out, only to retire a lap later with a broken valve train. Stewart's problem was a flat tire. However, his situation rapidly went from bad to worse as a crew member punched a hole in the Lola's oil pan with the jack. A furious Stewart was reduced to watching the black liquid drain onto the pit lane, thus ending his motoring activity for the afternoon.



*Pukekohe victor Ken Smith.*

Smith, running easily, kept a distant Allison at bay for the latter half of the event and they finished one-two. McCormack had retired, leaving Bartlett and Redman to vie for third, and vie they did. Redman put on a display of driving which showed why he had won the last two SCCA F5000 titles. The Chevron pushed the Lola around the track, twice getting past under braking. Each time Bartlett came back, repassing Redman on the straight. But there was a price, and it showed on the faces of his pit crew as they worried over the Lola's oil consumption.

The final laps saw Bartlett holding off his rival to take third, with Redman nailing down fourth. Afterwards the Aussie crew said that if the race had been as little as three laps longer, their man would have run out of oil. Fifth was Murdoch, while sixth went to Bernasconi. Baron Robertson of New Zealand was seventh in an Elfin MR5. McCormack was awarded eighth, with the last two places going to Kiwis John Edmonds and Robbie Booth respectively. Edmonds had an Elfin MR5 and Booth a Matich-Michigan.

Smith's win was the first time the New Zealand Grand Prix had been won by a resident of that country, a fact which increased the joy of the large crowd.

The series next stop at Manfield should provide equally good racing as Stewart and Lawrence attempt to make up for their failures at Pukekohe. Redman, on the other hand, will have a chance to show if he can improve on his position as the little spoiler among his bigger brothers. ■


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*(LEFT) Tom Gloy in his Atlantic car. (RIGHT) Billy Scyphers in his Formula Ford.*

# Dynamic Duo: Gloy & Scyphers

## By Marc Sproule

As the 1976 North American racing season gets under way, professional Formula Atlantic racing will be getting a lot of well deserved attention from the media and from the road racing public. More importantly numerous talented young American competitors will be directing their efforts to the series, seeking world class competition for reasonable costs. Two such competitors are West Coast drivers Tom Gloy and Billy Scyphers.

Tom Gloy ran the Atlantic series during the 1975 season. His first and second outings were nonpro events. Driving his Lola T360 Tom won both races, setting new track records at Sears Point and Westwood. His first professional Atlantic race was in the Player's series opener at Edmonton, where he started tenth on the grid and finished fourth. At the Westwood Player's, Tom qualified sixth and moved up to fifth before dropping out with a duff clutch. Then began a series of ups and downs that saw him finish 9th at Gimli, 19th at St. Jovite and 7th at Brainerd in a postseason pro race. Monetary limitations and series preparation inexperience kept him from competing full time and as a result he finished out of the top ten in the Player's final standings. Although his eleventh place standing was no disgrace it was disappointing for Tom because he had not done this "poorly" for several seasons. His difficulties also put him out of contention for the rookie of the series award. This winter Tom has been directing all of his efforts to raising the necessary monies to field a competitive car for the '76 season. If the funds are forthcoming Tom should have no problem returning to the top ten again — and maybe even to the winner's circle.

Billy Scyphers, on the other hand, will be a rookie in the series but if his past record is any indication of where he belongs then he will be at least knocking on the door of the top ten in pro Atlantic racing. In his first two seasons in Formula Ford (also his first two seasons in non-oval racing) he finished in the top ten seventeen times. The other finish on his record is an eleventh at Ontario in 1974, his first National finish. In 1975 he ran three pro Ford main events, taking third twice at Sears Point and a second at Phoenix — and at the Sears Point races he won both his heats. 1975 also saw him win three regionals on three consecutive weekends in November at Laguna Seca, Riverside and Sears Point. During the season he also set track records at both the short and long courses at Sears Point and at the Phoenix road course.

Tom and Billy both started their competitive involvements at approximately the same point in time, but at different ends of the racing spectrum and at markedly different times in their lives. Tom, now 28, started out in a bugeye Sprite in 1969 at the age of 21. Billy, 21, started out racing go karts in 1968 at age 13.

Gloy was your basic Joe College business student when he started. His inauguration to go racing came at Indianapolis Raceway Park where he qualified 19th and was second by the time the field got to the 13th turn; two turns later he spun, but nevertheless it was an auspicious start. He finished his first season broke and, like a true racer, came back for more the next year. In '70 he finished another season in the Sprite, sold it, took his B.S. in business, and moved back to California.

1971 brought about two new approaches to Tom's racing career. He decided that open wheel racing was for him and he purchased rock singer Lee Michaels' Winkelmann FF. (During the transaction Gloy discovered that Michaels also owned three 4-legged type cheetahs and on several occasions they had him convinced that a career in short two-legged spring racing might be advantageous, even though the odds against his finishing higher than fourth were nil.) At any rate he started racing the Ford in '71 and he won enough races straight away to make him decide to start entering nationals. He did well enough to make the runoffs at Atlanta and qualified fifth for the race, though he DNF'd for a disappointing end to a promising season. 1972 was to bring further frustration as a rash of parts failures in a prototype Winkelmann, and then a write off of a new Elden when a rear A-arm broke, kept him from repeating his successes of 1971. The highlight of the season was his win in the Formula Ford support race at the Laguna Seca L & M F5000 weekend.

Between the '72 and '73 seasons Tom started a relationship with Pierre Phillips of Pierre's Motors Racing that provided Tom with some necessary and worthwhile guidance for his racing career. It was also at this point that Tom opened his racing sales business and became one of Pierre's dealers for Lola and Titan race cars.

The '73 season started out well as Tom had moved up to Super Vees and won several amateur races and finished high in the others. He tied for first in the Gold Rush series, finished second in the Northern Pacific division, and qualified for but did not attend the runoffs at Atlanta. He also competed in the VW Gold Cup series but a streak of blown engines kept him from placing well.

1974 saw him in Formula Fords again; bank statements played a major role here. He finished fourth in the Northern Pacific division and Gold Rush series, qualified for the runoffs again, and closed out the season by qualifying in the first two rows in eight of his last ten races, four times on the front row.

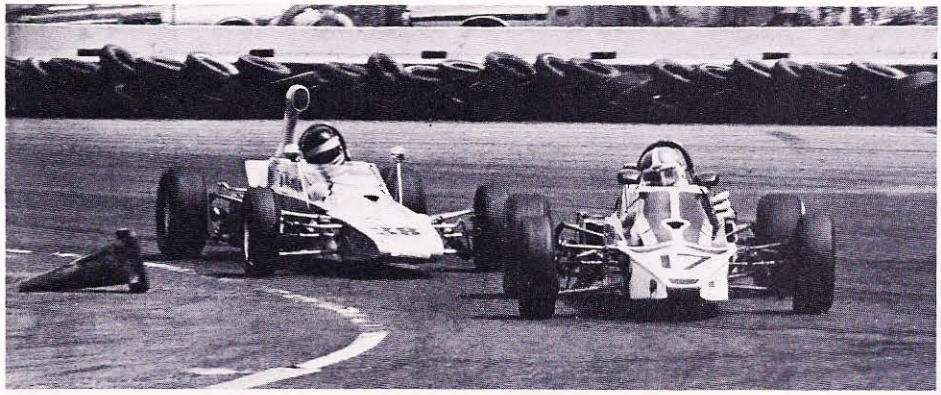
Billy Scyphers came to racing from a different angle. Having started racing go karts in 1968, he bought a NASCAR modified sportsman dirt car in 1970. There was a problem here though as Billy wasn't old enough to drive it; seems NASCAR had a rule that drivers had to be 16. Billy wasn't, so somebody else drove the car. 1971 came and Billy was legal. He competed at two different tracks during the season and managed to finish in the top 20 in final standings at each track. Billy decided a new car was in order for the '72 season and set about to build one. This took longer than he expected and he missed the first six weeks of the season and then spent the remainder of the season getting the car sorted properly. At the end of the year, with the car dialed in, he had enough good races to finish high in the standings.

The focus for the 1973 season was to prepare the car for reliability and to build better motors. The first race out the big motor blew and Billy was out of the next six races. Then a new motor arrived and Billy started finishing in the top five consistently; he turned his attention to winning races and concerned himself less with seeking points. It worked because at the end of the season he had won the California state NASCAR modified championship. As he was only 19 it meant that he was the youngest NASCAR champion ever; he also picked up enough points in three 100 lap races to win the West Coast regional championship. The last race of the '73 season opened up a new program for Billy — at San Jose Speedway he ran his first race on asphalt. The night before the race the motor blew so he and his crew spent all of that night and the next morning putting in another one. This meant that he missed all of the practice sessions and would have to start the race with no experience on asphalt. He led the first lap of the race, ran second for 80 ➤

laps, then DNF'd when the replacement motor blew.

The 1974 season was coming and Billy felt it was time for a change. In '73 he had met Ike Smith, former Carl Haas CanAm mechanic, and Colin Riley, who had worked for Haas, Dan Gurney and Colin Chapman, and Ike and Colin advised Billy to get into road racing, preferably in Formula Fords. As he was accustomed to racing for money Billy was not too enthused about the idea but he followed their advice, bought a new Lola T340 and went at it. And at it he did go; his first time in the car ended in a rollover and a rebuild before the season had even started. From there he won both his races in drivers' school and you know most of the rest. He supported his Ford habit in '74 and '75 by running a dirt track car to "make a little money". He won races at two different tracks and finished high enough in five races at another track to wind up in the top ten for the season.

You now know the basic history of Tom's and Billy's careers. What about their driving styles? Again they come at it from a differing background. As all of Tom's experience has been on road courses he has developed what might be called a "classic" technique of driving. He drives hard and smoothly in qualifying and has consistently qualified well. He races basically the same way but manifests his aggressiveness by well calculated moves, quite often under braking, that put him in front of other drivers who may not be so cagey. He rarely makes mistakes while driving which means that he does not throw away any of his chances at doing well.



*Scyphers leads Gloy at Sears Point.* Marc Sproule Photo

Billy tends to be more aggressive in his driving. With a background of go karts and dirt track experience he tends to "hang it out" more and as a consequence has sometimes made mistakes that have cost him high placings. He has shown a definite progression away from mistakes however, and as a result has improved his finishing record. He still is very aggressive in his racing and frequently will pressure an opponent into mistakes, allowing Billy to improve his position.

As it appears to this writer that in Atlantic racing a combination of smoothness and hanging it out are necessary to do well it would appear that Tom and Billy will have to assimilate some of each other's techniques. To this end both drivers have been working. I have observed Tom in some recent testing and he was throwing the car around more than I had seen before. He freely admits that this change is necessary for him to get back to his early 1975 competitiveness. Billy, too, has been changing his style, often at Tom's suggestion, and as a result has become noticeably smoother in his most recent outings.

Time will tell where these drivers will end up in their pursuit of the shared goal of being full-time professional racers Given that natural talent and successful experience are attributes that these two have, it would seem that this goal is well within their individual grasps. Now all they need is the dollars. ■

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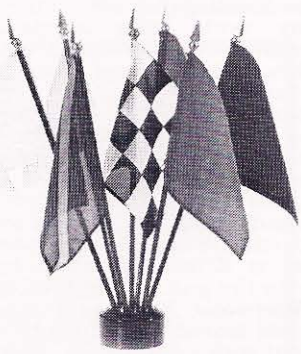
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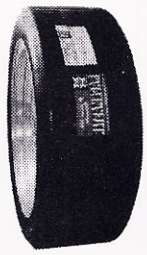



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*Gregg relieves Redman in a late night driver swap.* Bruce Czaja Photo

# THE ALMOST 24 HOURS OF DAYTONA

**By Bruce Czaja**

Peter Gregg was "right with Jesus", Brian Redman was tired and discouraged, Union 76 was trying to explain away the unexplainable, Hurley Haywood and Al Holbert were unhappy, and BMW had finally claimed a victory in a 24 Hour race. That, in brief, was the 24 Hours of Daytona, the opening round of the 1976 Camel GT Challenge Championship.

The 1976 Daytona 24 will be one of those races which will be talked about for years to come. Controversy, in the form of a fuel crisis, turned what would have been a boring endurance race into a race to remember. No one would have thought so at the outset.

The opening round of the Camel GT was denied the prestige of being included as a part of the World Manufacturer's Championship, which took some of the lustre from one of the premier endurance races in the world. Last year, since there was no guarantee that at least eight of the Group V sports prototypes from Matra, Renault, Alfa or Ferrari would compete, they were excluded from the field. The move was made to ensure that more of the IMSA regulars would qualify for the race, an unlikely event if they had to qualify within a percentage of the super-fast prototypes.

That policy was adopted this year as well; although Group V cars were invited, only a semi-works Porsche accepted. In order to increase the marketability of the race Daytona International officials, working with IMSA and with representatives from Le Mans, struck upon a plan which could benefit both events. Two new classes were allowed. The first was "Le Mans GTX". This was primarily formed to allow cars such as the Monza and other IMSA All American GT cars to compete in their own class at Le Mans. For Daytona, it allowed cars like the new Ferrari Dino and Charlie Kemp's Cobra (Mustang) II which had run afoul of the IMSA tech inspectors.

The second new class would be for Grand Internationals. These would be primarily NASCAR Grand National cars outfitted to run at night. The thought was that at a track like Daytona, the stockers would have a great advantage on the oval portion of the 3.84 mile course, and this would compensate for any deficiencies on the infield road course portion. In theory it was fine, but in practice it would be another story.

In any event, neither of the two classes was recognized by the CSI for inclusion under the rules governing the Makes Championship. Because of that, the race no longer had a bearing on the standings in the International series. No matter. It had a lot of other things going for it.

## entry & practice

Daytona '76 had David Pearson, Donnie and Bobby Allison, and Buddy Baker going against the best in American GT racing. Leading the latter group was 1975 Camel GT champ Peter Gregg who, after a false start last year, would finally be in a BMW. For a co-driver he had two-time Formula 5000 champ Brian Redman. Many FORMULA readers may not realize it but, among his many talents, Redman is one of the premier endurance racing drivers in the world. He is second in the all-time standings for number of victories in Makes races and, predictably enough, his drives last season for BMW at Sebring and Riverside were outstanding. That the two would be a formidable duo was demonstrated when the car was put in the pole position during qualifying on Thursday for the first 10 grid spots. The BMW posted a time of 1:56.550, well off John Greenwood's record time of last November. But remember, this would be a 24 Hour race, not a 250 mile sprint.

BMW was not going to settle for anything less than a victory in the 24 Hours. Last year's defeat was a bitter disappointment, one which "would be rectified". David Hobbs and NASCAR's Benny Parsons would share the driving in the second team car, which was carrying the Coca Cola banner for this event and Sebring. Many people thought that Parsons would be a weak link, with his limited road racing experience. This judgement was quickly disproved during qualifying and the race, when it was shown that there was no appreciable difference between the times Hobbs and Parsons were turning. The two qualified second with a time of 1:57.427.

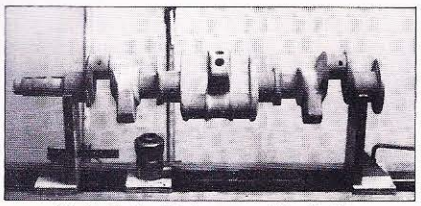
Third place on the grid was taken by a pair of English drivers, John Fitzpatrick and Tom Walkinshaw in a BMW CSL sponsored by Hermetite. They turned a time of 1:58.436. Although qualifying for a long endurance race can be misleading, there was no doubt that the BMW effort under Jochen Neerpasch would be a factor.

Thursday's top ten qualifying produced some surprises. Fourth on the grid was the Corvette of Javier, George and Manuel Garcia. The car, similar to Greenwood's, had never done so well and turned a time of 1:59.389. In spite of its starting position, few people expected it to do well in the race.

The fifth spot and fastest Porsche was the Carrera of Al Holbert and Claude Ballot-Lena. The car belonged to George Dickinson and is the one Hurley Haywood used to carry him to second place in the standings last year. Al kept his own car back in Pennsylvania, still on the sales block. Their time was 1:59.607.

Sixth position was taken by Tom Nehl and Steve Behr in Nehl's much revised Monza, the only one entered in the race. Tom had spent the last two months in serious preparation on the car and it looked like it was ready to pay off. There is a saying however that bad things come in threes, which Tom is beginning to believe. Incredibly, for the third time in a row at Daytona, Nehl crashed the car during the pre-race warmup on the banking. At last year's Paul Revere 250 and the finale, he did the same thing in almost the same spot. It was a bitter pill for both drivers as once again the talented Behr was left to talk about his ability in the paddock rather than demonstrating it on the track.

George Dyer and Michael Keyser teamed up and captured the seventh starting slot with a time of 2:00.656. George turned a couple of very strong efforts in the long races last season and showed he would be a contender this time. However, like Nehl, fate would intervene. The team did start the race, but after only five laps their weekend turned into the Daytona 10 minutes. Dyer pulled the car into the pits with the engine gone. Again, one of those un- ➤



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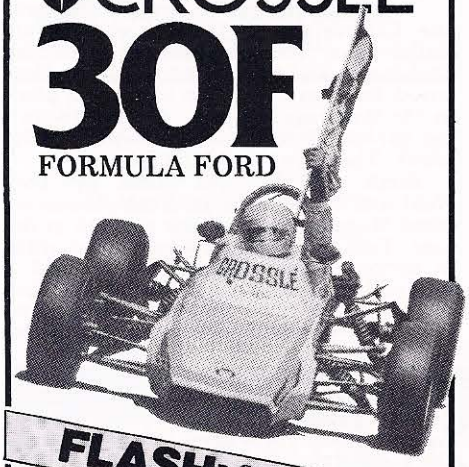
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# 24 HOURS OF DAYTONA *continued*

explainable things about racing occurred. Why they didn't change the engine and get back into the race is a mystery. A complete engine change is now allowed under the rules and can be performed on a Carrera in less than an hour. Such a stop does not entirely eliminate a car in a 24 Hour race. However, the team decided to pack up and call it a day.

Eighth on the grid and not happy about it was the Levitt Racing Corvette team of John Greenwood and Mike Brockman. The car had been troubled with an engine misfire throughout practice and they couldn't fix it in time for qualifying. Their time was done by running only one full, flying lap, showing the potential if the problem could be cured.

Ninth was another car which qualified well but which no one took seriously. That would be the Pantera of Hugh Leinpeter and Ron Goldleaf. The car had never finished a race.

The tenth spot was filled by the Corvette of Ted Mathey, Joe Chamberlain and Carl Shafer. Their time was 2:01.873. Shafer decided not to run his own Camaro in the longer races, preferring to hold back until Road Atlanta and the balance of the season where it would realistically stand a better chance.

There were only two Friday qualifiers who improved on the times of the previous day's qualifiers. Sepp Greger, Jurgen Lassig and Egon Everts pushed their new turbo Carrera around at a time of 1:59.205, which was actually the fourth best time. The car, which has created so much controversy in the Camel GT since IMSA banned it, showed a lot of the potential the officials feared. The only car to outpull it on the banking was Greenwood's Corvette, which is saying a lot. It was not overly good in the infield though.

Mo Carter and Gilles Villeneuve were 12th in Carter's Camaro with a time of 2:01.092. There were a number of potentially good cars in the balance of the 72 car field. In the 13th spot and fastest of the Grand National cars was the Chevy Nova of the Allison brothers. Herb Jones and Steve Faul had the second best Camaro effort, taking the 14th spot. Bob Hagestad and Jerry Jolly, making his first start in the KLV Spirit of Colorado Carrera, came next followed by the similar make driven by John Graves, Dave Helmick and John O'Steen. David Pearson and his son Larry were next in their Purolater Torino.

One car which never posted a qualifying time, so its potential was unknown, was the Cobra II of Charlie Kemp and Sam Posey. IMSA officials nearly had a seizure when they saw the car. They looked at it and concluded that Kemp must have picked up the wrong rule book when he built the car, feeling so much

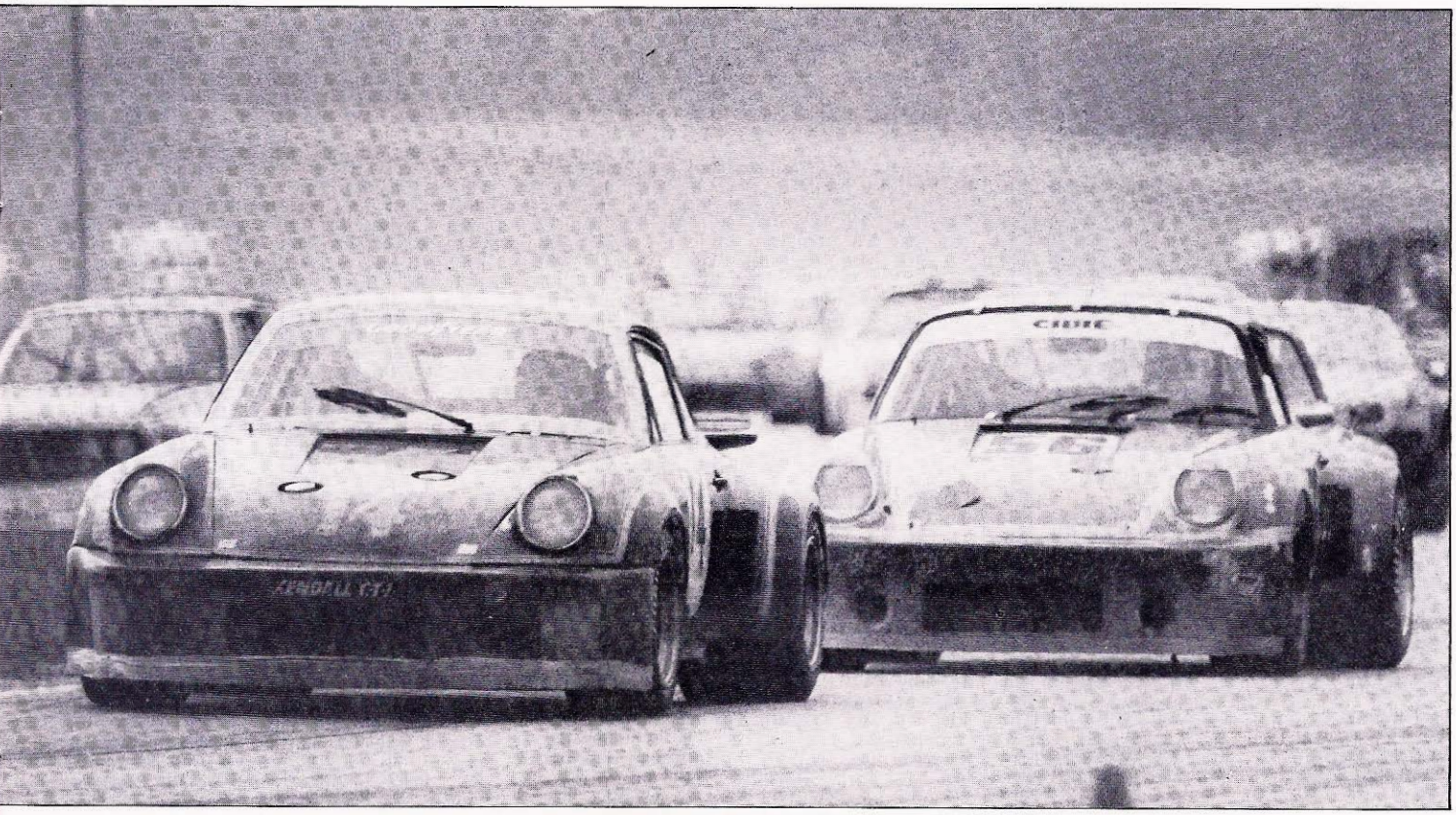
*(BELOW) Charlie Kemp's Cobra II Funny Car was declared officially "not funny" by IMSA. (BOTTOM) Jim Busby and Hurley Haywood ended up third.*







Sandy Lewis Photos



*The Carrera of Al Holbert and Claude Ballot-Lena on its way to second place.* Sandy Lewis Photo

was illegal. Of course Charlie felt differently — he thought that it was really just a matter of interpretation of the rules. In any case, the initial decision was that the car would not be allowed to run. After lengthy meetings and long after qualifying, the decision was reversed. The car could run, but it would be in the GT category and would not be eligible at this time for Camel GT points. Charlie was not pleased by the decision, but what could he do? He started from the back and did ten laps before the car retired.

## race

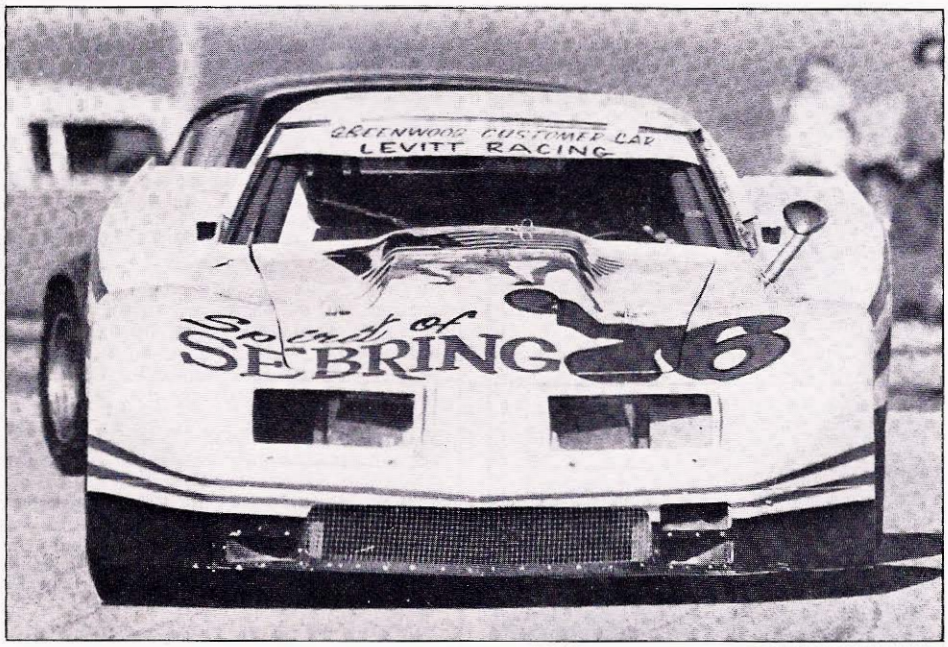
The race began under ideal conditions at 3:00 on Saturday. The first hour was really the only interesting hour in the first half of the race as far as actual on-track racing was concerned. The BMWs were instructed to hold a steady pace a few seconds off their qualifying times. Greenwood was of course under no such instructions, and within a few laps was challenging Gregg for the lead. Lap after lap the two would dice, first one and then the other taking a turn in front. The Hobbs/Parsons car held second, followed by Walkinshaw and Fitzpatrick. The turbo Porsche worked up to fifth while the Allison boys moved their Nova into the top ten.

Greenwood made his first stop within the hour and Brockman took over the car, attempting to regain the positions lost in the pits at the end of the first hour. Gregg and Redman were on top with 29 laps completed, followed by Hobbs, Parsons, Brockman, and Fitzpatrick and Walkinshaw. In fifth, a lap back, was the Turbo Porsche, followed by the Carrera of Holbert/Ballot-Lena. The Graves/O'Steen/Helmick car was next, having a good dice with the Carrera of Ludwig Heimrath, Jacques Bienvenue and Norm Ridgely. Hagestad and Jolly were right in with them, followed by the Carrera of Juan Bolanos and Billy Sprowls. The Allison car was making the first of several long stops, which left the Pearson Torino leading the GI class. Hurley Haywood and Jim Busby in the Brumos/Mitcom Carrera had dropped back to 49th place after changing two broken windshields. They would be back in contention before it was over.

*It was a troubled weekend for the Greenwood/Brockman Super-Vette, they DNFed after setting fastest lap.*

As the second hour started, the race for the lead quickly evaporated. Brockman pulled the car into the pits with the ring and pinion gear gone. It took the crew almost an hour to change the rear end, leaving them more than 20 laps behind when they returned to the track.

By the third hour, darkness had begun to cover the circuit. Gregg and Redman droned effortlessly on in the lead, a lap ahead of the Walkinshaw/Fitzpatrick car. The Holbert/Ballot-Lena Carrera was third on the same lap, one up on Hobbs and Parsons. The Bolanos Porsche was fifth, with Hagestad/Jolly sixth. Fred Van Buren and Guillermo Rojas were ➤




Bruce Czaja Photo




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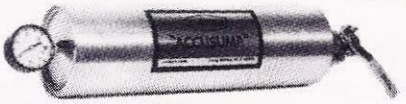
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# 24 HOURS OF DAYTONA *continued*

seventh in their Carrera followed by the Heimrath car, which was already eight laps back. The Pearson/Pearson car was ninth, followed by the GI Chevelle of Herschel McGriff. The Haywood/Busby car had worked up to 22nd, 13 laps behind Gregg. Greenwood/Brockman were another 18 positions and nine laps back.

Into the darkness they rolled. Lap after lap, hour after hour. A problem here, a problem there. Quick pit stops, long ones. Some dicing on the track, but mostly solitary running. There were still many hours to go. No sense risking it all on some foolishness in the dark. There would be plenty of time for heroics during the daylight hours tomorrow. On and on it went as the record crowd turned their attentions to more personal pursuits, doing their thing as the drivers and crews did theirs.

By the 12th hour of the race the lead BMW had opened an incredible 22 lap gap over the second place car of Holbert/Ballot-Lena. Of all the leaders, it was the only one to avoid trouble. The Holbert car replaced a half-shaft. The third place Carrera of Graves/O'Steen/Helmick, 24 laps behind the BMW's total of 346, had had fuel feed problems, running out of gas on the circuit among other minor mechanical ills. The Haywood/Busby Carrera was fourth, still trying to make up its early deficit. The Greenwood/Brockman Corvette had moved to fifth just before the halfway point when the engine expired, leaving the car stranded on course. They would be officially classed as tenth at the 12 hour mark. The Fitzpatrick/Walkinshaw BMW held fifth after a long stop to repair a crankshaft damper. Hagestad/Jolly were sixth, with the Carrera of Dieter Oest/Mike Tillson/Bruce Jennings seventh. Chris Cord/Milt Minter/Jim Adams had moved the Ferrari Daytona into eighth, followed by Hobbs and Parsons whose BMW had lost a lot of time when the gearbox had to be replaced. The McGriff Chevelle had taken the lead in the GI class and held 13th place overall, one position and one lap ahead of Pearson.

Fortunately for the crews the weather remained nice through the night, temperatures staying comfortable after several successive nights of near-freezing temperatures. After nearly 12 hours of darkness, the first fingers of light reached out from over the Atlantic and nothing had changed: Gregg and Redman were still miles in front.

As if to reward those hardy souls who had stayed awake all night hoping for something interesting to happen, the fates of racing intervened. As dawn broke, so did the leading BMW. Gregg, who had passed a couple of driving shifts during the night due to a stomach problem, was in the car when a tire let go. It wrapped around the suspension, causing extensive damage. The BMW crew pushed the car behind the wall and set about making repairs. The Holbert/Ballot-Lena car, which had been cutting into the BMW's margin throughout the night, was now making serious inroads. Shortly after the 16th hour, the gap was down to six laps when the BMW returned. Quickly the car reasserted itself, turning faster and faster laps to regain its margin. Again fate intervened for suddenly the Holbert car, which had been running so strongly throughout the first two-thirds of the race, went sour. Holbert stormed into the pits (as best as he could storm with a broken engine) and his crew leapt like men possessed to install a new power plant.

The crew had been working on the car for 17 hours doing normal maintenance, and now they had the task of changing an engine. They did it in spectacular fashion, taking only 43 minutes! Holbert lost only two positions during the change but the stop did allow Gregg and Redman to extend their lead to 16 laps.

By 9:00 a.m., with three-fourths of the race gone, the leading car had completed 500 laps. The great fear on the part of the BMW team was whether or not the car would make it to the finish. During the last hours of darkness it had dropped a valve and was being propelled by only five cylinders. It had been able to run steadily, although it was questionable what it could do if someone should push them for the lead. The hope was that the cushion would hold.

The official standings at the 18th hour showed Gregg/Redman in front with 500 laps, Graves/O'Steen/Helmick with 484, Busby and Haywood third with 474. On the same lap was the Holbert car. Fifteen laps behind came the Hagestad/Jolly Carrera, two laps up on Oest/Tillson/Jennings. On the same lap was Hobbs/Parsons, one up on Walkinshaw and Fitzpatrick. The Ferrari was ninth with 449 laps. The leading GTU car, the Porsche 914 of Handson/Davenport, was tenth with 448 laps. The Pearsons were leading the GI contingent in 16th place with 398 laps. The standings at 9:00 a.m. turned out to be important, for the race would go back to them.

At 9:01, the leading BMW stopped for gas. When the pit stop was over they had a bit of trouble firing the car up. It started, eventually only to die at the end of the pit road. After being nearly hit by another car, the crew which was located near that end of the pit ran out to get the car and pushed it back to its own pit, which raised the question of whether or not it had received illegal assistance on course. The word quickly came from the pits that the car had water in the gas and the crew was draining the tanks. After a 20 minute pause Redman at last rolled out of the pits, but he completed only two turns of the infield when it died again. He sprinted back to the pits and took a couple of crewmen along for advice as he set about draining the lines again. At nearly the same time, the other two BMWs came in for routine fuel stops. They too were struck with watered gas, the Hobbs car expiring in the second turn past the pits and the Walkinshaw car never leaving after refueling. As the Graves Carrera closed in, Redman finally got the car restarted. He went another mile, as far as the west banking, when it died again. Another sprint to the pits, more feverish work.

The Graves car was now on the same lap as the leader. It too would have to stop for fuel, but based on how long it had taken the BMW to start, a quick stop for fuel would not hurt. By the time the BMW was running, they could have a several lap margin built up. Besides, the BMW might not even go again. Whoops, their fuel came out of the same compartment in the Union 76 truck and you guessed it. The Carrera didn't want to run.

By this time, a semi-panic had gripped the pits as word about the watered gas spread like wildfire. The Graves car re-

started after a while, but made only one lap before going back into the pits. By this time the Haywood and Holbert cars had moved in on the leaders. Incredibly, when Redman started rolling again, as did the Graves car, all four were on the same lap. What had been a bore could now be a great race.

However, no one knew the extent of the problem of the water in the gas. Rather than risking a lot of expensive equipment. IMSA officials red-flagged the race so that the gas problem could be straightened out. At 10:10, the Speedway became silent, shocking those fans who were coming back in after having left the night before, certain that they would still see five or six hours of racing that day.

Union officials were at a loss to explain the water. The tanks had been checked every morning and there was no water in the storage tanks. Only one compartment out of three in the tanker supplying the pits was affected, and it had almost more water than gas, ruling out the possibility that the water came from condensation.

Sabotage is probably the only logical explanation, although it would be hard to prove. Like the Kennedy assassination, everyone knows what happened, but why, exactly how it was done, and by whom will never be known.

After nearly a three hour delay, while fresh gas was shipped in and fuel tanks and cells were drained, the race was restarted. Since the problem was something which was out of the hands of the competitors, IMSA officials decided to restart the race based on the standings at the 18th hour, the last full hour completed. Had Gregg made his stop a few minutes earlier, the last full hour would have been the 17th, before Holbert made his stop. They would have been second only a few laps back. But, it would be the 18th, with the 70 minutes of racing after 9:00 wiped out.

With the weather rapidly deteriorating, it was decided that the race would end at 3:00, with the time of the stoppage included in the total. To have the cars run the full 24 hours would again run them into the dark, a situation they wanted to avoid. So with a little more than two hours left, the drama which had built up was gone. The only question now was whether or not the five cylinders on the BMW would last.

At the restart, the second place car of Graves/Helmick/O'Steen was unable to get going, allowing the BMW to increase its margin. During the initial problem, the crew had put an additive in the gas to absorb the water, not realizing how much water was there. The combination of the additive and water clogged the injectors and although the car did eventually restart, it only made a few laps and retired to finish eighth. The Hobbs/Parsons car was also late on the restart.

A light rain started falling shortly after the restart. All the Gregg/Redman BMW had to do was run until a little after two. By the 23rd hour, its margin over Busby and Haywood was 26 laps. Even if the engine died, there was no way the following cars could complete enough laps in the wet to surpass their distance. The BMW did not have to be running at the end to finish and win.

As they ran to the finish, there was little anyone could do to catch them, but there was still the question of second place to be decided. The Haywood/Busby and Holbert/Ballot-Lena cars were on the same lap; they were both running strong and could have a battle to the finish. As it turned out, the rain and the pits decided the race. Holbert ducked in early for rain tires, giving Hurley about a half a lap lead. Hurley was hoping the rain would not get any harder, allowing him to complete the race without a stop, but eventually the intensity increased and he had to stop after all. The two would have been neck and neck again except that the right front tire stuck. When the crew finally got it changed and got Hurley back on the track, Holbert was more than half a lap up, holding the margin to the finish.

Hagestad and Jolly claimed fourth, 35 laps behind the leading car's total of 545 laps. The Tillson/Oest/Jennings Carrera was fifth, followed by the Ferrari Daytona. The Porsche 914 GTU car of Hindson and Davenport and Carney was seventh, with the Graves car eighth. Phil Currin, Cliff Gottlob and Pete Knab were the highest finishing American car, finishing ninth in the Corvette. Hobbs/Parsons were tenth.

In the press box after the race, Gregg attributed his third straight victory in the Daytona 24 Hours to the fact that he was "right with Jesus", Redman attributed it to the fact that he wound up driving more than 12 hours of the total race, with Fitzpatrick sharing it for another stint. Gregg was actually in the car only about seven hours and Brian felt many people were giving the wrong person credit. Holbert and Haywood were unhappy with the decision to wipe out the hour run when the cars were struck by the water. They both felt that it was racing luck and it was too bad for the cars affected. The Graves crew was just unhappy, not knowing really who to blame for their misfortune.

So, once again, a Camel GT Challenge has started a season with Peter Gregg in the familiar position as points leader. He has stated that he will not seek the title nor compete in all the races, but the smart money says differently. It will be an interesting year. ■




Bruce Czaja Photo

# Results

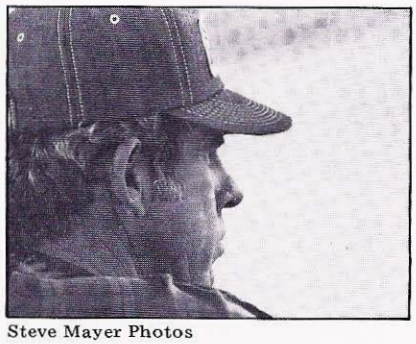
24 Hours of Daytona, Camel GT
Daytona Beach, Florida
January 31, February 1, 1976
545 Laps, 2092.8 Miles
(Top Ten Finishers)

1. Peter Gregg, Brian Redman, John Fitzpatrick, BMW CSL, 20 hours 6 min 53.835 sec, 104.04 mph average, $15,000, 545 laps; 2. Al Holbert, Claude Ballot-Lena, Carrera, $8,500, 531 laps; 3. Jim Busby, Hurley Haywood, Carrera, $4,000, 530 laps; 4. Bob Hagestad, Jerry Jolly, Carrera, $3,000, 510 laps; 5. Mike Tillson, Dieter Oest, Bruce Jennings, Carrera, $2,500, 508 laps; 6. Chris Cord, Jim Adams, Milt Minter, Ferrari Daytona, $2,000, 500 laps; 7. Bob Handson, Dick Davenport, Frank Carney, Porsche 911ST†, $3,800, 495 laps; 8. John Graves, John O'Steen, Dave Helmick, Carrera, $1,700, 493 laps*; 9. Phil Currin, Cliff Gottlob, Peter Knab, Corvette, $1,600, 483 laps; 10. David Hobbs, Benny Parsons, BMW CSL, $1,500, 481 laps.

† Under 2.5 GTU
* Not running at the finish

**Fastest Lap:**

John Greenwood, Mike Brockman, Corvette, 1:56.550, 118.61 mph



Steve Mayer Photos

# Good Ol' Boys

By Steve Mayer

Rain was pouring down in the final hours of the 24 Hours of Daytona. From the infield two cars charged to the entrance to the tri-oval: one was David Pearson's Purolator Ford Torino, the other a Honda Civic driven by the veteran team of Bergstram/Shaw/Palmer. The pundits thought the Mercury would literally blow the Civic off the track. But no! The Honda tucked in behind the stocker and drafted the Torino the entire length of the oval before slingshotting past into the first turn.

That was most people's introduction to the newly-created Grand International class. The new class allows the NASCAR stockers, with certain modifications, to compete at international events like Daytona and Le Mans. In addition to the necessary windshield wipers and headlights, the racers may add an extra 10 gallons fuel capacity while paring weight to the limit of 3200 lbs., as compared to the 4000 lbs. stipulated in NASCAR. With relative freedom in the engine department, the competitor can use even the famous Chrysler Hemi and the 429 c.i.d. Boss Ford engines. A technically interesting class, at the very least.

More important from a promoter's viewpoint were spectator-enticing names like David Pearson, Bobby and Donnie Allison, James Hylton and Buddy Baker. The largest crowd in 24 Hour history can probably be attributed to these superstars competing for the $10,000 award to the highest placed stocker. The eventual winner was the Purolater Mercury entry driven by David Pearson, son Larry, Jack Bowser, and sons Gary and Jim, after changing an engine in the middle of the night. Most competitors in this class believed they had a chance at the overall win if their machines were reliable. Donnie Allison felt "We could run with the leaders a little. If we would have run the entire 24-hour period, the relative advantages and disadvantages would have equaled themselves out. That would have put us right up there at the end." Donnie was speaking of the 355 c.i.d. Chevy Nova short-track Modified Allison Bros. entry which Bobby drives weekly on the Sportsman circuit in the South. David Pearson viewed his participation as a new experience. "I enjoyed it," said David. "Driving at night wasn't as bad as I thought it would be. I hit some oil last night. Could smell it, but I couldn't see it." Just like the Honda, David? "Right," grinned the NASCAR Superstar. ■






*Howdy Holmes leads the Pacer invasion.* Bruce Czaja Photos

# GOODRICH 100

## By Bruce Czaja

**The opening round of the Goodrich Radial Challenge produced one of the best races for first place in the history of the series. The fact that Carson Baird crossed the line officially 4.4 seconds ahead of Gene Felton is totally misleading. They were inches apart only 50 yards before the finish. The fact that Felton is listed last in the finishing order is also misleading, since he was placed there when the post race inspection showed that his Gremlin had . . . ah, shall we say a couple of modifications and changes which were not exactly within the spirit or letter of the rules. Such is racing.**

Felton's Gremlin led all 70 qualifiers with a time of 2:24.074 at 95.95 mph. Baird's two liter Colt was second fastest at 2:24.434. Tom Waugh had his Hornet third on the grid, with Milt Minter in Herb Adams' Starfire fourth. Buzz Marcus in a Gremlin was fifth, followed by Walt Bohren in a Mazda. Bob Mitchell put the Bolus & Snopes Bobcat in the next spot, sharing the row with George Alderman's Datsun. Tom Frank's Executive Industries Hornet was ninth, alongside Vic Mathews' Toyota.

1975 series champion Nick Craw was having engine problems and put his BMW 2002 in 11th spot, more than 4 seconds off the pace. The 1975 runner-up to Craw, Amos Johnson, was in even more trouble. His new Pacer, which led the first half of the race here last November, was mired in the 17th starting spot next to Howdy Holmes in the E-Z Wider Pacer, which Amos also prepared. Both cars were afflicted by fuel feed problems as they kept cutting out in the turns in practice.

The race, scheduled for 100 miles, started at 8:00 in the evening. It would run entirely in the dark. At the start it was Felton who powered into the lead in the first turn. He and Baird passed and repassed throughout the infield and onto the tri-oval for the first lap. At the end of that lap Walt Bohren had moved his Mazda into third, only to have a seal go on his rotary engine, ending his race. As the balance of the field fought for position, as well as a piece of the road, Baird and Felton drove off into the night.

Lap after lap they diced, never more than a second apart. Within a few laps they were lapping the slower cars, both drivers handling the traffic masterfully.

Behind them all sorts of battles raged. Craw moved up, Johnson moved up, Holmes moved up. Waugh had the best of the fight for third, wanting no part of the battle which raged behind. But Milt Minter wanted Waugh to play, and the two cars were having a dandy battle for third, just like the leaders were for first. Marcus was holding fifth, trying to hold off Craw and Scott Hoerr's Pinto. Eighth place was held by Bill Scott in a Scirroco, in a tight race with Steve Coleman's Gremlin and Tom Frank's Hornet. Vic Mathews, one of the early chargers, was in the pits with electrical problems. The Bolus & Snopes Bobcat had retired on the seventh lap with a hole in its oil cooler.

The order held generally the same for the next few laps. Minter was the first to falter when he retired at the half way point, the engine gone. Craw, after having a great dice with Marcus, saw his chances for points end on the 19th lap when his BMW swallowed a valve. Both Amos Johnson and Howdy Holmes had worked their Pacers to near the top ten at this point, but Holmes dropped back because of a long stop to replace a fan belt.

At lap 20 the battle for the lead was still raging. Felton held the top spot, with Baird content to sit on his tail, waiting for the right opportunity. With the pressure from Minter gone, Waugh was at last comfortable in third, although he was far behind the leaders. Marcus held the fourth spot, still fighting with Hoerr's Pinto. The Scirroco was sixth, Coleman seventh. Amos Johnson had moved to eighth, passing Tom Frank. Andy Vann was turning in a remarkable drive, holding tenth after starting last.

But the good racing that was going on behind the leaders was scarcely noticed; the Felton-Baird duel took total attention. Two laps to go and still Felton led, with the Colt glued to his back bumper. One lap to go. The two had appeared about equal all night on the banking — could Baird find enough to get by? Through the infield they went, the back of Felton's Gremlin ablaze from the lights of Baird's Colt. Onto the banking, with the Gremlin opening a slight edge. Down the long back straight, the Colt closing the two car length gap in the draft. For the past 20 laps, Carson had noticed that the Gremlin lost about 300 rpm as they climbed the East banking into turns three and four. The heavier cars tended to do that as their suspensions adjusted to the increased loads, causing the cars to slow just a bit. Baird had noticed and knew it would be his chance.

As they pulled onto the banking Baird went low, edging up alongside the Gremlin. Felton dropped down to block but to no avail. Baird's slingshot had worked and he pulled in front. Felton's only hope was to try and slingshot by on the tri-oval, taking Baird into the first turn. The official start-finish line for the road course is at the exit of the first turn in the infield where the timing stand is located. The start-finish line for the fans is on the tri-oval portion of the Speedway, where the flag was. Under the checkered they went, both still racing, knowing there was a quarter mile more to go before they crossed the official finish line.

Felton went wide to go by Baird into the turn, putting his Gremlin back into the lead. There was a lot of traffic and Felton was going faster than he should have. Suddenly a few yards from the finish, there was confusion as cars started flying in every direction. Felton looped and Baird didn't, and Carson crossed the line first. Felton had a hard fought second place which the officials took away. Waugh was awarded the second spot, followed by Marcus, Hoerr, Scott, Coleman, Frank, Johnson and Vann.

Carson averaged 94.15 mph for the 26 lap race, a new record. He is determined to take the championship this year, as it has eluded him for the past couple of seasons. Based on its Daytona showing, the Colt is going to be a contender unless some restrictions are placed on it. And based on Daytona, the Goodrich Radial Challenge should have yet another excellent series, with several drivers able to challenge for the title. ■



*The winner.*

# Results

**Goodrich 100**
**Daytona Beach, Florida**
**January 30, 1976**
**26 Laps, 99.84 Miles**
**(Top Twenty Finishers)**

1. Carson Baird, Colt, 1 hour 3 min 37.50 sec, 84.15 mph average, $2000, 26 laps; 2. Tom Waugh, Hornet, $1250, 26 laps; 3. Buzz Marcus, Gremlin, $1000, 26 laps; 4. Irv Hoerr, Pinto, $850, 26 laps; 5. Bill Scott, Scirocco, $750, 26 laps; 6. Steve Coleman, Gremlin, $700, 26 laps; 7. Tom Frank, Hornet, $650, 25 laps; 8. Amos Johnson, Pacer, $600, 25 laps; 9. Andy Vann, Gremlin, $550, 25 laps; 10. G. Alderman, Datsun 710, $500, 25 laps; 11. Bob Gardner, Maverick, $450, 25 laps; 12. Steve Anderson, Gremlin, $400, 25 laps; 13. Keith Swope, Gremlin, $350, 25 laps; 14. Steve Ross, Gremlin, $300, 25 laps; 15. Robert Wood, Pacer, $250, 25 laps; 16. Ray Korman, $200, 25 laps; 17. Jerry Thompson, Andy Bach, Colt, $150, 25 laps; 18. B. Bergstrom, Honda Civic, $100, 25 laps; 19. G.H. Sharp, BMW 2002, $75, 25 laps*; 20. Pete Levine, Pinto, $75, 24 laps.

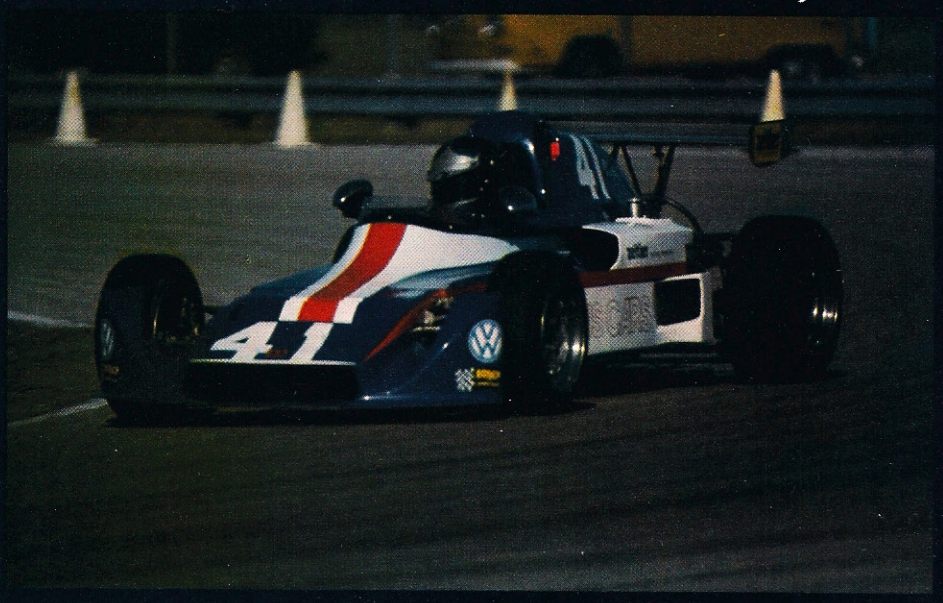
Fastest Lap:

Carson Baird, Colt, 2:24.545, 95.64 mph (new record)

Maureen Fennelli Photos




*Tom Bagley's Kent Oil Zink was again untouchable at Daytona; qualifying on the pole and leading every lap.*




*Bill Alsup behind the wheel of the new Zeitler Racing Modus M-2.*

# DAYTONA

## Round 1, Robert Bosch VW Gold Cup

**By Bruce Czaja**

It was a brand new season for the Robert Bosch Gold Cup, but you would never have known it by the results. Nothing had changed. Tom Bagley and his Kent Oil Zink were still dominant, as they were last year at this event. Even Herm Johnson, who took advantage of Tom's handling problems to win last November, was no match this time as Bagley scored a 12.7 second victory. Johnson finished second, well in front of the next man. The next man? Well, there we have the whole race . . .

The Gold Cup season was starting under IMSA's auspices this year as it had in 1975. The original schedule had about eight races with IMSA and four with the SCCA. Then came all that silliness with VOA and IMSA regarding the new Turbo Carrera. IMSA banned the Turbo and out of spite VOA yanked the Super Vee series. Bosch had aligned itself firmly with VOA. So, although the season was starting at Daytona with IMSA, when the second race would be was still anybody's guess.

Fortunately, since the race, reason has prevailed and some of the Gold Cup races will be held with IMSA. The most notable one will be Lime Rock, with the possibility of a few more. The full schedule should be released shortly. In view of the problems, few people had new cars, preferring to wait and see what would develop before they made complete plans for the coming year. So, in many respects, the Daytona race was really a continuation of last year.

### entry & qualifying

Tom Bagley led the qualifiers with a 2:04.251 lap. Better than his time in November, but still slower than the record lap posted by Holmes in that race. Herm Johnson, continuing his 1975 form, put his Ozone Lola in the second spot a half second off of Bagley's pace.

Leading the second row was Jerry Jolly in his Spirit of Colorado Lola. Jerry had picked up sponsorship from radio station KLZ in Denver and wanted to really show his stuff. He was especially ►

# Daytona 1976 continued

keyed up for the weekend, for he would be sharing a ride with fellow Denverite Bob Hagestad in Hagestad's Carrera in the Camel GT. Fourth on the grid was Benny Scott in the BAR Lola.

Jon Batchelor held the fifth spot in Wilbur Bunce's Lola which Howdy Holmes drove last season. Bill Henderson was sixth fastest in his Lola. Bill Alsup, finally able to run the new Modus, showed the potential of the car by claiming the seventh fastest time, although it was two and a half seconds slower than Bagley. Gary Passon had his Lola in eighth position. Chris Gleason was ninth, with John Barringer rounding out the tenth spot.

Peter Moodie in the Bunce car was 11th, with Dom Billera in a second Modus 12th. Ken Cobb and Francisco Romero shared the next row, followed by Bobby Rahal and Scott Ovel. Rahal had one of Fred Opert's new Supernovas, but the car just would not run well in practice. Some changes would be made for the race however, and the car would show marked improvement. Formula Ford star Bruce MacInnes was making a foray into the world of Super Vee in a Zink and not finding it at all to his liking. The best he could manage was 23rd on the grid. Richard Melville, who finished fourth in the standings last year, fared little better, putting the Bill Scott Royale RP19A in the 21st spot. Needless to say, it doesn't look like he made a wise move when he left Heppenstall.

Harry MacDonald had left the BSR team and was fielding his own car prepared and backed by Merzario Motors which did his National Champion Vee car. They had problems, qualifying 34th in the 38 car field. During qualifying, the tach didn't work properly and this really affected Harry. Lou Gigliotti also had a new Zink but wasn't doing too well with it as he qualified 36th.

The final grid spot was taken by Howdy Holmes in a new Lola sponsored by Jiffy Mix and prepared by Bill Scott. Howdy found himself on the back of the grid when the engine blew on the first lap of qualifying; he was primed for a charge through the field on race day (see Howdy's Column elsewhere in this issue).

## race

The Gold Cup race was set for Saturday afternoon as a curtain-raiser to the 24 Hours. The weather was ideal, but the drivers weren't as three cars came together on the pace lap and Jim Grob, Juan Cochesa and Scott Ovel were out before the start, necessitating two pace laps while their cars were cleared from the course.

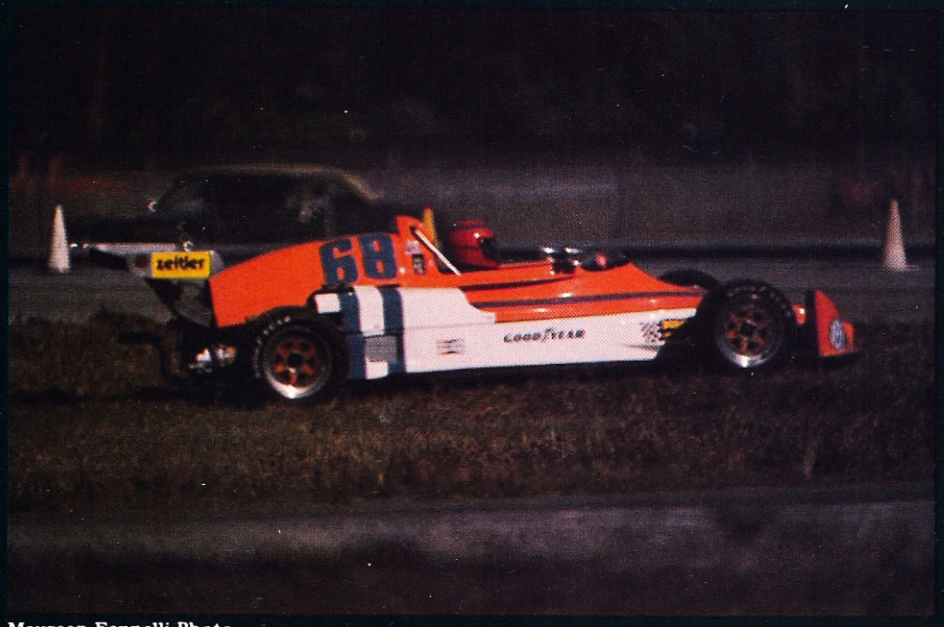
At the start Bagley jumped into the lead immediately opening a gap between himself and Johnson. Johnson was in turn doing the same on the rest of the field. So it would go for the balance of

Gary Witzenburg Photo




*(ABOVE) The incredible battle for third place; Jolly leads Batchelor, Gleason, Scott and Alsup.*

*(BELOW) Billera mows the field with his new Modus.*




Maureen Fennelli Photo



Steve Mayer Photo

*Wilbur Bunce: Unhappy.*

## Super Vee; What's Ahead?

By Steve Mayer

"Hoppen giveth and Hoppen taketh away," said Fred Opert, one of the leading entrants in the Super Vee series. He was talking about the action taken by Jo Hoppen, Special Vehicles Manager of Volkswagen of America, who transferred the Bosch VW Gold Cup Super Vee series from IMSA to SCCA when IMSA banned the race version of the Turbo Carrera from their Camel GT series. The issue posed to Gold Cup entrants was how this sudden shift would affect the SV season. "Jo Hoppen has helped racing a great deal," continued Opert, "yet Bishop made the right decision in his own mind to protect his series. In the long run, this will benefit F/Atlantic.

The uncertainty of the 1975 SV schedule is of less concern to entrants and competitors than one might think. "So long as they make up their minds, we'll show up," says Tom Milner of Bill Scott Racing. VW and Bosch have committed themselves to a ten or twelve race series; only locations and dates have yet to be set. Most entrants believe, like Opert, that the change of venue will improve the chances of putting on an American F/Atlantic series in conjunction with IMSA. "The competitors gain if an F/A series comes about," states Carl Haas, largest importer of SV machines into the U.S. Bill Scott agrees and adds, "F/Atlantic fits naturally into an IMSA weekend, if SV isn't there. Together they would tend to cancel each other out."

A dissenting opinion came from entrant Wilbur Bunce. "This is nearly a million dollar industry, especially when you consider that entrants like Bill Scott, Fred Opert, Carl Haas, John Zeitler and myself have hundreds of thousands of dollars invested in equipment, machinery and personnel. I think it's a terrible shame that we're used as the bartering tool. Before, a young driver could compete in both series. Now that doesn't appear to be a viable possibility due to inevitable scheduling conflicts. The two forms of formula racing can complement each other. We were getting enough races in both series so that the young driver could get enough races to be a professional driver in America, to progress and mature in ability along the same rate as a European driver. That won't happen for a few years now."

the 13 laps, with Bagley averaging 109.27 mph for his opening victory. Both drivers performed flawlessly, Bagley posting the fastest lap en route at 2:04.154.

Behind, all was not so calm. There was a race for third that, believe it or not, was even better than the November race when Jerry Jolly and the Europeans slugged it out. This time there were seven cars all contesting the position. In addition, several others were also in on the struggle, notably Holmes and Alsup, who retired before the finish.

Jerry Jolly held the third spot for the first four laps according to the official scorers but really it all depended where you were on the track. Batchelor held it for the next two circuits, when again Jolly tried it. Rahal, moving excellently through the field and showing his impressive credentials as a driver, was into third by the eighth lap. He was there for the ninth and tenth too. Then Jolly, then Rahal again on the penultimate circuit. It bears repeating that these positions were only at the scoring stand; the number of passes that took place on other parts of the course seemed almost infinite.

In this group besides Jolly, Rahal and Batchelor were Benny Scott, Bill Alsup, Gary Passon, Chris Gleason and, for a time, John Barringer as well as Romero. Holmes even got into the act as he and Rahal closed on the pack. Howdy moved into the top ten only to retire after five laps with a broken throttle linkage.

Lap after lap, turn after turn, straight after straight, the cars battled. Side by side, nose to tail, hardly more than a second separated third from ninth. It was quite common for a driver to lose or gain three, four or even five positions on each lap. Had it been a race for the lead it would have made the Daytona Gold Cup an instant classic in the world of racing, regardless of the series. It was that good a battle. What was even more amazing was that the driving was really good. Any mistakes made were minor ones. Not a single driver did anything really stupid — they were all driving excellently, fighting for each inch. Drafting, late braking, and alternate lines all came into play during the struggle.

John DeGarmo Photos



*Rahal charges to the front.*

It all came down to the last lap. All the brilliance they had displayed was thrown out the window. The adrenaline pumped by the tight competition was too much for most as they let their competitive drives overcome their good sense. Here you had this pack of six or seven cars all bunched together on the tri-oval fighting for position going into the first turn to get by in front of the timing shed, the official finish line at the exit of the turn, each driver trying to outmanuever the other. Perhaps predictably, the race ended in a shambles.

It is difficult to say whose fault it was. Rahal thought he was bumped by Scott, whom he felt was driving over his head in the turn. Other people felt it was another driver, or still another. Collectively it was probably a bit the fault of each, but also the fault of none. It was just a competitive group struggling for position. As they screamed into the first turn for the last time, there were cars going every which way. Within an instant, the air was filled with dust obscuring the scene. Fortunately, the timers had a clear view and the following was the result.

Gleason was third, with Benny Scott fourth. Rahal was fifth, followed by Passon. Jolly wound up seventh, being one of the drivers who crossed the line backwards. Romero wound up eighth, with Batchelor ninth. Tiny little fractions of seconds separated the cars.

Tenth and far enough back to miss all the insanity was MacInnes, who drove a steady but unspectacular race. He finished just ahead of Bob Rodamer's Lola with which he had been dicing for the duration. Harry MacDonald soldiered on to 13th, followed by Mike Yoder. Also completing 13 laps was Walt Grady.

It was an interesting race. If it's any indication of things to come, then Bagley should capture the title this year. Johnson looked like he too was in a class by himself. However, the rest should be a dandy of a show. Also, the fact that the Zink isn't as good on the slower circuits comes into play. All in all, if the organizers get their act together, the Gold Cup could develop into a great competitive series, of which we saw a glimpse at Daytona. ■

## DAYTONA SUPER VEE GRID

**Tom Bagley**
Kent Oil Zink Z-11
2:04.251 (111.26 mph)

**Jerry Jolly**
KLV Spirit Lola T324
2:05.496

**Jon Batchelor**
Wilbur Bunce Lola T324
2:06.480

**Bill Alsup**
Zeitler Modus M2
2:06.757

**Chris Gleason**
Whalley BMW/Alfa Lola
2:07.005

**Peter Moodie**
Wilbur Bunce Racing Lola T324
2:07.195

**Ken Cobb**
Zeitler Racing Lola
2:07.555

**Bobby Rahal**
Opert Racing Supernova BH6
2:07.645

**Kirk Stowers**
Stowers Royale RP19
2:08.393

**Christian Skoppe**
Stefan Skoppe Elden Mk14
2:08.888

**Richard Melville**
Bill Scott Racing Royale
2:09.063

**Bruce MacInnes**
Citation Engineering Zink Z-11
2:09.867

**Ray Heppenstall**
Heppenstall Royale
2:10.924

**Juan Cochesa**
Opert Racing Supernova BH5
2:11.477

**Walt Grady**
Grady Racing Royale RP19
2:12.001

**Jack Rabold**
Rabold Lola T320
2:15.093

**John Helming**
Helming Lola T252
2:17.110

**Phil Caliva**
Caliva Lola T320
2:18.476

**Jim Grob**
Grob Lola T320
2:20.783

**Herm Johnson**
Ozone Lola T324
2:04.747

**Benny Scott**
BAR Lola T324
2:06.373

**William Henderson**
Lola
2:06.754

**Gary Passon**
BMR Assoc. Lola T324
2:06.776

**John Barringer**
Scott Racing Lola T324
2:07.005

**Domenick Billera**
Billera Modus
2:07.436

**Francisco Romero**
Opert Racing Supernova BH5
2:07.621

**Scott Ovel**
Iowa Pipe & Supply Lola T324
2:07.922

**John Weakley**
Royale
2:08.425

**Clint Dalton**
Dalton Roofing Lola T252
2:08.894

**Bob Rodamer**
Lola T320
2:09.459

**Mike Yoder**
Lola T320
2:10.587

**James George**
Hermes Racing Lola T324
2:11.028

**John Kalagian**
Kalagian Royale RP18
2:11.635

**John Berget**
Tui
2:12.098

**Dick Ferguson**
Justice Bros. Tui BH3
2:15.822

**Harry MacDonald**
HEM Racing Lola T324
2:17.443

**Lou Gigliotti**
Budlong Team Zink Z-11C
2:19.358

**Howdy Holmes**
Scott Racing Lola T324
2:32.744



# Results

**Robert Bosch Gold Cup**
**Daytona Beach, Florida**
**January 31, 1976**
**13 Laps, 49.92 Miles**

1. Tom Bagley, Kent Oil Zink Z-11, 27 min 24.714 sec, 109.27 mph average, $2500, 13 laps; 2. Herm Johnson, Ozone Lola T324, $1500, 13 laps; 3. Chris Gleason, Lola T324, $1000, 13 laps; 4. Benny Scott, Black American Racers Lola T324, $800, 13 laps; 5. Bobby Rahal, Fred Opert Supernova, $600, 13 laps; 6. Gary Passon, BMR Lola T324, $500, 13 laps; 7. Jerry Jolly, KLZ Spirit Lola T324, $400, 13 laps; 8. Francisco Romero, Fred Opert Supernova, $350, 13 laps; 9. Jon Batchelor, Wilbur Bunce Racing Lola T324, $300, 13 laps; 10. Bruce MacInnes, Barry Budlong Zink Z-11, $250, 13 laps; 11. Bob Rodamer, Int'l Air Leases Lola T320, $200, 13 laps; 12. Harold MacDonald, HCM Lola T324, $200, 13 laps; 13. Mike Yoder, Lola T320M, $150, 13 laps; 14. Walt Grady, GR Racing Royale RP19, $150, 13 laps; 15. William Henderson, Lola, $100, 12 laps*; 16. Jack Rabold, Lola T320, $100, 12 laps; 17. John Kalagian, Royale RP18, $100, 12 laps; 18. Bill Alsup, Zeitler Modus M2, $100, 11 laps*; 19. Clint Dalton, Dalton Roofing Lola T252, $100, 10 laps*; 20. Kirk Stowers, Royale RP19, $100, 10 laps*; 21. Dick Ferguson, Justice Brothers Tui BH3, $100, 10 laps*; 22. James George, Hermes Racing Lola T324, $100, 10 laps; 23. Dom Billera, Modus, $100, 8 laps*; 24. Phil Caliva, Lola T320, $100, 7 laps*; 25. Howdy Holmes, Scott Racing Lola T324, $100, 5 laps*; 26. Christian Skoppe, Skoppe Elden Mk14, 5 laps*; 27. Peter Moodie, Wilbur Bunce Lola T324, 4 laps*; 28. Richard Melville, Scott Racing Royale, 4 laps*; 29. John Helming, Lola T252, 4 laps*; 30. John Barringer, Scott Racing Lola T324, 3 laps*; 31. Ken Cobb, Zeitler Lola, 3 laps*; 32. Scott Ovel, Iowa Pipe & Supply, Lola T324, 0 laps*.

* Not running at the finish

**Fastest Lap:**

Tom Bagley, Kent Oil Zink Z-11, 2:04.154, 111.35 mph

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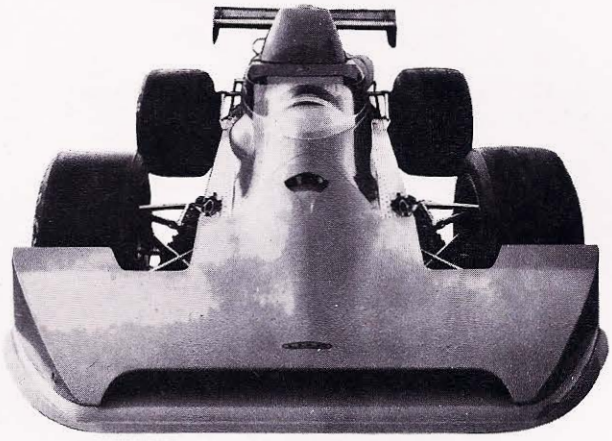

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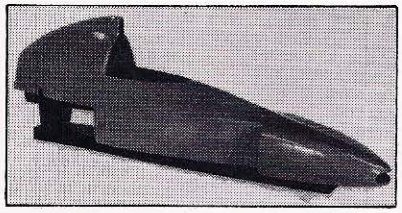
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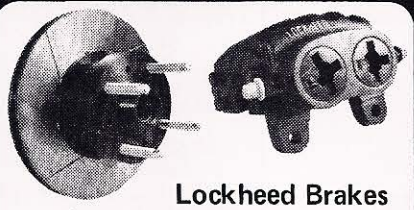
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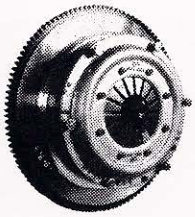
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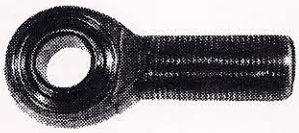


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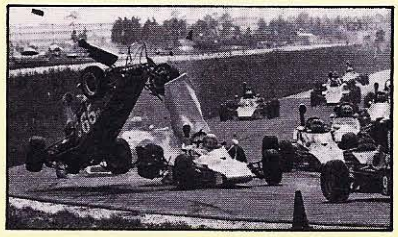
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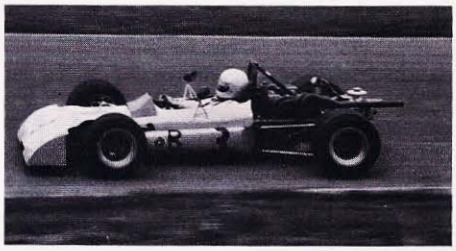
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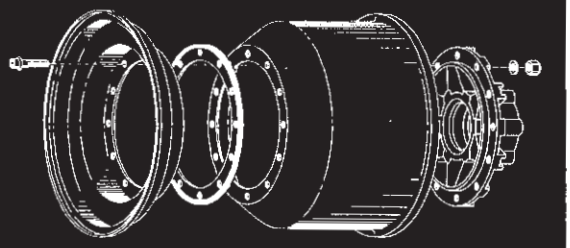
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