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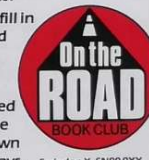
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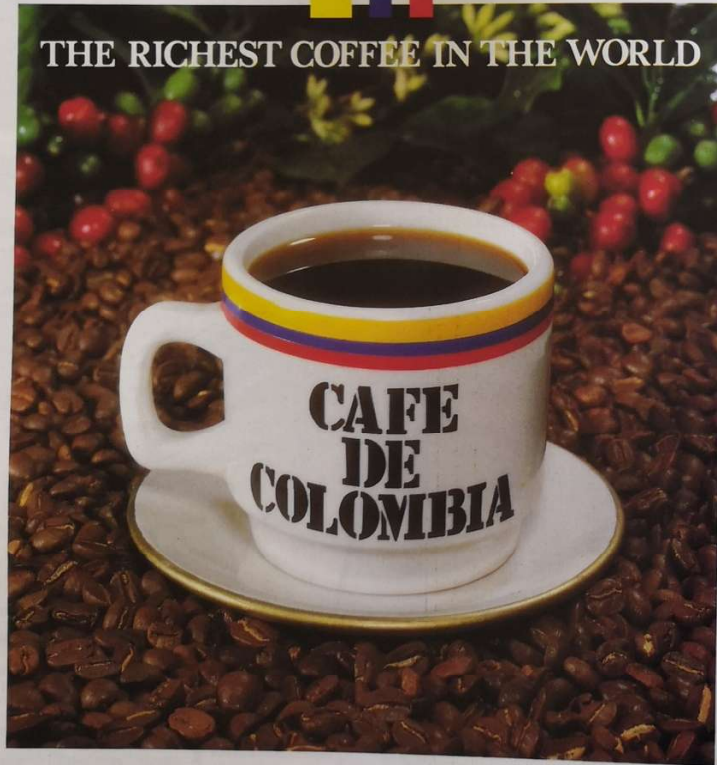
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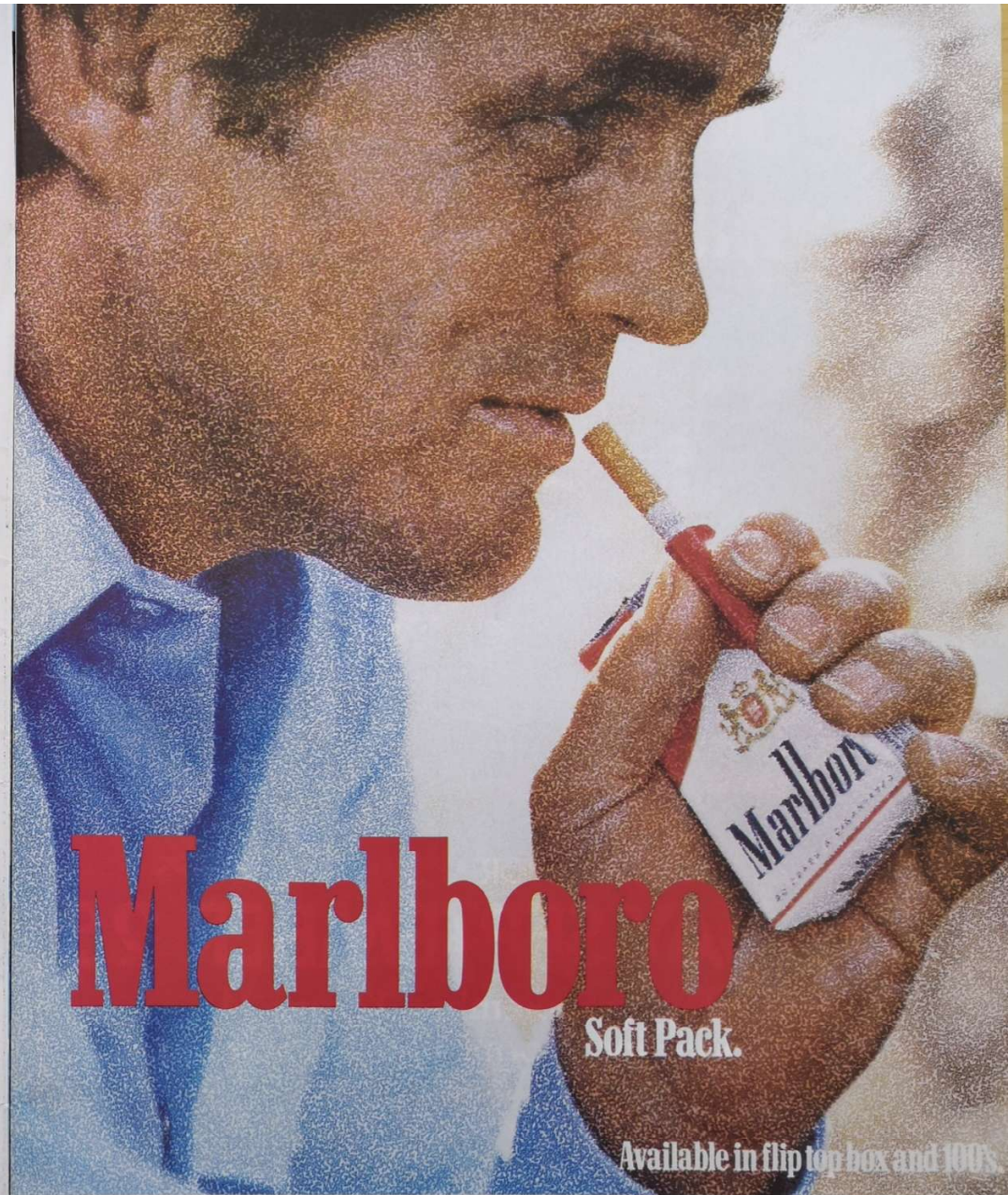
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(Cover photo: DPPi)

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A HARVEST OF CHANCE



René Arnoux was badly placed but started well; Patrick Tambay was well placed but started badly. The Ferraris were not out of the running, but it took a collision on lap 43 between Alain Prost and Nelson Piquet to enable them to come into their own and for the little man from Grenoble to pluck the fruits of his passion. In counterpoint, Patrese's miseries and, as usual, Keke's Column.

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PRACTICE

Elio de Angelis and Lotus-Renault on Friday, Nelson Piquet and Brabham-BMW on Saturday. Practice was intense and fiercely fought with oddly average performances from René Arnoux and Eddie Cheever.

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THE RACE

Nelson Piquet and Alain Prost took off and then collided. René Arnoux won and Patrick Tambay made it a Ferrari one-two. Behind, John Watson's McLaren-Cosworth put in an astonishing performance to finish ahead of Derek Warwick's Toleman-Hart, which notched up its first points.

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WITH THE GREATEST OF EASE



The 'Indian' Nelson Piquet was world champion in 1981 and has not given up hope for 1983. Racing, he puts in superb performances with apparent ease; away from the track, at ease, he likes to work with his hands and bask in the sun.

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PHOTO ALBUM



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TAG TURBO + LAUDA = BRAINPOWER



The path that brought a McLaren powered by a TAG engine built by Porsche to Zandvoort was fraught with difficulties; Niki Lauda, whose computer brain never fails to surprise, made the most of the first tests.

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MANSOUR'S BABY

In counterpoint to the preceding, GPI talked with Mansour Ojeh, a man determined that his TAG engine should have a brilliant career in F1. Logic and passion are the two poles of his activity.

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EXTRA, EXTRA



Riccardo Patrese was assaulted by Andrea de Cesaris during practice and Elio de Angelis only just managed to control his temper. Their problems were forgotten on the morrow as John Watson and Derek Warwick roused the fans with two splendid performances. As a contrast, the budding hopes of Frank Williams, whose Cosworth-powered cars are destined for the junk-heap.

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COCKPITS



The powers-that-be, the evolution of the cars and a novelty: the McLaren MP4-1E with a TAG engine.

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The paddock in Zandvoort



BLACK DAY FOR ATS

The 1983 Dutch Grand Prix will be long remembered by the British-based but German-financed ATS team. Despite some problems during qualifying, Manfred Winkelhock was able to start his BMW-engined ATS from the fifth row of the grid. Some last-minute problems prevented him from doing the usual warm-up lap after the grid had formed, however, and it may have been the several seconds delay caused by confusion over his car that contributed to the startline snarl-up in which Tambay's Ferrari almost stalled. In fact it was while Winkelhock was fending off Tambay from 10th place in the first half of the race that FISA officials were conferring to decide what action to take. The race was already well into its second half before the German was black-flagged and informed that he should have started the race from the back of the grid, and that his punishment was exclusion from the results. Not surprisingly, this raised his ire, but he could do nothing except protest in robust language. His race number was even officially deleted from the official Longines-Olivetti electronically-produced lap chart. The incident wasn't the only excitement at ATS on Sunday, though, for the team's Austrian designer Gustav Brunner had the misfortune to step into the path of Eddie Cheever's Renault as it left the pit lane after its refuelling stop. Brunner is reported "comfortable" from a Zandvoort hospital where his twice-broken leg is being treated.

SLEEPWALKERS

If Stefan Johansson rolled his Honda over the foot of a bystander in the pits during practice, and another spectator had to be hauled away before being run over by an oncoming Ferrari, that was because the Zandvoort pit-lane was plagued by an excess of traffic. In Johansson's case, the sleepwalker simply headed straight at the Swede's car and there was nothing that could be done about it. So bad did the situation become that Saturday practice was held up 13 minutes while the security men hauled out a gaggle of purple-FOCA-badge holders, the ones who are allowed behind the garages but not in the pit-lane. We understand the struggle was fierce. Among those asked to move on were Peter W. Schütz of Porsche, one of a group of ten Porsche engineers who came to see the TAG engine make its debut.



NEW FACES FOR BRANDS

It is with great pleasure that we congratulate Surrey driver Jonathan Palmer, GPI's sponsored choice of F3 "coming man" in 1981, on following up his British Marlboro title that year with the European Formula 2 championship for 1983. "Dr Jon" — aged 27 — has driven his works Ralt-Honda to five victories this year, the last four of them in consecutive races. He has also raced the Canon Porsche 956 with distinction, quite a contrast with the Austin Healey Sprite with which he made his racing debut eight years ago. Having been associated with the Williams team for two years, Jonathan will be getting his F1 chance at last next month, when he will race a third works Williams-

Ford in the European GP at Brands Hatch. Another F2 driver tipped for F1 is Maurer man Stefan Bellof, the 26 year old German who has also driven some sensational races with a Porsche 956 this year. Although he says that his Rothmans-Porsche contract makes a widely-reported association with the Marlboro-McLaren team unlikely, Bellof has been seen in animated conversation with McLaren MD Ron Dennis at several recent GPs. Bellof's Porsche connections could help smooth his way to a test drive with McLaren, and the rumour mill has already suggested a third (Cosworth-engined) McLaren for him at Brands Hatch — repainted in the pinstripe colours of the Stuttgart-based Boss tailoring concern.

KEKE STAYS

All the reports of Keke Rosberg moving to Brabham or Lotus for 1984 took a beating last week when the world champion signed for a third season with Williams. Keke was clearly tempted by the Honda turbo as much as he was by Frank's money, but it wasn't until the two got their heads together in



Keke's turbo-prop plane on the way home from Österreich to the vital piece of paper was signed. Progress on the all-new Williams-Honda FW09 is already sufficiently advanced for Frank Williams to announce a first test for "some time early in September," while its race debut could be at Brands Hatch for the European GP. Ironically, as we recorded in the previous GPI, the future plans of the Spirit-Honda team and driver Stefan Johansson (who shares Keke's personal manager) have become murkier, not clearer, since the Honda-Williams deal was announced. American sources say that the US Tobacco Co, which makes the "smokeless tobacco" known as Skoal, will definitely be sponsoring Spirit in 1984, although the company's chairman admits that he "doesn't yet know" which engine the car will have. Skoal has made an effective racing debut this year as sponsor of Teo Fabi's March-Cosworth Indy-car and the Preston Henn Porsche 956.



GP MEETS JR

When Burdette H. Martin Jr., the new president of ACCUS, which organizes its own share of motor sport in the United States, made a coy reference to three grands prix to take place in 1984 in that nation, he said we could all look forward to another race in Detroit. New York (see further Paddock), he thought, was a likely second venue. As to the third, he would only say that it would take place in "a pleasant climate." Since the likely venue for this third US Grand Prix is Dallas — in a fair-ground overlooked by the towering buildings whence JR rules his empire of oil — that reference to climate caused a number of us to raise our eyebrows. The average early-afternoon temperature in Dallas towards the end of June (the proposed date) is 95 degrees plus, and the humidity such that neither man nor beast is ever seen in the downtown

streets at that hour, when the denizens of Dallas move from one air-conditioned tower block to another in air-conditioned cars. The indefatigable FOCA boss, Mr. Bernard Ecclestone, was off to Dallas right after the Dutch GP. Though an announcement of the race was made the Tuesday before the Dutch GP, we understand that a number of details remain to be worked out. These include: an application to ACCUS for a date and, more importantly, how much FOCA will be levying for the race, to which Chris Pook, of Long Beach fame, is a consultant. According to one American with whom we spoke, "the trouble with race organizers in the United States is that they like to make money. It's all very well to see the money coming in the gates, what they don't like is to see it going back into Bernie's pocket by the back gate. They like some of the stuff to stick to their hands."



TIMES, GENTLEMEN

Brian Wray of Imperial Tobacco took the occasion during a dinner celebrating the 15th anniversary of the international journalists' organization, IRPA, to make some strong statements about the organization and professionalism of our sport.

It is not the first time that sponsors have addressed us with their misgivings: Aleardo Buzzi of Philip Morris had his say on a similar occasion during the FISA-FOCA war and Francois Guiter of Elf, another of the sport's elder statesmen, has also spoken out in defence of peace and the sport. But Wray's remarks deserve special attention, directed as they were to an obvious evil: the constant chopping and changing of the F1 schedule.

And it does seem strange that if football, athletics, tennis and countless other sports can organize their events sometimes as much as four to six years ahead, that this sport of ours, supposedly so super-modern and hyper-organized, should still be operating in so makeshift and gimcrack a manner. Mr. Wray's points are only given further importance by the fact that no other sport is so totally dependent for its very existence on the good-will (and self-interest) of its sponsors. While any man may buy a racquet and take up tennis, or run, or kick a ball around, the same is emphatically not true of Formula One.

Mr. Wray urged "Grand Prix racing to get its house in order, and quickly." As he quite rightly added: "There isn't another professional sport where the calendar is chopped and changed in such a hap-hazard way. Nothing upsets a sponsor more than to make long term plans for expensive advertising and poster campaigns, and then find that these campaigns are invalidated by the cancellation of a date or a change of venue." Mr. Wray is, of course, not the only sponsor put out by the lack of consistency in F1 planning: other sponsors are equally affected, so are the media, the organizers, and most important of all, the public at large.

The sad truth is that as of this moment, we in the sport have no firm idea of where or when our races are to be held next year. We know neither dates nor venues. Must we live forever in the impromptu, with our schedules decided by availability, whim, profit or simply by necessity?

So, who is responsible for this state of affairs? First and foremost, it is the responsibility of FISA, a body which M. Balestre controls with a strong hand and a strong arm, to determine the F1 calendar. But while M. Balestre may control the sporting authority, he does not control the finances of the sport, nor its television, nor its circuits. There, Balestre merely sanctions, and Mr. Ecclestone rules.

Since their gradual rapprochement over the last year, these two men detain the power and the glory of the sport, with which goes the responsibility. Certainly the problems of circuits, financial, political and organizational, are great, but uncertainty compounds them. Neither man is responsible for acts of God or for *force majeure*, but the record for 1983 is clear: South Africa twice bumped, New York falling through, Dijon and Las Vegas going by the board, a hastily-organized race added at Brands Hatch. We share Mr. Wray's view that this cannot go on much longer without bringing the sport into discredit. As the sport needs stability in rules, peace on the political front and consistent support from sponsors and public, so it also needs a schedule that stands.

GPI

The paddock in Zandvoort



Carbon fibre disc brakes heated to incandescence produced this truly extraordinary picture from First Line. It immortalises Nelson Piquet's Brabham-BMW as it captures pole position during Saturday practice. As they brake into Tarzan, cars have to slow down, in a few score yards, from 280kph to less than 100kph!

WATER, AGAIN

In response to, among others, our paddock (see Germany/Austria and previous issues), Renault has issued a formal denial that their water-injection system had been challenged in the courts at Detroit. They also argued against the Williams/Tyrrell protest to be heard in Paris on September 19.

The relevant passages of Renault's defence are the following: "When one elevates the threshold of pinking of an engine, one lowers the requirements in octane rating of the fuel... Adding water to the air aims at the same result but does not have the power to change the fuel's octane rating... Everything being equal, water injection reduces the power of the engine into which it is injected by reducing the engine's volumetric efficiency, the reason being that water replaces an equal part of the air... A fuel is a body capable of burning, whilst water is a neutral body whose potential of oxidation or reduction is nil."

Renault further argues that "FISA has already officially allowed water injection systems in other formulae... According to a decision of FISA's technical commission (June 16th, 1983) concerning groups N, A and B: 'It is admitted that injected water must not be considered as a fuel.'" Our comment is that as none of those groups contains any limitation on fuel, the argument is invalid as to Formula One. Teams have got around it this year with pit-stops, but next year?

PEKING... THEN THE WORLD

Jean-Marie Balestre, the FISA president, was in a sombre mood as he addressed the press at Zandvoort. That is, he looked sombre. And

business-like. He came, however, with news which he thought would gladden the hearts of all.

The first was that after all the problems with F1 in the United States, which led FISA to the United States, which led FISA at one point to suggest that perhaps ACCUS (the association of American race-organising clubs) might like to withdraw from the sport's governing body. ACCUS had studied the problem and decided it would back and promote "all FIA championships in the United States."

The second Balestre announcement, which momentarily made our little world shrink quickly, was that the FISA president had just received an application from China to join the the FIA. The implications caused many of those present to blink not only would the Chinese federation sponsor "at least two major rallies," but it was also proposing to stage, two years hence, an F2 race at the Peking circuit. Since China has fewer than a million cars (we think) as against a million cars on any one street in Hong-Kong, the enterprise of the whole plan boggled our collective minds. A Peking circuit? A Far Eastern loop in F1's already complex international calendar (Peking, Fuji, Melbourne)? Then a greybeard among us recalled seeing, in the sepia pages of a prewar *Illustrated London News*, a picture of a two-seater racing car crashing in Peking. A long time, then, between races.



AN INDY McLAREN?

Not content with unveiling the immaculately-prepared Marlboro-TAG (McLaren-Porsche) turbocar at Zandvoort, McLaren International's Ron Dennis also revealed his team's intention to be represented at the Indy '500' next year.

"We want to be there in '84," said Dennis, "and Niki Lauda will drive for us. The project will not be at the expense of our F1 effort, although we intend to build a car that is better than anything else over there..."

During the course of a "feasibility survey" into the project, Dennis admits, he discovered several of the thorns which have pricked Europeans who want to race at the 'Brickyard.' Casualties include his F1 partners at Porsche, who were forced to abandon a long-term Indy car racing project in 1981 because of a last-minute rules change which made their flat-six engine obsolete overnight.

Dennis's co-director, McLaren designer John Barnard, was responsible for the Chaparral Indy-car which won admiring glances (and several design awards) in 1979 and 1980.

CLUBS GALORE

While the Régie Renault mounts a mighty poster campaign ("Allez Alain") behind one world championship hopeful, Charlie and Pete of Chessington have announced that they're inviting support for Nelson Piquet.



Actually, Charlie (Whiting) and Pete (Mc Kenzie) are two of Nelson's Brabham mechanics: they'll send details of the club if you'll supply a stamped self-addressed envelope (postal coupons from overseas fans) to: the Nelson Piquet Fan Club at PO Box 22 F, Chessington, Surrey KT9 1DJ. Meanwhile, Williams fans are being catered for by a Supporters' Club which has already organised a number of events. Write to the club for details at 27 Sprules Road, Brookley, London SE4 2NL. And for McLaren devotees, a "Support Club" has been formed in Holland by fellow enthusiasts at van Hallstraat 31, 8072 BA Nunspeet.



ENVIRONMENTAL IMPACT

When it comes to the New York Grand Prix, matters are more troubled than we imagined. At the start of the whole notion, it was decided that what the race needed, to be accepted in New York, was a frontman with real pizzazz: honey-tongued, well-connected, sociable, presentable — in short, a sort of PR paragon. And one Percy Leach was duly hired. But Mr. Leach apparently advanced the project (Canadian-financed, incidentally) very little and was duly put out to pasture.

before a car can set a wheel on the proposed parkland circuit near Shea Stadium in the Borough of Queens. As Mayor Koch (Mr. Ecclestone's chief political backer) reaches the end of his term as New York's mayor

next November, politics, as well as the environment, may be very much on his mind. Meanwhile, the men from CART (nemesis of FOCA) have organised an Indy-car race on their circuit at Meadowlands, NYC.



A HARVEST OF CHANCE

There was the "Professor" among the "Indian's" feathers. Coming into Tarzan under braking, the Renault went sideways and rammed the Brabham like a pirate ship spoiling for booty. In the Ferrari pits, engineer Mauro Forghieri proclaimed a miracle: René Arnoux would harvest the unexpected fruit of his passion.

by Didier Brailon

W have to believe in it, no matter what the evidence: even if I start on the fifth row of the grid and even if at Zandvoort there's only Tarzan under braking to pass another car. You know why I have to believe it? Because I drive a Ferrari. And a Ferrari, no matter what happens, is one hell of a car..."

Thus René Arnoux less than an hour before the start. Enough to make you smile, eh? But...

The race had barely started when René made up one place: his team-mate Patrick Tambay, on the front row, blew his start in spectacular fashion and finished lap one twentieth. The little man from Grenoble swallowed up Elio de Angelis's Lotus like a peanut and then started attacking Eddie Cheever's Renault and Riccardo Patrese's Brabham. It was hard, careful work and it took René 22 laps to get the better of them and install himself in third place. Later, he said he had decided to gobble up everything that moved in front of him:

"I honestly felt that being tenth on the grid was no real handicap, and I wanted above all to make sure I didn't lose contact with the leaders. In fact, my real race began after the 22nd lap, when I finally had a clear track ahead of me and could start attacking the way I like to. I got right down to it."

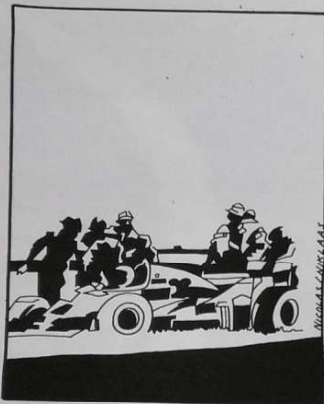
A tenth of a second and a yard at a time, the Ferrari clawed its way towards the joint leaders. Nelson Piquet was fractionally ahead of Alain Prost, but the Renault was catching up fast, with its pointed nose sniffing at the Brabham gearbox. Refuelling was coming up. Suddenly, at the start of lap 43, with his car suffering from ever increasing understeer, right up alongside the leader, Prost decided to make his decisive attack under braking at Tarzan. He was on the inside but a few yards behind. Should he really try it on just then, just before refuelling? Was it the pressure Arnoux was applying that

influenced him in his decision? There was no time even to consider the question. The wheels of the Renault flashed and the car improvised a little jag inward and struck the Brabham hard, sending it spinning into the sand. Nelson Piquet unbuckled his straps and bolted across the track with his helmet still on, refusing to reply to the journalists who were crowding towards him. One can imagine his feelings of fury! But not at all: there were to be no painful scenes between Nelson and Alain.

No Sunday night brawl, no motorway tempers... In jeans, jogging shoes and an impeccable brown leather jacket, and watched



over with tender care by Sylvia, the "Indian" had the fortitude to watch the race to the end from the wall of his garage: "I saw Alain coming. We were both coming up to our refuelling stops and driving with care. At that point in the race, I knew he was faster than I was and I stayed wide so that he could get by on the inside. Suddenly, I felt a great bump. It was all over: he'd missed his braking. It was a stupid mistake and cost him as much as it cost me. But I haven't got it in for him, even though I'm bitterly disappointed."



Alain is trying to win the championship just as hard as I am and he's not the sort of man to shove you off the track just for the hell of it, out of malice. I am sure he did not do it on purpose. Anyway, we were both driving to win and that excuses it; it's not like when Salazar shoved me off at Hockenheim last year..."

Admirable and surprising sportsmanship; we got no less from the French driver, though getting to him was no small problem. Having hit Nelson, Alain had gone on for nearly a lap before spinning violently off the circuit on the curve before the pit lane. Renault first said the front wing had buckled under his tyre, but a tele-

RICCARDO PATRESE

As you can imagine, I'm not particularly in a mood to talk about the race. I was sitting in a good position, everything was going well and then it was all over. Naturally, I feel a little peeved. But I had problems with the turbine from the very start. It was faltering on me. Worse than the turbo however was a problem I had with my left rear brake; the air duct broke off and seemed to go up perpendicular on me which caused me a lot of aerodynamic problems. It affected the whole wide pod on the left side and from that time on I suffered from severe understeering and the left rear was getting worse and worse. The result was that I had to drive with great care. Then I found myself in a battle with Tambay. I think I could have contained him. He was quicker than I was in the curves, but on the straight I had his measure. It didn't work out: my turbo blew and that was it.

PATRICK TAMBAY

I'm twentieth at the end of the first lap and I wind up as part of a Ferrari one-two on the podium: slightly unbelievable, no? Allright, I'm bragging. To tell the truth, I'm not particularly proud of my start. Perhaps I held my clutch down too long and it began to heat up; anyway, when I let it out, at the same revs as usual, the clutch plate stuck to the flywheel instead of setting the wheels spinning. The engine nearly stalled and when I got it going again, just about everybody had got by. After that, I drove a cautious race and it was only when I caught up to Patrese that I started pulling out the stops. The battle was just about equal: we were identical under braking and he was somewhat better on the straights while I had the advantage on curves. It was in the lap of the Gods. Then finally his turbo went. With Ferrari finishing one-two here, Monza is going to something else!

vision replay clearly shows some other cause, perhaps locked wheels on the right side. Still, a few hundred yards from refuelling...!

"It's not the pleasantest thing to have to say, but I made a mistake. Big mistake or little mistake, it's still a mistake. And it's a mistake fraught with consequences. I was sure I could pass Nelson at that point but my wheels locked under braking: I really don't know why. Arnoux was only five seconds behind and I made my move because the Brabham had been holding me up for a few laps. It must have had minor problems with its tyres or the engine..."

"At the time, my move seemed to me perfectly reasonable, but now, with an hour's hindsight, I realize I was taking a risk. A big risk. And I'm very angry with myself. I repeat, it was a mistake on my part." Perhaps it's reassuring that even computers make mistakes, but over at Scuderia Ferrari they were at least decent enough to admit that such an untoward result hadn't crossed their minds: "A miracle like that", exclaimed Mauro Forghieri, "is not an everyday occurrence. But we didn't just steal our victory. We were in the running: far more than we had hoped after practice."

René Arnoux, the little man with the googly eyes, had been polishing his star all week-end; now it burned brightly on the podium. Triumph had literally been plucked from the tree of fortune: "Before Piquet and Prost had their set-to, I was attacking like a maniac and I think I might have caught up to them just in the natural course of things. But when I found myself all alone in the lead, it was as though a curtain of lead had come down over my cockpit. The race was suddenly boring. I wasn't chasing a carrot; instead I was monotonously counting down the laps to go. It was as though I had countless ears glued to the engine, the gears, the brakes, agonizingly picking out signs of how the car was behaving. The last ten laps, as ever in these cases, are a real torture. It's not really my way of winning, but it would hardly do to complain..."

The Love of racing came out of his every pore. Now only eight points separate him from the lead in the world championship and there are three races to go: to pluck the richest harvest of them all.

Alain Prost hits Nelson Piquet and René Arnoux wins after starting from the fifth row of the grid. The championship tightens up again and the atmosphere at Monza should be fierce.
(photos: First Line; preceding double page: B. Asset)



KEKE'S COLUMN

That misfire in my engine at Zandvoort wasn't an excuse to abandon a race which was becoming an embarrassment, honestly. It was there right from the start, but it didn't get really alarming until after I'd stopped for tyres and fuel, and then it was impossible.

Imagine accelerating hard out of a corner in second gear and having the engine cut out: suddenly your head is thrown forward because it's the only thing in the car that still wants to travel forward... and equally suddenly the engine cuts in again, throwing your head back against the head rest.

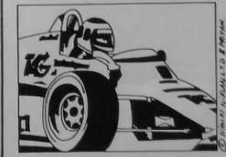
This was happening four or five times every lap, each time giving me a terrific bang to the head. Stubborn bastard that I am, I would probably have tried to carry on to the end, but when I made my second pit stop to see if anything could be done the boys thought I'd stopped for tyres, like Jacques had done, and I think we all lost interest in carrying on.

The first part of the race had been reasonable: up from 23rd place on the grid to 14th place at the end of lap 1. Then Wattle went past me with his McLaren, which was obviously very well matched to its tyres, and I was also losing touch with Alboreto in the new Tyrrell. At least we hadn't been taken by surprise, because we knew well in advance that Zandvoort would be bad. We don't have enough power, of course, but as usual on a circuit with a mixture of fast and slow turns, we couldn't afford to use any wing—and the handling through the slow corners was miserable.

Prost's behaviour in the incident with Piquet was a real surprise to me: he's looked like a champion so many times this year that it comes as a shock to see a man with his experience taking an impossible gamble by trying to pass another competitor when he's got six easy points in the bag. It was just before he and Nelson were due to come in for their pit-stops, too, and I'm wondering now whether the pressure of being so close to becoming the first French world champion driver is beginning to affect him.

With Arnoux now in a threatening second place in the world championship, I hate to think what sort of mood the crowd will be in when we go to Monza next week for the Italian Grand Prix.

Yes, I'm looking forward to the Honda turbo. It's being fitted into a completely new car, the FW09, but I haven't even seen a drawing of it yet. By the time you read this I shall have had a fitting at the Williams factory, and we hope to test it before Monza in readiness for a possible debut at Brands Hatch on September 25.





Hot sunshine and blue skies greeted the large Friday crowd of holidaymakers who gathered at Zandvoort in anticipation of yet another of those great racing battles which are inseparable from the Dutch seaside circuit. Apart from the interest provided by two days of qualifying, there was the added piquancy of an all-new turbocharged engine, the eagerly-awaited TAG-Porsche V6 installed so neatly in the back of the much-revised McLaren MP4-1E driven by Niki Lauda. Judging by the number of senior Porsche management officials who were to be seen in the pit lane, the first Porsche F1 project to appear in Grand Prix racing since 1962 represents an unusually important step for the Stuttgart company, even if their engine carries someone else's name. When at last the McLaren was wheeled into the pit lane, however, the first session of untimed practice was already an hour old, and in view of the newness of the MP4-1E it seemed unlikely that Lauda would be vying with the established strong turbo opposition for a place at the front of the grid. Nevertheless, in between stops to adjust settings and change tyres, it was evident from Lauda's enthusiasm that he intended to race his new turbo, come what may. "In eight laps it's already faster than Wattie in the Cosworth car," he said, "and we've got nothing to lose by racing it." Fast times were not expected immediately from the Ferrari drivers, who were at a disadvantage compared with their immediate rivals because they had not tested here a month earlier, having preferred to concentrate on a test at the Osterreichring. Fastest man in the first untimed session, therefore, was Renault's Alain Prost, ahead of a happy Andrea de Cesaris (Alfa Romeo) and Lotus-Renault driver Nigel Mansell. With the Ferraris still in handling trouble that afternoon, it was three Renault-engined cars which were destined to come into their own. The battle for pole position had obviously gained a new dimension, for it was the Pirelli-shod JPS-Lotuses of de Angelis and Mansell which were making life difficult for world championship leader Alain Prost. First Mansell put out a challenge, leaping to the top of the list on his second set of "stickies" halfway through the session. Within a matter of minutes, Prost had chiselled away 0.1 second from Mansell's time, despite some reservations about the handling of the Renault on its Michelin qualifiers. But the high spot of the afternoon was yet to come, as Elio de Angelis climbed into the spare Lotus 94T (the first time the team has had this luxury) following

an engine problem with his sparkling new "race" chassis. Underlining a great performance at Silverstone, he proceeded to clip 0.2 second from Prost's best to claim the "overnight pole" with a time of 1m 16.411s. "I knew it was a fast lap even before I saw the pit signals," said Elio: "but really I don't enjoy qualifying, because you have to mistreat the car so badly to get the maximum from it." Fastest of the "Formula Fords" was Michele Alboreto, enjoying his new Tyrrell 012 now that the braking and other problems from Austria had been sorted out. But he was only 14th fastest, a full three 3.5 seconds slower than de Angelis... Saturday, cooler and cloudier, was also the 29th birthday of Derek Warwick, who had been sixth fastest the previous afternoon with a Toleman that was handling, he said, extremely well. But there was nothing to be done against the more powerful V6 turbos in qualifying today. Prost set fastest "unofficial" time in the morning session, ahead of Tambay's fast-improving Ferrari and the Renault of Eddie Cheever, which had been oversteering badly on Friday. The final session started ten minutes late, as marshals persuaded dozens of unauthorised intruders to leave the pit lane, but it promised to be a battle royal. Logically, the main contenders for pole position would be the two Ferraris and four Renault-engined cars, all of which are equipped with the controversial water-injection that permits extra high levels of turbo-boost to be used for as long as their qualifying tyres can last (which in most cases is the duration of just one "hot" lap). There was a surprise in store for the "V6 brigade," however. First of all, Patrick Tambay — winner of pole position at the previous two GPs — was finding his Ferrari difficult in the slower corners. He improved by half a second on his previous day's best time to be decisively quicker than Prost, who (like his Renault team-mate Cheever) was finding that his car was not as well balanced on qualifying tyres as it had been on race rubber. René Arnoux in the other Ferrari was in even worse trouble, being forced to switch to the spare 126C3 when his race car's engine broke a turbo. The unfortunate Arnoux then had an engine failure, and his total number of laps in the entire one-hour session was only five. The expected Lotus/Renault/Pirelli challenge failed to materialise, too: de Angelis "lost" his first set of qualifying tyres when one of the Pirellis deflated due to a leaking wheel rim, while Nigel Mansell had to change cars because a spark plug broke in the V6 of his own

PRACTICE

chassis. This left the two Lotus drivers with one set of Pirelli's "one lap specials" each, but incredibly both of them were heading for what, surely, would have been pole position times when they came across Danny Sullivan's Tyrrell in two entirely separate but otherwise identical incidents at the chicane. Sullivan, going much slower than the Lotuses, on cold tyres, could hardly be blamed, but one could imagine the frustration of de Angelis, who has been looking for a good performance now that he appears to be on the point of parting company with the British team. The Italian passed Sullivan after the chicane, but could sense immediately that he had already taken everything that was in his



tyres: he just pulled into the pits and jumped out, his promising afternoon ruined. And the surprise? That was to be the performance of Nelson Piquet and his Brabham. Without water injection, he can't dial up the sort of horsepower form his BMW engine that is available to the French and Italian turbocars. But with the others in trouble, and a niggling handling problem at last traced to a dud shock absorber, the Brazilian demonstrated that he had not given up world championship hopes by breaking through the 1m 16s barrier with a fabulous lap of 1m 15.63s, only 1.4s slower than Arnoux's "ground effect" pole time from last year. "Not bad for a legal engine, eh?" said a

delighted Gordon Murray as Nelson vanished under a crowd of pressmen in the Brabham pit. Among the unsung heroes of the day were Marc Surer, whose Arrows was flung around the circuit in a superb display of car control that beat John Watson's McLaren in the "atmospheric" division, and Stefan Johansson, fighting a bad case of turbo lag and vanishing grip to get the Spirit-Honda into the fray. The Williams drivers concentrate on race tyres, not qualies, attempting to find a good race set-up, and the unlucky guys who didn't make it into the race were Ghinzani, Cecotto and the ill-starred Kenny Acheson. Before the session has over, Niki Lauda

had been obliged to call it a day with the new McLaren turbocar, which had been running so reliably that team chief Ron Dennis was already planning to start the race with the same engine that had been used throughout two days of qualifying. That plan was frustrated when the engine lost power and it was discovered that one of the KKK turbo units had bent a shaft and lost some blades. For Lauda and for Porsche, however, a new era had started: the TAG turbo is alive and kicking like a lusty new-born baby.

Mike Doodson





THE RACE

On a circuit famed for its close-fought races, Nelson Piquet and Alain Prost faced each other in a battle that could have been decisive for the 1983 world championship. But a rare error by Prost eliminated both would-be champions and enabled Ferrari drivers Arnoux and Tambay to come through to score a convincing 1-2 result which has improved each of their own individual championship aspirations.



THE RACE

1. With his Ferrari's clutch overheating after an unusually long wait for the grid to form up behind him, Tambay is struggling into Tarzan alongside Boutsen and Lauda. Piquet is clear leader from the two Renaults (note Cheever's great start from row 6). (photo: DPPI; double page spread: B. Asset)



2. Right from the start, Warwick was in fighting mood, and quickly took the initiative from both Lotuses in the "Pirelli" class. Despite some later problems with the fast-wearing Italian radials -- which forced him to ease off -- he came through to earn the first championship points ever won by himself or a Toleman-Hart car. (photo: First Line)



3. With Piquet and Prost way out in front, Patrese and Cheever battled hard for 3rd place. They duelled from lap 5 to lap 14 before the Brabham got away, while the Renault barely lasted past its fuel stop, retiring with engine trouble on the circuit. (photo: B. Asset)



4. On lap 10 the McLaren of Watson found a way round the turbocharged Spirit-Honda of Johansson and set off after Warwick in 8th place. In spite of the "handicap" of a Cosworth engine, retirements among the leaders enabled the British driver to join the Ferrari drivers on the podium. (photo: B. Asset)



At the start, it looked very much as though poleman Piquet would be able to disappear into the distance, for the whole of the left side of the grid had to find its way round Tambay who admitted that he simply loused up his start.

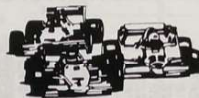
It was so bad that he was fifth from the end at the of the first lap. Remarkably, the rest of the field made a clean start without incident, although a minor collision between Guerrero and Jarier at Tarzan spelt retirement for the Frenchman, and a long pit stop for the Colombian.

Piquet, meanwhile, stretched his lead while the rest sorted out who would be second. That was held by Cheever for three laps until teammate Prost took up the running. But both Patrese and Arnoux were eager for better placings, and Patrese moved up to third ahead of Cheever on lap 8, while Arnoux, the tail-end Charlie of the leading group, demoted the Renault driver on the 14th lap. Within another couple of laps, the Ferrari driver was challenging Patrese's Brabham for third place: on lap 21, he got by and quickly pulled away.

By that stage, Piquet had a six second-plus lead over Prost. Arnoux was third, while Patrese soon slipped back to battle over fourth with Cheever again. Some way behind, Mansell had caught Warwick's sixth placed Toleman; he tried to outbrake his British rival into Tarzan but was too fast. The Lotus-Renault driver spun and stalled — right in front of the family of the late Colin Chapman, who were there to spectate. The only other driver remotely in touch, even at this stage, was John Watson. Despite his Cosworth engine, the McLaren driver had showed superb form in the early stages to pull away from turbo-men like Baldi, Johansson, Lauda and the rest.

The Cheever/Patrese battle seemed to have been resolved in favour of the American on lap 32 as the pit stops began. Indeed, Cheever pitted for his tyres on lap 37, but two laps later he came in again with a spark box problem. The Renault mechanics were expecting Prost, so Eddie was instantly sent out again, retiring on the circuit. But as these pit stops had been taking place, excitement had reached fever pitch on the circuit. Prost had steadily nibbled away at Piquet's lead and by lap 36 the Brabham and

Renault were running nose to tail. The pit stops for both cars were due, would the issue be decided in the pits? The answer was no, it was out there at Tarzan, the long, 180 degree right hander at the end of the pit straight. On lap 41, Prost made his move. Although he was just about to stop for fuel in the pits, he darted for the inside line, left his move too late, locked his brakes and bumped into Piquet's Brabham. Piquet abandoned his stalled car there and then, its front suspension bent, but Prost managed a little more of the lap until a mechanical failure caused him to crash. So, when the pit stops were all over, the race looked different. Arnoux now had a comfortable lead over Patrese, while Tambay had overtaken Watson in his through-the-field charge, and the second Ferrari was suddenly in third place. Watson was fourth, while Baldi was having a rest from Alboreto.



The excitement, however, was maintained right until the end by Tambay's ever-persistent pursuit of points. There were still 17 laps to go when Tambay found himself right behind the Brabham. Surely there would be time for him to overtake the Italian driver? He did his best for a couple of laps, then dropped back slightly to await developments. He then put the pressure on again before backing off a little. And on lap 67, the situation was resolved: Patrese came crawling past the pits with a broken turbo. Tambay was left with a comfortable second place, while Patrese dropped to ninth. Watson thus picked up third place, just reward for a superb drive, while Lauda had been in the thick of a battle with Johansson before retiring with brake problems. And picking up a welcome fourth place was Derek Warwick, 29 the day before, and now winning Toleman's first ever world championship points. The final points went to Baldi and Alboreto, the Benetton driver suffering a broken exhaust which led him to believe that he was running out of fuel: so he stopped but didn't lose a place, and a point was the team's reward for their first race with the promising 012.

Bob Constanduros

THE RACE

5. With Piquet's rear tyres beginning to wear out (note him sliding through Tarzan), Prost was able to close up, especially in traffic. Starting lap 43, they were to collide (see pages 36/37), yet despite their sporting attitude, the incident played right into the hands of the Ferrari drivers who inherited their places and points. (photo: B. Asset)



6. With Piquet and Prost now out, it was Arnoux (five seconds astern) who took over, 46 seconds ahead of next man Patrese. The Frenchman's Ferrari cruised home to a win that seemed impossible when one recalled the endless problems he'd had during qualifying. (photo: B. Asset)



7. Making up quickly for his startline misjudgment, Tambay closed in on Patrese. Their cars were so well-matched that they provided all the interest for the crowd, whose sympathy went to Patrese as his turbo failed with only six laps left to run. (photo: First Line)



8. First Ferrari 1-2 since Imola last year: points galore both for Arnoux (now 2nd in the championship with 43 points, and closing on Prost's total of 51) and Tambay (now 3rd equal with Piquet on 37 points). The excitement at Monza in two weeks is almost too much to contemplate! (photo: B. Asset)



Postcard from Zandvoort



Alas, Alain, not everyone loves you - 'le nain' means the dwarf!



Elio anticipates his first pote... prematurely



Joining Jacques on the links are a couple of buddies (that's non-golfer Prost in the middle)



Prost for Williams? Looks like they've got a car in his size already...



Girls: 'Are you Michele Alboreto?'
Uncle Ken: 'No,



F1 has passed Jan Lammers by, but he scored a close victory

but I'm not doing anything tonight'
keke to Johnathan Williams (Frank's son): 'Get me a turbo quick, kid, and I'll let you have this stereo cheap...'

in the Renault 5 turbo thriller



WITH THE GREATEST OF EASE

To have been a world champion, to have spent a year in the desert, to emerge this year with real hopes for another championship, to run into ill-fate : these would be enough to tax any man. Add to that a passion for privacy and Nelson Piquet, the champion who went incognito, remains largely unknown. Yet the man is simplicity itself ; it is the world about him that is complex.

by Keith Botsford

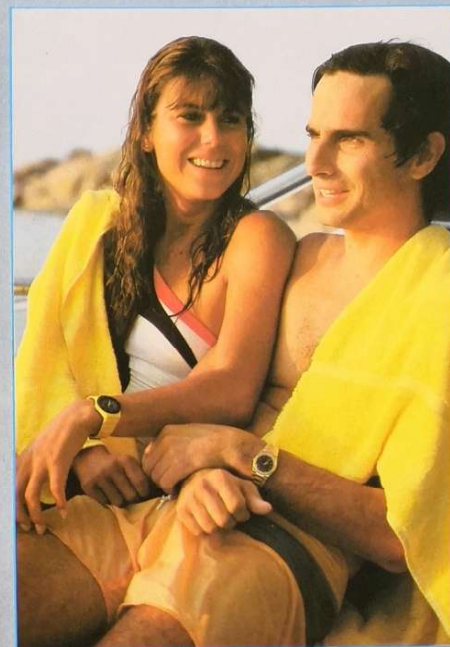
tackle course, full of hesitations, lost words being translated from Brazil on a long-distance telephone. But now the scene is Monza, the set is the back end of a transporter. Nomex is wrapped around his waist and we both glisten with summer sweat as he waits for an engine to be changed that has gone wrong in testing. Another engine gone wrong ! Behind us, the BMW men, in white T-shirts, finish off the beer in the fridge and slip out the door quietly. Testing is a curious atmosphere anyway; hurry up and wait, rather like the army. The tifosi, out by the thousands, are somewhere out there scaling spiky walls at high risk of impalement; the floor by the door of the 'authorities' is in fact soaked in blood.

Has Nelson changed? We all have, but does that mean we *feel* different? Nelson doesn't really think so. He remembers those days when he started with Brabham as a sort of apprentice period. It is marked in his mind with learning. "I think back then I was learning whatever I could," he says, "and still I am learning everything I can. I don't think will ever change." Yet he recognizes one difference: "Today, I am much more easy-going than I was then." The reason? "Maybe now I don't have to prove myself any more. And also I have got used to the team; now I know everyone very well, they know me very well."

Consider a difference: a young man comes up from the lower formulae; he has just enough money to survive; his talent is spotted; he enters a team alongside the

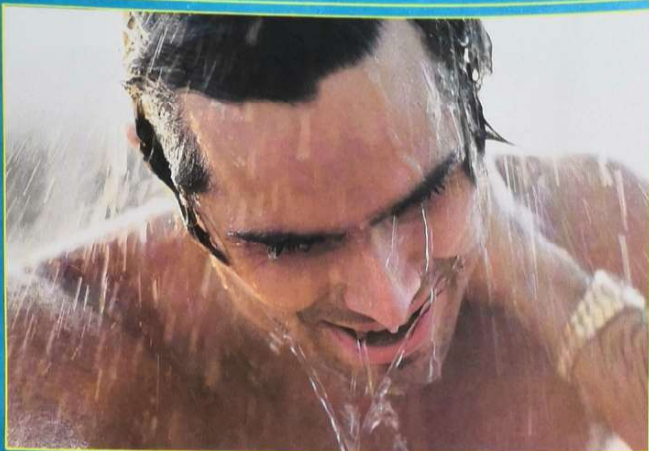
master fox, Niki; he works for the inscrutable Bernard Ecclestone, who rules his team one day like Napoleon, the next like a soft touch on Broadway; he finds a resident genius in Gordon Murray. The entry into F1 is never an easy one. There are things to be proved: that you're competent, first, that you're careful, second; that you fit, third; that you're quick, fourth; that you can win, fifth; that you can be consistent, sixth. And so on down the line. "At this point, I don't have to explain, I don't have to say I'm quick or I can do it; of course now they believe me. That makes my life much easier." For which, read: at one time perhaps they didn't believe, and life was not easy.

For the beginning is all learning. Learning the ways of the car, the ways of the team, the ways of the world. Was he truly less easy-going? Then? Yes, jumpy, twitchy, nervous; his eyes didn't meet you; he worried, he brooded. Back then he had to learn the hard way. "Now, I learn by doing, I learn by experience. The worst thing is not to learn. You have a race, you have a week's testing and you've learned nothing, then you're going down, you're progressing backwards. The learning part was a big chunk of Nelson anyway; the mechanical passion goes back a long way, and today, as those years ago in Montreal, he views his main job as that of interpreter of the car. "The main thing you can do in grand prix racing is to help your engineer. You have to be able to give him all the information he needs, because you're going to need it. Even from



Their boat is named "Gostosa" (Portuguese for "Tasty"), a suitable title for the million-dollar craft with two 700 horsepower engines which Nelson and Sylvia use to escape from the clamour of the F1 scene. (photos : B. Asset)





When he's extricated himself from racing business, Nelson submerges himself in a silent, watery world. It's the right setting for a man who places such a high value on privacy. (photos : B. Asset)

...races, even from bad experiences."

But the difference that comes with experience is that subtle matter of being able to use the knowledge you have. It isn't just knowing what to do, it's having sufficient confidence and certainty to apply it immediately. "Like when I hit my wheel with Prost," says Nelson about the race in Austria. "When I came out of the corner, I knew exactly that if my wheel came down straight, not a little bit bent, it was that nothing had happened. It's something you learn with time. Maybe another driver, who's a beginner, he might come off the corner with his wheels not so straight; maybe he still keeps going; and for sure, then he has a big problem."

In a way, that skates over the problem. For there are, in F1, the smart ones, and also the less smart ones. "Sometimes, there are drivers who want to learn; there are others for whom learning means nothing." What kinds of drivers could those be? "It's like going to school; they go, but they're not there to learn. They think there's nothing to it."

The man who studies his trade, as Piquet does, has relatively little time for other things: there is his work and then there is that little portion of his time that is not owned by some one else. Necessarily, some drivers are cornered by this fact: if their own time is important to them, they do not want the world in on it. "There are simply two different worlds," he says. "On the circuit, when I am doing my job, I don't mind too much dealing with all the things that are part of my job: the public, the

press and the rest. But outside, yes, I like to be very private. I like to be on my own and do my own things. I don't believe that part of me belongs to anybody."

In fact, it is even more severe with Nelson. It is as though he suffered from agoraphobia, a fear of crowds. When we meet at the motor home, he has dashed through a horde of the tifosi; they want to touch flesh, to be near. His distaste is evident. The day before, they'd just invaded the transporter, ten or fifteen of them, and sat down at his table. Just to be here. "I don't like to be with a lot of people," he goes on. "I do what I can to keep people at arm's length. I've learned how to hide. I'm never home. I'm always on the boat. I don't answer the telephone. I have a machine that answers for me and I can talk only to people I want to talk to."

That is not the full explanation. Nelson is isolated in more ways than that. He admits to reading no newspapers and few books, to not watching the news on television: "They don't interest me, I don't believe in the news or in politics." What then, the whole outside world is a lie? "Yes, I think so."

Is it possible to go completely private? And why the desire, one wonders? Very simple, answers Nelson: "It is the desire to lead a normal life, which is different from the difficult life that is motor racing. If I have a normal life outside, I can come to a race feeling fresh and without problems." What about the "duties" that go with the job? The sponsors? The public part of being a champion? "I'll go: but

only when they pay me so much money I have to go. They call me up for a show, for instance, and they say, look, all the other drivers are going for three or four thousand dollars... I say no, I want 20,000. I want them to say, no, we don't pay that sort of money. I'm disappointed if they say they will."

So, what is done with privacy? Is it just a matter of relaxation? "No, I do many, many things. But Sylvia's boat is the heart of it. I just love fixing things, and on a boat there's always something to be fixed. Mechanical things. I was a mechanic first, don't forget."

"Now my company's bought an airplane. That's opened up a new world to me. I'll learn to fly, I'll have something else to work on and learn about. I can spend weeks looking at things, seeing how this or that part works. It's not because I need it, but because it's something different for me. Learning. I start with the practical; I learn by doing. Then I go to the books and learn the theory. But my life starts with my hands."

As he proclaims, that is the direction his life must take; for him it is easier to work from the natural, the experienced, the manual, the felt, and then to construct intelligent theory on that basis, than to work in the opposite direction. Naturally, then, what he is doing now, testing, is a pleasure; it is not for all. "If I am five days at home and I get a call to go testing, my hands itch to drive. I like to come. I hate people, I hate people around. I try to be polite, more polite than everybody, but I

think I am very difficult to make friends with. I have friendships with everybody; and with nobody. So testing is ideal, alone and with the car. I don't think I have any friends outside my work."

Testing is where you see the real people: the people you work with all the time. "My mechanics," says Nelson, "I spend time with them and they are my friends. They are real people. A lot of drivers think, oh, they are just mechanics. But perhaps I am just a mechanic. For me, they are on my level, which is why I enjoy talking to them. I don't think there is a driver, and then there is a mechanic. Alright, I can talk to Gordon Murray at a different level, perhaps, but my mechanics are my best friends. Money, power, those don't mean anything in those relationships. It's not that they join my mentality, it is that I have their mentality. I don't judge people by their money or their politics; I judge them as human beings and I make friends with those who share my life. I know when they're good, because I too work with my hands. Few drivers can do that. And what they do with their hands, when it is well done, is beautiful: like a pianist. People who think they don't create, don't know. Mechanics are in constant creation."

Is there then a clear division between the art of driving and a mechanical passion? "A part of driving is mechanical, but driving is something different. I was born with that. It is an aptitude. For me, it is simply easy. I know it sounds funny, but that is the right word. Even from the beginning it was easy. Even the first time, when



I got into the Brabham and it was wet and it should have been difficult, it wasn't. "I cannot explain why it is easy." Could one say that it was a matter of being at ease with the machine, at one with it? "I don't know. I might be in a race and fighting three or four cars, I don't know what it is, I am not nervous, I am not worried. I might get tired because of the tension, but look at Zeltweg when I hit Prost and went past him. I was zigging and zagging, playing, I felt easy.

"Just driving, driving, I don't learn anything. It comes from talent perhaps. Like a good stroke at tennis. What else can I say?"

Indeed. What do 'naturals' say? If you're a writer, the public asks, what paper do you use? Do you write long-hand? Have you a routine? For a driver, driving is what he does. The real context, then, is in hope and expectation, in disappointment, in fortitude, in tenacity. For instance, after a year in the desert, Nelson might be excused for thinking 1983 could be another championship year. Ask him and he looks quizzical. "No, I think from the beginning I had my doubts. Also, there have been so many little bits of bad luck. I knew we could not create a fantastic engine in one year, or even in two. Now we're in the third year. You win one race when everything works well. When you don't win it's that something went wrong.

"Perhaps also there is a little bit of good luck. At the end in Brazil -- that was the best thing happened to me all year, winning that race -- I had what? a half gallon

left in the tank? It was a bit stupid of the team: Patrese was pushing me from behind. It would have been more sensible to say, slow down, both of you. I would have had a chance to finish the race better. "But it was wrong. Just as I think it's completely wrong that Ferrari has two drivers fighting against each other. It is dangerous: for the driver, for the team. Maybe both don't finish. I am against equal drivers and I think in each team there has to be a number one; and then a number two who respects his obligations, like Ronnie Peterson did with Andretti. Ronnie could have won the championship, but he was a gentleman.

"I think I have had a very good season. I made only one mistake, the start at Imola, nothing else. Very good races otherwise. The rest is the car. If I made mistakes and blew the championship, then I'd call that a shitty year, but this year, everyone can see that if I'm not on top it is not because of me. It's things like a flat tyre in Detroit, in Austria I lost 80 horsepower in the last laps because I had rubber in the air inlets. It was an easy race to win. It's things like that."

So, how does one feel? Your engines fail you. Machinery gives up before you do. "I do all the testing with BMW now -- Riccardo used to do some -- and BMW works very closely with me, but if something goes wrong and it's not my fault, I don't worry about it. It's just one of those things. "I can relax about it. I come back in after Zeltweg and I meet my mechanic. He says, it was fourth gear, hit me. So I hit him.

Then he says, no it wasn't, it was the engine, so he hits me. It's so good to have a good relationship in your work."

With Gordon Murray, yes. With the mechanics, yes. With Ecclestone? "Bernie is a man who changes all the time. When he wants something from you, he treats you like a king; if he doesn't need anything from you then sometimes you think he treats you like a dog. I am very happy at Brabham; I would like to stay. But I have not signed yet, because I don't want to be in that position. Sometimes Bernie would decide to do things inside the team: like once, he and I and Alastair decided to put on slicks. They didn't work. Suddenly, it was my fault. So now if Bernie asks me, what do we do? I say, you decide, I don't want the blame."

So a lot of it in F1 is the complex process of growing up: learning that success has its opposite, which is failure, and that no one wants to be blamed for failure. Another part for Nelson has been putting on strength and acquiring stamina. Now he skis; the rest comes from the regular practice of his trade. Having that greater strength gives confidence. It affects the mind, too. "I think I am 100% stronger in the mind than I was at the beginning. Weariness is mental; it is thinking about other issues. If something goes wrong now, and it is not my fault, I am not unhappy. I take it easy. But my championship year, I was coming up to the end of the season and I was thinking about my contract. You cannot drive well and think of something else. If you worry, you cheat yourself of

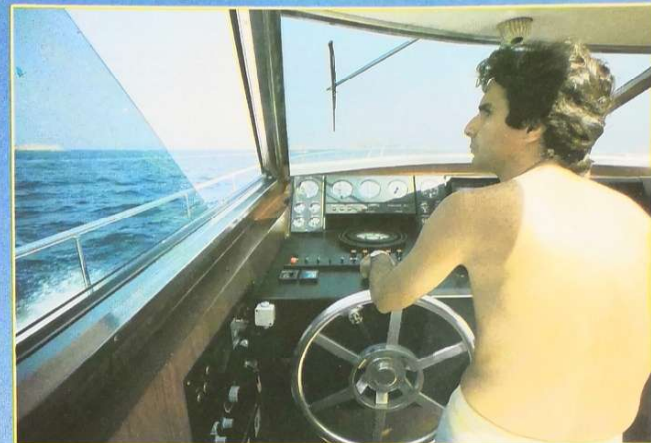
success."

So ultimately, what has changed in the man? Whence the new certainty? "In the beginning, you are afraid of everything, you are afraid of making mistakes, afraid to be yourself. Today, everything is relaxed. Even now, if I stop motor racing, with the money I have, I can live normally and have a fantastic life without ever working again. I don't say I don't want to work, I do, but I won't have to. I just feel that much more relaxed. But now if I want I can go back and live a simple life. But if you're at the point where you can't leave the sport, that's when it's bloody stupid to go on.

"But I'm not a flashy type. I wanted to start in a propellor plane but Niki pushed me to buy a jet, Parmalat said it was a good deal... I gave in, but I'd rather start with the simplest than with a jet.

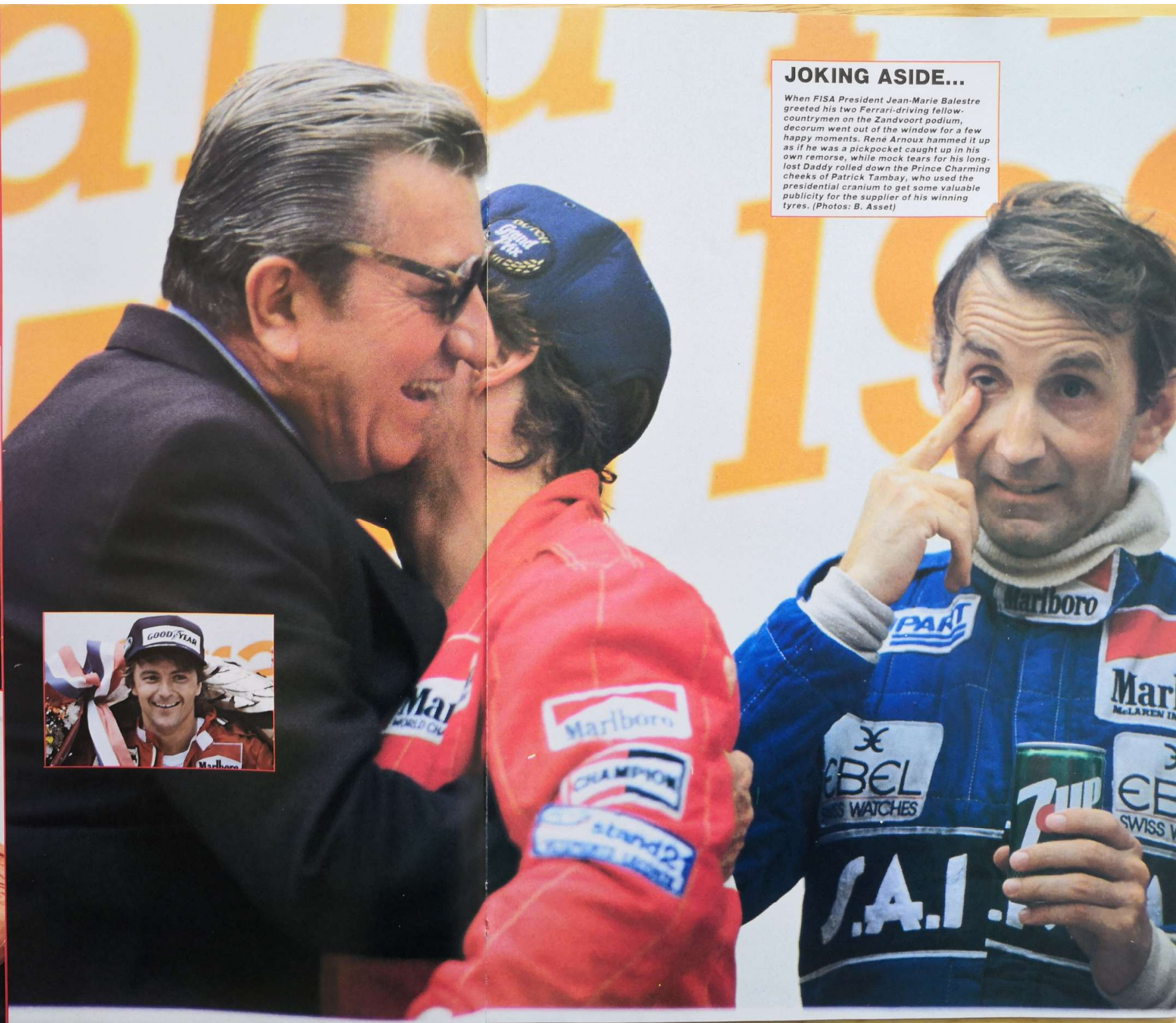
"You see, I'm very lucky. A lot of things come easy for me..."

And perhaps one should stop there; but... Is it a good thing in life that everything should come easily? "I think it is a good thing," says Nelson flatly. I insist. He thinks again. "Maybe it is not always a good thing. But I don't have any experience of it not coming easily: how would I know? I have always tried to do everything right, but I can also say that from the beginning it's always come very easily." Because God is Brazilian and has been looking after this young man from the start. And maybe also because he's always been himself? And never pushed his luck?



A little bay off the Sardinian coast is swathed in sunlight: one of the priceless moments of relaxation here for the Brazilian, master -- under God and Sylvia -- of this fine vessel.
(photos : B. Asset)





JOKING ASIDE...

When FISA President Jean-Marie Balestre greeted his two Ferrari-driving fellow-countrymen on the Zandvoort podium, decorum went out of the window for a few happy moments. René Arnoux hammed it up as if he was a pickpocket caught up in his own remorse, while mock tears for his long-lost Daddy rolled down the Prince Charming cheeks of Patrick Tambay, who used the presidential cranium to get some valuable publicity for the supplier of his winning tyres. (Photos: B. Asset)

SPINNING CRAZILY

Without four-wheel-drive there was no hope of escape for Nigel Mansell. The Lotus driver was chasing Derek Warwick's Toleman into Tarzan on lap 27 when he spun under braking, and seconds later he was trying in vain to rejoin from his personal sand-trap. For several laps already he had been battling with a set of tyres that had lost most of the grip which they'd had earlier in the race. (Photo: B. Asset)





ACTION, MEN!

This remarkable sequence of pictures says more than words ever could. It's the story of the lap 42 incident in which Alain "The Professor" Prost lost his cool, missed his braking point at Tarzan and speared race leader Nelson Piquet clean out of contention. The massed spectators at this spectacular 180 degree turn could scarcely believe their eyes - and neither could René Arnoux, who gratefully moved his Ferrari into an unexpected lead for nine vital points. (Motor-drive photos: B. Asset)



RAPID PROGRESS

With a 12th place finish behind it in Austria, Stefan Johansson's previously white Spirit-Honda was "promoted" at Zandvoort to the official Honda livery - and promptly scored a very encouraging 7th place. It's still too early to know what's in store for the ex-F2 team run by John Wickham, but for Monza the team will have a "pukka" new F1-specification chassis. (photos: B. Asset & DPPI)



ONE POINT FOR KEN'S BABY 012

*Having appeared briefly in practice at Zeltweg, the unconventional-looking new Tyrrell 012-Cosworth had an excellent first race at Zandvoort. With its narrow rear track, but without the original delta wing, the 012 ran strongly in the hands of Michele Alboreto, claiming a point in spite of a late pit stop to check a misfire caused by a broken exhaust pipe.
(photo : B. Asset)*



BRAKES OK, ENGINE KO'D

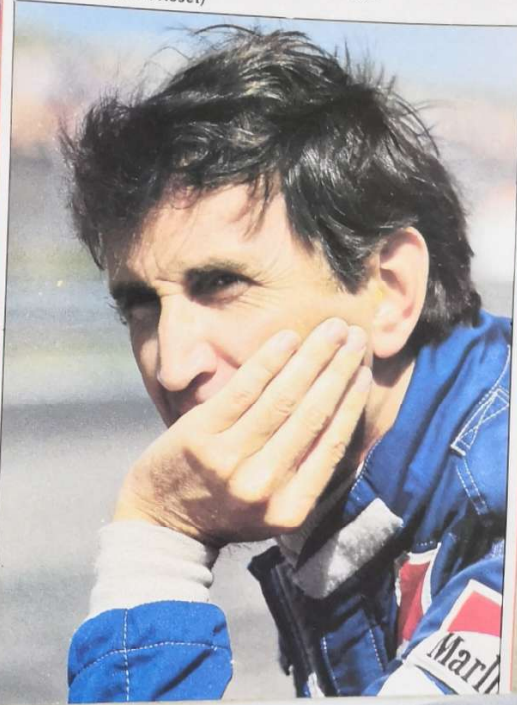
Having made a splendid jackrabbit start, Eddie Cheever held off his own team mate Alain Prost for four laps before giving way to Prost in order to concentrate on "riding shotgun" to hold off attacks from Riccardo Patrese and René Arnoux. During Eddie's scheduled pit stop, alas, the engine started to show signs of failure, and when the American returned to his pit for a second opinion he had the misfortune to bowl over ATS engineer Gustav Brunner in the crowded pit lane, despite a heavy foot on the brakes. The brakes stood the strain, but very soon afterwards the engine wilted.
(photos : DPPi & First Line).





ALL THAT GLITTERS...

... is not necessarily as golden as it might seem. In qualifying for the Dutch GP, John Watson looked less than thrilled with the outclassed Cosworth-engined McLaren MP4 while team mate Lauda was allotted the sparkling new TAG/Porsche-engined MP4-1E for its world debut. On race day, however, Lady Luck reversed the roles, for while Lauda was forced out before one-third distance with the inevitable teething troubles, having climbed no higher than 11th place, the placid Ulsterman performed one of his memorable "attacks from the back", all the way to a place on the podium. Some swan song...
(photos : DPPI & B. Asset)





TURBO TORTURE

Saturday's one hour qualifying session was a bad experience for Riccardo Patrese, who had to take over Piquet's spare Brabham at a moment's notice after troubles with his own, only to be jostled physically in pit lane by an irate Andrea de Cesaris. Race day was hardly an improvement, though, for although his mechanics performed an heroic super-fast 'asbestos hands' engine change after problems in the warm-up, and he drove beautifully to hold off Tambay's Ferrari in the race, another failed turbo dropped him out of 2nd place with only six laps left to run.

(photos : A. Asset)



TAG TURBO + LAUDA = BRAINPOWER

Being realistic, Niki Lauda didn't expect Zandvoort to give the Porsche-designed TAG turbo V6 a debut victory. But he was anxious to get some race miles behind him with the new TAG-engined McLaren MP4, which he hopes will become an unbeatable combination for 1984 of power, brains and reliability -- helped along by the old Lauda ability to analyse and develop racing machinery.

by Heinz Prüller

For the family that owns and runs the TAG company, the association with Williams as a sponsor was not enough. So now the Saudis and their technically avant-garde reputation are linked with the engineering project of the TAG turbo engine and its commercial future. (photo : D. Winter)

On the desk in Niki Lauda's study there are only two reminders of his past racing triumphs. One is the trophy he won for his first GP, at Jarama in 1974 ("very practical: it's got so many spikes that I can hang things like the scissors and rolls of sticky tape on it"), while the other is one of the exclusive golden plates which Ford presented to commemorate 150 wins in Grand Prix racing with their 3-litre V8. In fact, after so many years with Italian 12-cylinder engines behind him, Niki contributed only two of those GPs (Long Beach and Brands Hatch in 1982).

At his last "Cosworth" race, in Austria last month, there was not the slightest trace of nostalgia. "I wish I could have said goodbye to the Cosworth car long ago," he grumbled: "my happiest moment will be when I climb out of this old dog, because from now on there is only the TAG turbo in my mind. Nothing else." Remarks like that are typical Niki: fresh motivation, a new challenge. Joining the turbo squad will put him on equal terms with the others instead of 150 horsepower down. "One of the basic principles of sports competition is being able to fight with the same odds. With the Cosworth V8 that task has become totally frustrating. In our business you can't overtake a car that has five more horsepower. Let alone 150 or more."

At Silverstone, for the British GP, that frustration became overwhelming. "Look at the top speed figures recorded in practice: I was 59 km/h slower than Arnoux's Ferrari. Fifty nine...! If I try to drive at that speed through the traffic in Vienna, I get booked by the police. And here it's only the difference." But Niki can see the difference getting smaller. First time out with the TAG turbo on a proper circuit -- Silverstone, of course -- he hit 300 km/h for the first time in years. With the German engine he was 39 km/h faster than the Ford, and his fastest lap would have put him on to the sixth row of the grid, alongside Giacomelli or Baldi, for the start of the British GP. Not bad, but not sensational yet.

The weekend of the British GP had been a significant one. While the McLaren team struggled just to get a car into the points, the striking new Lotus-Renault 94T tubocar was putting on a terrific show, with de Angelis fastest in all three of the "untimed" sessions and Mansell coming fourth. "What Gérard Ducarouge has done, by designing and building a completely new car in five weeks, should also be feasible for you," said the McLaren sponsors. "Make sure the new car is on the grid at Zandvoort," they seemed to be asking, putting slight pressure on team chiefs Ron Dennis and John Barnard -- and possibly on the Porsche people too.

So, Zandvoort it was to be, the sandy Dutch track which has seen so many racing "firsts," including the most celebrated of them, Jim Clark's debut victory with the Ford-engined Lotus 49 back in 1967. The Porsche people were cautious about a similar achievement by their engine, and their man in charge of the turbo project, the genial Hans Mezger, said it would be unlikely, "but it would certainly be nice to finish our first race with the turbo."

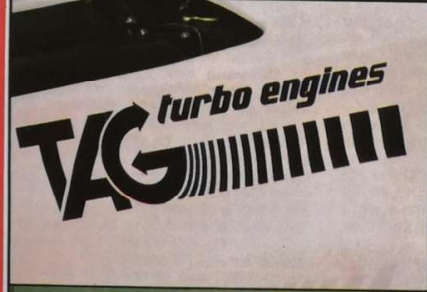
Mezger is not new to F1, for he was already a Porsche engineer in the days when the Stuttgart company was racing its own F1 car and winning a singleton GP (with Gurney at Rouen) in 1962. For Niki the Austro-German connection is convenient: "at last I can speak German at the track again, instead of having to explain everything in English." It also gives him a chance of beating Jackie Stewart's all-time F1 championship record of 359 points. At the moment Niki still needs 24.5 points to do it, but Stewart himself says that he's confident his record will have fallen before the end of the 1983 season.

The delays in the sensational TAG/Porsche project have been acceptable. It was in 1981 that Ron Dennis ordered the engine from Porsche's experimental department at Zuffenhausen, and by December 1982 the new "baby" had uttered its first cry on the test bed. Things went rather quiet after that, but whenever he was asked to comment, Dennis would retort that there was "no reason" to be impatient: "... or do you think I have invested five million dollars for nothing?" In fact, everything was bang on schedule, and sometimes even a couple of days ahead. There had been an unexpectedly curious note when it became known last September that Dennis had talked Mansour Ojeh of TAG into forming a partnership with McLaren to finance the engine. Some observers in Germany suspected that Ojeh wanted to "do a Ford" by swamping the F1 grids with TAG engines, but this has been denied by Ron Dennis.

"There's no money to be made in F1, even if we supplied half a dozen teams," he says, adding that "racing isn't the only application for this engine, you know." As everyone now knows, the TAG-sponsored Williams team was not counting on getting the TAG turbo, and Frank has just announced a two year deal with Honda. His new turbo partners effectively stole some of the TAG publicity at the Geneva Motor Show in April this year when they hastily unveiled their F1 V6 to the Press a couple of hours before the TAG engine was due to be shown, the long-awaited culmination of several weeks' careful PR planning.

Incidentally, and remarkably, both the German and Japanese engines are 80-degree V6s. Honda had already used this layout for the 2-litre V6 on which the F1 unit is based, while for Porsche the main aim was to make the "vee" angle as narrow as possible, thus leaving designer Barnard with as much space as possible for downforce-inducing side wings. That, of course, was before the new "flat bottom" rules were suddenly introduced this year by FISA, largely (as it happens) at the urging of Niki Lauda himself. Thus Niki has effectively deprived himself of what could have been a technical advantage over the opposition's wider-angle V6 turbos, although he insists that "if you are convinced that something is wrong, you must change it -- even if you lose something." With irony in his voice, he adds: "I have to be able to look myself in the face when I shave every morning, you know..."

Speaking of the degree angle selected by Porsche, Mezger comments: "we have tried all possible angles between 60 and 120 degrees -- and we found this to be the best." To hear the turbo-muffled TAG V6 running on the test bed, the overriding



Nobody can now accuse Niki Lauda of having lost the determination of his great years as an F1 driver, for with a turbo engine behind him at last the twice world champion will surely find his second wind. Could this race though the Dutch dunes sound his real return as a master of Formula 1 technique and strategy?
(photos : D. Winter)

impression is how quiet it is compared with the "atmospheric" Ford. Revealing something which he's never fully discussed before, Niki now feels free to complain about the vibration generated by the Ford, a fault which was part of Keith Duckworth's deliberate plans - for technical reasons - when he designed the V8 back in 1966. "That vibration was always so bad," says Niki, "that it left you with itching all down your back and scrambled your kidneys. I'm really glad that that part of my racing is all over now..."

By contrast, the TAG-Porsche runs so smoothly that it hasn't even lost an exhaust pipe yet. So far, six experimental engines have been built, and the first has already run 25 hours. Not non-stop, of course, says Mezger: "because for a GP we need maximum power only for one and a half hours." There undoubtedly is more horsepower already, with a figure of 620 bhp (100 more than a Ford) probably a close guess, although the McLaren and Porsche people respond to the inevitable "how much?" questions with that reply beloved of Rolls-Royce under the same circumstances - "it's sufficient," they say. For Mezger, saving weight has been just as important as extracting power, and he claims that the all-up weight, including the two KKK turbos and the necessary intercoolers, is close to that of a well-known aspirated V8.

The first runs with the new engine were completed around Monaco time, in May, using a Porsche sports car fitted with the V6 for tests at the company's Weissach test track. "We don't need an F1 driver yet," Niki was told: "our directors' chauffeur could do the job." In fact, when the first McLaren chassis had been fitted with the V6 and was ready for tests at Weissach, it was John Watson who was invited to try it. Perhaps the McLaren management deliberately organised it that way because they believed (as did some of Niki's friends) that their Austrian superstar wasn't showing as much interest in racing the MP4-Ford as he should have done. Anyway, Niki's contract with McLaren guaranteed him the lion's share of the long-distance testing that would come later...

So it was another week before Niki got his opportunity to sit in front of the new V6, at Weissach. "Incredible, fantastic," he enthused: "just like being hit from behind by a bomb." Lap times aren't regarded as being very relevant at Weissach, but Niki did beat John's time. He also got close to Ickx's best with the 956 and to the (very discreet) outright record, held by Stefan Bellof. As Mezger said: "when you consider that this isn't a proper race circuit, and doesn't have the sort of safety that you would expect from a GP track, it shows what a big heart Niki has. He really had a go..."

Mileage was now up to serious figures: 540 kms for Watson, about 300 for Lauda, including a few with the boost wound round to 2.4 bar. "It may sound stupid," said Niki, "but I was very happy that it ran so long without any problem. Quite a contrast with some of the other turbos a few years back: remember how they flew to pieces after only a few laps?" Indeed, he had set two objectives for the programme: getting it reliable on the test bed, and then to have it correctly adapted to the requirements of racing. "There's a big differ-

ence between having an engine which produces nothing at low revs and then suddenly produces 700 horsepower at 9000 rpm. Ideally the power should build up slowly all the way to maximum revs at around, say, 12,000 rpm. That's what the Ferrari does, and in my opinion that's the best turbo engine at the moment."

As he says, "this is the sort of fine tuning which Porsche people are really good at doing, but they need time and patience because their engine has complete electronic engine management. The microchips in the computer have to be specially programmed, and as the three "big name" turbo rivals have already found, that is altogether a very complex, difficult problem." It would have made no sense at all to have put the engine straight into the McLaren and tried to go racing immediately. Equally, adapting the MP4 chassis to the new engine has been a much more difficult task than it might appear. Ron Dennis says that although the TAG-engined MP4 looks similar to the Ford-engined car, the work that's been done on it makes it virtually a brand new car.

With Niki busy helping to develop the McLaren TAG turbo, it's easy to draw a parallel with his experience ten years ago at Ferrari, when he became identified with the "R & D" work that produced two championship-winning Ferraris. "Oh no," grins Niki, "the most important thing on the car is not me, it's the on-board computer which we use for test runs." With all its electronic sensors and recording equipment, the computer makes the test car very heavy (around 600 kilos), but it tells the engineers about things which the driver isn't even aware of, details like cylinder head temperatures and and how much fuel is being used under certain conditions of boost, temperature, etc.

The driver has more than enough to occupy his mind with driving, as Niki has already found: "it gives you a little shock to find that what used to be a straight with the Cosworth car is suddenly a bend, like the kinks at Silverstone which I never regarded as a proper corner." He's also having to come to terms with throttle lag, a familiar turbo complaint, although it's being improved with every test. "Of course it's more difficult to drive a turbo: you need time to build up the turbo pressure before you have full power. You approach a corner with the turbo and brake, but you have to be on the throttle when you're still in the corner. I think I can learn the technique as quickly as my turbo colleagues did, but we also have to improve the throttle response in the engine."

Another aspect of turbo driving which particularly fascinates Niki is the choice of different boost pressures, and not just between practice and race conditions, because there is a driver-controlled boost control for the TAG turbo, situated on the left side of the cockpit. "It's going to make racing more fun," he says, "because you can play tricks on the others by using the right boost at the right moment. But you have to be very careful to make best use of it, by choosing a setting that the engine can work with."

Niki Lauda, the master tactician who can dissect the way his rivals' minds work, is back in business - now even having his own computer... □

MANSOUR'S BABY

The man behind the TAG engine is one Mansour Ojeh. It is his baby, but not his plaything. For Mansour, it is the beginning of a new world, a fresh departure into the unknown.

Keith Botsford

One remembers his first appearance in the Formula One scene: a tall young man, handsome, upright, light-skinned, elegant and carefully introduced to the world of Formula One by Frank Williams and his coadjutors. Frank had pulled off a great coup: first of all the constructors, big and small, he had brought into the sport those Arabs of whose fabulous wealth the rest only dreamed. But what we saw was the converse of the image, for neither Mansour, nor his brother, nor any of his entourage were remotely what anyone had been led to expect: they were the exact opposite of flash; they were quietly elegant, highly-educated, remote and lowkeyed. Which is the way Mansour would have it. For nothing bothers him as much "as this image of Arabs who are simply filthy rich." The Williams team had started with Saudia, the airline, which did have a certain near-Eastern splendour to it. TAG entered somewhat later, but by the same conduit: through Frank's careful, thoughtful cultivation of his first Middle Eastern contacts. And, in fact, they were well-suited to one another, Frank himself being the exact opposite of flamboyant and very much the tenacious, self-confident sort of man the Ojeh family could understand: no nonsense, hard work, all results. And those results! Within a year, the Williams team had been transformed into world champions: no mean feat when one considers how far down the pecking order Williams was in those days. And though the Williams fortunes have been in decline this season, the TAG family remains very much just that: the sort of family where people can joke and say, "Well, you do meet a very much better class of people at the back of the grid."

Then we heard that Mansour and TAG were entering a new domain. They were going to create a turbo engine: not just as a development for their own team (in fact, for McLaren) but as a commercial enterprise, as a fundamental part of the far-flung TAG empire, which ranges from advanced weaponry to aeroplanes, but always axed on the principles involved in its name, *Techniques d'Avant-Garde*.

How did this come about? "A little bit by chance," answers Mansour, "and a lot by a natural evolution from our experience in Formula One. We started by being sponsors, and we've been very lucky to have

been associated with Williams and to have been successful, winning two or four championships — depending on how you want to count — out of six. It's a great record. Then came the opportunity to build an engine." Mansour speaks of it as a natural conse-

quence, but of course the true story is more complex than that. The opportunity to build an engine is always there. It only requires the resources and the imagination. Mansour's part in this, which was also TAG's, was to underwrite the hugely costly research and development involved in such a project. "Basically, we created the finance, and the engine belongs to us. But it was a logical step. We entered Formula One as relative unknowns; we became well-known; to take our company from sponsorship into a more direct role was an obvious direction for us to take. For me, it's also logical that we should make of it a commercial venture."

Logic irrefutable, for TAG had indeed invested very handsome sums in the Williams team: "After all the money we spent," says Mansour, "it seemed quite right that we should try and get some back. To be a sponsor is all glory, but it's not money."

You might think that such a project would require a deep and abiding interest in engines as such. Not at all: at TAG's level of functioning (it has nothing to offer the consumer and deals primarily with other



high-technology companies and governments) the point is that the company cannot stand still. It is run by young men who, besides means, have a vision of constant development, a technological equivalent of what economists and political scientists call 'the Permanent Revolution'. "No, I have no special interest in engines as such," offers Mansour. "I think our engine is a good image, a good project to keep TAG going ahead; to finance, own and build an engine is the sort of thing we should be doing. We believe it is going to be the best, or one of the best, F1 engines. And then, in a second stage, our idea is to commercialize it. We are thinking of road cars, helicopters, aeroplanes; we might build our own road car; we might sell the engine to a big manufacturer." But the engine is a wholly new departure for TAG. "We produce no other engines," adds Mansour. "We are, however, involved in a lot of other high technology projects. We build, for instance, a small car, the Croco, an all-terrain car, a six-wheeler with an articulated two-part body that can go anywhere. It's a Swiss car that we build in Germany. The Swiss army is looking into it because it can handle any terrain; it can climb the alps and go through water."

So in Mansour's mind, the TAG engine is a double development: it is a further development of technology within the group and a method of capitalising on what the company has done in Formula One. "Everyone knows us now and now we are simply moving on to manufacture. We don't want to limit the engine just to Formula One, however." Obviously, TAG would not commit that amount of backing to a project unless it felt the final result would be something unique. Mansour says: "We think it's quite unique. It is very advanced technologically: it is very light; it uses new materials, like titanium; it won't heat up; it's innovative, small enough to put in a road car. I want it to be a success beyond Formula One."

Organizationally, the TAG Turbo engine is a separate company within the TAG group of companies. "Eventually," Mansour continues, "we could have a whole engine division within TAG. We are already looking at its usefulness for helicopters. There will be many uses for it." As for the association with Porsche, Mansour says: "It came about quite naturally. There are not that many engine development programmes going on, but beyond that, I have a long-standing personal admiration for Porsche. They are the sort of people who are going to do their utmost; they don't just jump in and do something for the hell of it. They are disciplined and superb and you know from the outset, which gives you a good, confident feeling, that they are going to produce something special."

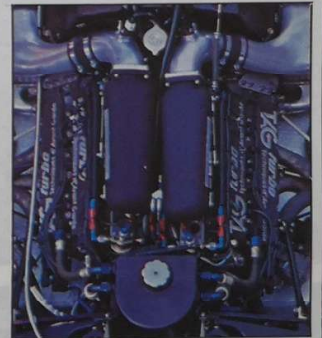
For Mansour, personally, it has meant a new element in his life, for he has been constantly and directly in contact with the development of the engine. "I follow it all closely. I may not know a huge amount about technical things, but I have worked alongside Porsche throughout and I am really very proud that it's out there today on the grid. It seems like yesterday we signed the contract and in Zandvoort we have it in a car that hasn't yet turned a wheel. I think that's not too bad, and by

Monza it will be a lot better. I'm looking for us getting into the points already this season."

The development of a turbo engine, as Renault and others have found out, is a slow and costly business; it takes a long time for reliability to be achieved. But Mansour thinks his engine will perform more quickly: "I think Porsche starts with a great advantage over the others: it has vast experience with turbos in many areas of motor racing and in production cars. If you think of their experience with fuel consumption in Group C racing, you can see the advantage that will be to us with the new regulations next year."

For Mansour personally, the change has been as natural as the development from sponsor to manufacturer. "It seems just to have happened at a natural rate. You get involved in something, you happen to like it, you must expect it to evolve. Change is natural. Having been successful and made a name for yourself, it would be stupid just to let go and stop. It's a good way to keep in something you like to do and a good way to capitalise on the experience gained."

Commercialization would depend on how TAG went about it. Mansour mentions licensing or selling the engines outright.



possibly to another manufacturer with a rally team, for instance. Asked which he prefers, Mansour answers with characteristic humour that that "depends on the deal. Look, my purpose is to make money."

In a way, it seems it is the association of the TAG name with the engine that gives Mansour the greatest cause for pride. Yet many still write of it as the TAG-Porsche engine: "No, it's a TAG engine. Porsche is a sub-contractor to us. We commissioned Porsche to build us this engine with these specs and in return we paid them so much. The engine and all the rights in it belong to us."

To Mansour, it is "my pet project." His baby in the big, very private and discreet world of TAG. And it's his baby because he loves the sport. "Maybe I'm a frustrated racing driver," he says. "I love driving cars. You have your ups and downs, but it can't hurt: either me or the company." Not bad after so few years in the sport. But when Mansour's eyes really light up is when he tells you that he went around Ricard in 1 m 12 s. Not bad, either. A man who helped make two champions and clearly expects to make others. □

EXTRA, EXTRA

SUNDAY NIGHT ON THE MOTORWAY

His face showed the strain. It was still bathed in sweat after the effort of practice. But Riccardo Patrese was trying to wear a mask of serenity and relaxation. In vain. A minute earlier, when he finally brought his beautiful Brabham-BMW to a stop in the pit-lane, Andrea de Cesaris, who had been lurking in a corner, popped out like a jack-in-the-box and shoved his way through a slightly disordered group of British mechanics to get to Riccardo. His objective was Riccardo's helmet which he was soon buffing about as might an energetic cocktail-shaker.

"Nothing happened, nothing at all," said Riccardo at first, wishing to minimize the incident. But then his frail defences broke down and the words started pouring out of his mouth: the undamning of his pent-up rancour:

"Andrea can say what he likes. I don't give a damn. He can even call himself world champion if he likes. I couldn't care less. I don't even listen to what he says. You know, he's just a little bit..." The traditional gesture: finger to forehead, a screw loose.

Once again one driver had got in the way of another when the latter was doing what

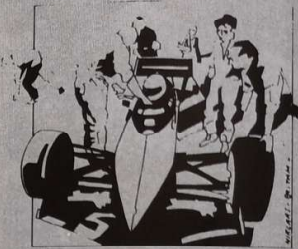
we call a flying lap: fast as you can go on the special quallies. The incident happened on the big left-hander before the rise at Hunzberg. There, the Brabham, slowing down, had blocked the Alfa Romeo, which was going flat out. It is the sort of incident that has become increasingly common since the introduction of two sets of special qualifying tyres: but in this case, it all had a rather bitter taste. De Cesaris only just managed to avoid the Brabham after Patrese took up a line which Andrea obviously did not anticipate. That move threw Andrea, still in his cockpit, into a fit of extreme rage. The Alfa Romeo went past its rival on the outside and then cut in front of Patrese's car: at which point Andrea slammed on the brakes, sparks flew from all four wheels and an accident could easily have ensued. Just like any Sunday driver on the motorway feeling aggrieved at being overtaken without due permission being granted!

The result? Yet another weight on the already-loaded shoulders of poor Riccardo, a flying lap lost and a storm of tics from the gladiatorial Andrea. De Cesaris was stuck with his Friday time and complained to the heavens at his fate, arguing that his compatriot had blocked him deliberately.

A few minutes earlier, just how delicate is the task of building a flying lap under the current rules was clearly demonstrated. Here, the principal actor was another Italian, the fiery Elio de Angelis. Elio had been on pole the previous afternoon, but on his warm-up lap, his tyres had let him down to a leaking wheel rim which caused his right front tyre to lose air. That left him with just his second set of Pirel-

lis for one more crack at the grid and pole, which Nelson Piquet had just taken over.

When the Lotus-Renault came charging back into the pits at full tilt just a hundred seconds or so after having left, and when its driver parked it there any which way and leaped from the cockpit as though it were on fire, and when he ripped off his



helmet before taking off at high speed, the world knew something had happened. But unlike Andrea, Elio was able to master his own temper. After having danced on one foot and then the other for a few seconds, Elio had recovered his sanity. His face showed his disappointment, but when he walked back towards his team, he was completely calm: "Sullivan blocked me outrageously. Like some beginner with no experience at all. It's a dangerous thing to do and one day it'll lead to an accident.

And just for a piece of sheer stupidity I've lost my last chance..."

Frustrated, but as ever a good loser, Elio did not bother to seek explanations from Sullivan. The American would not, anyway, have had much to say:

"I'm supposed to have blocked Elio? I don't understand. I did see a Lotus some hundred yards behind me, but that's all I saw. Anyway, there's only one possible line to take at the chicane. If it's true, then at least there's a little divine justice, for I myself was held up by a Lotus on my fast lap..."

The amiable Tyrrell driver was clearly sincere. The problem does not lie there. No more than it lies in the fact that Elio knows how to master his emotions and Andrea took it upon himself to shake Elio's head like a basket of fruit. The fault lies with the rule that allows two sets of qualifiers. Drivers are creatures of fierce enough determination as it is, but the rule transforms them, for something like a hundred seconds, into engines of war. And that with all the attendant risks.

A de Angelis, a Patrese or a de Cesaris has too much talent to act like a Sunday driver on the motorway. FISA might put its thinking cap on and reconsider the rule: if drivers go past the point of no return at Zandvoort, is it not because of implacable circumstance forcing them to do so? It is now up to the law-makers. And not self-appointed moralizers.

Didier Brailon



CHILD OF THE SENSES

I has to be admitted, it was something of an occasion for John Watson. His team-mate Niki Lauda was getting the celebrity treatment due to the inauguration of the new TAG engine: John was sitting out of the limelight with a string of results from the last few races that put him well behind Lauda, and nursing thoughts of facing a turbo grid well in front of him on a circuit that might be thought to favour the turbos.

Yet there he was, not only winning the sub-class of aspirated Cosworth engines, but also finishing a handsome third behind two Ferraris. He could well have been excused for a little jubilation. In the event, he was sober, calm and no more than pleased. After all, there are things weighing on his mind: such as, where he might be driving next year.

But in a number of ways, there were pre-arranged for John's results: "We'd come to test here at Zandvoort after Silverstone,

and I knew then that the car was going to go well here. The end result, third place, was really the culmination of a good weekend, and a good test before that. I knew the car would be good and in fact I was surprised when we started practice, because the car was not as good as I had hoped. But this morning in the warm-up it was very good indeed, and likewise during the race.

"The only difficulties I had were at the start. I was well back on the grid in fifteenth place and though I made a good start, I didn't really make the use of it I might have. I lost about four places right at the beginning but after that, I was relatively unhindered." In fact, John blew by the turbos as though through butter. Winkelhock, Baldi, Johansson. So what had happened since his rather poor recent run? "You once described me as a 'child of the senses,' and that's how it is with me. It's really feel that enables me to go quickly or slowly on any given day. I can do it when that's the message my senses are giving me."

With anticipation, then, John came to Zandvoort: it was, as he described it, the kind of circuit where he thought the McLa-

rens would go well:

"The surface, the kind of curves, the usual weather, just the feel of it. I thought our Michels would be good. I was pretty sure we would head the Cosworth cars and even that we might make a point or two. So to make four is a nice bonus."

The reason for his modesty was that John is not a blow-hard: He's been around long enough to know that a third place is not what he really wants: "it's not the same as winning the race, and that's why I'm here," he said.

Meanwhile, thoughts of joining Niki with his own turbo were very much on top of his mind: "Yes, McLaren have promised me that we'll have two turbo cars ready for Monza and I'm looking forward to driving the turbo. This was the first time the car had rolled and the first outing for the TAG engine. I would think that by Monza it will have been highly refined. But I'm not expecting miracles right away."

But over that pleasant prospect, there hangs a longer range cloud, which is John's own future. Coming to Zandvoort, it was being widely said that the Ulsterman was ready to call it a day. "Not only do I not intend to retire, I intend to go on

racing next year and that's very firm. I would hope to go on racing here with McLaren, but I've not heard anything from them so I am unable to say anything on that score. If you want to know if I'll still be with McLaren next year, it is McLaren you must ask. But I'm in racing because I enjoy it, and as I'm still enjoying it I intend to go on."

So what are the options? "Well, I suppose that if I do not hear fairly soon, I'll have to go looking for a drive and by that I mean a competitive drive. At the moment, there's a lot of talk in the paddock about drivers going here and going there. I think everything is a lot less settled than people think, so in judging my own chances, I have to think that I have alternatives still available. I feel the longer I race, the better the results I will be able to produce. The last few races Niki has driven better than he's driven all year: now I hope to catch up.

People have come to expect that I can make it up from the back: maybe on some circuits, but not on the quick ones. So from now on, we should be able to start further up."

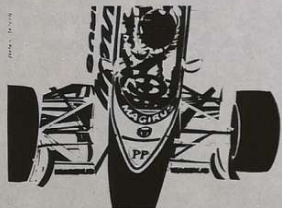
Keith Botsford

EXTRA, EXTRA

RHONDA'S TEARS

"So they're talking about me for Lotus? You know, right now I'm having advanced discussions with just about everyone: Renault, Ferrari, Brabham, Williams; but my guess is I'll settle for Theodore..."

Derek Warwick, hair plastered down on his head, his overalls sweaty, burst out laughing and gives us a mighty smack in the back. His joke gives him the greatest of pleasure. Maybe the truth is he'd like to cauterize the wounds from last winter, when Renault had indeed had serious discussions with him before opting for Eddie Cheever, or maybe he'd like to forget his terrible first part of the season during which he failed to notch up a single point? On this particular Saturday afternoon at Zandvoort, the normally heavily-overcast atmosphere at Toleman had finally parted to admit a ray of light. Ever since they have been equipped with Holset turbos, Brian



Hart's four-cylinder engines have shown steady improvement: both as to reliability and as to performance. The proof lies in Derek being on the fourth row of the grid, seventh in practice, between Riccardo Patrese's Brabham-BMW and Andrea de Cesaris's Alfa Romeo. 24 hours later, when the British driver crossed the finish-line, he raised his arm high while the Toleman mechanics leaped over the pit wall in picturesque disorder.

He didn't win, to be sure; he wouldn't even be on the podium; he was just fourth...

It is a placing that will seem anonymous in years to come, but it still bore all the marks of a victory: the first points one earns are always the best, as is true of much else in life. When Derek came back to the pits, his mechanics literally doused him in champagne: it had been waiting in the motor home and cooling off for some time. Derek's lovely wife, Rhonda, gave

way to the magic of the moment: great tears of joy formed at the corners of her eyes and fell down her cheeks for several minutes. She was a trifle ashamed of them but she couldn't resist savouring a joy too long deferred. When the mass of British journalists - a mass in proper English order - fell upon him to sniff at his champagne-soaked overalls, Rhonda withdrew. A few yards away, undone but overjoyed, her husband was inundated with questions:



"The car was perfect: engine, brakes, transmission, perfect. But two-thirds of the way through the race, the tyres were gone. Ten laps before my scheduled refuelling, I had no grip left at all. I was driving on eggs. At the beginning of the race, Mansell was behind me, and he seems to have had the same problem. Finally, just as he was threatening me, he spun off at Tarzan. That took a great load off my mind. Then, on lap 32, Watson just blew by me. With his little kit-car Cosworth! Unbelie-

vable! The fact is, he was going so much faster than I was, I left the door wide open for him. It was as though he were in a turbo and I in an atmospheric..."

The two men, Mansell and Warwick, have a lot in common: they are both polite, both well-brought-up, both calm and both share the same love of nature and family. Being the good professional he is, Derek gave due credit to Toleman:

"I have always believed in the team and even after three years, I haven't had

enough of them. True, my name is mentioned for a lot of teams, but my dream is to stay with them; as long as we can get enough money together to develop car and engine in satisfactory conditions. Today's performance should be a help. He was chugging away at a big bottle of water and behind him, Rhonda was starting to dry off her tears. For Toleman-Hart and for Derek Warwick, a new era begins: one of confidence and serenity.

Didier Brailon

ANOTHER DAY IN THE DOLDRUMS

In the bad old days of the Williams team, five years ago and more, Frank's drivers struggled for obvious reasons: uncompetitive chassis, worn-out engines, not even enough money to buy new tyres. In recent weeks they've been struggling for more complicated reasons: not just a lack of horsepower compared with the turbos, but also an apparent lack of tyrepower compared with the Michelin-shod McLaren opposition, at least under race conditions.

At Zandvoort, the prospects looked glummer even than they did at Silverstone. "To be honest, I was worried at one time on

Saturday afternoon that I hadn't even qualified," confessed Keke Rosberg, the reigning world champion. "I know that I also blocked Patrick Tambay when he was on a quick lap. I was struggling to free the cable of my cockpit adjustable rollbar at the time, but even so that's not my style, to block another driver..."

Five years ago, the two Williams - if they'd qualified - would probably have broken down in the race. They don't do that very often these days, so it was a surprise to find that both Williams drivers were out of the running when the Dutch race still had 20 laps to run. Only Rosberg had struggled into the top 10 places.

Keke left the circuit immediately, so that he could nurse the neck muscles battered by a misfiring engine. Jacques was watching the race in the company of some old Ligier friends, having given up in des-

pair with a lack of grip after destroying two sets of soft Goodyears. His lack of interest had been displayed during his first pit stop, when he didn't even bother to keep his foot on the brake to help the mechanics bolt on the replacement wheels.

It's easy to blame Goodyear," said Rosberg, "but not when they've just finished 1-2 like they did today with Ferrari. With the chassis settings which we have to use on a circuit with the characteristics of Zandvoort we just don't have anywhere near as much mechanical grip as some other cars. I don't just mean the McLaren on its Brand X rubber, but Goodyear cars like the new Tyrrell or the Arrows. I could keep Alboreto in sight for the first few laps, but then he went away. And the Arrows... well, they went past me as if I was standing still after my stop, and they'd started with full tanks!"

The gloom extended itself to the faces of

the Williams mechanics, more accustomed as they are to leaping pit barriers in order to greet their drivers. With a Honda engine and radial Goodyear tyres now definitely arranged for the near future, you might have expected Frank Williams to have taken this setback more phlegmatically than his staff.

Apparently he didn't. On his way out of the circuit, Keke encountered his boss, who'd caught the same Zandvoort glooms as all the boys in green. Losing when you're a winner comes hard to Frank, but he had an encouraging word for Keke. "Now I know," he said. "Why I paid all those millions to Reutemann and Jonesy and now you: it's worth it just to win..."

Mike Doodson



Cockpits

by Giorgio Piola & Didier Brailon

ALFA ROMEO EURORACING

183T/03 : Andrea de Cesaris (I)
183T/04 : Mauro Baldi (I)
183T/05 : T-car

The 05 T-car, which was a new monocoque for Silverstone, has been upgraded to "B" specification by reducing the height of the fuel cell, which needs only half of its previous capacity now that pit stops are common practice. The

183T's were all fitted with the larger "Austrian" turbos, with even bigger ones due for Monza. The air boxes on the engine cover are also of a new type. An engine was wrecked in the de Cesaris car on Friday morning when what was left of a broken spark plug fell into a cylinder, and he had to have a turbo changed on Saturday morning. On Saturday Mauro Baldi was suffering from a severe pain in his right wrist, diagnosed by the circuit doctor as an inflamed tendon. The problem was to handicap him throughout the weekend.



ARROWS-COSWORTH

A6/4 (2) : Marc Surer (CH)
A6/5 (3) : Thierry Boutsen (B)
A6/1 : T-car

The Arrows were all back to regular front wings, two-piece rear wings and engine covers with integral air boxes, as seen at previous meetings. To allow heavier braking on this demanding circuit with its chicanes and 180-degree Tarzan loop, the A6s had also been fitted with twin-caliper brakes.

ATS-BMW

D6/03 : Manfred Winkelhock (D)
D6/02 : T-car

Following several exhaust pipe breakages and cracks (both fatal to a turbo), the ATS team had designed a new exhaust system. It still starts low on the left side of the car but is now much shorter, ending just above the rear suspension

arms where previously it ran between them. The cooling system has also been improved, with different radiators and hoses. Also new for Zandvoort was a revised turbocharger air intake, now projecting from the right side-pod to improve airflow into the trunking; this has required the fitting of a "silly plate" under the monocoque, in order to satisfy the regulation which demands a flat bottom under the entire body-width of the car.

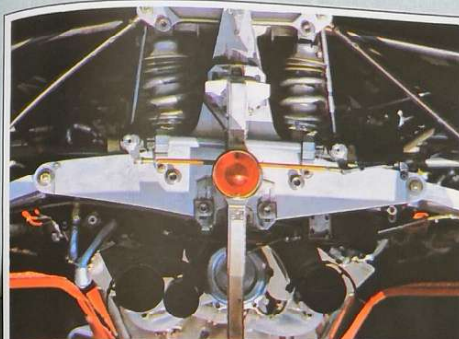
BRABHAM-BMW

BT52/05 : Nelson Piquet (BR)
BT52/06 : Riccardo Patrese (I)
BT52/01 : T-car

In order to reduce the temperature of the intake air for the engine (and thus to increase its density), the BT52s were fitted during practice with a supply of cold water piped to the intercooler. The water flows over the *outside* of the cooler (ie it's not injected into the incoming charge), but only when the temperature exceeds a pre-set limit. Although this is a much more sophisticated idea than the widespread habit of filling the intercoo-

ler intakes with dry ice (as most turbo teams have been doing for qualifying), the tanks are not big enough to provide the cooling throughout a full race distance. Long nose-cones were fitted for Zandvoort: they had to be strengthened when it was found that they were flexing at high speeds.

On Saturday afternoon, Piquet and Patrese took it in turns to drive the T-car, which was fitted with a special "qualifying" engine using a larger turbocharger unit. There was a major panic in the Brabham pit after the Sunday morning warm-up when Patrese's race engine (fitted overnight) developed a serious oil leak, while Piquet's engine was changed when he found that the T-car had more power than his race chassis.



FERRARI

126C3/067 : Patrick Tambay (F)
126C3/068 : René Arnoux (F)
126C2/065 : Tambay T-car
126C3/066 : Arnoux T-car

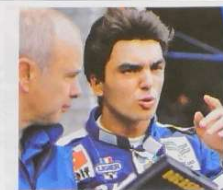
With Arnoux suddenly ahead of his team mate after the Austrian GP, it was he who was allotted the third C3 as his 1-car, Tambay being given the C2 (ie the reverse of the situation at Osterreichring). There were no important alterations to the specifications of the T3,

although on Saturday morning Tambay tried a modified suspension geometry layout, with the lower rear wishbone attached to a lower position on the upright, thus altering the roll centre. C3/068 still has the transmission with a lighter modified casing. On Friday afternoon an engine problem forced Arnoux to switch to the T-car, which then developed ignition trouble. He was in more engine trouble on Saturday, when either an electrical or engine problem affected the power of the engine. When he tried to switch to the T-car so that he could qualify that instead, the left turbo broke.

LIGIER-COSWORTH

JS21/04 : Jean-Pierre Jarier (F)
JS21/03 : Raul Boesel (BR)
JS21/02 : T-car

Chassis 02, the one damaged in Boesel's major Hockenheim accident, has been repaired and brought back into service as the T-car. It still has one spherical pressure container for each pair of wheels instead of the latest "one per wheel" arrangement. Boesel's 03 was being tried in practice with a simple engine cover (no air



boxes) and a monster rear wing with lateral "ears," while Jarier preferred to stay with the airbox-equipped engine cover, the long rear bodywork and a much smaller rear wing.

RAM-MARCH-COSWORTH

RAM 01/3 : Kenny Acheson (GB)

The singleton RAM 01 sported a revised pull-rod arrangement in the rear suspension. Acheson had a minor accident at the chicane on Saturday morning, which he blamed on a brake failure, and yet again the young F2 driver failed to qualify. It should be noted that his fastest lap was more than two seconds slower than that of Cecotto, who also failed to make the cut.



OSELLA-ALFA ROMEO

FA1E/03 : Corrado Fabi (I)
FA1E/02 : Piercarlo Ghinzani (I)

In spite of the presence, again, of celebrated mechanic Ermanno Coughi (who has been building Alfa engines until released for Zeltweg), only Fabi managed to qualify. The ancient and grossly overweight T-car had not been brought to the Dutch race.



Cockpits



LOTUS-RENAULT

94T/3 : Elio de Angelis (I)
94T/2 : Nigel Mansell (GB)
94T/1 : T-car

With a brand new chassi (no 3) at Zandvoort, the JPS team now has three of the latest models available: because of the summer holidays and subcontracting delays, it's taken three weeks to get it built up. On Friday de Angelis started practice with his regular no 1, but a fast-failing engine forced him to

take no 3. He decided that it was so good that he kept it for the entire weekend. All three 94Ts have been fitted with lighter half-shafts (a saving of 1.5 kgs per pair) and a revised "spaghetti" exhaust system ejecting across the small underbody profile; designer Ducarouge claims that these are more effective than the Renault system, and they're also three kilos lighter. Mansell switched to the four-blade "chip cutter" rear wing halfway through the untimed Friday session, and de Angelis followed his example in the afternoon. In a back-to-back test on Saturday morning it was decided, again, that the curious-looking device (which almost completely blocks the driver's rear view) gave a performance advantage. In the later timed session de Angelis spoiled his first set of qualifications because a leaky wheel rim allowed one tyre to go flat, and his chances of claiming fastest time for the day (thus repeating his Friday exploit) were completely frustrated when he was blocked at the chicane by Sullivan's Tyrrell.



RENAULT

RE40/05 : Alain Prost (F)
RE40/04 : Eddie Cheever (USA)
RE40/03 : T-car

The "03" T-car has been lightened, and now weighs in at the same figure as the two race cars. For Friday practice it was fitted for test purposes with the "spaghetti" exhaust system, last seen at Silverstone. It had been originally abandoned because it was suspected of having contributed to the team's overheating problems, but

these are now known to be the result of problems with the intercoolers. With no decisive advantage being gained from the old exhausts, however, the normal vertical "mortar pipe" system was refitted for Saturday. Having got his race car set-up for the circuit on Saturday morning, Prost as usual switched to the T-car in the afternoon, in order to spare the race engine, and concentrated on qualifying with that. Eventually, however, he went back to his race chassis in the final timed session because he considered the T-car to be handling appreciably less well than it should.



SPIRIT-HONDA

201C/6 : Stefan
Johansson (S)
201C/4 : T-car

Having informed the chassis number collectors among our readers after the Austrian GP of the complicated numbers game played by Spirit with their chassis, we are now informed that although the "race" car carries chassis number 201C/5, this is a mistake because it is, in fact, the sixth chassis to

have been built. The T-car still has the long wheelbase, but the bodywork has now been shortened at the rear. The first genuine "F1" (as opposed to F2-based) Spirit chassis is expected to be seen at Monza. Since finishing honourably at Osterreichring, the previously white Spirits are now painted in "official" Hondalivery of red, white and blue. It seems that the fuel injection system has also been revised, although the secretive Japanese engineers would give us no hint about the nature of the changes.

THEODORE-COSWORTH

183/17 : Roberto
Guerrero (COL)
183/18 : Johnny
Cecotto (YV)
183/16 : T-car



Nothing new for Zandvoort, although Guerrero didn't use the additional bodywork around the

radiators. As at Zeltweg, Cecotto was slower than Guerrero; he again failed to qualify.

MC LAREN-COSWORTH & TAG PORSCHÉ

MP4-1E/01 : Niki Lauda (A)
MP4-1C/02 : John Watson (GB)
MP4-1C/07 : Lauda T-car
MP4-1C/04 : Watson T-car
MP4-1E/02 : incomplete T-car

Although outwardly very similar to the MP4-1D "laboratory" car used at Silverstone and illustrated elsewhere in this edition, the "E" development of the TAG/Porsche-engined turbocar is considerably different. The "E/01" and "E/02" are based on the former "C/05" and "C/06" monocoques respectively, being the result of a design study which was only started by John

"E/01" was about 95 per cent complete, so Lauda tried the Cosworth-engined car during the first hour of the session while the finishing touches were given to the turbocar. The second turbo-equipped chassis stayed untouched, having been brought along mainly as a source of spares if required. While the basic tub is much the same as the earlier MP4s, and the rear suspen-

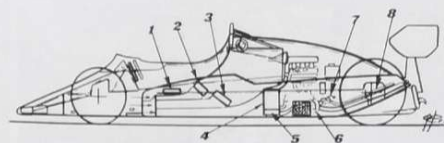


Hans Mezger



Barnard one week before the British GP in July. The drawing office work took only ten days to complete, and the fabrication was hurried through in three weeks; preferring to get as much work done "at home" as possible, the truck bringing the two "E" cars did not leave Woking until Thursday afternoon.

sion is of the reinforced type already seen this season, a lot of careful work has gone into the installation of the ancillary parts with which the TAG/Porsche 80 degree V6 is equipped. Interesting technical novelties include the 100 per cent electronically operated fuel injection (similar to the Honda system), which operates without a high-pressure pump; the twin ignition system, with two entirely separate circuits; and the adjustable turbo wastegate, operated by the driver from the cockpit using compressed air. Lauda quickly decided to stick with the turbocar throughout practice, and by Saturday morning he wanted to race it in spite of various problems, among them poor



SIDE VIEW OF THE MP4-1E

(1): electronic fuel injection "black box" (one per cylinder bank).
(2): oil cooler.
(3): water radiator.
NB: the air flow through (1), (2) and (3) is kept entirely separate,

as shown by the arrows.
(4): air-to-air turbo intercooler.
(5): air-to-water turbo intercooler.
(6): turbocharger unit.
(7): waste-gate pressure control, adjustable from the cockpit.
(8): long (tuned) exhaust pipes.



throttle response, barely adequate braking despite carbon fibre discs, and a lack of downforce at the rear (which will be cured for Monza with a fashionably big rear wing). The Porsche "brass" at Zandvoort was

led by company president Peter W. Schulz, competitions department chief Helmut Boff, sport director Peter Falk and engineer Hans Mezger, who has been responsible for the engine itself.

Cockpits



TOLEMAN-HART

TG 183B/04 : Derek Warwick (GB)
 TG 183B/03 : Bruno Giacomelli (I)
 TG 183B/02 : T-car

Following tests at Monza, the Tolmans have now been fitted with an

important modification in the form of a cockpit-adjustable boost control, operated by a prominent yellow tap mounted to the left of the steering wheel. As at Zeltweg, Warwick had a modified Hart engine using a British Holset turbocharger, and a similar unit was fitted to Giacomelli's car for Saturday's practice.



WILLIAMS-COSWORTH

FW08C/07 : Keke Rosberg (SF)
 FW08C/08 : Jacques Laffite (F)
 FW08C/09 : T-car

Nothing new since Austria: designers Patrick Head and Frank Dernie were at home, concentrating on the Honda-engined FW09 which they hope to have ready in time for the European GP at Brands Hatch on September 25. The Williams chassis was particularly uncompetitive at Zandvoort, which doesn't suit the car at all.

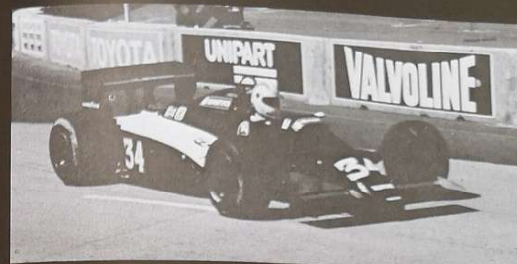
TYRRELL-COSWORTH

012/1 : Michele Alboreto (I)
 011/5 : Danny Sullivan (USA)
 011/4 : T-car

Since being tested at Osterreicherung and elsewhere the interesting new composite 012 car has been



fitted with stronger wishbones, a wider (by 1 cm) track, and a conventional rear wing instead of the swept-back device which created so much interest at the car's announcement. To overcome the car's "nervous" instability over bumps, Alboreto was trying softer springs in qualifying: designer Philippe is already working on a completely revised suspension to overcome the problem in time for Brands Hatch.



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Design Giulio Lazzotti

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