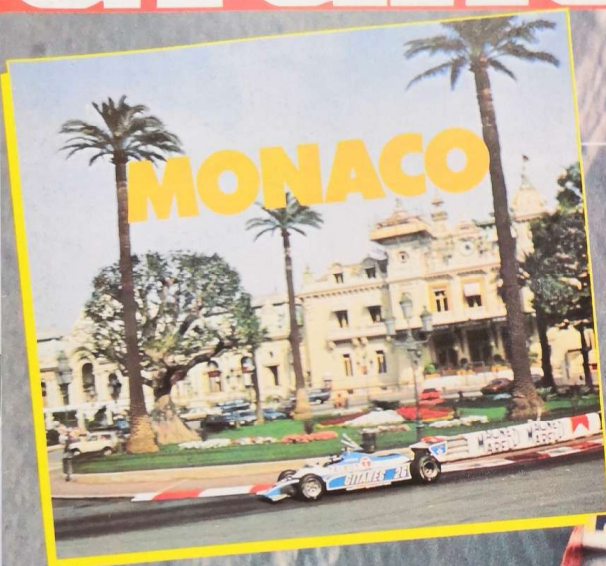


Grand Prix

international



M 1484 - 33 - 12 F

We call it Super.

Because the Pentax ME Super is a superior auto/manual camera.

Manual creative control has become super simple.



No other camera in the world has the ME Super's combination of features.

On Manual, electro-touch pushbuttons give you fingertip control of the shutter speed.

On Auto, GPD metering cells guarantee accurate exposure no matter who pushes the button.

Add to this a 30% brighter

viewfinder. The superfast 1/2000 sec. top shutter speed. And a small compact body that is the lightest auto/manual ever made.

Complete your system with the wide range of perfected Pentax lenses and accessories.

The Pentax ME Super makes taking superior pictures so easy.

PENTAX
ME SUPER

The history of Pentax is the history of the SLR.

Pentax cameras are guaranteed quality products of Asahi Optical Co., Ltd., Japan.



Marlboro



LOW TO MIDDLE TAR As defined by H.M. Govt. DANGER. H.M. Govt. Health Departments' WARNING: CIGARETTES CAN SERIOUSLY DAMAGE YOUR HEALTH

As Britain's leading oil company, we're always prepared to invest in Stirling.



It's not every day you get the chance to invest in one of motor racing's living legends.

So when we were approached by Audi to sponsor Stirling Moss O.B.E. in this year's British Saloon Car Championship, we jumped at the opportunity.

Mind you, we had to shed a nostalgic tear or two.

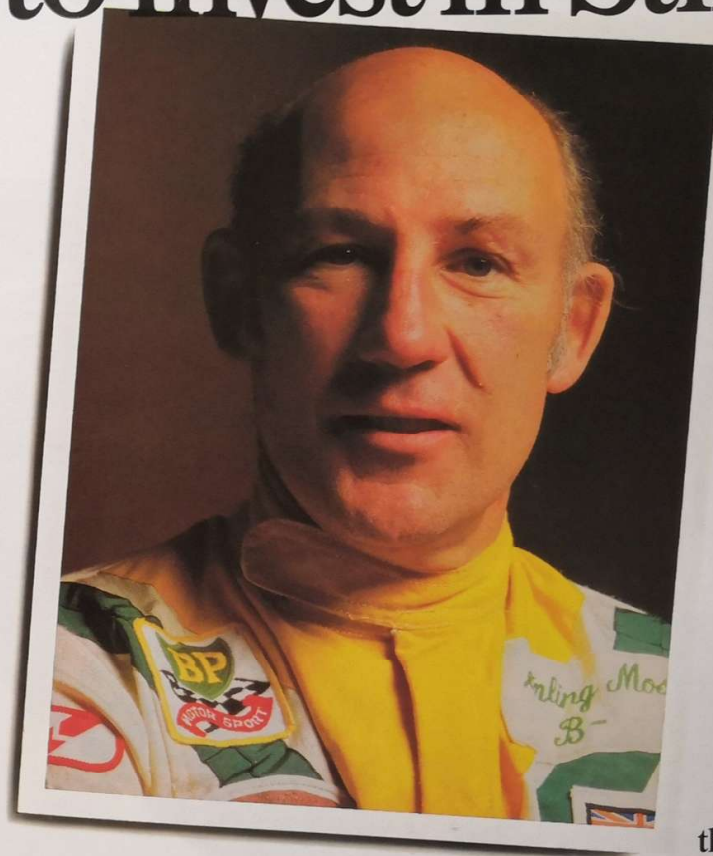
It was way back in 1953 that we

first signed up a promising young driver, name of Moss.

For almost a decade he did BP and Britain proud.

Remember his annus mirabilis of 1958?

That year he scored no less than four Grand Prix wins, only to lose the championship by a single point to Mike Hawthorn.



Indeed, we were still together when he recorded his last (and arguably finest) win in the 1961 German Grand Prix.

Now, twenty years on, he's lost none of his old skills and charisma.

But something that has changed is the oil under his bonnet. Instead of Energol, he'll be driving his works Audi 80 on BP VF7. Because we're out to prove that

the oil designed to save you petrol can also improve performance.

For the proof, we suggest you watch the BP-Audi team in action at the British Saloon Car Championship.

We think you'll agree Stirling's worth every penny of our investment.

Much like our investment in BP VF7.



Black for the Summer



John Player Special

JPS64GX

The tar yield of this brand is designed to be **MIDDLE TAR** Manufacturer's estimate, January 1980, of group as defined in H.M. Government Tables

DANGER: H.M. Government Health Departments' WARNING: CIGARETTES CAN SERIOUSLY DAMAGE YOUR HEALTH



THE LONGINES STYLE

Time? Snub it and leave it to Longines.

Most Formula One events are timed by Longines. To 1/1000th second. So need we insist here on the ingenious electronics of the Longines Conquest quartz watch? Or the fact that it is accurate to within one minute a year? And since the Conquest is made by Swiss craftsmen who often inherit their skills from their fathers, why dwell upon its fine finish and workmanship? With a Longines, you can take time for granted. And forget it.

Longines Conquest. Ultra-slim quartz movement with calendar and centre second. Water-resistant. Sapphire glass. Steel or two-toned case with steel bracelet. Available also in 18 ct. gold.



Longines.
Quartz made in Switzerland.

LONGINES



A Matter of Style.

IN THIS EDITION

PAGE 10

Paddock Notes FROM MONACO

PAGE 12

CANADA'S OWN IMP

With his victory at Monaco, Gilles Villeneuve could afford a sly grin. He'd poked the pundits in the eye at the circuit where they'd said a turbo could never win... and he'd already signed for two more Ferrari years



PAGE 16

FORGHIERI: A FOUNTAIN OF BRILLIANCE

Like the great team whose cars he designs and manages, Mauro Forghieri is a living paradox. Pete Lyons, recognised as one of motorsport's greatest writers, examines the character of the man and his team

**Nr. 34 (SPANIEN)
ERSCHEINT AM.
1 JULI**

Grand Prix international

PAGE 18

EXTRA, EXTRA



PAGE 20

THE FILM OF THE RACE

PAGE 22

MONTE CARLO STATISTICS

PAGE 24

LAP BY LAP

Race placings in colour

PAGE 26

MONACO STORY



Atmosphere and parties are the stuff of race weekend, at this, THE Grand Prix of the year, so we've expanded the usual Post Card feature to bring you every detail. This is Monaco as you've never seen it presented before

PAGE 30

RACE TALES ...IN PICTURES

PAGE 38

FACE TO FACE: HECTOR REBAQUE



Some would say that the miniature Mexican is only in F1 because he can afford to pay for his place at Brabham. We find that there's more to Hector than his money

PAGE 42

JODY: IT'S A LIVING

The painless retirement of the 1979 champion has enabled him to look for pastures new. With his winter motorcycle racing championship



ready to roll, it's a far from quiet life for Jody Scheckter

PAGE 46

TECHNICAL: THE LOTUS 87



The Lotus 88, according to Colin Chapman, will be back soon. Meanwhile, for Monaco, he presented the "interim" type 87, based on just one of the 88's two chassis structures

PAGE 48

THE NOT SO PUBLIC RELATIONS AT TEAM LOTUS

The performance of two new Lotus cars at Monaco suggests that the men from Norwich have got their act together again. In human terms, however, there is still some way to go, as Mike Doodson found out after some close observations

PAGE 51

PROST SCRIPTUM by our favourite Frog

PAGE 52

OK, AYJAY?

by the fastest man in the race

PAGE 53

In the quayside paddock, we look at the technical side of the Riviera weekend

Das Formel 1-Magazin erscheint 10 Tage nach jedem WM-Rennen.

GRAND PRIX INTERNATIONAL berichtet über jeden Weltmeisterschafts-Lauf der Formel 1. - HERAUSGEBER: Michel Hommel, Gérard Lips, CHEFREDAKTEUR: Eric Bhat, GESCHAFTSFÜHRENDE REDAKTION: Manfred Klutmann, Uscha Turat, ART DIRECTOR: Marc Tournaire, PRODUKTION: Régis Lacroix, Martine Fréour. GRAFISCHE GESTALTUNG: Pascal Tournaire, Alain Convard. FOTOS: Bernard Assot, A+P, DPPI, SAM. GRAFIK: Serge Thomassin, Nicolas Géron, Antonios Stephanakos. GRAND PRIX INTERNATIONAL erscheint in sechs Sprachen: Deutsch, Englisch, Französisch, Italienisch, Spanisch und Holländisch. STÄNDIGE MITARBEITER: Bob Constanterros, Giorgio Piola, Luis Criado, Rob Wiedenhoff, Mike Doodson, Mario Luini. REDAKTION: Grand Prix International 92, Industriest. 92, D-4044 Kaarst, FS 0886708. VERLAG: S.N.E.P. 7, rue de Lille, F. 75007 Paris. Tel.: 260.34.65, FS: 67289, (0228)-481280, VERTRIEB: W.E. Saarbach GmbH Follerstr. 2, D-5000 Köln, Postfach 10 16 10. Tel.: (0221)-20831, FS: 8881067, HERSTELLUNG: RPJ RPM, Hoorens, GRAND PRIX INTERNATIONAL erscheint nach den Formel 1-Weltmeisterschaftsläufen, EINZELHEFT: 4,80 DM, 4,80 SFR, 40 OS, BEZUGSPREIS direkt ab Verlag (12 Hefte): 50 DM, 50 SFR, 400 OS. ANZEIGENPREISLISTE: 1981.

The paddock in Monaco



A STORY OF SURVIVAL: PATRICK AND MARC

With 29 candidates for the 24 places available in official practice, the AC Monaco had no option this year but to revert to the unpopular method of prequalifying. There were 22 drivers automatically excused the indignity of having to get up early on Thursday (on the basis of the fact that their teams had scored championship points last year), leaving nine anxious men to climb into their cars for the hour-long 8am session. To be fair, only seven of them were really involved. Toleman drivers Brian Henton and Derek Warwick knew that they were merely going through the formality of putting in a few laps, strictly in order to acknowledge the Concord agreement, for their turbo-charged engines are still a long way from being competitive.

That left the Theodore, the Ensign, two Osellas, one ATS and two Marches in contention with Tambay in the Theodore the acknowledged favourite as far as the locals were concerned. Sure enough, Tambay set fastest time on a track which the organisers had inexplicably showered with water only shortly beforehand. Not only did this make it difficult to drive, but also ensured that times got faster from minute to minute as the surface dried. Surer got in on his very last lap, and Gabbiani was lucky to join his Osella team mate Ghinzani among the favoured five after a couple of incidents, including a wheel-breaking incident with the guardrail at the swimming pool. Times: 1 Tambay, 1m 30.49s; 2 Surer, 1m 31.25s; 3 Ghinzani, 1m 32.19s; 4 Gabbiani, 1m 32.70s; 5 Borguud, 1m 33.28s; 6 Daly, 1m 33.80s; 7 Salazar, 1m 35.25s; 8 Henton, 1m 37.53s; 9 Warwick, 1m 41.97s.

CHAPMAN LOBBIES

Colin Chapman isn't normally one of the more sociable team managers. He tends to be slightly distant and aloof. But at Monaco, he was a changed man. He would greet other team managers and designers with a happy "how are you today, everything OK? Good," which considering his current problems might seem out of character.

Some of his rivals noticed the change as well. One Frenchman obviously thought that Chapman was lobbying. "He's friendly at the moment, but I think he's softening us up in readiness for a new car. I feel another twin-chassis car might be in the wind..." Chapman himself was perfectly honest about it: "the 87 is our interim car for a couple of races until the 'B' version of the 88 is ready."

WOLF GOLD FOR AJ

The international jury of presmen appointed to cast their votes for the driver who demonstrated the best "fighting spirit" at Monaco decided in favour of Alan Jones. The world champion will receive his prize of a £300 gold coin, offered by the Walter Wolf perfume company, at the next round of the world championship, in Spain (June 19/21).



DOUBTS ABOUT JABOUILLE...

There was a nasty surprise in store at Monaco for Talbot driver Jean-Pierre Jabouille. Unlike his team mate Laffite, he was destined once again not to make the grid, the second time that this has happened to him in four appearances with his new team.

"We had electrical problems and a radiator leak on the first day," he said. "On Saturday the car just didn't handle right and we ran out of time to get it sorted in the first session. In the afternoon I was baulked on every lap that felt as if it was going to be any good."

Needless to say, the paddock experts immediately assumed that Jean-Pierre's difficulties were caused by the lingering effects of the leg he broke in Canada last year.

The Frenchman takes a more objective view of the situation. "Obviously I'm having to make a careful appraisal of the situation, because Jacques' results indicate that the car is beginning to go well," he said. "My personal fitness is no problem now, I feel much better than I did, say, at Long Beach or even in Argentina. I know that I'm driving as hard now as I have ever done in my career. I don't really understand what's happened to me."

"I remember something similar happening before. It was in my F2 days at a time when Patrick Depailler was knocking spots off me in the same team. Then, at Rouen, he had a shunt with his car and had to take over mine. He was instantly a couple of seconds slower. So there was obviously something seriously wrong with the car itself."

"So what's going on at the moment? Is it me or is the car? I think it's the car that's wrong, so we've got to take a close look at it in the workshops." Equally disappointed was team owner Guy Ligier, although as yet he won't commit himself to any final judgment. "All we know is that Jean-Pierre isn't going well. It's tough driving these cars. We've got to leave it up to him to make his own decision, nobody can do it for him. If he decides to carry on, it goes without saying that he will have my complete personal confidence."

DALY'S FUTURE

Fortune played a cruel trick on Derek Daly at Monaco for a second consecutive year. This time, however, he didn't even get into the race, for his Guinness-sponsored March broke a driveshaft 15 minutes before the end of Thursday morning's pre-qualifying session.

"The track was drying out and everybody was going faster and faster," he explained. "I'm sure that I would have been among the top four if the car hadn't packed up."

The March team under the management of John Macdonald has accomplished miracles since the set-backs of the early season, for the two new cars which appeared at Zolder are plainly a major im-



provement on the less than wonderful devices which made their debut at Kyalami in February. Yet a major question mark hangs over the team's entries at Jarama for the Spanish GP, particularly in view of the attitude adopted by the Chilean sponsors of the team's number two driver, the inexperienced Eliseo Salazar, who has qualified for only one championship GP this year.

The stresses inside the team itself are equally high. Macdonald's dissatisfaction with the original design of the March, vented so publicly after Argentina, is now being aimed not so much at the car as the chief designer, Robin Herd. To the great disappointment of his team, Herd left his pit immediately after the pre-qualifying session and packed his bags for England.

The following day, in the paddock, Daly was to be seen discussing the possibility of spending the remainder of the season in North America, behind the wheel of a Can-Am car. Perhaps he's been talking to Patrick Tambay...

unsuited to the circuit. We didn't win the San Marino Grand Prix at Imola, even though we should have, but that's racing. Turbo-charged engines are competitive in motor racing today, and we shall make further developments in this direction in the future."

Enzo Ferrari

LAS VEGAS FINALE?

Long Beach circuit boss Chris Pook made an appearance at Monaco, where he told GPI that there was a "95 per cent chance" of Las Vegas staging a GP. The race,



ENZO FERRARI'S STATEMENT

The day after Gilles Villeneuve had won the Monaco Grand Prix, Commandatore Enzo Ferrari released the following statement: "Thank you to all the members of the Ferrari team, and to all motor racing enthusiasts. I didn't expect my cars to win on such a difficult circuit as Monaco, despite the promise shown in practice by the new 126 turbo engine, which is so

which would take over from Watkins Glen, is scheduled for Saturday October 17.

It remains to be seen whether the fixture meets with the agreement of the FISA Executive Committee, which will be discussing the matter before the Spanish GP. A "yes" from FISA would bring the number of GPs back up to 15. It would also mean that the 1981 championship season starts and finishes in the same place: on the West Coast of the USA.

FOR WHOM THE BELL TOLLS



The large Italian crowd at Monaco crossed the border at Ventimiglia happy to have seen their Ferrari turbo win the Grand Prix. But Ferrari's victory didn't make everyone happy. Keith Duckworth, for instance, must have been cho-

king on his own prediction when the chequered flag greeted Gilles. The 1981 Monaco Grand Prix could well have marked the beginning of the end for the venerable Cosworth engine, even though it may win 150 Grands Prix. But is it now out of date? Has Villeneuve's victory sounded its death knell?

Who would have guessed that a turbo engine could have won at Monaco? Even the craziest long-shot gambler wouldn't have put a penny on it. It wasn't simply a question of reliability, but that the engine was supposedly unsuited to the twisty street circuit.

Even so, it's an important step, not only technologically but also psychologically. Cosworth's engine seemed a good bet for the future. It is well-suited to slower circuits, and reliable elsewhere. Before the Monaco Grand Prix, anyone would have predicted that a Cosworth-engined car would win the World Championship in 1981. But two hours later, few people would deny that a turbo-engined car just might establish itself.

Having said that, the turbo isn't dominant yet. A turbo engine won a battle, but it hasn't won the war yet. It's still possible that Colin Chapman may draw inspiration out of that famous black cap of his, that Gordon Murray might pluck an idea from his beard, or that Patrick Head might find something filed in his brief-case that will allow the Cosworth engine to remain in front of its Latin rivals.

After all, it has to be admitted that Villeneuve won by default. Jones, Piquet, Patrese and of course Reutemann were faster than the Ferrari at Monaco, without wishing to discredit Gilles' and his engineers' efforts. The gang of four, Jones, Reutemann, Piquet and Patrese, won't retire in every race. It may not be so for ever, but for the moment, anything could happen.

Eric BHAT



THE IMP RETURNS

Two qualities stand out on the face of Gilles Villeneuve: his determination and his sense of fun

The turbocharged V6 of the Ferrari 126CK provided an unexpected surprise at Monaco, underlining the remarkable abilities of the engineers at Maranello



Have some sympathy for an old man when he turns on his television to watch a Grand Prix every other Sunday. His name is Enzo Ferrari, and he employs two of the drivers he watches on his TV. One of them, Gilles Villeneuve, threatens to have a detrimental effect on the old man's health, such is the excitement any observer feels when watching him drive. But Gilles has no intention of upsetting his Commendatore, he respects him far too much. The evening after the Monaco Grand Prix, he phoned him, to some extent in gratitude. Gilles appreciates more than ever the amount of work that the Scuderia's engineers have accomplished.

by Eric BHAT

The first thing that strikes you when you meet Gilles Villeneuve are his eyes. They almost devour your eyes, rather like Rene Arnoux's. And they're at the same time most revealing. Looking into those eyes is like opening a book about Gilles, because they tell you so much about him. At the same time as being cold, his eyes are impish, just as they show resolution and guile. But principally, his eyes reveal determination and mischief. His determination is almost legendary these days. As for mischievous, that has a considerable bearing on his enormous popularity, and goes, perhaps, hand in hand with his determination in making him the most spectacular driver in Formula 1. His impish character was particularly in evidence after his win at Monaco. He was obviously pleased to have upset the establishment who didn't believe that a Ferrari turbo could win at Monaco. "No one expected me to win? I didn't think I would either to tell you the truth." He

was obviously pleased to have made a little history by taking the chequered flag: "I was lucky for sure. But then I've had a lot of bad luck. The last time I won a Grand Prix was at Watkins Glen at the end of 1979. Twenty months is a long time. So to have a lucky win... I don't care, it's winning that matters. It's even better when you're not expecting it, it's a very pleasant surprise." Throughout the weekend his determination shone through. In practice, he almost equalled Nelson Piquet's supposedly untouchable pole-winning time. It was a superb effort. During the final qualifying session, the Ferrari seemed to be twitching all over the track. It was tremendously spectacular, because even though Gilles is usually spectacular, it was that much more apparent at Monaco. The proximity of the track makes it easier to appreciate his fantastic car control as he opposite locks through the tight Monegasque corners. Gilles deserves full praise for getting the car onto the front row. His 126C wasn't at all perfect. "It was jumping all over

Gilles in the cockpit which he will occupy for at least two more years as a result of extending his Ferrari contract

the road on Thursday and Saturday. Only on Saturday evening did we find out that two shock absorbers were seized almost solid. They were scarcely working at all. I was virtually driving a kart."

Even so, he had qualified superbly, far better than anyone would have suggested in a car powered by a turbo engine on this tight circuit. Gilles wasn't optimistic for the race. During the warm-up, on Sunday morning, when he was trying the car on full tanks for the first time, he was disappointed to find that its handling deteriorated badly. His skirts were worn away at the back. "When I realised that they were wearing under full tanks, I realised immediately that I wasn't going to be as quick as the Williams and Brabham."

I made a good start, I was pleased with it. But Nelson also made a good start..."

So Villeneuve found himself behind Piquet, and the Brabham driver soon began to pull away. Just as he feared, the Ferrari's road-holding deteriorated after a few laps as the skirt wore away. That allowed Jones and Patrese to close up. "They were faster than I was, and I couldn't stop them passing. I was at a disadvantage from the start. The Ferrari turbo is very quick in a straight line, it's one of its strong points. It's fairly difficult to go through the tunnel flat in the dry, but with the water (from the Loews hotel fire) it was

While Gilles's number 27 was on its way to its historic victory, there were constant problems for Pironi's number 28 car. He crashed three times in qualifying and had an exhausting struggle throughout the race which ended with him in 4th place

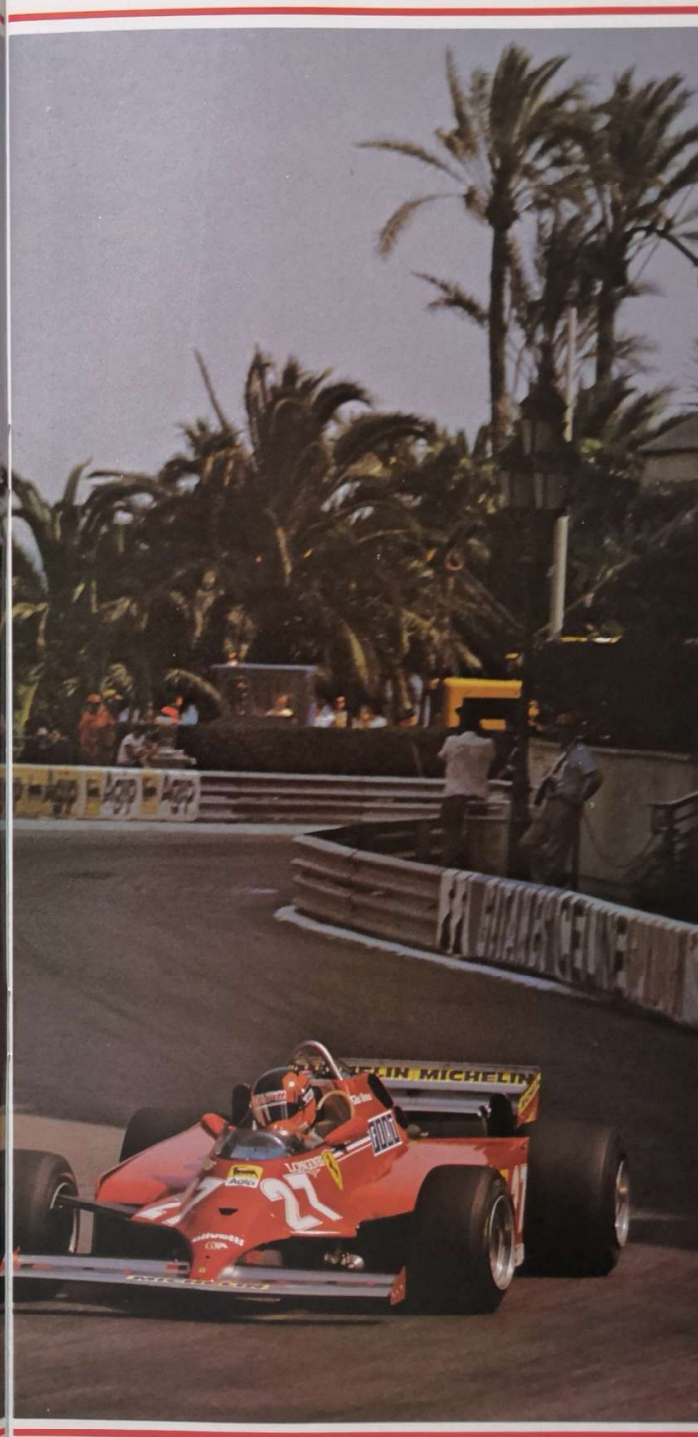


Blue sky... palm trees... Ferrari success... and a delighted Italian crowd of supporters

But by starting from the front row of the grid, perhaps Gilles had some chance of taking an all-important lead at the start. Might not his powerful turbo engine push him straight into the lead which would be a tremendous advantage? "No, I didn't think that was possible," replied Gilles. "First of all because the grid is staggered and so Nelson already had a few yards advantage. Secondly because the Ford engine is very good at the start. And finally because I was on the left side of the track and no one ever uses that part of the track, so it would be easy to spin the wheels. As it happens,

absolutely impossible, so that was one of our advantages lost. But Patrese retired soon after overtaking me, and when I saw Jones closing on Piquet, I realised that I was going to pick up another place fairly soon. A Jones-Piquet duel had to end with one of them in the armo!" While Villeneuve was working all this out on the track, Jody Scheckter told me at the trackside: "you see, Alan and Nelson are going to fight so hard that Gilles is going to win."

Sure enough, one of the two leading duellists thumped the barrier. It was Pi-



quet, which left Jones heading for an unchallenged win. But it was at that moment that Gilles won the Monaco Grand Prix. In the Ferrari pit, the mechanics hung out a board telling him to slow down and make sure of his second place. It's not in Gilles's nature to slow down, and he decided against it. "I drove as hard as ever," he said afterwards, as determined as ever. He decided to push hard, firstly because that's the way he is, and secondly for tactical reasons: "If Jones had to stop for tyres or something, it would be far better to be 30 seconds behind him than a minute."

And when Jones found himself in difficulties, Gilles was sufficiently close to the Australian driver to be able to catch him and overtake with just four laps to go. "I was right to drive hard earlier, otherwise I might not have won," he laughed, pleased that he'd done the right thing.

So he won his fifth Grand Prix, and his first in Europe. Furthermore, it was the most unexpected. The Ferrari engineers have obviously worked wonders with the engine. Is it good enough to power Gilles to whole series of wins? He tilts his head and wonders. "Aaahh. To win the title, we'll need a run of five wins, and we've only just begun. We'll see."

On the long circuits to come, Ferrari's turbos are going to be very quick, but will they be reliable at high speed when they're revving so much? "No doubt you're asking me that because of the problems we had in Argentina. But we've made some progress since then." Success always motivates a driver, it's very reassuring and gives him confidence. Furthermore, Gilles's win was complemented by Pironi's fourth place. Didier had suffered throughout the weekend. He'd crashed three times during practice, and that had cost him valuable time in practice, not only in setting a time, but also setting up his car. He started towards the back of the grid and by the end, he was completely exhausted. His head had been hitting the fuel tank throughout the race which gave him a bad headache. But he was happier for the team and for Gilles that they'd won, than he was with his own fourth place. Perhaps next time it would be his turn. At least, that's what his fans thought after the race, while he was trying to recover.

Gilles, too, was thinking of the future. He'd been sufficiently pleased with the way things were developing at Ferrari to have signed a contract for a further two years. A number of teams, and good ones at that, had tried to secure his services for the future. Some people thought that Jones and Villeneuve might swap teams. Gilles's decision has put an end to that one. "Personally," he says, "I never wanted to leave Ferrari." On Sunday evening, we all knew why. □

FORGHIERI

by Pete Lyons

As the fierce blaze of the sun of the Côte d'Azur began to fade behind the craggy ramparts of the Principality, two of the very brightest minds in Grand Prix racing found themselves together on the deck of a friend's yacht. In the hands of Keith Duckworth and Patrick Head were cooling drinks of orange juice-and-champagne, but in their heads burned thoughts of the race that would come tomorrow. And in their thoughts, one particular rival dominated. Ferrari.

"Well", said the genius of Cosworth finally, with his slow, judicious, farmer's voice, "if they ever sort out their chassis so it's as good as their engine, may God help the rest of us."

It is an idea of the English teams that Ferrari has never actually lived up to its potential. Even during the good years, when races and championships were won, many on the outside have felt the potential was there to win even more races than were finally entered into the record. The team has great genius, is the feeling, but that genius is flawed.

Of all their rivals in this era of revitalized, heavily-financed international F1 competition, the men who must build "kit cars" with the Ford-Cosworth DFV engine fear Ferrari the most. It is not only the resources at the command of the Italian giant - Renault, Alfa, Talbot all have deep reservoirs of money and talent as well - but in some almost metaphysical way the spirit they fear of the team whose emblem is the Prancing Horse.

Indeed, like a spirited blood horse, Ferrari as both a car and as an organization seems to offer power, speed and "heart," but cannot always be said to be under tight control.

And while Ferrari as an organization has perhaps more personnel than any other - certainly three times as many as the Williams team that presently holds the World Championship - and while in a very real sense that team is headed by the monumental Enzo Ferrari, in day-to-day terms one can say that it is an individual named Mauro Forghieri who really is responsible for the racing record of Ferrari.

Forghieri is a figure of intellect, one capable of remarkable technical innovation; he is also a human being of passion, who often lets his emotion rule. He is probably a genius.

Didier Pironi, a driver still in his first flush of enthusiasm for racing's great game (and, it may be noted, still in his first season with Ferrari), is a supporter of his team's technical director. Forghieri, he has said, is especially impressive in a development scenario. "Whenever we go to Fiorano for testing," reports Didier, "Forghieri is a fountain of ideas of things to try. He never dries up, he always has something new to suggest. Nothing is a problem, there is always a solution. It makes a driver feel very confident to work with Forghieri."

But there are a number of once-Ferrarimen who have a more bitter memory of the man. A digest of the experiences of Niki Lauda, Jody Scheckter and Carlos Reutemann would seem to paint a portrait of a character with whom it is a chore to work, one who has such iron-bound confidence in his own ideas that anyone else's opinion cannot penetrate, one whose interior mental activity is accompanied by an exterior whirl of arms and shouting. One ex-driver spoke of "the Big Casino" atmosphere of his time with Ferrari.

It is therefore curious to recall a remark of this clearly emotional man, uttered during an interview with this writer perhaps three or four years ago: "In life, my ideal would be that the technician would be in charge of the affairs of the world. Government, economies, policy; all should not be governed by the politicians, but by the scientists. All should be operated on a basis of logic."

If this cold ideal does not seem to coincide with one's observation of a person of considerable heat, well, which of us operates always on the course we have laid down? Look behind the achievements of many of the authentic geniuses of history and you will see curious anomalies. The towering music of a Beethoven is so often accompanied (but not offset) by a certain pettiness of mind...

And there has been only one period in modern Ferrari history when the team appeared to be governed on a coldly logical basis. That was the era of Niki Lauda, of course, but within the

Lauda-era most specifically the time of Luca Montezemolo as team manager. For a few seasons, then, Ferrari's F1 machine seemed to function as smoothly as any top English team, with as fine a balance between ambition and practicality, with equal attention being paid to all elements.

Otherwise, Ferrari victories have been achieved almost in spite of the team. Almost in spite of the genius of Mauro Forghieri; so it appears on the outside.

"The Ferrari flat-12 engine was a fabulous engine, no doubt about it, but somehow I never felt that it was as great as it ought to have been," remarked Keith Duckworth, nursing his Buck's Fizz. He was speaking out of the feeling, the fear, always held by the British teams that the Ferrari organization is a steam roller that "ought to be" crushing them into the ground. But they so often escape.

That flat-12 engine was ideally suited to the aerodynamics of the pre-ground-effects era. Lauda and his teammates were pushed along the tracks of the world by a motor that crouched low in the car, allowing the maximum flow of airstream to the rear wing; the flat-12 used more fuel than the English V8, but it was smoother and easier to drive. It "ought to have" won more races than it did; so believe the English. Failures of the powerplant itself were all too often matched by mysterious failures of the chassis, by days when the drivers could not make Forghieri's apparently brilliantly-conceived "package" function as intended.

Then, when Lotus developed the ground-effects concept (Colin Chapman did not invent it, but he did seize it before anyone else in F1 and made it work), Ferrari was left behind. Once again, as in the '50s and '60s, their excellent chassis kept the British teams in contention against their more powerful Italian opposition. Forghieri appears to have made up his mind that the flat-12 engine was fundamentally unsuited to the modern aerodynamic concept, because of its width. Despite Scheckter's World Championship of 1979, Ferrari men have been consistent opponents of everything introduced by the English. Especially, of course, the articulated skirt concept.

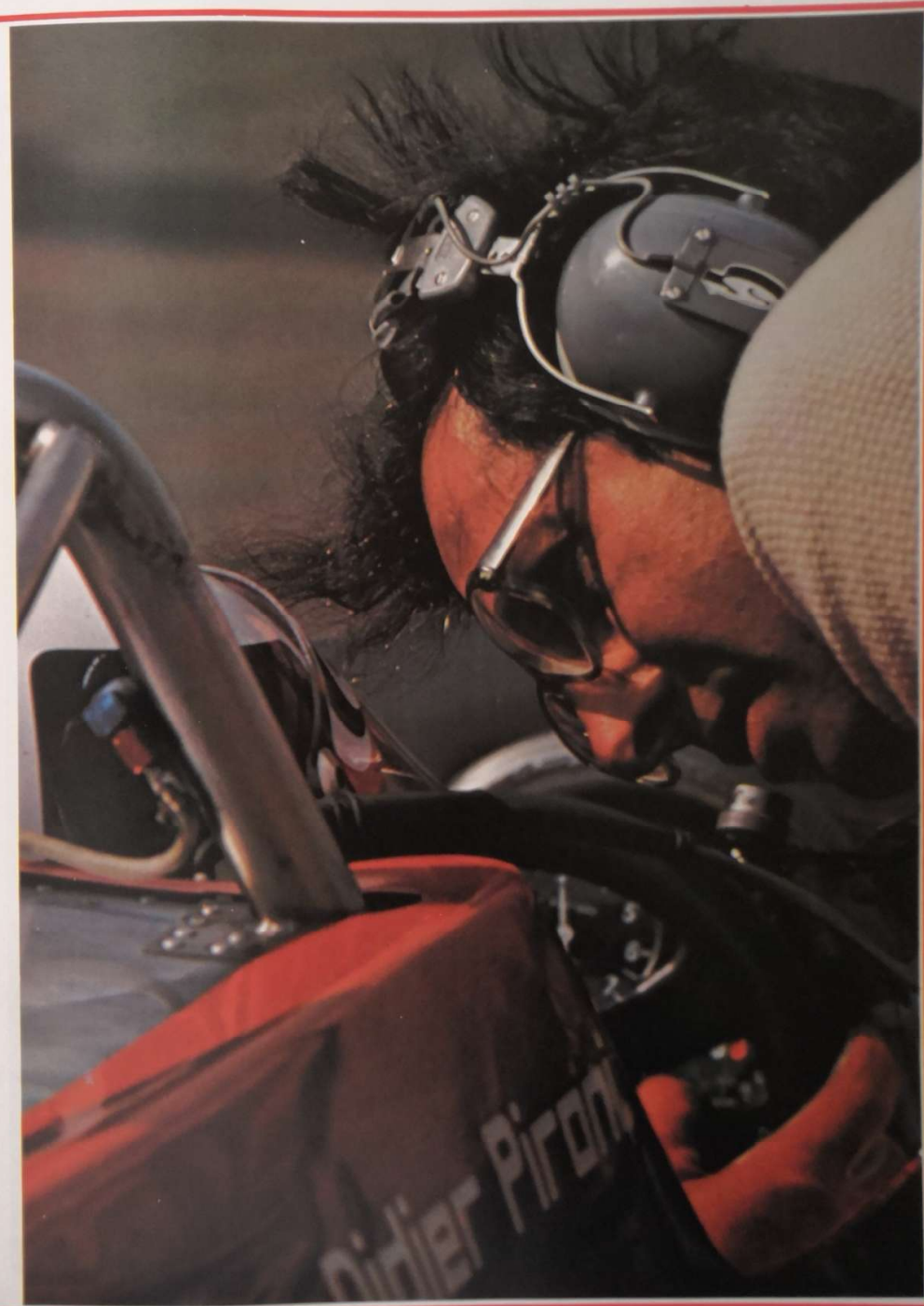
Indeed, it is said in F1 circles that it is only the Ferrari opposition that "spoils" racing political discussions nowadays; "Anything you bring up, Ferrari will be sure to vote against it on general principles!" is a common remark this year in the paddocks.

"I really don't believe Forghieri has ever understood ground effects or how to make a skirt system work," said Patrick Head on the yacht. "You know, the amount of development work involved is enormous. Not only have you these great side-loads to contend with, as much as 400 or 500 pounds acting over the length of each articulated side skirt; they've also got to keep sliding smoothly and touching the road at all times, despite the constant barrage of stones and dirt and other rubbish you have flying through there." Perfect operation of the 1980-style sliding skirts was vital: a transitory gap of as little as a quarter of an inch would allow a leak that could cost as much as 1000 pounds of download and - because of the remaining effect of the rear wing - the loss would be felt by the driver more at the front wheels than the rears.

It is sometimes supposed that it was Ferrari's inability to make its skirt system function properly that led Scheckter to his opposition, so vocally expressed, to the acceptance of wing cars in general and skirts in particular. He has always claimed that ground effect cars presented drivers with dangers, in terms of elevated cornering speeds, that they should not have to face. It is an opinion that is strongly contested by the likes of Jones, Piquet and even Reutemann.

Some would say, though there is no proof, that standing behind Scheckter on his GPDA stage was none other than one's epoch. And if one sign of authentic genius is an impact on one's epoch, the oddly mixed abilities of Mauro Forghieri must surely qualify him to that stature!

(Pete Lyons, currently editing an automotive publication in Southern California, formerly covered Grand Prix racing for Autosport, Autoweek and other motorsporting reviews.)



EXTRA, EXTRA

MO'S DILEMMA

There was understandable jubilation in the Ensign camp after Marc Surer had safely brought the team's car through the anxieties of pre-qualifying and the rigours of four practice sessions and 76 race laps. Hearts had jumped into mouths at the end of the first lap, when the Swiss made a quick stop to replace the front tyre damaged in a collision with the wheel that had become detached from Andretti's crashing Alfa. And Marc confessed that he had only begun to race hard when he had spotted Tambay

about to lap him, a sight that jolted him into action. Sixth place at Monaco - an achievement that would have thrilled even major teams like Renault, McLaren and Alfa Romeo - would also boost the points-based FOCA income which Ensign owner Mo Nunn needs so badly. And, in principle, it should have guaranteed Surer's Ensign place. But later on Sunday night, Nunn had to explain to Surer that it is unlikely he will be able to race the car (the team still has no spare) in Spain on June 21. The well-heeled Argentine driver Ricardo Zunino, with substantial South American backing, has made an offer which Nunn is finding it very difficult to refuse. "Financially, we're not in any trouble," says Nunn. "There's no pressure from Bernie (Ecclestone) over the money we borrowed from FOCA (to restart the team), in fact there's only one more payment to be made. The problem is

that we don't have any money for development. And here at Monaco, without things like hydropneumatic suspension, we're losing 1.5 seconds a lap. "If, say, Zunino proves to be half a second slower than Marc, and we can find a second per lap from development, then we're better off. It's an alternative that I have to consider very carefully if we can find a way through the various formalities."

Nunn underlines the fact that Surer accepts the difficulties which may prevent him from racing the Ensign. They are both still actively searching for a major sponsor, and there is a possibility that one will surface before the end of the year. Meanwhile, Surer is acknowledging the use of Nunn's racing car with a friendly gesture: because the Ensign boss can't afford a road car, his erstwhile driver has loaned him his own personal BMW 320 saloon...

M.G.D.



WILLIAMS: A WIND OF CHANGE

Carlos Reutemann lost his chance of a place in the points at Monaco on lap 14, when the nose of his Saudia-Leyland was bent in a collision with the Lotus 87 of Nigel Mansell at the Station hairpin. After a long stop to replace it, he finally retired from the race before half distance, his gearbox in ruins. As he climbed languidly from the car, his 16-race record of points-winning results was finally broken.

Head in hands, he sat quietly in the pits to reflect for a sad moment or two. Then he packed his things into a bag, stretched himself out and strode away from the circuit, still in his overalls, without even acknowledging the journalists begging for information. Less than half an hour later, he was safely behind the front door of his villa in nearby Cap Ferrat. Apart from a brief discussion with his engineer, Neil Oatley, he had not uttered a word to anyone since the driver meeting on the grid.

Alan Jones was more loquacious. Obviously not entirely happy to have had victory snatched from him by a fuel system problem with his Williams, he had nevertheless grabbed six points for second place, retaken second place in the championship, and closed the gap on Carlos by six points.

And for Jones, on a circuit which he has described as a "concrete jungle", even a finish behind Villeneuve's Ferrari was well worth having. He had broken a run of bad luck and misjudgments that went back to Argentina, and he had uncomplainingly conquered the pain from the left leg that was scalded by boiling radiator water in his accident at Zolder two weeks previously. Just as Alan had hoped, some of Carlos's departed luck was to rub off on him. The Australian had arrived in Monaco fully conscious of the critics who compared his record of mistakes this year unfavourably with the tally of his erstwhile rival, the supposedly almost perfect Piquet.

When he saw that Piquet had erred seriously and crashed at the Tabac, Alan was equally quick to underline the Brazilians's misfortune: "On the lap before Piquet stuffed it into the barrier, I had taken a full second off him. I hope that the pressure from me contributed to that..."

M.G.D.



THE FILM OF THE RACE

Nelson Piquet led 53 laps of the 76 lap Monaco Grand Prix; Alan Jones led for 19 laps and Gilles Villeneuve led for four laps. But Gilles' four were the most important: they were the last four, and it was he who took the chequered flag. Piquet had pulled out a good lead during the early stages and looked untouchable. But Jones wasn't giving up easily. After overtaking both Patrese and Villeneuve, he steadily caught up his Brazilian rival and pushed him hard. Then Piquet hit the barrier, but just before the end, Jones had a fuel problem which allowed Villeneuve to take the chequered flag.



1 - Piquet is first past the Hotel de Paris after the start, followed by Villeneuve and Mansell: the fastest three in practice.



2 - Two cars were eliminated just after Ste Devote: Andretti's Alfa Romeo and de Cesaris's Marlboro McLaren.



3 - Behind Piquet, Jones and Mansell - on the first lap still - Reutemann and Jones are closely followed by Patrese and de Angelis.



4 - The field begins to space out and there are more retirements. Laffite, Arnoux and Prost battle over fifth place.



5 - Jones catches up Piquet in a determined drive, and for the laps, he worries the Brabham driver. In the end, Piquet hits the barrier.



6 - Jones leads for 19 laps, with only a few laps to go, however, a fuel feed problem delays him and Villeneuve nips past to take the chequered flag.



7 - Ferrari's men are happy and surprised as they surround their Canadian winner before he's even had a chance to take off his helmet.

PRACTICE

Pole position has always been of special importance to a driver at Monaco, even more so now than ever before. There are a number of reasons for this. First of all - and most important - the track is narrow, which makes it hard to overtake. So to start from pole position is to be half way to the chequered flag, simply because the others have in effect nil chance of overtaking. Secondly, these days the rows of the grid are staggered, so the pole position man actually starts in the lead. Thirdly, as the field funnels into Ste Devote, there are inevitably incidents, particularly in the middle of the field: remember Daly's shunt last year.

Nelson Piquet was the lucky man to start from the coveted pole, and his Thursday time was unbeaten during the second timed session on Saturday. The Brazilian driver was more than a second faster than his rivals during the first session, which led observers to suspect that Nelson was driving a special 'qualifying car.' Whatever, he was 1.1s ahead of Villeneuve and 1.2s ahead of Jones. Carlos Reutemann set fourth fastest time, but was relegated to ninth slot when his ground clearance was found to be insufficient, which deprived him of his best time. So provisionally fourth fastest was Nigel Mansell in the brand new Lotus.

Generally speaking, nearly everyone was faster on Saturday afternoon, perhaps because the cars were better set up, or perhaps because the track

was quicker. Most drivers were at least a second faster, apart from Piquet, Andrea de Cesaris and Hector Rebaque. Piquet felt that his advantage was great enough to enable him to concentrate on improvising his car's handling on full tanks. Villeneuve was as spectacular as ever and proved that Nelson's time was not totally impossible: he virtually equalled the Brazilian's time. Mansell was also sensational in the new Lotus, qualifying third quickest, only two tenths slower than Piquet. Reutemann was fourth fastest, putting himself back on the second row whence he'd been bumped two days previously because of his "6cms" problems.

There were two surprises amongst the non-qualifiers: Jabouille, who had had a lot of problems, and Rebaque, who crashed on Saturday morning.

RACE

When the green light finally came on, an hour late because of the fire at the Loews, it was Piquet who shot straight into the lead. Through Ste Devote, Piquet led Villeneuve and, remarkably, everyone got through the corner without tangling. But on the way up the hill, Prost and de Cesaris collided. The Renault jumped into the air but carried on, while the Marlboro MP4 hit the guardrail. Arnoux was slightly delayed, but Mario Andretti hit the MP4 and neither driver could continue. A wheel and upright came off the Alfa and punctured the front tyre of Surer's Ensign. Piquet remained in the lead and began to pull away slightly from Villeneuve in second, closely followed by Mansell, Reutemann, Jones and Patrese.

Jones and Patrese were lucky for at the 15 lap mark, Reutemann ran into the back of Mansell at the Station hairpin. The Argentine stopped in the pits for a new front wing and nose, while Mansell retired shortly after with broken rear suspension.

So Jones and Patrese were up to third and fourth positions behind Villeneuve. They both caught the Canadian, Jones overtaking on the 20th lap and Riccardo on the 25th. Could Jones catch Piquet? The answer was yes. By half distance, the Williams was right behind the Brabham. The others were left behind. Patrese had retired with gearbox trouble from third place, which then reverted to Villeneuve in front of Laffite. Jones pressured Piquet for a number of laps, and then dropped back slightly when he thought he'd overheated his

tyres. He soon put the pressure on again, took a second off Piquet in one lap which more than worried the Brabham driver. The Brazilian made a mistake when lapping Tambay at Tabac corner, colliding heavily with the guardrail. So Jones found himself in the lead. But the Australian was troubled with fuel starvation: was it vapourisation or was it not picking up the last couple of gallons? Jones gambled on a pit stop for more fuel on lap 67 and his margin over Villeneuve was enough for him to remain in the lead. But it was vapourisation and the heat build-up in the pits had worsened the misfire. Villeneuve caught the Williams and overtook in front of the pits with four laps to go.

Monaco statistics

MONACO GRAND PRIX

Date: May 31, 1981
 Circuit length: 2,058 miles
 Race distance: 76 laps,
 156,406 miles
 Conditions: sunny and hot
 Attendance: 50,000 spectators

THE RECORD

(last five races)
 1976: Lauda (Ferrari)
 1977: Scheckter (Wolf Ford)
 1978: Depailler (Tyrrell Ford)
 1979: Scheckter (Ferrari)
 1980: Reutemann (Williams Ford)

STARTING GRID

VILLENEUVE Ferrari 126 C 1'25'78	PIQUET Brabham BT 49C 1'25'71
REUTEMANN Williams FW 07/B 1'26'01	MANSELL Lotus 87 1'25'81
DE ANGELIS Lotus 87 1'26'25	PATRESE Arrows A3 1'26'04
LAFFITE Talbot Ligier JS 17 1'26'70	JONES Williams FW07/8 1'26'53
WATSON Marlboro MP4 1'27'05	PROST Renault RE 30 1'26'96
ANDRETTI Alfa Romeo 179 1'27'51	DE CESARIS Marlboro MP4 1'27'12
STOHR Arrows A3 1'27'56	ARNOUX Renault RE30 1'27'51
TAMBAY Theodore TY 02 1'27'93	CHEEVER Tyrrell 010 1'27'59
GIACOMELLI Alfa Romeo 179 1'28'32	PIRONI Ferrari 126 C 1'28'26
ALBORETO Tyrrell 010 1'28'35	SURER Ensign N 181 1'28'33

Non-qualified:

ROSBERG (Fittipaldi F8C) 1'28'43	1'28'84
JABOUILLE (Talbot Ligier JS 17)	1'29'18
REBAQUE (Brabham BT 49C)	1'29'18
SERRA (Fittipaldi FB)	1'29'43
GHINZANI (Osella FA1)	1'29'64
GABBIANI (Osella FA1)	1'29'79



TIMES IN UNOFFICIAL PRACTICE

THURSDAY MORNING		SATURDAY MORNING		SUNDAY MORNING	
Piquet	1'27'27	Reutemann	1'26'50	Jones	1'28'13
Reutemann	1'27'43	Jones	1'26'80	Reutemann	1'28'16
Laffite	1'27'64	Villeneuve	1'26'86	Patrese	1'28'84
Villeneuve	1'27'95	Mansell	1'27'47	Villeneuve	1'29'02
Patrese	1'28'26	Patrese	1'27'55	Piquet	1'29'21
Jones	1'28'62	Watson	1'27'88	Mansell	1'29'46
Prost	1'28'83	Laffite	1'27'89	Watson	1'29'68
Pironi	1'28'84	Prost	1'27'98	Prost	1'29'70
ArnoUX	1'28'95	De Angelis	1'28'13	De Cesaris	1'29'71
Mansell	1'29'43	Tambay	1'28'22	De Angelis	1'29'72
Tambay	1'29'98	Pironi	1'28'29	Pironi	1'29'76
De Angelis	1'29'99	Cheever	1'28'50	Laffite	1'30'02
Andretti	1'30'10	De Cesaris	1'28'82	ArnoUX	1'30'11
Giacomelli	1'30'18	ArnoUX	1'28'89	Andretti	1'30'29
Surer	1'30'50	Jabouille	1'28'94	Cheever	1'30'62
Gabbiani	1'30'70	Andretti	1'29'17	Tambay	1'30'68
Cheever	1'30'82	Rosberg	1'29'18	Alboreto	1'31'06
De Cesaris	1'30'97	Piquet	1'29'45	Giacomelli	1'31'07
Rebaque	1'31'26	Stohr	1'29'60	Stohr	1'31'82
Rosberg	1'31'62	Surer	1'29'63	Surer	1'32'12
Watson	1'31'79	Giacomelli	1'29'72		
Stohr	1'32'10	Ghinzani	1'29'92		
Alboreto	1'32'21	Alboreto	1'30'20		
Ghinzani	1'32'44	Rebaque	1'30'41		
Serra	1'33'11	Serra	1'31'17		
Jabouille	1'33'71	Gabbiani	1'33'72		

PROVISIONAL WORLD CHAMPIONSHIP POSITIONS

Position/Driver	Long Beach	Brazil	Argentina	San Marino	Belgium	Monaco	TOTAL
1. Reutemann	6	9	6	4	9	—	34
2. Jones	9	6	3	—	6	—	24
3. Piquet	4	—	9	9	—	—	22
4. Villeneuve	—	—	—	—	3	9	12
5. Laffite	—	1	—	—	6	4	11
6. Patrese	—	4	—	—	6	—	10
7. De Angelis	—	2	1	—	2	—	5
Cheever	2	—	—	1	—	—	3
Pironi	—	—	—	2	—	—	2
10. Prost	—	—	—	4	—	—	4
Mansell	—	—	—	—	4	—	4
Surer	—	3	—	—	—	—	3
13. Andretti	3	—	—	—	—	—	3
Rebaque	—	—	—	2	—	—	2
15. Arnoux	—	—	—	—	1	—	1
16. De Cesaris	—	—	—	—	—	—	1
Tambay	1	—	—	—	—	—	1

THEIR FASTEST RACE LAPS

	Time	Lap n
Villeneuve	1'29'00	71
Jones	1'27'47	48
Laffite	1'29'48	43
Pironi	1'29'61	51
Cheever	1'30'55	44
Surer	1'30'77	45
Tambay	1'30'92	12
Piquet	1'28'04	47
Watson	1'29'23	44
Alboreto	1'38'36	48
Giacomelli	1'29'82	50
Prost	1'29'90	25
Reutemann	1'28'76	30
De Angelis	1'29'52	29
ArnoUX	1'29'74	26
Patrese	1'29'01	23
Mansell	1'29'52	7
Stohr	1'31'72	8

CONSTRUCTORS CUP

- Williams 58 pts
- Brabham 25 pts
- Ferrari 17 pts
- Talbot Ligier 11 pts
- Arrows 10 pts
- Lotus 9 pts
- Renault 6 pts
- Tyrrell 5 pts
- Ensign 4 pts
- Alfa 3 pts
- Theodore 1 pt
- McLaren 1 pt



OFFICIAL PRACTICE TIMES

	1st session	2nd session
Piquet	1'25'71	1'28'66
Villeneuve	1'26'89	1'25'78
Mansell	1'27'17	1'25'81
Reutemann	1'27'64	1'26'01
Patrese	1'27'44	1'26'04
De Angelis	1'28'38	1'26'25
Jones	1'26'93	1'26'53
Laffite	1'27'46	1'26'70
Prost	1'27'62	1'26'95
Watson	1'28'13	1'26'05
De Cesaris	1'28'96	1'27'12
Andretti	1'27'51	1'28'16
ArnoUX	1'28'61	1'27'51
Stohr	1'29'78	1'27'56
Cheever	1'29'28	1'27'59
Tambay	1'28'89	1'27'93
Pironi	1'29'15	1'28'26
Giacomelli	1'28'33	1'28'32
Surer	1'29'61	1'28'33
Alboreto	1'30'69	1'28'35

RESULTS

- VILLENEUVE** Ferrari 126 C 76 laps in 1h54'23'38
82.039 mph
- JONES** Williams FW07/8 39'90 behind
- LAFFITE** Talbot Ligier JS17 1'29'23 behind
- PIRONI** Ferrari 126 C one lap behind
- CHEEVER** Tyrrell 010 two laps behind
- SURER** Ensign N181 two laps behind
- TAMBAY** Theodore TY01 four laps behind

Fastest lap: Jones, 1'27'470, 84.70 mph

Subscription coupon

To be cut out or copied

Full name _____

Address _____

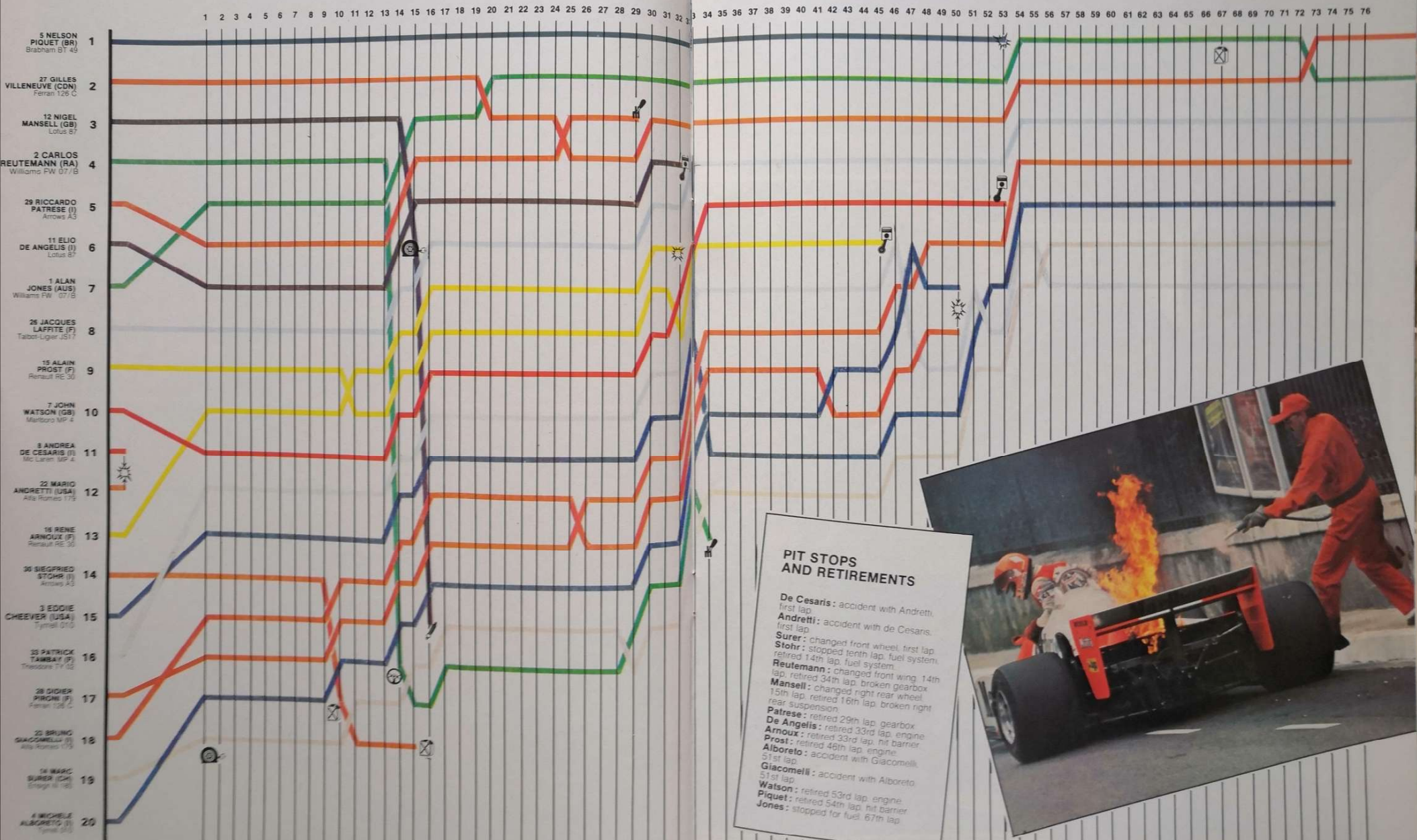
Country _____

ENGLISH LANGUAGE

Subscription including postage & packing £ 15 (UK only)
 USA/CANADA Subscriptions: LONG BEACH GRAND PRIX ASSOCIATION - 100E Ocean, Suite = 908 Long Beach, California 90802.
 Subscription USA only US \$ 44.25
 Cheque or money order (UK currency only) should be made payable to: GRAND PRIX PUBLICATIONS, at Grand Prix International, Group Print House, 24-32 Pottery Lane, London W11, ENGLAND. Telex 21882. Tél. 01-221 1721/5454.

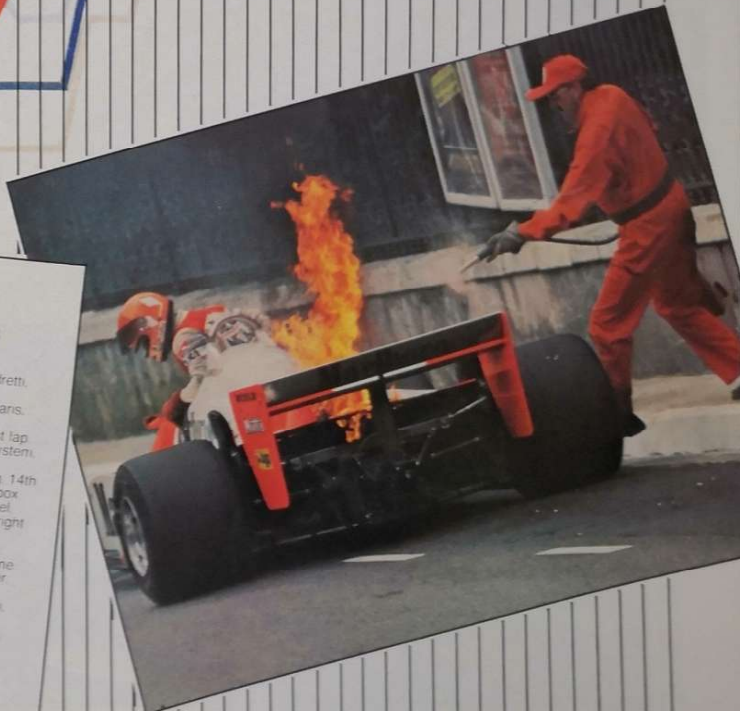


Lap by lap - Giro per giro - Runde um Runde - Tour par tour - Vuelta a vuelta - Ronde



PIT STOPS AND RETIREMENTS

- De Cesaris:** accident with Andretti, first lap.
- Andretti:** accident with de Cesaris, first lap.
- Surer:** changed front wheel, first lap.
- Stohr:** stopped tenth lap, fuel system, retired 14th lap, fuel system.
- Reutemann:** changed front wing, 14th lap, retired 34th lap, broken gearbox.
- Mansell:** changed right rear wheel, 15th lap, retired 16th lap, broken right rear suspension.
- Patrese:** retired 29th lap, gearbox.
- De Angelis:** retired 33rd lap, engine.
- Arnoux:** retired 33rd lap, hit barrier.
- Prost:** retired 46th lap, engine.
- Alboreto:** accident with Giacomelli, 51st lap.
- Giacomelli:** accident with Alboreto, 51st lap.
- Watson:** retired 53rd lap, engine.
- Piquet:** retired 54th lap, hit barrier.
- Jones:** stopped for fuel, 67th lap.



Monaco story

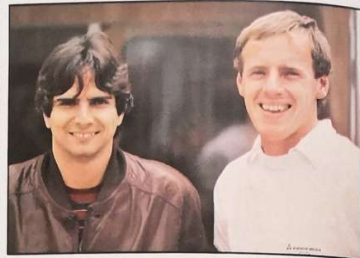


photo John Townsend

Downhill ski champion Weirather with Nelson Piquet, to whom he delivered a pair of skis.



Lamborghini back in business: this year there were four special Countachs as course-closing cars



A good place to watch, if you're lucky, is a balcony



Race day: a fire in the kitchens of the Hotel Loews. Water pumped by the firemen leaks through the floor... and floods on to the track in the tunnel below

Constant news bulletins from Radio Monte Carlo keep French speakers up to date: Alan Jones listens in too



Rigorous "vetting" this year by the AC Monaco kept the pit lane clear of the usual hangers-on

Winners of the two supporting races were Frenchmen Jean Ragnotti (in the Renault R5 turbo race) and Alain Ferte (in F3).



Jackie Stewart takes over his role as a TV journalist



Pironi showers the crowd with licorice whirls (he's sponsored by the manufacturer)



Seen off duty: Italian drivers Gabbiani, Patrese and Alboreto

VIP guests on board Pironi's Abbate speedboat were Nelson Piquet and his girlfriend Sylvia



A very wonderful laser device appeared during practice, to check the infamous 6 cm ground clearance



A change from his Arrows for "Captain" Patrese

Monaco story



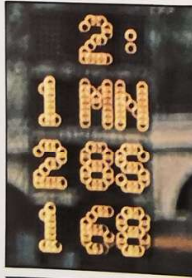
Girls... and more girls

Patrick Tambay surrounded by the hoopla of the Moulin Rouge, the Paris nightspot which is helping to sponsor his Theodore



Agip Agip

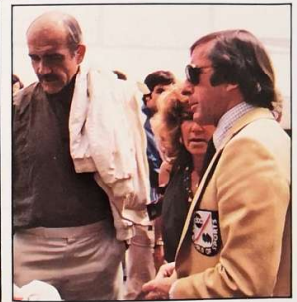
An electronic scoreboard kept spectators up to date with practice times and race positions



This Lagonda was supposed to attract the eye of potential customers... until it was creamed into the barriers



Juan Manuel Fangio and Emerson Fittipaldi are South America's only two world champions. With both now retired, much is expected of Reutemann and Piquet



Old pals Jackie Stewart and actor Sean Connery

Undignified exit for this Alfa Romeo



Gilles Villeneuve in the spotlight, although this was the night before his victory, at a party thrown by Marlboro to celebrate their ten years as an F1 sponsor. Also to be seen are Pironi, Prost and Hunt



Making plans for the future are Jan Lammers and his companion Evelyn

Monaco's favourite pastime... posing





THIRD TIME LUCKY IN MONTREAL?

Monaco was the second street circuit on the 1981 F1 calendar, and once again Riccardo Patrese was obliged to concede what might have been a win. His chances in the Principality, however, had never looked as good as they did at Long Beach. Nevertheless, it should be recorded that Riccardo made quick work of disposing of Villeneuve, and was pulling away without apparent effort... only to have his gearbox fail. The next street circuit on the schedule doesn't turn up until the Canadian GP in September. The Ragno-Arrows team sincerely hopes that there'll be a chance before then for their car to show its capabilities. (Photos Thierry Bovy/DPPI - Eric Vargiolu/DPPI - Jean-Luc Tailade/A + P).



WEIGHT... AND SEE

Under the limit in practice? Under too much pressure in the race? Those were the rumours being made about Nelson Piquet at Monaco by the local papers (for what they're worth). It was his remarkable Thursday afternoon practice time, 1.2 seconds faster than anyone else's, which set the tongues wagging. In no time at all, the story was out that his Brabham was under the 585kg F1 weight limit. It didn't stand up quite as well on Saturday, however, for by then his usual rivals had almost equalled the time while he concentrated on full tank tests. They paid off handsomely in the race, which he led convincingly until Jones started to press him, whereupon the Brazilian threw away a likely victory with an error that sent him into the guardrail. Attempting to pass Tambay (who was being lapped for the second time), Nelson locked up the rear wheels of his Brabham on the dirty part of the track when he ran off line at Tabac corner. As Jones went past the scene with a grin, Nelson did his best to forget what had suddenly become a very unhappy weekend for him. (Photos Thierry Bovy/DPP - Bernard Asset A + P).





CHEEVER'S LUCK OF THE DRAW

After a lucky sixth place in Belgium, Eddie Cheever again finished in the points by taking fifth place at Monaco. Fortune smiled on him for a second consecutive race, for he only narrowly escaped damaging his Tyrrell in a skirmish with Pironi's closely-following Ferrari which sent him spinning at Mirabeau corner. The American somehow managed to get his engine re-started, and he was soon on his way again. (Photos Jacques Cochon/SAM).



HAPPY JACQUES

The frowns on Jacques Laffite's face after two perplexing days of qualifying at Monaco had given way to smiles when he climbed from his Talbot-Ligier after the race. The reason? He had handsomely parlayed eighth place on the grid into a commendable eighth place on the track into a more than third place finish. Not only was this a more than satisfactory result, but when coupled with his second place in Belgium it demonstrates that the "all-blues" are back in the ball park. Despite his post-race exhaustion, Jacques had time to greet the representatives of the many supporters that the team has acquired this year. "I'm especially glad for Gitanes, Matra, Talbot and of course Guy Ligier," he said. "Today has confirmed that our work is paying off and that the good old Matra V12 can still give a fair account of itself." Whatever it may lack in terms of power, the redoubtable engine makes up in reliability; as a result Laffite isn't too far from the front runners. "Watch out," he warns: "the pundits were too quick to write off our chances at the beginning of the season." (Photos Jean-Luc Taillade/A + P - Bernard Asset/A + P).



HECTOR REBAQUE

FACE TO FACE

When it comes to racing reputations, there has never been anything particularly edifying about the career of 24 year old Mexican Hector Rebaque - apart perhaps from the fact that, like the famous Rodriguez brothers, he started racing at an amazingly early age. That his financial resources are virtually unlimited is well known: when he made his F1 debut four years ago, there were many pundits who assumed that it was money alone which had taken him into Grand Prix racing. Nevertheless, this year Hector has been showing good form in his works Parmalat-Brabham BT49. Even Brabham designer Gordon Murray has gone on record with some favourable remarks about the youngster's abilities.

by Eric BHAT



Hector, there's not much known about your early career. Can you give me a brief summary of what you did before entering F1?

I started racing at home in Mexico in 1971 on dirt ovals with standard cars, Renault R8s and that kind of thing. Then I switched to the States, in endurance races like Daytona and Sebring, with a Porsche. Afterwards I started doing something in Formula Ford and Formula Atlantic, and in 1974 I had a few Atlantic races in England. In 1975 I raced in F2 for the first time, and in the Canadian Formula Atlantic championship. My first season in Formula 1 was 1977, with Hesketh, when I qualified for only one GP, at Hockenheim.

You then started your own team, using ex-works Lotuses. That proved to be difficult, didn't it?

Yes, we set up our own organisation, but as you know, after two years we

were still having lots of problems. It was complicated for me trying to drive and trying to keep the team together. We were fighting against all sorts of problems, especially at that time, with pre-qualifying and the special Q-tyres the other teams were getting. We also had to try and keep our cars as similar as possible to the ones from the factory. It was very complicated. We had sponsors... and I feel that they weren't getting what they were paying for. So then we decided to build our own car. We had promises from everybody to help us with tyres, and this and that, if we became a constructor, but it didn't happen. Instead of having some fun, and enjoying what we were doing, it was really tough. I thought it wasn't fair to our sponsors to keep doing this, so I decided to quit with the team. I promised myself that I would not come back to Formula 1 unless I thought we had a fair chance of doing it (properly). Then the opportunity with Brabham came



up... and since then things have been quite a bit different!

How did you get your drive with Brabham? Did you have sponsorship money available to offer to various teams?

Well, I was really disappointed after the seasons with Lotus and our car. So I kept out. There had been some talks with Bernie Ecclestone before I (disbanded) the team, when we had been trying to become a FOCA team with our own car. So the possibility of going to Brabham stayed there, but the team already had two drivers. Then, when they had the trouble with Zunino, they asked me if I would be interested to drive with them. And for sure I was.

Didn't you have to bring your own sponsorship?

At the beginning, yes, when they asked me about this, I had to bring a sponsor with me. Now, of course, it's different, because we have a sponsor, Pemex, of the full team. Pemex is the Mexican oil company. Last year, though, it was only my personal sponsors, that's all.

Can you give me some idea of the sums involved?

I wouldn't like to speak about money, because that's something between Bernie and the sponsors. But it's not as much as people think!

When you had your own team, would you say that your greatest satisfaction was the sixth place you took in the 1979 German GP?

That was my best finish, although I think some other races were better than that. My best race should have been Long Beach in '79, though I didn't finish. I was running sixth, a few laps from the finish, when I crashed (with Daly's Ensign). I think it was one of my best drives. Again, the only time we actually raced our own Rebaque car, in Canada '79, was not bad. We qualified 17th, which was pretty fair for us then, considering that for most of the year we had been qualifying around 24th, only just getting on to the grid. After designing and building the car, it was satisfying to do as well as that, although we had too many problems to continue with it.

With Brabham you've had the disappointment of losing 2nd place in Argentina but the satisfaction of finishing 4th at Imola. Was the retirement in Argentina difficult to take?

Yes, it was a disappointment not to finish in Argentina. But it was also a great satisfaction, for a while, because before the race I hadn't expected to be (so well placed). But as the race went on and on, I could feel that the car was working fabulously, and I could overtake without trouble... it was a really



nice feeling. In that way, I had a big advantage, definitely, the car was working incredibly well, compared with the rest. It was bad luck what happened to me when the electrical part broke, because it's a piece of the electrical system which normally never gives any trouble.

You and Nelson proved in this race that the Brabham was really the quickest car with its hydro-pneumatic suspension. What part does the driver play in this?

Whether it's a good car or a bad car, it's the driver who drives it. When you have a good car, it's the driver that proves how good it is. In such cases, it's up to the driver to put the car in the position in which it should be. I think that Nelson and I did that in Argentina. The cars were the best and we were the fastest two in the race. It's hard for me to say exactly what percentage of this is down to the driver, and how much down to the car, but I think a good car has to be driven well, otherwise one doesn't even realise that it's a good car. I'm happy about the Argentine race, even if there was a lot of talking afterwards. I'm happy because we were in front, and the cars were the best.

Was it a sort of revenge for you, against the people who said that you didn't deserve to be in Formula 1? Did you feel that you'd proved that you could be a front runner?

Definitely. I'd been trying for two years, trying hard to be at the front and I'd never really had the satisfaction of being a top six driver, so I felt good that I was at last at the front. It's incredible, but it's much easier to be in front than at the back. I can remember the amount of pressure on me when I was driving my own car: it was more a case of being in the race or out of it. That was it. A lot of people ask me if there isn't a lot more pressure driving for a top team like Brabham, but I think it's much



more relaxed. In Belgium, for instance, I had bad luck on the first day of practice, and then it rained on the second day. But I was still in the race. Before, in my own team, when things went wrong, I was out of the race, and that was it, end of story.

Have you learned much from Gordon Murray and Nelson Piquet?

Yes. Gordon Murray is a fabulous designer. I now know that was our mistake in our team: we didn't have anybody who understood the car. I would tell the mechanics what was wrong, they tried to figure out what I was talking about, and then I couldn't understand them because we weren't speaking the same 'language'. When Gordon and I talk, he can understand what I'm saying and translate it into technical terms with reference to the car. Gordon and I understand one another. Nelson and I have a good relationship too. He helps me a lot, especially somewhere like here at Monaco. It's the first time I've been here, although in 1978 we failed to pre-qualify. So it's almost completely new to me and this is where Nelson's help is invaluable. I think in most other teams there is a lot of politics between drivers, but there's none of that here in the Brabham team. I find this is a relaxed team, and that suits me fine. I have to go back to Mexico between most races and this would be difficult if I was in another team. I would have to go testing. But with Nelson here, it's no problem.

Gordon Murray has suggested that if you didn't spend so much time on business in Mexico and travelling across the Atlantic, you could be a better driver.

I think he's right in some ways. It would help if I didn't travel so much. But I don't think it would help that much. I'm used to it now, jet lag doesn't trouble me. But if I could stay over here testing, it would be a help. I'm going to try and stay in Europe for a while after Spain and not keep going back all the time.

What is your business in Mexico?

I have a construction company. It takes up a lot of my time, yes... it's a big disaster!

But now that you've proved yourself in Formula 1, aren't you tempted to give up your business?

It's something that I started myself, and I wouldn't want to close it down, because one day I will have to retire from racing. It's something that has taken a lot of time and effort to build up, and it still takes up too much time. I'm trying to organise it so that I don't have to be there so much.

Would you say you were a professional who happens to have a second job, or a gentleman who is motor racing for pleasure?

Well, my case is rather different from most other drivers'. I don't have to race for a living: I have my job and I could do something else other than race. But I really want to drive racing cars, and



drive them competitively. I want to prove that I can be at the front in Formula 1. On the other hand, I wouldn't like to close down my business. For the moment, I want to race, which is why my company is a disaster: I'm trying to handle it as well as I can. But racing is more important for me than anything else.

What is your ambition in motor racing?

It's difficult to say just how far one's career can develop, because it depends on so many things. One can have a good car one year without knowing how good it's going to be the next. My ambition is to try and win some races and try to be at the front as much as possible. And if some day there's the possibility of being world champion, so much the better, but that's everyone's ambition. At the moment I just want to win a race.

How did you feel last year when several people, including some in your own team, suggested that Nelson didn't get enough help from you in winning the championship in the way that Reutemann helped Jones?

If they'd had somebody with more experience it might have been better. But that's not necessarily the case: look what's happened between Jones and Reutemann this year. I've tried to help Nelson when I've been in a position to do so. At Imola, for instance, when I was in front of Jones, I tried to stay there as long as possible. It's a difficult question to answer: how much could somebody, anybody, have helped Nelson last year?

Are you able to help Nelson with technical information?

Do you mean setting up the car? We help each other, it's reciprocal. Sometimes I try something and he tries something else and from the two different set-ups we draw our own conclusions. If Nelson is in a position to win the world championship again this year, of course I will try to help him. If I could help him to win the championship I would be really happy.

Bernie Ecclestone has the reputation of regarding drivers as of secondary importance to the cars themselves? Without asking you to be rude, what do you think about him?

When I first joined the Brabham team, I wasn't sure how long I would be able to stay, because of the reputation you've just mentioned. People said just what you've said. But it's incredible, and we haven't had any problems from the moment I joined the team. We get along pretty well and I don't think he's nearly as bad as people say he is.

Where do you think you stand against other drivers in F1 in terms of ability?

Formula 1 is very very hard. It's not like racing in Indy cars where the tracks are very similar to one another. Here at Monaco, I'm at a disadvantage because you have to know every inch of this track to go quickly. It's the first time I've driven here and I'm at the back, where I belong on this occasion. But we're going to other circuits now which I know, and there I should be in the top

ten, taking into account my own ability and the car's performance. You have to take driver and car as a whole.

When Lotus failed to go to Imola, Elio de Angelis was reported as saying that he had received offers from other teams. Was there a possibility that he could have gone to Brabham as Nelson's number two? Is your contract for the whole season?

Yes, my contract is for the whole season. I don't know if the team would run a third car, but I would still be driving for the team if another car was entered.

When the drivers held their demonstration at Zolder, you remained in your car. Why?

Well, it's not that I disagreed with what the drivers were saying, it's that I didn't think it was the right way to do it, immediately before a Grand Prix. I think we should have our say, but we should go about it in another way.

Did it make it difficult for you to take part because you're a Brabham driver?

Well, of course it was difficult to counter the interests of the British team managers. But as I say, I didn't think it was the right moment to demonstrate. Of course I agree with everybody that we should improve safety, all the drivers are concerned with safety. I think we should make our point of view and we should be heard, but we should do it in some other way, not as at Zolder.

As the only Mexican driver in Formula

1, are you now very famous in your country?

There haven't been any Mexican Formula 1 drivers since Pedro Rodriguez. When I began racing in Formula 1 there were very few young drivers in Mexico, just people who had been racing for some time. Now there are a lot of younger drivers racing in Europe and the United States, and I think there will be some more in Formula 1. There is still the possibility of a Grand Prix in Mexico and I would, of course, be very happy if there was a GP in my country again.



Not as long ago as it seems: Jody at the wheel of the T4 Ferrari en route to his 1979 world title

JODY: IT'S A LIVING...



There is a natural tendency to regard retirement as a pain, especially when the retiree is someone who's enjoyed the spotlight of fame in Formula 1. Nevertheless, the act of hanging up one's helmet has its compensations, especially when most of one's adult years have been devoted to a profession as demanding as racing. At the age of 31, former world champion Jody Schecter has made a success already of the transformation... and he still has his entire life ahead of him.

A new workplace for the champion: behind a desk. Jody is assisted by his secretary Niki



The Schecter family group: Jody, Pam, Toby and Thomas in their tenth floor Monaco apartment, enjoying the sunshine of their own little balcony

There are no generally accepted rules of behaviour for retired F1 drivers. Former racetrack stars tend to go off in all sorts of different directions. Jean-Manuel Fangio, for example, is President of Mercedes in Argentina. His former team mate, Stirling Moss, has made a racing come-back, this time in saloon cars, after no fewer than 18 years of virtual retirement. Meanwhile, saloon cars continue to provide Jean-Pierre Beltoise with similar success. Jackie Stewart has become a past master at the art of Public Relations in its many forms. Niki Lauda started up an airline. Emerson Fittipaldi has taken over the running of his own F1 team. And Jody Schecter, as you can read below, is busy organising another championship, this time on two wheels. Bye, bye cars... hello bikes!

It goes without saying that a driver who quits F1 very rarely finds himself with nothing to do. Just because you've changed your lifestyle doesn't mean that you're going to lose your taste for work, however different it might be. Accomplishing one ambition positively encourages an active man to look for new challenges, new aims, even new

problems. It's a phenomenon which is currently gaining ground, largely because of the changing nature of F1 itself. Careers at the top of the racing profession have become more hectic and intense than ever before. They're also becoming shorter, with the result that we're seeing more and more drivers withdrawing at an early age, especially those who started young. Men like Niki Lauda and Emerson Fittipaldi - both contemporaries of Schecter in age, success and early retirement - are already making good use of all the time that's suddenly become available to them.

For the past eight months, Jody Schecter has belonged to motor racing's past. It seems so much longer than eight months: it feels as though he's been away for years. Today his crashes in 1973 appear very distant, as do his Tyrrell six-wheeler successes, his world championship win, even the emotional scenes that followed his farewell race at Watkins Glen last October. Things happen quickly in Formula 1. The recent past soon becomes history. It's over and already out of date. Any driver who retires finds exactly the same thing: that once the step has



Scheckter and son:
two generations but
still the same profile

been taken to pull out, the break is clean and total. "These days, racing is no longer a part of my life," says Jody. "When I go to a race, I don't feel at home any longer. I'm not part of the scene. Because I'm no longer a driver, I don't think in the same ways as the others. I feel out of place."

Jody Scheckter still comes to races, but these days he wears a jacket and tie, the clothes he regards as appropriate to the president of the GPDA. There are signs, however, that he's bored and uninvolved in some of the things he's doing. He stays close to the Ferrari pit and his former teammate Gilles Villeneuve, watching with semi-interest as the world of Formula 1 bustles around him. When he meets old friends, they only confirm the feeling that he no longer has anything to do with Grand Prix racing. "They always say the same things: 'hi Jody, how are you? Good to see you' and they have nothing else to say. They go back to work again. It's their life, they have nothing else."

But he doesn't regret the good life that motor racing has given him. He doesn't miss racing, he doesn't itch to hold a little leather bound steering wheel in his hands, nor to feel the punch of 500 brake horsepower in his back while watching the rev counter needle flick round to 11,000. "I think I've had enough of driving. I did ten years, I did what I wanted to do. At the beginning I thought I was the fastest driver in the world. At the end, I thought I was the cleverest driver. But I don't want to drive any more. I have no illusions that I

could beat everyone else, but if I had the right car I know that I could win. I don't think I have any desire to get back in a car and prove everything."

So one part of Scheckter's career is definitely over, and he's not sorry to have taken that decision. All the same, he doesn't regret his motor racing years. "I retired when I was on top. I'd been successful for 12 years. I'd earned a lot of money, enough to live without working for the rest of my life. I like to think that I gave a lot back. I may have retired fairly suddenly, but it wasn't because I was bitter, not at all. I had to get on with my new life. As time passes, the happier I shall be that I was world champion, and the happier I shall be that I was once a Formula 1 driver."

It hasn't taken Jody long to start out on a new tack. He could have gone home to South Africa and lived quietly in retirement with a few financial interests to keep him going. But he's not that sort of person. He's lively and impatient and he's quickly become involved in new ventures. "I don't see him any more often than I used to," says his smiling wife Pam. "He's always travelling, even now." Jody isn't happy simply selling his name to endorse products. "Publicity pays well and it's easy money. I'm not the same as Jackie Stewart. He likes publicity and promotion, but I'd prefer to work in the direction of a new crea-

tion. I don't want to go around for the rest of my life saying 'I am Jody Scheckter'. I now want to create something that is new."

Scheckter's new direction is towards the two-wheeled world. He's involved with the organisation of a new 500cc motor-cycle championship, the "World Winter Cup Series," which will take place during the off-season.

"The first race will be on August 29 at Donington Park. It's not finalised but we are trying to run four or five races from there on. The places we are looking at are Belgium, Germany, ermmm, Mexico, America, South Africa... and we'll chose five out of those circuits. Also we're talking to one in Holland."

How does Jody find the change from his four-wheeled life to his new two-wheeled career? "Well, people approached me first and asked if I was interested in doing it. I know nothing about motor bikes but the more I thought about it, the more sense it made. I went to see a race at Paul Ricard and another at Donington Park. I've been to see the FILM people and I have got their approval."

For Scheckter, this is no "front man" job: he's thoroughly involved in the organisation with Donington's managing director, his old friend Robert Fearnall. "Jody's been doing most of the negotiations," says Fearnall. "It's his thing. He's been instrumental in negotiating with the circuits, riders, manufacturers and TV companies. Someone was needed to coordinate it all, and that's what he's doing."

Jody is already very interested in motor cycle racing. "At the beginning I said 'I don't want to go to the races' but then I started to get interested. I think that if it's promoted properly, it's a good spectacle. On TV, you know, it really is the best show: there's so much passing. They're much slower in the corners than Formula 1, but they look much faster. Yet the only people that know about motorbike racing is the people with the leather jackets. The person at home who doesn't go to the races doesn't know anything. I think that's where the potential expansion is." Jody could be Bernie Ecclestone ten years ago. Does he want to be the Ecclestone of bike racing? "I am going to be the friendly Bernie," he says with a grin. Apart from his motor cycle interests,

Jody is also taking a professional interest in motor racing from the other side of the armco, as a TV commentator.

"I'm doing a lot of TV for America with CBS and another company. I was recently at Ferrari doing an interview on Ferrari. But don't talk to me about it! Even when I'm at Ferrari I'm not allowed to film anything. 'Don't film that,' he told me, his old driver."

He's still involved with the GPDA, although to a lesser extent now than before. But it's enough for Jody to have been blamed for some of the events at Zolder. A number of team managers reckoned that he was the subversive element who was urging the drivers to strike. "I have made a lot of bad friends because of my work in Formula 1," says Jody. "That's sad because for eight of

my ten years I drove for the constructors, Ken Kyrrell, people like that, and I know that most of the constructors hate me. But talking of Zolder, unfortunately for the people there, I had very little to do with it. I'm still in my position at the GPDA because the drivers asked me to stay, but I don't push them as I used. I'm just a co-ordinator now, no more. At the last meeting, when they decided to go on strike, I wasn't even in Belgium. Now I think they were right in the way they did it and in what they did. They were strong. The mess was from the organisers, from everything else. Their reactions were ridiculous. It's criminal. But I want to try and get some young drivers interested in the GPDA to carry it on. I think it would be very sad to see it go completely."

When Scheckter gives up his post as president of the GPDA, he'll be seen less and less at Grands Prix. He might not even come at all. Instead, his new job is with the motor cycle racing men. And so far, it's a life he likes.

"I often used to drive to the circuits on race day with Patrick Depailler," remembers Jody. "We used to ask one another, what are we doing here? We'd be better off going fishing or something. People often ask themselves what on earth they're doing going motor racing. Most of them would prefer to be anywhere but at the circuits." The main change in Scheckter's life is that he no longer feels the tension of a race; it's a weight off his shoulders.

E.B.



LOTUS 88... MINUS

When Colin Chapman's Lotus 88 was declared illegal, the first question was: how would Chapman react, or seek his revenge? The question was soon answered. Formula 1's most innovative designer was sufficiently unhappy and unprepared to give the San Marino GP a miss. One week before the Belgian Grand Prix, however his new car, the 87, appeared at Zolder for testing. It may be called the 87, but its parentage is undoubtedly 88. Two of the new cars made their race debuts at Monaco, and showed immense promise. The 87 is basically an 88, without the contentious parts of that car. It's a single chassis 88 retaining the monocoque of Chapman's revolutionary car but without the second chassis on which the bodywork was mounted. The result is small car by Formula 1 standards, almost the size of a Formula 2 car.

by Giorgio PIOLA

The Lotus 87 retains most of the basic parts of the 88. The intriguing carbon fibre and kevlar monocoque remains, and the suspensions are identical. The long and narrow radiators are also used in the 87, plus the flexible hoses which were so necessary because of the independent chassis movements of the twin-chassis 88.

The appearance of this new car so soon after the previous 88 had been banned might have led one to suspect that it was built in double quick time. But there aren't many new parts on the 87. The only new parts are a nose cone extension on which is mounted the front wing, narrow side pods and a small engine cover.

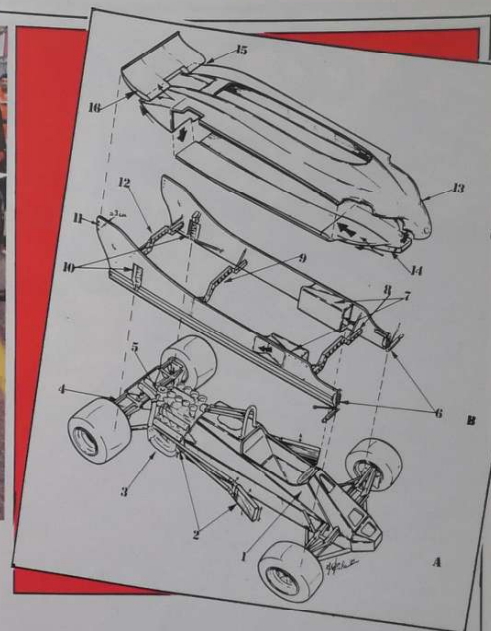
The central part of the bodywork is actually formed by the chassis itself, painted in dark blue to match the rest of the bodywork. The 88 was designed to give downforce through its independently sprung bodywork, but because this secondary chassis was deemed illegal, Chapman has had to use the front and rear wings previously fitted to the 81. The result is a car that is much more compact than other Grands Prix cars. Generally speaking, its overall dimensions are much less than an other Formula 1 cars. Both front and rear tracks are narrower. The front track is 160cms wide, whereas other F1 cars are between 170 and 173cms wide. The same is true of the rear track: 150cms as

opposed to 160-162 on the opposition. The side pods are a further ten centimeters narrower on either side, but there's good reason for this. Colin Chapman wants to maintain air flow under the car and to reduce turbulence created by the rear wheels. For this same reason, the side pods aren't straight but have two curves in them. They also extend rearwards to the drive shafts, whereas the side pods on most other cars extend no further back than the rear suspension.

The size of the Lotus 87 suggests that it might not be quick on faster circuits, and this has already proved to be the case during testing at Silverstone and circuit Paul Ricard.

For this reason, the Lotus team tried a wider track at the French circuit, but found that this upset the car's balance. However, there's a strong possibility that wider front and rear tracks will be fitted for the Spanish Grand Prix, and that the car will also be fitted with new bodywork. Colin Chapman still wants to try a modified twin-chassis 88, but the 87 has already shown that it's a competitive conventional car. According to Chapman, the Lotus 88 was close to the weight limit; with one light. That's certainly one advantage, and it's also a very manoeuvrable car. It was clearly well suited to Monaco where it made its very promising debut.

Compare the new car with the 88: note the inner chassis (still used on the 87), the outer chassis and bodywork.



1 - The 87 is fitted with the 81's wide front wing.

2 - Nose extension onto which is mounted the front wing.

3 - The chassis is the same as that used on the 88, made of carbon fibre and kevlar.

4 - Small cockpit surround which also encloses the top suspension mounting points.

5 - Mirrors are part of the bodywork.

6 - Aerodynamic bulges (to bring the car up to the minimum width).

7 - The side radiators are the same as the Lotus 88.

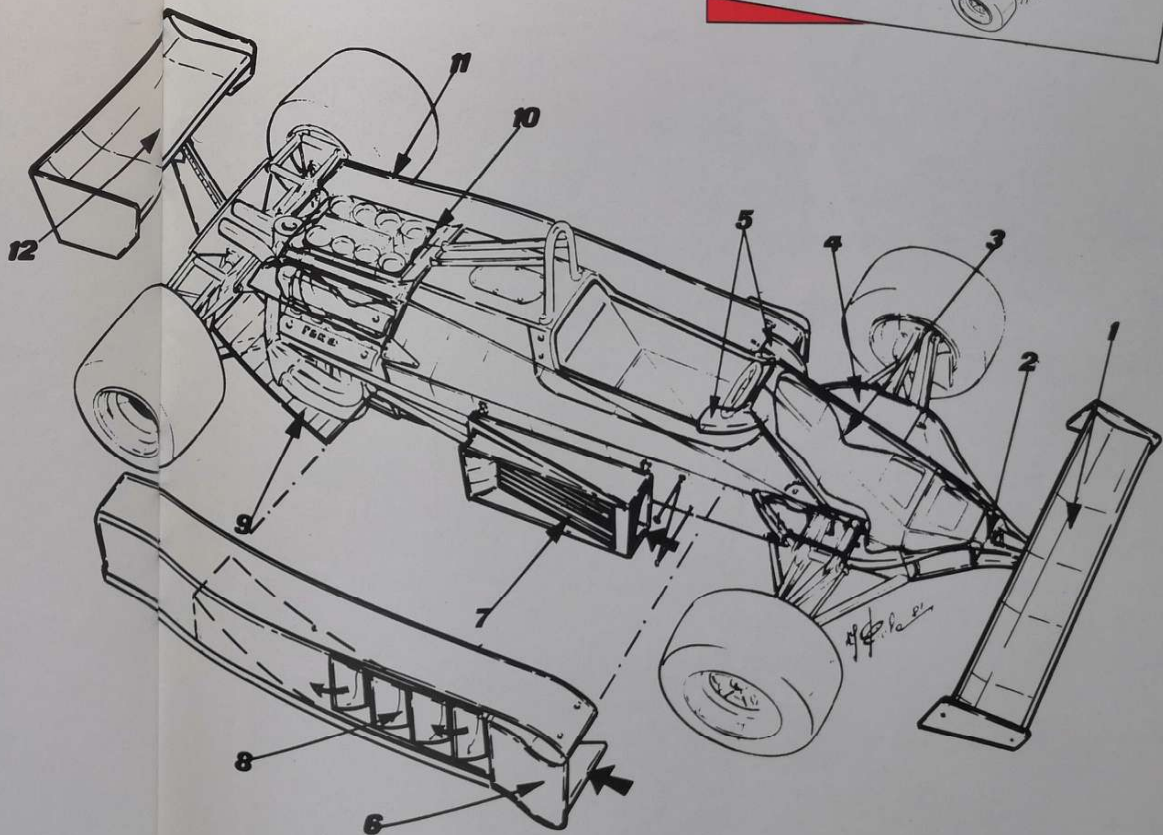
8 - Louvres to aid air flow from the radiators in the side pods.

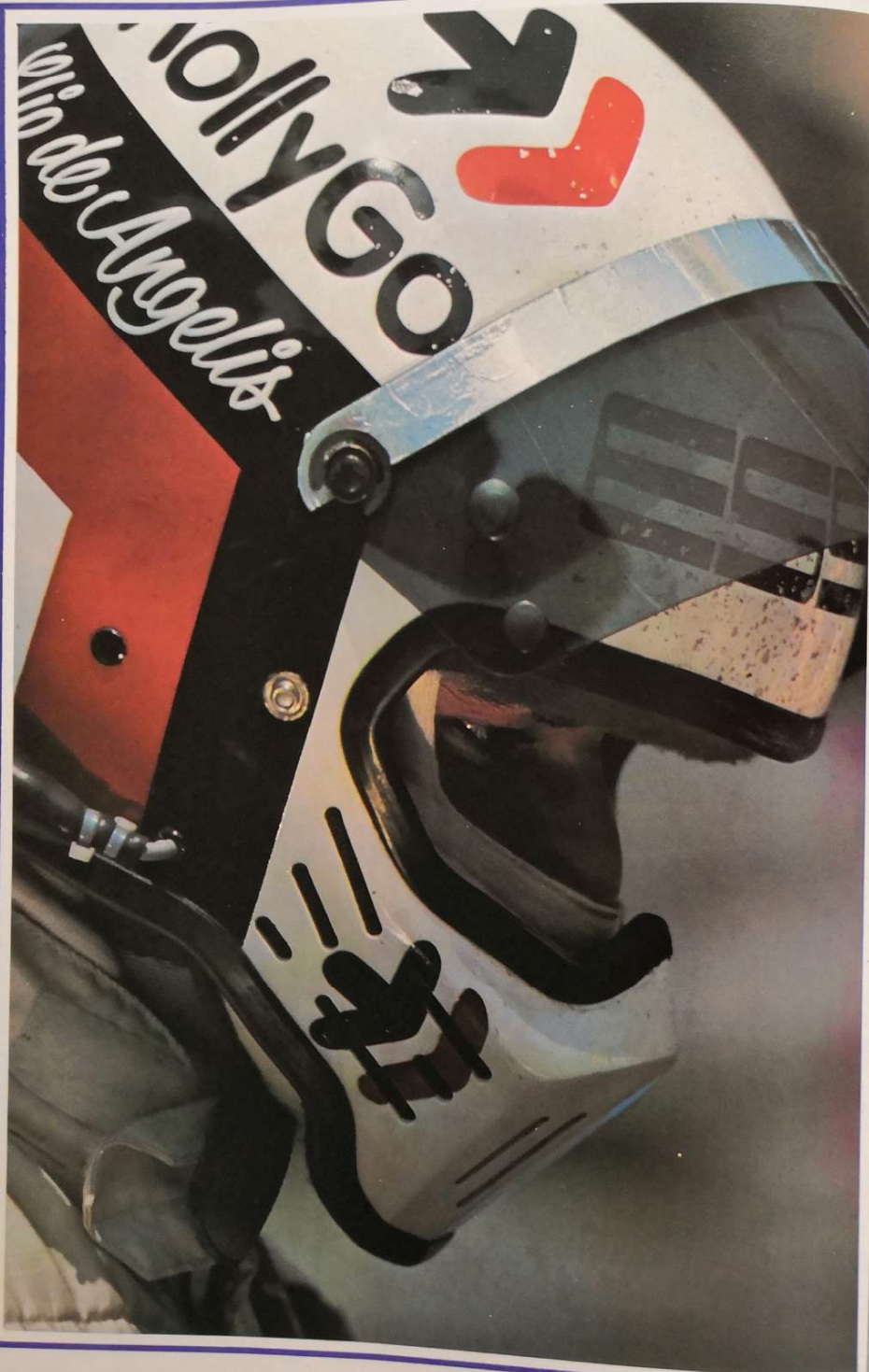
9 - Bottom part of the side pod wings, which also incorporate the lower bodywork around the engine and gearbox.

10 - Small engine cover.

11 - The side pods are no higher than the rear wheels in order to reduce turbulence.

12 - Lotus 81 rear wing.





Elio de Angelis has reason to feel frustrated. He expected to be Lotus's number one driver this year, but finds himself out of favour

Nigel Mansell is almost the number one driver for Lotus now. He showed immense promise in both Belgium and Monaco GPs. He's Britain's greatest hope, and surely has a rosy future before him. He's Chapman's favoured driver

THE NOT-SO PUBLIC RELATIONS OF TEAM LOTUS

Team Lotus and its boss, the amazing Colin Chapman, have always had an ability to bounce back from adversity. This year Chapman and his team have needed that quality more than ever before, for their problems have included a ban on their revolutionary double-chassis Lotus 88 and a major setback in the oil business controlled by their enthusiastic American sponsor David Thieme. At Monaco, Lotus arrived with the 88 in its interim "legal" guise (renumbered type 87). But the inevitable mechanical problems with a new car were not the only difficulties which were to arise in Chapman's team in Monte Carlo.

by Mike DOODSON



Inside his Simpson helmet, with its dark visor snapped down tight, it's impossible to see the expression on the face of Elio de Angelis. It's three minutes past one on Saturday afternoon, and almost all of Elio's rivals are in their cars and running around the Monaco circuit already.

The Lotus mechanics are fussing around the number 11 Lotus 87, still up on its stands, as Elio paces up and down in his helmeted anonymity. It takes eight mechanics to lift the car, and Colin Chapman himself whips away the trestles underneath. At eleven minutes past one, they invite him to step inside and get himself buckled up.

As the belts are tightened, Lotus team manager Peter Collins explains what's happening. "During the break between practice sessions we changed the gear ratios, adjusted the skirts and altered the spring heights." The airguns rattle as a set of fresh Michelins go on. "The boys are just finishing a front spring change now," Collins continues. But no sooner is the front body cover fixed in place than Colin Chapman has to plug in the intercom with bad news for his number 1 driver: the mechanics are now working under the rear of the car, trying to get the spring platforms adjusted to the right height. Frantically, the work continues. Theoretically, the mechanics should look as clean and elegant in their expensively decorated cotton shirts as the man who paid for them, David Thieme, does in his. But Geoff Hardacre under the car is literally groveling in the dirt. When at last the car is ready to be pushed into action, Chapman glances at his expensive gold Swiss watch with diamonds. It's one twenty-four, almost half of this vital session gone, and de Angelis hasn't even done a lap.

Nigel Mansell in the other Lotus 87 has already done the fifth fastest time of the session. His car, unlike Elio's (which was so new that it was still being painted when it was being loaded into the transporter), has completed several hundred miles of promising tests. With an astounding third place to his credit from Zolder in the old Lotus 81, and suddenly become the target of admiration from the world's press, Nigel's progress im-

mediately enraptures Chapman, now that the problems with the de Angelis car are apparently overcome.

The Lotus chief is so wrapped up in Mansell, indeed, that when de Angelis returns to his pit after only one lap, his mechanic has to pit after only one lap, his mechanic has to draw Chapman's attention to the stationary car only 25 feet away from him. The hydro-chamber suspension system has stuck, the pneumatic suspension system has stuck, the car is undriveable, and any time it might achieve would surely be invalidated by the laser installed in the pit lane to check the infamous 6 cm...

Mansell, meanwhile, is chiselling away, faster and faster. By the end of the session he will have achieved a time that gives him third place on the grid. In the meantime, there will have been even more fiddling with the rear springs on the de Angelis car. On Elio's last lap, with sixth fastest practice time miraculously in the bag (he's done only 12 laps in this session), Elio is reported to have stopped at the swimming pool. "Engine must have tightened up," mutters Collins: less genteel voices point out that it is difficult to check the ground clearance of a car that's dangling above the ground on a big hook suspended from a crane.

Later that day, not long before midnight in fact, the lights burn on the quayside where the big transporters are drawn up in their makeshift paddock. The haunting electric music of Steely Dan drifts across the harbour from the Williams enclo-

sure, and appropriately the number they're palying is "My Rival". The remaining mechanics are almost all English speaking, for most of the French and Italian teams have already packed up for the night.

Under their canopy, the Lotus mechanics are hard at it, still in their torn and greasy white shirts. There is nevertheless an innate cheerfulness, for the two new type 87s have done better than anyone dared to hope. In the Lotus motorhome nearby, Peter Collins calls for his supper and reflects. "Elio handled that situation this afternoon rather well," he says. "He's been a bit... well, uptight lately." Uptight? That's putting it mildly. Last October, when de Angelis was already being tempted by other teams, Colin Chapman cajoled him to stay with attractive inducements. More money. Number 1 place on the team. The Lotus 88, a guaranteed winning car. But now the Italian papers are full of scandal: Mansell is being favoured over de Angelis, they say, and there are whispers that Elio's salary is three months overdue.

In next morning's half hour warm-up there is a sign that de Angelis is not as relaxed as he should be. After only a couple of laps, his Lotus 87 appears in the pits with its front wing bent askew. A marshal foolishly tries to gesture the car into its place, and Elio all but scoops up the alarmed official as he brakes to a halt. He bursts out of the cockpit and heads for the spare car, the T81 "old nail."

"Bloody Arnoux," he mumbles: "he knew that I had been waiting to pass for a couple of laps, but still he wanted to drive down the middle of the road." The mechanics send him off for a couple of familiarisation laps, and when he returns they're already at work with fibreglass and resin in an attempt to repair the front wing mount.

Now resigned and calmer, Elio stays with the team in the pits as the session is flagged to a close. "The car? Well, to be quite honest it feels terrible round here. I can't explain why it's so quick compared with the others, unless of course they're all doing it wrong. Now we shall have to use a smaller front wing on my car. We just don't have the spares we need for the 87."

Next door, Nigel Mansell is looking sharp and confident. Is there any truth, I venture to ask de Angelis, in the stories that the number 2 man is getting favoured treatment? "I don't think so," replies Elio. "I prefer to think that what's happening to Nigel is a matter of coincidence, no more. It's a bit worrying when I think that the coincidences only started to happen after I asked about my money..."

Nobody would deny him that glory, of course. He shows in the race that he deserves it, for he holds a most remarkable third place behind Piquet and Villeneuve despite a rear suspension problem that Reutemann, following closely in fourth place, can see only too clearly. At the Station hairpin, on lap 15, Mansell's car snaps out of shape, and Reutemann can't avoid him. Mansell stops at his pit, where a rear wheel is changed, but the rear suspension collapses altogether on the next lap, and his car is eliminated.

That leaves de Angelis carrying Lotus hopes. On lap 30, he's risen to fourth place, ahead of Laffite. He's going well, despite a serious handling problem which isn't helped at all by having to use the small front wing. But the fourth place lasts for only three laps, until his engine explodes in an oily mess that catches out... the following Arnoux.

Not all the scores have been settled at Lotus yet, but that one little incident with Arnoux—revenge for the morning's collision—may have given Elio de Angelis a crumb of comfort as he made his way home to his apartment. There are many tales to come, however, in the return to prominence of the team that calls itself Lotus.

PROST

Scriptum

So a Ferrari turbo won the Monaco Grand Prix. That makes us look pretty silly doesn't it? Naturally people are going to compare Ferrari's turbo with Renault's turbo, and we're not going to come out of it well. People have said—or at least they've intimated—that we've taken advice, we're no longer good enough, and that after Monaco, the Renault people are panicking.

I wasn't a Formula 1 racing driver when the Renault RS 10 made its debut. I was racing in Formula 3 that year, but I was an interested spectator at the Monaco Grand Prix 1979. Which were the cars on the back row of the grid? If my memory serves me well, they were a couple of Renaults.

Next question: Who won the next race, at Dijon? Jean-Pierre Jabouille is the answer to that one. And who was third? René Arnoux. Moral?

surprise that the car was undriveable thereafter.

Any comparison between Gilles' race and mine is consequently useless. But there is one factor that makes me an optimist: our car is new, and we know how we have to develop it. I see the future as being rosy.

I congratulate Ferrari on their victory with the 126C, but also see that it's of considerable benefit to our team. Up until now, Renault has been the only team on Grand

turbo engine can be at low revs, and just how good the torque can be, and how reliable it can be, there's no knowing just what we can with our own turbo.

So now we're going to do the same things as Ferrari has done. That's because we like to be competitive, but most of all, we know that we can do it. I repeat that Ferrari's advertisement at Monaco for a turbo engine has not been in the slightest bit detrimental to Renault. If anything, it's



Basically, since Gilles' win at Monaco, my team is regarded as having failed. But as I know the details, allow me to step in as the defence lawyer, or at least to air my own personal views. It's easy to jump to conclusions. Instant reaction goes hand in glove with immediate news. But I think everyone should take a wider view, taking into account the past, and the potential of the future.

Don't jump to conclusions. But going back to this year's Monaco Grand Prix, I'd like to tell you that there is no gnashing of teeth back at the Renault works. I spoke to Michel Tatu at the factory, both the day after the race, and the day after that, and he tells me that my monocoque was badly bent in the accident just after Ste Devote on the first lap. Let's face it, that's not surprising. The car jumped six feet in the air. So it's no

Prix circuits running turbo engines. There have been turbo engines running on brakes in factories; that explains why Ferrari has been so quick to succeed. But Renault has never had anyone with whom to compare the V6 engine. The team has never known just how far it can go in engine development. That's why our engine may seem to be a little way behind the rest. But now that we know just how good a V6

motivated the team. Our engine men are keener than ever to prove that they're just as good as their counterparts at Ferrari. You wait and see. We're going to win races.

Al Prost



OK ALAN?

by Alan Jones

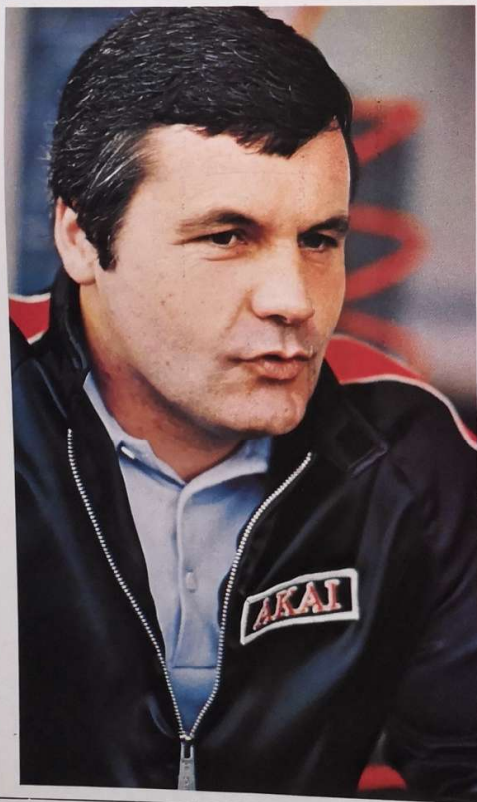
Monaco was never a circuit with any particular appeal for me. Back home in Australia when I was a kid, I learned all about the great races that had been held there, but none of the so-called "magic" ever permeated down-under. It was just another name to us, one which we probably mish pronounced more than most.

I raced Formula 3 cars twice in Monaco, and even then I couldn't raise any enthusiasm for it. The place was overcrowded, our paddock was miles away from the pits, and there was so little time for practice that you stood a good chance of wrecking your racing car against one of those allegedly romantic buildings. They even made you get up at the crack of dawn one day in order to do it!

Grand Prix drivers have no right to be treated better than the other people who have work to do at a race meeting, but at Monaco it's physically difficult even to move around. Getting to the pits is a hassle and the paddock is a joke. Monaco is now the only circuit in the world where no attempt at all is made to provide covered garage space for the cars. The mechanics have to haul all their tools and materials to the "pits" for practice. And every time they put something down, there's a good chance that someone will have pinched it.

In my opinion, the cars outgrew the circuit long ago. As Elio de Angelis suggested, the safest way to hold the GP would be to put us all in F3 cars, but on second thoughts they're pretty quick these days. Even the Renault R5 turbos looked dangerous in their supporting race!

The reason why Monaco stays on the calendar is purely a matter of status. It's a great place to entertain important people, a super atmosphere in which to introduce a sponsor. There's no other circuit in the world, not



even Long Beach, where you can step on to the balcony of your hotel room and watch supposedly sane men trying to tame 500 horsepower on the hairpin bend below.

Safety is a word that the militant drivers conveniently forget at Monaco. Yet I cannot understand why they create a huge fuss about hazards on other circuits without ever mentioning Monte Carlo. Every year the odds get higher that there will be a truly horrific accident in the streets. I'm sure it's purely coincidence that the drivers who are first to condemn other circuits are the ones to happen to live in Monaco. Tax haven or not, I feel sorry for them tucked away in their high-rise apartments. I reckon it's a tax in itself to have to live there...

I had a feeling that I would have a good chance of victory in this year's race as soon as I was told that Princess Grace wouldn't be there to present the prizes: it would be my luck to have won the one time she wasn't there! Nosooner had I started to think about the walk up the steps to the Royal Box than my engine began to misfire. Gilles Villeneuve's Ferrari was far enough behind for me to gamble on a pit stop for fuel, but if anything the problem was worse when I got back on the track, and Gilles hustled by while my engine spluttered and coughed.

So I'll have to defer my meeting with the Royal Family until another year, assuming of course that they decide to attend their own race ever again. Personally, I'm not sure that I would want to leave my castle, any more than the thousands of race spectators who stayed at home this year. Is it possible that the magic of Monaco is beginning to wear off for the public too? □

Cockpits

SAUDIA LEYLAND WILLIAMS

Williams-Ford FW 07/15:
Alan Jones (AUS)
Williams-Ford FW 07/12:
Carlos Reutemann (RA)
Williams-Ford FW 07/14:
spare
Williams-Ford FW 07/16:
spare chassis

Jones was using a new chassis in Monaco to replace number 11 which he crashed at Zolder. In case it should be needed, the Williams team had brought a spare chassis as well as the normal three cars. There were no great modifications to the Williams, apart from a small development in the hydro-pneumatic suspension system: the springs were enclosed in a tubular casing to prevent any lateral movement. On Thursday, Reutemann had a side pod skirt mounting break which dropped the car below the crucial six centimeter limit. As he'd just set his fastest time, this was disallowed which him from fourth to ninth quickest. Consequently the Williams mechanics reinforced all skirt mountings and also modified the hydro-pneumatic system. The Williams drivers were



able to raise or lower their cars, even in the pits, without having to rely on the aerodynamics to activate the system. This should not have pleased the scrutineers... The spare car had new front brakes made in Leamington Spa by AP, similar to those on the Renault. On Saturday, it was Jones's turn to have problems. His car's engine was down-on-power so he used the

spare car. In the race, Reutemann hit the rear end of Mansell's Lotus and had to come into the pits to have the nose cone and wing changed. In the end the gearbox broke shortly before half distance. Jones overtook Villeneuve and found himself in the lead when Piquet crashed. But then the Williams engine began to misfire, and a rapid fuel stop failed to cure it.

He had to give best to Villeneuve, but even so, his second place puts him second in the championship, and in the best position to challenge Reutemann for the lead of the world championship.

FERRARI SEFAC

Ferrari 126 C/052:
Gilles Villeneuve (CDN)
Ferrari 126 C/051:
Didier Pironi (F)

The Scuderia originally took three cars to Monaco, but after Didier Pironi had hit the barrier in two different cars, they ordered 049 to be brought from Italy. This car was fitted with a conventional hydro-pneumatic suspension system. But the other three chassis, all in short-wheelbase form incidentally, without spacer between engine and gearbox, had a newer hydro-pneumatic suspension system. Instead of an air bottle which operated all four spring/shock absorbers, the front and rear systems were operated independently. A bottle was mounted either side of the cockpit and there were two levers to operate the system mounted in the cockpit which meant that the car could be raised twice as fast as before. This system is heavier than Bramham's, but it has a further advantage: it's easier to adjust because all the hydraulic cylinders on the spring/shock absorbers are of the same capacity. Front and rear suspensions are operated from their own air bottles mounted on either side of the cockpit. Work had also been carried out to improve the turbo engine's throttle response at low revs. The Italian engine men had

improved the electronic device controlling fuel feed, fitted revised valve springs and also a wastegate valve more sensitive to the variations of exhaust pressure. All these measures reduced turbo lag and any handicap that the red cars may have had on the starting grid. During Thursday's practice, Pironi hit the barrier twice, first of all in his race car and then his spare. Didier failed to improve his time on the Saturday when more problems intervened. He also used chassis 049, making a total of three chassis during practice. Villeneuve did well to get within

a couple of hundredths of a second of Piquet's very quick time, despite a broken engine during Saturday's practice. During the race, the skirts on Villeneuve's Ferrari broke up very soon on full tanks which upset the car's handling. Even though he was soon left behind by Jones, Villeneuve's chance came in the end. Pironi started from the ninth row, waited until people in front of him made mistakes, and finished fourth, confirming Ferrari's turbo potential.



TALBOT GITANES

Ligier-Matra JS 17/02:
Jacques Laffite (F)
Ligier-Matra JS 17/03:
Jean-Pierre Jabouille (F)
Ligier-Matra JS 17/01:
spare

The only modification to the Ligier chassis was the skirt mounting. However, work had been done on the engine, principally to the injection pump which has been the cause of the V12 engine's problems in the past. Jean-Pierre Jabouille did few laps during both official sessions, and didn't qualify. Laffite was allowed an extra 400 revs at Monaco, which meant that the rev limiter was set at 12800 rpm. The gear ratios were also set closer together than normal to use the power of the high revving engine to greater advantage. Laffite was careful at the start but himself in fourth place at half distance, and finished in a good third place.



Cockpits

ESSEX LOTUS

Lotus-Ford 87/2:
Elio de Angelis (I)
Lotus-Ford 87/1:
Nigel Mansell (GB)
Lotus-Ford 81/2:
De Angelis's spare
Lotus-Ford 81/1:
Mansell's spare

The 87 made its official race debut at Monaco. It is described in detail in our technical article. It seems a smaller car than most other Formula 1 cars, almost the same size as a Formula 2 car. The twists and turns of Monaco seemed to suit it, for both Mansell and de Angelis made good use of its agility and handling on the tight circuit. However, the little Lotus may not be quite so at home on faster circuits. During testing at Circuit Paul Ricard, the team tried a wider rear track, but this caused understeer because the front track lost grip. During practice at Monaco, this wider rear track was quickly discarded in preference to the narrower version.



Mansell spent all his time driving his new 87, but de Angelis had to use his 81 on Thursday, and again on Saturday when the hydro-pneumatic suspension caused problems. After five laps in his 87, he took over the 81

which ended up with a blown engine. A new exhaust system gives an extra five horsepower from the Cosworth engine. In the race, Mansell maintained practice form by holding an excellent third place until his rear suspension broke. He had a

slight nudge from Reutemann, but it's possible that the suspension was cracked during the warm-up. De Angelis lost his top six position shortly before half distance when his engine blew.

MARLBORO MCLAREN

Marlboro-Ford MP 4/2:
John Watson (GB)
Marlboro-Ford MP 4/1:
Andrea de Cesaris (I)
McLaren-Ford M 29 C/4:
spare

The third MP4 should be ready for Spain, but even so, Andrea de Cesaris was finally allowed to drive the team's latest MP4, so his M29 became the spare car. He took over the first chassis, while Watson used the second chassis which is 15 kilos lighter. The MP4s were unchanged since Zolder, apart from a driver-operated

hydro-pneumatic suspension system. It was this system that caused the drivers most of their problems, and Watson never really got used to it and decided to start the race with a conventional suspension. He also tried a new style nose/front wing assembly. Watson's main problem was with the gearbox which pre-

vented him from starting any higher than tenth on the grid. He managed to get up to fifth during the race before retiring with a broken engine in the final quarter of the race. De Cesaris crashed on the Saturday, and celebrated his 22nd birthday when he tangled with Prost and then Andreotti on the first lap of the race.



AUTODELTA ALFA ROMEO

Alfa Romeo 179 C/04:
Mario Andretti (USA)
Alfa Romeo 179 C/02:
Bruno Giacomelli (I)
Alfa Romeo 179 C/01:
spare

The Alfa Romeo team isn't as helpful in giving out chassis numbers as some other teams, but as Giacomelli had damaged chassis 03 in Italy, it must be assumed that Andretti had a new car: 04. The team is still trying various different side pods, front and rear wings, and different suspension set-ups. There were new rear wings and front wings

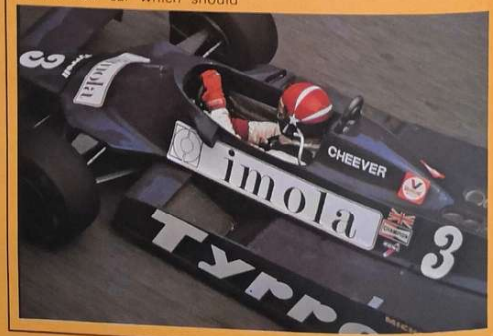
at Monaco. Giacomelli used both his race car and spare during practice, while Andretti complained of sloppy turn-in on the Saturday. The car was improved later in the day, but Mario was still unhappy about the car's reactions. Alfa's hydro-pneumatic suspension system was manually operated by a lever to the right of the steering wheel. Andretti got no further than the first lap after tangling with de Cesaris, while Giacomelli started from the back of the grid and retired when he made contact with Alboreto.

TYRRELL

Tyrrell-Ford 010/3-6:
Eddie Cheever (USA)
Tyrrell-Ford 010/2:
Michele Alboreto (I)
Tyrrell-Ford 010/1:
spare

The Tyrrells were unchanged at Monaco, and in similar suspension trim as they had been at Zolder. However, they didn't seem to be quite as competitive as they had been during previous races. Maurice Philippe stayed in England to work on the team's new car which should

test for the first time the week after the Spanish Grand Prix. The new car is intended to be a compromise between the current Williams and Brabham but with wider side pods. The drivers complained that their cars handled badly during practice for Monaco, suffering understeer on turn-in. Cheever had a spin when he tangled with Pironi, but he continued to take fifth place, two laps behind Villeneuve. Giacomelli crashed with Alboreto, but this time neither driver continued.



FITIPALDI
Fittipaldi-Ford F8C/3:
Keke Rosberg (SF)
Fittipaldi-Ford F8C/4:
Chico Serra (BR)
Fittipaldi-Ford F8C/2:
spare

Like Ensign, the Fittipaldi team is currently in financial trouble, and furthermore, their designer, Harvey Postlethwaite has now left the team because there is no money for him to work with in

developing the car. However, sponsorship is confidently expected by the Spanish Grand Prix. While the two race cars were fitted with hydro-pneumatic suspension systems worked either by the engine or gearbox, the spare car was fitted with conventional suspension. But the cars were in lots of trouble, and Rosberg spent a long time in the spare. Furthermore, the team reverted to Michelins from Avon on Saturday, but neither driver qualified.



DENIM OSELLA

Osella-Ford A1/03:
Beppe Gabbiani (I)
Osella-Ford A1/04:
Piercarlo Ghinzani (I)
Osella-Ford A1/01:
spare

Osella brought along their short-stroke Cosworth (98 mm x 60.2 mm) to Monaco. This engine, fitted to Gabbiani's car, is the one that they hope will reverse their fortunes. It is principally power at low revs that they hope to improve. The team didn't use a hydro-pneumatic suspension system at Monaco, for even though it works with the normal suspension, it is still too complicated to adjust. Osella has de-

veloped the new car, preferring to develop the current cars, although they're obviously not competitive for neither driver qualified.



ENSIGN
Ensign-Ford
MN 180 B/14:
Marc Surer (CH)

Ensign may not have any money, or any trick suspension, but Marc Surer not only pre-qualified for the race,

but finished in the points as well. The development programme is non-existent, but Nigel Bennett had built up a new front wing. After a puncture on the first lap, Marc Surer toiled round and picked up a point when he overtook Tambay's ailing Theodore.



PARMALAT BRABHAM

Brabham-Ford BT 49/11:
Nelson Piquet (BR)
Brabham-Ford BT 49/12:
Hector Rebaque (MEX)
Brabham-Ford BT 49/9:
Piquet's spare
Brabham-Ford BT 49/10:
Rebaque's spare

Last year, when Piquet damaged two monocoques at Monaco, another chassis had to be rushed out from England. So this time the Brabham came well prepared with four cars: you can never be too careful. Gordon Murray, the man who originally adapted hydro-pneumatic suspension to racing, thinks that the current systems used by most F1 teams are not only illegal but much less interesting, technically speaking, because they are so easily adjusted. Before, it was harder to

adjust as they relied more on the car's downforce. So Murray joined the rest with a hydro-pneumatic system operated by the driver and not by downforce. On Thursday, Piquet used both his cars, breaking one engine and overheating another while waiting for the scrutineers to check his car at the entrance to the pits. Rebaque had a lot of problems, with a broken engine on Saturday and then he crashed on Saturday morning and never managed to qualify. Piquet tested carbon fibre brakes on his spare car, but never managed to establish sufficient reliability. During the race, Piquet took the lead and soon pulled away from Villeneuve. But the Brazilian wasn't so happy when Jones began to catch him, and he suffered brake trouble. When trying to lap Tambay, whom he'd already overtaken twice, the Brazilian locked his brakes and slid into the barrier, and there he ended his race.



THEODORE RACING

Theodore-Ford TY/02:
Patrick Tambay (F)
Theodore-Ford TY/01:
spare

Tambay, like Surer, got through pre-qualifying and managed to qualify well for the race. He was running until he lost second and fourth gears, which cost him a point in the world championship.

Cockpits

RENAULT ELF

Renault RE 31:
René Arnoux (F)
Renault RE 32:
Alain Prost (F)
Renault RE 26 B:
spare

After their problems at Zolder, both drivers race debuted their new RE 30s at Monaco. Between the two races, the team had been testing at Circuit Paul Ricard where a number of aerodynamic tweaks had been tested. At Monaco, the side pods appeared with revised radiator vents and large fins in front of the rear wheels. Renault also brought seven engines with higher revving engines: an 11500 rev limit. All three cars were fitted with servo-assisted brakes. Prost's car was fitted with a hydro-pneumatic system built by Renault but similar to

those systems used by the opposition. The system proved to be good and was fitted to Arnoux's car. On Thursday, Arnoux and especially Prost had persistent gearbox trouble. Prost's wasn't cured on Saturday and was soon without fourth gear. So the Renault team took off the servo brake system which is linked to the gearbox. Arnoux had worse problems: he crashed and bent the RE 30's monocoque, so had to use the spare car for the race.

Both drivers were involved in the accident after Ste Devote on the first lap but they continued even though their cars' suspension had been damaged. Arnoux went off at the Station hairpin on oil left there by de Angelis, while Prost had more gearbox trouble and finally his engine broke.

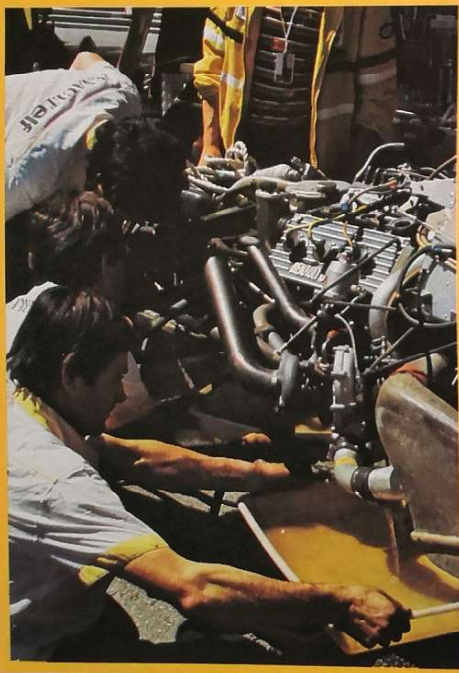


RAGNO BETA ARROWS

Arrows-Ford A3/5:
Riccardo Patrese (I)
Arrows-Ford A3/6:
Siegfried Stohr (I)
Arrows-Ford A3/2:
spare

Stohr was driving A3/6 as his car had been too badly damaged in the startline accident at Zolder. He was one of the few drivers using a car without hydro-pneumatic suspension. The team was working hard to perfect the hydro-pneumatic suspension on Patrese's Arrows. It is linked to a mechanical fuel pump (no longer used on

more modern Cosworths) and the electronic black box. When the engine is revved to over 3000 rpm, the car sinks to the ground; under 3000 rpm, it rises above the six centimeter limit. On Thursday, Patrese nearly hit the barrier when his steering broke, but he repaired the car with a piece of wire and drove back to the pits! New rear suspension should be fitted to the car in Spain, and a totally new car will run in July. Patrese was running in the top six when his engine broke, while Stohr stopped six times in the pits with a fuel feed problem before retiring.



MARCH GRAND PRIX

March-Ford 811/05:
Derek Daly (IRL)
March-Ford 811/04:
Eliseo Salazar (RCH)
March-Ford 811/02:
spare

The March team had hydro-pneumatic suspension, but neither driver had much of an opportunity to use it. Daly broke a driveshaft at the most important juncture of pre-qualifying, and Salazar spun, so neither car got any further than pre-qualifying.



CANDY TOLEMAN

Toleman-Hart TG 181/2:
Brian Henton (GB)
Toleman-Hart TG 181/1:
Derek Warwick (GB)
The Tolemans weren't expected to qualify in Monaco, and that's just what happened. However,

much work is being done on the rear end of the car in order to make space for extra intercooling and a new single turbo engine which, it is hoped, will cut down turbo lag. A revised car with a new rear end should appear in Spain, where the team will also have a new Italian sponsor.

ATS WHEELS

ATS-Ford HJS/1:
Slim Borgudd (S)
ATS-Ford D4/05:
spare

Hervé Guilpin's new car had already been modified in terms of stiffening the chassis (now to

1982 spec) and a new bulge over the shock absorbers where the bodywork was breaking up before. But Borgudd was one of the unlucky ones who failed to do more than pre-qualify.



UNIPART

Marlboro

British Grand Prix

World Championship for Drivers



Silverstone

Grand Prix Circuit

SATURDAY JULY 18th.

Qualifying July 16th and 17th.

Britain's round in the Formula One World Championship.
Supporting races for Marlboro British Formula Three,
Tricentrol British Saloons and Lloyds and Scottish Historics.

ADMISSION PRICES:

Raceday trackside enclosures: Adult £9.00, Child £2.00. Stands, Paddock transfer and qualifying days extra.
All parking free.

Raceday tickets available, bookable in advance at reduced prices.

Enquiries to: Booking Office, Silverstone Circuit,
Nr Towcester, Northants. NN12 8TN. Tel: (0327) 857273.

Win with Canon - The Official Grand Prix Camera. Take the best photograph and win superb prizes.

The Organisers/Promoters reserve the right to alter or cancel the programme without notice.



FORMULA ONE WORLD CHAMPION GETS INTO A LEADING POSITION.



Alan Jones, a man accustomed to being out front, has recently joined the board of Richard Knight Cars Ltd.

We are the leading Mazda dealer in London, England's largest RX7 specialist and sole distributor of the 'RX7 Elford Turbo'.

And everyone at Richard Knight Cars would like to wish Alan as much success on our board as he is having on the racetrack.

Richard Knight Cars Ltd

35a-37 Fairfax Road, Swiss Cottage, London NW6
Telephone: 01-328 7714/7727/7738

FOR \$44.25 YOU CAN SEE ALL THIS YEAR'S GRAND PRIX.



FOR \$2.95 YOU CAN SEE ANY OF LAST YEAR'S GRAND PRIX.

Just 10 days after the winner crosses the line, all the facts, figures, personalities, whys, wherefores and hows could be on their way to you.

Grand Prix International is the only magazine devoted exclusively to Grand Prix racing.

Grand Prix by Grand Prix, it builds up into a unique and complete record of the sport.

As a special introductory deal, through the Long Beach Grand Prix Association, a year's subscription will cost you only \$44.25 (including postage and packing). This way you can be sure of your copy after every race in 1981.

Back issues are also available in

limited numbers and these can be obtained on request.

If you're a Grand Prix enthusiast it's an offer you can't afford to miss.

To: Long Beach Grand Prix Association
100 E. Ocean, Suite No. 908, Long Beach, California 90802

Full Name _____

Address in U.S. _____

I wish to take out a subscription for the 1981 season and enclose a cheque/money order for \$44.25 made payable to The Long Beach Grand Prix Association.

Credit cards accepted Type _____

No _____

I wish to order the following back numbers (\$2.95 each) from 1980 and enclose a cheque/money order for \$_____ (including postage and packing).

<input type="checkbox"/> Long Beach	<input type="checkbox"/> France	<input type="checkbox"/> Holland
<input type="checkbox"/> Brazil	<input type="checkbox"/> Belgium	<input type="checkbox"/> England
<input type="checkbox"/> Africa	<input type="checkbox"/> Monaco	<input type="checkbox"/> Germany Austria
<input type="checkbox"/> Spain	<input type="checkbox"/> Canada USA East	<input type="checkbox"/> F181

GRAND-PRIX N°34

SPAIN



WILL BE ON SALE ON JULY 1





WORLD LEADER

Wherever excellence is a way of life, the swing is to Rothmans King Size. Rothmans extra length, finer filter and the best tobaccos money can buy give you true King Size flavour. Rothmans King Size really satisfies.

THE GREATEST NAME IN CIGARETTES