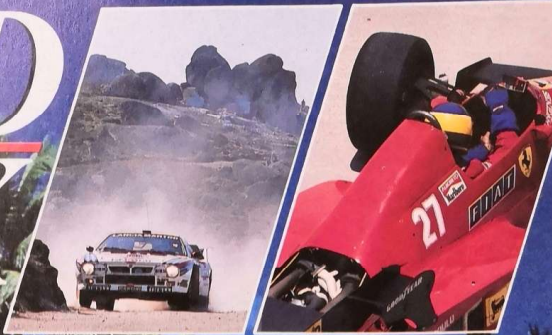


GRAND PRIX

INTERNATIONAL



NIP AND TUCK

Portugal Rally '84

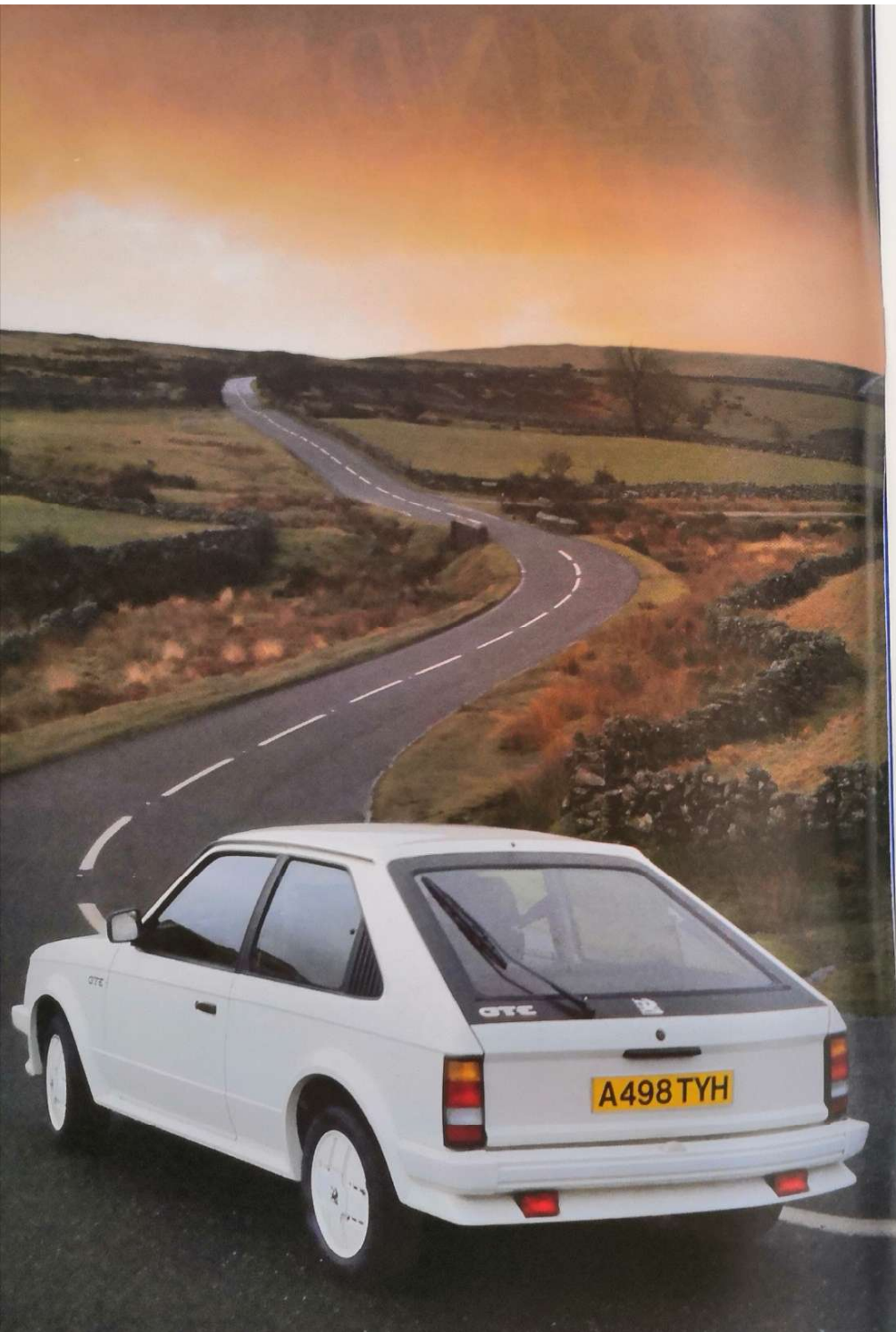
McLAREN'S LEGACY

Marque of Excellence

JAGUAR RULES

Miami Grand Prix





NOUGHT TO NAUGHTY NAUGHTY IN 8.5 SECS.

Most of us need reminding the speed limit on ordinary roads is still 60mph.

Astra GTE owners especially.

Under the bonnet, a 1.8 litre engine with Bosch LE Jetronic fuel injection produces 115 bhp.

Allied to a 5 speed gearbox, it takes the car from 0 to 60 in just 8.5 seconds.

And reaches a top speed of 116 mph.

That's a lot of power for the rest of the car to live up to. But live up, it most certainly does.

The GTE boasts a suspension that incorporates anti-roll bars, uprated springs and gas pre-loaded shock absorbers.

The limpet-like road holding is aided and abetted by ultra low profile tyres on 5½" alloy wheels.

Its ventilated front disc brakes received top marks in a Group Test report by Motor Magazine.

Equipped though it obviously is for even the most enthusiastic of drivers, from the inside the GTE is a model of respectability.

There's thick carpeting, tinted windows and Recaro front seats. Plus a radio/stereo cassette player complete with four speakers.

As for the dashboard, Motor Magazine remarked, 'the Astra's display wins by a mile, both aesthetically and functionally.'

With all that going for it, how can anyone accuse the GTE of being naughty?

On the contrary. It seems to us to be setting a perfect example.

PERFORMANCE FIGURES FROM MOTOR MAGAZINE



BACKED BY THE WORLDWIDE RESOURCES OF GENERAL MOTORS

VAUXHALL ASTRA GTE.

Better. By Design.

C O N T E N T S

COVER PHOTOGRAPHS
Stéphane Foulon / DPPI

PAGE 8

PADDOCKS

PAGE 12

THIRD DEGREE

IMSA's chief executive, the thoughtful John Bishop, resents any accusations of being protectionist and says he wants to see IMSA cars racing against their Group C 'cousins.' Nevertheless, he won't budge from his existing technical baseline.

PAGE 14

A CLOSE SHAVE FOR 4WD



In a memorable battle with the might of Lancia, world champion Hannu Mikkola and his 4wd Audi hung on tooth and nail to take a narrow 27-second win over Markku Alen on the Portuguese Rally. The Italian marque came mighty close, though...



PAGE 48

ARI'S GENTLE WAY OF WINNING

Ari Vatanen and Jean-Pierre Nicolas make a delightful team: a Finn from the North and a Frenchman from the Provence South. Ari aims to restore his reputation — and Peugeot stands to share the glory.

PAGE 54

THE FRENCH OFFENSIVE

The next big rally is the Tour de Corse. It may be too much to hope that Peugeot's 205 Turbo 16 can win its maiden event, but it will be a stern test for Jean Todt and his men.



PAGE 58

WILD IN THE STREETS

A Jaguar sports car victory after so many years; a world champion's sensational come-back; a flat-out and the presence of Juan-Manuel Fangio.

PAGE 84

MORE THAN A NAME

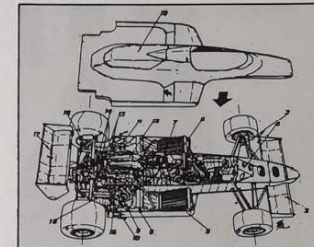


Times, and people, have changed at McLaren since the death of Bruce McLaren in 1970. We went for a visit, and found them working as hard as ever — on a Sunday.

PAGE 90

TECHNICAL EYE

Taken apart in drawings, the Renault RE 50 and the Honda turbo-engined are the subjects of the moment. Both could be in the battle for the 1984 constructors' crown.



PAGE 94

THE BLUE(S) IN HIS SOUL



Everyone in F1 knows that it's best not to be too close to Guy Ligier when he throws a wobbly. But under the balding head and behind the flattened nose is a great French character whose life story reads like a novel. It's a tale with as many highs as lows.

PAGE 100

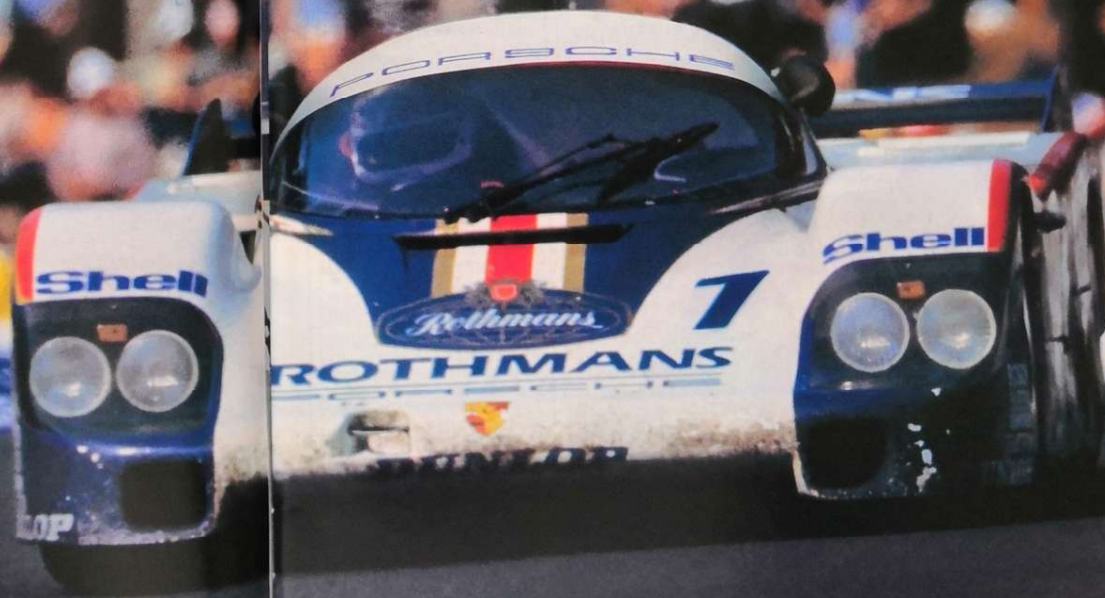
POST SCRIPTUM

PAGE 102

COMING UP MARCH 29 IN THE NEXT GPI...



Rothmans World Leader



CAMPIONI DEL MONDO DI DURATA '82
AUTO DA CORSA DELL'ANNO '82

○1° Silverstone, Inghilterra ○1°, 2°, 3° Le Mans, Francia
○1°, 2°, Spa, Belgio ○1° Fuji, Giappone ○1° Brands Hatch, Inghilterra.



ROTHMANS
PORSCHE

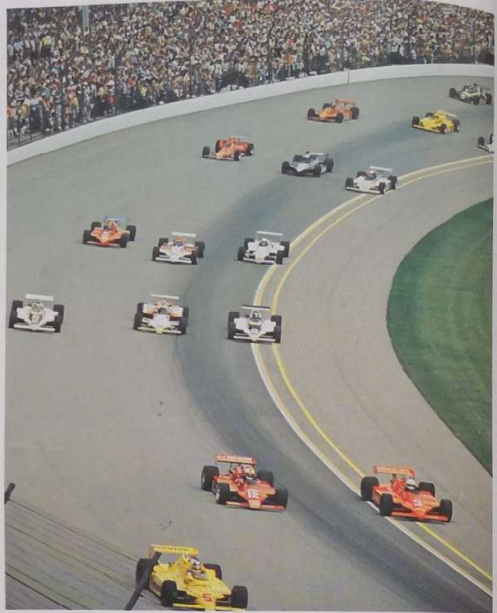
DR JONATHAN GETS SECOND RAM-HART

Although he had been widely tipped by several sources (including GPI!) to be joining Tyrrell, reigning European F2 champion Dr Jonathan Palmer signed last week to drive a second RAM-Hart in all 16 of this year's world championship GPs. Palmer's unrewarded ability has attracted the attention some weeks ago of prize-winning *Daily Mail* sports writer Ian Wooldridge, who wrote an eloquent plea for financial support in his column. Among those who came forward was the flamboyant industrialist Peter de Savary, who financed (and captained) Britain's yacht *Victory* in last year's America's Cup races. "I had to go and visit Brian Hart to persuade him to make enough engines for our team," said a delighted Palmer. "Both Brian and my team boss, John Macdonald, have worked incredibly hard to make this possible.

Palmer joins RAM with three years of F1 experience as Frank Williams' official test driver. The team's other driver, Frenchman Philippe Alliot, will have the first all-carbon fibre chassis for Rio and Kyalami, but Palmer will have equal equipment in time for the start of the European season. The late announcement of Palmer's appointment, and of a second driver at Osella for some European races, means that as many as 28 F1 drivers will be in contention for the 26 starting places on some GP grids during the summer.

CART INTO GEAR

The domination of the British-built March chassis looks set to continue, in spite of opposition from rival marques. Even the well-budgeted Indy-car teams which can afford to build their own chassis have bought March's latest product, the 84C, for back-to-back tests. It is



The Indianapolis '500' is the showpiece of CART's schedule

reported from Phoenix (Arizona) that Rick Mears, the 32 year old Californian who leads Roger Penske's team, has shattered the lap record by no less

Andrea de Cesaris attempts to come to terms with the problems of being a designer. Ligier's pencilmen need have no cause for concern at present!



than 1.4 seconds using both his brand new Penske PC12 (built at Penske's Poole, Dorset, facility) and the team's new March.

Also seen at Phoenix was 1978 world champion Mario Andretti, trying the latest Lola chassis which he will be driving for film star Paul Newman's Budweiser beer sponsored team. Another ex-F1 "name" who has done some impressive times is Colombian Roberto Guerrero, who broke the lap record on the Laguna Seca road circuit using the Cotter team's new March. Roberto and his American wife Katie are now living in San Diego, incidentally.

There could be a major shock for the American Indy-car establishment on the way from Britain, where McLaren International will be deciding, probably within a month, whether to build an Indy car. "We have the finance and the technical ability to do it," says McLaren director Ron Dennis: "at present, unfortunately, we don't have the capacity." Sadly, the 1984 Indy-car season will start without one of its most experienced competitors, California-based Mike Mosely, 37, died on March 22 when he was burned to death following a road accident involving the truck in which he was a passenger. Tall and bespectacled, Mosely had failed only once in the past 15 years to qualify for the Indy '500' and has twice suffered serious injuries in the race. His best '500' result was 3rd, in 1979, but he had qualified 2nd fastest in 1983, driving a March for the Kraco team.

AN AUSTRIAN FOR OSELLA

Too late for inclusion in our F1 Guide (GPI75) came the news that the Austrian F2 driver Jo Gartner will be joining the Osella-Alfa team for six European GPs later this year.

Gartner, aged 29, hails from Vienna, where he runs a Citroën dealership. A popular character off-track, he has a reputation for an attacking style behind the wheel, and in four F2 seasons has taken several useful places, including a win at Pau last year. He will be sponsored in F1, as in F2, by the Austrian cigarette brand Milde Sorte.

It has been confirmed by Enzo Osella that Piercarlo Ghinzani will lead the Turin-based team throughout 1984. The latest FA1/F chassis, designed by Tony Southgate, was due to be tested with Osella's first turbo Alfa V8 engine, at Balocco, as this issue of GPI was going to press.

The sponsors of Ghinzani's car will again be Kelemäta (herbal cosmetic products), joined for '84 by Carvico (a textile manufacturer) and Sol, a producer of oxygen and other gases.



Teo Fabi: his place in the Brabham F1 team will be given to brother Corrado when his CART commitments take precedence

FABI(S) FOR BRABHAM

As forecast in GPI 75, the driver of the second works F1 Brabham-BMW alongside Nelson Piquet in 1984 will be called Fabi. Officially, that's all we know at the moment because the shrewd owner of the team, Mr Bernard Ecclestone, simply nominated "Fabi" as his driver when entries closed at FISA's Paris HQ on February 28.

There was a little clarification of the matter in London last week when Teo Fabi, elder of the two brothers, returned from testing the latest Brabham BT53 at Kyalami. "I expect to be driving for Brabham in all the races that don't clash with my Indy-car commitments," he said, "but we will probably take another look at the situation halfway through the season." In order to avoid any possible FISA ban on non-American

drivers who race in CART's Indy-car series, Teo plans to race with an American licence this year.

Teo also explained that his younger brother Corrado, the 1982 European F2 champion, would take over the Brabham F1 place when he wasn't available. In the first half of the F1 season, this means that Corrado can expect to be stepping in for Teo at Monaco, Dallas and Brands Hatch. FISA was due to decide this week whether both Fabi brothers would be permitted to score points in the 1984 world championship.



Spirit: a tiny team busy surviving. Chief designer is ex-McLaren man Gordon Cop-puck

WITH MAURO IN SPIRIT

One of the final details of the 1984 F1 season fell into place last week when the identity was revealed of the sponsor whose support will carry Mauro Baldi back into F1. Testing at Silverstone, Baldi's all-red Spirit-Hart 101 carried decals for Australian, the Italian-based company

Intriguingly, "Australian" brand sports clothes (the company specialises in trendy tennis gear) are manufactured in Italy and in There is also news of two would-be Spirit men. Sweden's Stefan Johansson, last year's choice to race the all-new Spirit-Honda turbo in F1 (and someone who certainly did not deserve to have been left in the cold for 1984), has signed to compete in all rounds of the Japanese F2 championship this year. He will drive a new March 842 with works-supplied Honda V6 engines. The car is sponsored by Yokohama tyres. Meanwhile, the lamentable ongoing saga of Signor Fulvio Ballabio, Spirit and the admittedly appropriate sponsorship of Mickey Mouse comics has come to an end. Meeting in Paris, the members of a FISA committee reached the same conclusion as most of those who had watched Ballabio's ham-fisted efforts with the Spirit during testing at Rio and elsewhere: they decided he wasn't yet ready for F1, and declined to let him have a Super-licence.

THE INDY ALTERNATIVE

In the French town of Vichy last week, Guy Ligier unveiled his latest 'baby,' an Indy-car sister for his new F1 car which will race in the North American CART (Championship Auto Racing Teams) series. In two weeks time the Ligier will be at Long Beach to race on the splendid California street circuit, where the muffled turbo-growl of its Cosworth DFX engine will be in tune with many other similar powerplants. In view of the spiralling costs of staying in Grand Prix racing, it is a relief to know that an honourable way out remains. In the case of Guy Ligier, it has also been a sideways step, one which only a man of his vision and foresight would consider. He is at present the only constructor to be genuinely involved in both 'schools' of racing.

For many of Ligier's former rivals, CART has provided a providential escape route. And while one must never crow too soon, it can surely be assumed that some of the talented European "exiles" will one day be able to match the sort of success that came the way of March Engineering in only two seasons of Indy-car competition. Teddy Mayer, one of McLaren's founder members, and Morris Nunn, whose own F1 team no longer exists, eagerly await adventure in a new sphere, while John Barnard — already the holder of an award for Indy-car innovation — could soon have another potential winner of the '500' ready on his drawing board.

The whole phenomenon, let's admit, could snowball. Drivers such as Teo Fabi — who left F1 only to return to it as his second string — will have company from other European "refugees" this year, including Derek Daly, Danny Sullivan, Bruno Giacomelli and Roberto Guerrero.

Gone are the days of the off-set chassis in Indy racing. In 1984 the road circuits will outnumber the traditional ovals, a tendency which does nothing, however, to detract from the rightful place of the super-speedways — with Indianapolis itself to the fore — as the centrepiece of the show. Driving standards constantly improve, and so too does the technical standard of the competition machinery.

CART has every reason to be proud of what it has achieved. But its masters must be ever aware of the threat of price escalation. It is a factor which can strike down the sport just as quickly as it may, briefly, have bolstered it.



Stefan Bellof and Tyrrell: a promising trial at Ricard

STEFAN BELLOF TRIES A TYRRELL

British F1 entrant Ken Tyrrell's attempts to fly the patriotic flag, reported in GPI 75, have not lasted very long. At the Ricard tests which ended on March 21 it was being widely rumoured that the team might be recruiting a German driver (and sponsor?) following an impressive showing in the latest version of the Cosworth-powered Tyrrell 012 by Porsche endurance star Stefan Bellof.

"I thought that Bellof showed a lot of talent," confessed Tyrrell last week. "It was obvious to me after Stefan had driven our car for an hour and a half that he ought to be in F1 already."

Only a couple of weeks ago it seemed that Bellof - who had been tipped to join the Arrows-BMW F1 team before Christmas - would be concentrating on F2 races in 1984 when he wasn't committed to Rothmans-Porsche. But F2 entrant Willi Maurer, who also acts as business manager to the 27 year old German, made the surprise decision last week to abandon all his F2 links in order to find an F1 place for his protégé.

Unless sufficient cash is found very quickly, however, Ken Tyrrell says it is likely that he will be calling on Danny Sullivan to join Martin Brundle in the team for the first two GPs of the year, Brazil and South Africa. Sullivan has already signed an Indy-car contract in the USA to race a March 84C for New Jersey-based entrant Doug Shierson.

In the Ricard test, incidentally, Tyrrell number 1 driver Martin was 0.3 second slower than Bellof, whose best lap of the short circuit was 1m 06.3s. "But if Martin had been at Ricard to persuade me to let him race, I'm sure he would have done a 1m 05.2s lap," said Tyrrell mischievously...

McLAREN'S MP4-2

By the time this issue of GPI is on sale it is expected that the new McLaren-TAG/Porsche F1 car will have been tested by both Niki Lauda and Alain Prost at the Paul Ricard circuit. The first chassis was completed on the night of March 6/7, at well after midnight, so please understand why the smiles on the faces of Lauda and Prost look slightly forced in our photo...



Don't be misled by the similarity to its predecessor: the latest McLaren MP4-2 is in fact a big change

McLaren designer John Barnard says that virtually everything on the MP4-2 is new, but the car is so similar in shape to the original MP4-1 (itself a three year old design) that one must assume that Barnard got it right first time. "Aerodynamically the new car is a good improvement," says Barnard: "we also have a new rear suspension to fit in with the new aerodynamics, and to save some weight."

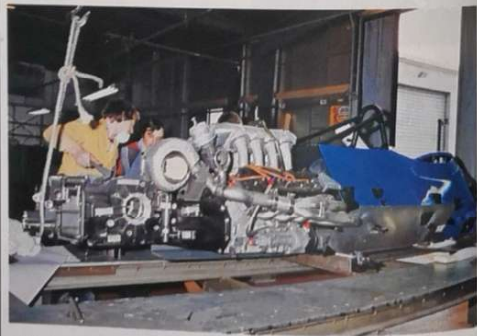
Although the car is longer, the carbon-fibre Hercules-manufactured chassis is virtually the same as the original MP4-1, which was designed to allow for such changes. An interesting feature is the adoption of McLaren-designed brakes to take advantage of some new carbon-fibre ventilated brake discs. These discs are manufactured in France by SEP, about whose products Barnard has been enthusiastic for over a year. In spite of some recent setbacks

in testing, team chief Ron Dennis has high hopes for the TAG turbo engine, made in Stuttgart by a team of Porsche engineers under the supervision of Hans Mezger. Dennis points out that the German V6 is the only racing engine that was purpose-designed for a Formula 1 application. Although notably economical, it will (of course) have water injection, and the special Shell-made fuel will be chilled, to reduce its volume, before being put into the regulation 220-litre tank.

LIGIER'S INDY-CAR

Having hastily completed their new LC 02 Indy-car, a group of Ligier men left their HQ in Vichy last week in a big hurry. They were headed for the West Coast of the USA, where American driver Kevin Cogan anxiously awaits the arrival of the new car, which he hopes to drive in the Long Beach Indy-car Grand Prix on April 1.

In view of the high CART weight limit (680 kilos, compared with 540 in F1) it has not been necessary to use carbon-fibre for the new car. Instead the design team supervised by former chief F1 mechanic Jean-Claude Guenard has fallen back on a development of the two year old JS21 aluminium honeycomb chassis, a narrow tub designed for ground



effects aerodynamics, which are still permitted (in restricted form) under CART rules. Team manager Dany Hindenoch recognises that the Long Beach race may prove to be an over-ambitious target for an all-new team with a car that didn't even exist on paper five months ago. A heavy test programme at the Phoenix oval track is planned for subsequent weeks, with rounds two and three of the championship (Phoenix on March 15 and Indianapolis itself on May 27)

THE MOST IMPORTANT IMMEDIATE OBJECTIVES.

Unlike previous Ligier racing cars, the LC 02 carries the initials of Ligier himself and his new partner, American Mike Curb. Best known as a major producer of Country & Western records, Curb has other business interests in movies and TV. But he is also extremely busy at present with the Republican Party as a major fund-raiser for President Ronald Reagan's re-election campaign.

Quite an interesting partnership when one recalls the active political support which Guy Ligier gave to the election campaign of his left-wing buddy François Mitterrand in France's last presidential elections...

BALESTRE HOLDS COURT

Addressing a Press Conference in Paris on February 27, Jean-Marie Balestre sent sales of a new French book about F1 finances ("Des Bolides en Or," reviewed in GPI 75) to a new high by announcing that lawyers had been instructed by the FIA to sue the author, Jean-Pierre Dubreuil. When the book arrived in our office for review (along with several other publications), we accepted it in good faith and aired our feelings about it in order to keep our readers informed. We found it interesting because it revealed some of the means by which certain per-

sons had managed to get themselves into positions of some importance. In this particular case, Jean-Pierre Dubreuil made no secret of his approach; he was a newcomer to something which he intended to show up as being scandalous.

BUSY SCHEDULE FOR GOLF 2

Swedish driver Kalle (say "Shal-lay") Grundel had his last outing in Portugal with the old-style Golf GTI in which he had put up such a great show on his "home" rally a couple of weeks earlier. Starting with the Tour de Corse he will have a brand new Golf 2, fitted with the same 8-valve engine as the earlier car, and weighing the same, but fitted with revised suspension.

Grundel has already tested the new car at the Nürburgring, achieving lap times a clear 20 seconds better than before. He hopes to have a competition version of the latest 1.8-litre 16-valve GTI engine homologated in time for some of the end-of-season rallies, and will be doing a European championship programme in the meantime. There is to be a Group A 4wd version of the Golf 2 for 1985. Not surprisingly, Grundel hopes to be the driver chosen by the VW factory to run it in next year's a major events.

WITH THANKS

GPI wishes to acknowledge the kind co-operation of Michelin and the Du Buot publishing house in Paris for permission to reproduce a number of maps in the Formula 1 Guide published in our last edition. The maps of Belgium, France, Monaco, Britain and Spain are Michelin copyright, while du Buot supplied those for Brazil, San Marino and Italy (Kummerly & Frey), South Africa (Ravenstein), Canada (Rolph McNally) and Detroit and Dallas (Wagner).

TOYOTA: RELIABILITY FIRST

The Japanese Toyota company plans a relatively relaxed world championship programme of rallying this year. The Celica Turbo made its first appearance since the 1983 RAC Rally in Portugal last week, and will be going on to compete on the Safari (in April), where there will be three cars, for Waldegaard, Eklund and Munari.



degaard and Eklund. Toyota Team Europe, run from Cologne by Ove Andersson, will end the season with the RAC Rally.

An all-new 4wd Toyota rally supercar is presently being designed in Japan. It will have nothing in common with the existing Celica, which despite its extremely powerful 16-valve turbo engine is unable to compete against the superior traction of the Audis and Lancias on European roads. Nevertheless, the Toyota still has a fair chance of success on African events, which is why the Japanese engineers are concentrating on extracting maximum reliability from the conventional design of the Celica. The East African Safari is undoubtedly the most important event of the year for Toyota, and Waldegaard has been in Kenya since January, with Eklund having joined him



You read about it two weeks ago in these pages, now you can see it. The 4wd MG Metro 6R4. Its V6 mid-engine design promises to make this car a worthy opponent for the Peugeot 205 Turbo 16

for a week before going to Portugal. With no fewer than five other factory teams intending to make the trip south for the Safari, such preparation takes on unusual importance.

GUY EDWARDS IS A BANDIT

Normally the above headline would guarantee a writ from good ol' Guy, that most sensitive (and business-like) of racing drivers. Happily, on this occasion both Mr Edwards and his ever-vigilant lawyer will have to grin and bear it, for it was announced in London last week that Guy would be one of four drivers on the two-car team of private Porsche 956s sponsored in all 11 of this year's world championship endurance races by Skoal Bandits, an American-manufactured "smokeless tobacco."

The programme is a development of the one begun at Le Mans last year, where John Fitzpatrick entered one of his two Porsches in Skoal's green and white colour scheme. The team's four regular "Ban-

dits" - presented in deliciously French style by a top Paris agency on the press release with all the SURNAMES in CAPITAL LETTERS - will be Guy EDWARDS and his long-time racing partner Rupert KEEGAN, plus British veteran David HOBBS and Belgian Thierry BOUTSEN.



Edwards and Keegan

US Tobacco Co of Connecticut, which reported more than \$380 million in sales last year. Smokeless tobacco, the company's principal product, is sold in small pouches, like tea bags, which contain moistened tobacco. The ever-dwindling number of nicotine addicts are invited to "hold the pouch between cheek and gum, releasing the tobacco flavour (sic)."

Back in the days when Ken Tyrrell first branched out as an F1 constructor with the 001, blue was his colour.



JOHN BISHOP



There seems to be a strong possibility that some of your top IMSA entrants will be coming to race at Le Mans and elsewhere in Europe this year. Would you describe that as a vindication for your approach?

Definitely not! This year's Camel GT series has 17 rounds, several of them in the months of June and July. I'm quite worried, because we could find ourselves with smaller grids. IMSA has some important tasks ahead of it this year, for example we're going to bring racing back to Watkins Glen.

Last year, at Daytona, you were quoted as saying that IMSA could claim a true clash of manufacturers, Aston Martin vs Jaguar, while in Group C it was just Porsche vs Porsche. What do you really think of the world endurance championship?

I don't believe that it's a true world series: it's only a European series. With the exception of Mazda, all the manufacturers involved are European. Furthermore, Group C is not a racing formula, it's a technical research centre. Throughout the pages of motorsport history you'll find tales of fine human achievement, not reports of how so-and-so managed to save a couple of quarts of gasoline. Anyway there's no point in trying to get the American racing public excited about a racing category based on fuel consumption... Take the Indianapolis "500" or NASCAR's Daytona 500, our two greatest national races: the drivers give their very best, without ever taking a look at the fuel gauge. In Group C the drivers can't afford the luxury of driving flat-out. And you can't overlook the incredible cost of those electronic engine management systems which the teams must have to reduce consumption.

The concept of saving gas is obviously the right way to go, but it is essential to have a "heroic" aspect to the races if we're going to attract the spectators to our tracks.

What do you think of FISA's approach to Group C?

FISA must be made aware that in order to have a truly "world" championship it is essential to have American car builders and sponsors. In fact I believe that they should restrict their activities to setting up the ground rules and issuing competitors' licences, but not to get involved

THIS QUIET MAN MUST BE TAKEN SERIOUSLY. DON'T BE CONFUSED BY THE SLEEPY BEAR-LIKE APPEARANCE, NOR BY HIS RELAXED MANNER. JOHN BISHOP, PRESIDENT OF IMSA - THE AMERICAN SANCTIONING BODY WHOSE SUCCESS HAS OVERSHADOWED FISA'S OWN WORLD ENDURANCE CHAMPIONSHIP - IS A TRUE VISIONARY. EUROPEANS TEND TO REGARD IMSA AS A CLOSE-KNIT GROUP OF AUTOCRATS, UNWILLING TO OPEN THE DOOR IN ORDER TO LET THEM INSIDE. INDEED, SEVERAL ATTEMPTS TO BRING FISA AND IMSA TOGETHER HAVE ALREADY PROVED ABORTIVE, AND THE CLASHES WITH PORSCHE OVER NEW RULES ARE LEGION. YET NONE OF THIS SEEMS TO HAVE ANY EFFECT ON BISHOP...

Interview by Didier Brailon

with the promotional side of their championship. To do that they need a Bernie Ecclestone, and they don't have one...

Does that mean that you believe that IMSA could undertake the promotion of a substitute world endurance championship?

Not at all, I have no ambitions at all in the area. I guess that our promotional activities are much the same as FISA's, but at least our technical regulations are more attractive. We now have support from Chevrolet, Ford, Buick, Mazda, Jaguar and many others. As a result, IMSA racing is relatively easy to promote commercially.

If I accused you of being anti-

Porsche, how would you react?

I would say you were completely wrong. However, we have no intention of letting IMSA racing fall into the hands of just one car builder. We are extremely proud to have created a set of regulations which has permitted a large number of different cars to produce very similar performance using production-based engines which are available to private entrants.

But if you look at the IMSA race results over the past few years it would appear that the Porsche 935 is a car that has been made available to a large number of private entrants!

Yes, that's true. IMSA needed Porsche over the course of the past few years, but only because the 935 was the only "ready to race" car on sale. As of now, times have changed; you can go right out and buy a competitive Chevrolet V8 for less than 20,000 dollars.

Coming back to Porsche, were you worried last year about the 956?

How could I be worried about a car that doesn't comply with our IMSA rules? Porsche has fallen into line by building the 962, a car that has a steel rollbar, pedals inside the front axle line and a single turbocharger.

Didn't you just try to use the "safety" aspect in order to discourage Porsche from racing the 956 in IMSA events?

No. In this country you have to look ahead and take a lot more precautions than you do in Europe. When you have a serious accident over there you can say that it was "just one of the risks of the game," or point out that "the driver had gone over the limit." Then it's forgotten. Here, that sort of attitude is indefensible.

Porsche got thrown out of the Can-Am at the end of 1973, and then they were banned from Indianapolis before they'd even raced there. Is it fair to accuse the USA of being protectionist? Or are Americans afraid of the competition being too stiff?

I cannot speak for my country in general terms, but as I recall, the Porsche Can-Am car and the Porsche Indy engine were outlawed by changes in the rules. Here at IMSA there has never been any rule change. So I don't feel that we're being protectionist. You have to be careful not to get too political. That's a journalist's trick. All that we want is a series of competitive races which satisfies the drivers, sponsors and organisers. Anything else takes second place.

You met (FISA) President Jean-Marie Balestre at Daytona. What do you think of him as a person?

He's a leader on a world scale. He has the experience and the temperament. Running FISA requires political qualities and a wide knowledge of European motorsport. I don't have either of those things. However, Jean-Marie Balestre must face reality: to base a set of technical regulations on fuel economy is a fundamental error. I am convinced that he is well aware that our regulations are more sensible. □

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WORLD RALLY CHAMPIONSHIP - P. 105A

A FANTASTIC SHOW! EVERYTHING THAT COULD HAPPEN, DID, AND THE PORTUGUESE ROUND OF THIS YEAR'S WORLD RALLY CHAMPIONSHIP WILL BE REMEMBERED AS ONE OF THE TRULY GREAT MOMENTS OF RALLYING HISTORY. AUDI EXTENDED THEIR STREAK TO A THIRD STRAIGHT VICTORY, BUT LANCIA CAME TO WITHIN A HAIRBREADTH OF THE IMPOSSIBLE - WINNING ON GRAVEL, AND FOR ONLY 27 SHORT SECONDS DEFEAT WOULD HAVE TURNED TO TRIUMPH.

by Cyril Frey

A CLOSE SHAVE FOR 4WD

At the end of the Portugal Rally, one thing was in everyone's mind: the superiority of the Audis with four-wheel drive over the more conventional Lancia Rallies had been sorely tested - with the Italian cars having the best of it. Of course, particularly mild weather spared them from mud, and the undeniable high quality of their new Pirelli tyres helped compensate for the Lancia's mechanical handicap. The exceptional skill of their drivers, with Markku Alen at the forefront, accounted for the rest. If we start looking for lost seconds, it was a puncture on the all-tarmac first leg that cost the Finn his victory. On gravel, their performance was impeccable. In addition, as already shown last year, the reliability of the Lancia 037 turbo engine was superb. Flexibility and power remained its major qualities. It is left to the imagination what such a car might be if it were equipped with four-wheel drive... His hands worn raw after an enormous effort, Alen told anyone willing to listen that in 1985 he must have a four-wheel drive.

'I MUST HAVE A FOUR-WHEEL DRIVE' - ALEN, HIS HANDS WORN TO THE BONE

The perfect harmony which reigns in the Italian team between Markku Alen and the triumvirate Fiorio/Pianta/Russo would lead us to believe that Alen will get his wish, from Lancia. The prototypes of a car destined to debut in 1985 are already under study in Turin. Alen has seen one, and hopes to test it during "recce" for the upcoming 1000 Lakes Rally.

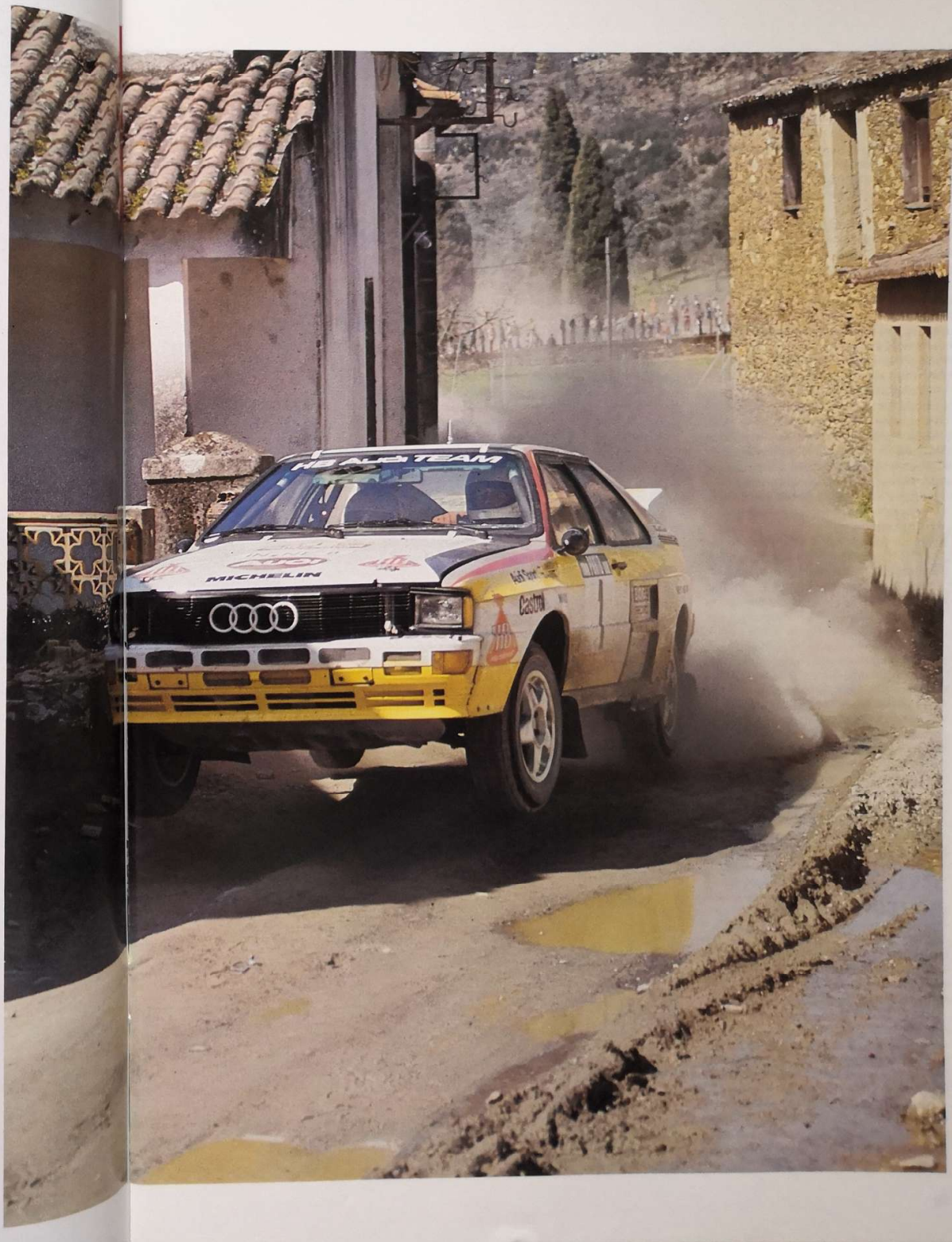
The third round of the world championship began in a predictable manner. Lancia dominated the first leg on tarmac. Henri Toivonen, the newcomer to the Italian team, was leading the pack in spectacular form when, during the sixth stage, he got carried away in a power slide and wrecked his car. His eyes glistening with disappointment, Henri could but watch as Alen, Biasion and Bettega carried the Lancia charge onward to Povo, finish of the first section without him. Suddenly, Biasion/Bettega were leading with the closest Audi, driven by Mikkola, 145 seconds back after 15 special stages. Not surprising on asphalt where Lancia traditionally dominates. Or so one would think. Indeed, the mighty Walter Röhrl might have given the Italians a hot time of it during that first day. This year's "Monte" winner was in fact the only member of the Audi team to keep pace with the Lancias. With the next three legs to be contested on gravel, some 76 per cent of the overall rally course, Röhrl's tenacity seemed to presage a German victory. But no one's perfect - not even Walter. His concentration lapsed coming out of the eighth stage. His car's suspension was damaged, putting him at a disadvantage. For Lancia, the sky was the limit. The next day, Alen set off to reclaim the lead from his teammates Biasion and Bettega. Mikkola, for his part, on more favour-

able terrain, began to shave the seconds off the front runners' lead. Finishing only 1 minute behind Alen, once again the leader, at the end of the leg. For another thing, Blomqvist's own troubles had put Hannu Mikkola in a difficult position. On the shoulders of the reigning world champion, all of Audi's hopes were firmly set. A single slip, and Lancia would be out of reach. Any attempt to play it safe was out of the questions as well. Mikkola had to attack. Slowly, the third act in this movable drama began to take shape, although less so than the previous day. Thanks to a propitious wind, dust was still an insidious enemy to one and all alike. It had to be counted on and dealt with. On the side of Audi, crafty Christian Geistdörfer, Röhrl's navigator, tried every trick in the book and then some to see that Mikkola, seeded 4th after the second leg, would not have to wade through the dust of 3rd seeded Biasion. The official one-minute delay between each contestant's beginning of a stage wasn't enough in itself. First, Hannu Mikkola showed up at the starting line without a helmet or safety belt: "Give me just a minute to get ready, in the interest of safety!" Request granted. Biasion was already far down the road when Mikkola took off. A little later, Röhrl pulled up ahead of time. He was given a two-minute penalty, but allowed to start before Mikkola - who he graciously let go by after the first few kilometres. And so on, such that the best Audi was always able to keep out of the worst of the dust raised by the third Lancia. At day's end in Viseu, Mikkola was in the lead, 43 seconds ahead of Alen.

THE LOCAL POLICE WERE THROWBACKS TO THE DAYS OF SALAZAR

The next day, it was apparent that the two runs at Arganil (56 kilometres each) would decide the rally. As things turned out, Markku Alen and Hannu Mikkola would do a remake of their epic confrontation in 1978, when Markku won. Arganil One: Alen makes scratch, 33 seconds ahead of Mikkola. Only 10 seconds now stand between him and Mikkola in the overall standings. Going to 9 seconds after the brief Candosa stage. Back to 11 after Lousa. Arganil Two: Mikkola wakes up. And the "oldman" of the three-man Audi team explodes into action. The same fellow, who was forced to follow Blomqvist and Röhrl at Monte carlo, who some think is on the downhill side of his career, and who is said to be more and more interested in family life than in motorsport, turns the rally on its head. This man, Hannu Mikkola, beat by more than 30 seconds Alen's time for the second run. All records were shattered, with even Markku beating own time. He's now in 2nd place by 4 seconds. Yet victory, who seemed at last to be smiling on Italy, again turns her face to Germany. And Hannu Mikkola would begin to slip further out of Lancia's grasp. Soon, after Candosa Two

Hannu Mikkola, reigning world champion, pulled victory out of the fire for Audi. A magnificent achievement. (Photo: André Marzoli)



and Lousa Two, he was 19 seconds ahead. Now, with only two special stages left in the rally, one of which was 20 kilometres long, everyone was on pins and needles to see this wild week through to its finish. It was not the moment for one or the other to flinch and they both knew that they would be pushing themselves and their machines to the breaking point. In addition, something as simple as an inopportune puncture could easily put Mikkola out of the running. Not to be caught counting on luck, Lancia was doing everything humanly possible to maximise their chances. In short, the atmosphere on the course was electric.

Three hours from the start of the last stage, Fiorio sent Alen up in a helicopter. At the same time, his mechanics drove a practice car over the rally route just before the roads were closed to traffic. Having had his last look at the terrain, Markku Alen flew back to the rest stop at Tomar – and the beginning of the end of the rally. The last hours crawled by for some, raced by for others. And at the finish line, as Markku Alen charged across the last few metres, time stopped. But it was already too late. At Coruche, Mikkola was again faster. Like the year before, he had once more won the Portugal Rally – although this time by only 27 seconds! A heart-stopper ending to a thrill packed rally.

Although logical, Audi's victory was no less only by the barest of margins. Lancia, for their part, were still smarting from "Monte", where Audi's domination of the rally had been so complete that the entire Italian team had been thrown into paroxysms of pessimism. Even to the point where Cesare Fiorio had been said to be contemplating abandoning the world championship until 1985. Yet, Alen's, Biasion's, Bettega's, and Toivonen's (as well) performances in Portugal have rekindled the fires of hope. We all know how big a part luck plays in the Safari, where Lancia will be competing next month. However, the men from Turin will try to leave as little to luck as possible. The Tour of Corsica in May would seem to be a natural for Lancia. Acropolis? Well, we've now

THREE HOURS BEFORE THE LAST STAGE, FIORIO SENT ALEN ALOFT IN A HELICOPTER

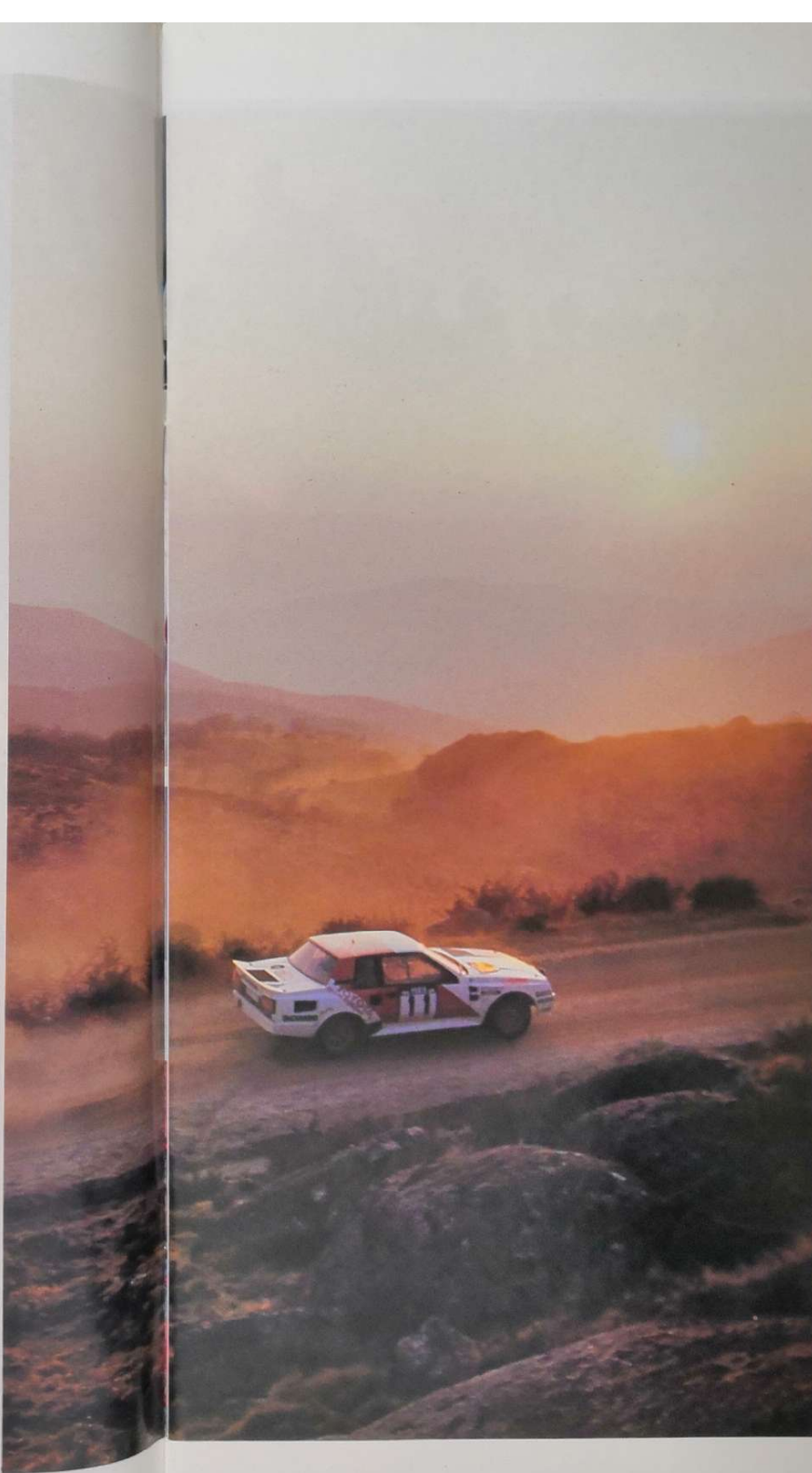
seen that nothing is impossible. There are still plenty of opportunities left, food for the energies and ambitions of Fiorio's men. Portugal may have been a defeat, but it nevertheless gave the team a definite boost. And put their minds at rest as to the value of their cars. Perhaps it was this very dissatisfaction that provoked a scene on the first morning of the rally at the end of the Sintra loop. At the finish of the tarmac stage, Fiorio asked the organisers to check the conformity of the Audi Quattros' front-wheel arrangement. This long standing feud dates back to the decisive 1983 San remo Rally. It would appear to have flared up again.

According to the rules, a vehicle's wheels are not allowed to extend beyond the limits of the bodywork at the top of the wheel wells, measured by dropping a plumb line from this point across the wheel rims. If the lower part of the wheel extends beyond the bodywork, however, which is the case with the Audi because of the very pronounced negative camber of its wheels, this is allowed. On this point, Cesare Fiorio and Roland Gumpert were in agreement as of the last BPICA meetings held this winter. When the scrutineers checked the Audis, during the first day of the rally, they found nothing to say as to the top of the wheel. That the bottom slightly toed out was also normal. Yet, the Italians were saying that it was just before the cars were inspected that the Audis had been modified to meet the specs. On the other hand, Roland Gumpert, who denies any last-minute modification, sees this incident as further proof of Fiorio's fear in the face of the Audi's excellent performance on asphalt. "We must have been going a little too fast for his liking. He needed some excuse fast. All I have to say is that before you go sticking your nose in other people's business, you'd better be sure your own house is in order".

Not far from the finish of the last Monte Carlo, one of our colleagues who is a specialist in F1, had a chance to witness a strange scene at the last Lancia service stop. Light-weight exhaust pipes were taken off the car, replaced by heavy-weight ones. Then the water injection system was topped up to overflowing. Everyone knows something about fiddling the rules, about subtleties – just look around...

This first day's incident nonetheless gave Gabriele Cadrinher, the Italian engineer from FISA, a chance to forget problems concerning conformity of the F1 fuel used. Side by side with Fiorio at San Pedro, he could at last relax. And what might have otherwise spoiled the atmosphere at the Portugal Rally, ended up being brushed aside as mere technicalities and political posturing. After all, these was the battle between Alen and Mikkola to think about. In any event, the general public doesn't care much for these high level quarrels, which most people associate more with F1 than with rallying. In Portugal, this is especially true. The fans turn out in droves, and aren't always the best behaved. Indeed, they mass along the special stages, in the most spectacular spots – which are often the most dangerous as well – even sometimes spilling into the road itself. It's just one more thing for the drivers to worry about. Mikkola's opinion: "The spectators are crazy. Around every corner, you never know when you're going to see who knows how many of them milling around on the road. The day someone goes off the road, there'll be 20 dead". For his part, Alen says: "The biggest problem is the fans. Even if Nini Russo flies reconnaissance from his helicopter and warns me where I have to watch out. But since they're everywhere... For another thing, what with the wind they don't hear the cars coming. More than once I practically had to stop to avoid running a few down, then shift into first, sound the horn. It's mad.

The Finn Juha Kankkunen – a rising star. But this year, his Toyota Celica Turbo took a real beating on the Portuguese gravel. Prudence in Kenya! (Photo: DPPI)



Next year, they'll have to send an advance team 20 minutes ahead of the first car to open the way, like in Finland and the RAC. It's the only thing to do." The organiser Cesar Torres doesn't hide his pessimism on this subject. "There's no way you're going to change an entire nation. The Portuguese are this way, what do you want?"

Alas, crowd control is a black spot on what was otherwise a well-organised and exciting rally. And by the way, the police could use a little controlling themselves. The local peace officers, holdovers from the Salazar era, still have a few disturbing habits. We might mention among other incidents that a photographer from the French agency DPPI was clubbed because the vantage point he had chosen to take his pictures from didn't agree with an over zealous gendarme. In addition, the reporter sent by Grand Prix International Magazine was held at gun point. The spot he had chosen to park his car, not far off from the Lancia service area, was poorly chosen, or so another of these "friendly" police officers said. Needless to say, this reporter decided not to make an issue of it, which unfortunately meant he missed that particular part of the event. It would seem that no police force has a monopoly on stupidity.

'OVER AT LANCIA, THEY SHOULD FIRST SEE THAT THEIR OWN HOUSE IS IN ORDER' – GUMPERT

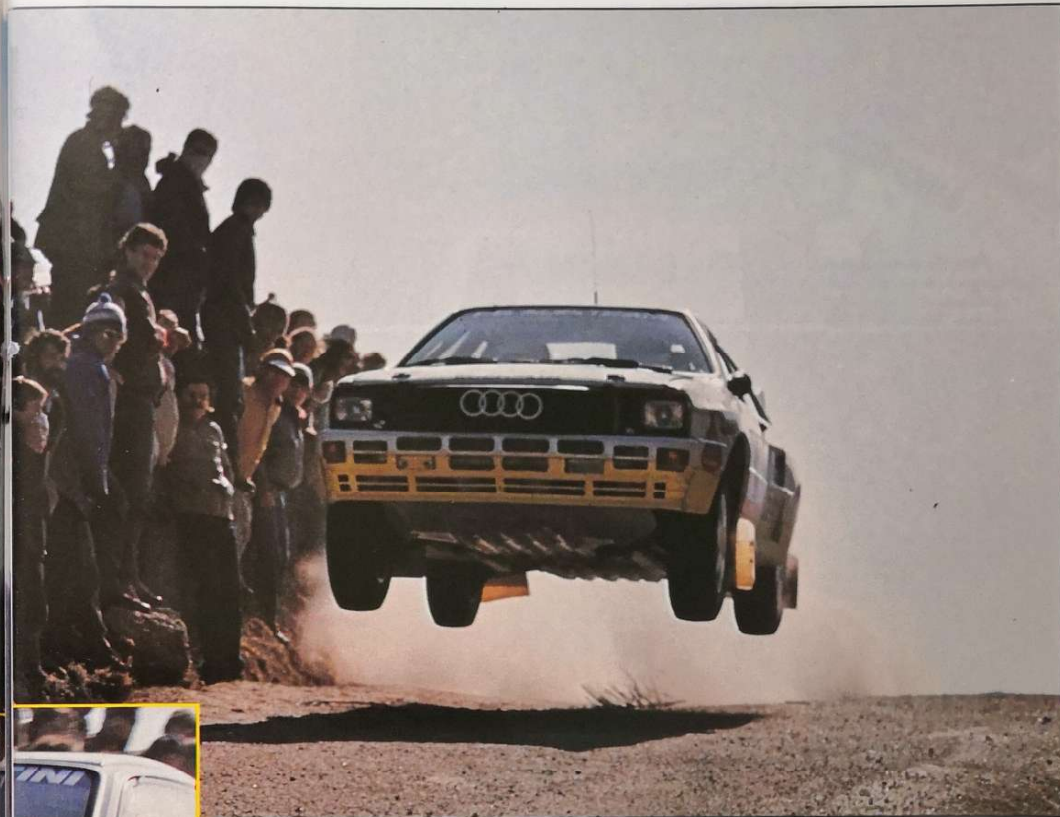
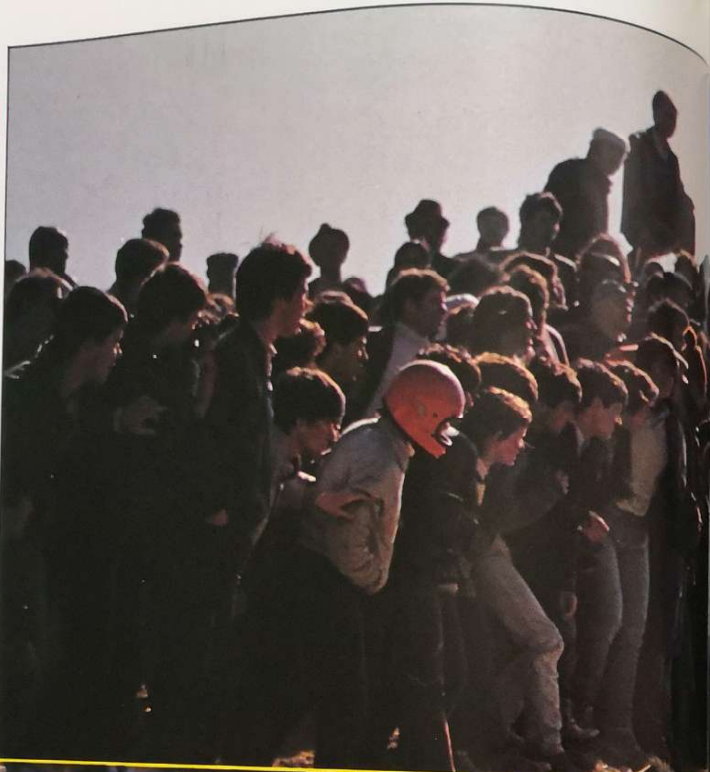
This doesn't mean that this tense climate prevails in every province of Portugal. No one can deny the charm of the people and the natural beauty of the countryside. Still, this land hasn't been spared the ravages of inflation, corruption, and political instability. Ten years of democracy have not yet succeeded in transforming Portugal into a modern state. Perhaps even more shocking: some people regret the dictator Salazar! Another national passion is soccer. Remember Benfica! Yet with the rally booming along, and in spite of a considerable soccer calendar, still some 250,000 fans turned out for the Sintra leg alone!

Even though a money loser financially, the rally has considerable prestige internationally, which allows it to benefit from government subsidies, amounting to 65 per cent of its budget. That is, 35 per cent from the Ministry of Tourism and 30 per cent from the cooperative Vinho do Porto, the rally's principal sponsor.

A bit farther to the south, the next round in the world championship will be taking place in Kenya. And the duel between Audi and Lancia could spread with Opel, Nissan, and Toyota coming into the fray. However, if Audi's streak is to continue, what with Röhrli winning in Monte Carlo, Blomqvist in Sweden, and Mikkola in Portugal, then it should be Audi's fourth driver on the Safari – Michele Mouton isn't saying no. □

4 RUN FOR THE MONEY

After they'd had enough of flogging it through the Portuguese countryside, Attilio Bettega (Martini-Lancia) on the one hand, Walter Röhrl (HB-Audi) on the other, settled down to see their teammates, better placed in the standings, through to the finish. This way, Alen (Lancia) and Mikkola (Audi) were able to make the best of the strategic opportunities that arose. At the start of the rally, it was still anybody's game. And Röhrl, strangely



enough, managed to roll his car. "On a left-hand curve, we sailed along for 20 metres or so up on two wheels, without the car being able to decide which way it would go. I was starting to push it, back down please. Next thing, we were on our roof." That's Walter Röhrl's side of the story. But he still had a laugh for us: "At Monte Carlo, I won, but I wasn't satisfied with my driving. Here, and in spite of the worst, even the roll, I'm very happy with myself. Funny, huh." Bettega doesn't ask himself so many questions. And at the Tour of Corsica, he'll be charging. (photos: André Marzoli).

ALLEN OR MIKKOLA?

People have been asking themselves the question for a long time. Markku Alen



(in helmet) and his co-driver "Kiki" suffered every kind of mental anguish, but never flinched. Perhaps they can get some satisfaction from knowing that Hannu Mikkola and Hertz suffered as well. But once these two had stepped onto the podium, you could see they were pleased with the reversal inflicted on Markku – and on Lancia. Alen dreams of the day he'll have a four-wheel drive. Could that be what he's telling Roland Gumpert (in beard), the boss at Audi Sport? Probably not. Alen tells us, "At Lancia, everything runs like clockwork. The organisation is fantastic, and Fiorio is always encouraging me to go faster, always faster. That's what I like to hear." Markku Alen took every kind of risk to keep up the pressure on Mikkola. His Lancia stayed the course, but at the end of the day, he was still 27 seconds short. Too bad. A nod of acceptance to the victor, then on to Corsica: "next time I'll be the winner." (photos: Reinhard Klein; André Marzoli).





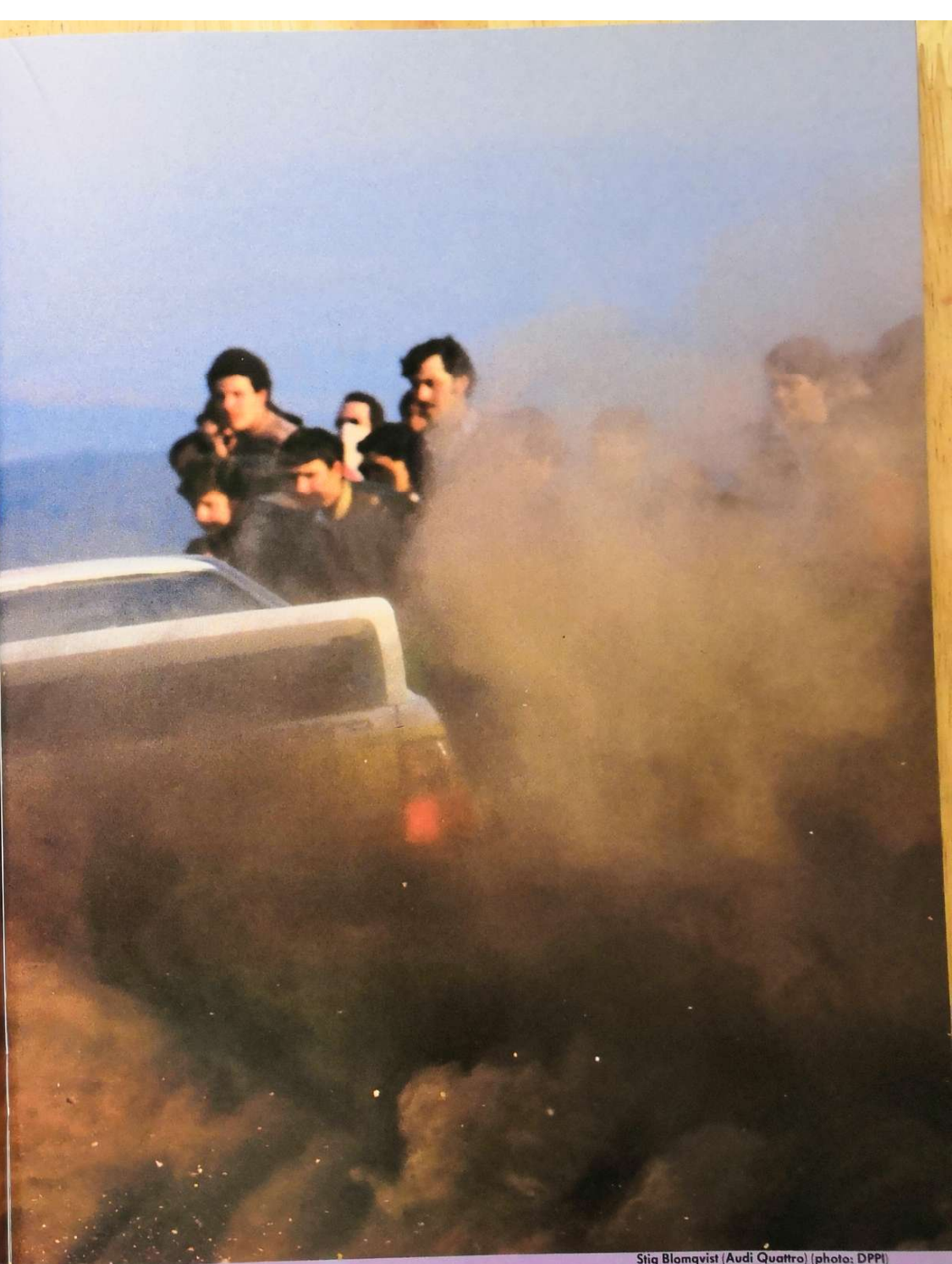
Stig Blomqvist (Audi Quattro) (photo: DPPI)

WITH BLOMQVIST OUT OF LUCK THIS WEEK IT SUDDENLY BECAME HANNU'S TURN TO WIN



Markku Alen (Lancia Rally) (photo: Reinhard Klein)

ALEN FOUGHT LIKE A LION. WATCH OUT FOR HIM ON THE SAFARI!



Stig Blomqvist (Audi Quattro) (photo: DPPI)

THE DUST HAS TURNED THE RALLY INTO ONE BID GAMBLE



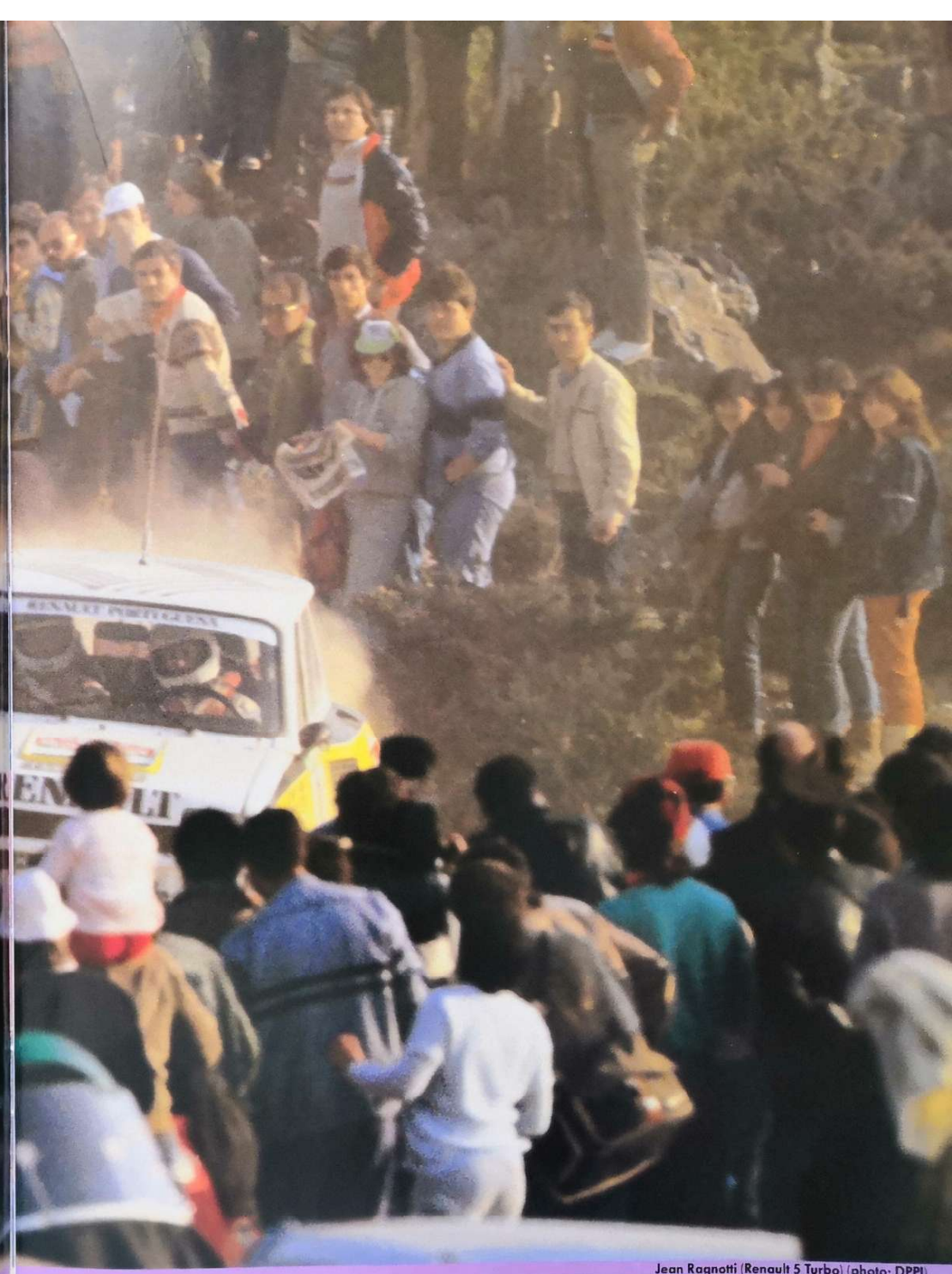
On the first stage (photo: Reinhard Klein)

SINTRA WAS THE WORST. ESTIMATES OF THE CROWD WERE AS HIGH AS 250,000



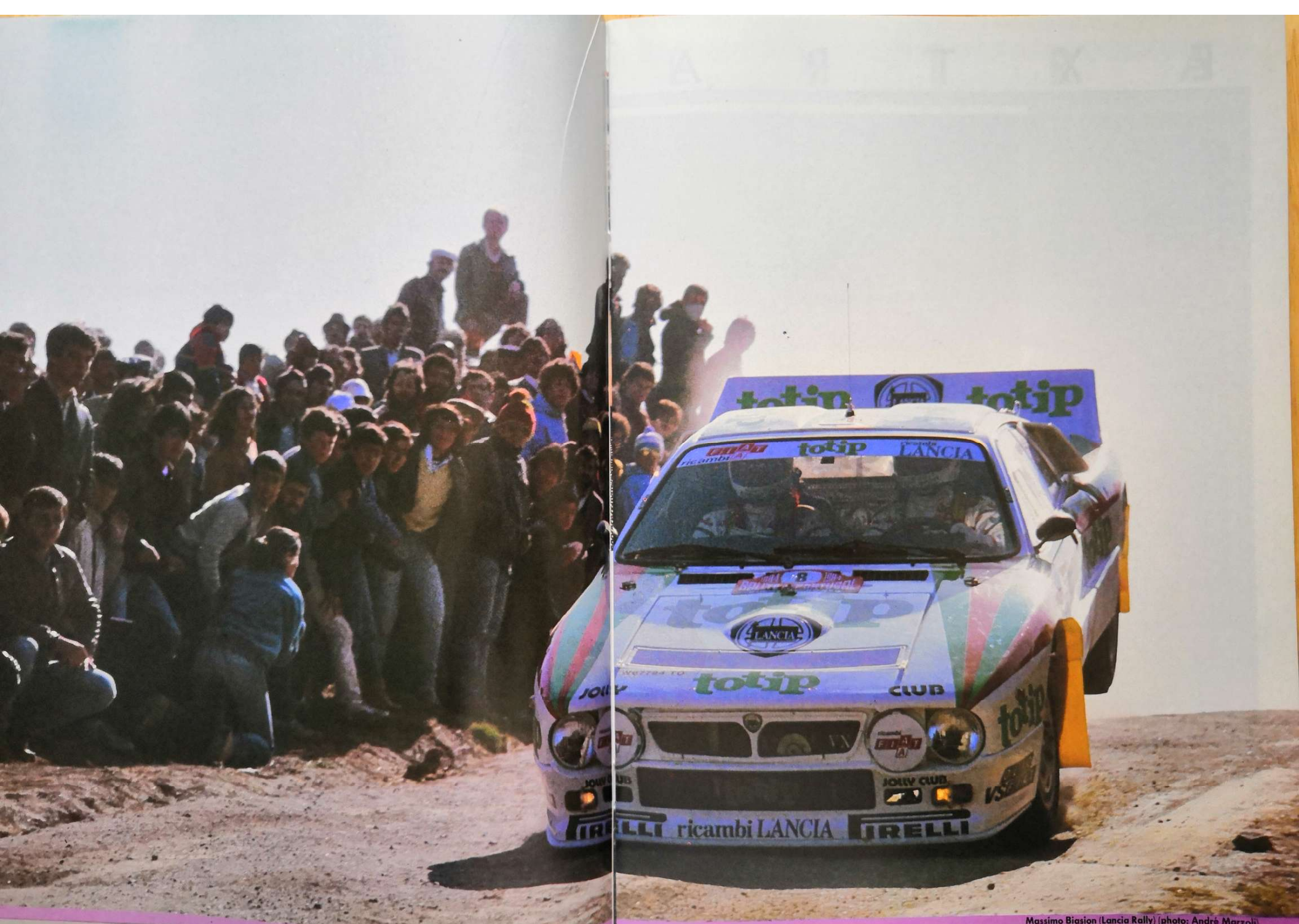
Markku Alen (Lancia Rally) (photo: DPPI)

I'M IN THE RIGHT PLACE WITH THE LANCIA TEAM. FIORIO ALWAYS ENCOURAGES ME TO HUSTLE



Jean Ragnotti (Renault 5 Turbo) (photo: DPPI)

I AM GIVING IT A REAL GO TO FIND OUT WHETHER THE CAR CAN TAKE IT ON LOOSE SURFACES



IT WAS A BIG SURPRISE FOR MIKI BIASION TO FIND THAT HE WAS IN THE LEAD

Massimo Biasion (Lancia Rally) (photo: André Marzoli)

SAD STORY

SAN PEDRO IS A LITTLE VILLAGE NOT FAR FROM LISBON, AND EVEN CLOSER TO SINTRA WHERE LORD BYRON USED TO GO FOR INSPIRATION. EVER SINCE THE famous "carnation revolution", April 25, 1974, the country has been enjoying democracy. A relief after 40 years of dictatorship. It was also at that time that the sumptuous villas which dot the hillsides began a gradual evolution. If they didn't lose any of their old-fashioned splendor, at least they changed owners. Nowadays, the state owns the noble houses of Sintra. While others have gone to ruin and are now inhabited by ghosts. Down in the valley, the San Pedro villagers aren't much bothered by what goes on in the hills, in the palaces of yesteryear.

On the other hand, a new race of princely cavaliers has come to the region. And once every year, they stop to rest their tired mounts in the shade of San Pedro's main square. But these are animals of a different hue: they breath smoke and fire and have the strength of hundreds of horses. These are the beasts of Lancia, who is in the habit of setting up their service area in San Pedro. Fought out on the burning-hot roads of the region, the first day of the Portugal Rally passes three times over the stages Lagoa Azul, Sintra, and Peninha. After each loop, the village chosen by Lancia resounds with the same nervous uproar. The scene is a modern operetta, played out by Italian mechanics, to the accompaniment of the whine of air-driven tools. On this particular scorched afternoon under a March sun, the performance is somewhat special.

From the start, just as everyone expected, Lancia has been stealing the show. Their newest recruit, the Finn Toivonen, has been having great fun, setting the fastest times on each of the first five stages. The man touted as the fastest, the most promising of world-class rallymen seemed to be making a stunning success of his debut with Cesare Fiorio. Around the Martini motorhome, as we arrived on the scene, however, there was a strange feeling. Men were walking around nervously. Giorgio Pianta, Lancia's chief engineer, Nini Russo, their chief mechanic, and Markku Alen, at the moment 2nd in the overall standings, kept going up and down the steps of the trailer. After a while, a sad face peeped out of a window - Henri Toivonen. Pianta gave him the high sign. A mechanic patted him on the shoulder. After a friendly nod, Alen set off for his car. He was leaving on the third loop. But Henri was staying behind. Suddenly, the situation was obvious. The sixth special stage had done him in. A few words came to us from the motorhome.

"I believe I've found the Lancia's limit." Coming closer to the trailer, we shot a glance inside. Fiorio was sitting there alone and



closed up. His face haggard, Toivonen decided to tell us about the events leading up to his demise. His voice cracked with emotion. "I think I made a mistake in the sixth stage. Satisfied with my times up until then, I had decided to stop pushing the car, and rather analyse its handling characteristics. To do that, I slightly changed my driving style. Going into a right-hand curve, rather quickly, I started to slow, and maybe I didn't accelerate again fast enough. The weight came off the rear wheels of the Lancia. The road had some loose gravel, and I went into a skid. I went off sideways for some 15 metres. Anywhere else and it wouldn't have made any difference. But right there, well,

there were these two walls and a very big tree. I shunted against the left rear-end of the car. It wasn't a very bad crash, but this car has all the drawbacks of Group C. Even a little accident can have serious effects." Henri bowed his head. In fact, his debut had been spoiled, by his own fault. And that was what was bothering him. No one dared grill him about his story, which he told over and over like a mea culpa. "I have no excuse. To get a chance like this, with such a great team, and to end up so badly. I never should have tried a driving trick like that around here. For another thing, I knew it was a dangerous spot. I'd lost all sense of reality, and was too overconfident. Never before had I driven



Henri Toivonen (photo André Marzoli)

such a great, car. I must have been crazy to try a trick like that."

For Lancia, the day before gravel stages, which weren't to Lancia's advantage to begin with, the lead Toivonen had built up was like manna from heaven. His accident and subsequent retirement gave Audi a needed boost. Moreover, the Germans would see their chances in the world championship improve. Fiorio knew all this. But what was his reaction? "He was disappointed, of course," recounts Henri, "but he wasn't going to kill me for it. I'll telephone him tomorrow, when he's at Povoia. We have to talk about the future. Nothing says I'll be at the Acropolis, now. As soon as I can, I'll get out of here. I don't have

the heart to stay." Henri shuffled off, his hands stuck deep in his pockets. And now they'll start to talk about how he hasn't won anything worth mentioning since the 1980 RAC. His only world championship victory. Nevertheless, he doesn't seem cursed, not yet. This prodigious young man knows he still has things to learn. Chalk it up to experience - the experience his rivals and elders already have. And in spite of this misfortune, and his visible melancholy, Cesare Fiorio is not too hard on the kid. "These things happen, unfortunately. And it happened to the car that was leading the rally with everything that means for all of us. Henri was certainly overconfident. He doesn't yet

know the Lancia well enough nor what to expect from it. And then, he had bad luck. When you go that fast, you're constantly in danger, everywhere, but you have to stay in control. At Monte Carlo, Röhrli shunted two or three times, but he never went off the road. This isn't going to have any effect on Henri's contract with us. He'll be at the Acropolis." The boss at Lancia is down in the mouth. He doesn't yet know that two hours later the lead Audi (Röhrli) will lose precious time repairing its suspension. Fiorio's smile will be back, when we see him again at Estoril. "We lost Toivonen, they're having trouble with Röhrli. That's one for each side." The rest you already know.

Cyril Frey



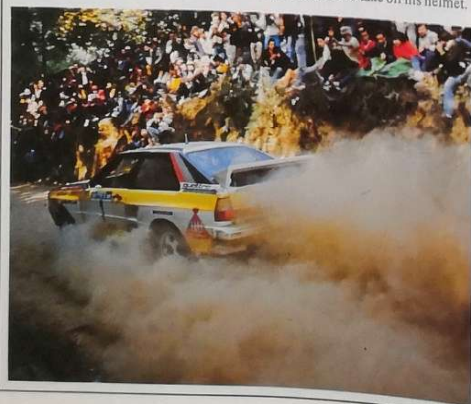
AUDI

1. Mikkola-Hertz (SF)
4. Röhl-Geistdörfer (D)
7. Blomqvist-Cederberg (S)
12. Van der Merwe-Boshoff (ZA)

While Blomqvist had been adding to his drivers' championship points score in Sweden in a couple of weeks earlier, Röhl had been sorting out new suspension settings on a long "reccé" in Portugal. The settings chosen are more or less those used on the Safari. The turbo 5-cylinder engine (running a boost pressure of 1.5 atmospheres and producing around 350 horsepower) has been fitted with a new, electrically operated wastegate by-pass valve to release any surplus pressure which may momentarily build up. Team boss Gumpert has now revealed some details of the

new handbrake system which will be fitted to the forthcoming Quattro-Sport: it is a split brake arranged to operate either the left rear wheel or the right, as required. Michèle Mouton was delighted with it in recent tests. A full range of tyres had been brought by Michelin: the TRX in S4, S5, S9 and S10 variations for dry tarmac. Their most popular rubber for loose surface conditions was the TRX M4 (soft, non-reinforced), M5 (hard, non-reinforced, and a winner here in '83), M8 (soft, reinforced) and M9 (hard, reinforced).

This was to be the German car maker's third consecutive victory of the year (and their second in the manufacturer's championship). Not everything was trouble-free, however, for after a good start on the tarmac sections Röhl managed to hit a rock when he let go of the steering wheel in order to take off his helmet.



Suspension repairs cost him seven minutes of penalty time. In spite of a puncture on the following day he started to make up places.

On Friday, Walter had another "off" and went end-over-end. The car briefly caught alight, and it was the end of the German's hopes for a finish. He blamed his hopes for a finish. He blamed his hopes for a finish. He blamed his hopes for a finish. He blamed his hopes for a finish. He blamed his hopes for a finish.

On the first day a fault in the electrical system forced him to modify his driving and forfeit a lot of time. On Thursday he had what he claimed was a minor bump which caused the suspension to collapse, jamming a wheel. It had

to be removed, and Stig completed the stage on three wheels, causing a certain amount of damage. On the following day he had a puncture and then retired for good after hitting another rock. South Africa rally champion Sarel Van der Merwe (who recently shared the winning March-Porsche at the Daytona 24-hour sports car race) complained about his Quattro's understeer before going off on the first day. Mikkola in the remaining works car went on to take a fantastic win: he had no problems at all apart from a minor accident on Friday and a few worries about his differential on the first run through Arganil on Saturday morning. Like everyone else on the Audi team, Mikkola was amazed by the performance of the Lancias on loose dirt surfaces. In deference to Michelin Gumpert couldn't say too much, but he was obviously impressed with the latest Pirelli tyres.

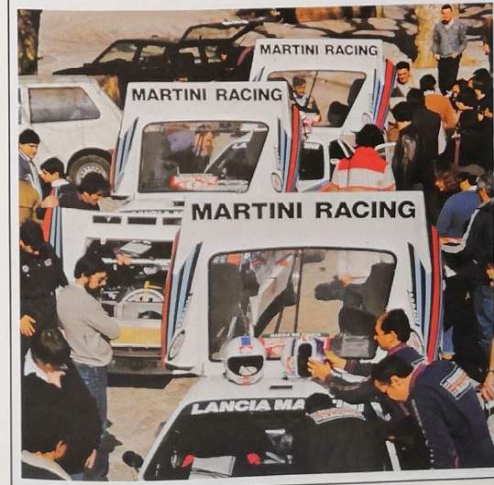
LANCIA

2. Alen/Kivimäki (SF)
5. Bettiga/Perissinot (I)
8. Biasion/Siviero (I)
10. Toivonen/Piironen (SF)
19. Rodrigues/Cotter (P)

With the exception of the latest "dirt" tyres, which were specially tested in the Buçaco region several weeks ago, very little has been changed on the Lancias since Monte Carlo. The tyres, which are appreciably taller, have made it necessary for the suspension settings to be re-thought, and according to the drivers these changes have made the car easier to drive. The new soft tyre replaces the SG35 and comes in two specifica-

tions: the "tipo 1" is particularly puncture-resistant, and both types are longer-lasting than their 1983 Pirelli equivalents.

"These new tyres inspire a lot of confidence," said Toivonen: "they're not necessarily quicker, but they're longer-lasting and give better grip." The Lancia engine is now developing between 320 and 330 bhp, but for Portugal the car was heavier (980 kg) because of the special equipment required to run on dirt. The Portuguese driver Antonio Rodrigues, who runs a Lancia privately, decided not to start the second leg in case it got damaged: he preferred to keep it for the coming rounds in the national championship. If he had finished in front of the Audis at the end of the first day, he would have been given



works assistance until the end. Instead, having lost 30 seconds in an expensive spin, he preferred not to continue.

Henri Toivonen was thrilled with his Lancia, but he was fated to have the problem which caused him to go off in the Sintra stage. Alen took over the lead only to be passed by the Jolly Club entry of young "Miki" Biasion, who probably found the pressure a bit too much for him. He certainly never expected to lead, even briefly, and on the following morning his car started to understeer alarmingly. With team leader Alen's hands full trying to match Mikkola, Biasion continued running to give his team mate the same sort of support that Röhl had tried to give Mikkola: he eventually finished 4th, but it was a performance worth remembering. Equally praiseworthy was Attilio Bettiga. He also took over the lead, giving Biasion a tough time, albeit friendly and sporting. Third place when added to his Monte Carlo performance (5th) looks really good for the future. Then there was Markku

Alen, who put on a great fight after a puncture on the first stage had cost him a minute. He was very unhappy about the terribly dusty conditions on Thursday, and worried about a growing differential. By Friday he was leading and had less to complain about since he was starting ahead of every other car, but by then the route was favouring the 4wd Audis: "it was like driving along a beach." On the second stage on Friday Lancia engineer/driver Giorgio Pianta suggested disconnecting the rev limiter in order to get a few extra revs (up to 9000 rpm), but Markku said he preferred not to risk a blow-up and refused. "I take risks in my driving. I've been flat out since the start. But maybe I just wasn't quick enough on the last two stages. Too bad. But I'm going to win in Corsica, that's for sure."

With Cesare Fiorio in overall charge, well-supported by Giorgio Pianta and Nini Russo, the Lancia machine runs impressively smooth. It's yet another advantage for their drivers.

TOYOTA

3. Waldegaard/Thorszelius (S)

11. Kankkunen/Gallagher (SF/GB)
This was the first official outing of the year for Toyota Team Europe under the direction of Ove Andersson and Henry Liddon. The engineers have been concentrating on the front suspension, always the Achilles heel of the twin-cam Celica Turbo, and after the rally had been going for some time Waldegaard was able to report that "it's now reasonably

good". The transmission differential has also been strengthened and the engine is still fitted with Nippon-Denso electronic fuel injection. The motor turns out 360 bhp but the weight (1060 kg) is rather more than on the RAC. The Pirelli tyres are the same as those available to Lancia. Juha Kankkunen, who is only 24 and hails from Jyvaskyla, the town where the Thousand Lakes Rally is traditionally based, made a better start to the



event than Waldegaard, who was having trouble getting brake pressure. At this early stage the Celicas on their "loose surface" suspensions were falling way behind the Lancias. By Thursday Kankkunen found himself in brake trouble too (broken caliper), a pretty nasty discovery considering that he was going downhill flat in fifth at the time!
On Friday his front suspension gave up the ghost in Marão and he had to

retire. Waldegaard too had front suspension trouble, then a puncture, and he retired soon after Kankkunen on Friday with a broken gearbox. With the Safari so close, these problems must be worrying for Ove Andersson, since the African terrain is expected to be equally damaging. Speeds in Kenya are unlikely to be quite as high as they were in Portugal, however.



NISSAN

6. Pitkanen/Harjanne (SF)

What do you do when your driver is suddenly unavailable on the day before he's due to appear and you still want to have your car competing on the event? It was exactly that problem which Nissan Europe boss Bill Blydenstein was faced with after Timo

Salonen had informed him that a nasty attack of sciatica had left him bed-ridden. Since the rules of the event allow an entrant to substitute thoughts were to call up Englishman Terry Kaby, but because all the pace notes had been prepared in Finnish by Salonen and his regular navigator

Seppo Harjanne it made much more sense to invite a Finn to take over. The choice fell on Erkki Pitkanen, a "B-grade" Finn. The car carried number 6 as planned, but started at no 16 on the road, between Woodner and Grundel. The Finn had a difficult time with the unfamiliar car on Thursday until retiring when the dif-

ferential broke in SS25 following other woes with the gearbox and suspension. Pitkanen is expected to be back with Nissan for the Thousand Lakes. By that time Nissan will have done the Safari with a team that includes Mehta, Kirkland and Salonen, hoping for yet another African victory.

RENAULT

9. Ragnotti/Thimmonier (F)

18. Moutinho/Fortes (P)

With all of Renault-Sport's rally personnel fully committed to the development of the new R5 Turbo it was Renault-Portugal which had officially entered Ragnotti's. French boss Patrick Landon turned out to supervise operations, having brought two mechanics from rally HQ at St Antony and also the two engine builders from Renault-Chartres. The engine in fact turns out around 300 bhp, and with the car set up for loose surfaces the weight is close to 960 kg. "Jeannot" Ragnotti hadn't been near Portugal for eight years and had been given a Renault R20 for his initial race, finding that it left something to be desired brake-wise. He had some brake and tyre problems on the first day of the rally with his "racer," but the real headaches were in store for him when the rally switched to dirt roads, where he had decided to give it everything he was worth in order to assess the car under unfamiliar conditions. They were also some rather unfortunate misunderstandings with Renault-Portugal which involved Ragnotti starting one stage with front tyres on the back and vice versa thanks to the non-arrival of a service truck. No sooner had the truck made belated contact than someone managed to grossly over-inflate the tyres, making the handling so alarming that Ragnotti was convinced that something was so seriously amiss that he actually went slow. Nevertheless, he plugged on to finish, taking 5th place in spite of a big slide in the ice on Arganil 1 early in the morning. In Portugal, however sunny the days, it can be bitter cold at nights. The Portuguese driver Moutinho had an excellent rally before having to retire on SS31 when his turbo blew.



VOLKSWAGEN

17. Grundel/Diekmann (S/D)

With the Golf 2 scheduled to compete in Corsica, this was the last official appearance of the factory-prepared and entered Golf 1 GTI. It was a painful event for Kalle Grundel, who was suffering very badly from a rib injury suffered in a big road car accident in Sweden one week before the start. In spite of some worries with steering and suspension he again walked it in Group B. It is worth reminding readers that Group A, which is basically for production models that are turned out at a minimum rate of 5000 per year, has a fairly free choice of modifications permitted to suspension, brakes and (to a lesser extent) the engine. In effect Group A is similar to the old Group 2, without so many alterations to coachwork. FISA's much-cherished Group N models must be pro-

duced in minimal annual quantities of 5000, but many fewer modifications are allowed: the class was very thinly represented in Portugal. It is in Group B, a class that Volkswagen won't be entering for the time being (in order to avoid unnecessary rivalry with Audi, its commercial "cousin"), that the rally supercars are found, machines that need only be produced in numbers of 200 per year and in which a "type evolution" process is allowed for a minimum of 20 very special cars per year. This is the very topmost category in which the winners are most likely to be found and comparable to the old Group 4 of two or three years ago. Group A is now attracting a representative group of amateurs and semi-professionals, more in fact than the much cheaper Group N.

OUTSIDERS

14. Santos/Oliveira (P) (Ford Escort RS)

Joaquim Santos, Portugal's national rally champion in 1982 and 1983, ran off the road in SS25 and had to withdraw. His navigator Miguel Oliveira also sponsors the car through the business which he owns, among them textiles and perfumery. Santinho Mendes, who was Portuguese national champion in 1980 and 1981, was unable to find a suitable car this year.



15. Woodner/Harris (USA) (Talbot Lotus)

Prepared in England by Talbot specialist Mike Little, Jon Woodner's car had 260 horsepower and a weight of 1050 kg. It runs on Michelin tyres. Jon plans to make an appearance on six European events this year, but this one ended when he retired on SS15.

20. Gooding/Jenkins (GB) (Vauxhall Chevette)

Already a veteran of two Lombard-RAC Rallies, 23 year old Russel Gooding is a Newport-based Welshman. Driving an ex-Pond Chevette, he has two encouraging RAC places (26th in '82, 23rd last year) to his credit. His Chevette now runs in Group B and produced around 240 bhp. He went on to finish 10th in spite of some minor problems, including one to his on-board navigation computer.



22. Ortigão/Batista (P) (Toyota Corolla)

The Portuguese crew brought their 16-valve Corolla home 2nd in Group B, not too far behind Grundel's class-winning VW.

24. Breyner/Vilar (P) (Audi 80 Quattro)

Like most competitors the young Portuguese driver's Audi had some suspension problems, which was entered in Group B.



27. Dorche/Thimonnier (F) (Citroën Visa)

Regardless of the woes that were to befall him (steering and suspension mainly) the Frenchman from Gap in the maritime Alps managed to get the car across the line 9th overall.

28. Grissmann/Pattermann (A) (Audi Quattro)

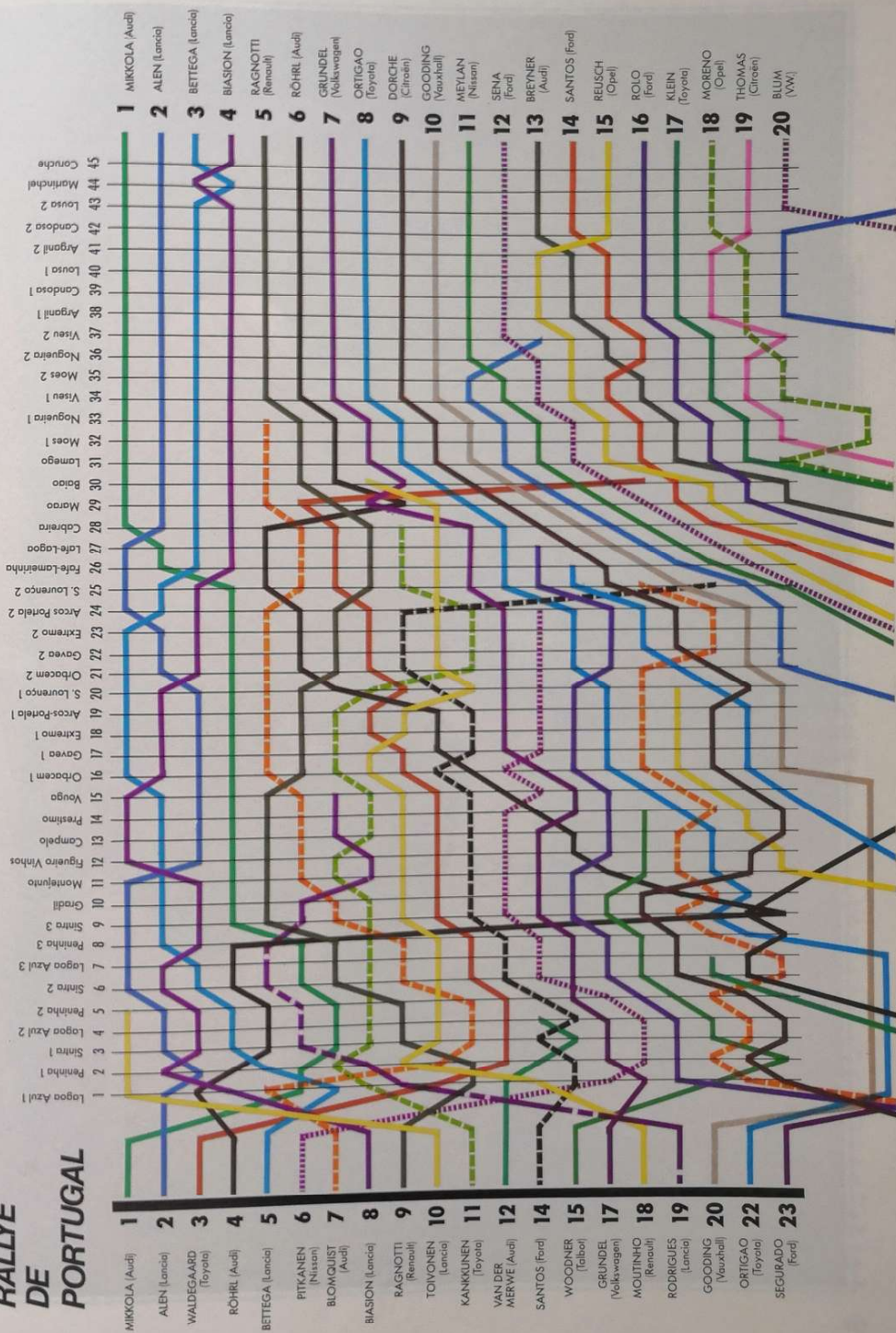
A former member of the Austrian downhill skiing team, Werner Grissmann and his Audi didn't get any further than the first special stage, preventing him from showing his prowess on a slippery surface.

29. Meylan/Bertozzi (CH) (Nissan 240 RS)

The Swiss-entered Nissan eventually came through to finish 11th, having overcome numerous suspension problems...



RALLYE DE PORTUGAL





In Sweden (photo) and elsewhere, Ari could often be found with his favourite car, the Ford Escort RS 1800. (Photo: DPPPI)

Family scene: Ari waits with his two little girls Ria and Tua (4 and 2 years old) for big brother Kim (11 years old) to get home from school. (Photo: David Winter)

ARI: THE GENTLE WAY TO WIN



WITH JEAN-PIERRE NICOLAS AT HIS SIDE, ARI VATANEN WILL BE DRIVING A WORKS PEUGEOT INTO THE FRAY OF WORLD CLASS RALLY COMPETITION. AT 31 YEARS OF AGE, THE FINN IS ALREADY A SAVVY RALLYMAN. BUT HE STILL HAS ALL THE ENTHUSIASM OF A FIRST-TIME DRIVER. AND IT'S SHEER STRENGTH OF CHARACTER THAT KEEPS HIM GOING – A TRIER AGAIN AND AGAIN.

by Cyril Frey

It was somewhere in Kenya, an April night in 1983. An Opel was bouncing along a treacherous track, brushing aside the thorn bushes that were choking the road at every turn. Ari was sweating it out in the overheated driver's compartment of his Ascona 400. This would be the car's last rally. He had decided not to push his luck, and the Safari Rally seemed to be booming ahead without him. There had been nothing but trouble on the first leg – particularly a zebra that had jumped out in front of him. Should he go for it? What would be the point, given the considerable penalty time he had already accumulated. Step up the pace, "and all we'll accomplish is to wreck the car," confided Ari to his co-driver Terry Harryman. But Terry wasn't of the same opinion. For several miles now he had been watching in the rearview mirror. And he could see another Opel, its headlights ominous, always closer and closer. They belonged to Rauno Aaltonen, better seeded in the Safari than Ari,

and who had been hot on his fellow countryman's tail from the beginning. For 20 years, old man Rauno had been dreaming of winning the Safari, but every year bad luck dogged his heels. This year, Aaltonen was chasing Vic Preston and his Audi. And he needed to overtake Vatanen, who was holding him up. Harryman was getting excited. "Faster! Can't we go faster?! If he passes us, we'll have to eat his dust!" But Ari remained calm. And let Aaltonen go by, who then went charging off after his rival. "I could have accelerated," tells Vatanen, "but the road was very bad and bumpy and I didn't want to take any chances. In spite of our being far behind, I hadn't given up hope of winning. Deep down inside, I was counting on a miracle. I was enjoying a quiet hope that something was going to happen. Then I saw Rauno by the side of the road. Out of action. Was this a sign that my hopes would be fulfilled?"

Yes. And everything came together like in a dream. First, Ari heard about Michèle Mouton's problems, then that Hannu Mikkola was in trouble. Preston had shunted just before Aaltonen retired. And Salonen had to throw in the towel as well. Only a few hours from the finish, it was time for a rest halt at Nakuru. Vatanen was in the lead with Mikkola 6 minutes back. It was one of the greatest Safaris ever – with what some thought to be a Grand Prix finish.

"Hannu and I covered the last few miles to Nairobi flat out. We could both smell victory. It was like 1000 Lakes, but on open roads. At the last time control, Hannu came over to

'DEEP DOWN INSIDE, I WAS COUNTING ON A MIRACLE. THEN I SAW RAUNO BY THE SIDE OF THE ROAD'

congratulate me. I could hardly believe it, but Terry had our times. It was true – we had won the Safari. I really felt great!"

The miracle had happened. And better than his rivals, during the week's work in Africa, Ari had known when to push and when to take it easy. You need luck to win the Safari, but no one wins by luck alone. There's a subtle difference. This surprising, and crucial, victory – it saved Opel's season no matter what followed – the blond Finn in the blue car could only consider as a gift from heaven on an Easter's morning. And it would remain the high point of a moribund '83 season with more downs than ups for Opel. The Safari had been Opel's only chance for success in the world championship, dominated everywhere else by the Audi Quattro and Lancia Rally. These others, with the wind in their poop, showed that the Ascona and Manta, although Group B in name, were nevertheless outdated.

"Besides winning the Safari, which in a way was my personal contribution to the Opel team in '83, I was not at all satisfied with my driving last year. Perhaps I was trying to drive the Opel like my good old Escort, a car I felt I could ask anything of. In short, I lacked confidence in myself, at the wheel of a car I distrusted, even if there was nothing intrinsically wrong with it."

Indeed, as of the 1983 Monte Carlo Rally, Ari was often in a huddle with his engineer Karl-Heinz Goldstein, to whom he admitted his driving problems. Modifying the suspension settings didn't seem to change a thing. And over the season, only Kenya and 1000 Lakes offered him any relief from his difficulties. In addition, like many men from the icy North, Ari doesn't look for excuses on his bad days. And of a sudden, a few mediocre performances poorly explained can cause certain observers to start having doubts. What if Vatanen was slipping? He was compared to Carlos Reutemann, whose fragile character showed through under difficult circumstances. Could Ari be

a has-been at 31, and only 2 years after carrying off the world champion's crown? "Of course I don't agree with this view of the situation. The problems encountered in 1983 had to do with my driving in technical terms. It has nothing to do with any lack of character or conviction. In 1984, the same people who doubt me, are also very suspicious of the Peugeot team. It'll be nice to prove them wrong."

Another story goes with the name Vatanen. And it's not just the backbiters who called him the driver who went off the road too often. True enough, his first few years in rallying were punctuated by several hair-raising shunts. "Even recently, it still happened to me! But don't forget that my transition from 'junior class' to being an official driver was extraordinarily short. Henri Toivonen, for example, was very early in the major rallies, thanks to his father. He got the necessary experience more quickly than myself. When you're young, and are suddenly in the big times, you try very hard. With all the risk that entails."

It isn't so long ago that a 15-year old youngster named Vatanen used to borrow his mother's car on winter nights to go skidding along the frozen roads of Finland for a kick. Already at 12, the story goes, he had mastered the technique of opposite lock. With his driver's licence under his belt, all that was left was to try his hand at rallying. With his mother's blessings. Which was very understanding on her part. Ari had lost his father at the age of 8 in an automobile accident. He has his mother to thank for not standing in the way of his passion for rallying. Even more so when you know that it was with her help that he got his start. The first years of Vatanen's career may have been marked by frequent incidents,

AND WHAT IF VATANEN WAS SLIPPING? HE WAS COMPARED TO REUTEMANN, SAID TO HAVE A DELICATE NATURE...

but it would be wrong to forget that at the same time he won in the British Championship, and that his first international victory was the Acropolis Rally in 1980. One year later, he would become world champion, driving a Ford Escort. A title which would be even more glorious for him if he could repeat the exploit in 1985. And in the face of the elite of rallying motorsport to boot.

In 1982, Ari Vatanen devoted himself to working the bugs out of the new Group B Escort. But alas, the 1.7 litre turbo would be shelved by Stuart Turner when he took over the helm at Ford's competition department. The rest you already know: Opel in 1983, and now Peugeot in 1984. The Franco-Finnish duo will debut at the Tour de Corse – the only rally on the world championship calendar in which Vatanen has never competed. A Norseman among "frogs"; is it sure

Win the Safari (Opel number 2), or drive for Peugeot – but his family will always come first. (Photos: DPPI, Reinhard Klein and David Winter)



they'll get along?

"Between you and me, to work in a latin team, or in an Anglo-Saxon team, there's really not much difference. It's the personalities of the people that counts rather than their nationalities. Of course, when you can see in an Italian mechanic's eyes that he's 100% behind you, it's a real help. A Finn is a more reserved person. Which isn't to say that he's not interested in the people around him. You have to know how to interpret his silence. He may not have a lot to say, but two words from him are as good as an iron-bound contract with you."

Even if his professional life has taken him afar and he now lives 20 minutes from Heathrow airport, Ari has not forgotten his homeland. Perish the thought he might abandon it. "What I like most about Finland, now that I live elsewhere, is the open spaces. We have 62,000 lakes where you can

'THE SAME PEOPLE WHO DOUBT ME ARE ALSO VERY SUSPICIOUS OF THE PEUGEOT TEAM'

always have a great time in summer. Finns are often accused of being heavy drinkers. I sometimes run across groups of my countrymen in different airports. I can still recognise them even if they aren't drunk. And if they are, I still feel something special for them. It's like I can see deeper into their souls. Most of the time, they're timid and hide the things that touch them, locked away until Friday night. I know them and understand this. In England or in France, you can pretty much drink whenever you like, wherever you like. In Finland, like in Sweden, the law on buying drink is very strict. You have to know this."

By living not far from London, Ari has nonetheless found some peace. It was not the case in Espoo, the residential Helsinki suburb. Finnish magazines, friends and various acquaintances were constantly hounding him because he was a motor-sport celebrity. Nowadays the telephone rings less often. And testing with Peugeot is not a permanent preoccupation. As you might guess, Vatanen's family is thankful. "When I have a moment free, I try to make the most of my time with my wife and children. It's incredibly valuable for me to have time with my kids. It's a long-term investment. The majority of fathers don't have this chance. They're generally too caught up in their work. And when they're older, when they have more time, and maybe more money, it's often too late. Their children have already grown up – without them. I don't want this to happen to me. Personally, I wouldn't want to do too many rallies in a year. And what with 'recce', do you have any idea of the time a full season represents?"

It was the moment to remind him that in 1985, if he stays with Peugeot, he'll have to compete in most world championship rounds, like Mikkola did in 1983. "We'll see about that when we get there," he said.

Indeed, who knows what's in store for the 205 Turbo 16 during its first season. In any event, with the exception of the Brazilian Rally which has not left Ari with any undying memories in spite of his victory there in 1981, and which is no longer on the calendar anyway, there is no world-class event that Vatanen doesn't like. "At Monte Carlo, there is a sort of classical atmosphere which grips you. At the Portuguese Rally, I've never been able to make it to the finish, but I like it nonetheless. The Acropolis is great. Not just because I've won twice, but because the family can follow along and have a wonderful holiday to boot. Kenya is a fabulous country where there's always plenty to see, even more so than the Ivory Coast. New Zealand is much like 1000 Lakes. The roads are perfect for rallying. In Argentina, I liked the countryside as well. In San Remo, there's sometimes a few too many fans. But the RAC, since it's the only rally with a secret itinerary, is remarkable. What about the Tour de Corse? Well, I suppose after I've won there next May, I'll also have a good impression of it, too", he joked.

Ari is one of those people who like travelling as much as getting home. His life is harmony and serenity, unlike Walter Röhrl, who recently told our readers all about his inner turmoil. As to certain deep questions concerning life, where others are tormented, Ari has found the answer in a Christianity which he is not afraid to discuss. "Why are we here? Where do we come from and where are we going - these are questions I don't ask myself anymore. I no longer have to wonder. Some people think it strange that I let people know about my personal commitment, but in a certain way I think this can encourage others. There's nothing mysterious about it. Rapid advances in technology have befuddled a lot of people, who think that now man can control everything. That will never be the case. Man may be capable

'RAPID ADVANCES IN TECHNOLOGY HAVE BEFUDDLED A LOT OF PEOPLE, WHO THINK THAT NOW MAN CAN CONTROL EVERYTHING'

of earth-shaking accomplishments, but the fundamental questions still remain. One day, your stay in this world will be over, and that's inevitable. Faith gives you freedom. Look at Mother Teresa. In this way she has been gifted with an extraordinary power to help. For another thing, I'm often deeply moved by the conversion of hardened criminals in prison, who then seem to be in a state of grace. No one can deny the truth of these phenomena."

Remember Alex Ribeiro? The future looked bright for the little Brazilian when he was driving in Formula 2 a few years ago. On the side of his March-BMW was the slogan

"Jesus saves". In 1981, after he had won the Brazilian Rally, Ari Vatanen had a chance to meet Alex, although it was purely accidental. This meeting is one of Ari's fondest memories. Between these two Christians, one from the steamy South, the other from the wintry North, there was a perfect understanding, not only concerning religion, but motorsport as well. It's not surprising that they had to meet one day or another.

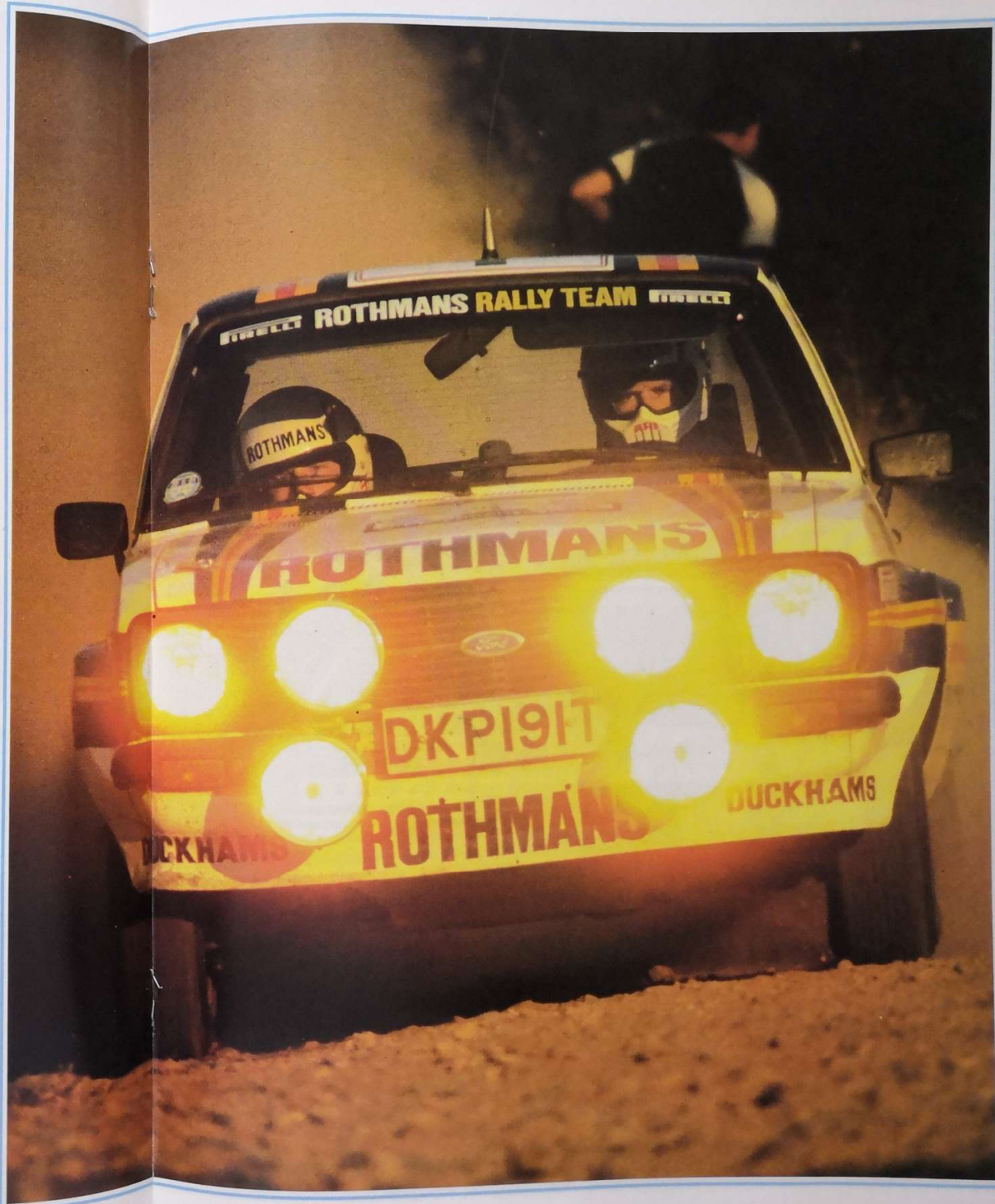
But don't think that Vatanen is some kind of mystic, a faraway look in his eye, and lost whenever he's out of his church or the driver's seat of his car. Open to the most worldly of pleasures - he's an ardent aficionado of French cooking - the cosmopolitan side of his nature is amply evident. In addition, he is a citizen of a country, Finland, over which the long shadow of its mighty neighbour, the Soviet Union, is ever present. It is the only country bordering the USSR which is not governed by a communist regime.

'THE FINNS ARE A PROUD AND FREE PEOPLE, AND THEIR FIGHTING SPIRIT HAS NEVER FALTERED'

Quite a kettle of fish. The term "Finlandisation", which was coined to describe the state of peaceful dependence that the Finns must respect vis-à-vis Moscow, was not invented lightly. The perjorative connotation this word often has in the mouths of Westerners is a constant irritation to Ari's fellow countrymen - and to Ari himself! Yet, like everything else, he can talk rationally about it. "You mustn't think that the proximity of the USSR is considered by every Finn as a constant threat. We're not worried, only slightly disappointed that our politicians don't say in public, what they grumble in private. On the subject of the Afghanistan invasion, or Poland, for example. They don't want any trouble with the Russians. On the other hand, commerce is healthy and thriving with the Soviets. We import raw materials from them, which we pay for in manufactured goods, not in currency. The price we have to pay for this important advantage, is to moderate our criticism under certain circumstances. But we are not the vassals of Moscow. The Finns are a proud and free people, and their fighting spirit has never blanched in the face of adversity. We'll never let our country become anyone's satellite."

If this fighting spirit has been sorely tested in war, the combativity of the Finnish nation today is more willingly expressed in sports. This spirit (in Finnish: *sisu*) is the ultimate weapon of the rallymen from the North who find their way into works teams. And Ari is one of the best examples. What will be the outcome of his pact with the French? It's still anybody's guess. But after 3 months of testing the Peugeot 205 Turbo 16, Ari is very optimistic. See you in Corsica, where we'll get the whole story soon... □

1981 Drivers' World Champion with his Ford Escort - and thanks to the good offices of Freuquin/Todt/Talbot. Who said history repeats itself? (Photo: DPPI)



THE FRENCH OFFENSIVE



Ari Vatanen (right) and Jean-Pierre Nicolas: a Franco-Finnish pact to undertake an ambitious programme. (photo: Reinhard Klein)



IN A LITTLE MORE THAN 7 WEEKS AUDI AND LANCIA WILL NO LONGER BE THE ONLY CONTENDERS FOR THE WORLD RALLY CHAMPIONSHIP TITLE. AT LEAST THAT'S THE FEELING AMONG THE PEUGEOT TEAM, WHOSE 205 TURBO 16 WITH FOUR-WHEEL DRIVE WILL BE MAKING ITS DEBUT IN MAY AT THE TOUR DE CORSE. THE FRENCH OFFENSIVE WOULD SEEM TO BE WELL GROUNDED. BUT BETWEEN TEST RESULTS AND ACTUAL COMPETITION, THERE CAN OFTEN BE A WORLD OF DIFFERENCE.

by Cyril Frey

Since Jean Todt, director of Peugeot-Talbot Sport, unveiled the 205 Turbo 16 and introduced its development team to the press, there have been a multitude of tests on all sorts of terrain. Besides the Sarlat Rally where Jean-Pierre Nicolas came in 2nd behind a 4wd Citroën Visa, the most significant was the practice session last December on the San Remo Rally route. The world championship event had run its course through the Italian countryside 2 months earlier. Among the spectators was an expert team of scouts. Leading the reconnaissance was Jean-Pierre Nicolas, who during certain special stages carefully noted the times, even intermediary ones, for the Audi Quattros and Lancia Rallies. And the leaders were putting on an outstanding performance. When it came time for the Peugeot 205 to show its stuff on the Sienne back roads, although under much more discreet conditions, the benchmarks recorded

by Nicolas proved a rich source of information. Meanwhile, the Finn Ari Vatanen had been recruited by Jean Todt to take over responsibilities as first driver at the side of "Jumbo" Nicolas. The choice of these two men was grist for the pressmen in 1983, at least in France. An issue was Nicolas's age, who at nearly 40, is all the same no less lively than Mikkola - current world champion - or Waldegaard. Concerning Vatanen, the Gallic backbiters harped on his '83 season with Opel, which was admittedly disappointing. You can read what Ari has to say about this elsewhere in this issue, and you'll see that Vatanen is anxious to put his past problems to bed. Nevertheless, last December in Italy, Ari Vatanen made the acquaintance of the Peugeot 205 under less than happy circumstances. The fuel injection system continued to fail more or less every 10 km, the

The 205 Turbo 16 in action on the Charleval track: tarmac, like in the Tour de Corse. (photo: Reinhard Klein)

injectors clogged. Nicolas tells the story: "Up until then, we had never had any real problems. Then along comes Ari and suddenly we have this unidentifiable trouble. At first, we thought it was in the ignition system, or in the fuel system. It turned out to be a Matra filter, recently installed, that simply didn't work. Unfortunately, Ari didn't get a very good first impression."

Once they had worked out the bugs, the serious work could begin. Leading to some good performance data. If the rally

'THE DAY ARI ARRIVED, WE HAD OUR FIRST REAL PROBLEM WITH THE CAR'

2 months earlier had been by day and on dry terrain, Vatanen and Nicolas were trying the special stages at night and in the rain. The comparison between the Peugeot and the veterans on the Italian course was flattering, since Nicolas was theoretically shaving a second off the times of the lead Lancia, then driven by Alen, and was holding his own against Mikko's and Mouton's performances, the Audi drivers. As for Ari, he was even a little quicker, matching Audi's best, which is to say keeping up with Blomqvist. In addition, the Peugeot engine was not operating at peak power, putting out only 300 bhp rather than the 340 bhp nowadays available. For another thing, the car was missing its new aluminium air intake system because of a broken weld and as a result the turbocharger response time was off. Meaning Nicolas's optimism starts to make sense. "I feel so good about this car that I think Ari and I will even be ahead of the Audis on all terrain. And in spite of what you might read, I've never blown an engine. Twice I've had problems with connecting rod bearings, but that's finished nowadays thanks to the dry sump oil system. And even then, nothing broke."

In the autumn of '83, practice sessions had revealed two major problems: first, the turbo response time, and second, the mechanical resistance of the drive lines. Concerning the first, it seems to be resolved. This is due to the good offices of the engine-builder Jean-Pierre Boudy, a veteran of the Renault Formula 1 team, and the assistance of Jean-Pierre Colinot. Their knowledge of turbo technology was certainly a big help, not to mention time-saver, for the team headed up by André de Cortanze. How did they do it? "We don't want to say too much," admits Nicolas. "The longer it takes the competition to find out about our ideas the better things will be." All that we know is that the Peugeot mechanics worked on the exhaust system, between the cylinder head and the turbo - moved them closer together. We've heard of tuned exhaust pipes of the same length and with smaller cross section, which results in higher pressure. Meaning the turbine works at higher rotational speeds. We've seen a new intake system, which has considerably improved the power curve of the 2.4 litre transversal engine. This together with a four-valve per cylinder configuration (hence, 205 Turbo 16) means the car is now pulling from 3,800 to 8,000 rpm ins-

stead of from 4,500 to 7,200 rpm as it was before.

After San Remo, the whole team met at the Michelin test track at Charleval not far from Aix-en-Provence. This was quite frankly J.-P. Nicolas's cup of tea. On the tarmac of this private special stage, which had already played host to the Audi and Renault teams, the flexibility of the engine was marvelous. If you take the drivers' word for it, you could hardly even tell when the turbo kicked in. This time around, "Jumbo" scored higher marks than his Finnish teammate, who is not really partial to tarmac. The margin separating them was tight, but nonetheless enough so that Ari decided to ride with the man from Marseilles to see for himself where seconds could be saved. And what a show! Indeed, it was then that Nicolas somehow managed to go flying off the road, luckily without serious damage. Nicolas explains: "We were on the fastest part of the track, a long gradual left bank at 170 km/h. At one point you brake a little, to get into position for the turn where you'll then accelerate. That's just before you brake again for the following right-hand turn, which is pretty tight. It was there, on braking, that I went straight instead. And ended up in a ditch. The surface was a bit rough at that point and I must have hit a bump a little hard."

As a matter of fact, it was during that January in Charleval that everyone started having braking problems because of the speeds reached on tarmac. The ideal solution would have been to use larger discs. But the problem was they couldn't be adapted to the wheels.

To come back to the drive line problem, first noticed last September, it also seemed

'I THINK WE'LL BE AHEAD OF THE AUDIS ON ALL TERRAIN'

to be solved. The absence of a central limited-slip differential, needed to ensure compensation between the front and rear axles, had caused two drive line failures - and in spite of the power-takeoff settings being at 50% front, 50% rear. New drive lines have been beefed up, and have been reliable. Indeed, if four-wheel drive has its advantages in rallying, it also has a few problems. And the power-takeoff settings for the front and rear wheels are not the least of these puzzles. Nowadays, for tarmac the Peugeot is using 25% front, 75% rear. Two solutions on all terrain are under study: 50% front, 50% rear, or alternatively 33% front, 66% rear. It takes 8 minutes 30 seconds to change these settings under pressure, and usually it's more like 10 minutes. Since we're on the subject of the time necessary for mechanical procedures, it's worth noting that it takes at least 40 minutes, if not an hour, to change gearboxes on the 205 win or lose a rally. And everyone agrees that for a gearbox it's too much. But the team reassures themselves with the fact that since Nicolas took on the final development of the car in 1983, there hasn't been the

With two cars and 23 mechanics, the Tour de Corse costs £70,000. Argentina costs £250,000. Peugeot-Talbot Sport is not only 75 people, but a finely-tuned structure.

(photo: Reinhard Klein)

When Vatanen made the acquaintance of the 205, he thought it was underpowered. But with 340 bhp, there are 65 bhp more than his Opel in '83. In part, this would seem a sign of the French engine's flexibility. On the right, Jean Todt.

(photo: Reinhard Klein)



least problem with the gearbox. Says Nicolas, "I've only had very minor trouble in selecting gears. Concerning the ratios, we played around with it in the beginning because third was a little far from second. But for Corsica, we'll have a new ratio and everything will be OK. At the top of the curve, when we're pushing and with a turbo pressure of 1.2, which is right for us, we can touch 184-190 km/h."

Looking back on the times for the Audis and the R5 Turbos at the Michelin track, the men from Peugeot didn't fail to notice the clear superiority of their 205 over the Germans, and a slight edge over the Renault. But due to varying track conditions, it is difficult to draw any solid conclusions from this theoretical order. And Jean Todt is the first to counsel prudence. In addition, on tarmac Lancia remains the standard-bearer, and Lancia is still to be seen at Charleval. But this doesn't stop J.-P. Nicolas from having an opinion as to his car's chances against the Italians. "I put the difference between us and the Lancia on tarmac at about 1 second per kilometre, in their favour. If we can just keep on their tail in Corsica, we'll be more than satisfied."

In terms of weight, the car should move off the 950 kg mark where it has stood for the last few weeks, yet curiously enough, it won't be lighter, yet heavier. Reinforcing certain parts, installation of special lights, the dry sump, all will contribute to adding a few more kilos between now and the Tour de Corse. Road handling is right on the mark for Nicolas, but Ari has noticed a slight tendency to oversteer, although the Finn has a different driving style. By taking advantage of the suspension settings, it will be possible to adjust the 205 to Ari's liking, who continues to use left-foot braking on all terrain (a Finnish habit). However, this driving technique may not be necessary if the turbo response time has really been reduced to practically zero - since it certainly doesn't spare the brakes, which have already been shown to be fragile. In the Sienna region, Nicolas also started braking with his left foot, but the engine wasn't running at its best and this was inevitable.

On the exterior, the 205 Turbo 16 has not undergone any major changes, besides a small spoiler on the front, a new air outlet on the bonnet and a different air scoop on the back. From now until the Tour de Corse, additional all-terrain tests are planned in Greece as preparation for the Acropolis Rally. There'll be some drawn out "recces" on the Ile de Beauté as well. Nicolas is wondering if he can keep the pace, while Vatanen thinks about Corsica where he's never competed before. Yet they both have plenty of confidence in their car. And with 340 bhp, 960 kg, and 4wd, they have good reason to believe in the French offensive on world championship rallying, which has been amply prepared for take off. It would be surprising if they lag too far behind the star performers. And if they enjoy a few moments on front, even briefly, then we'll be able to write that Jean Todt has been vindicated. Audi Quattro Sport will be in Corsica as well. And the future Lancia 4wd? Could be a "mission impossible." We'll see. □

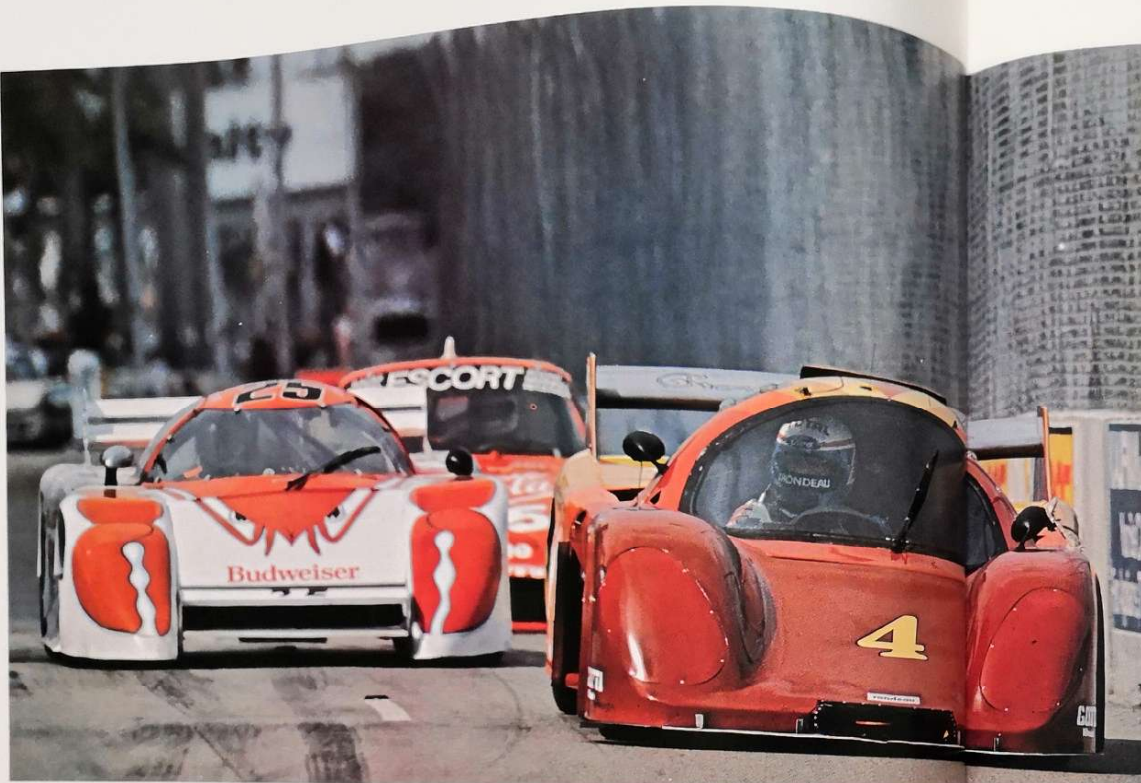
MIAMI IMSA GRAND PRIX

WILD IN THE STREETS

DAYTONA'S BANKING WAS A PICNIC BY COMPARISON. AND THE SCHOOLBOYS CAME OUT TO STRUT THEIR STUFF. BUT ALONG THE SNAKING STREETS OF DEEPEST, DARKEST, DOWNTOWN MIAMI THEY GO ON TIPTOE - SHRINKING FROM THE EAR-PIERCING SCREAM OF THE TARMAC'S FEROCIOUS WILD BEASTS. OLD PEOPLE, SNUG IN THEIR BUNGALOWS, WONDER IF THE BANG IN THE DISTANCE IS THE CRASH OF A CAR'S BACKFIRE, OR OF GUNFIRE. SMALL GAME MAKES ITSELF SCARCE WHEN THE BIG CATS ROAR, AND EVEN THE MOST NOBLE SAVAGE KNOWS WHEN HE'S MET HIS MATCH.

by Didier Brailon





Asked to drive the Chevrolet M382, Rondeau was soon forced to retire by overheating and an oil leak. (photo: Stéphane Foulon / DPPI)



Impressive in qualifying, and spectacularly driven by Larrauri during the race – a surprising performance from the Momo AR3 Cosworth. (photo: Stéphane Foulon / DPPI; previous double-page spread: Didier Brailion and Stéphane Foulon / DPPI)

Louis Kano isn't feeling well. His legs ache, he's hung over, and he feels uncomfortable, sitting in a green and white plastic chaise-longue. Around him are his companions of the Coral Sands retirement home. He thinks back on his arrival in this modest old-folks community, located at the southern tip of Miami beach. The most exciting event since then has been the escape of someone's talking parrot from its cage. Now he's watching TV, but "big Bertha", who he hates, comes in and changes the channel in spite of his protests. Then comes George, a retired barman from Minneapolis, who day in and day out, whatever the season, wears brown and yellow checked pants that Louis figures must have been cut from old curtains.

To tell the truth, Louis is much like the others, sedately seated in the lounge of the Coral Sands, or the Stardust, or the Beachcomber... They have a nowhere look in their eyes, staring off into infinity, waiting for the sands of time to run out on them. A few souvenir shops are interspersed among the shabby storefronts. Stoplights blink on and off for no one, and sway aimlessly in the wind. The streets are empty of both automobiles and life. The swimming pool, dead leaves scattered over the water, and the beachfront lined with palm trees on the other side of Collins Avenue, haven't held any interest for Louis Kano for he doesn't remember how long.

But at least his wretched existence as a recluse has one advantage. Unlike downtown Miami, the south end of Miami beach doesn't have to worry about crime. What is there to steal? It's in the west, on the other side of Biscayne Bay, that the motorcycle cops of the Miami Police Department are continually cruising on their outsized Harley-Davidsons. Always on the prowl for trouble. Whether a cocaine dealer, his

A WHITE MARCH-CHEVROLET ENTERED BY ONE OF THE ORGANISERS OF THE RACE STUNNED THE CROWD

pockets stuffed with greenbacks – or a poor sucker with a nickel-plated popgun in his shirt, trying to muster the courage to hold up a liquor store. Miami's finest will do their duty. But in reality, their efforts are lost, and any attempt to put an end to the crime wave is like trying to fill a sieve with sand. And the air of the city has grown thick with the smell of fear. In addition, the black and Latin-American communities are growing by leaps and bounds. Mixing about as well as oil and water. Nowadays, they account for over 60 per cent of the city's population, and what with inevitable unemployment, despair often turns to rage. However, today there's a truce, and the ruff have been replaced on the streets by race marshals. It's raining outside, but the humidity hovers at 100 per cent inside as well. Louis Kano heaves a sigh to see "big

Bertha" in his favourite easy chair, and is once again exasperated to watch television in Spanish – Bertha prefers the Hispanic TV shows "because the music's nice." Yet for a change the programme's interesting. Sleek racing cars, streaking through downtown Miami's streets.

"Buenos dias, amigos," an interviewer begins, then is cut off as Louis Kano kills the sound. However, in the background you can read the banner IMSA Camel GT Championship. Miami is a slow circuit, a street race, with numerous sharp turns, and not a few dips as well as old railroad tracks strewn along the route. A tough track, which Emerson Fittipaldi likes to compare with the Monaco Grand Prix, especially the part running along the Marina. At the end of Alton Road, Biscayne Bay stretches off towards the south end. You could probably see the cars from the other side of the bay – it's only 3 km across – but this morning the view is obstructed by an enormous ocean liner, the SS Norway, previously the France, before it was bought by Akram Ojeh. His son, Mansour, is perhaps better known as the director of Techniques d'Avant Garde (TAG) in Formula 1.

'ONE DAY OR ANOTHER, AMERICA IS GOING TO BECOME FOR EUROPEAN CONSTRUCTORS A REAL LIFESAVER'

Towards 4pm, the sun at last comes out and dries the streets. The GP starting grid, made up of some 30 hefty sport prototypes, has been settled. The first qualifying session was run on a wet track, some water even remaining on the straights. The second was much like the first, only a little drier. A white March-Chevrolet entered by Ralph Sanchez, one of the organisers of the race, and sponsored by the city of Miami, has stunned the crowd by capturing pole position. The day before, no one would have made book on it: "It's the crummiest March of the bunch," confided a savvy shop mechanic. Indeed, the car had been hastily prepared, but none bargained on the dexterity and gumption of its driver, Emerson Fittipaldi. On a practically dry track, at the end of the qualifying session, Fittipaldi had shown that he was still pretty fast. Ralph Sanchez's little team were as surprised as anyone. But with the \$15,000 that had just come to them like manna from heaven, they redoubled their efforts to be ready for the next day's race. Late into the evening they could be heard rehearsing their pit-stop schedule: up on the jacks, Fittipaldi takes over from Tony Garcia (a local driver), fill-up, tyres changed, and so on. The script may not have been written by Brabham, but after 10 times through their paces, the team was starting to look good.

Across the road, his driving coveralls open at the front, a calm-looking fellow is sitting at a bus stop. "It's the first time I've seen the

sun in a long time," he sighs. He might've meant that figuratively as well as literally. Jean Rondeau's part in the story of motorport is more than a bit player. Last year, the company he had forged with his own hands went under - in spite of winning the 24 Hours at Le Mans in 1980, and almost walking away with the world endurance championship title in 1982. He had to fire his staff, restructure, and swallow his pride.

AT 73 YEARS OF AGE, JUAN-MANUEL FANGIO REMAINS AN IDOL, HIS NAME PRACTICALLY A HOUSEHOLD WORD

A syndicate of managers took over, but today Jean Rondeau thinks they should be satisfied with the results of the last few months. These are the signs, in a way, of a long and perhaps successful climb back up to the top. "Three of my cars have been sold, and I have confirmed orders for more than 10 of my Formula Fords. For another thing, I haven't given up hope of being able to enter an M484 with a Porsche 956 engine at Le Mans. Even though I don't yet have a sponsor, and we're already mid-March."

Jean Rondeau has come to Miami for the same reasons that other people go to the movies: to have a good time and forget his troubles. He is the guest of a Florida resident, Gary Belcher, who bought one of Rondeau's cars with a Chevrolet engine, two seasons ago. The first attempt by the constructor from Le Mans to break into the American marketplace was a disaster - due to poor timing, poor organization, and inopportune partners. But with Belcher in his camp, things may be looking up: "One day or another, America is going to become for European constructors a real lifesaver. It's time to again start thinking about setting up an outlet for Automobiles Rondeau, here in the States."

A few paces behind Rondeau, who continues to take it easy, is a garage hastily put together in the Bayfront Auditorium. A man who is only slightly bent by age answers, always with a smile, whoever may care to ask him questions. Through the good services of a bearded giant, acting as his interpreter, the debonair Juan-Manuel Fangio meets the press. Clear-eyed and silver-haired, it has now been over a quarter of a century since this man retired from motor racing. Five-time world champion, at 73 years of age, Fangio remains an idol, his name practically a household word. The master of Balcarce has deigned to leave his native Argentina in order to accompany his nephew, who is making his debut in IMSA at the wheel of a Porsche 935. "Here, they call him Juan-Manuel Fangio II; we simply call him Juan-Manuelito." This legendary man speaks in Italian or in Spanish. English never made much of an impression on him throughout the eight years of his international career.

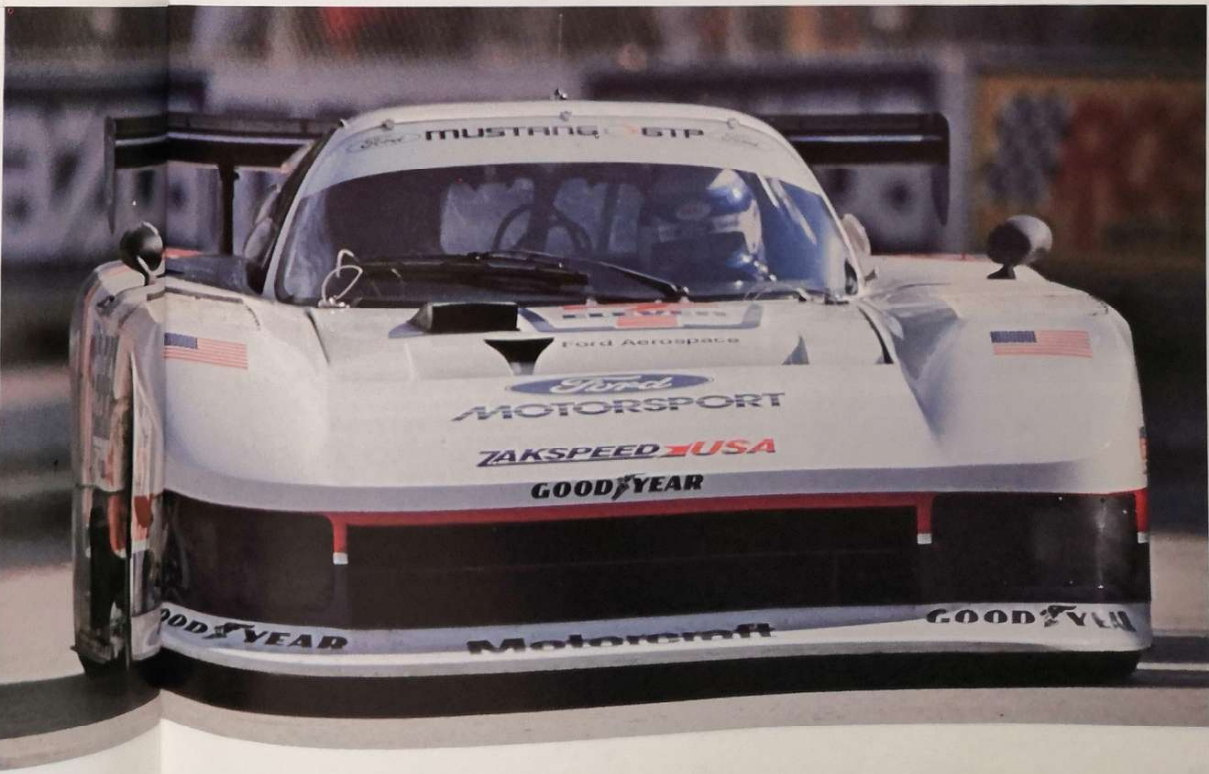
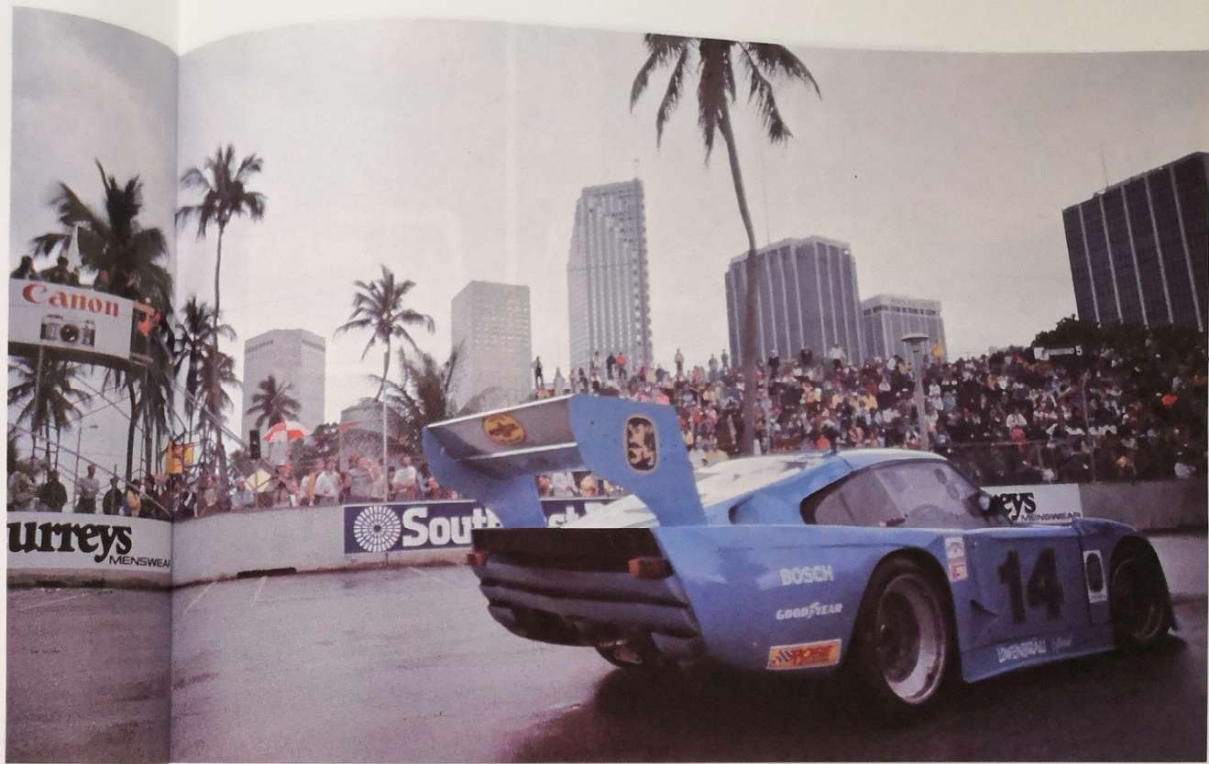
Oscar Larrauri, son of a modest butcher in Rosario, may be timid, but he nonetheless took the 1982 European Formula 3 Championship title. This time, he's driving a Momo-Cosworth. He told of the respect he had for his illustrious fellow countryman: "Juan-Manuel Fangio has always won because of his great skill as a driver. He won 24 of the 51 Grands Prix in which he raced. His world titles were achieved with Alfa Romeo, Maserati, Mercedes and Ferrari. What better proof that technology was only of secondary importance?"

To win by good driving alone is not what some of this year's heroes at the Miami Grand Prix achieved. Although the huge crowd loved the race no less. The circuit is taxing and technically difficult. The track has all it takes to separate the men from the boys. And since you can see the race from up close, the drivers' own effort is amply apparent. When it is necessary to brake late, accelerate early, to use opposite lock, often just missing a concrete wall, these are the moments when men like Emerson Fittipaldi, Bob Wallek (let's leave A.J. Foyt out of this), Oscar Larrauri, Klaus Ludwig and, to a lesser degree, Bill Whittington stand out. For Group 44, whose "big cats" scored a terrific 1-2, carrying off \$75,000 in prize money, the course was no picnic. The splendid XJR5 coupés, in complete opposition to all good sense, were not equipped with onboard drinking-water systems - even though every other team has them. Throughout the sweltering afternoon, for the knowledgeable onlooker, it was evident that both Brian Redman and Bob Tuilius were "cats on a hot tin roof." Lap after lap, you could see them stewing in their juices, their faces drawn, the epitome of wild animals, hanging in there to the bitter end in order to make the kill.

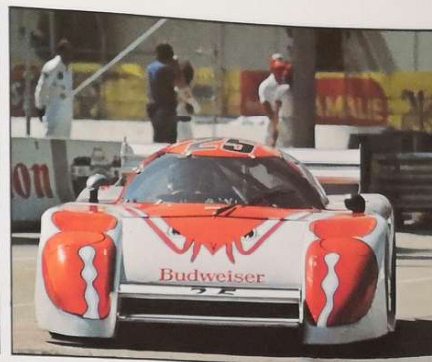
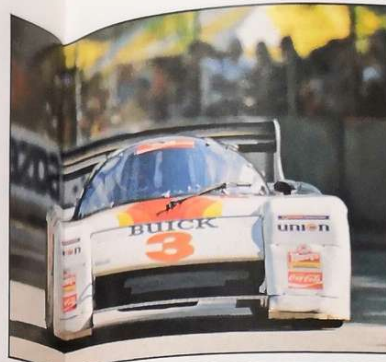
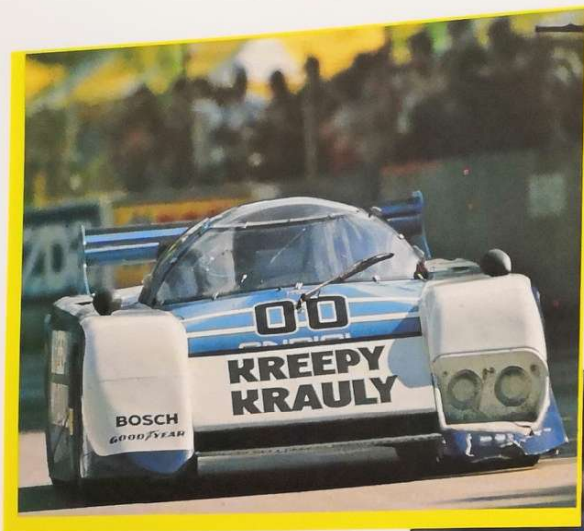
TAXING AND TECHNICALLY DIFFICULT, THE TRACK SEPARATES THE MEN FROM THE BOYS

This incredible oversight on the part of Group 44's engineers was probably the cause of some rather erratic driving, which culminated in a spin that was happily without consequences. On the other hand, the organizers of the Miami Grand Prix made the most of high technology, to the glee of one of the biggest race crowds ever. All around the track were gigantic video screens, dubbed "diamond vision". A lone screen was first seen at last year's European Grand Prix at Brands Hatch. And together with video monitors mounted directly on the racing cars, these devices have become the ultimate expression of modern motorsport spectating. Fangio Sr., speaking from the wisdom of age, was not mistaken when he declared, "Thirty years ago, a mere 100,000 people at most could benefit from the spectacle of such a race. Nowadays, there is no limit. And the magic and power of motorsport are all the greater for it." □

The smell of dollars brought John Fitzpatrick Racing for a moment back into IMSA. But Holbert/Hobb's Porsche 935 was an early casualty with a busted gearbox. (photo: Stéphane Foulon/DPPI)

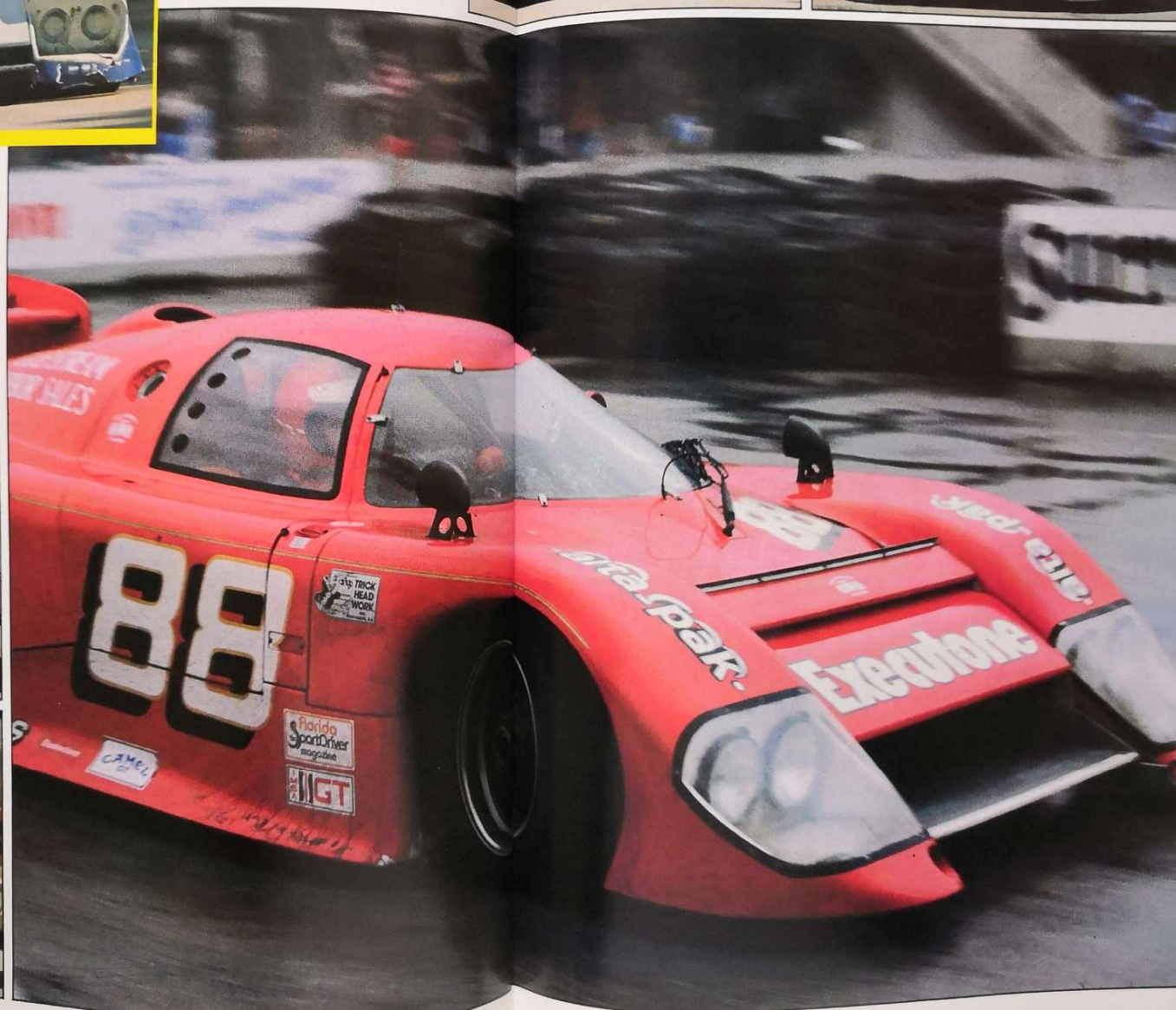


Ludwig/Rahal's long-awaited Ford Mustang GTP was hot on the heels of the lead Jaguar when a puncture and damaged suspension retired unlucky number 7. (photo: Stéphane Foulon/DPPI)



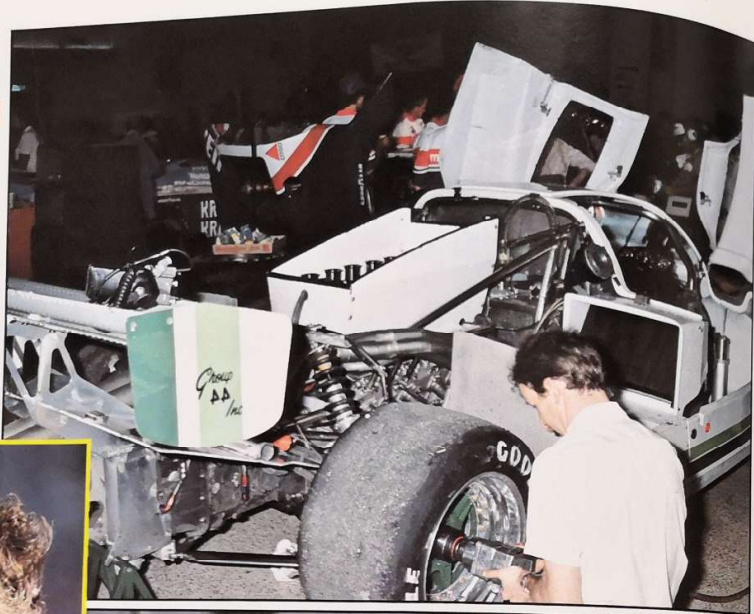
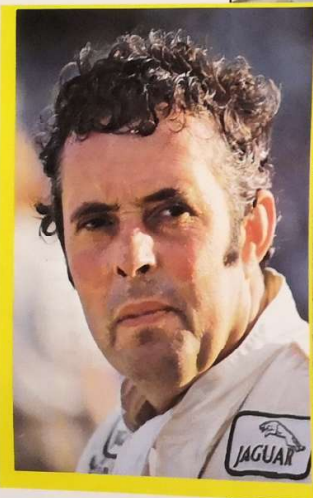
**BITTER
MEDICINE**

No constructor likes to get beat. But this time, Robin Herd had to take his medicine, and it left his face squinched up with the taste of it. Only one of the seven cars carrying his marque came anywhere near the victory lane – the March Chevrolet of the great Emerson Fittipaldi. For the rest, chance dealt a cruel hand. Both with blown engines after the warm-up, the March Buick number 3 of Speer/Madren and the March Chevrolet number 16 of Hinze/Lanier didn't even start. The March Chevrolet number 25 of Cowart/Miller, repaired after its spectacular roll at Daytona, finally placed 9th after a lackluster performance. And the March Porsche number 00 of Van der Merwe/Martin, although victorious at Daytona, was hardly any less disappointing, finishing 8th. It would seem the South Africans had lost their sparkle at the reins of number 00, even if they often lapped the March Chevrolet number 2 of the Leon brothers. All things considered, it was the March Chevrolet number 88 that was the most explosive. Brilliantly driven by the two Whittingtons, this car was in 3rd place when a fire took it out of the race in the 27th lap. Even so, the Whittingtons got back into action a while later – only to glance off a concrete retaining wall, and retire. (Photos: Stéphane Foulon (DPPI)).



LOOKING GOOD

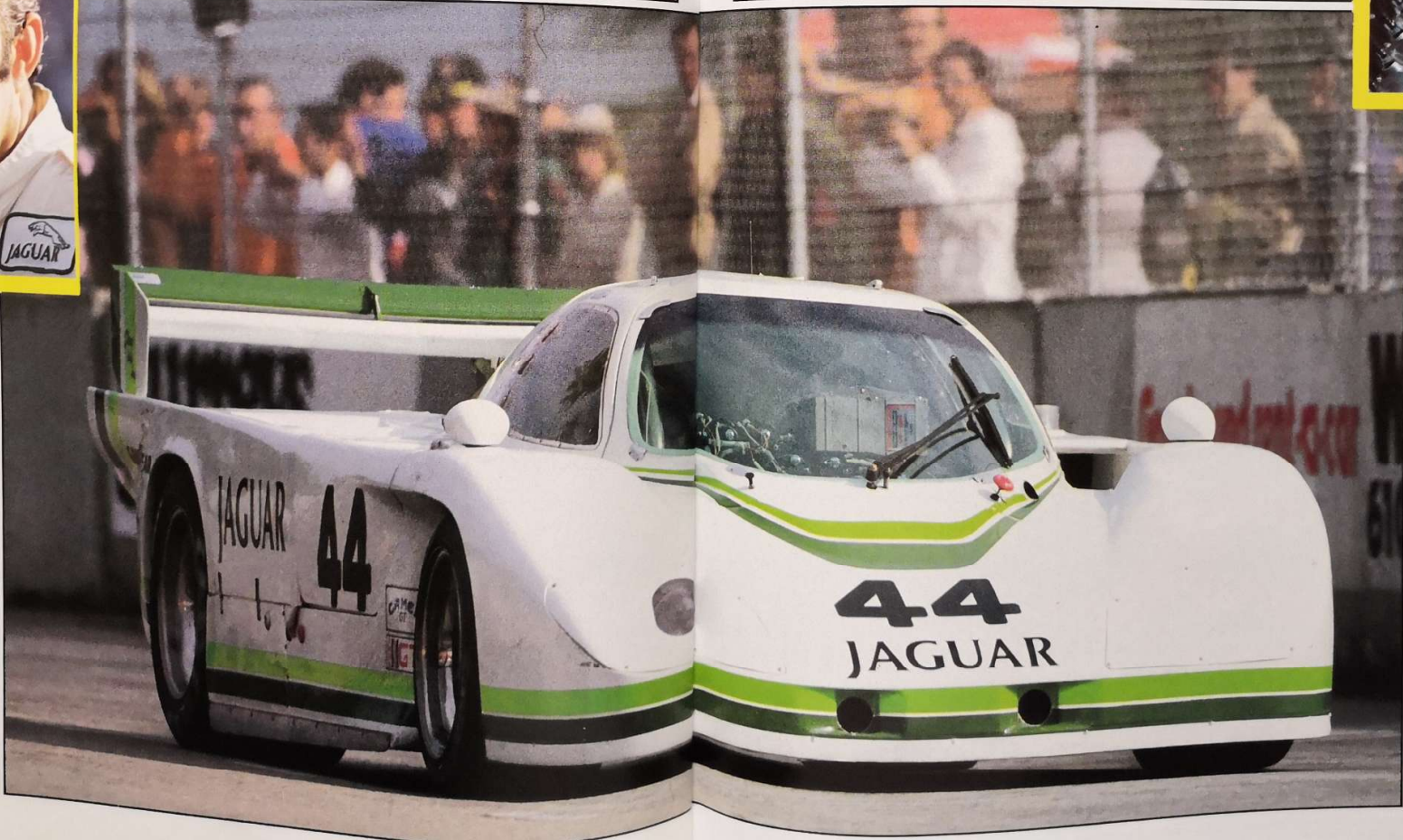
"What if we run out of gas?" Three laps from the finish, Bob Tullius (top, right) seems worried. And rightly so. The Miami Grand Prix lasts 3 hours, which favours the Jaguar



Mans 24 hours are hoping these marvelous white cars with the green trim will be putting in an appearance at their event, these results would seem to indicate that things are looking good for them. Even if some people are saying that with a little more luck, the March Chevrolet driven by Emerson Fittipaldi would probably have won. Which is true. Or that in spite of excellent preparation, Group 44 still suffers from a few weaknesses. Which is also true. For example, how could

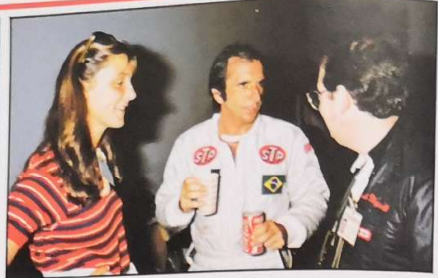


XJR5s in so much as they only require one refuelling stop. But what about that ominous engine knock, on coming out of the corners? Could it be the first signs of a dry fuel tank? Luckily it was not the case, and for Brian Redman (above) seconded by Doc Bundy (bottom, right) all of Miami's tortuous streets led to victory lane. Just behind the winning Anglo-American combination, were Tullius and Bedard (number 44) in 2nd place. A nice one-two for group 44, which pushed the team's total prize money to \$75,000 (£47,000) as well. At a time when the organisers of the Le



they forget to equip the XJR5s with one of those all-so-essential systems for providing the driver with drinking water while he's driving? Everyone else has it, and judging from Bob Tullius's haggard appearance as he dragged himself out of the tight cockpit of his car-cum-furnace at the end of his 90-minute stint, the lesson has probably been learned. (Photo: Stéphane Foulon/DPPI)





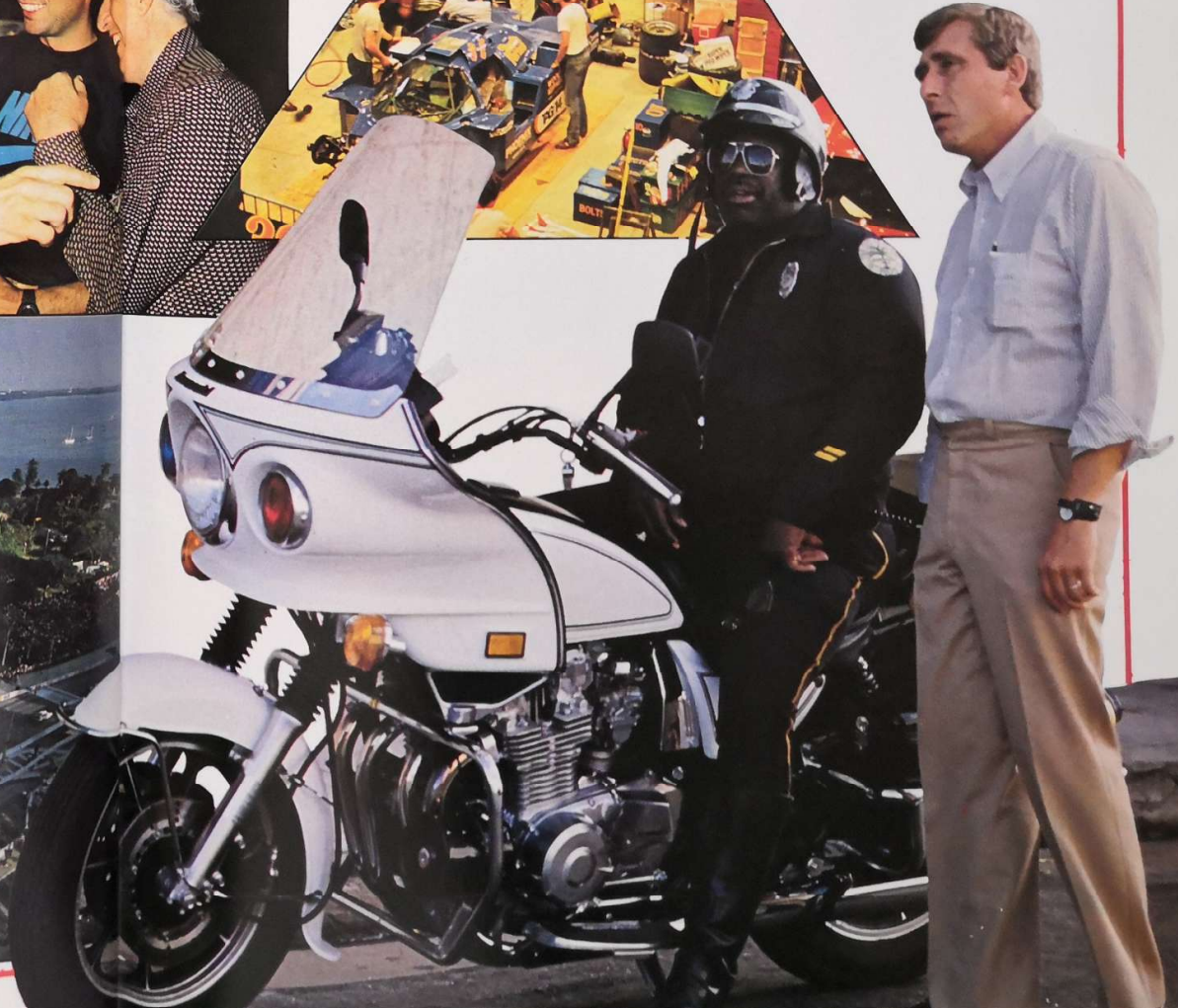
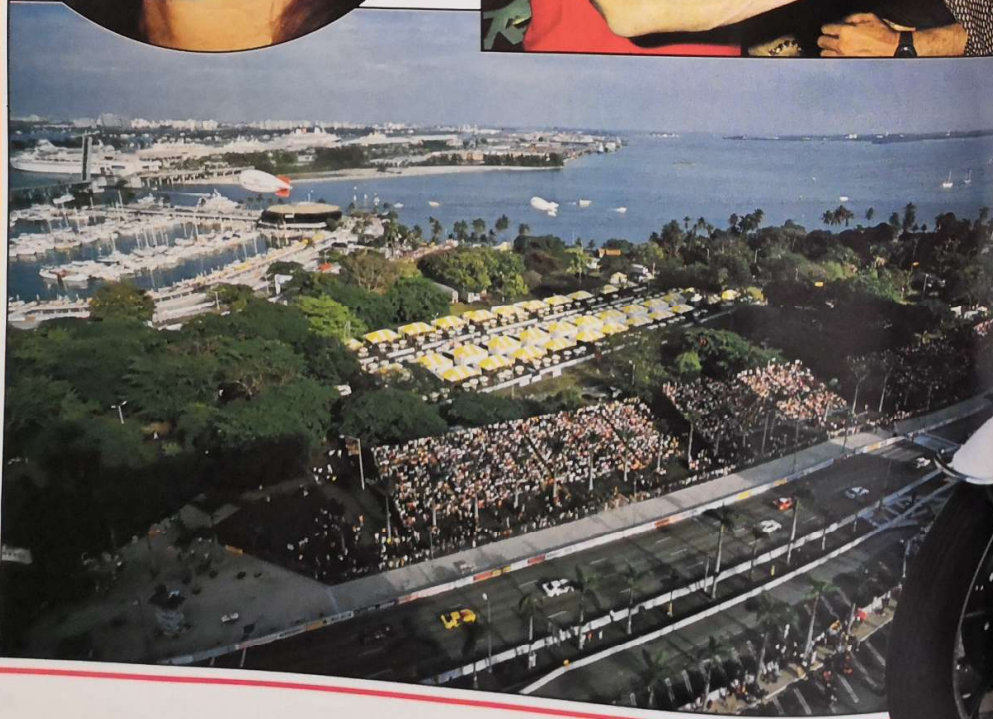
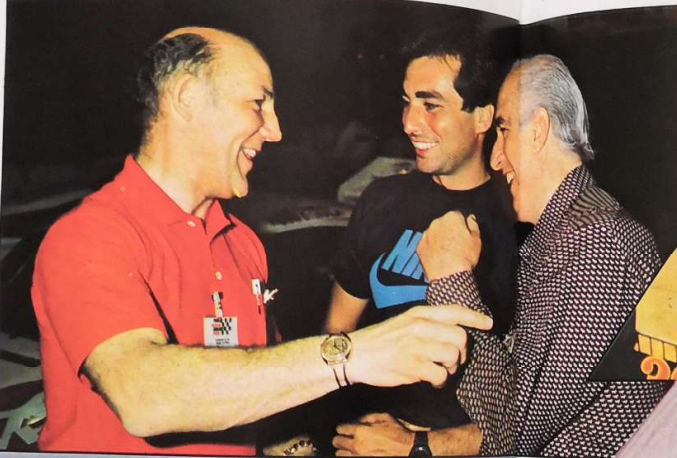
MIAMI



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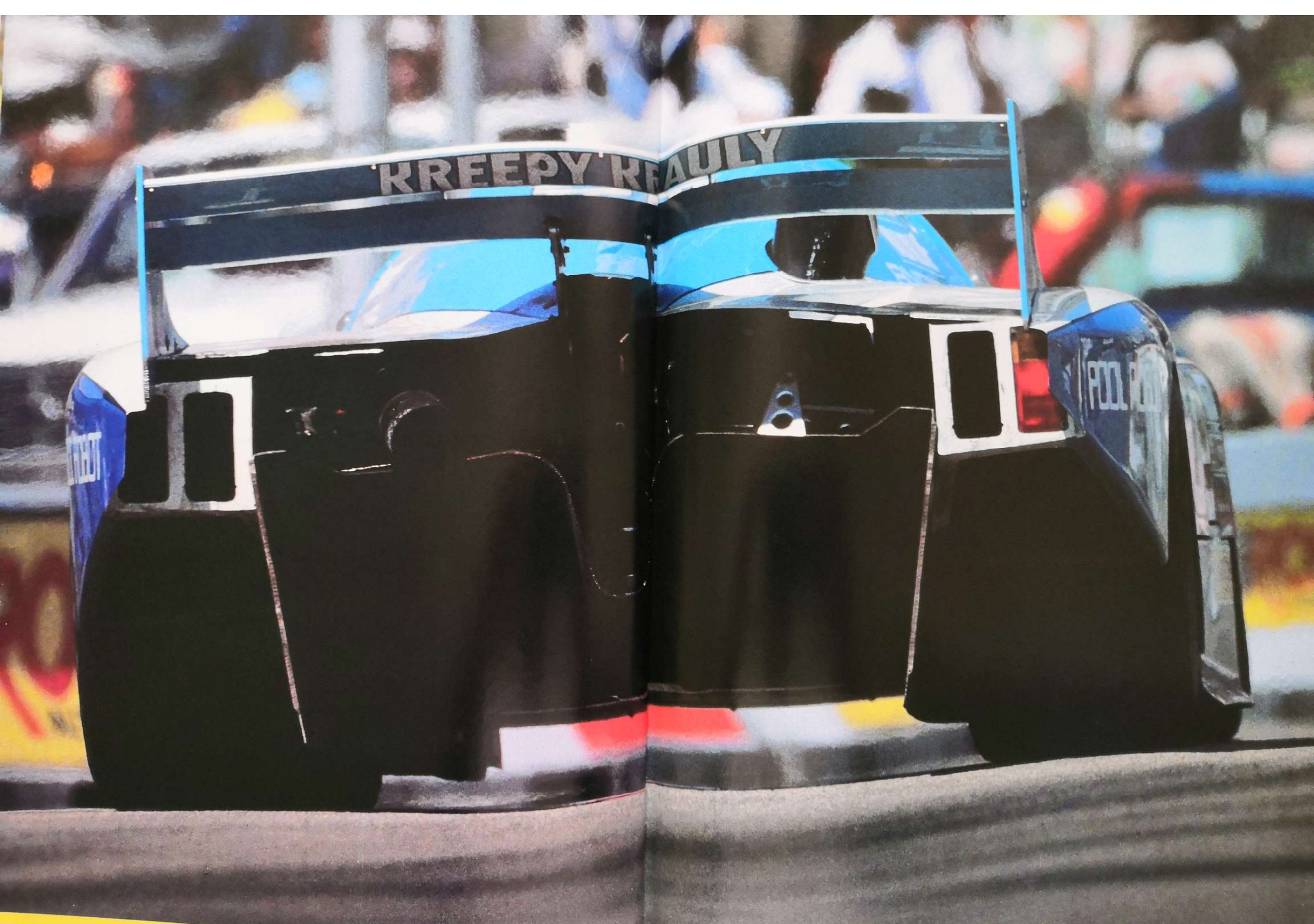
Emerson with Teresa, his new love SS Norway, idea or Akzam Ojsek's of a yacht





Bob Wollek / Andial Porsche 935 (photo: Stéphane Foulon)

AN EXCEPTIONAL SHOW IGNITES THE MIAMI CROWD, AN ORANGE BURST IN A PLAY OF COLOURS



EFFORTLESSLY HUGGING THE GROUND THROUGH MIAMI'S NARROW STREETS, THE CARS PLUNGE AHEAD

March 83G Chevrolet number 00 (photo: Stéphane Foulon / DPPI)



Klaus Ludwig and Bobby Rahal/Ford Mustang GTP (photo: Stéphane Foulon / DPP)

SNAKE-LIKE, WINDING THROUGH SETS OF TIGHT TURNS, THAT'S DOWNTOWN MIAMI



AN INTRIGUING PUZZLE TO SOLVE BEFORE RACE-DAY, FOR THIS MECHANIC IS BUT CHILD'S PLAY

Porsche 935-84 number 5 (photo: Stephane Foulon/DPPI)

MIAMI GRAND PRIX RACE

Round 2 of International Motor Sports Association (IMSA) 1984 Camel GT (GTP, GTX, GTO, GTU) championship.
Official race title: Budweiser Grand Prix of Miami.
Date: February 26, 1984.
Race distance: 3 hours on a 1.85-mile (2.98 km) circuit.
Weather conditions: brief showers and wet track on Saturday; clear skies and hot on Sunday.
Attendance: 75,000 spectators.



LAST YEAR'S WINNER

1983: Holbert/March 83G Chevrolet (race stopped after 17 laps because of a hurricane).

POLE POSITION

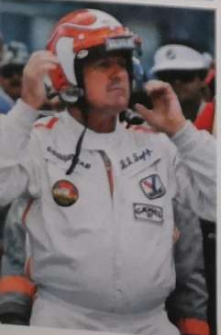
Fittipaldi/March 83G Chevrolet, in 1 min. 24.84 sec., an average of 78.501 mph (126.335 km/h).

BEST RACE LAP

Tullius/Jaguar XJR5, in 1 min. 24.302 sec., on lap 13, an average of 79.095 mph (127.291 km/h).

LAP LEADERS

- Laps 1 to 27: Redman/Bundy (Jaguar XJR5).
- Laps 28 to 29: Ludwig/Rahal (Ford Mustang GTP).
- Laps 30 to 52: Redman/Bundy (Jaguar XJR5).
- Laps 53 to 61: Tullius/Bedard (Jaguar XJR5).
- Laps 62 to 118: Redman/Bundy (Jaguar XJR5).



STARTING GRID

- 7. FORD MUSTANG GTP
Ludwig/Rahal
1m. 25.523 s.
- 04. JAGUAR XJR5
Redman/Bundy
1m. 27.159 s.
- 00. MARCH 83G PORSCHE
Van der Merwe/T. Martin
1m. 28.139 s.
- 44. JAGUAR XJR5
Tullius/Bedard
1m. 28.598 s.
- 6. ANDIAL PORSCHE 935
Foyt/Wallek
1m. 30.480 s.
- 14. PORSCHE 935
Holbert/Habbi
1m. 30.784 s.
- 45. LOLA T600 CHEVROLET
Morton/Lobenberg
1m. 31.328 s.
- 5. PORSCHE 935/84
Akin/O Steen
1m. 32.037 s.
- 06. PORSCHE 935
Haywood/Ballot Lena
1m. 32.906 s.
- 25. MARCH 83G CHEVROLET
Cawart/Miller
1m. 33.276 s.
- 24. PORSCHE 935
Fangio/Gralia
1m. 34.551 s.
- 63. ARGO JM16 MAZDA
Downing/Maffucci
1m. 35.060 s.
- 19. NIMROD ASTON MARTIN
Miller/Ramirez
1m. 38.094 s.
- 3. MARCH 84G BUICK (2)
Madson/Sper
1m. 42.380 s.
- 2. MARCH 84G CHEVROLET
Al Leon/Art Leon
1m. 44.695 s.
- 50. CHEVROLET CORVETTE GTP
McIntyre/Martin
1m. 47.069 s.
- 84. MARCH 83G CHEVROLET
Fittipaldi/Garcia
1m. 24.840 s.
- 15. MARCH AR3 COSWORTH
Morelli/Laraun
1m. 26.096 s.
- 39. PHOENIX JG1 CHEVROLET
Gunn/Revene
1m. 27.843 s.
- 88. MARCH 83G CHEVROLET
B. Whittington/Dale Whittington
1m. 28.516 s.
- 11. LOLA T600 CHEVROLET
Kendall/Cook
1m. 30.221 s.
- 68. LOLA T616 MAZDA
Halsmer/Hayje
1m. 30.589 s.
- 4. RONDEAU M382 CHEVROLET
Rondeau/Belcher
1m. 30.872 s.
- 15. LOLA T600 CHEVROLET
Kalagian/Lloyd
1m. 31.410 s.
- 9. PORSCHE 935
Baker/Blockler
1m. 32.059 s.
- 67. LOLA T616 MAZDA
Busby/Knoop
1m. 33.078 s.
- 16. MARCH 82G CHEVROLET (1)
Hinze/Lanier
1m. 33.869 s.
- 18. SAUBER C7 BMW
Naon/Fomfor/Valiente
1m. 34.744 s.
- 46. PORSCHE 935
De Narvoez/Heyer
1m. 37.263 s.
- 61. ARGO JM16 COSWORTH
Courtney/O'Neill
1m. 39.195 s.
- 05. LOLA T600 PORSCHE
Almeida/Morejon
1m. 43.582 s.
- 02. GRID S1 COSWORTH (3)
S. Shelton/T. Shelton
1m. 45.108 s.
- 03. GRID S2 PORSCHE
De Villota/Wood
2m. 18.453 s.

- (1) No start after warm-up (engine)
- (2) No start after warm-up (engine)
- (3) No start after qualifying session (off road, damaged body shell)



GTU (GT less than 2.8 litre)

Pole position: Baldwin/Mazda RX7, in 1 min. 32.791 sec., an average of 71.774 mph (115.509 km/h).
 Best race lap: Baldwin/Mazda RX7, in 1 min. 33.021 sec., an average of 71.597 mph (115.224 km/h).
 Race distance: 26 laps in 45 min. 35.390 sec., an average of 63.299 mph (101.869 km/h).

- | | |
|----------------|------------------------------|
| 1. Cord | 26 laps / 4th in qualifying |
| 2. Mueller | 26 laps / 3rd in qualifying |
| 3. Ganz | 26 laps / 8th in qualifying |
| 4. Dunham | 26 laps / 5th in qualifying |
| 5. Baldwin | 26 laps / 1st in qualifying |
| 6. Alderman | 26 laps / 9th in qualifying |
| 7. Jansal | 26 laps / 27th in qualifying |
| 8. Francesca | 26 laps / 13th in qualifying |
| 9. Rubino | 26 laps / 17th in qualifying |
| 10. Meina | 25 laps / 15th in qualifying |
| 11. Bacon | 25 laps / 6th in qualifying |
| 12. Burdall | 25 laps / 16th in qualifying |
| 13. Drolson | 25 laps / 18th in qualifying |
| 14. Artunoff | 25 laps / 23rd in qualifying |
| 15. DiLallo | 25 laps / 19th in qualifying |
| 16. Graer | 25 laps / 24th in qualifying |
| 17. Wilder | 25 laps / 21st in qualifying |
| 18. Winters | 24 laps / 12th in qualifying |
| 19. Benin | 24 laps / 22nd in qualifying |
| 20. Figgaro | 24 laps / 26th in qualifying |
| 21. Wenzler | 23 laps / 30th in qualifying |
| 22. Hurley | 21 laps / 21st in qualifying |
| 23. Adams | 17 laps / 28th in qualifying |
| 24. Case | 16 laps / 11th in qualifying |
| 25. Green | 12 laps / 20th in qualifying |
| 26. Sheehy | 12 laps / 10th in qualifying |
| 27. Leitzinger | 11 laps / 25th in qualifying |
| 28. Finger | 10 laps / 29th in qualifying |
| 29. Lopez | 0 laps / 29th in qualifying |
| 30. White | 0 laps / 29th in qualifying |

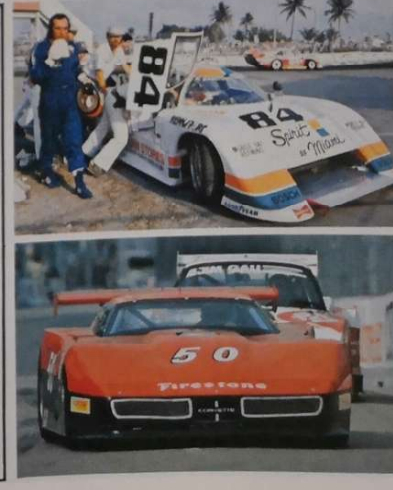
GTO (GT more than 2.8 litre)

Pole position: Felton/Chevrolet Corvette, in 1 min. 40.852 sec., an average of 66.037 mph (106.276 km/h).
 Best race lap: Felton/Chevrolet Corvette, in 1 min. 30.535 sec., an average of 73.563 mph (118.388 km/h).
 Race distance: 27 laps in 46 min. 29.240 sec., an average of 64.465 mph (103.746 km/h).

- | | |
|---------------|------------------------------|
| 1. Bohren | 27 laps / 6th in qualifying |
| 2. Riggins | 27 laps / 3rd in qualifying |
| 3. Mandez | 27 laps / 7th in qualifying |
| 4. Mandeville | 27 laps / 4th in qualifying |
| 5. Conessa | 26 laps / 12th in qualifying |
| 6. Felton | 26 laps / 1st in qualifying |
| 7. Fomfor | 25 laps / 30th in qualifying |
| 8. Levenson | 25 laps / 19th in qualifying |
| 9. Griffin | 25 laps / 16th in qualifying |
| 10. Munoz | 25 laps / 21st in qualifying |
| 11. Mathenzo | 25 laps / 25th in qualifying |
| 12. Erickson | 22 laps / 11th in qualifying |
| 13. O'Neil | 22 laps / 13th in qualifying |
| 14. Vincentz | 21 laps / 15th in qualifying |
| 15. Fontana | 21 laps / 22nd in qualifying |
| 16. Del Russo | 20 laps / 27th in qualifying |
| 17. Gonzalez | 19 laps / 10th in qualifying |
| 18. Heinz | 18 laps / 17th in qualifying |
| 19. Link | 18 laps / 28th in qualifying |
| 20. Frink | 14 laps / 2nd in qualifying |
| 21. Montoya | 13 laps / 9th in qualifying |
| 22. Varde | 11 laps / 8th in qualifying |
| 23. Micangeli | 10 laps / 5th in qualifying |
| 24. Cumin | 9 laps / 20th in qualifying |
| 25. Sereix | 8 laps / 26th in qualifying |
| 26. Garcia | 4 laps / 24th in qualifying |
| 27. Theall | 3 laps / 18th in qualifying |
| 28. Hagan | 2 laps / 29th in qualifying |
| 29. Solo | 0 laps / 14th in qualifying |
| 30. Almeida | 0 laps / 14th in qualifying |

FINAL RESULTS

- 1. Jaguar XJR5 (Redman/Bundy), 118 laps for 218.3 miles (351.3 km) in 3h 00 m 21.340 s, an average of 72.623 mph (116.875 km/h).
- 2. Jaguar XJR5 by 1m 21.290 s
- 3. Lola T600 Chevrolet 117 laps
- 4. Andial Porsche 935 115 laps
- 5. Lola T616 Mazda 114 laps
- 6. Lola T616 Mazda 114 laps
- 7. Lola T616 Mazda 113 laps
- 8. March 83G Chevrolet 112 laps
- 9. March 83G Chevrolet 112 laps
- 10. Sauber C7 BMW 109 laps
- 11. Porsche 935 109 laps
- 12. Porsche 935 109 laps
- 13. Chevrolet Corvette GTP 105 laps
- 14. Porsche 935 103 laps
- 15. March 84G Chevrolet 98 laps
- 16. Momo AR3 Cosworth 96 laps, retired (gearbox)
- 17. Lola T600 Chevrolet 90 laps
- 18. March 83G Chevrolet 90 laps, retired (transmission)
- 19. Argo JM16 Cosworth 62 laps, retired (collision)
- 20. Nimrod Aston Martin 58 laps, retired (off road)
- 21. Porsche 935 54 laps, retired (rear suspension)
- 22. Porsche 935/84 37 laps, retired (off road)
- 23. Phoenix JG1 Chevrolet 37 laps, retired (collision; radiator)
- 24. March 83G Chevrolet 33 laps, retired (collision; radiator)
- 25. Ford Mustang GTP 31 laps, retired (puncture; damaged LF suspension)
- 26. Argo JM16 Mazda 24 laps, retired (fire)
- 27. Porsche 935 20 laps, retired (collision; half shaft)
- 28. Rondeau M382 Chevrolet 16 laps, retired (overheating; oil leak)
- 29. Lola T600 Porsche 0 laps, retired (transmission)
- 30. Grid S2 Porsche 0 laps, retired (off road)
- 31. 18 minutes of the race were run under the protection of the pace-car, following the shunt of the Nimrod Aston Martin (laps 64 to 70).





Stéphane Foulon / DPPi

EMERSON VINDICATED

I COULDN'T WORK OUT WHAT WAS HAPPENING. WHILE I WAS WAITING IN THE PITS, OUR CAR WAS GETTING SLOWER AND SLOWER. EVENTUALLY I RECKONED THAT IT MUST HAVE HAD some sort of brake trouble. But when my teammate came in after 31 laps he was completely exhausted. I realised that he'd lost all that time for physical, not technical, reasons. All my worries vanished when I took over. There was just one thing on my mind: to go as hard as I could for the whole two and a quarter hours left in the race." Emerson Fittipaldi was delighted to be telling the story. To me there was a feeling that I'd got into some sort of time warp, because it was as though the great Brazilian, dressed now in a white sweater and impeccably creased dark blue pants, had never been away from racing. He spoke easily in French, albeit heavily accented with the Swiss intonation that reminded me of the years he'd spent living near Lausanne back in the 70s. He's eagle-eyed, as ever, and he had a look of well-earned satisfaction on his face as he offered

his hand to Teresa, the young and athletic new woman at his side. A sudden flashback of memory caused me to lose the thread of the conversation for a moment. Two hours earlier I had been standing on the inside of the Marina hairpin, at a marshal's post where you can get close enough to the cars to reach out and touch them. Lap after lap I got the same view of Fittipaldi's March-Chevrolet, with the orange-gloved right hand flashing energetically as he used the tiny steering wheel to put on the opposite lock. Braking on the very limit, its driver ready to pile on the power and accelerate, the heavy March coupé swept from left to right across the road in a superbly controlled slide that took it, every time, to within a fraction of an inch of the concrete wall. It seemed crazy, but it was paying off, for ever since the pace car had pulled back into the pitlane the spectators were shouting encouragement to the Brazilian. In only 20 laps he had cut down the leader's 30-second advantage to almost nothing. Doc Bundy's Jaguar, with Bob Wollek's Andial Porsche glued to its tail, dodged around the circuit looking for all it was worth as if it were a hunted animal that knew its fate was about to catch up with it. It was at this point that the March's gearbox mainshaft chose to break. "I really enjoyed it. I've been away from racing for three years, but my speed suddenly came back to me in

a rush. My lap times were right down, under 1 min 24.40 sec, better than my pole time from yesterday morning. I was terribly hot in there, and the car was very tiring to drive, but it didn't seem to matter. I could have got through to the end of the race without a fuel stop, just like the Jaguar, and I really believe that I could have won here quite easily." He kept on chatting, of IMSA, of CART and a possible attempt on the Indianapolis 500. The abortive attempt at a Grand Prix comeback with Spirit is nothing more than a faint memory: "I will only make a return to Formula 1 with a good car, not just for the fun of it. I've had enough of fooling around at the back of the grid..." To be or not to have been; that was the question, insidious perhaps, which had been asked of him before the Rio tests. The answer then was plain: Fittipaldi was a has-been. At Miami, the Brazilian had completely resurrected himself. I was knocked out by his superb, stylish driving... and now I found myself alone at the trackside, talking to myself. He was gone, leaving me with but one overwhelming thought. As I told myself (and it's worth repeating)... you need a lot more than luck to have been twice champion racing driver of the world.

Didier Brailon



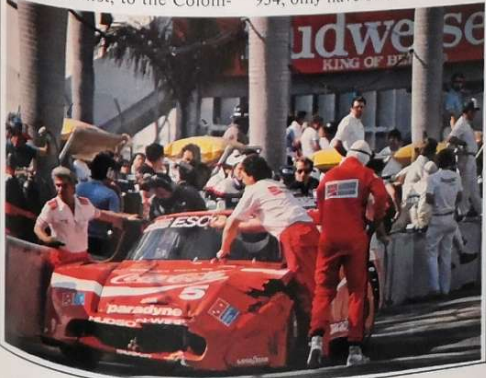
PORSCHE GTX

- 5. BOB AKIN MOTOR RACING/PORSCHE 935-84 (Bob Akin/John O'Steen) 16th in qualifying, DNF race
- 6. HENN'S SWAP SHOP RACING/ANDIAL PORSCHE 935 (A.J. Foyt/Bob Wollek) 10th in qualifying, 4th in race
- 9. PERSONALIZED AUTOHAUS/PORSCHE 935 (Wayne Baker/TomBlackhaller) 17th in qualifying, 14th in race
- 14. JOHN FITZPATRICK RACING/PORSCHE 935 (Al Holbert/David Hobbs) 12th in qualifying, DNF race
- 24. PEGASUS RACING/PORSCHE 935 (Juan Manuel Fangio/Hugo Galia) 22nd in qualifying, 12th in race
- 46. MAURICIO DE NARVAEZ/PORSCHE 935 (Mauricio de Narvaez/Hans Heyer) 25th in qualifying, DNF race
- 86. BAYSIDE DISPOSAL RACING/PORSCHE 935 (Hurley Haywood/



Claude Ballot Lena) 18th in qualifying, 11th in race

Five of the seven Porsche GTXs were at Daytona. The others belonged, the first, to the Colom-



bian De Narvaez, who entered a not very hot 935 prepared by Reinhold Jöst, and the second, to John Fitzpatrick Racing, which briefly returned to IMSA because of the prestige of the Miami event and for the big prize money being offered. Holbert, reigning IMSA champion, and Hobbs, drove number 14 in Budweiser livery. The most competi-



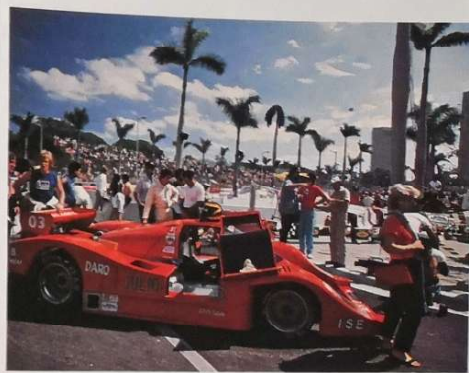
tive of the Porsche GTXs remained the Andial 935, driven by Foyt/Wollek, and still bankrolled by the Texan's usual sponsor, Gilmore. Poorly positioned in the starting grid because of problems with a valve rocker Saturday morning, it still placed 4th in the race and in spite of Foyt's poor times. Number 24 drew the attention of the South American press, since Juan Manuel Fangio, chaperoned by his uncle, was driving in his first international-class event. All the 935s were equipped with 3-litre flat-six engines, except the Andial which has a capacity of 3.2 litres. They are all turbocharged by two KKK turbos, except numbers 9 and 46, which being based on the 934, only have one.

GRID

- 02. GRID MOTOR RACING/GRID S1-COSWORTH (Steve Shelton/Tom Shelton) 31st in qualifying, non-starter
- 03. GRID MOTOR RACING/GRID S2-PORSCHE (Emilio de Villota/Dudley Wood) 33rd in qualifying, DNF race

Number 02, with a 3-litre Cosworth V8 DFV engine, is the same car that almost won 12 Hours at Sebring in 1983. Num-

ber 03, which has been promised by Ian Dawson for several months now, was making its debut. Equipped with a single turbo, 3-litre Porsche 935 engine, coupled with Porsche 956 inter-coolers, it obviously still needs considerable development. Qualifying at the back of the grid, almost impossible to start, the Grid S2 in the livery of the singer Julio Iglesias, who lives in Miami, took a beating going off the road in the hands of De Villota on the first lap.



RONDEAU

- 4. WALRUS RACING/RONDEAU M382-CHEVROLET (Jean Rondeau/Gary Belcher) 13th in qualifying, DNF race

This M382/1 has now grown fat, tipping the scales at 1,050 kg. Its

weight puts the car in the category GTP (900 kg plus), which allows it to use a 6-litre engine. Indeed, it has a Chevrolet V8 prepared by Franz Weiss at VDS. In the race, Rondeau soon had to contend with an engine overheating problem, followed by an oil leak that forced him to retire.



NIMROD ASTON MARTIN

- 19. PERFORMANCE MOTORCARS/NIMROD ASTON MARTIN (Jack Miller/Carlos Ramirez) 26th in qualifying, DNF race

A single Nimrod, whereas there were three at Daytona - the Brits John Cooper and Ray Mallock

having gone home. This car was present for most of the '83 season. Heavy, it uses a normally-aspirated 5.34-litre Lagonda V8 engine, which puts out 550 bhp. On the 61st lap of the race, the Nimrod shunted against the wall on the fast left just before the Marina hairpin. The pace-car came onto the track for 7 laps, the car hauled off and the race went on.



MARCH

00. KREPPY KRAULY RACING/MARCH 83G-PORSCHE (Sarel van der Merwe/Tony Martin)
5th in qualifying, 8th in race
2. LEON BROTHERS RACING/MARCH 84G-CHEVROLET (Al Leon/Art Leon)
30th in qualifying, 15th in race
3. PEGASUS RACING/MARCH 84G-BUICK (Ken Madren/M.L. Speer)
28th in qualifying, non-starter
16. MARTY HINZE RACING/MARCH 82G-CHEVROLET (Marty Hinze/Randy Lanier)
21st in qualifying, non-starter
25. RED LOBSTER RACING/MARCH 83G-CHEVROLET (Dave Cowart/Kenper Miller)
20th in qualifying, 9th in race
84. RALPH SANCHEZ RACING/MARCH 83G-CHEVROLET (Emerson Fittipaldi/Tony Garcia)
1st in qualifying, DNF race
88. MOTORSPORTS MARKETING/MARCH 83G-CHEVROLET (Bill Whittington/Dale Whittington)
7th in qualifying, DNF race

With Robin Herd looking on, seven March machines were entered. Number 00, the 83G/04, which won the Daytona

JAGUAR

04. GROUP 44/JAGUAR XJR5 (Brian Redman/Doc Bundy)
4th in qualifying, 1st in race
44. GROUP 44/JAGUAR XJR5 (Bob Tullius/Pat Bedard)
8th in qualifying, 2nd in race

Entered by Jaguar Cars, the XJR5 have 5.3-litre, normally-aspirated, fuel-injected V12 engines, developing 600 bhp. At the start of the race, Redman jumped into the lead and stayed there, except on the 28th lap when he had to give way to the Mustang GTP. Two laps later, he was again out front until Fittipaldi began his lightning climb to the top. But just as Emerson came to within 4 seconds of the leader,

24 hours, was powered with a 3-litre 6-cylinder Porsche 935 engine prepared by Andial. Number 2, the 84G/01 sported a 5-litre Chevrolet V8 prepared by VDS. Number 3, the 84G/02, had a 3.4-litre Buick V6, with a single Warner-Ishii turbo, prepared by McLaren Engines. Number 25, the 83G/03, used a 5-litre Chevrolet V8 prepared by ProMotor Engineering. Number 16 is an older 82G/04 with a 5-litre Chevrolet V8 prepared by Ryan Falconer. The 83G/02 was prepared by RennSport Autohaus, belonging to Tony Garcia, and was equipped with a 5-litre Chevrolet V8 from ProMotor Engineering. Driven by Fittipaldi, it captured pole position Saturday morning. Number 88, the 83G/01 in the hands of Bill and Dale Whittington, had a 5-litre Chevrolet V8 by Holley. On race-day, both numbers 16 and 3 had to quit with blown engines after warm-up. The two Whittingtons ran a good race, challenging Tullius's Jaguar from the beginning for 3rd place. However, they were forced to retire. But by far the most spectacular performance was number 84's, brilliantly driven by Emerson Fittipaldi up until he was forced to retire by a broken gearbox input drive shaft.



suddenly he was out of the race. Number 44 took 2nd place, in spite of a spin. Nevertheless, all the Jaguar drivers were victims of their engineers forgetting to install onboard drinking-water systems. The Jaguars, which stayed the course with only a single fuel stop each, brought their masters \$75,000 in prize money.

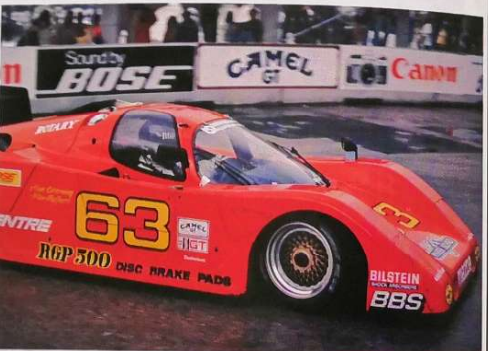
ARGO

61. DECO SALES/ARGO JM16-COSWORTH (Don Courtney/Brent O'Neill)
27th in qualifying, DNF race
63. RGP 500 RACING/ARGO JM16-MAZDA (Jim Downing/John Maffucci)
24th in qualifying, DNF race

The Argos are built in Griston, Suffolk GB, by the Swiss engineer Jo Marquart. The one belonging to RGP 500, 9th at Daytona, has a 1308cc Mazda 13B twin-rotor engine, developing 300 bhp. The one belonging to Deco Sales uses a 2993cc nor-



mally-aspirated Cosworth V8 DFV, producing 450 bhp. This engine is brand new, and utilisation of the same block previously of F1 fame allows the car to make it, along with the JM16-Mazda, into the 700 kg class - what would not have been possible with a 3.3-litre or 3955cc DFL assembly.



MOMO

30. MOMO CORSE/MOMO AR3-COSWORTH (Giampiero Moretti/Oscar Larrauri)
3rd in qualifying, DNF race

Built in Turin at Alba, designed by Giorgio Stirano, the Momo uses a 2993cc normally-aspirated Cosworth V8 DFV engine, producing 450 bhp, and making it possible to enter in the 700 kg class. He hired as his second the young Argentinian Larrauri, who was European Formula 3 Champion in 1982. Taking full advantage of the agility of the Momo on a slow track, the car scored a surprising 3rd in quali-

fying at the end of the morning session. Indeed, the road surface was practically dry on the straights. In the race, the Momo quickly lost the use of second gear. However, that didn't stop Larrauri from scoring a lap-time of 1 min. 24.80 sec. - before the gearbox finally blew up.



FORD

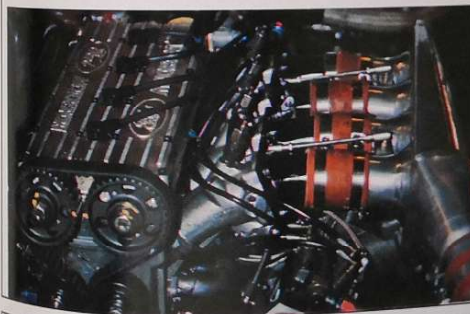
18. TEAM ZAKSPEED USA/FORD MUSTANG GTP (Klaus Ludwig/Bobby Rahal)
2nd in qualifying, DNF race

Designed for short races, the works Mustang GTP was not at Daytona. A winner of its debut in 1983 at Road America, Elkhart Lake, the car designed by Ford Riley is the result of Ford Aeros-



pace's advanced construction technology and uses carbon composites. Front-engined, with the gearbox over the rear wheels, it has a 2.1-litre 4-cylinder turbo. The only handicap this 600 bhp GTP has is its weight - IMSA's regulations put it in the 900 kg

class. Off the start, Ludwig was a serious threat for Redman and even overtook him on the 28th lap. But he had to fall back behind the Jaguar on the 30th lap, before suffering a LF puncture, which forced him to retire with broken suspension.



PHOENIX

39. HOLLY RACING/PHOENIX JG1-CHEVROLET (John Gunn/Justin Revene)
5th in qualifying, DNF race

First seen at Miami last year, the Phoenix is a creation of John Gunn, previously of CanAm

fame. It has a Chevrolet V8 engine. In spite of last-minute preparation and a rather skimpy turnout, the car managed a 5th in qualifying. An exploit accomplished at the end of the morning session at a time when the track was practically dry on the straights.

SAUBER-BMW

18. EUROPEAN PERFORMANCE PARTS/SAUBER C7-BMW (Albert Naon/Willy Valiente)
22nd in qualifying, 10th in race

Entered by its owners from El Salvador, built in Switzerland, and equipped with a 3.5-litre BMW M1 6-cylinder inline engine, this GTP had already been seen at the 24 Hours at Daytona.

LOLA

05. HI-TECH RACING/LOLA T600-PORSCHE (Almeida/Miguel Morejon)
29th in qualifying, DNF race
11. KENDALL RACING/LOLA T600-CHEVROLET (Chuck Kendall/Jim Cook)
9th in qualifying, 17th in race
15. KALAGIAN ARDISANA/LOLA T600-CHEVROLET (John Kalagian/John Lloyd)
15th in qualifying, 7th in race
45. CONTE RACING/LOLA T600-CHEVROLET (John Morton/Bob Lobenberg)
14th in qualifying, 3rd in race
67. B.F. GOODRICH/LOLA T616-MAZDA (Jim Busby/Rick Knoop)
19th in qualifying, 6th in race



68. B.F. GOODRICH/LOLA T616-MAZDA (Pete Halsmer/Boy Hayje)
11th in qualifying, 5th in race

The Lozano Brothers prepared the 5-litre Chevrolet V8 on number 15, the T600/4 with a modified body. A 5-litre Chevrolet V8 engine from VDS equipped the

T600/11 number 45, the same as at Daytona. Number 11, the T600/6 which competed in the 1983 Miami Grand Prix in Budweiser livery, had a 5-litre Chevrolet V8 prepared by Arias Racing Engines. Number 05 is the car Bruce Leven used to race for Bayside Disposal. Equipped with a single turbo, 3-litre



Porsche 935 engine, this T600/8 was also at Miami last year and now belongs to Hi-Tech. B.F. Goodrich's T616/1 (67) and T616/2 (68) were also at Daytona, and both placed well after only refuelling once. In the GTP 700 kg class, they used Mazda 13B twin-rotor engines, which put out 300 bhp.



chunky white fisherman's sweater - no tie - he's relieved that we haven't brought a photographer or a camera. "Sorry about that," he grins, "but I can't expect our people to keep secrets when they see a journalist wandering in like you just did."

He settles down at the silent switchboard and starts searching for the Yellow Pages. He needs the telephone number of a local hotel which has catered Sunday lunch for his staff in the past. One false start (to an old peoples' home) and several curses later, he gets through: "lunch for fourteen... I think you provide plates and cutlery... and you'll deliver? Thank you very much." John Barnard appears, unshaven and slightly unkempt, and offers a formal "good morning." The two men stand together briefly before we're invited into John's design office. Ron vanishes back into the factory. It's time to start the promised interview, and I dip into my pocket for my tape recorder. First, though, let's reflect on the achievements of these two different but self-complementing characters who carry on the traditions of Bruce McLaren's team nearly 14 years after Bruce's tragic death at Goodwood. In an era when all but a handful of team owners, managers and designers are heading into their 50s, Dennis and Barnard are still several years off 40. When McLaren founded his team in 1963, Dennis was only 15 years old, and it was to be another three years before he found himself a mechanic on Jochen Rindt's Formula 1 Cooper-Maserati. As recently as 1975, Barnard was working at the old McLaren factory, designing Indy car modifications under the supervision of the team's well-established chief designer, Gordon Coppuck. Meanwhile, Ron Dennis had been establishing himself as an independent F2 and F3 entrant: he was also the man whose work-

'NONE OF THE PRINCIPALS INVOLVED CAN RECALL WHO SUGGESTED THE MERGER BETWEEN DENNIS AND MCLAREN'

shops had done the basic preparation of the BMW M1 coupés that raced in the Procar series of 1979 and 1980. His company, Project Four, had earned a reputation if not for a lot of wins then certainly for immaculate turnout, and sponsors spoke highly of his efforts to give them constant return from their investment in the form of involvement, personal and encouraging, with "their" cars and drivers. One of those sponsors was Marlboro...

By the beginning of the 1980 season, Dennis had set his sights on F1. He had recruited Barnard from the widely-acclaimed Chaparral Indy-car project, offered him a partnership in the company, and found the cash to finance the F1 car with the help of another partner, Creighton Brown. Starting with a blank sheet of paper, Barnard was in the enviable position of being able to design his first F1 car without the stresses of

race-to-race development, and he had taken the opportunity to use a new material, carbon fibre, for the entire monocoque chassis when others had dared only to use it for isolated panels.

As motor racing author Doug Nye records in a splendid history of the marquee (McLaren, Hazleton Publishing, £12.95), the "marriage" between the Marlboro-sponsored McLaren and Project Four teams is now shrouded in mystery. "None of the principals involved either will or can recall who first suggested the merger between the two operations. It was a difficult yet extremely sensible and practical solution to the problem of a great team in technical decline, looking for a car, and an aggressively ambitious newcomer, painstakingly developing an innovative new car free of week-to-week calendar pressures but short of a sponsor. The merger brought Project Four's programme instant membership of FOCA with all the travel-arrangement, expenses, start, prize and bonus money advantages accruing plus access to McLaren's Cosworth DFV engine shop developments plus the accepted experience of Team McLaren men like Teddy Mayer and Tyler Alexander..."

In the three years since then, McLaren International has won six Grands Prix and, significantly, re-established the marquee's reputation for sound engineering and impeccable preparation. Latterly it has done so without Mayer and Alexander, who saw the merger through its first 2 years leaving, on a friendly basis, with their shareholdings generously transformed into cash, at the end of 1982. The team is in its new Boundary Road premises, with many new faces on the staff of 75, and Dennis doesn't even feel too resentful that he's lost half a dozen long-serving employees to Mayer's recently set up Indy car team, which has its British base only a few minutes' drive away. All that remains of the team that Bruce McLaren established in 1963 is the name.

But in Rio de Janeiro next week the company turns over a new leaf in its career: a new car, purpose-built for the expensive TAG/Porsche turbo V6 engine, replaces the trend-setting MP4-1, and the team - essentially British and artisan - must confront the "Grandee" constructors on equal terms. When these words were written we still hadn't seen the new car, but Barnard assured us that it is "just another logical step that follows the trend which we started of using the airflow around the back wheels." This trend, dubbed the "coke bottle" effect because of the pinched-in body sides behind the side radiators, has already been copied, and Barnard anticipates that it will be seen on several other cars this year because it offers a significant reduction in drag (Cd) figures.

Like most other current F1 designers, Barnard uses wind tunnel models to test his ideas. Beautifully made in the McLaren workshops, and fitted with intricate flow-measuring devices, the 1:3 scale models are tested in the National Maritime Institute's wind tunnel at Feltham, not far from Woking, using McLaren's own moving-ground equipment to make the simulation all the more authentic. To Barnard's disgust, sev-

Left: John Barnard, "father" of the latest McLaren and Ron Dennis's co-director.

Right: Tyler Alexander, co-founder of McLaren Racing, who has since left to join his friend Teddy Mayer (another McLaren founder) in an Indy-car project. (photo: DPPI)



McLaren International's drivers for 1984 are Alain Prost and Niki Lauda, who together form the last link in a long and delicate chain between drawing board and success. (photo: DPPI)

eral modifications to last year's interim TAG-engined MP4-1E could not be wind tunnel tested because of pressure on time, and had to be tested under race conditions on the car itself. "I really don't like to work like that," he says: "if it's a small improvement you'll never find out anyway until you check by using the model, because the driver can't possibly tell you if there's been a fine aerodynamic improvement, or a small improvement in horsepower. Small modifications like that must be made on the basis of some sound technical knowledge, when you are convinced that it's better."

When Dennis announced the association with Porsche 2 years ago, before TAG (Techniques d'Avant Garde) stepped in as his commercial partner to market the engine, he said that there would be no

'A DRIVER CAN'T POSSIBLY TELL YOU IF THERE'S BEEN A FINE AERODYNAMIC CHANGE OR A SMALL IMPROVEMENT IN HORSEPOWER'

question of running the German V6 in an adapted, interim car. Well, the engine (like so many turbos) was later than expected on delivery, and the modified MP4-1 chassis had to be pressed into service. Barnard's perfectionist approach ensured that the car at least looked as though it had been purpose-built, but he is eager to see the MP4-2 on the track. After all, other teams have built as many as three completely different new chassis in as little as 12 months (look at Lotus!), but Barnard has waited over three years for this...

Although the new car schedule was aimed at getting the MP4-2 to South Africa for the recent tests at Kyalami, the team insists that it is one week late in being presented. As Ron Dennis says, "in a way we're deliberately late. That may sound silly, but we want to be sure that every detail is right on this car. Imagine putting up a bookshelf at home: if you run into a little snag you would probably leave the bookshelf where it was and promise yourself to fix it properly at some time in the future. We have fixed as much as we can right now, before the rush starts."

Asked about progress with the TAG/Porsche engine, both men take deep breaths and think carefully before opening their mouths to comment. Ron Dennis: "it is accurate to say that the engines are coming through rather slowly from the factory. Hopefully this is for the right reasons, insofar as we're trying to start with a better 'package' in the form of economy and power for a given fuel consumption than we would have been prepared to accept 1 month ago."

From Barnard's point of view, however, the discontent goes rather deeper than that. To begin with he's no lover of turbos ("these nasty things that have been allowed to come along and ruin Formula 1 racing"), and secondly he was not at all happy to be

obliged to start racing a turbo engine before it had been more extensively tested. "From the point of view of our engineering staff it was a waste of time to have to make an interim car: I feel sure we would have finished higher in the championship if we'd carried on running the Cosworth car." Nor does Barnard believe that the team benefited greatly from taking the engine to the races and being forced to develop it there. "You don't have to go to a Grand Prix to find out that the engine refuses to start, and to look foolish in front of thousands of people in the pit lane..."

Most of the problems associated with the Porsche-designed engine have been in the electronic engine management system developed for it by Bosch, the company whose electronics worked so well in 1983 for Brabham, BMW and Nelson Piquet. But the all-electronic Bosch Motronic MS3 system on the V6 is different from the mixed electronic/mechanical system on the BMW four-cylinder. "When the engine was first about to be fitted in our car I wanted mechanical fuel injection, because it was something that Porsche knew inside out. It would have been great for me, from the chassis side, to be able to run an engine and to get the car sorted out. But Bosch stepped in and... well, they wanted electronic from the word 'go' - and it really wasn't quite ready, not then."

The TAG/Porsche-engined car first ran (and raced) at Zandvoort, where it was competitive with Ferrari and Renault on top speed until Niki Lauda withdrew from the race with brake problems. For the next race, at Monza, both drivers had TAG turbos, and at the South Africa GP it was a story of "good news and bad news," with Lauda qualifying reasonably well. Meanwhile Watson seemed to spend most of his time sitting in the pit lane as sweating German engineers fought unsuccessfully to coax his engine into life.

The Kyalami race was very encouraging for Lauda, who fought his way up to 2nd place behind Patrese with ten laps to go, only to be let down five laps later by the failure of a voltage regulator. It seems that it was a standard road-car part, mounted on the chassis, which failed due to the unusual conditions of heat and vibration.

"I don't think that all the problems are out of the engine by any means," says a cautious Barnard. "But I do think that the Brazil test - which was a real fiasco - forced Bosch to look at things which they had assumed, in their German style, could not be a problem. It is one of the little differences in the approach to racing between us and them: when you've been in racing long enough, you don't take anything at face value, because the most ridiculous things can turn round and bite you... After Brazil, everything had to be re-examined in detail. The (later) Ricard test was OK, although we had some mechanical problems, basic pieces breaking in the engine because, I suspect, they were inferior pieces that had to be fitted because there weren't enough of the right parts available at the right time."

Both Barnard and Dennis have an attitude towards 1984 that can only be described as

"constructive optimism," hope based on experience and knowledge. For example, despite the evidence of recent explosive driver combinations (Jones and Reutemann at Williams in '81, Pironi and Villeneuve at Ferrari in the first few races of '82), Dennis sees no reason why Lauda and Prost shouldn't work together amicably and well. "If the combination doesn't work," he insists, "it won't be the fault of either of the drivers; it will be a weakness in the management." Dennis clearly regrets the note of scandalised resentment that the British Press has taken towards the firing of John Watson from the team at the end of last year. It was, he insists, a joint decision between Marlboro and McLaren: "any sponsor has a vested



Bruce McLaren. (photo DPPI)

interest in who drives the cars he sponsors, but it's the team's responsibility to win races. That's why McLaren International exists, to win races, and if that position is enhanced by a change of driver, then that opportunity has to be considered. One of the factors involved was financial, and this was a supply-and-demand situation. I think that John was mentally prepared for a protracted financial negotiation over the winter months, and he wasn't in a position to respond to the set of circumstances that existed within a few days after the South Africa GP."

But was Prost available, one asks, at a bargain price because he'd got a pocket full of Renault's redundancy money? "I think Alain is earning the going rate for a top-notch F1 driver," says Dennis, guardedly. Money is a subject on which Dennis is always reluctant to talk. Nevertheless, his financial affairs are evidently in apple-pie order, and he is proud of the company's ability to know its financial position at any given moment. All the accounting is handled by an extremely sophisticated computer/word processing system, and the company's accountant, Bob Illman, was promoted to the board of directors a year ago.

Talking to the BBC at the beginning of last year, Dennis said that his 1983 budget was

"a little over four million pounds." In view of the fact that the TAG turbo engines have to be bought and serviced in exactly the same way as if they were Cosworth engines that belong to the team, one may safely estimate that this year's costs will be appreciably higher. "It's a little early to say exactly how much more," he says, "but I know that we have enough to do the job, so if we're not successful it won't be through lack of finances."

This is remarkable, especially when one is reminded that McLaren's direct British rivals, Brabham and Williams, both receive their engines free of charge from BMW and Honda, probably with a budget contribution from the maker as an added "sweetener." If the TAG turbo project is to succeed, it must be commercially successful, and McLaren International - a partner with TAG's Mansour Ojeh in the project - has a vested interest in that success. On possible sales of the V6 engine Dennis comments that "a lot is happening - and there's a better than 50/50 chance that it will be sold for use in a helicopter." Significantly, even if the engine were to be made available for sale to another F1 team, which at present would not be possible, it would be too expensive for the likes of Ken Tyrrell, who says that he has investigated the possibility.

Visiting the McLaren factory on a Sunday, even so close to the completion of the new car, enabled us to see a side of Barnard and Dennis that has not emerged until now. Dedicated as they are to their work, and to winning races, neither man is so devoted to racing that he will allow it to dominate his life in the long run. Barnard, married with two young daughters, has recently moved from a comfortable modern house to an old one that he plans to convert. It is only 6 minutes drive from Boundary Road, and he insists on going home for lunch every day. Dennis, unmarried, lives in a light, airy modern house which is equally close to the factory. Although he devotes himself 24 hours a day to his company, and is constantly aware of his responsibilities as an employer, he says that at some stage in the next 10 years ("but more likely in the next five") he will take a complete break from racing in order to buy a boat and spend a year afloat somewhere in the sunshine. As Barnard says, "basically motor racing is a rotten life which leaves you very little time for friends."

Strangely, that is a reminder of the foundation of McLaren Racing 21 years ago: four friends, Bruce McLaren, the American lawyer Teddy Mayer whose brother Timmy had driven with Bruce at Coopers, and American engineer Tyler Alexander, with Kiwi journalist Eoin Young bringing in some financial flair (he had, after all, worked briefly in a bank!). In those days there was time for friendship, whereas today it's planning and the constant search for cash, perfection and success.

Perhaps one day, with John Barnard busy in his vegetable garden and Ron Dennis sunning himself on his yacht, someone will talk about the "good old days" that began in 1981, just as they do now of the time when Bruce McLaren started his company... □

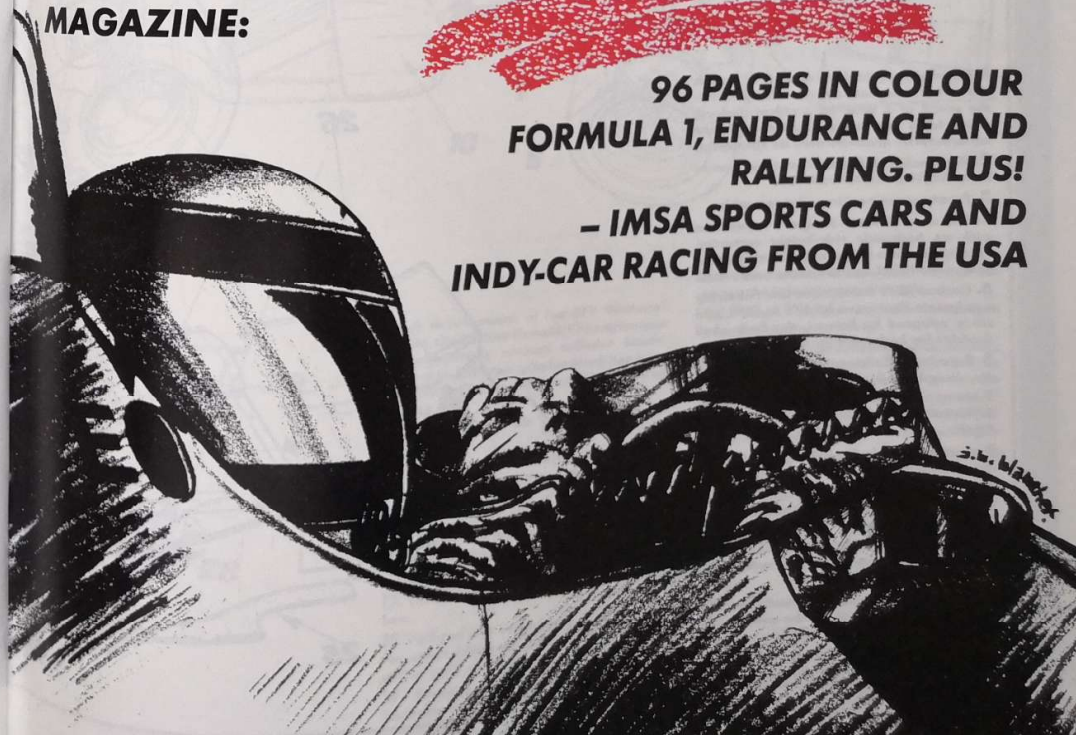
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RENAULT RE50



HAVING JUST FAILED TO TAKE ALAIN PROST TO THE 1983 DRIVERS' WORLD CHAMPIONSHIP TITLE, THE MEN AT RENAULT REDOUBLED THEIR EFFORTS. AND THE RÉGIE'S TURNAROUND TIME HAS BEEN ASTONISHINGLY SHORT. THERE'S A NEW CHASSIS, PLUS THE LATEST EF4 ENGINE, A SPIN-OFF FROM THE OLDER EF1 V6 MOTOR. THE OUTLOOK IS PROMISING. TO BEGIN WITH, THE RE50 SET THE FASTEST TIME IN JANUARY'S PRACTICE IN RIO. IN ADDITION, LATER TESTS CONFIRMED THESE RESULTS.

by Giorgio Piola

1. The nose, particularly wide, is of carbon fibre. It is designed to protect the driver in the event of a head-on accident. Indeed, crash tests carried out by Renault have satisfactorily demonstrated its efficiency.

2. Removable body panel to permit access to brake fluid master-cylinders.

3. Front access port to pedal assembly.

4. The suspension is designed to function with an hydraulic ride-height corrector. This system was frequently tested last season on the RE40, but has never been raced.

5. Carbon fibre monocoque tub. Following a principle first used by ATS in 1983, and since adopted by Ferrari, the body shell doubles for bodywork once it is painted.

6. Brembo radially-vented disc brake. Each disc is equipped with a single caliper.

7. Sidepod radiator/intercooler intake flow deflector. They are much shorter than on the RE40.

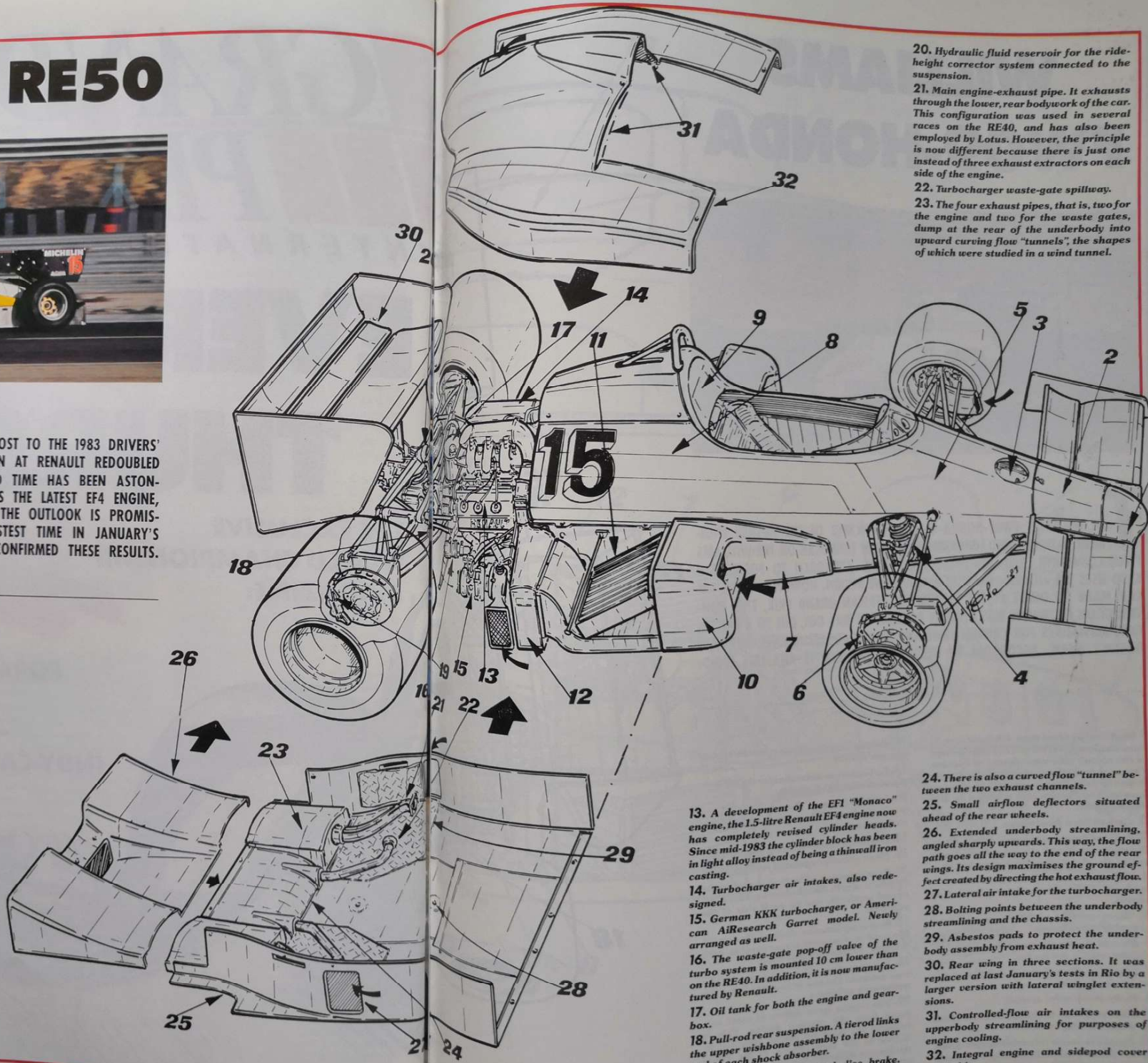
8. Fuel tank. It holds 220 litres, in accordance with the new-for-84 capacity ruling.

9. Upper bodywork, serving as a headrest, and covering the top of the fuel tank where the fuel filler is located.

10. Shortening of the sidepods was possible thanks to a new arrangement of the radiators and the intercoolers.

11. Lateral cooling assembly made up of the water-cooling radiator on the outside and the oil cooler on the inside.

12. The intercooler system, which was angled on the RE40, is now vertically mounted.



20. Hydraulic fluid reservoir for the ride-height corrector system connected to the suspension.

21. Main engine-exhaust pipe. It exhausts through the lower, rear bodywork of the car. This configuration was used in several races on the RE40, and has also been employed by Lotus. However, the principle is now different because there is just one instead of three exhaust extractors on each side of the engine.

22. Turbocharger waste-gate spillway.

23. The four exhaust pipes, that is, two for the engine and two for the waste gates, dump at the rear of the underbody into upward curving flow "tunnels", the shapes of which were studied in a wind tunnel.

13. A development of the EF1 "Monaco" engine, the 1.5-litre Renault EF4 engine now has completely revised cylinder heads. Since mid-1983 the cylinder block has been in light alloy instead of being a thinwall iron casting.

14. Turbocharger air intakes, also redesigned.

15. German KKK turbocharger, or American AiResearch Garrett model. Newly arranged as well.

16. The waste-gate pop-off valve of the turbo system is mounted 10 cm lower than on the RE40. In addition, it is now manufactured by Renault.

17. Oil tank for both the engine and gearbox.

18. Pull-rod rear suspension. A tierod links the upper wishbone assembly to the lower end of each shock absorber.

19. Brembo radially-vented disc brake. Each one is equipped with a single caliper.

24. There is also a curved flow "tunnel" between the two exhaust channels.

25. Small airflow deflectors situated ahead of the rear wheels.

26. Extended underbody streamlining, angled sharply upwards. This way, the flow path goes all the way to the end of the rear wings. Its design maximises the ground effect created by directing the hot exhaust flow.

27. Lateral air intake for the turbocharger.

28. Bolting points between the underbody streamlining and the chassis.

29. Asbestos pads to protect the underbody assembly from exhaust heat.

30. Rear wing in three sections. It was replaced at last January's tests in Rio by a larger version with lateral winglet extensions.

31. Controlled-flow air intakes on the upperbody streamlining for purposes of engine cooling.

32. Integral engine and sidepod cover assembly.

WILLIAMS FW09-HONDA



THE WILLIAMS FW09-HONDA IS THE BRAINCHILD OF THE BRITISH ENGINEER PATRICK HEAD, WHO BASED THE NEW TURBOCAR ON THE WILLIAMS FW08-COSWORTH. LIKE ITS PREDECESSOR, THIS APPROACH TO FORMULA 1 ALSO USES AN ALUMINIUM-ALLOY MONOCOQUE DESIGN. HOWEVER, WHEN THE CAR MADE ITS DEBUT AT THE 1983 SOUTH AFRICAN GRAND PRIX, THIS CONSTRUCTION TECHNIQUE WAS ALREADY WELL ON ITS WAY OUT, DUE TO A PREFERENCE NOWADAYS FOR CARBON FIBRE AND KELVAR CONSTRUCTIONS. BUT THAT DOESN'T MEAN, ACCORDING TO HEAD, THAT HIS CAR IS ANY LESS RIGID.

by Giorgio Piola

1. High-profile blunt nose. Williams aerodynamicist Frank Dernie worked out its shape in the team's own wind tunnel at Didcot. This nose is similar to the one on the Penske driven by John Paul Jr on CART circuits last season. The Penske was modified by Williams as well.

2. Carbon fibre front wings.

3. Pull-rod front suspension. A tierod links the upper wishbone assembly to the lower end of the shock absorber inside the tub.

4. Box-type chassis of classical design. It is made up of aluminium alloy sandwich-type panels.

5. Water-cooling radiators, angled, and placed in the sidepods.

6. Hitachi-Honda electronic "black box". Its characteristics are secret.

7. Carbon fibre lateral reinforcement panels for fuel tank.

8. Turbo intercooler system.

9. Oil-circuit heat exchanger, coupled with the water-cooling radiator.

10. Japanese-made Ihi turbocharger. Since January's tests in Rio, this replace the traditional German KKK turbo units.

11. Waste-gate pop off valve for the turbo-charger system.

12. Turbocharger airintakes for the 1.5-litre Honda V6 RA 163-E engine.

13. Ignition systems. There is one for each 3-cylinder bank of the engine, and timing is entirely electronic.

14. Electronic ignition-timing complexes.

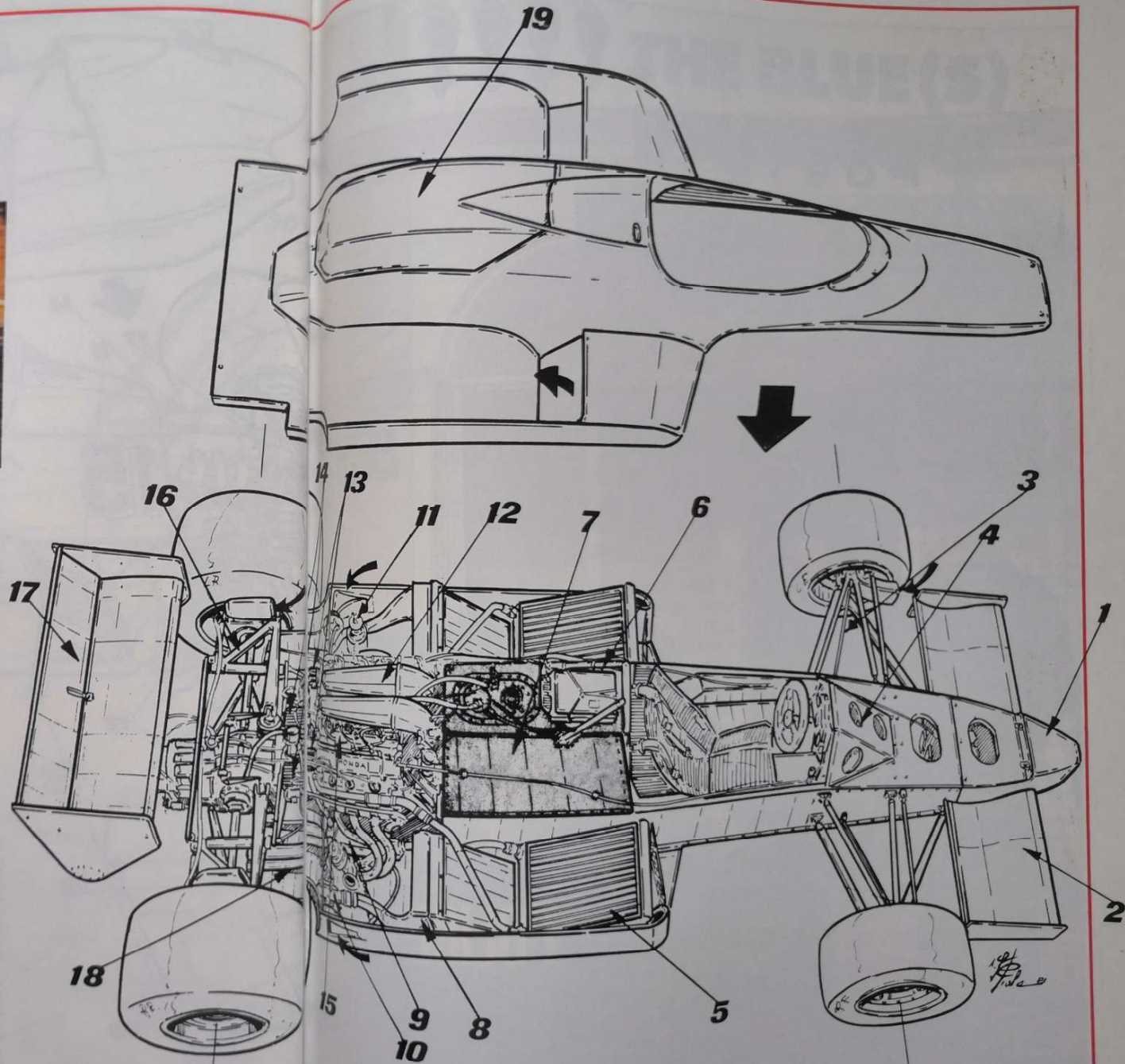
15. Electronically-regulated fuel injectors.

16. Rear suspension identical to that on the FW08-Cosworth. Shock absorbers are positioned vertically, one on each side of the gearbox.

17. Rear wing (smaller version). During the Rio tests in January a larger version, with "winglet" extensions, was tried.

18. Exhaust pipes. The centre pipe is the true exhaust, the one at the side is for the waste-gate spillways.

19. The engine cover differs in some respects from the original design. This is because the mock-up engine supplied by Honda in the early stages of the FW09 design was different from the eventual race engine: in fact, the present engine is bulkier than originally expected.





Ten of Guy Ligier's little 'voiturette' runabouts have found homes with the Vichy police force. Now he's trying to sell them to the post office too. (photo: Eric Vargiolu / DPPI)

THE BLUE(S) IN HIS SOUL



Proud times in the rugby strip of the Racing Club of Vichy. A manly figure. (photo: Guy Ligier's private collection)

THE ONE THING YOU CAN'T FORGET ABOUT GUY LIGIER IS HIS NOSE. IT'S SPREAD ACROSS HALF HIS FACE, TELLING THE STORY OF HIS CAREER AS A RUGBY FOOTBALL PLAYER IN THE '50s FAR MORE ELOQUENTLY THAN EVEN HE COULD. AND HE STILL CLEARLY RECALLS A TIME WHEN HE THOUGHT THAT HE'D BE INVITED TO PULL ON A BLUE SHIRT AND TURN OUT AT TWICKENHAM AGAINST ENGLAND FOR THE FRENCH XV. IT NEVER QUITE HAPPENED... SO HE AIMS TO MAKE HIS NAME AS THE ENTRANT OF RACING CARS INSTEAD.

by Xavier Chimits

On a quiet Thursday morning in Vichy, an icy March wind blows wickedly as Guy Ligier stumps along with me, his face tired and drawn. Formula 1 has just robbed him of another night's sleep, for he's seen the day dawn greyly over his racing workshop. He's been in the thick of things as his mechanics struggle to sort out a problem of suspension stress factors. The 1984 season has not exactly got under way encouragingly, for turbo technology isn't something that can be acquired overnight.

"We're going to have a few problems in the first few races, that's for sure," he admits. "We underestimated some of the things that have to be sorted out to cope with the extra power of a turbo. We really should have had one of these engines running at the end of last year, like McLaren and Williams did. Oh well, that's life..."

That's life. An expression which he often makes and one which sums up his philosophy. And he is a philosopher, Guy. When he's not in a towering rage.

He was seven years old when his father, a cattle farmer near Vichy, passed away. By the time he was 13 he was an apprentice butcher. Anyone who was around just then, soon after the war was over, will remember The Ligier Gang. A group of lads who shared a common taste for parties, comradeship and tough sports. In the summer it was rowing, rigger in the wintertime. "Taking part in competitive sports makes a man of you," he says. "You learn to be frank, sincere and honest. On the other hand, sport doesn't shake a youngster out of his innocence. Industry and business, money and estimates, they're all a different affair. Switching from sport to business isn't easy."

At the age of 16 he was a French national rowing champion, in the doubles (the rowing experts will understand). At 22 he was playing for all he was worth in the middle of the pack. It's the most exposed position on the field. Never show any signs of weak-

ness. But it was to cost him his life's ambition, a place on the A team and a cap for his country. "The A and B teams used to play each other regularly. I was always marked by the same player, Pascallin, a real scrapper. Every time he used to lash out viciously. The Federation ended up by banning him from the game..."

The following season, when the awful Pascallin had finally disappeared from the French XV, Ligier wasn't selected to take his place. He was so disappointed that he packed up playing rugby and decided to take up motorcycle racing. Riding a 500 cc Norton he was a regular member of the Continental Circus, competing against the likes of John Surtees.

"After that I switched to cars. It all got off on the wrong foot, though. I bought an Elva for Formula Junior, to race in what was then the equivalent of Formula 3. It was (Gérard) Crombac who advised me to buy it," he recalls of his first encounter with the man who now edits France's leading motorsport monthly. "I think he must have been in cahoots with the bloody Englishman who stitched me up with the deal..."

"I never managed to do more than three consecutive laps in that thing. I was so disheartened that I took up hillclimbing. That was much better. And I happened to meet Jo Schlesser..."

Jo Schlesser, alas, was to perish in the flames of a hideous accident at Rouen in 1968, during the first few laps of the French GP. It was his first-ever F1 race, it was raining hard, and the air-cooled Honda he was driving was known to be under-developed. In case anyone doesn't know, the "JS" in the type-number of every Ligier car is Guy's tribute to his friend. When you go inside the reception area of the Ligier factory at Abrest, near Vichy, the first thing you see is a huge photo on the wall, Jo and Guy together, perched on their Ford GT40 sports car at Rheims in 1967. They're holding their hands high to celebrate what was to be their greatest victory, in the classic 12 Hour race for sports-prototypes...

"We made a fantastic team together. Anyone who wanted to beat us would have had to work pretty hard. Believe you me, in a 12 or 24 hour race you would never catch us out. One year before Jo, I lost another friend, Pierre Coulon... Two mates, two really super blokes with whom I spent most of my time..."

Of the Ligier Gang, Pierre Coulon had been the oldest. Like Ligier he had rowed and played rugby football. During the war he had opted to join the Résistance. There weren't a lot of people like him around Vichy at that time...

Then, in 1947, Coulon got himself elected mayor of Vichy, under the Gaullist colours. He went on to become a député (French MP). When Guy Ligier started up in the construction business, in 1957, it had been Pierre Coulon who gave him a hand.

The beginnings of the business were distinctly small-time. "I was doing sub-contract work, digging trenches for a company who paid me by the yard, using a mechanical digger and a bulldozer which they loaned off me in exchange for something knocked off



It's no secret that the initial tests of the Renault-engined JS23 turbocar have been inconclusive. Since then a lot of work has been done at Vichy, under the boss's watchful eye. (photos: Eric Vargiolu / DPPI and Malcolm Bryan)

the price. During the daytime I dug the trenches and the contractors would lay the drain pipes. At night I filled in the holes again."

Having the city mayor as one of your mates obviously helped. And Guy Ligier's company started to expand enormously quickly. Before very long the former butcher's apprentice was the town's number one employer and France's second-largest motorway builder. That's what enabled him to go F1 racing in 1965. No argument, though: he was a self-confessed complete amateur.

"We did it for fun. I had just one mechanic, Roger Dubout. He is still working for me here in Vichy. I had a Cooper-Maserati. Yet another appalling choice. The chassis twisted unless it was raining. In 1967 I bought a Brabham-Repa. It was a bit better, but I didn't get any help from (Jack) Brabham. He promised to let me have some spares, but he just slung a set of springs in the car. They were the wrong ones, too... In 12 races with the car, though, I collected one world championship point. Not bad, eh?"

On the other hand there was a nasty accident at the Nürburgring, in 1966. "I went off the road in the quick right-hander behind the stands. The pine trees were sliced off 20 feet from the ground. I had 47 different fractures. My body was smashed: broken arms, legs, knees and neck. I only just managed to avoid losing a leg. It was Crombac who got me out of the hospital. He owed me after that stunt with the Elva. The doctors were waiting to see if there was gangrene in the leg. When Jabby (Crombac) translated what they were telling me I begged him to get me out. If anybody was going to cut off my leg, I wanted to lose it at home. He organised the whole thing and I was put in an ambulance, covered in plaster and chock-full of painkillers."

The death of Jo Schlesser effectively ended Ligier's own driving career. He occasionally raced one of his own cars, but his heart was never in it. He missed his friend. "If Jo had lived he would be my partner, here, today. We had so many plans. To carry on racing for as long as possible, of course, and then to start up a business. The idea of a Ligier team first came up in these discussions with Jo, when we were talking about the future." Ligier buckled down alone. One year later a road-going sports car, the JS1, was unveiled, at the Paris Show. The car-manufacturer side of the Ligier company had a quiet beginning. Then there was the 1973 oil crisis. "Larrousse and Darniche had scored a 1-2 result on the Tour de France Auto with a 1.2 seconds a kilometre JS2s. They were two seconds a kilometre faster than the quick Porsches and the Lancia Stratos. That was a great rally car. So Porsche and Lancia pushed through the new 500-off homologation rule. That was clever. How in the hell was I going to be able to sell 500 JS2s? Then the Yam Kippur war started and it was the end of the project. "I still managed to salvage something from the mess, because Matra pulled out of racing and the Gitanes racing budget was going and the Gitanes racing budget was going and the Gitanes racing budget was going and the Gitanes racing budget was going for a home. I got it. But if it hadn't been for the 500-off rule, I might never have come into F1."

He roars with laughter, as though he was thumbing his nose at his destiny. In fact, fate had another disaster in store for him: the financial collapse of his construction business. It had built up to be a tidy earner, with 1100 employees and a turnover of around £10 million at current values. When you're building motorways under a contract with the government, you must surely have friends in high places. In France that goes without saying. Pierre Coulon was equally well aware of it, which goes some of the way towards explaining the success of Ligier's business. Guy was happy just to carry on with his work. That was a mistake. In 1974 the French government decided to privatise the financing of all motorway construction. The banks promptly pulled the plug, to the dismay of all except a small number of carefully-chosen building companies. Ligier was left out in the cold.

'IN A 12 HOUR RACE JO SCHLESSER AND I WERE A FANTASTIC TEAM'

As Ligier himself recalls, "my company had expanded too fast. I allowed myself to get pulled under. I should have started taking work in Africa. I had made myself vulnerable by concentrating the business in one place. Within three months it all ground to a halt. But it was going great at one time, earning big money. We had men, machinery and know-how. I would have been prepared to sell out literally for tuppence rather than go into liquidation. The engineering team that I had put together and the 400 guys who drove the earthmovers went off to work for rival companies. And that was that..."

Fortunately there was the F1 team to help dissipate the bitter feelings. On two separate occasions, in 1979 and 1980, Ligier's cars dominated the championship. But Guy has never been blessed with a world title. As he admits, he wasn't tough enough, or experienced or sufficiently vigilant. The alliance with the Peugeot-Talbot group in 1981 should have enabled him to get over the final hurdle. But Ligier found himself a virtual hostage in a conflict which had nothing to do with him: Matra had decided to make delivery of their new V6 turbo engine conditional on concessions from Peugeot over the sales of the Matra Bagheera and Rancho road cars. "At Monza in 1982 I learned on the same afternoon that Peugeot was pulling out and Laffite was going to Williams. Nice, huh? That really made my day..."

The winter break was pretty dramatic, too. As a French sports writer wrote at the time, "nobody shut the door in his face. But it was worse. Once again he was left all on his own."

For this season, however, things look much healthier. Loto, a government-backed lottery, is providing most of the cash, and Renault the engines. That set tongues wagging. "It is indeed true that I have a friend who happens to be President of France. I have known Francois Mitterrand for over 20 years. He was president of the local council

'I PREFER NOT TO LOOK BACK TOO CLOSELY OVER THE PAST 53 YEARS'

at Nièvre when they agreed to pay for the resurfacing of the Magny-Cours circuit. My company was doing the work. The most important thing to me is the worth of a man. I do not conceal the fact that I voted for Mitterrand last time, and I shall do so again if I get a chance.

"But do you seriously wish to tell me that President Mitterrand would actually telephone the president of Loto to order him to help me out in racing? I've been negotiating with Loto now for six years. Renault? On the same day that I heard about Peugeot I went off to see Bernard Hanon (of Renault) to ask him if he would supply turbo engines to me. Immediately he said Yes, in principle. If people like to go around claiming that François Mitterrand made sure that I got some help, let them..."

When Ligier decided, in turn, to say Good-bye to Jean-Pierre Jarier at the end of 1983, it was not a popular decision at Vichy. "The trouble with Jean-Pierre, and it's part of his nature, is that he always puts up with the equipment that he's been given. He uses his ability to drive around a problem instead of getting it sorted out by the engineers. It's the wrong way to go. That's his problem, nothing else, and be careful because he's extremely quick. I love Jean-Pierre, he's a lovely bloke. But I don't go F1 racing for the sheer fun of it. I have to win, it's essential. Jarier's accident at Long Beach was a racing shunt. It happens. But I won't let a driver get away with telling things that didn't really happen. Now Andrea (de Cesaris), he's never satisfied. When he gets out of the car he could go on about it all night. If he hadn't been available I would have got Reutemann, we nearly did a deal, because I wanted a driver who could help us to make progress."

The decision to take on François Hesnault has raised some talk of the French F3 driver's lack of maturity. "Since we don't qualify for the FOCA travel concessions this year I am delighted to have François with us, because we have been able to make alternative travel arrangements through the international freight shipping company which belongs to his family. But that wasn't the factor that made up my mind. The '84 season is going to be difficult for us because we've got to get used to being a turbo team. I couldn't offer equal terms to both drivers, so my choice for a number 2 was to take on a young Frenchman and give him a chance." This is the Ligier who waits for the start of a season that he knows is vitally important to him and his team. He has enough money available to be able to match whatever the opposition does. Once a violent opponent of turbos and a loyal FOCA member, now his tone is modified. "Technically I have never been anti-turbo. But I have always spoken out against the price escalation that's been going on in F1. There are now two distinct types of F1 team: those who get their turbos free of charge, and the others. I'm worried that F1 is on the path to destruction.

That's why I've branched out into CART racing. In terms of straightforward competition, CART costs a fifth of the price of F1."

With the arrival of the Loto colours, the Ligiers are a noticeably darker shade of blue. It's yet another reminder of the dark days he hopes to leave behind. The happy years were the ones with Jacques Laffite and Gérard Ducarouge at his side. "I honestly believe that Laffite will be back with us one day. Not necessarily as a driver, though. Ducarouge is a much more complicated matter. He's really earned his stripes now. He was always the team boss at Matra, but now he's also one of the most gifted F1 designers. The only thing left for him to do now is to start up his own racing team. He obviously wants to do it. In the circumstances I doubt whether he'll want to stay with Lotus very much longer. But if he sets up in France I suspect that we'll find ourselves treading on each other's toes. It could be a him-or-me situation..."

Followed, need I add, by a roar of laughter. Ligier is also a large industrial company. The group produces lubricating oil, but it is known above all for the "voiturettes", little city runabouts, of which Guy is France's largest producer. The Abrest factory employs 270 people in their manufacture. Yet again, though, there has been a set-back: his major distributor, Matobécane, recently went tits up, leaving him without a retail outlet. "That was a big blow. Fortunately Bernard Hanon allowed me to start looking for outlets on Renault sites. I think that proves that all's well between Renault and Ligier." While he retains overall control of the Ligier group, Guy expects to hand over eventually to his son, Philippe. "I also hope that he'll want to carry on the Ligier name in racing." Good grief, does that mean that Guy Ligier may allow himself to be put out to grass? "Not on your life. I always want to struggle and to win. That's how I see all forms of sport. Being satisfied just to have taken part is not my way. Personally, I can't abide the thought of being beaten. I'm sure that I've been hardened by the past couple of seasons. That's my way. People have fun with me because of my sudden bursts of temper and tantrum, but I'm convinced that if we can do as well as we did in the good old days, then I'll start to be good-humoured all over again."

"I live my life at a very competitive pace. That's why I never bother to look over my shoulder. In one way, that's good. I prefer not to look back too closely over the past 53 years and all the troubles I've had, because if I ever thought things wouldn't improve there would be no point at all in carrying on."

A last gale of laughter and he's off back to the workshops. The monk-like tonsure, the strong back and broad shoulders, the widely spread nose: he's unmistakable. He grumbles about the civil servants' strike which has cut off the electricity supply to the factory since the morning. His trajectory has always been a dotted line. But deep down I don't believe he would have wanted it any other way. For Ligier was born to succeed in moments that alternate with strife... and with hoots of happy laughter. □

Vichy's Olympic-size rowing lake was completed in the early 60s by Guy Ligier's own company. It was an inspired idea from a mayor who wanted his city to be known for something other than its bottled water, Pierre Coulon. (photos: Eric Vargiolu / DPPI)



UNFAIR

Watson, Jarier, Giacomelli, Guerrero, Johanson: this year there seems to be a long list of drivers who aren't in FI when that's where they ought to be. In their places, though, who do we see? Alliot, Hesnault, Brundle and Fabi making a comeback, etc. I'm not so stupid as to imagine that talent is the only criterion for getting an FI drive, but I think that unfairness on this sort of scale detracts from the credibility of FI.

Catherine Lafforgue, 75014, Paris, France.

Sullivan left FI racing because he had a better offer at home in America, and we have reason to believe that Watson would be racing with Lotus this year if he hadn't priced himself out of the market. Also, it's encouraging to reflect that a promotable young driver like Senna or Brundle can still graduate to FI without having to bring a bunch of money with him.

Meanwhile there is no solid proof - yet - that the newcomers don't deserve a place in GP racing, even if some of them have an unfair advantage in the shape of a friendly sponsor. Don't forget that Niki Lauda had a sponsor. And what about Elio de Angelis and his wealthy father?

Obviously it's tough that Wattie and the others don't have FI cars this year, but we have to face reality. The situation isn't as scandalous as all that, and at least it looks as though the "exiles" will find a good home in CART racing. Who knows, some of them might find they're invited back, just like Teo Fabi was. And with so many FI men in Indy cars this year you may find that it makes the American racing all the more interesting to you.

OBJECTIVITY SUFFERING?

Congratulations on the FI Guide which you published in your last edition. There are two comments which I would like to make. First, you seem to have made a few mistakes about the drivers, which is a bit annoying

when you want to keep the guide for the whole season. Secondly, I didn't enjoy your assessment of the teams. Some of them seemed to lack any objectivity, notably Ligier, Renault and Ferrari. I got the distinct impression that you prefer the British teams, which is not my cup of tea at all...

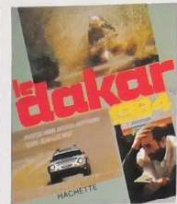
Congratulations all the same, concentrate on FI, and long live GPI.

Philippe Dubois, 33000 Bordeaux, France.

PS. Why didn't you make the FI Guide a pull-out supplement? That would have been a lot easier to handle.

FISA's official closing day for FI entries was February 28. Yet at the time of writing, two weeks later, Ken Tyrrell still hasn't nominated his second driver... Naturally, we were phoning constantly for last-minute confirmation of the second Brabham driver (ask Bernie Ecclestone!). At the moment there are only two mistakes (touch wood) in our list: Palmer, who will be racing with RAM instead of Tyrrell, and Ballabio, who hasn't been given a Super-licence. Not bad under the circumstances... In fact the team round-ups were written by an Englishman (our Editor). If they'd been written by a French member of the staff, I suppose that the English-speaking readers would have complained about the bias towards the foreign teams.

We promised readers a mixture of facts, opinions and fun with all the historical material in the Guide. Under the circumstances, how else would you expect us to express our personal opinions? Putting the Guide in the middle of the magazine? We quite agree that it would have been an improvement, unfortunately our schedules made it impossible. We'll try harder next time. Happy reading.



LE DAKAR 1984

Yann Arthus-Bertrand and Jean-Luc Roy Editions Hachette 75 bvd St-Germain, 75006 Paris, France ISBN 2 85 108 347 3 Price: 110 FF

This is a sort of handbook of the 1984 "Dakar," published at enormous speed within ten days of the finish. Some effort! Unfortunately, this means that the quality of the work is not particularly high. The cover is a mess, the colour photos are not always very interesting and many of them have been poorly selected. There are several pages wasted on postage stamped portraits of every one of the competitors, taken in Paris just before the start... Nevertheless, a faithful record of the event at an extremely fair price.

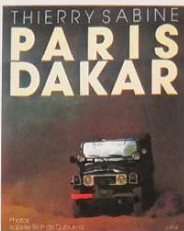
One), hoping for better in 1985.



FI/'83

Gianni Cancellieri and Paolo Facchinetti I Libri Sprint via dell'Industria 6 40068 San Lazzaro (BO) Italy No ISBN Number Price: £6

This is a hard-backed 1983 "round-up" edition of the famous Italian weekly motorsports magazine Autosprint. Strangely, the layout doesn't have the same whizz-bang quality of the magazine, but they don't let a bit of fuzziness prevent them from using sensational colour shots over two pages. Apart from a rather thin profile of Nelson Piquet there isn't much text (which will make it more attractive to English readers) and there's a nice section on the 1983 FI teams. Two), due to the modest price.



PARIS-DAKAR

Thierry Sabine and Isabella Bich Editions du Chêne 75 bvd St-Germain, 75006 Paris, France ISBN: 2 85108 334 1 Price: 240 FF

Don't let the fact that this book has an all-French text put you off, because its great strength is the outstandingly high quality of photography, both monochrome and colour. No other publication has come within a mile of revealing the truly heroic nature of the great North African adventure. Sabine, of course, is the organiser and promoter of the event: his writing has a nice degree of sincerity and even poignancy. Some of the photos are a bit grainy and it took 11 months to get the book into print, but (like the rally) it turned out to be well worth the effort... Two), an adventure in itself.

WHAT'S ON

23/25 MARCH 1984 **BRAZILIAN GRAND PRIX, JACAREPAGUA, RIO** Enquiries to: International Promotions, Rua Prof. Arthur Ramos 183 (10th floor), 01454 São Paulo, Brazil tel: (11) 813 5775

Untimed practice on Friday and Saturday, 10:00 to 11:30 and timed qualifying from 13:00 to 14:00. Sunday morning warm-up 09:00 to 09:30. Race starts at 13:00 on Sunday. Entry prices: open stands \$4 (US) Friday, \$8 Saturday and between \$18 and \$34 Sunday. Covered stands: \$5 Friday, \$13 Saturday and between \$39 and \$53 Sunday. All-in three-day tickets between \$83 and \$163.

MARCH 30/APRIL 1 LONG BEACH CART

Long Beach Grand Prix, 110 West Ocean Boulevard Suite A, Long Beach, California 90802. tel: (213) 437 0341 Untimed practice on Friday and Saturday, 10:00 to 11:30, and timed qualifying from 13:30 to 15:00. Race starts at 14:00 on Sunday. Entry prices: General admission \$12 Friday, \$12 Saturday and \$15 Sunday. All-in three-day ticket \$20. Stand seats: between \$20 and \$30 Sunday: all-in three-day ticket between \$25 and \$75.

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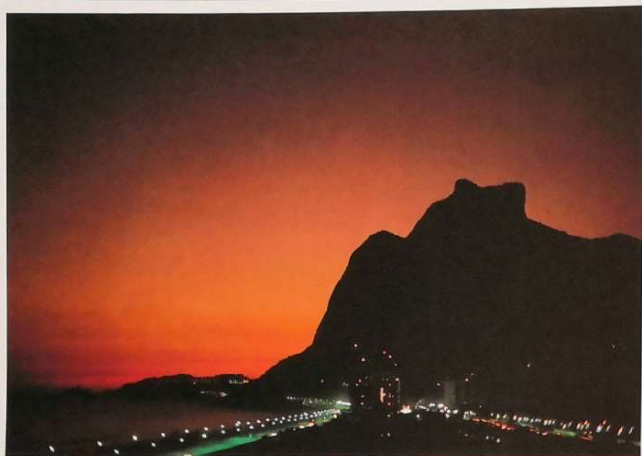
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