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# The paddock in Detroit

# PATRICK JOINS FERRARI... FOUR AND A HALF YEARS

"With effect from the Dutch Grand Prix, Patrick Tambay will drive the second Ferrari in the remaining races of the 1982 sea. Scuderia Ferrari is particularly grateful to Count Rudi Van der Straten, whose sporting gesture in releasing his driver from his Can-Am commitments is greatly appreaciated."

It was the above press release which alerted GPI's editorial team in Detroit to the appointment of the man who is to take over Gilles Villeneuve's place.

The contract, surprising as it may



be to some, will surely enable Patrick to show his full potential. This was certainly not the case during the two years he spent with McLaren (at a time when the team was going through a technically difficult period), nor last year, with Talbot, when he was rarely life ever) given the same

equipment as Jacques Laffite. Enzo Ferrari first approached Tambay in 1977, when the Frenchman was doing remarkably well with the Ensign owned and entered for him by Hong Kong millionaire Teddy Yip. At that time Patrick - an F1 newomer - was just one of several drivers being considered for the Ferrari position In the event, he decided (wrongly, as things turned out) to go to McLaren. The Ferrari seat then went to Gilles Villeneuve, who was very soon to become Tambay's close friend.

Having voluntarily withdrawn from Formula 1 after a brief encouter with the Arrows team at Kyalami earlier this year. Tambay was all set this year to chase a third Can-Am title with the VDS team. In the first round of the 1982 series at Road Atlanta, Georgia, he had been leading by more than a minute when his Cicale VDS001 was put off the road by a backmarker.

The announcement from Ferran seems to have caught most of the Italian press by surprise. They had speculated in depth on the possibilities facing the Scuderia, which included running with only one car for the remainder of the year, as had happened before following the deaths of Wolfgang von Trips (1961) and Lorenzo Bandini (1967).

American sources inform us that

the drive was offered both to Mario Andretti and Rick Mears ithey refused because there was opportunity to test the car beforehand), and even the names of Jones and Reutemann were mentioned. Yet not once among all the suppositions did the name of Tambay arise.

of Lambay arise. It now appears that a vital role in the selection was played by Didier Pironi. As he told us in Detroit. "I'm delighted, and it was I who first got in touch with Patrick, with Ferrai's full agreement naturally. In my opinion they would never have signed anyone without first consulting me.

"There was a very short list of possibilities. We considered it vital that they should all have up-to-date F1 experience... and once



we'd been given the go-ahead by VDS we didn't hesitate to choose Patrick. He is a greatly underestimated driver who has never been given the opportunity to show what he's capable of doing in a decent F1 car.

"Personally, I have known Patrick since our Formula Renault days. We did some F2 races together. Patrick will not be having his first race with us until Zandvoort, for technical reasons, because we have made a lot of changes to the card for Detroit and Montreal which would have made it impossible for three identical chassis to be got ready in time.

"Patrick will therefore have the opportunity to get used to the car, the team and the turbo engine during some long sessions on the test track at Fiorano. Our work programme has been badly delayed since Zolder: I'm sure that a fortnight's hard work by Patrick at Fiorano will help us to catch up a lot of ground."

a lot of ground."

Good luck, then, to Patrick Tambay, who has been consistently popular with the press and the public. In the circumstances, we think that he will agree that it's only right that he should not make his Ferrari debut until after the race at Montreal.

## WELL, BRIAN...

Our prize for honest quote of the week goes to Brian Henton who, basking in the sudden glory of the American media, said. "I think this race is great. These guys don't know I'm just a w...ke'r and they just go on interviewing me."

# NO TOLEMANS IN

With only 29 cars present, the Detroit organisers found themselves in the fortunate position of not having to organise the usual prequalification "session-within-assession" which normally takes place on Friday morning. Considering the panic at the circuit arising from the endless difficulties with the circuit safety arrangements, it is interesting to speculate what would have happened if the usual 31 cars had been in the pits...

The absentees were the two Toleman-Harts of Warwick and Fabi, allegedly stranded in France by a breakdown of their transporter on the way home from Monaco. Having lost two days rescuing the vehicle, it seems that there was just not enough time to get the damage to Warwick's Monaco wreck repaired and to turn the material around before the plane left for America.

We understand that the Toleman crew is determined to be at Montreal in one week's time, and that they will arrive by air freight. Sceptics have suggested that the team will be more than happy to have this break, but a Pirelli representative has confirmed that a full complement of tyres had been delivered to Detroit for the British turbocars, and will be taken to Montreal.

## **GPI IN FORMULA 3**

Following the trend begun last year by the English edition of your favourite motorsport magazine, GPI is to put its support behind a deserving Formula 3 driver. Last year our choice was Dr Jonathan Palmer, who went on to win the British title, and this year we will backing the French driver Pierre Pair



Petit, 22, is currently leading the series with his Ralt-Toyota RT3, which is prepared by Dave Price Racing in London. He has already set a terrific pace, with victories at Paul Ricard, Nogaro, Albi and Dijon, Currently he has 72 points, 12 more than second man Michel Ferté, brother of the controversial winner of the Monaco F3 event.

## THE LATE LATE SHOW: WHO WAS TO BLAME?

We had a conversation with Dess. Ongaro, the track safety man who looked as harried as every man who had so well as he was being attacked at though responsible for the endist at though responsible for the endist delays in Detroit Friday and Sauday "My job." said Derek. "Same they're safe." Then, to what do Derek ascribe the unpunctually (that's a polite word) of the croup organizers?

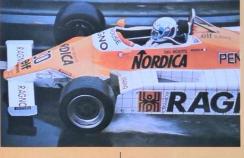
"Well, it's two things basically answered Derek philosophically 'First of all, it's almost impossible to get anything right the first time off. How can you tell a line the cars will take until they get our there and practise? If drivers sees bump, they're going to stee round it, that makes for a new line Second, there is the attitude of the organizers. For them this is a hig game. Great fun, but not something to be worked at. The simply have no experience of the professionalism of the sport and they spend as much time drinking coffee and eating hot dogs as they do getting anything done. It's almost impossible to get any sense of urgency into them

### DRIVES' PACE-CAR IDEA GETS THUMBS DOWN

Lack of visibility at Detroit, the narrowness of the circuit, the absence of any cranes, the probability of breakdown trucks on the circuit (with accompanying bad dreams about Long Beach, caused the drivers to put forward a suggestion that a pacecar might be used at Detroit in case of any accidents during the race. The aim was to stop racing while the track was cluttered with rescue vehicles. The idea has long been in use at Indianapolis and in endurance races.

But when Didier Pironi, Alain Prost, Nigel Mansell, Jean-Pierre Jarier and Niki Lauda met with Jean-Marie Balestre in his room at the Westin Hotel on Thursday night, to discuss safety and the pace-car, they came up against a problem. To use a pace-cal would effectively change the rules for the World Champions hip. Only with the unanimous agreement of all the construct tors could this be changed. affair was discussed throughout Friday until Saturday morning when it was learnt that that the idea had fallen on deaf ears and

we all now know what happe ned in the race. Three cars had relatively harmless accident, the organisers panicked and stopped the race. The drivers are very often right, and on this occasion, their pace-car idea would have saved the organisers ridicule.



### ARROWS IN THE BREEZE

There was an original event organised on the Wednesday, afternoon before the big race in Detroit. Starting at the fashionable Detroit suburb of Grosse Pointe on the Detroit river itself, the Formula 1 teams were invited to take part in a sailing race in boats provided for them complete with an experienced captain.

An extremely strong wind made things, uh, interesting for the several drivers, team managers and sponsors who went along for the sail, and some of them looked distinctly happy when it was all over two hours later. The antics of some of the novices looked very spectacular...

In the end, despite the expertise of yachting fans like Jochen Mass, Jean-Pierre Jarier and Jean-François Robin (the Matra engine man), it was the Arrows team who walked off with the trophy for this "Sailing Grand Prix of Detroit." Alas, noticeable by their absence were most of the Latinorientated teams like Talbot-Ligier, Renault, Ferrari and Alfa Romeo.

# MORE STREET FIGHTING?

Word has reached us from the Department of Opaque Communiques at the Place de la Concorde that two further street races are definitely being considered for next season: Paris and Moscow. The first, under socialism, seems unlikely: the second, under a different form of socialism, seems all too likely. If it happened, it would be one of the few times the noise around the Kremlin would be other than Politburo disputes. Mind you, it is doubtful the authorities could come up with nine or twenty thousand old tyres; we hate to think what dissidents they might use instead, but at least they d have long escape-roads — all the way to Sheria.

As to the projected British street race through Hyde Park, we understand that though the GLC has been approached and has given its approval, the whole idea is likely to be given a definitive coup de grace by the insurers.

### LAMMERS BREAKS HIS THUMB

It was on his 13th lap of the Detroit circuit that Jan Lammers had the misfortune to hit the wall near Cobo Hall, the consequence of a stuck throttle. The accident was not very severe, and damage to his Theodore was light, but the tiny Dutchman climbed out in obvious distress.

His thumb had been caught by the spoke of his spinning steering wheel and one of the two bones was broken. With his hand in tray of ice to numb the pain, he was taken off to hospital for a Saturday morning pinning opera tion. "We offered the drive to Mario Andretti, who turned it down, and we would have been happy to have put Derek Warwick in it if he had been here," said a team spokesman. "We will cer tainly have someone available for Montreal, and we expect Jan to be back in action for the Dutch GP

At least the organisers of the Detroit Grand Prix can be exculpated from one of the race's many disasters; they were not responsible for the rain which fell in buckets on Saturday, ruining the second qualifying session and leaving the World Champion, Nelson Piquet, out in the cold. But for therest, blame attaches.

A FLAG

**TOO MANY** 

It is not merely a matter of the state of the track which — manhole covers and all — did not prove impossible to drive on, caused no major mishaps and gave us what was really an enterprising race. It was the almost grotesque haphazardness and unprofessionalism of the proceedings that stuck in our craw. And, principally, the little matter of the red flag and the interrupted race.

It happened at a particularly ludicrous moment in the race and at a particularly apposite spot: in fact one of the few places in which there was an adequate escape road. Thus, when Patrese and Guerrero had their brief encounter of the usual kind, and Watson managed to avoid them, on any other track in the world the consequences would have been a retirement, a car wheeled away to safety et voilà.

But not in Detroit, where the marshal first tripped on his fire extinguisher and then couldn't get it working and where the clerk of the course, prematurely and unnecessarily, flagged the race to a stop. A stop, let it be said, that lasted an hour and eight minutes. During which, presumably, fire drill instructions were given and the tyre wall was lashed back together.

It would be hard to imagine the like happening in Monaco, or even at Long Beach — whose first Grand Prix we recall with a certain affectionate giggle. The trouble in Detroit was sheer amateurism on the part of the organisers. They were not there when needed and when there, not aware of the professional standards required by F1 racing. After all, if a race had to be stopped for a minor incident — and it was only the marshals who were at even the remotest risk — then what about the other cars that littered the track in far more dangerous fashion? Or the added danger of a second start?

The delay ruined television, which switched to a history of aerobatics, dampened the crowd — and baffled them as well —, further shortened the race and generally failed, as Watson said afterwards, to support the credibility of the sport. Surely the powers that be should insist on higher standards; or do they propose to go on handing out street races to whatever promotor puts up the necessary bucks?



GPI

# PRACTICE WAS NOT PERFECTION



GPI pays homage to Watson, here flanked by Cheever and Pironi. A weekend of whines ends on an up-beat.

The winner of the Detroit Grand Prix, predicted Ford's racing guru Walter Hayes, would be an experienced driver, someone with a mature head on his shoulders. At 36, John Watson might have been one of Hayes' nominations, but from 17th place on the grid he hardly looked like a good bet. Nevertheless, with a superb display of aggression, it was the McLaren driver who pulled off his second uncontested race victory of the season.

By Mike Doodson

fter all the delays and bitches during practice, it was a relief — almost a surprise — when on Sunday afternoon the green day afternoon the green main event only a matter of a few seconds after the 2.20 pm scheduled start time. But the Detroit Grand Prix still had a few surprises in store for the anxious teams in the pits and for the 100,000 spectators (not all of them paying, of course) who watched from grandstand or from one the many tall buildings around the course.

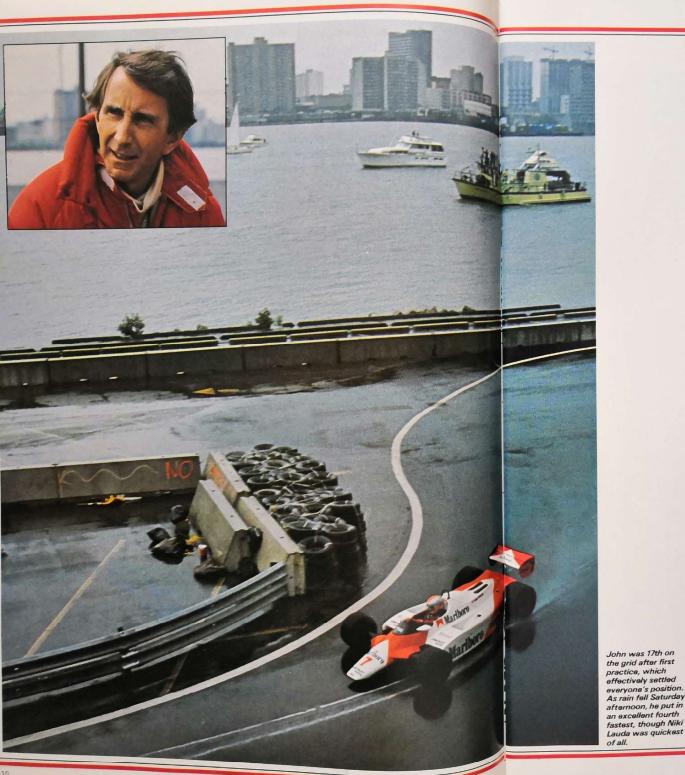
One of those surprises, of course, was the accident which caused the race to be red-flagged after only six laps. Another was the fact that no-one knew exactly how many laps the race would run, because someone had guessed (wrongly) that average speeds would be about 15 per cent higher than they were, and had allotted a race distance of 70 laps—which would take the event well over the two hour maximum laid down in the rule book.

But perhaps the biggest surprise of all was the mistake which Niki Lauda made on lap 41 of the "combined" races. Lauda tried to put his McLaren MP4 into a gap between Keke and the wall at a spot where Keke didn't expect it. The MP4 hit the concrete and damaged its suspension. Lauda climbed out, studied the damage and set off to walk back to his pit.

There he found the McLaren International

Unlike Zolder,
Wattie started out
on soft compounds.
At the re-start, he
had second
thoughts and from
then on was
unstoppable.





John was 17th on the grid after first practice, which effectively settled everyone's position. As rain fell Saturday afternoon, he put in an excellent fourth fastest, though Niki

crew in a state of strained happiness. His team mate John Watson had taken the lead a couple of laps before his accident, and now Wattie was in complete control of the race, more than 20 seconds clear (more on aggregate) of Eddie Cheever. "The accident was probably my fault", said Niki; "after being stuck behind Pironi and Cheever for such a long time I was being too eager to overtake Keke".

The team's joint managing directors, Ron Dennis and Teddy Mayer, smiled understandingly from beneath the head sets of their intercom systems. They were timing the gap between Watson and Cheever, and it grew even greater in the few minutes that Niki spent in search of his bright red Parmalat cap which he wears when his rolled-up racing balaclava doesn't conceal those burn scars on his

As Watson increased his lead, the frowns on the faces of Dennis and Mayer relaxed slightly. There remained a few worries, though. Would the fuel last? Would John's car fail the scrutineer's post-race weigh-in, as Lauda's had in Belgium? Would someone find a technical reason why they shouldn't have changed the tyres on the car in the hour before the race was re-started?

All those anxieties faded soon. But it took a long time for Watson, Cheever and Pironi to reappear after their parade lap (at 2.493 miles, Detroit is long for a street circuit), and when they did there can have been few winners who sprayed champagne with the enthusiasm that John Watson put into the job. There was a time, of course, when he didn't get much practice at it. There was a full five year interval between his first GP victory (Austria, 1976) and his second (Silverstone, last year). Now he'd won his second race out of the last three. He even had a six point lead over Pironi in the world championship.

This state of affairs had hardly seemed possible after practice, as John was ready to admit. "The car was really not at all good in qualifying. But then I have a reputation for not being particularly quick in practice, although in the race I seem to get on with the programme quite well. "We knew we had to do something fairly dramatic, so we made some changes overnight". He looked suitably ignorant later when aaked what the changes had been. "They weren't very major, I don't know exactly what was done and I can't explain why they made such a difference. But they seem to have done the trick." At the post race press conference, Wattie also admitted that he didn't remember much about the epic charge which had taken him all the way from 15th position on the first lap of the first race to the top of the podium. "I remember I passed Eddie and Didier on one lap, and I think I must have gone past Niki too. Sometimes in a race you get a sort of motion going, a momentum that makes almost anything possible. And obviously I had it

He said that two factors had helped him to win. "One was the restart. I had made such a bad start in the first part that it made it easier to have a second go with fewer people in front of me on the grid.

'Then there were the tyres. I went for the slightly harder Michelin compound, just like I did in Belgium. It was on the advice of Michelin that I did it both times... so maybe I'll take their advice again. My choice was affected by the weather, too: it could have done anything, but I gambled on the temperature being slightly higher than it had been in qualifying. And it worked."

The worst moment for Watson had been Bruno Giacomelli's ill-advised attempt to re-pass at half distance. "He tried to come inside me at turn 4, braked too late and ran over my rear wheel. His car was damaged but mine survived. I just pressed on.

Inevitably, the local newsmen wanted to know about John's feelings now that he had a solid six point lead in the world championship (subject, of course, to the appeals currently being made against the Brazilian and Belgian results).

"I suppose I have to consider them (my championship chances) very seriously, and so does my team. I hope it's not too embarrassing for them, because I know that my team mate would like to win the championship -- and he didn't score any points this weekend. I'm just going to run the races as they come... but with only one third of the season complete it's much too early to talk about the championship.

Inevitably, though, the championship will occupy his thoughts more and more. Just as a driver gets into the momentum of which John talked here in Detroit, so his season gets into a pattern. And with two GP successes behind him, Watson has more outright victories behind him this year than any other driver. (Discounting, of course, Prost's "by default" win in Brazil.) Whether he likes it or not, he must now get into a "championship momentum" to carry him through to the end of the year.

For one driver that night, Watson's position at the top of the table caused some amusement. "You know", grinned Nelson Piquet, "when I took John's place in the Brabham team there was some bad feeling between us. I used to tell him that I would be quicker than he was in his McLaren, and I would always go to have some fun with him when I was quicker. After I had done that several times, John used to avoid me.

"Still, I like to see him doing so well here in Detroit. I think it's very amusing to see John - who's probably a 200,000 dollar a year driver -- winning. Especially when Niki Lauda, who must be getting one and a half million dollars, makes a mistake like the one he made today with Rosberg.

# EXTRA, EXTRA

# **NEW LEASE OF** LIFE FOR OLD JS 17

\_\_HE LIGIER team took just one of their new JS 19s to Detroit. After the Monegasque scrutineers had ordered the skirts behind the rear wheels to be cut, the drivers reckened that it had lost much of its advantage, so the race cars were left at home, and just one JS 19 made the trip to the States,

So Jacques Laffite and Eddie Cheever had to fall back on their old JS17s again. No development work has been undertaken on the order cars for some time, and to the drivers, they now mean a struggle to qualify, let alone race.

So two race JS17s were taken to Detroit, while JS19's problems were being solved. The Talbot men made their excuses in advance: they didn't expect much to go right for them in the States.

During Friday's unofficial session, the two old cars were 12th and 15th, Laffite quicker than Cheever. It was nothing to shout about, but certainly better than expected.

On Saturday morning, Eddie set ninth fastest time in the first qualifying session, while Jacwas 13th. This went virtually unnoticed in the panic of Motor City, but in more serene circumstances, people might have sat up and

Laffite didn't go out at all during the second qualifying session, held on a track more suited to the sailing race held earlier in the week. The track was slippery and there were lots of puddles. Jacques didn't want to risk his car. Eddie, however, went out to see how the car handled, and check out Michelin's wets. He covered 17 laps and set seventh fastest time. The drivers still weren't very optimistic for the race, but at least they knew that the Matra engine was tough, when the electrics worked correctly. That was proven at the Belgian Grand Prix. Any race which is mechanically demanding and tough on the drivers could turn to the advantage of the JS17 men.

And this was the way it turned out. But it wasn't simply by chance. At the start of the second heat, on lap seven, Eddie and Jacques were already in sixth and tenth respectively. Only Prost, Rosberg, Pironi and Giacomelli preceeded the American.

And when Prost was delayed, Rosberg contacted Lauda, Pironi was uninspired and Giacomelli retired, Eddie suddenly found himself

in second position on the 43rd of the 63 lapt At the end, he finished just 15 seconds behind At the end, no find the winner John Watson. It was an amazing result, and no one more surprised than the dr

"I certainly didn't expect to have a race like that. The car behaved amazingly well, Despire the 'extra' 45 kilos of the JS17, I was able to fight on equal terms with Lauda, Pironi, Giaco melli and Rosberg. All the same, it wasn't a race I enjoyed. It was one of the most exhus-

And what of Jacques? He should have finished third or fourth, because his old JS17 was just behind his teammate's on the 41st and 42nd laps. But three laps later, Pironi launched an attack, the Ferrari and Ligier made contact and the Ligier came off worse with a damaged nose section. The final laps in a noseless Ligier were tedious, but Jacques hung on to finish sixth.

But Eddie's six points and Jacques' one were unhoped for reward. And they come just one week before the Montreal race, where the JS17's performance in the wet last year put Ligier and Laffite in line for the final battle for the World Championship in the desert at Las





# **PANIC IN DETROIT**

tter chaos reigned in Detroit right up to the evening before raceday. Some said that it would continue right up the race, even beyond it, and some even thought that the Grand Prix was seriously threatened with cancellation even before race

And why this chaos ? Quite simply, the track hadn't been finished, and those bits that had, according to the organisers, been completed were subject to modifications demanded by the drivers, Derek Ongaro and Bernie Ecclestone. The track that was presented on Wednesday evening was totally unfit for Formula 1 cars. It appeared impossible to smooth out the bumps on the circuit, despite its recent resurfacing. And there were no less than 135 manhole covers on the track (our thanks to AFP's representative who carried out this tedious research during his morning's jogging), plus many other shortcomings, modifications tinged with amateurism which would have to be rethought as a whole.

Barriers were removed from certain areas, and strengthened in others. Concrete walls were added, taken away, or repositioned when their angle on the outside of a corner appeared to be potentially dangerous. The escape roads, most of which were ridiculously short, were lengthened where the surroundings allowed. Hundreds of tyres bound together were gradually added to those which had appeared to have found their way to their chosen spot by luck, although the more cynical suggested that they lay where they'd fallen from an aeroplane.

The organisers had their excuses in that they were complete novices at doing the job, and you can't improvise in making a circuit safe. Furthermore, their job was a lot more difficult than their colleagues' in Las Vegas because their track was dictated by the streets of a town. They didn't begin with a car park which was totally devoid of any natural obstacles or exterior demands. But their responsibility was compounded by at least one mistake. They felt themselves sufficiently able to do the job that they refused the experienced advice of Chris Pook, the man who took Formula 1 racing to the streets of Long Beach and made the Las Vegas event into such a commercial success. Both FISA and FOCA are also in the firing line. They accepted to go to Detroit without a single race having taken place on the circuit. There used to be a well-chosen rule which required a circuit to run at least one race on a circuit some time before it could run a Grand Prix. At Long Beach, Formula 5000 cars raced long before the Grand Prix was held there. In the cases of both Las Vegas and Detroit, that rule appears to have been ignored.

Of course, the answer to this is that a considerable investment in human, material and financial terms would necessitate the running of a relatively minor race - SuperVee or Atlantic - in the case of Detroit. The Detroit Renaissance Grand Prix cost four million dollars. What price a SuperVee race?

That problem exists, but perhaps the powers that be could bear it in mind next time they accept to race in the streets of New York, Chicago, Miami or Toronto or whichever race is coming next. The problem is very real, and it was only by the skin of its teeth that Detroit had its race at all.

Formula 1 had to try to maintain an image which at that time was scarcely flattering to the large number of spectators in the stands who weren't informed of the considerable problems and demands being made of the organisers. There was a whole 48 hours in which there were orders and counter-orders and considerable confusion, without entering into too much detail. During this time, from Thursday morning to Saturday morning, both of Thursday's unofficial sessions were cancelled, and on Friday, there was just one hour-long session starting at four in the afternoon for unofficial practice. On Saturday, there were two hour-long sessions, with an interval of four hours which was thought sufficient in the event of any serious mechanical breakage.

To add to the chaos, this second and often decisive session was virtually rendered useless by rain. This was an act of God, and not the organisers, the two having vastly differing powers, although the latter tried hard to be willing and co-operative throughout the troubled weekend.

Didier Braillon

PRACTICE

"What are we waiting for ?"

"We're waiting for the delay to end..." This contradictory and ironic joke was the most appreciated by the French journalists, because it reflected the pitious state in which Formula 1 found itself in Detroit. For hour after hour, almost day after day, everyone found themselves in a hopeless Catch 22 situation: the more work on the track that was done, the more had to be

The drivers inspected the track minutely. The organisers, no doubt hoping



to veil their initial mistake and also eager to recoup their investment, accepted every criticism and every demand for more track improvements with utmost willingness, Team managers met like conspirators. Mechanics waited, as they have so many times during the past two troubled years, and journalists rivalled one another with their gloomy, analytical, "know-it-all" post mortems.

Thursday should have been the day for the first unofficial practice. Instead, it was filled with just another round of the numerous shop-filled alleys in the Renaissance Center. Friday was heelkicking day, until mid afternoon. At five to four, having returned from their latest inspection round, Lauda, Pironi, Stewart and later Ecclestone gave the green light for practice to get underway. The large crowd - entry was free that day - who had begun to lose patience and their legendary polite American manners, would soon be satisfied



As the cars passed the pits for the first time, Cheever's Ligier took off over a joint between two different levels of road surface, while Surer's Arrows was suddenly free-wheeling when it jumped out of gear. It didn't look good, even if the surface difference was only on the right half of the track!

The cars jumped from manhole cover to manhole cover, brushing the concrete walls, and sometimes chipping away lumps from the walls. Sometimes they would stall in ultra-slow corners, often having to make use of the electric fuel pump to get them going again. Others, like Giacomelli, would find themselves stuck down an escape road which was too narrow for manoeuvering.

or sending up marvellous light shows of sparks as the cars bottomed on the concrete surface in the tunnel. But slowly, the drivers learned the way round. Arnoux was the first to have a go. The result? A spin, one wheel and the rear left rear suspension broken plus the rear part of the left side pod damaged. The session was stopped to retrieve the Renault. Jarier was already using his spare. His Osella's left rear suspension had just collapsed from the strain of crossing the unequal surfaces. Everyone had their problems, but poor Lammers suffered more than others. His accelerator iammed in the Cobo Hall area and he slammed into a wall. The Theodore's front suspension was bent.



but worse was that the steering wheel spun round, catching and breaking the driver's thumb. As the Tolemans hadn't made it to Detroit (did they know something the rest didn't ?), there would only be 28 cars in official practice the following day.

De Cesaris' Alfa Romeo set the fastest time, at less than an average speed of 80 mph. He preceded Alboreto, Rosberg and de Angelis. Prost, whose right foot was still painful from his Monaco accident and who had trouble braking really hard, was seventh.

Everyone went away grumbling, having asked for more tyres to be placed on the outside of corners. The first official, timed session took place the next day at 10 in the morning. For many, it would be a trip into the unknown: the usual two sets of qualifiers with which to do one's best. Inside them, the brake discs could be glowing bright red.



Spins, straight-ons and stalls continued to colour this session which was stopped when Serra and Watson made contact, the McLaren suffering a damaged rear wing and broken front right suspension. All the same, it must be said that the battle for pole was fascinating on this tight circuit. And it was a surprise to find that Prost was the fastest. His foot was hurting him much less and he set a time of 1'48"527 for pole position at an average of 82.78 mph. De Cesaris came next in the Alfa, followed by Rosberg and Pironi, the latter



proving that turbo engines are now at home on any kind of circuit.

The most surprising performance was that of Winkelhock, who appeared to be well at home on the bumps and not the least daunted by a possible collision with one of the crude concrete walls. Manfred proved to be perfectly happy with the rather more scenic circuit of Monaco, but at Detroit, his reward was a superb fifth fastest time. You can read more of Manfred in the Zandvoort edition of GPI

The unlucky ones included Arnoux, who found that his repaired car bounced over the rough parts of the circuit. Then he was held up on his first set of qualifiers and later suffered gearbox trouble. Salazar never used his second set of qualifiers as he'd stalled out on the track, and it took a good ten minutes before marshals would give him a good enough push to get him restarted. But Piquet was the unluckiest. His Brabham's gearbox broke from the powerful punches it was getting from BMW's turbo engine. Nelson at that stage was slowest of all, behind De Villota's March.

But Piquet's true fate wasn't learned until the heavens opened at midday, and when the second timed session began at 3.15 pm, it was still raining There would be virtually no chance him to qualify. He scarcely eve

attempted the honeless task. Some like Giacomelli, Laffite, Patrese, Arnoux and de Villota, didn't bother at all.

A number of other drivers went out to test their rain tyres, and to see where the puddles might form. Niki Lauda set the fastest time of 2'09'121, heading de Cesaris who set a convincing 2'10"770 in four laps before spinning in the tunnel and hitting a wall sufficiently hard to give Gerard Ducarouge and his men a long night's work. Winkelhock set third fastest time, confirming Michelin's particular qualities in

So Prost would start from pole, although his foot could give him problems over 70 laps of this tough circuit.



But he remained confident: "Tight turns aren't particularly favourable to turbo engines, but our engine is fantastic. If it hadn't rained in the second session, I'm sure that I could have improved by a second. Having said that, the circuit is totally uninteresting; all you can see is bumps, corners and walls... And what if it should rain for the race? "I would prefer it not to, even though providing one made an excellent start, one would have a fifty per cent chance of winning. It's almost impossible to overtake here, worse even than Monaco, despite the straights being longer. When you're right behind another driver, it's very difficult to outbrake him into a curve or one of the right angled corners." And there are no less than ten right-angled corners!

Didier Braillon



here was almost a sense of relief as the grid lined up for the start on time. After the anguish of the previous few days, we were ready to go racing. But there were two cars less on the grid as they lined up. Jean-Pierre Jarier had lost an engine in the morning warm-up and Riccardo Paletti had lost a wheel, causing consternation in the Osella camp. Jarier took over Paletti's car only get a puncture as he went out for the start, so at the very last minute he switched to the team's third car, but he was too late to join the grid and had to start from the pit lane.

The light flicked to red, revs rose to a roar and the race was on. Rosberg almost snatched the lead from Prost until the Renault's turbo chimed in and Prost sprinted down to the first turn at the head of the field.

Everyone got through safely, but by the end of the first lap we had already lost Baldi who punted Boesel's March up the back at the hairpin and ripped a wheel off his Arrows. Boesel limped around to retire with damaged rear suspension in the pits. Two more down. Winkelhock's elevated grid position had him all fired up to do greater things in the race, but it ended on the second lap when he hit the wall

Next time around, Andrea de Cesaris, who had slipped by Rosberg to take second place, rolled to a halt with a broken driveshaft joint after he too had brushed a wall, leaving Rosberg out front chasing Prost. The rest of the field were already forming a traffic jam behind Pironi's Ferrari. Jarier's luck ran out yet. again, this time when the electrics went dead. Alboreto was another caller to the pits, requiring a new steering rod after banging wheels with Daly in the heat of the first lap.

Things were certainly happening fast, but on lap seven the noise and excitement suddenly died away as the flag came after an incident at turn three.

The cars trickled back to the grid area where we learned that de Angelis and Guerrero had made contact, while Riccardo Patrese had also slid off in sympathy. A minor rear brake duct fire on the Brabham had been liberally doused with powder by a marshal, adding to the

The stricken cars were soon cleared away, but it was over an hour before we were ready to go racing again, with somewhat more foreboding than the first time around. What if there should be another minor shunt? Surely there would not be more over-reaction as on this first occasion? If there was, this race could run and run..

Happily, it was not the case. Prost took up from where he left off, as did Rosberg, who patiently waited for Prost's second set of tyres to give problems in the hope of finding a way past. Keke waited for 23 laps, but in the end it was the fuel metering unit which gave him the opportunity to slip past the slowing Renault. But tenlaps later, it was Belgium all over again, Keke struggled to protect his lead from a



1 Prost took off into the lead at the start, while behind him, de Cesaris in second place held off Rosberg. But the Italian's transmission broke shortly afterwards. (Photo: B. Asset).



3 Disaster at the start of the seventh lap at the long left after the pits: Guerrero, de Angelis and Patrese tangled, and the Brabham caught fire... (Photo: B.



2 Arnoux made a superb start from the 8th row, and on lap three, overtook Lauda and held seventh place. (Photo-



4 ... while the Ensign remained on the track. It was partially blocked, and the organisers, alarmed by the smoke, promptly stopped the race. (Photo: B.



6 Teammates Henton and Alboreto tall gled on the eleventh lap. Brian conti nued with a damaged rear wing support. (Photo: B. Asset).



5 An hour later, the race was restarted,

cars having formed up on the grid as

they finished lap six. Prost again made a

7 Prost - Rosberg was the order until the 23rd lap, but the gap between them had been rapidly disappearing, as the Frenchman had gradually lost the use of first gear. (Photo: B. Asset).



8 Keke overtook the stricken Prost 8 steadily pulled away into the lead. by little, the Renault dropped back. (Photo: B. Asset).



9 ... and soon fell in the grip of Pironi's Ferrari. On the 30th lap. Prost pitted for fresh tyres and plummetted down the order. (Photo: First Line).



11 Pironi had been second behind Rosberg for six laps when a spin dropped him back to fifth place. (Photo: DPPI).

13 Mansell drove a steady race and held

seventh place, only to retire with a

blown engine on lap 40. Teammate de

Angelis had earlier dropped out with

15 Eddie Cheever moved into second

place on the 43rd lap having had an

excellent race in the old Ligier.

gearbox trouble. (Photo : B. Asset).



10 Rosberg easily led the race from the 25th lap, but further back, teammate Daly wasn't figuring strongly, being stuck between Mansell and Laffite. (Photo: First Line).



12 After Pironi's spin, Lauda inherited second place, only to retire on lap 40. (Photo: B. Asset).



14 Watson was only 13th at the second start, but steadily gained places at the expense of Laffite, Lauda, Pironi and Cheever. On lap 42, he overtook Rosberg and pulled away into the lead.



16 Watson, Cheever and Pironi wrestle with the champagne on a rostrum that will certainly look familiar to you. (Photo: DPPI).

determined Watson, who had fought through the field like a young charger, his Michelins outpacing the Goodyears. By lap 42, it was all over for Rosberg as Watson cruised ahead. But when Lauda tried the same thing, over anxious to try and keep up with his flying teammate, it was almost disaster. "I made a silly mistake, I should have waited", said Niki, who tried to squeeze between Rosberg and the wall into the first turn. He bounced off the Williams which bent his suspension sufficiently to force him to retire. Rosberg survived, and so had Watson in a similar incident with Giacomelli when the Alfa was overtaken by the McLaren. They were still dropping out like flies. De Angelis had gone out earlier with a broken gearbox, Salazar crashed the second ATS, while Alboreto tried to outbrake Daly into the chicane and came off worst: nose first into the tyres. Watson ran fast and free to the finish.

Cheever finally got by Pironi to take second place while Laffite lost his nose section and front wing when he succeded in doing the same thing. Only the Matra engine then went off and Laffite dropped back to sixth, a lap down by the time the flag came out after two hours and 62 laps of racing. Daly overtook Rosberg, the Finn having added the loss of third gear to his braking and handling problems. But Keke's first part advantage was enough to give him fourth ahead of Daly's fifth place. There was a huge sigh of relief all round when the chequered flag finally came out. Grand Prix racing is possible in downtown Detroit, but it had been hard work for all concerned.

The final count? Twelve running out of 25. Mansell lost his engine and seventh place when behind Daly. Mass came in seventh despite a broken exhaust header. Surer was eighth, also a lap down, while two laps down after a stop to replace a broken rear wing was Henton's Tyrrell. Both Renaults finished strongly, Prost taking the lap record, but too far down to score points. Arnoux was three laps behind after a pit stop, and Prost was eight laps behind after a similar halt. Serra was the only other finisher, in 11th place, five laps ahead of Prost.

J.H.



# Detroit statistics

# DETROIT GRAND PRIX Date : June 6: 1982 Circuit: Derroit in 1982 Circuit: Derroit in 1982 Circuit in 1984 in 25 miles Race distance: 22 lags: 155 miles Weather: host and peary Attendance: 100.000

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# PROVISIONAL DRIVERS' WORLD CHAMPIONSHIP STANDINGS

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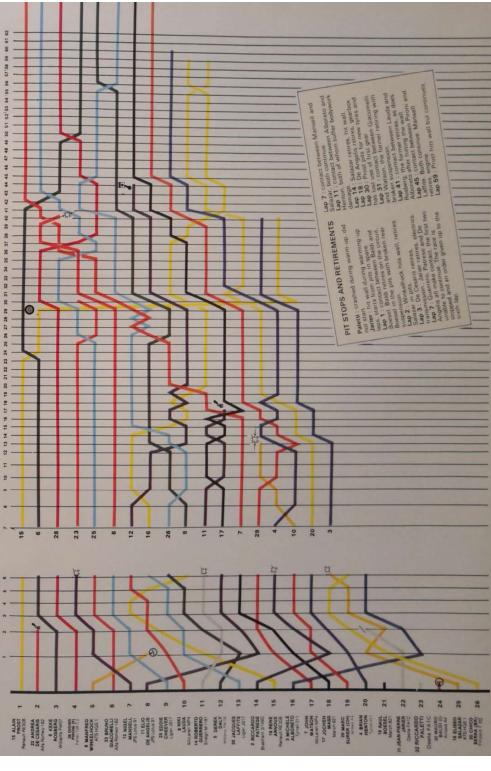
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giro-Runde um runde-Tour par tour-Vuelta a vuelta -Giro per nde-Lap by lap



# GO BACK TO THE SUMMER OF 1967

Detroit was on fire. Detroit was knows all over America as the 'Murder Capital'. Fifteen years later, there is a Grand Prix through the downtown streets. It is a place where the old survi ves along with the new: old habits, bad habits, good times, bad ves along with the heart special partial special partial parti streets just blocks from the four-year old Renaissance Center Detroit's answer to downtown blight.

by Keith Botsford

OW ironical that cars should be brought in in yet another attempt to save Motor City, in deepest depression, from annihilation

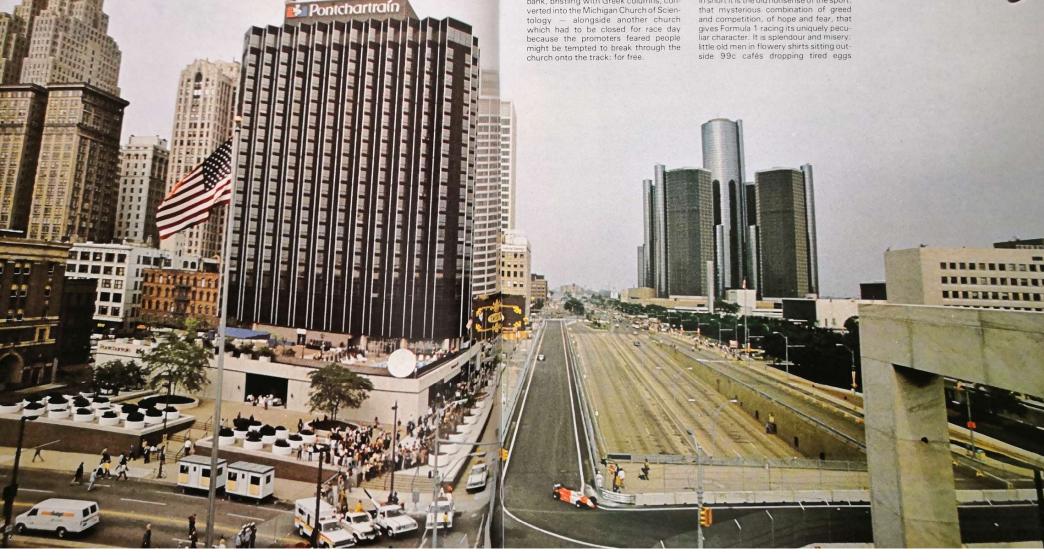
Detroit is many cities. It is: Henry Ford II (known as 'Deuce' to his friends) giving an evening-of-race party and modestly announcing "It's the same sort of thing that Prince Rainier and Princess Grace do at the Palace in Monaco," and it is the jobless and the ruined planning a protest rally the same day.

It is seeing a marble-faced downtown bank, bristling with Greek columns, converted into the Michigan Church of Scientology - alongside another church which had to be closed for race day might be tempted to break through the church onto the track: for free

It is the local businessman who says "Nothing could really hurt business downtown. It's really the pits." And it is Robert McCabe, the suave urbanologist and guru of the Detroit Grand Prix telling all comers it will bring in \$4 million in busi-

It is the city of Detroit putting out \$800,000 to repave streets for the race when there are more potholes than people in the rest of Detroit and the Michigan legislature passing a bill to make sure that Niki, Alain, Nelson and company don't get speeding tickets.

In short it is the old nonsense of the sport. that mysterious combination of greed and competition, of hope and fear, that liar character. It is splendour and misery: little old men in flowery shirts sitting out-



through their mechanical choppers while others sit in luxury 70 floors up quaffing vintage wine.

It's America, it's Mammon. They may not understand the sport, but they understand money. Mayor Coleman Young, a black in a city which is heavily black, puts down Astroturf on top of the Veteran's Memorial Building so that his guests can watch the race in comfort. And how do you refer to 1967? Well, you tell the world that it wasn't a good thing, because it "discouraged potential inves-

Of course, you dress up the facts and the contradictions in the language of salesmanship. A group called the Teen Beat modern morality begins with a pun keeps Detroit clean. You become a 'booster' and when people criticize the idea of a Grand Prix through their streets you accuse them of 'carping', of running down their own city, as though it were a nation or a race. Instead of which, Detroit is a racial conglomerate, with guarters for Greeks and blacks, hairdressers who are Welsh, taxi drivers from obscure

casual conversation among Detroit's power-brokers: Robert McCabe who orchestrated the Renaissance, Bunkie Knudsen, an ex-president of the Ford Motor Company, Max Fisher, Henry Ford Il and some 25 others who were recruited and tapped for money. If you have a Renaissance, they thought, why not mark it with a race?

The first trace of it you find is in May

Within a few weeks, it is off. FOCA wants over \$2 million, Detroit can only afford half that. Then it's back on again, when Henry Ford II steps in. The council nods its agreement, the State votes year (both the Mayor and the Governor are part of the Renaissance and Detroit's old and powerful newspaper, the Free Press, is also an investor). TV is signed on, live, wow! FISA gives its blessing, there is a renaissance in smiles.

Besides which, the city has baseball, bas-

ketball, hockey and appalling winters. why not Formula 1?



Polish and Moravian villages. They are all supposed to pull together and support the town they have, and support it through a Grand Prix

But then this Grand Prix is itself a byproduct of commerce. It takes place round a mammoth architectural folly known as the Renaissance Center because it is Renaissance that Detroit is selling. This huge bundle of upright glass cigars is one of the vast gestures that the insecure throw up to conceal the whistling in the dark. A fort of Versailles built on the eve of Revolution.

Why around the Renaissance Center? Because it's part of the 'image' the city would like to project: that the heart is sound and the folk proud. By appearing, perforce, as a constant on televison screens, the Renaissance Center may achieve something of the recognition afforded the Eiffel Tower.

Or it may not.

For this being part of showbiz, the whole idea starts, as per movie script, as a But underneath all the riches, there is deep unease. The Renaissance Center, pride of the city, has just been sold at a loss to a Chicago accountant and lawyer aged just 39. Apparently, the loss made by Detroit's symbol of pride can be converted into profit if you know accoun-

But the move still shakes Detroit, 50 partners bought into the Renaissance. Including the Ford Motor Co, through its Land Development company. But the losses amounted to \$40 million in 1981 and the car business is sick. Or as it's put in Detroit, the sale "reflects the cash flow squeeze of the whole automobile

Amen to that.

Maybe the pattern of the sport is something like the pattern of the city: slightly gaudy, a confusion of rich and poor, a blend of success and failure, a hightech monster grafted onto primitive beginnings, a media event.

The Family seems to feel quite at home.

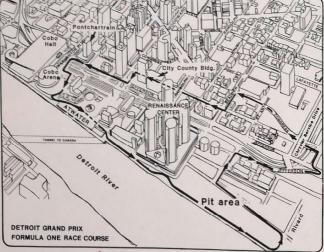


# DETROIT'S CONCRETE JUNGLE

OTOR City, Detroit is the fifth largest city in the United States and lies in the heart of the Great Lakes—Ontario, Erie, Huron, Michigan and Superior. Alternately very cold (two meters of snow last Christmas) and very hot, Detroit looks across the Detroit River to Canada. A fifty-year old tunnel joins Detroit to Windsor in Canada. The fourth 'street' circuit on the Formula 1 calendar, Detroit's track runs right

months ago, but resurfacing had to wait until April as four inches of snow still fell on April 6th! The circuit is 2.5 miles (4,022 km) long and has 20 curves, half of them being right angles formed by street intersections. Concrete blocks, each 30" high and 12" long protect the circuit over its entire length. Each weighs four tons.

There are 50,000 grandstand seats, most of them near the pits and the start-finish line and along the Detroit River,



Map courtesy of The Detroit News

through the downtown area and along the river and around the huge Renaissance Center, built five years ago at a cost of nearly \$4400 million. Five huge towers dominate the landscape, including the Westin Hotel, whose 1500 rooms are almost wholly occupied by the Grand Prix Family.

The idea of holding a Grand Prix was first mooted a bare 18 months ago by the same group who created the Renaissance Center to revitalize Detroit's decaying downtown area.

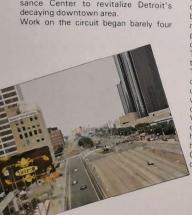
with another section near Cobo Hall where a long right-hand curve drops beneath a bridge.

Walking the track on the eve of practice, most drivers agreed that it would be a difficult and possibly hazardous circuit, particularly the Woodbridge straight, the hairpin at Jefferson Avenue, bumpy and heavily repaired, around Cobo Hall, where the track boasts a level-crossing and throughout the tunnel, where the cement surface, old and cracked, has not been resurfaced. Also criticized was the narrow funnel at the chicane before the pits and the chicane itself, which leads directly into the pit-lane.

The escape-lines were generally thought to be short, in some places absurdly so. The asphalt laid down is quite thin and it is quite possible that the surface will break up. There are also a large number of uneven manholes which could damage the cars' skirts.

Visibility is almost non-existant for most of the right-hand curves and poor throughout. Drivers admitted that they would have to place their faith in the Sports Car Club of America marshalls in case of accidents on the track.

Didier Braillon

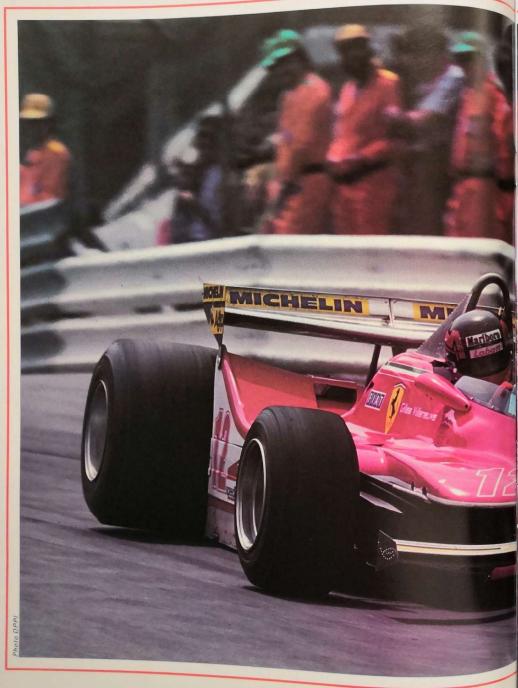


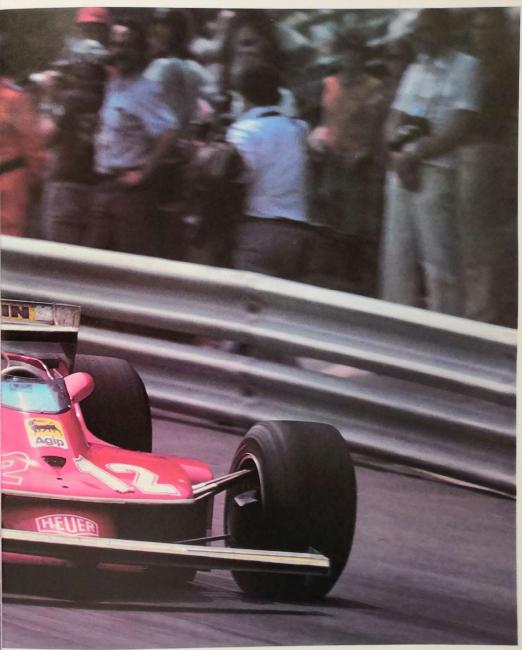


# Postcard from Détroit









# THE PASSION ACCORDING TO SAINT GILLES

YING young allows men, whose special talents raise them above theis peers, to achieve immortality."

The formula is a cold one; it might even seem linguistically inaccurate, given that the basic principle of immortality is never to allow death its prey... But mankind's recent history is replete with examples which deny this principle and a quick overview of such differing domains as mythology, music, the seventh art or politics reveal the inherent contradiction: lcarus, Wolfgang Amadeus Mozart, Gérard Philippe and John Fitzgerald Kennedy all went in their prime; their contemporaries agreed that the loss was irreperable, for none had the opportunity to fulfill himself completely.

True, but it is exactly that which makes them immortal. Great or unimportant, men are more or less equal and a normal life-span sometimes deceives us about those whom we consider 'supermen'. Given enough decades, they all fall to error and, however trifling the error, their reputation suffers.

Gilles Villeneuve was and always will be one of those supermen, for in the sport he practiced as a Grand Prix driver, to regress or just stagnate means to dwindle in esteem. Such a falling-off never occurred with Gilles, for the simple reason that he had not yet reached the peak of his art.

That art, contrary to that of a Niki Lauda or a Carlos Reutemann, did not consist in driving while keeping an eye cocked on the number of points there for the winning. Gilles was no calculator. His speciality, which put him above other drivers in Formula 1, was to draw from his car, however competitive or uncompetitive it might be, and whatever the circumstances, the very best it could offer.

He was called the Tight Rope Walker because he imposed such a rhythm on his Ferrari that a mistake of millimeters could cost him his life. For many drivers, taking a car to its limits simply means keeping it on the track. Such was not the case with Gilles. He would push those limits to such a point that the track suddenly seemed singularly narrow, barely more imposing than the width of his own car. When the laws of physics allowed a speck of sand into those carefully oiled wheels, the penalty was instantaneous: the gleaming Ferrari flew off the track with the utmost violence. Instances are not wanting, but Gilles had got away with it over and over again, convincing us all that he was truly immortal.

There was the Japanese Grand Prix of 1977 when his Ferrari defied the laws of gravity or the French Grand Prix in 1979 where his epic duel with René Arnoux will remain one of the great moments of the modern sport, the Dutch Grand Prix of 1980 when his desire to win was so great he made it back to the pits on three wheels after a puncture had torn away half his rear suspension, or the Italian Grand Prix that same year when his car hit the guard rail at 220 kph, and the terrifying ballet of Canada later that year

YING young allows men, whose special talents when he imposed his will despite a ripped and twisted front wing which denied him any view of the road.

Villeneuve 'miracles' are not lacking, but I prefer to think on those which enabled him to win. Of these, his wins at Monrteal in 1978 and at Kyalami, Long Beach and Watkins Glen in 1979 were fine enough, but those at Monaco and Jarama in 1981 were truly sublime. To take a turbo to victory on the sinuous Monaco circuit seemed impossible: Gil-

les did it. Born at Chambly, brought up from the beginning in the little village of Berthier, some thirty kilometers from Montreal, Gilles and his vounger brother Jacques lived with a single passion: a passion for speed. Everything and anything served that one purpose, to impose his own law on whatever means of locomotion were at hand, whether it was motorcy-



cles, go-karts or snowmobiles. One of Gilles' earliest cars was a wierd Czech Skoda with a broken starter whose main characteristics were a rear-mounted engine and a heavy inward camber on its drive-wheels. The car was the darling of Berthier and every evening a crowd gathered in a little town called Saint-Thomas, fortunately possessed of a long and difficult curve. Whatever the weather, a score of bystanders awaited Gilles' arrival. The Skoda would arrive like a strom and hit the curve; aided by its camber, it would climb up on two wheels and then, ineluctably, come back down on all four. Gilles would not haveve been afraid if it when he came into the care into the

When he came into Formula 1, Ferrari, with all its prestige, gave him the means to satisfy his passion and he quickly acquired all the gaudiest toys a man could imagine: a helicopter, an off-road car and a boat. None of them were ordinary toys; each was the nec plus ultra of its kind.

His first helicopter was leased from Walter Wolf, which allowed Gilles to gain experience before, very recently, purchasing his own, a splendid Agusta with a retractable undercarriage, certainly the most elaborate of modern helicopters. For Gilles, flying a helicopter was no different than driving a Ferrari to its limit in Formula 1; both were games, a

defiance of natural laws. Again, stories are not lacking, though the truth is hard to perceive given the Italian press's desire to deify the hero of 'their' team. He is supposed to have skimmed the tops of trees when landing in the Alps in a blinding snowstorm, to have been pursued one day by the Italian Air Force and to have dropped down in a crowded parking lot one day to ask the way. A lot more was said, but Gilles was discreet about his flying. That was part of his pri-

vate life and no one could enter. He was right.

The helicopter was useful for Gilles, for he often left his house Monaco, which no journalist ever penetrated, for a short hop to the test track at Fiorano. When he was asked to compare the relative advantage of traveling from Monaco to Fiorano by road or by air, he replied that it was very much the same.

From which all deduced that when his Ferrari went flat out on the *autostradas* of Italy, little Fiats were wise to move over lest they be scattered in the air like so many leaves...

His four-wheel drive car had a very special significance for Gilles. It was a magnificent Ford Bronco, a genuine prototype which he had built almost entirely with his own hands with to special parts. Its destininy was not merely to get him to places no ordinary driver could reach; it was there for real mountain climbing! His great friend Patrick Tambay said that Gilles in that car was an unforgettable experience: the Bronco would mount every imaginable rock formation, winched and roped in all directions. It, too, foreswore the laws of gravity. The winch-man was inevitably Patrick Tambay, for Villeneuve, the young man with the huge talent, utterly confident in his own abilities, refused to let anyone else ever touch the wheel... even another Grand Prix driver.

The boat was one of Gilles' last great passions and for the last year he elither used it or worked on it whenever he had a free moment. Anchored in Monaco harbour, it was one of the most extravagent ever, its two 8-cylinder motors providing 1500 horspower: these led into an elaborate set of

megaphone-like exhaust pipes which produced a sound fit to charm the ear of even the most exacting music-lover. Gilles used to say that finishing second or third in a race held no interest for him. He put his principles to the test, at the risk of losing all, even his points in the world championship. His was the right way of seeing things: on the one hand, he was utterly confident of his abilities and maintained his passion for winning; on the other he was clearly distinguished from all other drivers in the eyes of spectators around the world. For some six years Grands Prix had become events at which Gilles appeared... and others.

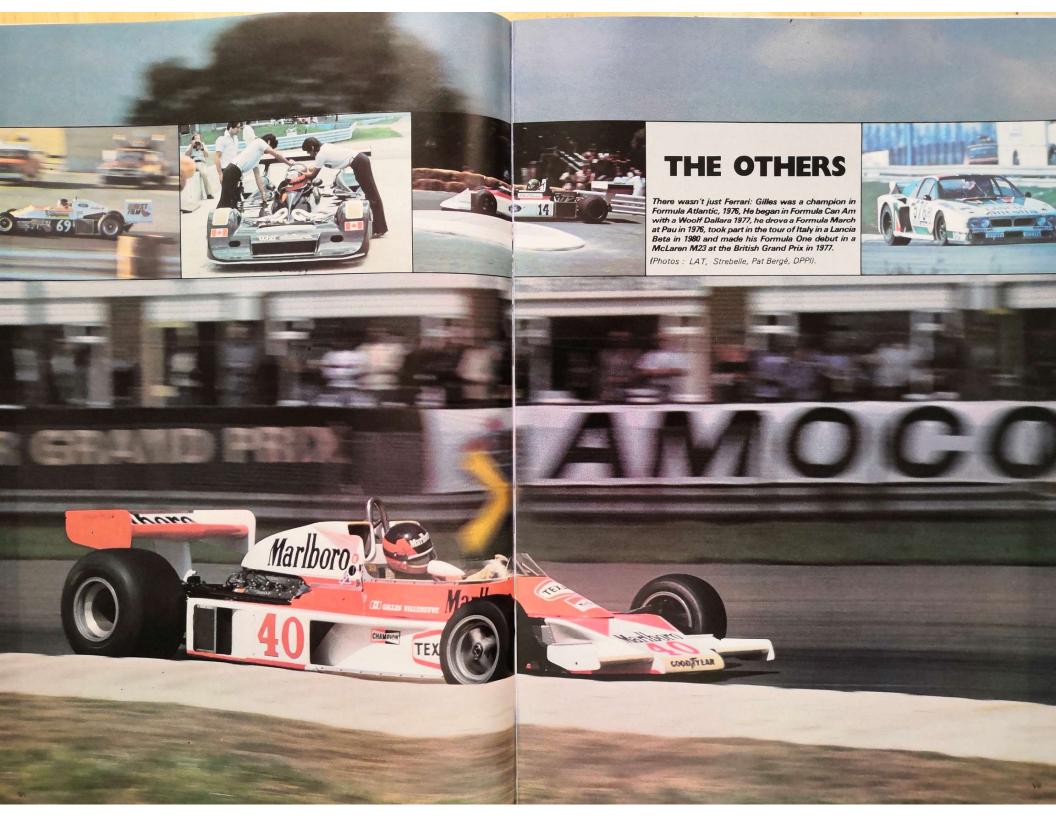
A good part of the sport's spectators travelled afar to admire him. He was a living god in his native Quebec, a superman for the Italians who found in him the panache and bravado of the immortal Tazio Nuvolari, and the subject of admiration throughout the world. To catch him for even a few brief seconds surpassing his own potential and that of his Ferrari was enough to make one forget one's troubles and give one renewed faith in the future of man. The one unanswerable question is what his future might have been. Would he have left Ferrari, which had given him the opportunity to perform his extraordinary feats but had likewise often deprived him of equally spectacular results by providing him with relatively uncompetitive cars and turbo-charged engines of an extreme fragility?

Probably, for from the beginning of this year Gilles was considering certain projects which, had they come about, would have made him even more of an immortal figure in the world of racing.

The last thing that should be said in this all-too-brief homage to Gilles Villeneuve - limited anyway by lanquage, which does not allow one to express admiration fully - refers to an apparently innoccuous fact that only a very few people in Quebec knew before the tragedy of May 8th, 1982. For though Gilles was indeed born on January 18th at Chambly as he said when he made his Formula 1 debut, it was not in 1952 but in 1950. When he first took the wheel of a Formula 1 car at Silverstone on July 16th, 1977, he was in fact 27 years old. No one ever knew the truth, not even Ferrari, but Gilles' justification for his rejuvenation was as follows: that in Formula 1, two years more are a handicap to the constructors, who greatly prefer a young hopeful to an older driver. True, But it was also unnecessary to use this stratagem to seduce the constructors. The latter prefer talent to age, and there is no doubt that Gilles had that, perhaps more than any other driver.

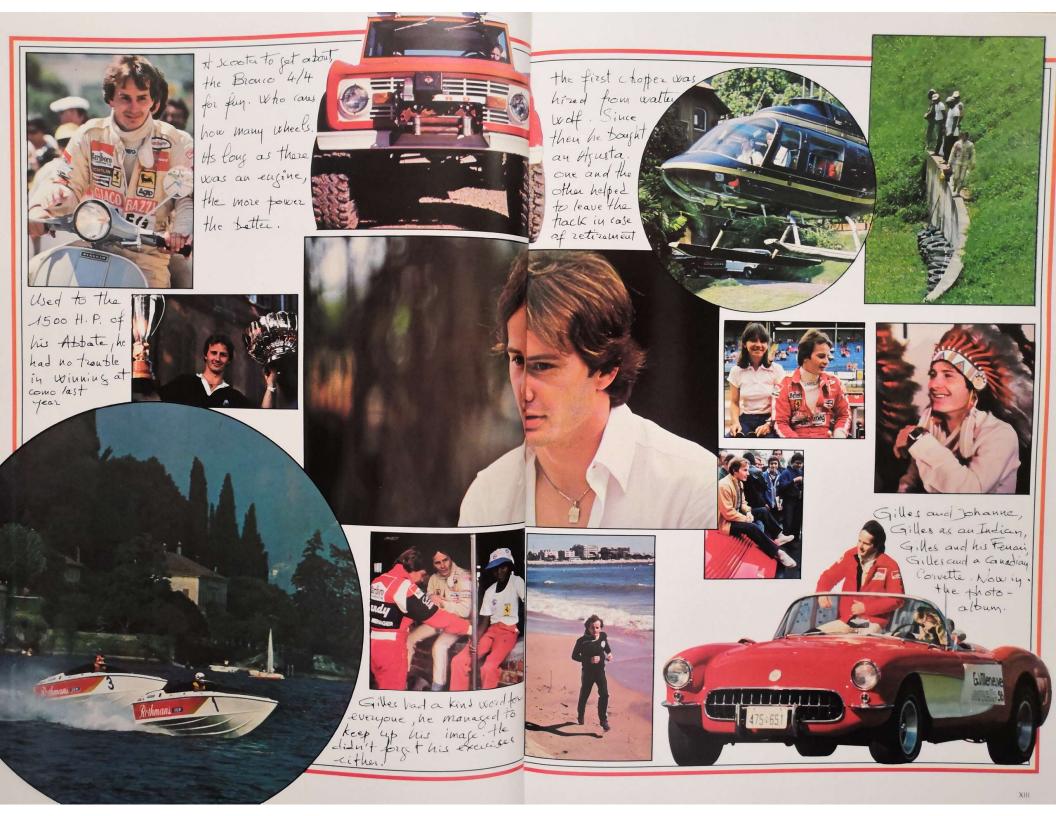
It is thanks to that talent and to the generous manner in which he displayed it for all to see that he will always be immortal: a fit companion to learns, Mozart, Gerard Philippe and J.F. Kennedy and to all those who throughout the centuries have given men something to look up to.

Didier Braillon









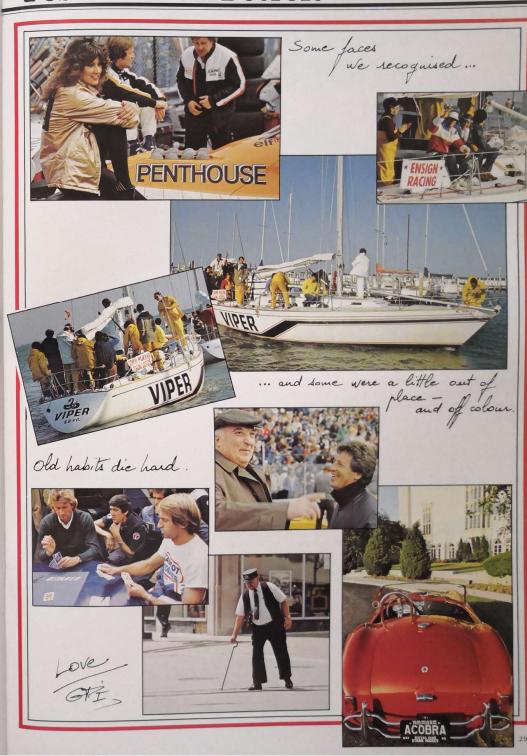
# Gilles Villeneuve's 67 Grands Prix

١	Date	Circuit	Car	Grid	Race result
١	10 1.177	Cilcinations	McLaren M23	90	11th
ı	16 Jul 77 9 Oct 77	Silverstone Mosport	Ferrari 312T2	17°	12th
١	23 Oct 77	Mont Fuji	Ferrari 312T2	20*	Ret. lap 5, collision
١				STAN STAN	Peterson 8th
ı	15 Jan 78	Buenos Aires	Ferrari 312T2	7° 6°	Ret. lap 35, accident
ı	29 Jan 78	Rio	Ferrari 312T2 Ferrari 312T2	8.	AB/55, engine
	4 Mar 78 2 Apr 78	Kyalami Long Beach	Ferrari 312T3	2*	Ret. lap 38, collision
١	2 Apr 70	Long Deach	Tollandicie		Regazzoni
1	7 May 78	Monaco	Ferrari 312T3	8.	Ret. lap 62, accident
	21 May 78	Zolder	Ferrari 312T3	4.	4th 10th
١	4 Jun 78	Jarama	Ferrari 312T3	5° 5°	10th
1	17 Jun 78	Anderstorp	Ferrari 312T3 Ferrari 312T3	70	9th
1	2 Jul 78 16 Jul 78	Paul Ricard Brands Hatch	Ferrari 312T3	90	12th
J	30 Jul 78	Hockenheim	Ferrari 312T3	13*	Ret. lap 19, transmission
ı	13 Aug 78	Zeltweg	Ferrari 312T3	15°	3rd
ı	27 Aug 78	Zandvoort	Ferrari 312T3	5*	6th
ı	10 Sept 78	Monza	Ferrari 312T3	2° 4°	7th (1 minute penalty) Ret. lap 23, engine
ı	1 Oct 78 8 Oct 78	Watkins Glen Montréal	Ferrari 312T3 Ferrari 312T3	30	1st
ı	8 Uct /8 21 Jan 79	Buenos-Aires	Ferrari 312T3	10*	12th
ı	4 Feb 79	Interlagos	Ferrari 312T4	5.	5th
ı	3 Mar 79	Kyalami	Ferrari 312T4	3.	1st
ı	8 Apr 79	Long Beach	Ferrari 312T4	100	1st
ı	29 Apr 79	Jarama	Ferrari 312T4	3.	7th
ı	13 May 79	Zolder	Ferrari 312T4 Ferrari 312T4	6° 2°	7th
ı	27 May 79 1 Jul 79	Monaco Dijon	Ferrari 312T4	3.	Ret. lap 54, transmission 2nd
ı	14 Jul 79	Silverstone	Ferrari 312T4	13°	Ret. lap 63, fuel supply
ı	29 Jul 79	Hockenheim	Ferrari 312T4	9*	8th
ı	12 Aug 79	Zeltweg	Ferrari 312T4	5°	2nd
ı	26 Aug 79	Zandvoort	Ferrari 312T4	6.	Ret. lap 49, accident
1	9 Sept 79 30 Sept 79	Monza Montréal	Ferrari 312T4 Ferrari 312T4	5° 2°	2nd 2nd
ı	7 Oct 79	Watkins Glen	Ferrari 312T4	30	1st
ı	13 Jan 80	Buenos Aires	Ferrari 312T5	8.	Ret. lap 36, accident
ı	27 Jan 80	Interlagos	Ferrari 312T5	3•	16th
ı	1 Mar 80	Kyalami	Ferrari 312T5	10°	Ret. lap 31, transmission
ı	30 Mar 80 4 May 80	Long Beach Zolder	Ferrari 312T5	10*	Ret. lap 46, transmission
ı	18 May 80	Monaco	Ferrari 312T5 Ferrari 312T5	12°	6th 5th
l	29 Jun 80	Paul Ricard	Ferrari 312T5	17*	8th
ı	13 Jul 80	Brands Hatch	Ferrari 312T5	19*	Ret. lap 35, electrics
۱	10 Aug 80	Hockenheim	Ferrari 312T5	16°	6th
ı	17 Aug 80	Zeltweg	Ferrari 312T5	15*	8°th
ı	31 Aug 80 14 Sept 80	Zandvoort Imola	Ferrari 312T5	7°	7th
	28 Sept 80	Montréal	Ferrari 312T5 Ferrari 312T5	8°	Ret. lap 5, accident
ı	5 Oct 80	Watkins Glen	Ferrari 312T5	180	5th Ret. lap 56, accident
ı	15 Mar 81	Long Beach	Ferrari 126C	5.	Ret. lap 18, transmission
ı	29 Mar 81	Rio	Ferrari 126C	7.	Ret. lap 26, engine
ı	12 Apr 81 3 May 81	Buenos Aires Imola	Ferrari 126C	7°	Ret. lap 40, transmission
ı	17 May 81	Zolder	Ferrari 126C Ferrari 126C	100	/th
	31 May 81	Monaco	Ferrari 126C	7° 2°	4th 1st
	21 Jun 81	Jarama	Ferrari 126C	70	1st
	5 Jul 81	Dijon	Ferrari 126C	110	Ret. lap 41, fuel supply
	18 Jul 81	Silverstone	Ferrari 126C	8.	Ret. lap 5, collision Jones
	2 Aug 81 16 Aug 81	Hockenheim Zeltweg	Ferrari 126C	8•	luth
	30 Aug 81	Zandvoort	Ferrari 126C Ferrari 126C	30	Ret. lap 12, accident
	13 Sept 81	Monza	Ferrari 126C	16° 9°	Ret. lap 1, accident
	27 Sept 81	Montréal	Ferrari 126C	110	Ret. lap 6, engine 3rd
	17 Oct 81	Las Vegas	Ferrari 126C	3.	Ret. lap 23, fuel supply
	23 Jan 82	Kyalami	Ferrari 126C2	3•	Ret. lap 6, engine
	21 Mar 82 4 Apr 82	Rio Long Beach	Ferrari 126C2	20	Het. lap 21, accident
	25 Apr 82	Imola	Ferrari 126C2 Ferrari 126C2	70	3rd (disqualified)
			, 311ari 120CZ	30	2nd





# Postcard from Détroit



# MICHELE ALBORETO



There is a delicious spring-time quality to the young driver's life. All goes well for him. He appears, mercurial, on the scene one day, he greets his older colleagues with respect and deference, he shows the proper amount of awe and shyness, he states his qualities, he is kind to the press, he signs autographs with gay abandon. In short, the world is his oyster.

by Keith Botsford

hould it happen, as it has happened with Michele Alboreto, that springtime coincides with more than a measure of success, that inner sunshine is reinforced, the inner nature of the man becomes positively luminous. A few years on, hardened by his first accidents, having moved from one team to another, from little money to a lot, from going unperceived down the local streets to being besieged by fans, from being a new boy learning to an old boy expected to produce results and produce them yesterday, all that has worn off. Then you've got your dour complete modern driver, with a briefcase under one arm, a list of appointments with sponsors under another and an attitude of studied insolence to all those who have helped put him up on

I spent several hours with Michele recently, partly in Milan at the offices

of COMINGROS, where his business associate Simone Vullo presides over a handsome office decorated with the denier cri of contemporary art, illuminated by immaculate Italian taste, and then in Monaco, where Michele comfortably established as this season's 'discovery', as Alain Prost was not two years back, was readying himself to affront that particulary nasty and difficult circuit.

"Imola was easy" he was saying, wishing perhaps that all races were so simple and uncluttered. "It was an endurance race rather than a Formula 1 race. I think I would have placed even if I had had more opposition, but I probably would not have finished third." Uppermost in his mind, as in all of our minds, was the tragedy that had befalen Gilles Villeneuve at Zolder. Alboreto was very straightforward on that: "I was deeply affected. Much more affected."



ted than I ever thought I would be. Not just because it was the first time I had participated in a race with such a fatality, but also because I admired Gilles greatly. Though we didn't have time to know each other well, I think we liked and appreciated each other.

"I was unhappy about what happened and about the reaction to what happened. When the drivers should have

been intelliernt, and perhaps fighting for how mey need to improve safety, they were bickering and blaming each other."

He also understood, with the same Clarity that informs all his calm thought about the sport, that the risks were inherent to the sport and had to be accepted. "There was human error involved, as Niki says; but when is there not human error? What error is not human in some way? But I KNOWI will continue in spite of the risks. It's part of the job. Gilles did take too many risks, but the rest was fate".

Michele's passion with racing began when he was thirteen or fourteen: at Monza; to any boy living in Milan, Monza is like a second home. Even though now, Monza is different for him. "I'd seen Ronnie Peterson the day before that race, you know", said Michele. "He was a good friend, we used always to get together, long before I got into Formula 1. I could tell he wasn't happy. Perhaps he was having problems at home. But he wasn't his usual self. I saw the accident and I remember feeling awful; but it never occured to me that he could die from it. I went to the hospital and then I found out he was dead. I suffered terribly, I was deeply shaken"

Michele's career in racing — he is only 25 — has been short, but he is already a determined and clearly-motivated driver. "I'm not afraid to do hat I have to do", he told me in Milan. "I also know what I can dc and I know why Ken Tyrrell hired me when he did. He needed someone who could get into the car and make sure it qualified. My first race was at Imola: I did what was expected of me and after that I got a contract for the rest of the year.

"I know it is going to take at least two seasons to learn the business, perhaps longer, 'm patient and Ken is one of the best teachers of a young driver there is. "I think of myself as a modern driver. I would like to become more like Niki. because Niki Lauda has this great power of concentration, and that is what you need in the modern sport. A driver has to make that great effort even when he does not feel like it. He requires that will to win. So many people work in the sport and depend on you: that makes what you do more work and less sport. A driver has to feel the sport inside himself. True, you can earn good money and have a good life, but sacrifices are involved and you have to be prepared for that, and for the fact that there is much

work as there is joy. I wouldn't do it just for the money. I do it because I'm following an old dream that started when I was a child and was taken to Monza, which is also where I first raced in Formula Monza'.

"Knowing the truth apart from the romance is a part of the modern driver's equipment. You may feel the car as

though it were a cloak around your body and you will do well; but you also have

to know there are days when it will go badly, and then you must just grit your teeth and get on with it— it's up to you, the car is there and it is your job to get out of it what you can".

His beginnings in Formula 1 were not easy. From a start in Monza, he hid for one year in Formula Italia. By 1981, he came into Formula 1 from Formula 3.

The year before that had been more than a little successful. From being at the top to being a new boy is not easy. And his entry into the top was no easier. There was the politics ("You learn to live with that. There is politics in everything") and then there was the great strike at Kyalami ("It was a joke for all of us, but it was a valid experience in terms of human values and basic solidarity. It started in a light-hearted fashion and then we got angry and we stuck together"). Also in 1981, Michele's car was hardly a front-unner Now it is different.

"I feel more at home now, the car is a much better car, but I take my time, I know how much I have to learn. This year's car is heavier, it takes more strength, I've had to discover its limits. I think I am getting there".

All in all, what the French call a jeune homme bien fondé; or, as Americans would have it, a young man with his head screwed on right. He has two brothers, two sisters, a 'friend' of much charm, an outgoing disposition, clarity of thought and everything going for him. And so far, none of the temptations to flash that take so many young drivers down the slippery path to overestimating themselves and their talents, none of that arrogance which some feel is a necessary part of their armour in the cruel world of Formula 1.

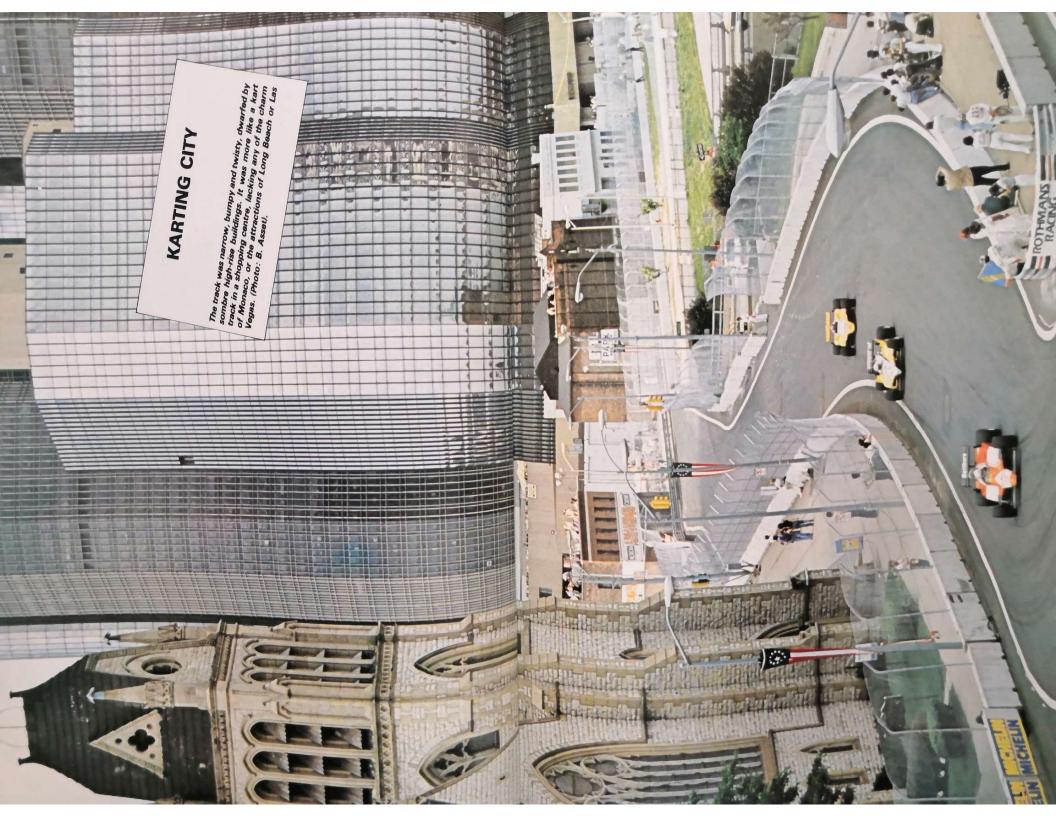
Ahead lie all those temptations. How long, for instance will Ken Tyrrell, a little starved of cash, be able to keep such a promising driver in the fold? The answer is that Michele is long on loyalty: if it serves his purpose to learn his trade with Ken, that is where he will learn it. He is in the spring-time of the young driver: can his summer be far behind?













# THE TALBOT LIGIER JS 19

# -HEIR TO **THE LOTUS 80**

When the JS19 made its debut at Monaco, the scrutineers promptly stripped it of the rear portion of its skirts, which extended behind the rear wheels.

Even with that handicap, the JS19 is an interesting and in some respects strikingly original car. Breaking with the current standardization of wing-cars, it is heir to the aerodynamic concepts instroduced in 1979 by the brilliant Colin Chapman in his revolutionary but disastrous Lotus 80.

by Giorgio PIOLA

oday's Formula 1 cars seem to be mass-produced along plans drawn up in 1978 by Colin Chapman's Lotus 79. Aerodynamically more sophisticated wing-cars have been dreamed up, but all of them have failed when faced with the reality of racing. This was the fate reserved for the Lotus 80: a high hope in the wind-tunnel, but no results on the track.

The design of Formula 1 cars has come to a standstill, the best of the current crop being only refinements of the theory laid down by the Lotus 78. The Talbot-Ligier JS19 is an exception; in a different technical and regulatory context, it has developed the theses advanced by the Lotus 80 and could well come up with positive results.

Jean-Pierre Jabouille explained the dif ference between 'his' JS19 - it is. after all, the first car produced at Vichy since the departure of Gerard Ducarouge for Alfa - and the Lotus 80.

"The basic aerodynamic concepts of both cars are indeed quite alike," the former Renault driver admitted, "but you have to keep in mind that they were born in different contexts. The Lotus had sliding skirts which created major difficulties. Because of the length of the skirts and the rounding of the side pods, it was very difficult to obtain the proper air-flow and positively utopian to think that you could get it to work consistently. As a result, the car was aerodynamically highly unstable. The system on our JS19 is a lot simpler; the flexible skirts no longer slide and all you have to do is find the correct setting to make them work properly.

The Lotus 80 also had mechanical problems and a rather too flexible monocoque, due to the methods of construction used in those days. In three years, the torsional rigidity of Formula 1 chassis ha increased by more than 80 per

### SEEN FROM BENEATH

110

One can clearly see how the side pods start off by being 140 cms wide at the front, and narrow to 110 cms at the back, at the same time prohibiting any



disturbance in ground effect through rear wheels, giving out into what is

1) The rear suspension is totally enclosed in the side pods in order not to

upset the aerodynamics under the car. 2) The exhaust pipes end just behind the inwards in order to avoid any possible

already a turbulent zone.

3) The side panels are curved following wind tunnel research.

4) The end of the side pods are inclined

flexing of the skirts.

5) Underbodywork completely encloses the gearbox.

6) It extends beneath the Ligier as far as the normal rear wing.

### SEEN IN PROFILE

1) Side radiators with split outlets for

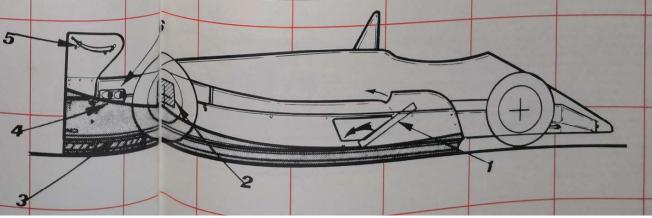
2) The rear suspension is totally enclosed within the side pods in order to maintain the maximum ground effect created by skirts.

3) This part of the skirts was cut off following the decision of scrutineers in Monaco and Detroit.

4) The side pods extend right to the back of the car, narrowing to pass within the rear wheels.

5) The small rear wing is an integral part of the bodywork.

6) The exhaust outlets are right behind the rear wheels, an area of turbulence anyway, created by the wheels them-



"The Lotus 80," continued Jabouille, "tended to lose much of its aerodynamic efficiency because to the rear of the underbody there was an opening for the lower wishbone which cut right across the air flow; on the JS19, the wishbone is entirely hidden and we think our suspension is the greatest advance we have made. Today's cars are largely defined by their aerodynamics and suspension systems are practically after-thoughts. A few years ago this was not the case, and we have gone back to those earlier principles. The most interesting problem we faced was how to remove all harmful turbulence from the rear of the car. That's where the lower wishbone causes a real loss in ground effect. We so designed the rear suspension that it is now entirely contained within the bodywork. The bottom wishbone is also mounted higher up, level with the driveshaft; thus the whole rear of the car is literally pulled onto the track."

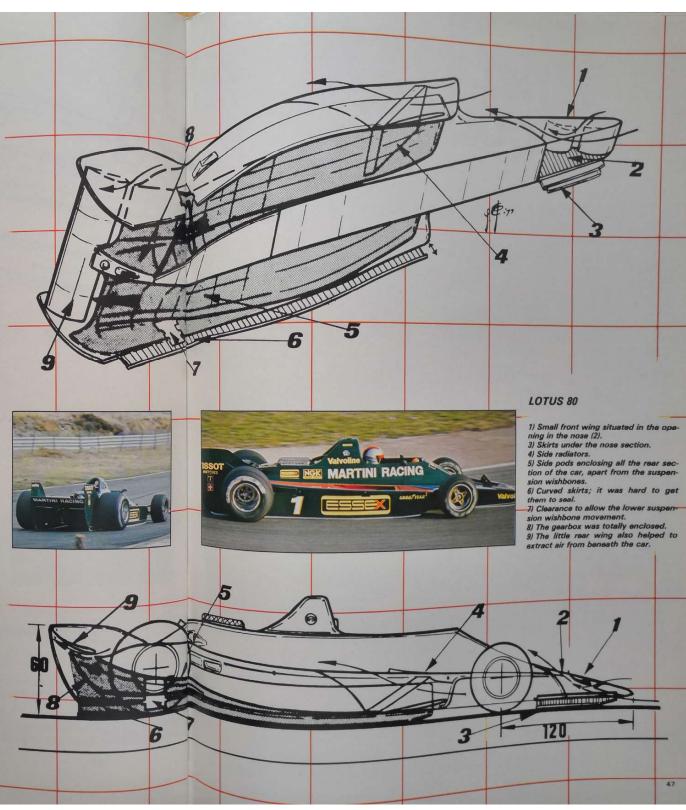
Why did Talbot-Ligier choose to follow a path that had not only disappointed with the Lotus 80 but also failed on Tony Southgate's Arrows A2? "We had no real choice," explained Jabouille. "Our V12 engine produces very little torque and its rev range is greatly inferior to that of the Cosworth or the Alfa 12-cylinder engine. We had to catch up on some other aspect and necessarily that meant an aerodynamic developement. We had a terrible problem because of the indecision surrounding which engine we would use throughout 1982 and, as we had no turbo available to us, it was obvious that the old JS17 was soon going to find it difficult even to qualify. Thus it was crucial that the new car be much faster, even if that meant it was harder to set up.'

The most worrying aspect of the JS19 is surely that the many problems which arise on the track have not been studied first in the wind-tunnel. "True, but we have done a lot of testing at Clermont-Ferrand," answered Jabouille, "with a laboratory-car which had a JS17 chassis, an intermediary rear suspension and the whole under-chassis and skirts of the JS19. We found no problems with it and this hybrid was a lot faster than the old JS17, 1"15" faster.

"Many details enter into making the JS19 a superior car. Take the sides of the car. They begin behind the front wheels at 140 cm and end behind at 110 cm. Their angle to the longitudinal axis, and therefore the skirts, is such that they should not bend when they come into contact with the track surface; they are at least 45 degrees to the side pods, and that was another major part of our design.

"The exhaust system is also brand new. The pipes emerge behind the rear wheels: in an area of high turbulence caused by the wheels themselves; thus the turbulence of the exhaust system itself is relatively unimportant. 'Our chassis itself is traditional, made of an aluminium honeycomb strengthened with carbon fiber panels. The front suspension reverts to the 'rising rate' type incorporated in the Brabham BT49s. On the other hand, our steering system is entirely new; it is fixed to the underbody in such a way as to prevent any risk to the driver's knees in the

event of an accident. "The car was designed and built in a little more than three months, which is a record for us. We had to work very quickly; both research and wind-tunnel testing was undertaken at high speed. And having said that it might be hard to relate what we've learned in the wind tunnel to the track, it should be easy enough for us to revert to a more traditional approach. In spite of that, I'm aware that, should weight be unrestricted, the best solution would be to build an ultra-simple car like the Williams FW08. All this sophisticated research into ground effect would become useless. Further more, and this may seem contradictory in the light of our new car, I believe that for the safety of the drivers, the best solution would be to legislate that the undersides of cars be flat. There is absolutely no suspension movement currently, and no one appears to want to restore that movement at the risk of being uncompetitive. Flat undersides and a limit on fuel consumption are the two fundamental rulings which would steer Formula 1 back to having some viable relationship to current automobile research. It would also be technically challenging to have to design a Formula 1 machine to precise dimensions with a limit on fuel to say, 200 litres, without defining which engine should be used. I think we would have to work on various sized engines, normally aspirated and turbocharged, to work out the best solution which would take full advantage and give maximum power from a limited amount of fuel. That way, we would get out of the technical rut that we're in at the moment, and we would have cars that were considerably more similar to automobile projects in gene-



larly looking forward to the Detroit Grand Prix. What I certainly did not anticipate was finding myself a spectator on Sunday afternoon. Gordon Murray promised to buy me a programme and find me a good grandstand seat, but it wasn't much compensation.

Obviously I felt sorry for myself. I also felt sorry for the people from BMW, who had made some more modifications to our turbo engine in the hope of making it suitable for the very tight Detroit circuit. A lot of people had anticipated that the track would be much faster than it was: as things turned out, there were so many stop/start slow corners that the average speed was even lower than Monaco.

Unfortunately, it's exactly that sort of corner which is bad for our turbo engine. It doesn't produce any worthwhile power at all below about 9000 rpm, so you have to get it geared exactly right. After only a few laps of the place, though, we discovered that we didn't have suitable gears available -- there just isn't anything in the Hewland catalo-

What we needed was a second gear low enough to



keep the turbo working. All we could do was to try a high first gear, which did the trick but was totally unsuitable for the hairpin. It was one of the most frustrating experiences of my life. There I was, probably with more power than anyone else at the track, yet unable to use it. It was a bit like trying to fly a model helicopter in your own living room .. Nevertheless, with only 28

cars going for 26 places after the accident to my friend Jan L'ammers, I did at least expect to get on the the grid. Maybe we were tempting fate to bring a BMW to the home of the American automobile, because on Saturday morning when they got around to running timed practice - my engine blew up just when I'd put on my first set of qualifving tyres. I tried to coast back to the pits but came to a halt in a remote part of the circuit where I wasn't even allowed to try to walk to the pits. I managed to find a way back later, when the session was red-flagged after the Watson/Serra incident, but although I set off again with the T-car, its engine was misfiring badly.

That left the afternoon session in which to qualify -- and it rained. There was no question of qualifying on a wet track, so after I'd watched everyone else splashing around I resianed myself to the fact that I was going to be a spectator at a Grand Prix for the first time since 1978. I have to say that it's not easy.

It could, in fact, have been worse: think of what happened to Riccardo Paletti. He managed to qualify for the very first time this year -- and then he crashed during the warm-up. That's what I call bad luck.

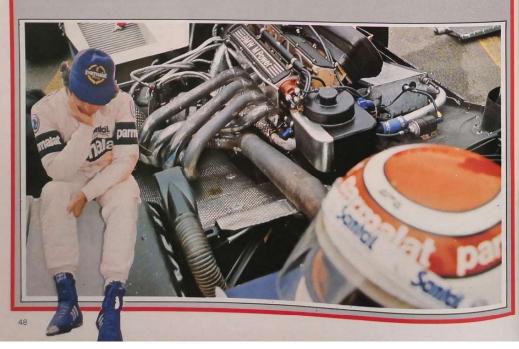
Sylvia and I watched the race from the Paddock Club. It would have been much more enjoyable if the TV broadcast

hadn't been interrupted every five minutes by commercials. At least the cameras caught the incident when Bruno Giacomelli decided to take a short cut over the back of John Watson's McLaren, I think John was very lucky that his car wasn't damaged. It didn't seem to make any difference to his speed, of course, and it was interesting to see that Niki lost out again. He missed winning at Zolder because he chose the wrong tyres, and then he lost Detroit because las he admitted to me afterwards) he made a mistake trying to pass Keke where he

Naturally I take a close interest in the other turbo teams. From what I can see, Renault just aren't making any progress. They've raced two cars in seven races this year (14 starts) and scored points only three times

On the other hand, I'm pretty impressed with Ferrari. They're not always the quickest car, but they do have a tendency to be around at the finish. That's what we're working on with our BMW. I shall be at Montreal next week. Maybe we won't win, but at least I plan to qualify ... and we hope to be there when the chequered flag comes out,

Nelson Piquet



# ALFA ROMEO

COCKPILS

182/1: Bruno Giacomelli (I) 182/4: Andrea de Cesaris (I) 182/3: T-car

Contrary to what had been announced at Monaco, none of announced to "B" specificathe Allas Well Services of Specification. Engineer Gérard Ducarouge had anticipated that the narrower "B" bodywork would have been well suited to Detroit, but not enough parts had been made yet to switch them to the different layout. As a result, the three cars were all with the older-type bodywork, including the T-car, so that there would be no difficulties in getting adapted for the drivers if



they were obliged to jump from

# race car to T-car during practice.

# ATS HGS1/03: Manfred

Winkelhock (D) HGS1/04: Eliseo Salazar (RCH) HGS1/01: T-car

Salazar's chassis had been modified to the specification of Winkelhock's Monaco car, with strengthened front rocker arms. The T

car is now also fitted with the latest Don Halliday-designed bodywork. All three cars had revised Lotus-type exhaust systems: they have different four-into-one junctions and new, megaphonetype, tail pipes.



### **ARROWS**

A4/1: Marc Surer (CH) A4/2: Mauro Baldi (I)

The mounting of the front suspension rocker arms had been modified. Designer Dave Wass, hard at work on a new car (possibly for the British GP), had not made the trip to America



### **BRABHAM**

BT50/02: Nelson Piquet (BRA) BT49D/17: Riccardo Patrese (I) BT50/03: T-car Piquet BT49D/16: T-car Patrese

Patrese's T-car was fitted on Friday with carbon fibre discs manufactured by Hitco of Gardena, Calif., and on Saturday they were also fitted to his race car. The BMW turbo-engines are fitted with different KKK turbos from those which gave trouble at Monaco: they are designed to improve power at low engine revs because previously the power 'comes in" very sharply at 10,000 rpm. The rear wings are also a new design.







### SEFAC FERRARI

126C2/059: Didier Pironi (F)

126C2/057: T-car

The 059 chassis is the one used at Monaco and the 057 is fitted with the "rising rate" front suspension, with Brabham/Ligier-type links, instead of the traditional rockers. This system is stiffer, to improve airflow under all condito be saved thanks to the disappearance of the plated mounting points, which have been replaced with cast mountings. The shock absorbers are now mounted closer to vertical. Because of the

demands which the Detroit circuit puts on brakes, ventilated discs 28 mm thick were fitted instead of the usual 24.5 mm brakes. The engines now have a simple water injection system, to reduce peak cylinder head temperatures and to eliminate detonation ("pinking") Thanks to the oxygen content of the water there is also a slight power increase. This is an aviation technique: it is more than likely that it was used for the first time tions, and has enabled three kilos at Monaco. The engine of the 057 was also fitted with smallerdiameter exhaust pipes, in an attempt to reduce throttle lag at the expense of outright power.

### FITTIPALDI F8D/3: Chico Serra (BRA)

No T-car for the Anglo-Brazilian team, whose new car (being built under the supervision of Richard Divila) could be ready for the Bri-

## LOTUS-JPS

91/6: Elio de Angelis (I) 91/7: Nigel Mansell (GB) 91/9: T-car

The T-car was the new chassis which Mansell had used at Monaco its reduced stiffness was expected to be an advantage at Detroit. It was de Angelis who nsisted that it be the T-car, able to try it lunlike at Monaco). It appears that it was Elio who had suggested the "flexible is better"



though so that he too would be chassis specification and there was no sign of the engine covers with integral intakes, which disturb the airflow to the rear wing.



Marlboro

Marlboro P

in California by Supertemp. There will be a new chassis, 07, for Zandvoort: like its predecessors it will be made by Hercules in Salt Lake City, with a higher proportion of accessory parts (for example, anchorage points) in carbon

improved and by Friday he was almost on top form. All the RE30B/7: René Arnoux (F) Renault engines were fitted here with the effective new electronic fuel injection system used first at With his favourite test chassis Monaco. It had also been decided naving been destroyed at to fit shorter gear ratios than nor-Monaco, Prost had to fall back on mal, in order to give better accelenumber 7. Still in pain from his ration at the start and out of slow sprained foot when he arrived in



RENAULT

RE30B/5: T-car

RE30B/6: Alain Prost (F)

# TALBOT-LIGIER

JS17/02: Jacques Laffite (F)

JS17/04: Eddie Cheever (USA)

JS19/01: T-car

The singleton JS19 present had been relegated to the role of T-car. The American scrutineers, following the example of their colleagues at Monaco, had demanded the shortening of the skirts behind the centre point of the rear wheels, which according to Jacques Laffite reduces the available downforce by a disastrous 20 per

JS19/02 stayed in France for wind tunnel tests, in order to facilitate a vital development programme under the supervision of engineer Jean-Claude Guénard



### MARCH

821/RM08: Jochen 821/RM09: Raul Boesel 821/RM10: T-car 821/RM07: Emilio de Villota (E)

Chassis RM10 is the lightweight model. The Mass and Boesel cars are now fitted with carbon fibre sidepods, making them lighter than at Monaco. Driver protection has been increased by strengthening in the cockpit area with carbon fibre panels. Designer Adrian Reynard has been working in the wind tunnel at Imperial College, London, on one or two ideas for the "concept car" which he is presently studying.

# OSELLA

MCLAREN

Watson (GB)

MPB4B1-05: John

MP4B1-06: T-car

MP4B1-04: Niki Lauda (A)

Cast iron brake discs replaced the

arbon fibre variety manufactured

FA1C/04: Jean-Pierre Jarier (F) FA1C/03: Riccardo

Paletti (I) FA1C/02: T-car

Still no new rear suspension. ecause the Osella team does not have sufficient spares to make it verthwhile. It should eventually appear at Zandvoort on Jarier's ar: after several breakages (anoher at Detroit), he will be relieved.







### THEODORE

TY02/1: T-car

TY02/2: Jan Lammers

The second chassis has now been completed, and was ready to serve as Jan Lammers' race car. It was fitted with original-type front suspension, narrower than the to the prototype model. There were new engine air intakes and different side pod profiles,

brought along only for use as spa res, mainly because they are expected to be more suitable for the fast circuits. Normal springs were fitted after designer Tony Southgate had decided that the special parts which he had been studying would be too expensiv for the team's limited budget. The Theodore took no further part in Detroit practice after a jammed later type fitted for several races throttle sent Lammers into the wall on Friday breaking his right

### TYRRELL

011/6: Michele Alboreto (I) 011/4: Brian Henton (GB) 011/2: T-car

Number 6 is a brand new chassis, with reinforced front chassis box and front suspension mounting points, the latter a change which had already been adopted on number 4. The smaller engine cover first seen on Alboreto's car at Monaco has now also been adopted for chassis 4 and 6.



**WILLIAMS** FW08/4: Derek Daly (IRL) FW08/3: Keke Rosberg

FW08/1: T-car

The T-car sported carbon fibre brake discs manufactured in France by SEP, a company whose products are used on Concorde and the Airbus subsonic jet airliner. These brakes were tested at Silverstone by Jonathan Palmer during the winter.





Marlh





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