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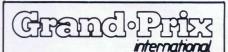
Page 12: Jean-Pierre Jabouille is certainly the unluckiest driver since Chris Amon. But he emphatically denies the fact. He explains his lack of success.





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### **JONES: DOUBLE REVENGE**

It hardly seems a year since Clay Regazzoni crossed the finishing line at Silverstone to win the 1979 British Grand Prix and give Frank Williams's Formula 1 team its first-ever Grand Prix victory. It was a race that Alan Jones should have won. In the intervening period of 12 months, however, both Jones and Williams have proved themselves to be consistent winners: the 1980 British Grand Prix brought Jones's personal F1 tally with Williams to eight victories. Williams has won ten of the 16 races (he does not accept that the Spanish result is invalid).

When the Williams team's giant Union Jack fluttered over the finishing line at Brands Hatch after the GP, it was being waved to celebrate not only the delight of the mechanics, but also the double revenge of Alan Jones. At last he had won the Grand Prix of his adopted home country, the race that had slipped out of his grasp last year. And he had taken another nine championship points, points which are going to be more than useful if the arguments about the validity of the Spanish GP develop (as they threaten to do) into a complicated court case.

The Williams people have no time in which to relax. The threat from their rivals is as menacing as ever. Frank Williams was more than aware, before Brands Hatch, of how competitive the Ligiers are. They could turn the tables at Hockenheim. And Nelson Piquet scores points as often as the Williams win. The Brabham is always ready to take over if the Williams should fail. The championship is still very open.

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# IN THE COCKPIT

# Candy

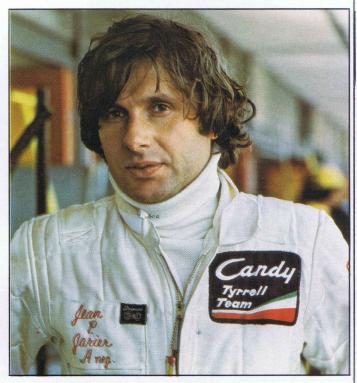
've just learnt that Jody Scheckter has decided to retire from racing at the end of this year. His decision doesn't really surprise me — as it won't have surprised many people closely involved in racing — because Jody has made no secret, during the last few months, that he intended to retire from Formula One at the end of 1980 or at latest, the end of 1981.

I appreciate the way in which he's taken his decision. He deserves to be congratulated on his attitude. Jody has shown that he really respects the public and motor racing in

general.

You could say that he stayed in racing a season too long, after he'd won the title, with the sole aim of capitalising on his worldwide fame. But you can also look at it another way. He made up his mind to do another season and put his position in jeopardy in spite of feeling somewhat weary at the end of last year. He could have quit then. But if he had, he would have disappointed the public who wanted to see the reigning World Champion in action, and he would have let down Ferrari who had given him the machinery with which

But what I respect most about Jody's decision is that he has decided to wait until the end of the season before quitting. A lot of people spoke of Niki Lauda's courage when he decided to retire on the spot at Montreal last year. « I don't like racing any longer, it's lost its attraction. I'm retiring », he said. Many people thought that it was a superbly spontaneous decision. But isn't Jody's decision that much braver? He has to tick off the races left, one by one, before he's completely free. He may have lost his enthusiasm for the sport, but he's going to see the season out, fulfilling his moral contracts with both team and public. He's going to take risks,



#### THE SCHOOL OF '73

even though there's nothing at stake and his heart is no longer really in the job.

His retirement means quite a lot to me, because we both came into Formula One at roughly the same time in 1973, give or take a couple of races. He was with McLaren, I was driving for March. Later in the season, I talked to Ferrari about joining them, and Jody entered into discussion with Tyrrell, and finally joined them. It's amusing to see which teams we're driving for now. Life can be strange.

Our careers haven't been very similar. Jody has won Grands Prix, and then the World Championship. I'm still trying to win my first Grand Prix. Those two different situations perhaps reflect our current atti-

tudes. Jody's no longer interested, he wants to get out of racing. I still like racing. How come two drivers with the same amount of experience have such different attitudes? I think it's simply because I'm still hungry, while he's done what he wanted to do.

Winning the World Champion was taxing for Jody in three different ways. First of all he had to be enormously psyched up for a whole season, in order to concentrate on winning the title. Secondly, because he was already famous and leading the series, there were considerable outside pressures on him, much more than on me. Thirdly, he succeeded in winning the greatest objective of his career, the World Championship. He achieved it,

there's nothing more to prove. Furthermore, Jody's had a bad time this season, not being competitive. It can't have been pleasant to fall from the summit to the depths. Unfortunately, having never been World Champion, I don't know what it's like to suffer such a fall from form.

I want to win races, that's still the principal aim in my career. I find it disheartening that I'm not battling for first place. In the long run, it's my own determination that suffers. But I still get a certain amount of pleasure from racing, even though I never seem to finish at the front. They say that it's the spirit which keeps one alive. That may not be wrong. I hope that my future is still to come.

But certainly, one day the fire will go out. I hope it won't be because I will have been so discouraged by not winning. On the contrary, I hope it will be because I have won and my hopes will have been fulfilled. And I hope I have the courage to respect my contracts to the end, like Jody, and Stewart in 1973. Jody is now 30. I've just turned 34. Retiring is not a question of age, it's a question of winning.

Men S

# The paddock in

#### THE BBC EXCELS

Jackie Stewart is just as good behind a microphone as he is behind a steering wheel. English public were able to watch the Grand Prix live on Sunday afternoon, as well as highligts on Sunday evening. Many foreigners in England for the Grand Prix were most impressed by the evening programme. The pictures were superb, the presentation was animated and comprehensive, Murray Walker was ably assisted by Jackie Stewart and James Hunt making the whole Grand Prix programme one that visitors judged to be of exceptional quality. Jackie's commentary was particularly interesting when the Ligiers struck trouble. The Scot knew what was wrong immediately. He spoke of Pironi's prudence when he had his first puncture, the Frenchman driving slowly back to the pits in order not to damage his car. On the other hand, Jackie was amazed to see Laffite driving around



#### WHO, WHAT, WHERE: THREE QUESTIONS AND A LOT OF ANSWERS

Peter Harden has just published the second edition of his annual directory of motor sport entitled «Who, What, Where?». It's a mine of information on all sections of British motor racing, from Formula One teams to the specialist press, via circuit information, preparation firms and suppliers etc. Every motor sport fan should have this book, particularly in great Britain. The book is available from the following address: «Who, What, Where?», Etcetera Publishing, 27 Marlow Road, Maidenhead, Berkshire SL6 7AE. Price: £ 10.

even though he had a slow puncture which was obvious to the outsider. He was just as amazed to see Jacques trying to get back to the pits just as quickly as before when he realised that he had a puncture. Of course, it all ended badly because the car left the track when the left rear tyre threw a tread. « There's an angry man, » commented Jackie when Laffite got out of the car. « He knows he's made a mistake by not stopping earlier and then driving back to the pits too quickly. Laffite is furious with himself. » No one is better qualified to describe the inner feelings of a driver than Ste-

There was also an interesting little dialogue between Stewart and Hunt. « Laffite has noticed his puncture », said Jackie at the time. « He's looking anxiously in his left mirror to check the state of the tyre... » Hunt, a little later : « I want to correct Jackie on a small matter and that is that on current racing cars, you can't see the rear tyres in the mirrors. » Stewart immediately countered : « I don't agree. I did a few laps in the Tyrrell on Friday and I could see the rear tyres in the mirrors quite easily. » Game, set and match.

#### HECTOR AND RUPERT RETURN, DESIRE DEBUTS



There were three new drivers practising for the British Grand Prix. Hector Rebaque replaced Zunino in the Brabham team, while RAM Racing entered two Williams for Rupert Keegan and Desire Wilson. Rupert hadn't driven in a Grand Prix since he crashed a Surtees at the Dutch Grand Prix in 1978. Hector disbanded his own team following the US Grand Prix East last year. But in spite of their lack of race driving, both managed to qualify. Desire Wilson did not get onto the grid, however, which some might think adds weight to the view that women will never succeed in Formula One. Nevertheless Desire was far from being ridiculed. Preliminary testing had been promising giving rise to hopes of qualifying for the Grand Prix. But those hopes went up in smoke, much to Desire's disappointment. « I thougt I could do well here, » she said. « I know the circuit very well because I look after the racing school administration at Brands Hatch. »

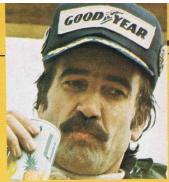


#### 1981 GRAND PRIX DATES

Next season's Grand Prix calendar has been announced. It comprises 15 or 16 races, depending on whether the Mexican circuit is passed as capable of hosting a Grand Prix. The full calendar is as follows: January 25, Argentina; February 7, South Africa; March 15, Long Beach; March 29, Mexico; April 12, Brazil; May 17, Belgium; May 31, Monaco; June 21, Spain; July 5, France; July 18, Great Britain; August 2, Germany; August 36, Austria; August 30, Holland; September 13, Italy; September 27, Canada; October 3, Watkins Glen.

#### FAMOUS SPECTATORS

There were just as many champions spectating at Brands Hatch as there were on the grid for the Grand Prix. There were no less than five former World Champions watching the race: John Surtees, Jack Brabham, Jackie Stewart, James Hunt and Niki Lauda. The latter had flown in a number of Austrian spectators in one of his own planes. The five former champions had won a total of ten titles between them.



#### REGAZZONI: A YEAR AGO...

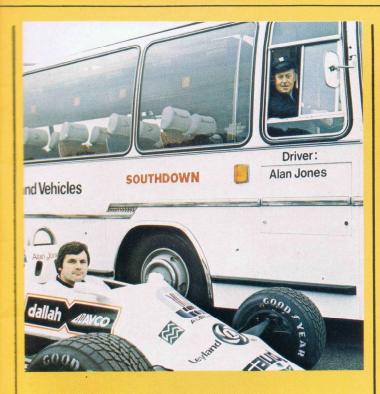
The English public spared a thought for Clay Regazzoni, an absent friend who won last year's British Grand Prix at Silverstone. He won the race for Frank Williams, giving the hard-trying Briton his first ever Grand Prix victory.

Courageous Clay had expected to be at Brands Hatch, his first race since his terrible accident at Long Beach. He would have been warmly welcomed by his many friends in racing. Unfortunately, a fever stopped the Swiss driver from making the trip, but we hope it's only a temporary set-back.

## DARK FUTURE FOR SHADOW

Will we ever see Shadows in Grand Prix racing again ? It seems doubtful. Although the trip would have been the shortest of all for them, there were no DN 12s at Brands Hatch. The factory doors were closed and Shadow had disappeared from the Formula One scene. That was the miserable end of a story that had its brighter moments. The first Shadows appeared in 1973 driven by George Follmer and Jackie Oliver. Don Nichols's team then had its ups and downs. Jean-Pierre Jarier gave rise to hopes, and Alan Jones won the Austrian Grand Prix in 1977. But then there were the deaths of Peter Revson and Tom Pryce. At the end of 1977, most of the principal team members left to form Arrows. Since then, Shadow has gone downhill. Earlier this season, Nichols sold most of the company to three partners of which Teddy Yip was the best known. But the DN 12s driven by Geoff Lees and David Kennedy were as unsuccessful as the DN11s. They did nothing to slow the decline of the Shadow team. There's no point in detailing the particularly difficult time the team had during its final months





Alan Jones meets Alan Jones! Both are Leyland drivers, but one prefers not to take passengers, and tends to drive a little bit quicker than the other. Their two vehicles met on the Brands Hatch grid, but as you can see, they have little in common but the name.

## STATUS QUO

No driver changes are expected in the French Formula One teams for 1981. Theoretically, both Renault and Talbot (née Ligier) teams should retain the same driver lineups as this year. Both Gerard Larrousse and Guy Ligier said at Brands Hatch that they expected to resign their respective drivers: Jabouille and Arnoux with Renault, Laffite and Pironi with Ligier/Talbot. However, it's up to the drivers. All four of them said that they hoped to stay with their teams next season.

#### LIGIER'S LATEST

No, it's not a Formula One car, but a little town car. It's called the JS 4 and Guy Ligier hopes to build a number of them in his factory at Vichy. It uses a 49.9 cc engine but it can be driven without a driving licence nor road tax. Ligier hopes to produce 10,000 a year and the next step is to make a more powerful version... with a 125cc engine. However, Ligier doesn't expect to call these cars Talbots.

#### A RACE, A MECHANIC : DANIEL CHAMPION

It hasn't all been easy for 32-year-old Daniel Champion, but in spite of his responsibilities, he's retained his sense of humour. Champion is Renault's chief mechanic. Furthermore, he's also responsible for looking after René Arnoux's car at the track. His own work has contributed a lot to making the turbocharged Renault work in Formula One.

Daniel Champion is a man who has been in competition for some time For the last three years. since Renault have been in competition, he's been a regular fixture in the pits, dressed in black and yellow with a headset around his ears. But once the race is over, Champion is a great practical joker. For instance, flying home to France, it's not uncommon to be suprised by Champion dressed as an air hostess. His constant travelling means that he knows quite a few air crews. On the flight back from Kyalami in March, he donned an air hostess's uniform-it's not revealed what happened to the air hostess - and put Arnoux's victory trophy on a little trolley. Daniel then did a round of the cabin to the amusement and applause of the team before uncorking the champagne.

Daniel Champion is in a rather priviliged position at Renault,

because he's little more than a mechanic. He provides the link between the engineers and the mechanics. « It's extremely interesting, » he admits. « Because of my job, I go to the team briefings at the circuit and I learn a lot. That is how I'm able to keep the mechanics well-informed. The team mechanics are very close to the engineers, and we talk a lot together. »

Ten years ago when he first worked on racing cars, Champion never imagined, that he would one day be chief mechanic for Renault. « If someone had told me that one day I would be working with the Regie in my current job, I would have thought that they were joking. It's really the peak of my career. »

Strangely enough, if one asks him how he got there, he mentions the name of a driver, and an unexpected name. It's not Jabouille or Arnoux, but Didier Pironi with whom he worked for a number of years before moving into Formula One. « I'm very grateful to Didier, » says Daniel, « he helped and advised me a great deal. It's thanks to him that I am where I am today. I worked with him in Formula Renault Europe. When he moved up to Formula Two, he advised me to get out too and accept a job that had been offered to me by Renault-Sports. thought at one time that I'd be working with him again, but unfortunately it didn't work out that way, René Arnoux joined the team, but never mind. »

Daniel Champion joined Renault at the end of 1976 as assistant to Jean-Claude Guenard. Then he was appointed chief mechanic and then development engineer.

Consequently, he's been involved with the team right from their inauspicious start through to their progress. Broken engines that had to be changed quickly, lack of results, continuous work back at the factory, they've all been part of his work. « We've had our difficulties, » he admits, « but personally, I've always believed in the team. People around me, even close to me, have tired of it. They thought that the V6 turbo would never work. I tried to convince them, to explain to them that we would soon win, that we had to



win. And we did win in the end... »

In fact Champion's hard work and those around him were soon to be rewarded. There was Jabouille's win at Dijon last year, and Arnoux's two victories in Brazil an South Africa this year. « I can tell you that those wins brought us all together more, » says Daniel. « They were like a shot in the arm to us. When you win, it creates such determination that nothing seems impossible. It's tremendous. » Apart from succeeding where many people doubted that it was possible, those wins made Daniel's job easier. « After a win, it's easier to ask people to work harder, whether they're suppliers or men from the factory. Previously, it was hard to ask for more without the reward of a win. »

René Arnoux — who is Champion's direct responsibility — is currently in a fine position in the championship table. However, Jabouille's misfortunes cloud the overall team picture. « What has happened to him shouldn't be allowed. It's really unfair. We do the same things to his car as we do to René's. It makes us unhappy to see what bad luck he's having, and that he's not winning. But he'll win soon... »

Neither Jabouille nor Arnoux afe Champion's really favourite driver although he does everything he can for them. He's still very attached to Didier Pironi. « My best seasons of racing were with Didier in Formula Renault Europe in 1975 and 1976, » he says. « That's where I learned my job. Didier is a tremendous person. He's intelligent and very human. That's very rare. We see one another from time to time away from the track, as friends. »

Champion worked in Formula France, then Formula Renault with Patrick Tambay in 1973 before moving to Formula Two with Jabouille in 1974, and thence to Formula Renault Europe.

Since then, the intelligent and ambitious Champion has risen through the ranks of Renault and now understands the complex hierarchy of the team. His own personal future? For the moment, it will follow that of Renault. « I want to stay with Renault in Formula One until the end. I was in at the beginning, and I'm not going to leave them halfway through the job. When they've done what they want to do, then I'll decide what I'm going to do. Basically, I'm a house electrician. If I leave Renault, I'll probably go and do that in Normandy. I also love boats, so I'll go back to the sea... »

# THE SECRETS OF PATRICK HEAD

Patrick Head was a happy choice for Frank Williams. It's Patrick who is behind the success of the FW07 cars driven by Alan Jones, which is not to diminish the ability of the Australian but nowadays a driver gets nowhere unless he has the right car. Quiet, well-built and typically English, Patrick Head is more of an organiser than an innovator. This, without doubt, is the key to the success of the Williams team.

by Mike DOODSON,

Sports Editor of MOTOR



Alan Jones heads for the chequered flag after the Ligiers have retired. Another step towards the World Championship?

t's Sunday morning at Brands Hatch and the half-hour warm-up has just ended. Thirty minutes set aside for teams to check the performance of their cars on full tanks, to make sure that overnight modifications are working, and to take a last look at track conditions.

For the local favourites, however, the session has not been without its problems. In the Williams pit a broken brakepipe has caused a momentary panic for Carlos Reutemann though it's easily fixed - and as Alan Jones steps out of his car he's clearly worried.

« Understeer, » he mouths at Patrick Heads as he removes his Nomex balaclava. Frank Williams steps forward and frowns. The three of them huddle by their garage entrance. « Understeer in the slow corners, understeer in the fast ones. There must be something we can do. »

As they walk off together in the direction of their motorhome the thoughts are whizzing through Patrick Head's mind. However, Jones knows Head too well to worry: « the good thing about Patrick is that he doesn't panic. He loves to work out pre-race strategy by settling down and getting the best from a bad situa-

tion. That's what he did on Sunday. »

Pragmatism is Head's strong suit: comfortably-built and docile on the surface, he has an abiding dislike of foolish questions but a generous way with intelligent ones. He firmly denies that he has a burning will to win: that would be much too un-English. He does admit, however, to « a huge distaste for losing. »

Son of an enthusiastic club racer, Head watched his father race his -Cooper- Jaguar in the 50s but didn't give much attention to motor racing until after he'd gained an Honours degree in Engineering at London University. He has a deep respect for academic achievement which is evident in the senior personnel at Williams: both Frank Dernie (in charge of the R & D programme) and Neil Oatley (the engineer on Carlos Reutemann's car) have good university degrees.

Head himself now regards time spent at the drawing board as a luxury. He learned his craft at Lola Cars with Eric Broadley, got involved with several private projects that were admired for their engineering despite being comparative failures on the track, and finally arrived in F1 after a false start with the ill-fated Trojan - as Harvey Postlethwaite's understudy at Walter Welf Resigna

Carlos Reutemann is a good number two to Jones. He's playing a part in the success of the Williams team.





ncouraged by his wife Kate, he agreed to join Frank Williams in 1977 when Wolf parted company with Frank. It was Head's organisational skills (60 per cent of his time goes on administration) that turned the corner for Frank Williams after years on the sidelines. Instead of trying to look after the factory and the racing team, Williams can now afford the time to rush off to Saudi Arabia or the USA for business meetings without compromising his team. « Frank doesn't have anything to do with the car's design these days. He just comes along and says « Make sure that the oil tank works, because if it doesn't it's going to cost me a lot of money »!

He is fiercely proud of the engineering team that he has built up around him. « Journalists like to look at motor racing in terms of personalities. But Patrick Head doesn't produce our racing car, it is Williams Grand Prix (Engineering) Limited's design department, which happens to be headed by me. Apart from the engineers who go to the circuits, we have five draughtsmen, and we're all highly qualified, some (like Frank Dernie) to a higher level than myself.

« By British standards, there are quite a lot of us, but if you compare us with Renault, Ferrari and Alfa Romeo it's not so many. We don't just assemble cars, you know: for example we make about 20 per cent of our gearboxes ourselves, to our own designs, though essentially it remains a Hewland unit. ».

« I haven't been involved yet with a team that has won the World Championship, but I'm aware of what we must do to achieve it. We must have an organisation with the continuity of engineering to make our car adequately competitive at all times. More than anything else, we must not make mistakes. If a driveshaft is incorrectly heat-treated, it's our responsibility to spot the mistake. That means having a £ 2000 machine available to check the hardness... so that brings us back to money.

« Journalists and TV commentators don't have any idea of the technical back-up which an F1 team needs to have. Not even Jackie Stewart can be fully aware of the technical support that was required to give him his 27 Grand Prix victories. I was extremely disappointed in 1978 when the journalists blamed our mechanics for the poor reliability of our car. The fact is that with 18 people on the payroll we were competing successfully against Ferrari, who must have 150 men on the payroll. Our failures were due to a combination of inexperience and not having enough people to cover every area of possible problems. It's not the mechanics who make the car reliable, they're only a small per-centage of the whole. What matters is to have a good engineering department. »

Obviously, Head has now assembled a more than adequate engineering department around him, and the Williams payroll reflects it. There are more than 40 employees on the staff this year in the adjacent factories on an industrial estate at Didcot.

But it takes more than good employees to win races, as Head admits. Asked for the secrets of success, he nominates « tenacity and attention to detail ». Then, reluctantly (because it's something that's out of human control), he acknowledges another important factor. « I hate to use the word, but luck plays its part too. Often when a race is finished and we take the cars back to the factory and get them stripped down we find a couple of things that have cracked. After the French Grand Prix we discovered that a gearbox oil cooler bracket had broken on Alan's car. One can't help wondering how many more laps the car would have done before the cooler would have been damaged and burst. »

Head's cars earn the admiration of his fellow designers because they're carefully thought out, always neat to look at, and (an important factor, this) easy to maintain. The bodywork,

for example, is tailored to a jig in the workshop, so all the panels fit every FW07 chassis without having to be bodged. Watch the mechanics at work when Jones or Reutemann comes in for an adjustment: invariably the bodywork comes off easily with half a dozen twists of the screwdriver. Elsewhere in the pit lane, other mechanics are engaged in a running battle with ill-fitting fibreglass.

e is not, however, an innovator. One of the wind-tunnel models which he investigated before the design of FW07 had been settled was a rather advanced car with a slotted rear flap that closely resembled the Lotus 80. It offered a 25 per cent improvement in the lift/drag ratio over the FW07, but Head anticipated problems with getting rid of the engine and oil heat. He went back to his research into the aerodynamic qualities of the Lotus 79 look-alike model which he was investigating. The finished article, according to Colin Chapman himself, was a beautifully tidied-up 79

« There's no denying that the basis for our car was the Lotus. I'm a cautious person, so I wouldn't make anything radically different unless I knew I had a good back-up design. We're here to win races, not to move the frontiers of race car engineering forward. Nevertheless, if I feel that we can be more successful by being innovative, when that time comes I shall press ahead. With the talents that we have at Williams I believe that we have as much potential to be innovative as any other team. »

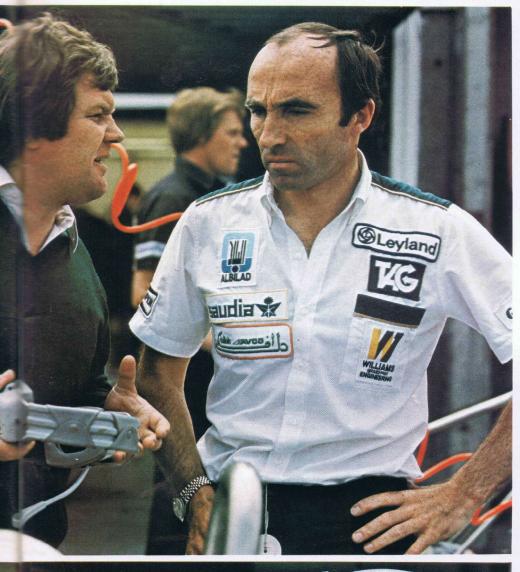
If there is to be any innovation from Head, it will certainly be the result of extensive wind tunnel work. Persistent rumours suggest that his engineers have been studying a car with two regular front wheels and four small ones at the back : the advantages would be greatly reduced frontal area, possibly better grip with the four rear wheels driven, and much increased ground effects from a wing that extended into the space beside the engine suddenly made available by the narrower rear wheels. He won't give away any secrets, but he does plead for more stability in the rules from a governing body which is less partial than the one which is presently attempting to dictate new F1 regulations. He agrees that a ban on skirts sounds like a logical way of reducing cornering speeds. « But achieving the current ground effect cars has required a lot of heart-ache and expense. We have a lot of money invested in research, just as Renault has in the turbo-engine. Like them (Renault), we're not prepared yet to be taken back to stage one. »

Since engine power and tyre grip - the two most important components of a racing car's performance - are in the hands of other companies, Head feels justified in concentrating a major part of his team's efforts on aerodynamics. Engine rebuilds cost the Williams team £ 450,000 last year, so the £ 35,000 or so which they spent on buying their own wind tunnel is a comparatively modest investment. As Head points out, the average speeds being reached at circuits like the Osterreichring are the sort of speeds at which the wings of jumbo jets are lifting almost 400 tons of deadweight into the sky. It doesn't take much imagination to guess the sort of forces generated by ground-effect racing cars.

These forces will increase even more dramatically if engine power - an area which has been inexplicably overlooked in recent negotiations is permitted to carry on rising. « Because of the present real strength of Renault, Ferrari and Alfa Romeo, with Talbot already committed and talk of Honda and Toyota getting involved, I think that the next five years will be an era in which Formula One becomes an intense engineering exercise. Teams like Ferrari could easily









embark on a split programme, using normallyaspirated engines for tight circuits and a turbo for the others.

« It's going to be very difficult for what have unfairly been called the « kit car » teams, most of them based in England, which have supported F1 through the good times and the bad. Unless boost pressures are somehow restricted, turbocharged engines are going to generate an enormous amount of work: we'll be changing engines overnight between practice sessions and we'll need five mechanics per car. Cost will be no object for the big manufacturers: even if it requires another million pounds, or two, they're going to do everything necessary to win. »

It remains to be seen, of course, whether the smaller constructors can continue to compete. In his cheerful, unemotional and somehow typically British way, Head obviously doesn't intend to be among those who fall by the way-side.

« As the rules are at the moment we have got to develop at a much faster rate than would have been necessary three or four years ago. If that involves expanding our engineering department, and finding more money, then it's up to Frank to find that money, and it's up to me to expand engineering.
« It's not a question of having any doubts

« It's not a question of having any doubts about where the money's coming from, because I leave that to Frank. If things are going badly in terms of generating the finance I'll groan and complain about not being able to do this and that.

« But if there is any one single individual who is capable of finding the money necessary to keep a team like ours in business, I'm pretty sure that I know who he is... it will probably be Frank Williams. »

### THE WINNER'S COMMENTS

« I must admit that the Ligiers were fantastic this weekend, they were very good around Brands Hatch. It was impossible to stay with them. When they go that quickly at the start of a race, you have a decision to make: whether to stay with them, or whether to look after the car for a while and then go. They were going so quickly that I decided to look after the car a little bit. Maybe the Gods are smiling on me. I won. When I saw that the Ligiers had disappeared, I breathed a sigh of relief, because I could deal with Piquet after the first few laps. The Championship? It's too early for me to say yet: there are still a number of races left, and the Ligiers are very strong, they're a good team. The main thing is get a couple more wins and then finish consistently in the points and then I'll feel safe. It's not over yet. »



# JEAN PIERRE JABOUILLE

It looked as though Jean-Pierre Jabouille had finally broken his streak of bad luck when he won last year's French Grand Prix, and that his persistence was about to be rewarded. Unfortunately, the future which had looked so promising turned out to be even worse than the period through which he had waited so patiently: the longed-for reversal of fortunes was nothing more than a mirage. Jean-Pierre had high hopes of winning the 1980 world championship, yet he has not scored a single point. We wanted to discuss things with him both as a human being and as a driver.

by Eric BHAT

YOU HAVE SAID MANY TIMES DURING YOUR CAREER — AND YOU SAID IT AGAIN AFTER LAST YEAR'S FRENCH GP — THAT YOU DID NOT BELIEVE THERE WAS ANY SUCH THING AS BAD LUCK. NEVERTHELESS, YOUR SCORE IN THIS YEAR'S CHAMPIONSHIP IS NIL. WHAT DISTINCTION WOULD YOU MAKE BETWEEN BAD LUCK AND... OTHER FACTORS?

If I had punctured a tyre in every race since the beginning of the season, I would blame bad luck. But as soon as you start to talk of technical or mechanical problems, luck doesn't enter into it. It's too easy to blame your luck. If I place too much strain on this part or that part, what must be done is to react in such a way that I won't break it again, and not blame bad luck. I have no doubts at all about the hard work that the team is doing, or about the prepa-

the considerable progress that they were making — what I said was neither properly interpreted nor understood. It wasn't necessarily a criticism, just a warning. I think Michelin has been working within limits that were much too narrow. That doesn't make me any less confident in them, because I know that they are capable of reacting extremely fast. However, it can't be done in two races. Goodyear's leap forward has taken them much further than we ever imagined, and at the moment we've slipped some way behind. In three or four races, perhaps we shall have caught up again.

#### DO YOU THINK THAT RENE ARNOUX STILL HAS A CHAN-CE OF BECOMING WORLD CHAMPION?

To be frank, I believe that the ball is now firmly in Michelin's court, and I think it's going to be difficult to make up lost ground. Unless the car-engine-tyre package is competitive two races from now, in my opinion we will have left things too late. The only factor which could play into René's favour is the fight between the Williams and the Ligiers, which could be in danger of having to share the results to the benefit of a third party, like René, who could sneak into the points.

## THE FIRST GOAL OF YOUR TEAM FROM NOW ONWARDS WILL BE TO HELP RENE WIN. WHAT PART WILL YOU BE PLAYING IN THIS STRATEGY AND HOW WILL YOU HELP?

It all depends on what I'm doing next year. If I stay with Renault — which is what I want to do — obviously I'll do my best to make sure that the Régie Renault wins the title this year... and again next year with me as champion. If, on the other hand, Renault decides to announce that there is to be some change in the situation as it affects me, then my task is no longer to give my full attention to the team, nor to to work like mad on developing the

#### YOU UNDERSTAND THAT RENAULT MIGHT NOT WANT YOU TO CONTINUE AS NUMBER ONE DRIVER, BUT AS A RESULT OF THE PROBLEMS YOU'VE SURELY CONSIDE-RED THE POSSIBILITY OF LEAVING. HAVEN'T YOU EVER CONSIDERED MAKING A SWITCH?

It's very difficult for me to answer. I have complete confidence in the Renault team, which has the potential to win the championship. I would love to stay with Renault and become world champion. But in order to do that I must be reassured that the Régie has the same desire to help me win the title. If I am asked to stay on



ration of my car. I am not blind, I know that my cars are well prepared. Having said that, it's not good enough to settle back and say « Jabouille is unlucky ». On the contrary, the vital thing is to make sure that Jabouille isn't unlucky again...

# THE SAGA OF BROKEN CLUTCHES AT THE START, MERELY BECAUSE THEY OCCUR OVER AND OVER AGAIN, CANNOT BE JUST A QUESTION OF COINCIDENCE. COULD IT BE A MATTER OF YOUR OWN STARTING TECHNIQUE?

I recently did some tests at Dijon to clear my conscience. I did two consecutive full-blooded starts with full tanks, simulating the exact conditions of a regular race, *i.e.* one slow lap, on to the grid, a longish wait, then the start. Then six laps in a row, another stop and a fresh start. I didn't have any problems at all.

The only doubt which remains is that a slight modification had been made to the clutch system before the test. But I am now convinced that my driving is not the cause of the clutch failures. I don't think that I am particularly bad at starts. I'm given a racing car to drive it flat out. When you hand a racing car to a driver, the object is to finish first. With this aim in mind, when I start I try to make the best possible start, in order to get into the best position possible. Perhaps my starting method is a bit rougher on the clutch than René's, but I doubt it. I can think of only one explanation, which is that we have a weakness in the car that cannot be blamed on bad luck. Except for the puncture at Kyalami, I can give you a reason for every one of my breakdowns. For example, the turbocharger which broke in Brazil and robbed me of victory: I knew at the start that there was a good chance that it would fail because we had had some problems during the morning warm-up. I don't want to have a « bad luck » label stuck on me which would hide minor technical problems.

## WHAT WILL YOUR ATTITUDE BE BETWEEN NOW AND THE END OF THE SEASON? HAVE YOU SET A GOAL FOR YOURSELF?

I'm well aware of one thing, which is that I'm not going to be world champion. My aim is to finish races and to obtain the best results that I can. If René is in second place behind me in a race I shall obviously let him pass me, because it is only right that he should score championship points. Otherwise I shall be trying to win races myself. But then again, I'm not under any illusions, I'm being realistic. I've been aware for some time that we're under a slight handicap on the tyre front. From now on, getting back into the points is going to be very difficult for us. Having said that, however, those of us at Renault must not get bogged down with the tyre problem and allow ourselves to fall asleep. We must get on with the work of improving the car. The second half of the season is going to be a lot tougher for us than we could ever have imagined or hoped. It's on the circuits which are supposedly to the advantage of the turbo-cars that we are going to see the biggest advantage. Anyway, I hope that this will make everybody, particularly the other teams, understand that there's more to a racing car than just an engine.

LAST YEAR YOU HAD VIRTUALLY BLIND FAITH IN MICHELIN. THIS FAITH SEEMS TO HAVE DWINDLED AWAY IN RECENT WEEKS. WHAT HAS HAPPENED? WHAT IS THE PROBLEM WITH MICHELIN?

My faith in Michelin is still the same, but the situation has developed. When I told the Michelin people at the beginning of the season that it was essential to keep an eye on Goodyear — because of

just to help sort out the cars, that is definitely not the goal which I have set for myself.

# LAST YEAR YOU WERE OFFERED THE CHANCE OF GOING TO LIGIER. THE TWO LIGIER DRIVERS ARE PRESENTLY CLOSELY INVOLVED IN THE FIGHT FOR THE CHAMPIONSHIP. DO YOU HAVE ANY REGRETS? DID YOU MAKE A MISTAKE?

I never regret what I have done. The Ligiers have a chance of winning the title, and I'm very happy about that for Jacques and Didier. As things happened, I had to make a vital choice at that time: either to stay with Michelin or to go to Goodyear. During the negotiations I thought that Michelin would be much more competitive this season. I can't honestly say that I ever thought last winter that we'd be where we find ourselves now, at midseason. However, I began to get a feeling about it some time ago, so it's not been a complete surprise. But I'm still confident in Renault... so long as that confidence is mutual.

## WHEN YOU'RE GOING THROUGH SUCH A BAD PATCH, ARE THERE EVER TIMES WHEN YOU'RE TEMPTED TO LET EVERYTHING DROP?

No. Occasionally I get angry, because I'm an impulsive person, but it passes quickly. I'm well aware of the reasons for our setbacks. I know that it's not my fault, that the problems are mechanical and technical. Once the difficulties have been sorted out, everything will be alright.

Naturally, I sometimes tell myself that I'm never going to get there, that Renault has a major problem. But when I look at things deep down, I change my opinion again. In those circumstances come to the conclusion that I must not leave Renault, that would be unthinkable. By continuing the struggle, I feel sure, it will all pay off in the end.

# THERE HAVE BEEN HIGHS AND LOWS IN YOUR CAREER, YET YOU MUST AGREE THAT THE LAST 12 MONTHS HAVE BEEN THE MOST DIFFICULT PERIOD SINCE YOU STARTED RACING. THE PAYOFF MUST HAVE SEEMED VERY CLOSE, BUT IT HAS YET TO COME...

It has yet to come; but you have to take a step backwards sometimes in order to make a good leap forward. Maybe all of us involved, both at Renault and at Michelin, were over-confident about the 1980 season. Perhaps 1981 will be Renault's year, and I hope that it happens to coincide with Jabouille's year. That's the way ligure it. Obviously I would have liked to have won in Brazil and South Africa. Too bad: that's the way it is. As far as I'm concerned, it's something I've forgotten.

# HOW HAS THE RENAULT TEAM REACTED UP TO NOW? HAVE YOU EVER FELT ANY ACCUSATIONS BEING MADE ABOUT YOU, OR HAVE THEY TRIED TO BOOST YOUR MORALE?

Let's sort out a couple of things. On one side there is the team which looks after my car: this team has given me its complete trust, and they have mine. On the other hand, within the company itself, I know that the anti-Jabouille faction is just as strong as the pro-Jabouille support. You hear stories that so-and-so has doubts about your ability, no kidding. I don't pay these stories a lot of attention: these people are looking at things from a long way away. It's not surprising that they should get the impression, for example, that Jabouille doesn't know how to do a start. If that's what they think, they only have to come and tell me so...

# THE FILM OF RACE

The Ligiers seemed unbeatable. The race was only a few seconds old but the two blue cars were in front of the field, confirming their practice form. Jones, Piquet and Reutemann ran together during the opening laps, but could do nothing to stop the two Ligiers running away with the race. But then three successive punctures sidelined Laffite and Pironi, allowing Jones to win. He'd shaken off Piquet who finished second. Behind the five dominating cars, Daly managed to survive where others pitted, and he finished a popular fourth.



1 - Big moment during the Saturday afternoon practice: René Arnoux wallops the guardrail on the way out of Druids hairpin. His car's monocoque is a write-off.



4 - Still the first lap, and Pironi is still increasing his advantage. There is already an impressive gap. Laffite, on the other hand, has his hands full holding off Jones.

5 - Now the backmarkers : Prost, whose engine bogged down, gets a bad start. He lies in 12th place ahead of Jabouille, de Angelis, Villeneuve, etc.

rands Prix are beginning to take on a familiar pattern. From the first day of practice, it was clear that the British Grand Prix was going to be another Ligier-Williams duel, just as the previous Grands Prix have been.

On Friday, Pironi set a tremendous 1'11''004 which was good enough to win him pole position. Jones was six tenths of a second behind, quite a lot between first and second, while Laffite and Reutemann were third and fourth fastest. Prost created a surprise by setting the fifth fastest time behind the Ligiers and Williams, proving that McLaren are back in the hunt. Watson confirmed that fact with his eighth quickest time. Piquet was sixth

fastest but unhappy: he couldn't understand how he could be two whole seconds slower than Pironi. Daly set a good ninth fastest time in front of the two Renaults which were both in trouble with lack of grip.

Pironi's Friday time remained unbeaten the next day, despite the efforts of the Williams drivers. They were also incapable of preventing Laffite from setting a quicker time. The Ligier driver found a perfect balance to his car which had troubled him the previous evening and did a series of laps between 1'11"6 and 1'11'4 which put him onto the front row of the grid. However, considerable traffic on the circuit stopped him taking pole position

A nonaggressive pact had been declared between the Ligier drivers.



2 - Didier Pironi, fastest man in practice, is also the quickest away from the start, immediately leaping into 1st place.

3 - Two corners later, Didier has already pulled out a slight lead over Laffite and Jones.



6 - The Ligiers have got away in front. Behind them, Piquet tries to take 3rd place from Jones, but he never makes it.

7 - Reutemann lies 5th, followed by the two Alfas which are competitive at this early stage because they are on soft tyres.

from his teammate.

So the first row was entirely Ligier and the second row entirely Williams. The third row was mixed however. Nelson Piguet managed to find another 1"5 to put himself fifth on the grid, while sixth was Bruno Giacomelli who was really in fine form with his Alfa, although he had to hand it over to teammate Depailler at the end of the session. The Frenchman's engine was showing signs of losing power. These two pushed Alain Prost back a couple of places. Depailler, Andretti and Daly completed the first ten. Arnoux had the biggest problem during this second session for he crashed coming out of Druids hairpin. His Renault was irreparable so he had to use his spare car for the race. Ferraris proved to be well down, while Lammers, Rosberg and Desire Wilson were the non-qualifiers.

here were threatening clouds as the cars formed up on the grid, but they held off until an hour after the race had ended. Among the more competitive teams, Ligier, Williams and Brabham opted for Goodyear's B compound tyre, while the Alfa Romeo drivers chose the softer C compound.

Pironi set the fastest time and he also

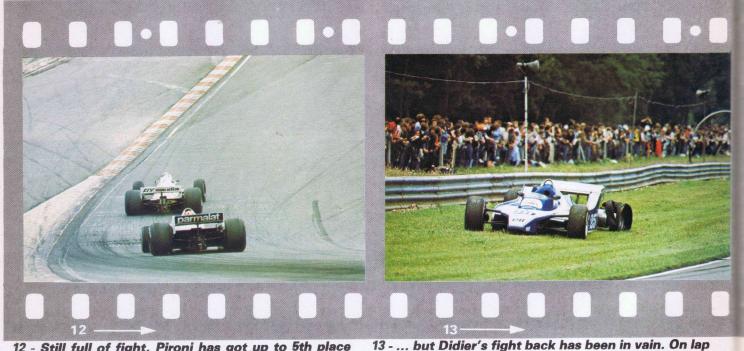
made the best start. Away he went as though he was just stroking the car round. A non-aggressive pact had been declared between the Ligier drivers. Whichever one of them took off into first place from the start would be allowed to stay there while the second would be the buffer against any Williams attack.

In fact there was no need for the buffer for the Ligiers were so superior. Didier Pironi quickly pulled away from Laffite. The latter was pressed hard by Jones and Piquet during the first three laps, but it didn't last long. Jacques soon pulled away from them. The race settled down into a pattern. Pironi and Laffite were out in front, separated by three seconds.



8 - Derek Daly holds an excellent 8th place, ahead of Andretti and Tyrrell team mate Jarier, in the early stages.

9 - Surer has been stuck behind Keegan for several laps. On lap 12 he finds an opening at last and takes over 15th place.



12 - Still full of fight, Pironi has got up to 5th place behind Daly...

13 - ... but Didier's fight back has been in vain. On lap 64, the right rear tyre of Ligier number 25 goes flat, completing the astonishing defeat of the French team.

Then came the Jones-Piquet duo followed by Reutemann-Depailler-Giacomelli who in turn were followed by another trio comprising Daly-Andretti-Jarier. The rest had been left behind.

The first third of the race was dominated by Ligier. On the 15th lap, Pironi led Laffite by three seconds and he in turn was ten seconds ahead of Jones. The Ligiers were literally running away with the race. Jones had his hands full to try and hold off Piquet. The Brabham was quicker than the Williams in the corners, but slower in a straight line. Reutemann, on the other hand, was slowing pulling away from the two Alfa Romeos.

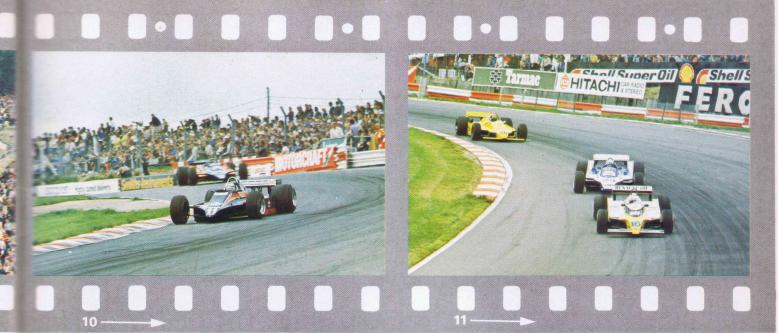
Pironi appeared to have the situation well

in hand. But on the 18th lap, he felt his car slide away from him. He realised that he had a puncture, and slowly drove back to the pits to have the wheel changed, restarting in 20th place.

So that left Laffite in front with a considerable lead over Jones who was slowly drawing away from Piquet. But then trouble hit Ligier again. Laffite's lead over Jones dropped to six seconds between the 27th and 29th laps. On the 30th lap, Laffite signalled to his pit hat he was going to stop and change tyres, but he never reappeared. His right rear tyre, which had been going down slowly, suddenly let go altogether causing the Ligier to crash.

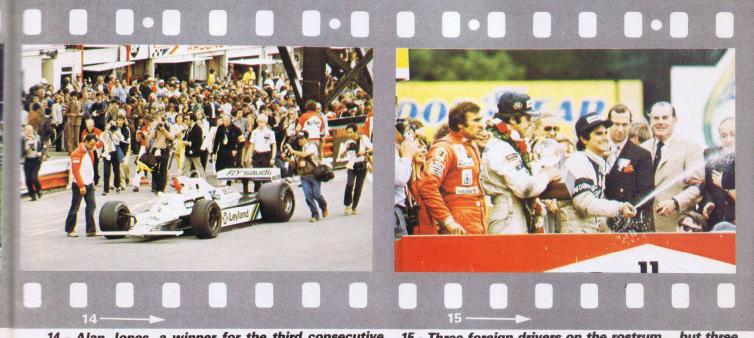
So Jones took over the lead, five seconds

Pironi appeared to have the situation well in hand. But on the 18th lap...



10 - Longest duel of the entire race: Jarier has been chasing Andretti for many laps. They are fighting over 6th place when Mario's transmission pinion bearing fails.

11 - Pironi has stopped to change a flat tyre. Back in the race in 20th place, he sets off on a stunning comeback drive. In full flight, he shoots past Arnoux into 16th place (lap 27).



14 - Alan Jones, a winner for the third consecutive race. Some habits are worth getting into...

15 - Three foreign drivers on the rostrum... but three British cars in the first three places. The spectators are well satisfied.

in front of Piquet, now second. Reutemann was a solid third, for the Alfa Romeo threat had disappeared much earlier when both Depailler and Giacomelli had to change their softer tyres. So it was a cool and calm Daly who held fourth place in front of Andretti and Jarier who had been battling for most of the race although the latter hadn't managed to find a way past. Next came Watson, then Surer and Rebaque fighting over eighth place. Prost had changed his tyres on the 15 th lap and was now eleventh followed by Pironi. Both were climbing up through the field and heading for points-winning positions.

At half-distance, the race seemed to have

been decided. Jones now had a good margin over Piquet. He was heading for his third successive win, problemfree. Piquet took second place, in spite of Reutemann catching him a little towards the end. Fourth place went to Daly. The Irishman's place had at one time been threatened because an on-form Pironi had been catching him after his pit stop. Pironi was only a few lengths away from Daly when his left rear tyre went flat and he pulled off the circuit to retire. Who knows, if that hadn't stopped him, may be the attacking Pironi would have been able to catch Reutemann and even Piquet. So Daly was able to heave a sigh of relief and take his second fourth place this year. Andretti,

however, was again deprived of a finish in the points. His gearbox broke on the 52nd lap which allowed Jarier to finish fifth. Alain Prost took the final point. His climb throught the field, unlike Pironi's, was rewarded.

The two Alfa Romeos didn't last long after their tyre changes. The Renaults never figured. Jabouille once again struck bad luck (how many more times?) by being the first to retire. The Ferraris were equally unremarkable, in spite of a superb start by Villeneuve. Basically, Ligier, Williams and Brabham were on top. Alfa were a little further back, while mention must be made of Tyrrell, Lotus and McLaren. The rest could be ignored.

# **Brands Hatch statistics**

#### **BRITISH GRAND PRIX**

Date: July 13, 1980

Circuit length: 4,206 miles

Race distance: 76 laps, 198,664 miles

Conditions: overcast

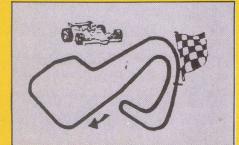
Attendance: approximately 110,000

spectators.

#### THE RECORD

(last five races)

1975: Fittipaldi (McLaren M23) 1976: Lauda (Ferrari 312T2) 1977: Hunt (McLaren M26) 1978: Reutemann (Ferrari 312T3) 1979: Regazzoni (Williams FW07)



LAFFITE

Ligier JS 11/15 1'11"395

REUTEMANN

GIACOMELLI Alfa Romeo 179

Alfa Romeo 179 1'13''189

McLaren M29/B

**DE ANGELIS** 

Renault RE 24

Williams FWO7

1'12"128 DEPAILLER

DALY Tyrrell 010

1'13"469

1'13"717

Lotus 81

1'13"859

**ARNOUX** 

1'13"967

**KEEGAN** 

1'14"236

**CHEEVER** 

Osella FA 1

**FITTIPALDI** 

Fittipaldi F8

1'14"517

1'14"580

Arrows A3

1'15"423

MASS

WATSON

Williams FW07/B 1'11'629

#### STARTING GRID

PIRONI

Ligier JS 11/15 1'11"004

**JONES** 

Williams FW 07/B

1'11"609 PIQUET

Brabham BT49

1'11"634 PROST

McLaren M29/B

1'12"634

ANDRETTI

Lotus 81

1'13"400

JARIER

Tyrrell 010

1'13"666

**JABOUILLE** 

Renault RE23

1'13"749 SURER

ATS D4

1'13"953

REBAQUE

Brabham BT49

1'14"226

VILLENEUVE

Ferrari 312T5

1'14"296

PATRESE

Arrows A3

1 14 560

SCHECKTER

Ferrari 312T5 1'15"370

Non qualified:

LAMMERS (Ensign MN180) 1'15"596 ROSBERG (Fittipaldi F7) 1'15"845 WILSON (Williams FW07) 1'16"315.



### TIMES IN UNOFFICIAL PRACTICE

WILSON

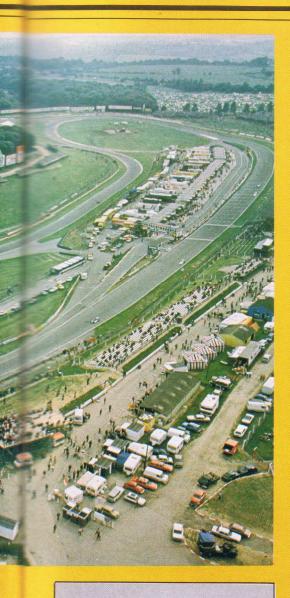
#### Friday Saturday Sunday morning morning morning 1'15"367 1'12"722 1'13"340 PIRONI LAFFITE 1'12"482 1'13"186 1'14"542 JONES 1'13"161 1'11"884 1'15"254 REUTEMANN 1'12"373 1'14"287 1'14"888 PIQUET 1'13"620 1'12"007 1'14"217 1'12"532 1'16"420 GIACOMELLI 1'14"424 1'15"496 **PROST** 1'13"436 1'15"555 DEPAILLER 1'14"450 1'18"792 1'15"897 ANDRETTI 1'15"233 1'13"553 1'17"881 1'14"360 DALY 1'15"063 1'14"208 1'16"394 **JARIER** WATSON 1'13"907 1'14"540 1'16"209 JABOUILLE 1'17"526 1'15"399 1'15"758 1'14"921 **DE ANGELIS** 1'14"033 1'16"135 SURER 1'15"362 1'14"309 1'17"198 ARNOUX 1'16"199 1'14"702 1'18"117 REBAQUE 1'16"013 1'16"128 1'17"124 1'21"200 1'16"831 1'15"627 KEEGAN VILLENEUVE 1'16"271 1'15"849 1'15"394 CHEEVER 1'18"897 1'14"904 1'17"792 PATRESE 1'18"936 1'16"430 1'18"210 1'19"738 1'23"841 **FITTIPALDI** 1'16"347 SCHECKTER 1'15"858 1'17"223 1'17"570 1'17"498 1'16"040 1'18"973 MASS 1'17"514 LAMMERS 1'16"694 1'16"880 1'17"542 ROSBERG 1'15"661

1'17"902

1'15"907

# OFFICIAL PRACTICE TIMES

g		1st session	2cnd session
/ 9	PIRONI LAFFITE JONES REUTEMANN PIQUET GIACOMELLI PROST DEPAILLER ANDRETTI DALY JARIER WATSON JABOUILLE DE ANGELIS SURER ARNOUX REBAQUE KEEGAN VILLENEUVE CHEEVER PATRESE FITTIPALDI	session  1'11"004 1'11"749 1'11"609 1'11"839 1'13"089 1'15"208 1'12"759 1'13"189 1'14"780 1'14"011 1'14"926 1'13"717 1'14"278 1'14"617 1'14"948 1'14"178 1.15"307 1'15"259 1'14"754 1'15"233 1'16"942 6'39"105	session 1'11''017 1'11''395 1'11''630 1'11''634 1'12''128 1'12''634 1'14''038 1'13''408 1'13''409 1'13''666 1'13''967 1'14''226 1'14''236 1'14''236 1'14''517 1'14''560 1'14''580
	SCHECKTER MASS LAMMERS ROSBERG WILSON	6'39'105 1'15''378 1'17'416 1'17''274 1'17''198 1'17''624	1 14 580 1 15 430 1 15 423 1 15 596 1 15 845 1 16 315



### THEIR FASTEST RACE LAPS

	Time	Lap n∘
Jones	1'13"179	53
Piquet	1'13"375	60
Reutemann	1'13"'225	75
Daly	1'14"348	69
Jarier	1'15"129	55
Prost	1'14"118	51
Rebaque	1'15"738	37
Watson	1'15''625	48
Patrese	1'16"945	49
Scheckter	1'15''742	64
Keegan	1'16"780	65
Fittipaldi	1'17"259	34
Mass	1'17"386	58
Arnoux Pironi	1'15"378	64
Surer	1'12"368	54
Andretti	1'15"561	52
Giacomelli	1'15"218 1'15"058	44
Villeneuve	1'15''837	40
Laffite	1'14''067	32 14
Depailler	1'15"786	13
Cheever	1'19"136	13
De Angelis	1'17"318	
Jabouille	1'17"224	10
vanounie	111 224	5

### PIT STOPS AND RETIREMENTS

Jabouille: retired 7th lap, engine tightened - Cheever: changed front tyres 10th lap, retired 18th lap, broken rear suspension - De Angelis: changed front tyres 13th lap, retired 16th lap, broken rear suspension - Prost: changed tyres 15th lap - Giacomelli: changed tyres 17th lap, crashed 43rd lap - Pironi: puncture then changed tyres 19th lap, retired 64th lap, damaged tyre following second puncture - Villeneuve: stopped 20th and 25th laps, skirt jammed, retired 36th lap, electrics - Depailler: changed tyres 23rd lap, retired 27th lap, broken valve - Mass: changed four tyres and steering wheel 29th lap - Arnoux: stopped 30th lap, brake fluid leak from right rear caliper-Laffite: crashed 31st lap caused by punctured tyre - Scheckter: changed front wing 34th lap following collision with Keegan - Keegan: changed front tyres 37th lap - Andretti: retired 57th lap, broken gearbox - Watson: changed front tyres 58th lap - Surer: crashed 60th lap.

# PROVISIONAL WORLD CHAMPIONSHIP CLASSIFICATION

Position/Driver	AP	BRANTING	N. 11/08	Us " AFD.	BEINEST "CA	MONIUM	SPA CO	SAE,	William Total
1. Jones 2. Piquet 3. Pironi Arnoux 5. Reutemann 6. Laffite 7. Patrese 8. Daly De Angelis 10. Fittipaldi 11. Jarier Prost Rosberg Mass	96 3 14 -	4 3 9 1 6 2 - 1	34926	91 6	6 9 3 4	4 96	936214	96 - 4 - 3 - 2 1	37 pts 31 pts 23 pts 23 pts 23 pts 20 pts 16 pts 7 pts 6 pts 6 pts 5 pts 4 pts 4 pts 4 pts 4 pts 4 pts
15. Watson Villeneuve 17. Giacomelli Scheckter	2	-	-	3 - 2		2	-	-	3 pts 3 pts 2 pts 2 pts

#### **CONSTRUCTORS CUP**

1. Williams 57 pts - 2. Ligier 39 pts - 3. Brabham 31 pts - 4. Renault 23 pts - 5. Arrows 11 pts - 6. Tyrrell 10 pts - 7. Fittipaldi 9 pts - 8. McLaren 7 pts - 9. Lotus 6 pts - 10. Ferrari 5 pts - 11. Alfa Romeo 2 pts.

#### **RESULTS**

		76 laps in	moyenne		
1. JONES	Williams FW07/B		(125.690 mph)		
2. PIQUET	Brabham BT49	11"07 behind			
3. REUTEMANN	Williams FW07/B	13"285 behind			
4. DALY	Tyrrell 010	one lap behind			
5. JARIER	Tyrrell 010	one lap behind			
6. PROST	McLaren M29/B	one lap behind			
7. REBAQUE	Brabham BT49	two laps behind			
8. WATSON	McLaren M29/B	two laps behind			
9. PATRESE	Arrows A3	three laps behind			
10, SCHECKTER	Ferrari 312T5	three laps behind			
11. KEEGAN	Williams FW07	three laps behind			
12. FITTIPALDI	Fittipaldi F8	four laps behind			
13. MASS	Arrows A3	seven laps behind	ď		
Fastest lap: Pironi, 1'12"368, 130,015 mph (Record),					

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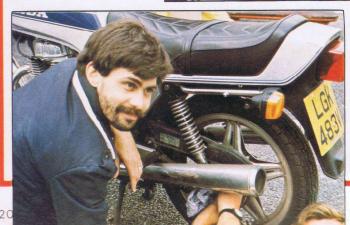
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# Postcard from Brands Hatch



Jackie Stewart combined his old job and his new by driving a Tyrrell as well as commentating on the TV. Derek Gardner appears to have been replaced by a journalist...



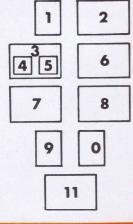


Guy Ligier notched up his 50 th birthday, and Laffite and Pironi gave him an all-blue front row as a present.

Alistair Caldwell and Gordon Murray (left) indulge in a little home maintenance, to keep their hand in ?

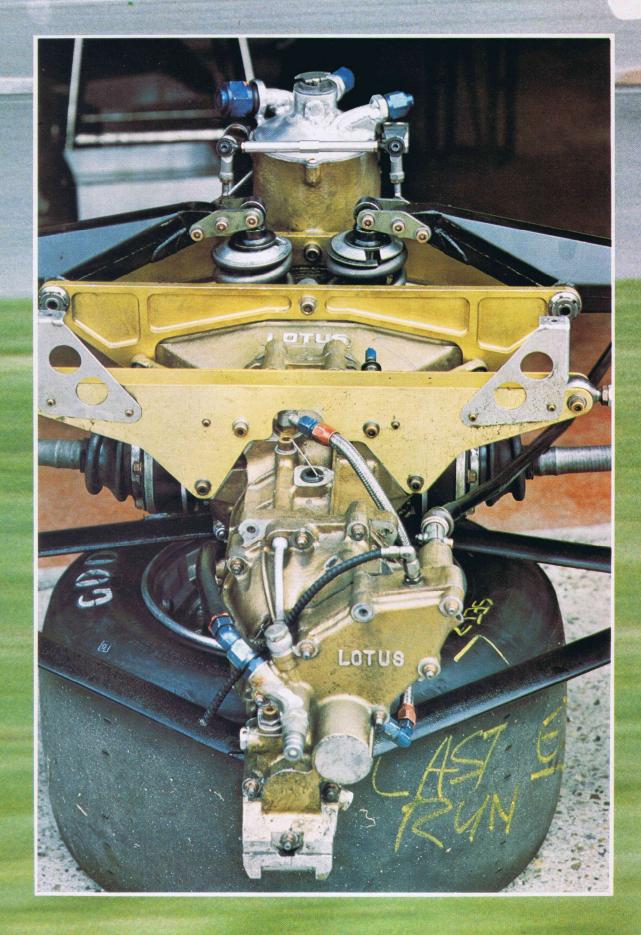
#### BRANDS HATCH IN PICTURES

- 1 Didier Pironi was without doubt the most attacking driver in the race. But his determination was unrewarded.
- 2 The McLaren team are obviously finding form again, but Prost hoped to do better than sixth place. His time should come.
- 3 Alan Jones had some luck after a lot of bad luck. He'd make a fine World Champion at the end of the year...
- 4 Lotus : a narrow gearbox to help air flow, but not sufficient to make the cars wholly competitive.
- 5 Inside a McLaren M 29.
- 6 Jan Lammers tried hard, as is clear from our picture. But he couldn't qualify.
- 7 Brands Hatch is one of the best circuits from a spectator's point of view. The cars are coming out of the Druids hairpin.
- 8 Bruno Giacomelli was tremendous in practice and started well in the race. However, he had to pit for a change of tyres and finally crashed.
- 9 The first leader change: one Ligier chases another. Laffite passes Pironi who has a flat tyre. But it's only a brief moment of glory for Jacques.
- 10 Hector Rebaque returned to Grand Prix racing. He'd been out of it for most of this season after having run private Lotus in 1978 and 1979. He went well despite the lay-off.
- 11 The British Grand Prix, lap by lap.

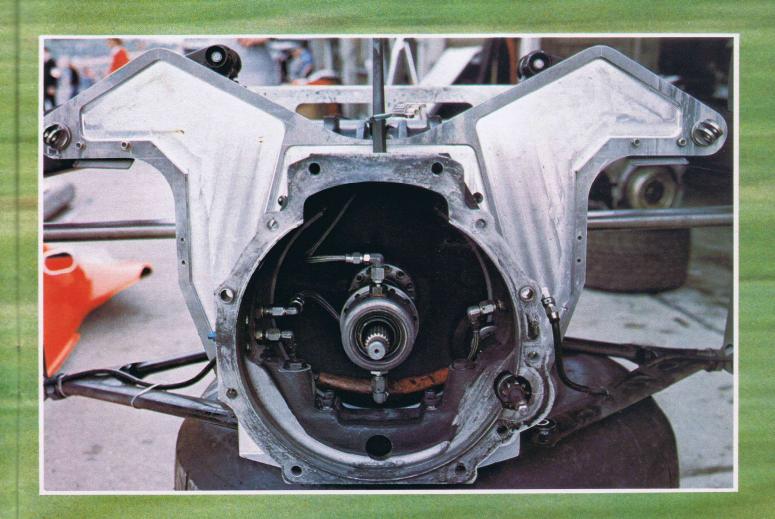












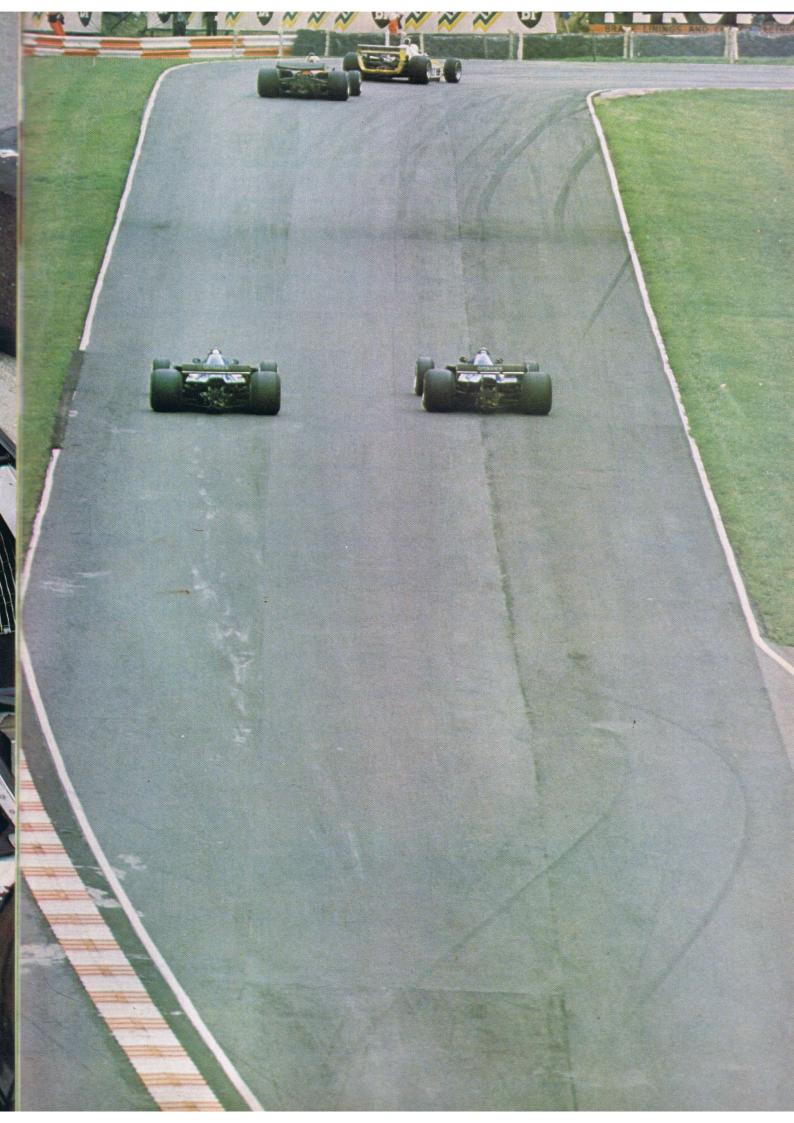




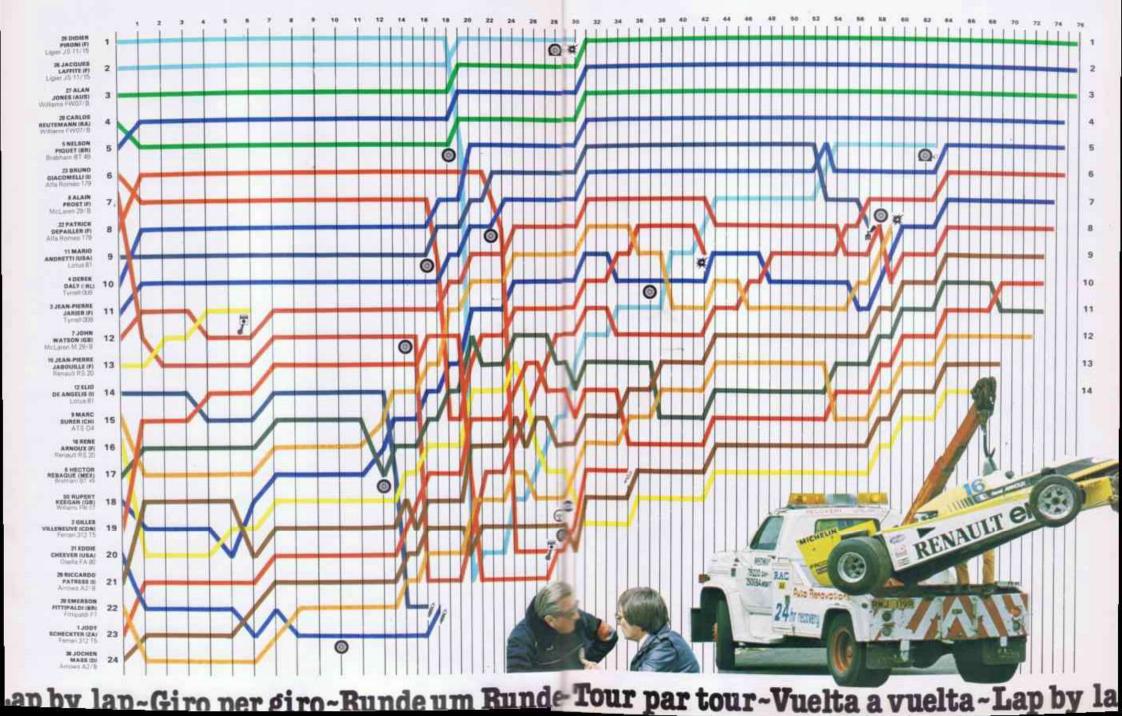








# ap by lap-Giro per giro-Runde um Runde-Tour par tour-Vuelta a vuelta-Lap by la

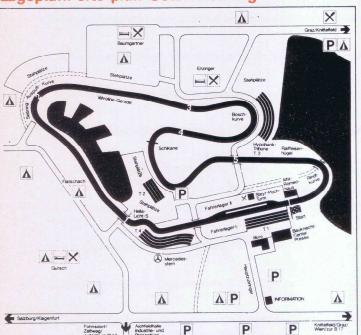




# Usterreichring Usterreichring

Formel-I-Weltmeisterschaftslauf 15.—17. August Zeitplan (Anderungen moglich)

Lageplan/site plan Osterreichring



Freitag, 15. August 1980 08.45-18.30 Uhr Training Formel SV, Formel 1, Renault 5, Formel 3, BMW Procar M1, Alfa Sud

Samstag, 16. August 1980 08.00-08.30 Uhr Training Formel 3 08.45-09.30 Uhr Training Formel SV 10.00-11.30 Uhr Training Formel 1 13.00-14.00 Uhr Training Formel 1 14.20-14.50 Uhr Training Renault 5 15.10-15.40 Uhr Training Alfa Sud 16.00 Uhr Start zum Procar-Rennen

17.00 Uhr Start zum Formel-3-Rennen Sonntag, 17. August 1980 09.00-09.45 Uhr Rennen zum VW-Castrol-Europa-Pokal 1980

Formel SV 10.00-10.45 Uhr Alfa-Sud-Rennen 11.00-11.45 Uhr Rennen zum Renault-5-Elf-Cup 1980 11.45-12.45 Uhr Pause 13.00-13.30 Uhr Informationstraining Formel 1 13.30-14.30 Uhr Pause

14.30-15.00 Uhr Startaufstellung Formel 1 15.00 Uhr Start des Formel-I-WM-Laufes

Rahmenprogramm:

Feuerwerk am Samstag abend, Flugvorführungen am Sonntag mittag. Attraktionen während der Rennpausen, Unterhaltungsmöglichkeiten bei Sommerfesten in der unmittelbaren Umgebung.

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Usterreichring







# WING-CARS: STANDARDISATION

The lower part of the rear of the car was fitted with faired-in bodywork, as can be seen in these illustrations from above and below. This bodywork, too, was quickly removed



There may be no clear-cut example, but events at Brands Hatch proved that current Formula One is very standardised. Each time a new car appears, its technical description includes mention of one the following phrases: « Lotus style », « Williams fashion » or « Brabham-like ». The reason for this is simple. Most of the current Formula One cars follow the same design pattern.

- by Giorgio PIOLA —

HE Williams FW 07 is a model of simplicity which has inspired more than one designer. Indeed, it was inspired by the super-successful Lotus 79, but that car's designer, Colin Chapman, took his ideas further in making the 80, a car that was too complicated to be successful. Since then, simplicity has become fashionable and a great number of current single seaters follow its principles.

The lack of originality in current Formula One was proven and even justified in the only two novelties at Brands Hatch. The first was the Fittipaldi F8 which could scarcely be called of original design apart from in a couple of small details. The second was the modified Arrows A3 which attempted to search for new aerodynamic solutions, but which didn't work, perhaps because it didn't follow the

well-tried formula.

Technically speaking, the 1979 season was interesting because of the original and different new ideas on the Arrows A2 and Lotus 80. Both cars had been developed following long, hard sessions in the wind-tunnel and came up with interesting new solutions in the use of ground effect. Theoretically, they should have been considerably superior to their competitors. Results in the wind-tunnel encouraged the teams involved. But it came to nought. Once on the track, the two cars became rolling disasters. Both Southgate and Chapman took a step back and reappeared with classic cars for 1980 which were inspired by the Williams FW 07

Classic ideas are followed closely in the design of the new Fittipaldi F8. However, there are one or two little interesting details: 1) the wheelbase, which is shorter than any other current Formula One car. 2) the chassis is of honeycomb structure, Emerson Fittipaldi shows the utmost confidence in its rigidity in spite of other

bad experiences. 3) a self-designed gearbox casting intended to make it narrower which is following the example of a number of other Formula One teams.

So although the F8 basically seems no more than a development of the F7, it is entirely new. It has been designed with the help of both wind-tunnel and computer, at considerable expense.

The modified version of the Arrows A3 was also developed in a wind tunnel, that at Imperial College, Kensington in London. It adopts some of the aerodynamic aids already seen on the Lotus 80. Southgate's main aim was to eliminate understeer which has afflicted the A3 since it first appeared. He attempted to do this by fitting two short mini-skirts on either side of the car's nose. Theoretically, this should have procured greater downforce at the front, thus giving the tyres better grip which they lack currently. The team had also enclosed the lower rear end of the A3s that went to Brands Hatch which was intended to improve the airflow from the side pods by eliminating some of the turbulence.

Unfortunately, the A3's understeer actually worsened due to the modifications, and no amount of adjusting the rear wing could balance it. It seemed that outside actual classic lines, there is no way to be competitive. Another one in the eve for originality.

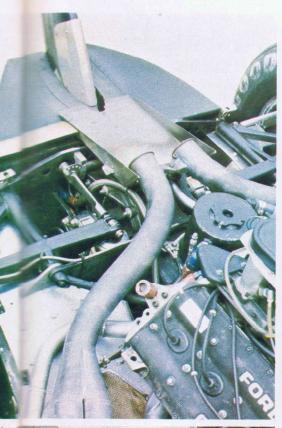
But both Lotus and Arrows are currently working on modified versions of their current cars for Hockenheim. It will be interesting in which direction those two Formula One innovators Southgate and Chapman decide to go. There are two options open to them with classic wing cars at their disposal. One is to become more sophisticated. The other is to follow the Williams-Ligier school of thought, of which the least can be said that it bears

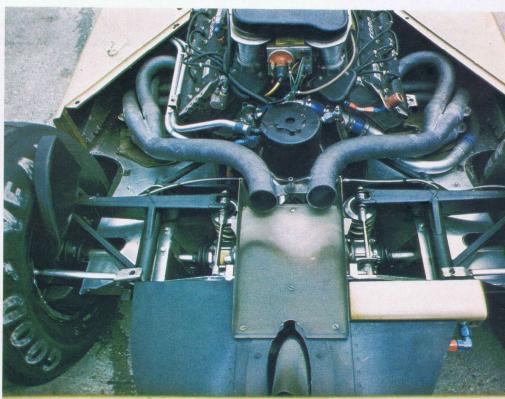
The skirts which appeared under the nose of the Arrows A3 were hoped to provide more downforce at the front. They were soon replaced by the normal wing arrangement





Note the strong chassis on the new Fittipaldi F8, fabricated from honeycomb laminate













# **BRANDS HATCH EXTRA**

#### McLAREN FIGHTS BACK

n Friday afternoon the McLaren team's star which has been eclipsed for so long, was in the ascendant. It wasn't exactly shining bright, as it had during the Emerson Fittipaldi and James Hunt eras. All the same, it was glimmering: Prost had set fifth fastest time and Watson was eighth fastest. This smacked of a comeback. It had been a long time since Teddy Mayer's cars had both been so high up after a practice session.

The rest of the weekend didn't reflect this initial promise. On Saturday, Alain and John both dropped down the grid a little. It wasn't a lot, but it was enough to exclude them from the potential outsiders. On Sunday, neither driver was particularly outstanding, even though Prost finished sixth, gaining one championship point. However, taking the Friday practice on its own, one might have hoped for better, and the team members were certainly more optimistic.

Nevertheless, the McLaren team appeared to be making a comeback. « It's the result of a logical and continuous programme », Teddy Mayer told us on the Friday. « We did some work in the wind tunnel during June which helped to improve the aerodynamics of the M 29, while we also worked on developing the mechanical elements of the car. »

The first hint of this progress came at Le Castellet where Alain Prost did very well during the early laps of the race. There was further proof during that first day of practice for the British Grand Prix. Prost was using new rear suspension. « I've given the new suspension to Alain, » admitted Teddy Mayer, « because we now consider him to be the number one driver in the team. »

" I'm as fast as Piquet over most of the circuit, " said Prost on Friday evening, " but I'm losing nearly a second alone at the hairpin." Watson had a similar problem. " It's not turning into the slower corners properly."

During the race, both M 29s had to stop at the pits in order to change tyres. But that didn't stop Alain from climbing up through the field back to sixth place.





#### **WELL DONE, DEREK!**

erek Daly's fine race at Brands Hatch deserves ten points out of ten, and the Irishman had every justification for the satisfied smile that he was wearing when he stepped out of his car. He was proud of what he'd done and also encouraged.

Derek Daly had started to get worried. Since the Argentine Grand Prix, in which he'd taken fourth place, the Dubliner has not had a serious opportunity to show his ability. At least not in the right way, because while Daly has attracted attention to himself the main reason for his

notoriety was the triple ground loop in which several cars were eliminated immediately after the start at Monaco.

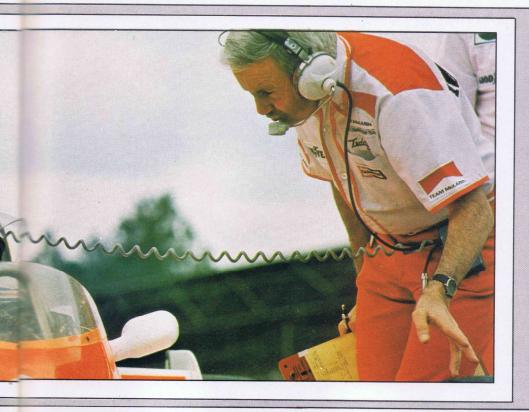
A fortnight later, another error sent him flying off the road at Jarama. Nothing seemed to be going right for him: the 010 Tyrrell was not the car in which he could shine, and it was only the accidents which drew any sort of attention to him. The situation for Derek was neither comfortable nor particularly enviable.

It was only to be expected when he smiled after the British GP to say « I really needed this. After Monaco and Spain I badly needed to score some points ». He didn't make it clear whether he was talking of points in the World Championship... or in Ken Tyrrell's esteem.

Daly had driven an impeccable British

Grand Prix. His task had, however, been far from easy. Right from the beginning he had to fight off Mario Andretti, who stayed threateningly close to the Tyrrell for most of the race. « Mario was a bit slower than me », admitted Derek. « Every time he got close, I was able to pull away again ».

At the same time as Daly was able to demonstrate his vastly improved maturity, the race was also a feather in Ken Tyrrell's cap. « We've done a lot of work on the monocoques », explained Derek. « They are now much stiffer. The suspension is able to work much better. » This technical turn-round has occurred at just the right moment for Daly to kill the bad reputation he was in danger of bringing upon himself.



« We learnt a lot, » he concluded. « We should have used the 15 - inch wheels on the front. I was going to try them on my race car on Saturday morning but the engine broke. All the same, we should have used them anyway. Otherwise, the car was well balanced. After the change of tyres, I was quicker than Reutemann for ten laps. Then the tyres started to go off again. Even so, I was a second a lap quicker than the Tyrrells during the final laps of the race. »

The promise is there. The M 30 may be the car to confirm the comeback

#### LIGIER : TOO FAST TO WIN

really sympathise with Gerard Ducarouge », said Frank Williams on impulse after the race. « The Ligiers were really the quickest cars on the track today. We had a lot of luck. ».

«I must admit that I'm very sorry for Ligier » said Patrick Head, who promptly added, with a malicious grin, « well, no, actually I'm not at all sorry for them. »

The two Ligiers of Didier Pironi and Jacques Laffite certainly deserved the chequered flag, if not a one-two. They had the race won when first of all Pironi and then Laffite were sidelined by punctures caused by weakness in their Gotti wheel rims. Frank Williams had made them bite the dust at Paul Ricard. This time they seemed to do so of their own accord.

The pill was even more bitter than it had been at Le Castellet. The French team had proved to be superior not only in practice but also during the race. However it had been Jones, the Australian demon, who had once again been the lucky one to survive where his rivals had failed

This time, however, the blue cars were armed with the same weapon with which they'd been beaten in France: the famous 15 - inch wheels which cut down tyre overheating as the wheels turned less than the 13 - inch models. « I'm confident », Lionel Hublet, Gerard Duca-

rouge's assistant, told us the morning of the race. « I'm more confident here than I was at Ricard because we've eliminated the tyre overheating problem. By using the 15 - inch wheels, the tyres should run at 240 degrees, which is 40 degrees less than they should with 13 - inch rims. So there are no worries on that front. »

Jacques Laffite went to visit his friends in the Williams team between the warm-up and the race. Confidence allowed him to tease his rivals a bit, even though they'd probably rumble him in the end. « It's just as it was in France », he told Jones, feigning disappointment. « Something's broken on my car. I'm going to have to start in the spare car. » Jones wondered if Laffite was being serious or not when the Frenchman burst out laughing: « no, don't start dreaming. It doesn't happen at every race, if it did, it wouldn't be worth

carrying on! » At that moment, one could sense that Laffite reckoned he was going to win the British Grand Prix.

He didn't win, nor did Pironi. The Ligiers were certainly the top cars at Brands Hatch, or at least those that had the maximum downforce. That might have meant that they were tremendous during practice, but it also indirectly caused them to lose the race. The Ligiers were too quick. Their Gotti rims weren't capable of holding up under the tremendous force subjected to them in cornering. They cracked. Pironi was twice a victim of a deflating tyre. The first time he lost the lead. The second time he lost a certain finish in the points. Laffite was just as susceptible. It was easy to understand why Ducarouge was so upset the evening after the race « we could have won so easily, but the new wheels cost us everything. »



#### TYRES: AN ALARM BELL RINGS

he armistice which was jointly declared by the two tyre manufacturers who share the F1 « market » lasted, it will be remembered, for only two races. Nevertheless, the basic idea was attractive insofar as it gave grounds for hoping that there would be greater equality between the two companies and more importance given to the cars and the drivers.

Two months since the ending of what was, after all, no more than a gentlemen's agreement, two conclusions may be drawn:

1) Michelin has not followed the important step forward achieved by Goodyear when the giant American company switched the manufacture of its racing tyres from Wolverhampton to Akron, Ohio.

2) Tyres have become an even greater factor in the competitivity of the cars. The Williams team's winning choice at Ricard - 15 - inch wheels at the front in order to alleviate the strain placed on the tyre - is a perfect illustration of this.

There is a third conclusion to be drawn from the British Grand Prix, in the sense that Goodyear products ran into an unexpected patch of poor reliability. This problem could turn out to be critical. During the race, 12 drivers - half of those who started - were forced to stop for a tyre change, either because their tyres had overheated or because of punctures (Mass, Jarier, Keegan, Arnoux, Watson, Pironi, Cheever, Prost, De Angelis, Giacomelli, Depailler and Villeneuve). In the case of some of these drivers, stops were inevitable because they had gambled on soft rubber, but it must also be pointed

out that the characteristics of the Brands Hatch circuit provide an interesting explanation.

Brands Hatch was the first GP in which the « 1980 generation » cars had raced on a circuit which requires so much aerodynamic downforce. An average speed of 132 mph by poleman Pironi - that's amazing! The worrying thing is that the Brands Hatch problem is likely to be found at all those circuits which have hitherto been regarded as « tight. » The acknowledged difficulties of these circuits - especially in the big curves - are being eliminated little by little not only by the widespread taming of ground effects technology but also by the extra grip which is created by tyre development itself.

The same tricky problem is expected to raise its head at the tracks which are similar to Brands Hatch and which will shortly be tackled by the F1 teams. The most obvious circuits are Zeltweg, Zandvoort and Watkins Glen, where extremely high lap speeds are coupled with lots of downforce. They contrast with Hockenheim, where high straight-line speeds are recorded, though with little downforce; and with Montreal, which will bring out the big wings but only for modest average speeds.

The most striking example of the torture to which the tyres are being subjected is provided by the Ligiers, which currently generate the highest downforce of any F1 chassis. Having already lost the French GP because they wore out their front tyres, the Ligiers then lost the British GP following a mysterious puncture epidemic - a total of eight shared between Laffite and Pironi throughout the weekend in England. Looked at logically, the extra

downforce which they enjoy submits their tyres - or their Gotti wheels, since they too appear to have reached their limit - to forces which must be difficult to calculate in advance.

On top of all this was the necessity to use 15-inch wheels at the front, each one three kilos heavier than the 13-inch variety, with the inevitable increase in the unsprung weight component of the car which must be taken into consideration.

Discussions are now well under way between Goodyear, Michelin and FISA with a view to formulating a tyre rule which will satisfy as many of the parties involved as possible. The basis of the agreement rests on the principle of some form of restriction which will reduce costs, bring down cornering speeds, and even-out the present inequality.

Among the various proposals which have been suggested, the following points are worth noting: 1) A restriction on the number of sets of tyres, and the different types, to two per car for each practice session; 2) A reduction in the width of the tyres; 3) A limitation on diameter; 4) A requirement that any future sixwheeled cars (presently banned, at least in principle) should use tyres whose width is no less than half that of current equipment; 5) A reduction in the area of the contact patch by the re-introduction of treaded tyres.

It has become clear that there are supporters and adversaries of the proposals in each of the two opposing camps. But it is worth pointing out that Goodyear has made it an express condition of its continued presence in F1 that a precise and definitive rule should be published before the end of the current season.

**Giorgio PIOLA** 





# FREE REN



# BY JODY SCHECKTER



Retirement is something that I've been thinking about for a long time. You will probably have been able to guess how I felt from my last column, because that's the way my thoughts had already begun to turn. Now I've done it: I've made my decision, and I shall stick to it. I want to keep to my contract with Ferrari, so I shall stay with the Scuderia until the end of the season. After that, I quit. I don't propose to discredit Formula I by criticising what's happened to it. That would be both ungainly and unfair: I could hardly

start bad-mouthing the profession which has given me so much in terms of sport, satisfaction and, of course, income. A combination of different factors have brought about my present state of mind. It's not so much a lack of interest as a lack of motivation.

On e of them is probably the sheer monotony of it all. Seven seasons of racing is a long time, especially when the racing is combined with day after day of testing. That's the way we work at Ferrari — and of course it's been to our advantage — but there's been more than enough of it to satisfy my appetite for driving. Possibly it's had a similar effect on my will to win. I have already achieved my personal ambition, which was to win the world championship. What more can you do in racing after that? Win the championship again? That requires so much effort that you have to ask yourself if it's worth the bother. I wasn't sure whether I wanted to fight as hard as would have been necessary just for the satisfaction of winning something which I had already achieved.

There are other reasons, too. Motorsport has not, perhaps, developed in the direction that I would have liked it to go. At the same time as I was beginning to become successful — and this is not a matter of cause and effect — I found myself getting increasingly disenchanted with the way things were going. It was getting even worse this year. According to what I hear, a Swiss journalist wrote somewhere that my eyes had suddenly opened. There's something in that.

Most importantly, things have changed as far as the driving itself is concerned. In practice for the British GP I qualified for 23rd place on a 24 car grid. That's the worst grid position I've ever had in the whole of my career. It really broke me up. I was under the impression that the car was going well: certainly I felt that I was driving it quickly. Yet the best I could do was scramble on the last row! Yet it was only last year that I was world champion!

What does it all mean? In simple terms, what it means is that if you don't have the right car you don't stand a cat in hell's chance

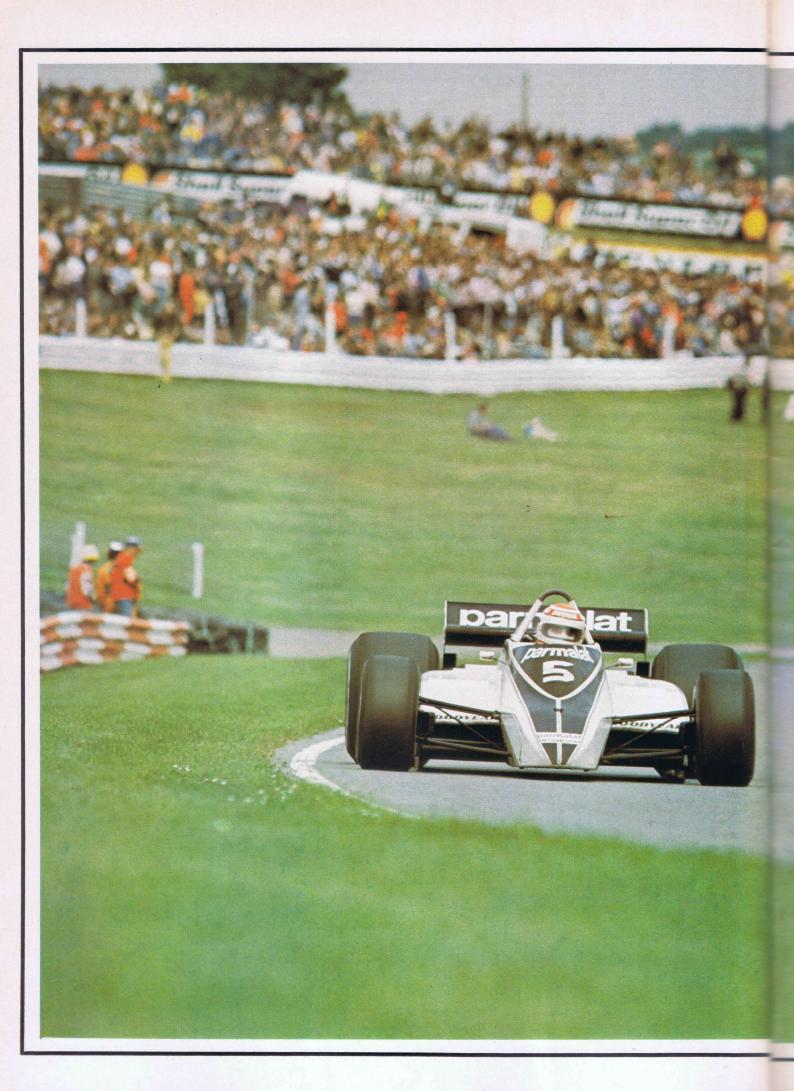
of winning. If you have a car that's good enough, say, for the fifth , the 10th or the 20th row of the grid, then a super-human effort on your part might shift you up one row of the grid. But that's all you can hope for. What it amounts to is that no driver, regardless of how brilliant he may be, can hope to compensate for a bad car by virtue of his ability. OK, in racing you can't always expect to be on top. Nevertheless, there's got to be a happy medium. Champion last year, back row this: everything's out of proportion.

There are people who are going to say that I'm retiring because I don' want to stick my neck out any more. To them I say only one thing: look at my team-mate Gilles. I'm convinced that Gilles Villeneuve is the quickest racing driver in the world. How many races has he won this year? How many points has he scored? This time last year, he was my number one rival in the championship table. I sincerely believe that the cars have taken over from the drivers. But we've still got to have a drivers' world championship. So what needs to be done to change the situation? Well, that's another side of the question, because it involves politics. Any change has got to be drilled into two men, Jean-Marie Balestre and Bernie Ecclestone.

I know them both, having been associated with them in my capacity as President of the GPDA. In its way, it was a pretty frustrating experience. The busier I got with GPDA business, the more I realised that no one was taking any notice of the drivers.

It ended up by costing me a lot of time and money on telex, phone and travel bills. I realised how difficult it was going to be to get any sort of satisfactory result. The question of safety, being more or less an exclusively GPDA problem, is going to come up more and more frequently because it is so closely linked to what's happening in car development. Then again, what can we do? Not even the drivers can agree! We never had a real spirit of unity for reasons which included sheer lack of interest in safety, fear of FOCA, or lack of personal conviction.

I was well aware that a bad car could prevent me from winning. I knew that politics could stand in the way of the sport. I quickly discovered that I would have to fight for what was right in the GPDA. Looking at them individually, not one problem is insoluble. But the combination of all three is overwhelming. They will rear their heads again. Goodbye for now... or anyway until the end of the season.





# PIQUET: AMBITION START HERE

He's a bright youth who behaves with all the self-assurance of an old hand. As yet, Nelson Piquet has scored only one Grand Prix victory — Long Beach — but he's regularly racking up the championship points. These consistently high placings are making him Alan Jones's principal rival for the world championship. What's more, he looks like being even more competitive at the end of the year: he gets more and more promising with every race.

by Eric BHAT -



Consistency, spirit and a burning ambition all influence Nelson Piquet's driving. He could be the outsider in the Williams-Ligier struggle which no doubt be a feature of the second half-season.

rands Hatch, 15 July 1978. Lined up on the grid on the afternoon before the Grand Prix, under the watchful eyes of the F1 hierarchy, the F3 chargers are more determined than ever to show their paces. The green light flashes and a terrifying pack of 34 insect-like F3 machines hurtles into Paddock Bend. Suddenly a chaotic mass of nose-cones, wings and monocoques explodes across the track: when it all settles down, what's left amounts to no more than 20 undamaged cars. Among the wrecks is the Ralt-Toyota of Nelson Piquet, a darkeyed Brazilian youngster with unmistakeably aquiline features.

He has a spare car to fall back on : he rushes back to his pit to start getting it ready. Before he gets there a happy feeling takes over, because waiting there to help him is the tall moustachioed figure of no less a hero than Gordon Murray, the Brabham designer.

With the help of two Brabham mechanics, Gordon mucks in to help the Brasilian prepare the spare car in double-quick time. In the restarted race, he goes on to finish fourth.

« We had had our eye on him for some time », confesses Gordon Murray. « We helped him out when he needed some support, that's all. He was the most impressive youngster in F3 that year: he was quick, he was a winner, and he wasn't making many mistakes. I think what clinched it was that he obviously understood the technicalities of his car. He seemed to have the right sort of attitude... Bernie Ecclestone noticed that. And Bernie was looking for someone to put in his car with a view to the future ».

As things were to turn out, Bernie Ecclestone had made an outstanding choice which must surely have him hugging himself with joy even now. Two short years since the Brands Hatch incident Brabham driver Nelson Piquet lies second in the

world championship.

For Nelson, of course, Gordon Murray is no longer the somewhat intimidating figure that he was in 1978. Instead, Murray is a close personal friend, someone with whom he collaborates on a daily basis both at the circuit and in the Brabham factory at Chessington.

After Nelson had brought his Brabham BT49 home in second place behind Alan Jones's Williams in the 1980 British Grand Prix, there was a lively post-race debriefing session involving Nelson and Gordon. The tall moustachioed figure, now with a matching beard, had taken on an other-worldly appearance. Anxious to get away from the circuit as soon as possible - in order to miss the rain as much as to avoid the traffic - Murray had already pulled on a black moto-cycle suit. Red skigoggles gave the get-up a weirdness that hardly fitted the Grand Prix atmosphere. Dressed like this, Murray congratulated his protégé on his excellent afternoon's work: « Great stuff, Nelson, well done ». « No, it wasn't so good », replied Piquet, though a contradictory smile spread across his face. « It was impossible to do anything about Jones. I was quicker than him through the corners but he was faster down the straights. Two or three times I tried to find a way through, but the chances were not so good ». Bursting into laughter, he added: « You know, I had a terrible shock at the start. Going up the hill into Druids a couple of times I felt the engine cutting out. But it didn't happen again. The car ran beautifully all the way to the finish, ».

« Well, that's another six useful points », remarked the ever-practical Murray.

he previous Friday evening, however, the British Grand Prix had seemed like a considerably less happy prospect. There were long faces in the Brabham pit, where disillusionment looked like being the order of the day. In spite of the promise it had shown in early tests at Brands, the times recorded by the BT49 in the first practice sessions were hardly encouraging to Ecclestone and his men. The day before, Gordon Murray cheerfully informed journalists that he was preparing for a satisfying weekend. « I'm expecting our car to be a shade faster than the Williams, and I hope that we'll be able to give the Ligiers a good run for their money ». Next morning, however, his optimism evaporated as it became evident that Piquet was lagging around two seconds behind Pironi's pace-setting time. The Brabham could manage no better than sixth place. Even the McLaren of the remarkable Alain Prost was faster.

"The car is well balanced" insisted Nelson to the South African engineer. Balanced yes, but far from quick... for no apparent reason. It was the situation which no GP team relishes: the one in which you don't know how to set about curing the problem, simply because you can't put your finger on it.

Boldly, Murray reacted decisively in the only way available to him. « We changed everything on the car... we've gone for a completely different set-up, » he confessed on Saturday morning. Asked for more details, he replied carefully: « Well, we haven't made any alterations to the aerodynamic settings. It's the mechanical things we've concentrated on, to get the car working better ».

It wasn't long before the change of settings was proved correct, indeed the name of Nelson Piquet started to shoot up on the tiny TV screen in his pit which keeps track electronically of the practice times. By Saturday afternoon Nelson's times were 1.5 seconds better than he'd been able to do previous day. The smile came back to Gordon Murray's face and went on getting wider.



There was more progress to be made overnight on the Brabham BT49, though it wasn't quite as dramatic. Nevertheless, Nelson had the satisfaction of being quickest in the Sunday morning warm-up. 

"The car feels terrific on full tanks," he said gleefully. So Gordon Murray was able to repeat his Thursday afternoon forecast (this time with considerably more conviction). 
"I think Nelson is going to be quicker than the Williams in the race, and I'm hoping that he's going to be able to do something about the Ligiers."

Yet to be sorted out was the question of what tyre compound to choose. The problem of what size to use at the front was already settled, because (unlike Williams and Ligier) Nelson much preferred the 13-inch front type. « When we tried the 15-inch fronts on Friday we were quite a bit slower », said Murray. « The BT49 is completely different from the Williams and the Ligiers... it doesn't hold the road in the same way at all ». The tyre choice facing him was between the « B » and the softer « C » compound. He opted for the « B » but carefully disguised the marks even when the car was already on the grid.

But the Williams were a more realistic target: Nelson had the legs on Reutemann

and was able to threaten Jones during the early laps, even though there was to be no chance of getting past him. The Ligier fallibility handed second place to the Brazilian.

This result adds to a reputation which Piquet has been building around himself since the beginning of the season. It is a pleasant surprise to find that in spite of being in only his second full year as a Grand Prix driver Nelson is establishing himself as a potential World Champion. His consistency has been demonstrated by the fact that he has failed to score points in only two of the season's eight « official » Grands Prix. Long Beach where he led from start to finish - showed that he's a winner, too. And he has the essential ability to take a practical, knowledgeable part in the technical development of his car. As Murray says, « he is a vital part of the team ».

ore and more, it seems, Murray believes in Brabham chances of pulling off the World Championship. « Yes, we could do it, » he says. « Nelson makes very few mistakes, you know... even fewer than Jones, for example. He reminds me a lot of Niki Lauda, but he's

got more enthusiasm than Niki had when he was with us. And because he's got his whole future ahead of him he seems to be even more aggressive than Niki was. The only thing we need is a first-class number twodriver — like Prost perhaps — who is capable of preventing rival teams from scoring points. We've also got to get the BT49 going a bit quicker, there's no question that the Ligiers are the fastest at the moment ».

With such good results behind him, Nelson himself is also starting to set his sights on the title. « As soon as we can get the Weismann gearbox sorted out — and we'll be testing it again very soon — we'll be even quicker. Because it's narrower and taller it makes a big difference to the ground effect aerodynamics ».

Alan Jones was under no illusions about the Piquet threat, as he indicated after winning the Brands Hatch race. « A team which finishes well everywhere is definitely a danger »,

READERS NOTE
Coverage of the next two
Grands Prix, Germany and
Austria will be published
in GP n°23. August 26.



# In the cockpits.



#### SAUDIA LEYLAND WILLIAMS Williams-Ford FW 07/07:

Alan Jones (AUS)

Williams-Ford FW 07/05 :

Carlos Reutemann (RA

Williams-Ford FW 07/08:

spare.

Jones and Reutemann used their two normal race cars which are 07 and 05. The spare car was completely new. The only visible exterior modifications on the Williams were new 15 inch diameter Speedline wheels, and a bigger rear wing. This was to give greater down force for the Brands Hatch circuit which is not only quick but twisty. For the same reasons, the front nose fins that had been taken off at Paul Ricard were refitted for Brands.

Neither Williams had any specific technical problems during practice but even so they were slightly slower than the Ligiers. But less so than at Interlagos, a similar circuit to the English track. The Williams certainly had less downforce at high speed than their Frenchlrivals and Patrick Head also admitted that the Ligiers were quicker in Clearways and Surtees.

As usual, Jones worked hard at his job, trying different aerodynamic set-ups and springs on the spare, then on his race car, fine tuning the car on Sunday morning on full tanks.

The Ricard winning solution using 15 inch rims at the front was used again at Brands, although it was no longer an original idea because most of the other top teams used them too. After the Ligiers retired, Jones won the race without being troubled. Reutemann, however, was held up during the early stages by a lack of grip at the front.

Extra large rear wing for Brands Hatch.



#### PARMALAT BRABHAM Brabham-Ford BT 49/8:

Nelson Piquet (BR)

Brabham-Ford BT 49/6:

Hector Rebaque (MEX)

Brabham-Ford BT 49/3 :

spare.

There were no great alterations on the Brabhams although the front suspension had been slightly changed in order to accomodate 15 inch wheels. The bigger rear wing used at Monaco was fitted as well. The spare car was fitted with the Weismann gearbox, around which a new rear track had been designed. However, after briefly trying the car, Piquet asked that the car be put back to normal again.

Piquet's car wasn't very quick on the Friday so it was completely revised: springs, downforce, side pods, under Gordon Murray's supervision. That enabled Nelson to go a whole second and a half quicker the next day. But on Sunday morning the Brabham team surprised their rivals by being quickest of the lot on full tanks.

The Brabham team were so confident that they covered their race tyres with canvas until the very last moment before Piquet went out on the track. The only mystery involved was that the Brazilian was the only one of the quick men to chose 13 inch front tyres, although the construction was exactly the same as on the 15 inch models. The rubber is hard but it reaches a higher temperature because the wheels turn more often. The race would seem to indicate that Piquet's choice wasn't the best, because he allowed Jones to pull away.

Nelson also had a repetition of his Monaco manoeuvre. He had a spectacular series of spins at Clearways on Saturday and then realised that he'd bent a steering arm. He drove along the pit straight, then crossed the track across the traffic and drove the wrong way down the pits.

#### UNIPART ENSIGN Ensign-Ford MN 180/14 :

Jan Lammers (NL)

Ensign-Ford

MN 180/12 : spare.

Both cars where in short wheelbase configuration fitted with new rear uprights. Lammers had no real problems, although the car's skirts didn't work properly on the Friday. The Ensign wasn't quick enough in the tight er corners due to lack of grip. Lammers never qualified.



Lammers was unable to qualify the MN180.

# ESSEX LOTUS Lotus-Ford 81/1: Mario Andretti (USA) Lotus-Ford 81/3: Elio De Angelis (I) Lotus-Ford 81/2:

spare.

The monocoques of the two race Lotus appeared to have been stiffened in a manner all too apparent. Andretti had never driven his car before and found that the reinforcements were hindering his driving so he switched to the older chassis. However, Mario was pleased with the modification because it showed that Lotus were working in the right direction.

However, the Lotus cars still see-

med to lack mechanical reliability. De Angelis went off the road on Saturday after the underside of the right side pod came away which meant he had to start the race in the car that Andretti had rejected. Mario tried a double rear anti-roll bar, probably in order to compensate for the lack of monocoque rigidity. But the Lotus was still oversteering badly in medium speed corners.

The rear cross member on De Angelis's car broke during the race, while Andretti was sidelined by a broken gearbox.

A considerably modified Lotus 81 is expected for the German Grand Prix. The side pod wing profiles will be much modified as the current car has too much downforce which provokes too much drag in a straight line.



1 - Upper part of the chassis now strengthened, but a sidepod came loose on Saturday.

#### **CANDY TYRRELL** Tyrrell-Ford 010/4: Jean-Pierre Jarier (F) Tyrrell-Ford 010/2:

Derek Daly (IRL) Tyrrell-Ford 010/1:

There were no great visible alterations on the Tyrrells at Brands Hatch, although they already seem a little outdaded. The two race car chassis had been stiffened, principally around the front suspension mounting points. The side pods had also been slightly altered while the fuel pump had been moved to the upper side of the engine in order to vacate the area around the side pods to allow for free air flow

Daly thought that progress had been made, although he wasn't entirely happy with his car's handling. Jarier, however, complained of porpoising which he was unable to eliminate completely and which held him up during the race and meant he remained in his teammate's slipstream. The Tyrrells started on the softer tyres and they held together until the finish without problem, which could be interpreted to mean that the cars don't have a lot of downforce.





**MARLBORO** MCLAREN McLaren-Ford M 29/2: John Watson (GB)

McLaren-Ford

M 29/3: Alain Prost (F)

McLaren-Ford M 29/4: spare.

Both McLarens were fitted with rear suspension geometry and mounting points, and this appeared to improve the cars even ore than they had been at Paul

Watson's Friday afternoon session and Prost's Saturday morning session were both upset by engine breakages. There was panic in the pits on Saturday morning when Prost left the pits before the mechanics had disconnected the pipe feeding compressed air to the starter.

It wasn't long before both McLarens had used up their front tyres during the race, and had to pit and change them, even though the drivers had opted for the harder

A new McLaren should appear at Hockenheim, where the sole model will be entrusted to Alain

#### WARSTEINER **ARROWS** Arrows-Ford A3/03:

Jochen Mass (D)

Arrows-Ford A3/05: Riccardo Patrese (I)

Arrows-Ford A3/01: spare.

The Arrows were the sensations of the paddock the evening before practice started because they where fitted with some interesting and spectacular aerodynamic modifications. Both race cars were fitted with mini-skirts mounted under the nose in the same manner as the Lotus 80, and they also had bodywork covering the rear end of the car.

But Patrese's mini-skirts didn't last longer than the first session. He asked them to be taken off because rather than cure the considerable understeer that afflicts this car, it increased it to the point that it was impossible to compensate with more rear downforce. The bodywork didn't have a much longer life altough half of it was retained, that used to channel air turbulence from the rear wheels.

Mass, who insisted on using the modified car in spite of everything, didn't qualify on Friday

The front fins and rear wings were

tilted as much as they could be in order to procure as much downforce as possible for the Saturday session, and both Arrows made some progress.

The race was virtually incidentfree for Patrese, while Mass broke his steering wheel. The Arrows started on Goodyear's softer tyre which lasted on Patrese's car although, Mass had tyres changed when he stopped in the pits to have his steering wheel replaced. An aerodynamically modified new car should appear at Hockenheim for the German Grand Prix

Skirts under the nose.



# In the cockpits



#### **FERRARI SPA** Ferrari 312 T5/046 : Jody Scheckter (ZA) Ferrari 312 T5/048 :

Gilles Villeneuve (CDN) Ferrari 312 T5/043 :

Villeneuve had a new chassis which wasn't just new in construction but also in its conception. It was narrower which allowed a gain of 1.5 cms on each side in the width of the side pods. At Hoc-

1 - New three-part rear wing.

kenheim, the side pods should be mounted in three pieces, as with other Formula One cars, not as a single unit which is currently the case, and which causes problems making aerodynamic fine tuning adjustments.

There was also a new rear wing made up of three parts, which was another step in the search for downforce. As Brands Hatch is not considered to be hard on brakes, the Ferraris were only fitted with a single caliper at the front.

In spite of these modifications, the Ferraris were still not competitive. Michelin's problems didn't help matters, which caused further problems for the T5, still not a real

The drivers had to try hard in order to qualify, especially Scheckter who went off at Stirling's Bend, badly damaging the rear right and side pod of his car.

During the race, Villeneuve was slowed by a skirt that kept sticking, and then electrical trouble meant the engine cut out around the circuit. Scheckter had a small collision with Keegan necessitating a change of front wing.

2 - Scheckter went off the road on Saturday morning.



#### **DENIM OSELLA**

#### Osella-Ford FA1/01: Eddie Cheever (USA) Osella-Ford FA1/02:

The Osella was considerably modified for Brands Hatch. The oil tank and cooling system had been revised as that had caused the three broken engines at Ricard.

Cheever had a host of problems

during practice. An engine broke on the Friday, the gearbox gave trouble on the Saturday and the distributor belt caused problems on the Sunday morning. So Cheever had to start in the spare, but the suspension hadn't been readjusted to take 15 inch wheels.

During the race, Cheever had quite a fright when he went off the road at high speed and narrowly missed a collision with the Harrier Jet on its launching pad in the

Less well adapted for Brands than Paul Ricard



#### SKOL FITTIPALDI Fittipaldi-Ford F8/01:

Emerson Fittipaldi (BR)

Fittipaldi-Ford F7/03:

Keke Rosberg (SF) Fittipaldi-Ford F7/01:

spare.

Giorgio Piola details the only real novelty to appear in the Brands Hatch paddock elsewhere in the

magazine, the Fittipaldi F8. The car has the shortest wheelbase of all Formula One cars at 261.6 cms. However, it obviously suffered teething troubles which caused Emerson to use the spare car on Friday afternoon. Rosberg took over the F7 fitted with the F8 rear track, but was unable to qualify while Fittipaldi managed to slot onto the back row of the grid.

The F8 had never run on full tanks, and during the race it suffered from a lack of grip which caused the driver to take things very carefully. It got better towards the end and the F8 finished its first race.

« In-house » casting for the F8 gearbox.



#### LIGIER GITANES

**Ligier-Ford** JS 11/15 - 03:

Jacques Laffite (F)

**Ligier-Ford** JS 11/15 - 04 : Didier Pironi (F)

Ligier-Ford JS 11/15 - 01 :

The two Ligiers came to England set up to gain maximum downforce. There was a large rear wing considerably angled and the cars were in the aerodynamic configuration for Monaco. New wheels of 15 inches (3 kilos heavier) were fitted and the fuel tank was in carbon fibre on one of the cars. The engine cover that appeared at Paul Ricard was still fitted.

Practice went well for the two Ligiers which were always well up and took the first two places on the grid. Laffite had a problem balancing the car on the Friday which he solved on the Saturday and then tried to take pole position off Pironi but failed.

Laffite was worried after the warm-up because his car had bad vibration but that was due to a badly balanced disc and wheel. Pironi had an oversteer problem. But everything was right for the race and the Ligiers pulled out in front in a most dominating fashion. But that was before they suffered puncture after puncture.

New front wheels in the 15-inch size.





#### ALFA ROMEO AUTODELTA Alfa Romeo 179/05 Patrick Depailler (F) Alfa Romeo 179/06:

Bruno Giacomelli (I)

Alfa Romeo 179/03:

Alta Komeo 1/9/03 :

spare.

Giacomelli had a new car for Brands Hatch which was lighter thanks to the use of carbon fibre at the front of the monocoque and above the fuel tank.

A new side pod wing had also been designed for Brands while a stronger rear cross member had also been fitted in order to prevent the constant breakages that occured at Ricard. There was also a third oil radiator fitted to each car. Giacomelli broke his engine on the Friday while Depailler again had problems with his exhaust.

On Saturday, Giacomelli tried various different set-ups and 15 inch wheels at the front but had to hand over his car to Depailler whose engine had started to misfire. It wasn't until Sunday morning that Depailler got his car going really well. He set the eighth quickest time in the warm-up, although Giacomelli was sixth on the grid. It was to be the first time that the Frenchman had driven the lower engined 05 in a race.

The two Alfa Romeos started on soft tyres, in spite of Goodyear's warnings. And they soon had to pit for new tyres. Depailler finally retired due to a broken exhaust (again) and a broken valve, while Giacomelli went off the road.

#### RENAULT ELF Renault RE 23:

Jean-Pierre Jabouille

Renault RE 24 : René Arnoux (F) Renault RE 21 :

spare.

Thre was no great modification to the Renaults which were set-up with even more downforce than their rivals. They were fitted with a big rear wing, a rear flap that was almost vertical. The engine problems that had ruined their French Grand Prix had been defined. The combination of maximum revs down the long straight and a high exterior temperature had been the cause.

Jabouille broke two engines at Brands, one his own fault when he

overrevved during practice and the second during the race when it began to tighten up.

The Renaults suffered a lot from Michelin's problems. The tyres wouldn't get up to temperature making it impossible to use the turbo properly. René Arnoux was trying really hard when went off hard into the barrier coming out of Druids. It was unexpected, but not totally useless considering the state of the car after the accident, something that the Renault people tried hard to cover up.

Arnoux consequently had to start in the spare car without much hope. A leak from his rear brake caliper saw him immobilised in the pits for a long time. To sum up, the Renaults were victims of a tyre problem, but also of their own reliability. Work has to be done in two French towns.

The method of adjusting the large rear wing.



#### RAM RACING Williams-Ford FW 07/03:

Rupert Keegan (GB)

Williams-Ford FW 07/01:

Desire Wilson (ZA)
Keegan left the track twice during practice, the second shunt pre-

venting him from starting in his own car. He had to do a deal to start in Desire Wilson's car, which had been crashed during an Aurora race and which, since unofficial testing, had « lost »a considerable amount of time.

During the race, Keegan had a coming together with Scheckter, but he managed to finished just behind the reigning World Champion.

An Aurora car with its skirts re-fitted.



#### **ATS WHEELS**

#### ATS-Ford D4/05: Marc Surer (CH) ATS-Ford D4/04:

spare

There was a wider track fitted to D4/04 and new mounting points for the rear suspension. Surer's engine blew up on Friday and he had to drive the spare car which wasn't so well set-up.

Marc tried both cars on Saturday morning, finally opting for 05 for the race, even though it wasn't quite as quick as the spare. But it was easier to drive which is why he chose it.

During the race, Surer had two spins, the second of which was on oil which came from his blown engine.

Surer raced the older chassis, which was easier to drive,

