Autosport

A Haymarket publication

January 3, 1985 75p

Focus on the racing Fordsters

eke Rosberg

lurray Walker

erry Harryman

oyota on test



Euro rally scene

Lola-Mazda C2 project

Paris-Dakar adventur

January 3, 1985
Vol 98 No 1

Autosport

FRONT COVER

Formula Fords in typical formation at the Festival, being led by the Van Diemens of Mark Peters, Ruairi O'Coileain and Damon Hill. Seasonal review: page 44. Photo: Jeff Bloxham. Below: European rallying action typified by this scene from the Antibes Rally in southern France. This is Didier Auriol's Renault 5 Turbo. Seasonal review: page 16. Photo: Hugh Bishop.

NEXT WEEK

Latest news from the Paris-Dakar Raid — Our full review of the Indycar season, plus an interview with CART champion Mario Andretti — AUTOSPORT Golden Helmet awards — Review of the regional rally championships — *File under Q* from Australia — A team by team guide to who's driving what in the 1985 Formula 1 World Championship — Plus all our usual news and views*.

**These items correct at time of going to press.*

Executive Editor Quentin Spurring
Deputy Editor Peter Foubister
Grand Prix Editor Nigel Roebuck
Assistant Editor Marcus Pye
Technical Editor Mike McCarthy
Racing News Editor Ian Phillips
National Rallies Editor Keith Oswin
Production Editor Ralph Morton
Sports Editor Jeremy Shaw
Photographer Jeff Bloxham
Editorial Assistants Bruce Jones, Joe Saward
Editorial Secretary Fiona Grant

Publishing Director Eric Verdon-Roe
Managing Director Simon Taylor

Group Advertisement Manager Tony Schulp
Advertisement Manager Martin Nott

Assistant Advertisement Manager Simon Maurice
Display Advertising Julian Cottam, Simon Sanderson
Classified Advertising David Ryan, Gary Barak, Paul Senn, Steve Luengo
Production Martin Haven

CORRESPONDENTS
North America: Gordon Kirby. **Australia:** Bob Jennings. **Italy:** Pino Allievi. **Japan:** Kunihiko Akai. **New Zealand:** Peter Greenslade. **South Africa:** Colin Windell. **West Germany:** Wolfgang Monsehr. **Midlands:** Derek Hill. **North:** Paul Boothroyd. **Eire:** Brian Foley. **Scotland:** Bill Henderson. **Ulster:** Esler Crawford. **Track Tests:** Tiff Needell.

Published every Thursday by: Haymarket Publishing (1980) Ltd. **Editorial, Advertisement, and Circulation:** 38-42 Hampton Road, Teddington, Middlesex TW11 0JE (telephone: 01-977 8787; telex 8952440). **Back Numbers & Subscriptions:** Autosport Subscriptions Department, Haymarket Publishing Ltd, 12-14 Ansdell Street, London W8 (telephone: 01-937 7288).

Subscription (per annum): UK £48, Europe £55, Airspeed USA £57, Airspeed Canada and Mexico £63. Airmail — Middle East £70. North/South America, Africa, India £80. Far East, Japan, Australasia £90.

US Mailing Agent: Expediters of the Printed Word Ltd; 527 Madison Avenue, Suite 1217, New York, NY 10022. Second Class Postage paid at New York, NY USPS No: 454 280. Postmaster: send address corrections to Autosport, c/o Expediters of the Printed World Ltd., 527 Madison Avenue, New York, N.Y. 10022 (U.S. Mailing Agent).

Printed in England by: Thamesmouth Printing Co., Stock Road, Southend-on-Sea, Essex. **Colour sections printed by:** B. R. Hubbard Ltd., Callywhite Lane, Dronfield, Sheffield. **Photosetting by:** Quickset, 184-186 Old Street, London EC1. Registered at the PO as a newspaper.

Reprinting in whole or in part of any matter appearing in AUTOSPORT is forbidden except by permission of the publishers. © AUTOSPORT 1984.

ABC MEMBER OF THE AUDIT BUREAU OF CIRCULATIONS

PIT & PADDOCK 4
Latest news from the Grand Prix scene — Maurice Hamilton's almanac — More news on Tyrrell — Le Mans in jeopardy — Dallas GP off — Fine, Spence and Gugelmin sign for F3 — New Eagle Indyear.

COMMENT 10
Our opinions on the latest developments in Paris, your comments on matters varied, and a look back at the scene 10 and 25 years ago in *Then as Now?* — Meanwhile *Catchpole* tries to get 1985 off to a humorous start.

KEKE ROSBERG 12



The Finn discusses the Williams chassis, the Honda engine, and his prospects with new team mate Nigel Mansell in this interview by Mike Doodson.

PARIS DAKAR 14



Now an established part of the international calendar, the adventure takes cars, trucks and bikes to some of the most remote parts of Africa. Following the official start last week, we consider the challenge ahead.

SPECIAL STAGE 15
Porsche's desert raider — Renault to chase Euro crown with Ragnotti — Aitken-Walker gets the other Peugeot — RAC MSA confirm B seeds for 1985 — Toyota's Group A campaign.

REVIEW: EUROPEAN RALLY CHAMPIONSHIP 16
Yet again the Italians took the major honours, with Carlo Capone's Lancia fending off the challenge from Henri Toivonen's Porsche. Hugh Bishop recounts a hectic season, fought out over 12 long months.

MURRAY WALKER 20
Television commentator and sports personality, Murray Walker, explains what it's like on the other side of the microphone, and remembers a few of those interesting moments . . .

ROAD TEST: TOYOTA COROLLA GT 22



The sporty 16-valve power pack, plus a 2 plus 2 body make this latest sporty version of the Corolla quite a performer. Mike McCarthy enjoyed the experience.

EUROPEAN F3 RETROSPECTIVE 24
A look at the last decade of this European series by Joe Saward, who details some now-familiar names who played a part in the category's history.

TRACK TEST: LOLA-MAZDA T616 28



The Le Mans class-winning Lola put to the test at Riverside by our man Tiff Needell, who confirms that rotary power can be impressive.

INSIGHT: BFGOODRICH 30
As other companies concentrate on specialised tyres for competition, BF's policy has been to stick with street construction covers. Tiff Needell investigates.

PURELY PERSONAL: TERRY HARRYMAN 33



The winter Safari. Peugeot co-driver Harryman details a full scale assault on the route for the 1985 event, and a few of the exciting times during his recent exercise.

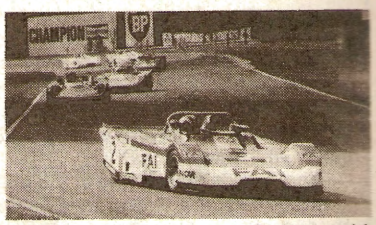
REVIEW: FF2000 38



The 1984 season really was a classic, with Brazilians Maurizio Sandro Sala and Mauricio Gugelmin emerging as champions in Britain and Europe, after protracted and highly competitive struggles. Now run on many levels, to suit all pockets, the category has rarely looked better, as Marcus Pye reveals.

REVIEW: FF1600 44
As in FF2000, a four-way scrap for major FF1600 honours enlivened the British championships at their highest level, Dave Coyne taking top seasonal honours. But FF1600 is not only about works participation, as Jeremy Shaw's round-up reveals.

REVIEW: SPORTS 2000 51



Only statistician Jeremy Shaw could spot a link between the British S2000 series and the F1 World Championship, but the parallel is there. While James Thomson and Bill Coombs won over here, Thorkild Thyrring again took Euroseries honours.

SPORTS EXTRA 55
Anglia Cars to run factory Argo FF2000 project — Reynard and Van Diemen testing latest — Silverstone retains championship sponsors — New BRSCC sports car series — British base for Brumos 2-litre team?

Team Tyrrell lives on

Ken Tyrrell wins Paris injunction against FISA — '84 points returned

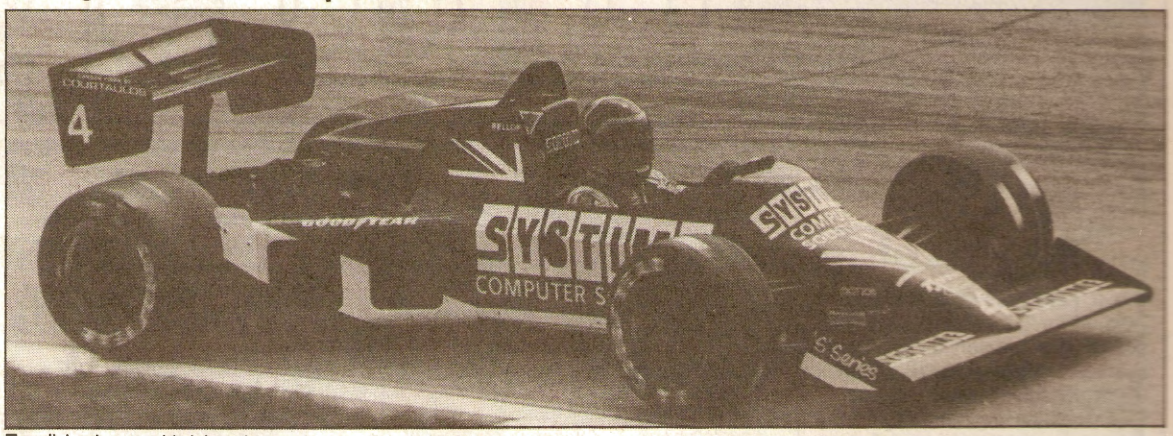
"How do I feel?" Ken Tyrrell said, in reply to a question at his press conference on December 19, "Well, I feel a little cleaner now. That's one thing. And financially the team must be in better shape. We now qualify for FOCA 'travel money' again, and it must help from the sponsorship point of view. Until now all a potential sponsor has heard is that 'Tyrrell cheated'. Today he's reading that maybe that wasn't the case, after all."

Tyrrell called the press conference after a Paris court's decision to grant him an injunction against the FIA/FISA. This suspends all the sanctions meted out by the governing body against his team, giving him back his 1984 World Championship points etc. "It is as if," Ken said, "the whole thing had never happened. However, we should be clear that it is not necessarily the end of the story. I have asked for a full hearing in the French courts, and of course I'd like it all cleaned up as soon as possible. But it probably won't happen for six or 12 months."

At the time of the press conference there had been no FISA reaction to the news. But Tyrrell said that if Jean-Marie Balestre were to take it upon himself to forget the whole thing, he, Tyrrell, would withdraw his action in the French courts. If the action goes to court, of course, very substantial damages will be involved.

Was there not, someone asked, a clause in the Concorde Agreement (of which Tyrrell is a signatory, of course), which forbids using civil law to settle a motor racing matter? "Absolutely not," replied Ken. "What it says is that if there is a disagreement over interpretation of any of its clauses, the matter must be settled by arbitration, at the International Chamber of Commerce. We consider that FISA and the FIA penalised us illegally according to their own rules. They did not have the power to make the decision they did. The decision was *against* their own rules. There is no provision in the Sporting Code to exclude anyone from the World Championship."

One of the consequences, of course, of 'setting everything back to square one' is that the decision, by the Formula 1 Commission, to retain the 220-litre fuel limit for a second year (thereby changing the rules), is apparently invalid. Where do we stand on that now?



Tyrrell, having won his injunction against the FIA and FISA, should see his World Championship points reinstated.

"Let me make it clear," Tyrrell said, "that I will do nothing to imperil Grand Prix racing. It's up to FISA to act on this. According to the court, their decision to change the rules was incorrect. I was banned, you will remember, the day before that F1 Commission meeting, and it was known that I — and I alone — was in favour of sticking with the original agreement (signed by all the constructors, incidentally) which called for reducing from 220 to 195 litres for 1985. In the court's judgement, FISA was incorrect to change the rules when it knew that one member of the F1 Commission was against it. If they don't do anything about it now, I'd have thought they'd be in contempt of court . . ."

At the time of the original ban, Tyrrell said he could bring himself to believe that the reason behind his ban was his refusal to go along with the retention of the 220-litre limit for 1985. Now he says he has changed his mind about that: "I rather think the timing — taking away my membership of the F1 Commission the day before it was due to vote on retaining 220 litres — was too much of a coincidence, frankly.

"This was a rule *change*, remember, requiring unanimous approval from members. Every other team was in favour of keeping to 220." Did Ken believe that FISA had acted alone and unprompted in their action against him? He smiled: "I'll leave you to draw your own conclusions about that . . ."

"What I don't understand is *why* all the others were against going to 195 litres. It would make no difference — the same people would win the races. If you've got a fuel-efficient engine you're going to win races. If you haven't, you're going to be at the back. Everyone recognises the need to restrict power — after all, we're going to 1200cc engines and 180 litres of fuel in 1988, so why didn't they keep to the time scale originally agreed by everyone?

"I'm only glad that my losing my points and then getting them back hasn't affected the outcome of the World Championship. Prost was given an extra point, remember. It would have been awful if he'd won the title by half a point, rather than lost it. If that had happened, they would now be taking away his World Championship."

Speaking of his team's future, Ken said that he still had no news about his engine for 1985. "I wish I had something to tell you, but I haven't. All I can say is that we will definitely run two cars, for Martin Brundle and Stefan Bellof. We're testing in Estoril in January, and in Rio the following month. In the meantime I'd like to thank all my employees who have stuck with us through this. We've lost a couple — to McLaren — but everyone else has stayed. I'm lucky to have such a good crowd of people working for me."

FISA announces appeal against Tyrrell decision

The press communique issued after the FISA Executive Committee meeting (on December 20) announced that FISA would *not* yet be reinstating Ken Tyrrell's team in the 1984 World Championship points table. It appears that an appeal has been lodged against the injunction won by Tyrrell in the French courts on December 18. It appears that the governing body takes great exception to the use of civil law in resolving motor sport matters, when "the actions of the governing body are being outrageously called into question." Imagine that . . .

Other topics mentioned in the communique included:

- **In future, if a Grand Prix organiser is unable to respect regulations concerning the importation of fuel, that Grand Prix shall not count for World Championship points.**
- **New Superlicences are granted to Ivan Capelli, Allen Berg, Mario Hytten and John Nielsen. The application of Alessandro Nannini was (unfathomably) rejected.**
- **Tyre manufacturers interested in F3000 must be in a position to supply 30% of the field.**
- **No driver may compete in both F1 and F3000 at the same meeting.**
- **The site of the 1985 German Grand Prix is not yet decided. The German ASN must nominate either Hockenheim or the Nurburgring by January 31.**
- **The Executive Committee of the FIA is formally going ahead with the expulsion of Monaco. We understand that this is to be finally decided at an Extraordinary General Assembly on February 19.**
- **If Kyalami is ever to stage another WEC event, it must commit itself to FISA over the number of competing cars.**

New F1 calendar: Dallas out, Rome in

A new — definitive? — 1985 F1 World Championship schedule was announced at the FISA Press Conference in Paris, on December 20.

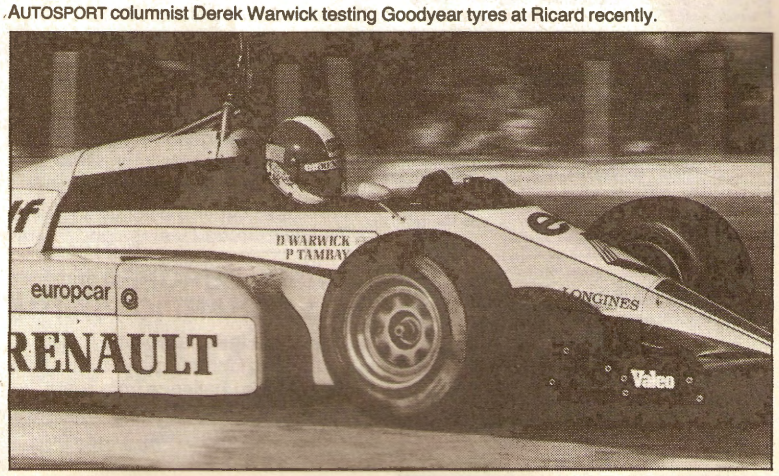
As yet, there is regrettably no solution to the Monaco problem, although it will be noted that its traditional 'slot' in the calendar (the weekend of May 19) has been left open. There is, however, a full complement of 16 confirmed Grands Prix programmed at this time.

It is interesting also that the second American nomination is listed simply as New York, not specifically the city. The Corning Glass concern, owners of Watkins Glen, is said to be keen — and financially able — to bring F1 racing back to its old North American home!

1985 WORLD CHAMPIONSHIP

Brazil (Rio)	Apr 07
Portugal (Estoril)	Apr 21
San Marino (Imola)	May 05
Belgium (Spa)	Jun 02
Canada (Montreal)	Jun 16
USA (Detroit)	Jun 23
France (Paul Ricard)	Jul 07
Great Britain (Silverstone)	Jul 21
Germany (Nurburgring)	Aug 04
Austria (Zeltweg)	Aug 18
Netherlands (Zandvoort)	Aug 25
Italy (Monza)	Sep 08
USA (New York)	Sep 29
Europe (Rome)	Oct 13
Australia (Adelaide)	Nov 03
South Africa (Kyalami)	Nov 16

AUTOSPORT columnist Derek Warwick testing Goodyear tyres at Ricard recently.



Old Mo's Almanac 1985

JANUARY
John Wyer quits after 2½ hours as ATS Team Manager.
Patagonian ace, Eric da Silvapod, wins Brazilian Grand Prix in a Lotus. Toleman say da Silvapod is contracted to them and claim nine points. Lotus are shocked. "I can't understand it," says Peter Warr. "I don't know where he came from. I looked in the car before we left Hethel and he wasn't there then. Suddenly, there he is, winning races in one of my cars. But he assures me everything will be okay."
A brilliant young South African driver, Tombola Blood, who races without a helmet, is brought to England by *Motoring News*. Blood granted a Super Licence in 24 hours by Leon Brittan.
Frank Williams gives a test drive to Conservative Party chairman, John Seldom Glummer.

FEBRUARY
Tombola Blood locked in a cupboard at *Motoring News* and played continuous tape of Brands Hatch commentators. Blood comes out screaming and ready for anything.
FISA spy catches Ken Tyrrell buying four pairs of socks in Marks & Spencer store in Guildford; Tyrrell excluded from World Championship.
FISA claim socks could be used to cover injection trumpets of Cosworth DFY; socks are made of lamb's wool; it is a known fact that, after six years, sheep's excrement is likely to cause spontaneous combustion — and is therefore a power booster.
Frank Williams OBE gives test drive to the Queen Mother.

MARCH
Tyrrell admits the socks were intended to cover the injection trumpets but says they were merely to stop the birds nesting in the Spring.
FISA fine him for cruelty to animals in a manner likely to be detrimental to the sport.
The RAC MSA regret they are unable to help Tyrrell; there are wider issues at stake here and, besides, they are busy looking into the fraught case of a competition licence holder who received a parking ticket in Belgrave Square and ugly rumours of an increase in the price of wine at La Campagnola.
Frank Williams, OBE, CBE, GHQ, asked to head Select Committee on Curing Understeer in the Third World.

APRIL
Tyrrell takes his case to the FIA Court of Appeal. The court confirm his guilt, adding that there is a large hole in the top of the Tyrrell monocoque. Tyrrell explains that it is for the driver to sit in. "We can't be sure of that," comes the expert response. "There could be several sheep in there excreting all over the place."
FISA ban animals from Formula 1 cars.
Ferrari forced to make René Arnoux redundant.
British Grand Prix in doubt after row breaks out over crêpe rights at Silverstone. FISA claim crêpe is a French invention and they should take the money. Silverstone and Alf Hartigan, Crêper-in-Chief, refuse. FISA call for a levy on all French cars with right-hand drive. The Renault F1 team ask for a clarification of this.
Frank Williams, supplier of Racing Cars by Appointment to H.M. Queen, causes shock by giving test drive to a racing driver.

MAY
Tombola Blood brought from hiding and warms up by winning six-lap event at Mondello Park by seven laps. AH, Grand Prix Correspondent for *Motoring News*, jogs alongside car throughout, fending off journalists from the *Daily Mail* and AUTOSPORT. AH inadvertently sets a new lap record and collapses when hearing the news. Writes report in comatose state. Sales of MN are unaffected.
The Bishop of Durham says the Tyrrell ban is causing severe hardship to sheep farmers in his area. The Church of England synod passes resolution not to take holidays in France nor preach in French and to use only English mustard on their ham sandwiches in the pub at lunchtimes.
FISA say they are to close uneconomic pits — starting with Renault.
Sir Frank Williams mediates with President Mitterand over impasse in Crêpe Row. Compromise reached; FISA agree crêpe sales are minimal and accept instead commission on sales of dill pickles on hamburger stand.

JUNE
Arthur Escargot, President of the NUM (National Union des Mecaniciens), calls his men out on strike and blockades entrance to paddock at Paul Ricard. Warwick and Tambay bussed to work.
Renault bus runs out of petrol.
Renault say that if it is not fixed by 5.30 p.m., they will pull out of racing in 1994.
Geraldine Ferraro replaces Stirling Moss as Team Manager at ATS.
Tombola Blood races at Monaco. AH, running alongside as usual, trips over a rear wheel and crashes to the ground in sight of a World record. Reaching for his Book of Racing Driver's Excuses, AH quotes at length from chapter 12: "I just don't believe it . . . . going beautifully . . . . under no pressure . . . . changing up early . . . . minimum boost . . . . Goodyear . . . . white line . . . . tiny mistake . . . . I could cry."

JULY
Tyrrell is quoted as saying he has never tried to find loopholes in the rules.
Lightning strikes the roof of Tyrrell factory. Fire breaks out in Turbocharger Installation Department and is undetected. Flames spread to Ball Bearing Store and explosion peppers Ripley church and kills several sheep in nearby field. It is admitted later that sprinkler system is not connected to water reservoir. The Bishop of Durham says the Lord moves in curious ways.
Racing drivers defy pickets at Ricard and drift back to work after FISA offers nine points to every driver practising for French Grand Prix. Escargot says FISA are manipulating figures.
Cardinal Basil Hume replaces Don Revie as Team Manager at ATS.
British Grand Prix at Silverstone stopped because of crash involving an articulated lorry on the M1. Mansell awarded the race even though Prost catching the Williams rapidly. RAC MSA say "you can't be too careful". FISA say it is a fix and launch full enquiry. Lorry found to be driving away from Silverstone; RAC MSA mysteriously lose lorry driver's log book.

AUGUST
FISA say the Tyrrell case was not victimisation.
Lightning strikes the roof of FIA headquarters in Paris. Fire breaks out in members' room, destroying a cupboard full of Lego and Stickle-bricks, and the blaze is not discovered for days. It is admitted later that the representative from Upper Volta, Reginald Tristan Freebee del Blazer e Armband ('Reg'), thought a nice open fire and acrid smoke in a room to be quite normal. Mr. Bespoke-Taylor of the RAC MSA was not in danger since he had left to catch an early plane three weeks previously.
Angela Webb called in to organise Grand Prix as a side attraction at the Farnborough Air Display.
Lord Williams of Didcot misses Austrian Grand Prix. Proclamation attached to factory railings says 'Summer Recess'.
Bishop Desmond Tutu replaces Rev Peon Aisley at ATS after Aisley had fired all Roman Catholic employees.
Tram crashes in Vienna and fuses starting lights at the Osterreichring.

SEPTEMBER
Tyrrell, in a press release from the Cayman Islands, says his final comment is that he went into Marks & Spencer and got fitted up.
Grand Prix International folds; second-hand book shops report sudden glut of dictionaries on the market.
Henry Kissinger replaces Terry Wogan at ATS.
Derek Ongaro presses green light at Monza and stops all the trams in Vienna.

OCTOBER
Renault lose World Championship. Escargot blames the press.
Kissinger retires to the Peter Cooper Home for the Bewildered.
Robert Maxwell buys ATS and says he will take them into Formula 1 for the first time.
Rupert Murdoch buys AUTOSPORT.
François Hesnault becomes World Champion when FISA adjust points table by stripping points from drivers who are not over six feet tall, do not smoke Gitanes and do not speak French fluently. Alain Prost is second by a short nose. No one is third.
Bernard Ecclestone puzzles Formula 1 world by buying exclusive rights to British Bergougnan tyres.

NOVEMBER
Goodyear, Pirelli, Avon, Michelin, Yokohama, Bridgestone and Dunlop stun the motor racing world by withdrawing from the sport.
Robert Maxwell buys *Motoring News* and introduces Bingo; one million back issues for the first person to find a copy of AUTOSPORT with the centre spread still attached.
AUTOSPORT, in an effort to recoup a sudden slump in sales, introduce a numbers game; a trip by Concorde to Brands Hatch for the first person to read the number of a moving Formula 1 car at fifty feet.
Williams unveil their latest car complete with crimson velour upholstery, gold pin-striping and drawn by a team of shining mares.
Rosberg says it understeers badly. Patrick Head says it's horse-shit.

DECEMBER
Motoring News run an exciting new game called Spot the Contract. They publish a picture of a heated discussion at a FOCA meeting and invite readers to place an X on the team manager who actually has Eric da Silvapod under contract.
Grave doubts about the 1986 calendar following discovery of 4.7 million crêpes in a bank vault in Luxembourg. Balestre says every event in which an Englishman might want to take part is cancelled. Dill pickle market slumps. Alf Hartigan is sued for Contempt of Crêpe.
Murdoch attempts Spot the Balls-Up competition by publishing pictures of the funeral of Sir Winston Churchill, the Coronation, the Trooping of the Colour and race morning at Dallas. Murdoch sued for $196 billion by the owner of a peanut stand who happens to be in the picture.
Haymarket buy back AUTOSPORT. In the re-launch issue they say the price increase is offset by more pages, more exciting features, lots of super colour and the use of staples.
Lightning strikes the roof of Haymarket Publishing . . . .

MAURICE HAMILTON

Financial problems put Le Mans in jeopardy

The organisers of the classic Le Mans 24 Hours in France say that their historic motor race is in serious jeopardy because of big financial losses.

The Automobile Club de l'Quest says that it is losing increasing amounts of money each year, the losses caused by falling attendance figures and spiralling taxation.

The crowd figure fell to below 60,000 last June, and the tax payable by the ACO on each spectator amounted to just over 40 francs. In contrast, back in 1965 the tax due was about six francs per spectator.

The ACO naturally buys relatively few products and services, and is therefore not in a position to recover the vast bulk of the value added tax it pays to the government.

The club points out that in 1981 (the most recent year for which accurate figures have been published), the Le Mans 24 Hours contributed a cash flow of 450 million francs, of which 70 per cent was spent in the Sarthe region.

It is now seeking exemption from value added tax and financial backing from the Sarthe Department and the city of Le Mans. The club has stated that, if sufficient finance is not found, this year's event is likely to be cancelled for the first time since 1948.

March-Porsche C-car project

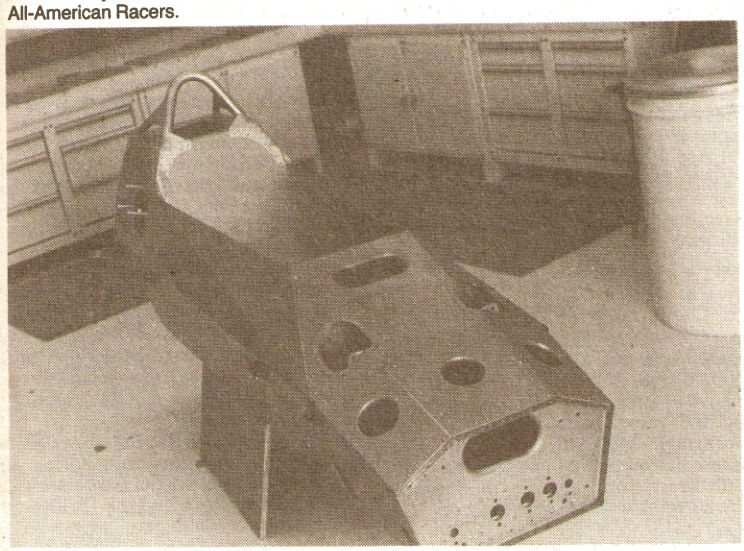
It is likely that there will be a Group C version of March's 85G IMSA GTP car running regularly in the World Endurance Championship next season. Christian Danner and Edgar Doeren are tipped to be the drivers of a Porsche-engined March chassis in a deal being put together by BMW M1 racer, Helmut Gall.

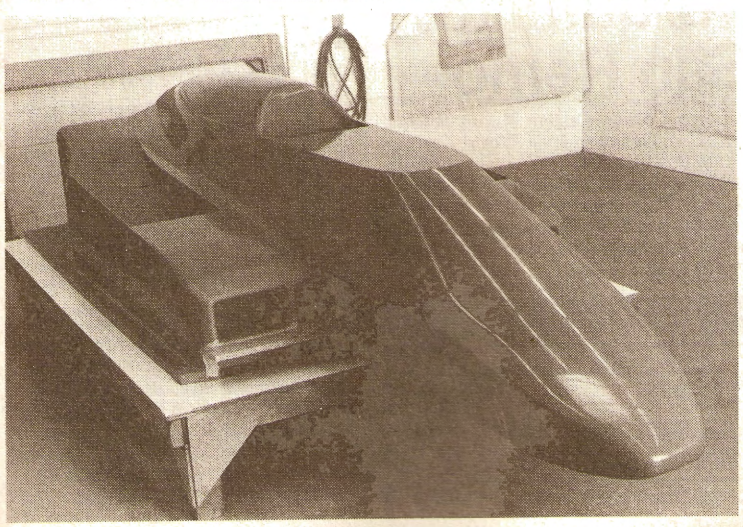
Danner said early this week that he was very hopeful of the deal coming to fruition: "I tested the March IMSA chaissis at Snetterton and it is a bloody good car which I am sure would be really competitive in Group C."

The German is still talking to Zakspeed about possibly driving their F1 car, and he is also actively seeking an F3000 drive.

New Eagle-DFX Indycar

Dan Gurney's Santa Ana, California factory is hard at work on the new Indycar series challenger bearing the Eagle name, which will be powered by a Cosworth DFX engine. Pictured are the chassis and body buck moulds of the all-new car, which has been designed by John Ward with aerodynamic development by Hiro Fujimori. There is no use of graphite materials in the monocoque, which is made from aluminium honeycomb and (without nosebox, as pictured) weighs 961lbs. The Eagle 85 will feature wishbone/pullrods front suspension and, like the Chapparal 2K and Lola T-900, an outboard shocker arrangement at the rear. Testing of the new car is scheduled to take place before the end of January. Resulting from Gurney's new association with Mike Curb, his team is now known as Gurney/Curb All-American Racers.





Forsyth bid for Fabi

Forsyth Racing tell our American Editor that they have yet to sign a driver for the 1985 CART season — but they are hopeful of signing Teo Fabi again! The Italian, it will be remembered, drove for the team with great success in 1983, but left in July 1984, worn out by trying to run both CART and Formula 1 (for Brabham).

Does this mean that Teo is not staying with Brabham this year? "We've spoken to him very recently," said a Forsyth spokesman. "He says he thinks he has a deal with Bernie Ecclestone — but as yet there is nothing on paper. He's the man we want."

Penske goes shopping

Shortly before Christmas, Roger Penske and members of his team were in England. Apart from spending time at the team's base in Poole, Dorset, they also visited March Engineering (where it is believed they placed orders for six 85Cs!) and Lola Cars (a pair of T900s).

From the States, it is confirmed that former team member Al Unser Sr will drive a third Penske entry (the other two being for Rick Mears and Danny Sullivan) in the three 500-milers next season.



Guerrero — IMSA drive.

Guerrero goes IMSA

Roberto Guerrero is to contest a Camel IMSA GTP programme this season, with a new Chicago-based team, run by former Theodore F1 and CART team manager Julian Randles. The Colombian is to do the Daytona, Miami and Sebring season-openers in a "competitive Group C2 chassis", prior to his ongoing commitment to Dan Cotter's Indycar equipe.

Guerrero will share the sports car with the experienced Diego Montoya, maybe with a Briton as third pilot. Roger Cowman has been heavily involved in getting Randles's team 'on the road', and is supplying the hardware and spares back up from England.

New deal for Rutherford

It was formally announced on Monday that Indycar veteran Johnny Rutherford would contest the whole CART series in 1985 with Johnny Capel's Alex Foods team.

Vermont American Tools will sponsor a pair of brand new March 85Cs for Rutherford, whose recent seasons have been interrupted by injuries.

Gentry move confirmed

Shortly before Christmas former Toleman engineer John Gentry resigned from his new post with Euroracing, having worked there for only a few weeks. It is believed that he is to join Renault.

Dallas company to run revised CanAm series

The Dallas Grand Prix Company issued a statement just before Christmas stating that, although there would definitely *not* be a Formula 1 race in 1985, the company was very much an on going concern and had now taken over full responsibility for organising and promoting the 1985 CanAm Championship.

They will shortly be announcing a 10-race calendar and have stated that 16 brand new cars are currently being built in England — by Argo and Van Diemen — to be mated to 16 new, normally aspirated, American-built V6 engines.

At least seven new drivers "of some note, including at least two with Formula 1 experience" will be involved in the series, which boasts over $1 million in travel and bonus funds.

In addition, Dan Partel, who has built up the European Formula Drivers' Association (EFDA) so enthusiastically during recent seasons, has been hired in an as yet unspecified capacity.

Spence for PMC Reynard drive

Although neither Russell Spence nor Peter MacIntosh could comment this week on their plans for Formula 3 in 1985, we can exclusively reveal that the two will be teaming up this year for a major assault on the Marlboro British series.

Spence, who finished third in last year's series, will be sponsored exclusively by Warmastyle, and the team will use one of the exciting new Reynard chassis with VW engines.

The final destination of Spence has been the most closely guarded secret in F3 with his name being linked with Dave Price, Eddie Jordan, West Surrey *and* Alan Docking teams. With the Yorkshire man now effectively off the market, it is expected that several other names in the F3 'jigsaw' will soon fall into place.

If things go according to plan, Spence should be a potent force in this year's series. A formal announcement is expected in mid-January.



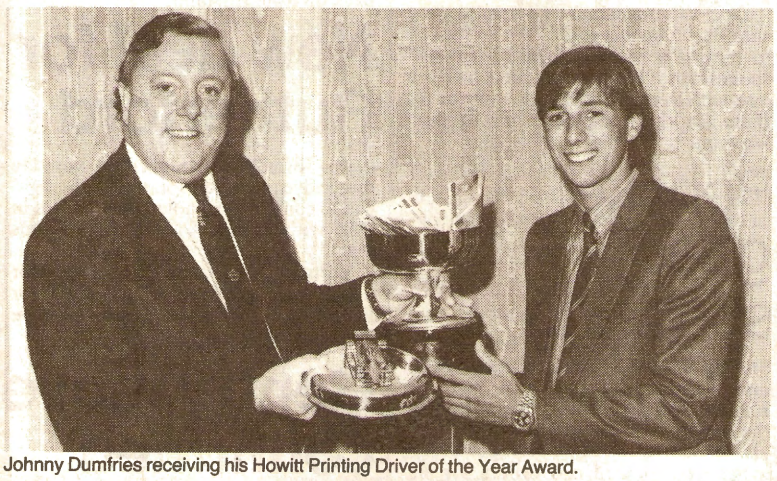
Spence — plans for '85 settled.

Gugelmin to sign for West Surrey Racing

Mauricio Gugelmin will sign for Dick Bennetts to run in Formula 3 this year. Although the contract has yet to be signed, it is now certain that the European FF2000 champion will be joining West Surrey Racing in a full assault on this year's Marlboro British F3 series.

The team will run Ralt chassis although engines are still a problem. Bennetts hopes to announce full plans for a two-car team shortly.

Drivers who have been linked with the team include Harald Huysman, Russell Spence and Spaniard Luis Sala, while Gary Evans too must not be discounted.



Johnny Dumfries receiving his Howitt Printing Driver of the Year Award.

Howitt award for Dumfries

Johnny Dumfries received the Howitt Printing Driver of the Year award as the most outstanding driver at Donington Park this season in a typically lively presentation in London recently. Patrick Howitt, chairman of the Nottingham-based print group, presented Dumfries with £1500 following his two Formula 3 successes at Donington this year, and for the competence he displayed in Formula 1 tests for Williams and Lotus at the circuit.

Clubmans and Sports 2000 Grovewood runner-up Will Hoy took the £750 second award.

Howitt confirmed that they will continue their involvement with Donington this season, with the £175 per meeting Driver of the Day awards and end-of-season cash prizes, and they will also sponsor three rounds of the circuit's Transnational GT Championship.

F3 teams chose tyres

The RAC Motor Sports Association has decided to allow British Formula 3 entrants to evaluate and select their own 'control' tyres for the formula when the present contract with Avon expires at the end of the season.

"Having initiated the principles of approved tyres, cost control and stability," the RAC MSA are now satisfied that some organising clubs and associations are sufficiently competent to make their own arrangements in future, providing the correct administrative procedures are met.

The first period to be covered under the new arrangements will be the three years from 1986-8. Thorough testing should take place so that a decision is reached, and published, by September 1985. The 'privilege' will also be extended to FF2000 and Sports 2000.

Fine plans

The 1984 Formula 3 class B champion, Keith Fine, looks set to drive an Anson this year. "It is 99 per cent certain that Keith will be with us this year," commented Mike Rowe recently.

Rowe will be running a two-car works assisted Anson team with Volkswagen engines this year, and is also close to finalising a second driver. Full details are expected to be announced shortly.

Amco to run Borgudd?

Amco Racing has confirmed its intentions to run a team in the fledgling F3000 series this year, Bob Howlings's outfit being close to a deal with Slim Borgudd as one of two drivers. The Cheshire-based team has three Arrows A6 chassis at its disposal, and is due to announce one major sponsor early in January.

Borgudd, a sessions drummer in the rock music business, has driven for Tyrrell and ATS in F1 over the years, following a lengthy F3 career.

Tiff 3000?

AUTOSPORT's regular track tester, Tiff Needell, is hoping to compete in Formula 3000 this year. "The new formula seems to have opened some sponsorship doors and the response has been very encouraging," said Tiff last week. "I've already found part of budget, and I am really keen to get a drive in the formula which I think will be a great success."

Tarquini to San Remo

Alberto Colombo's San Remo Racing are expected to run 1984 World Karting Champion Gabriele Tarquini in Formula 3000 this season. Tarquini is very highly rated in Italy after just half a season of Formula 3 in 1984. Colombo is currently deciding between March or Lola chassis for his team.

Wallace top Rookie

Rusty Wallace has been confirmed as last year's NASCAR Winston Cup Grand National series 'Rookie of the Year', following a successful maiden season with Cliff Stewart's Gatorade-backed Pontiac and Chevrolet. Wallace managed four top six placings and emerged top of the rookie points scorers, although his position had to be ratified by a specially selected NASCAR panel.

Sala talks British F3

Rapid Spaniard Luis Sala has recently been in England talking with British Formula 3 teams — Eddie Jordan, Dick Bennetts and Dave Price — about the possibility of running in the Marlboro series this year.

Last season Sala was racing in the European Formula 3 series with the Ravarotto team, with extensive backing from the Spanish national oil company Campsa, and in his first season of single-seater racing has been immensely impressive. He finished second at Knutsdorp and was a regular front runner towards the end of the year.

BRIEFLY

■ Schnitzer Racing, the most loyal of BMW's teams, and concessionaires for BMW in Bavaria, are rumoured to be switching to Volvo for this year's European Touring Car series following the example of the other leading BMW team Eggenberger. If the switch does take place, it is said they will be giving up their BMW concession. . .

■ Could it be that the rumoured Peugeot F3 engine is further advanced than originally thought? Our sources inform us that the engine will be based on a yet-to-be announced 2-litre engine destined for the 305GT possibly the GTI. It is said that the engine will be built on the same lines as the 1950cc diesel engine, with an aluminium block.

■ Sometime Aurora F2, F3 and sports car driver Herve Regout has bought a Fittipaldi F1 car, chassis F8/2, apparently with a view to contesting the F3000 series this year. The Belgian was a member of Brian Lewis's Bang & Olufsen-backed F3 team, back in 1976.

■ With the new F3 Ralt now unveiled and indications that Reynard's car is well behind schedule, Anson Cars have had a stream of visitors at their Bridgnorth base including some top names in F3 looking at what Gary Anderson's latest design has to offer.

■ Rapid Dutchman Cor Euser looks set to go to America full time this year, racing FF2000 and SuperVee with Vortex Racing, Anson's American agent.

■ Chris 'Flash' Morten, a March employee for the past 10 years, is planning to set up his own Formula 3000 team for 1985. "I have been approached by two well-known Italian F2 names to put a team together. If everything happens, I will buy a couple of Marches," said Morten, who can be contacted on Bicester 244802.

■ Belgian Thierry Tassin was in England early this week talking to a number of prospective Formula 3000 teams, among them Lola and PMC. "I've got most of a budget together and I am looking for the most competitive car," said Tassin.

■ ADA Engineering will be moving in the New Year to new premises at 3 Set Star Estate, Transport Avenue, Great West Road, Brentford, Middx (tel: 01-047 3521).

WEEKEND SPORT

OFF TRACK

Date	Venue	Event/Details
Jan 6	Chipping Broadway, Warwicks	Archie Langley Sporting Trial (SUNBAC) *First round of the BTRDA Gold Star Championship of the New Year with all the stars taking part including Gold Star champion, John Fack. Event starts at 10.30 am.*

Secretaries of the Meeting are requested to send details of forthcoming events to Fiona Grant, AUTOSPORT Editorial, Haymarket Publishing Ltd, 38-42 Hampton Road, Teddington, Middlesex TW11 0JE.



FREE key-fob with all orders over £25 . . .

Mill House Books

Mike and Jan Kettlewell of MILL HOUSE BOOKS offer a unique personal service. We send out orders by return-of-post (subject to availability); our books are double-wrapped for added protection; and our post & packing charge for UK and Irish customers is only £1.50 for orders up to £25 and FREE over £25.

Not only that. If you order over £25 worth of books we'll also send you a FREE KEY-FOB. Most makes, and some popular models, are in stock — but if we haven't got yours we'll send you one depicting a racing car.

Space does not permit us to list all our books. Suffice to say we can supply virtually any motoring (or motorcycling) book generally available.

OUR CHRISTMAS SELECTION











MERCEDES-BENZ GRAND PRIX RACING 1934-1955 by George Monkhouse, edited by Cyril Posthumus. With an introduction, plus editorial assistance, from Rudolph Uhlenhaut, this large-format, 208-page book features 450 excellent photos and seven technical drawings. Surely *the* book of the year — and if you still haven't bought one ask for it for Christmas! **£29.95**

FERRARI: THE GRAND PRIX CARS by Alan Henry. Well-written and well-received account of Ferrari's 36 years in GP racing. Fascinating 320-page book with excellent photos **£14.95**

JIM CLARK REMEMBERED by Graham Gauld. A full account of the life and times of the late, great Scot **£9.95**

SECOND TIME AROUND: The New Formula 1, The Turbo Era by Niki Lauda. A look at the technical side of modern Grand Prix cars. 224 highly-entertaining pages ... **£12.50**

McLAREN: THE GRAND PRIX, CAN-AM AND INDY CARS by Doug Nye. In 270 fascinating pages, the background story to this year's World Champions. Published this Spring **£12.95**

PORSCHE CARRERA 6 — 956: The Classic Sports-Racers From Stuttgart by Ian Bamsey. A great new book on racing Porsches, from the Carrera 6 via the 917 to the 956. 192 large pages **£19.95**

PORSCHE AT LE MANS by Dominique Pascal. A detailed record of *every* Porsche to have raced at Le Mans between 1951 and 1984 — over 440 of them! 156 large pages **£18.95**

FORD GT40: An Anglo-American Competition Classic by David Hodges. 144 pages on the Le Mans winners of the late '60s **£11.95**

FORD GT40 SPORTS CARS: Four Times Winner Of The Le Mans 24 Hours by Steve Archibald. Supercars in Profile No 1, a 36-page account with history, cutaway drawing and colour **£2.95**

PORSCHE 935: The Story Of A Champion Long Distance Race Car by Steve Archibald. Supercars in Profile No2 £2.95

AUTOMOBILE SPORT 83/85 edited by Ian Ramsay. Return of this motor sporting annual. Large format with lots of colour. Full review of the 1984 season with highlights from 1983. Due early December **£14.95**

SPECIAL OFFER! Automobile Sport 81/82, 82/83 and 83/85 — all three editions for just £21.00

THE RACING FIFTEEN-HUNDREDS: A History Of Voiturette Racing From 1931 TO 1940 by David Venables. From Amilcar and Bugatti, via ERA and Maserati, to Alfa Romeo and Mercedes-Benz. A superbly-researched 200-page account of voiturette racing before WW2 ..... **£24.00**

FROM CHAIN DRIVE TO TURBOCHARGER: The AFN Story by Denis Jenkinson. DSJ's latest classic, 312 pages on the Aldingtons **£19.95**

LE MANS 1 (1984) published by Kimberley's and Gary Sparks & Associates. Large and colourful review of the 1984 Le Mans 24-hours — in English . . . well, Australian **£12.95**

MY TWO LIVES: Race Driver To Restaurateur by Rene Dreyfus with Beverley Rae Kimes. An excellent insight into pre-war racing **£15.95**

WILLIAMS: Kimberley Grand Prix Guide 11 by Bob Constanduros **£2.50**

KEKE ROSBERG by Bob Constanduros. Booklet from Kimberley's **£2.50**

NELSON PIQUET by Ric van Kempen. Booklet from Kimberley's **£2.50**

AUTOMOBILE YEAR 32 edited by Ian Norris. The 1984 motor sporting season reviewed in detail. Superb photography. 248 pages. Mid-December publication **£19.95**

BRUMM COLLECTOR'S MODELS



We stock the Italian BRUMM range of fully-finished 1:43 scale metal collector's models. Very reasonably priced at £4.99 each, our brief selection from the 120-plus range is listed below. (A colour catalogue is available for 60p plus 13p p&p.)

Morgan Three-Wheeler 1923 (open or closed)
Grand Prix Fiat F2 1907
Paris-Madrid Renault 1903
Ferrari 500/F2 1952
Lancia-Ferrari D50 F1 1956
Ferrari Dino 246 F1 1958
Ferrari Testa Rossa 1960
Alfa Romeo 158 1950
Alfa Romeo 159 1951
Mercedes-Benz W125 1937
Bentley 4½ litre 'blower' 1930
Jaguar XK 120 roadster, soft-top or coupe
Jaguar XK 120 racing (Mille Miglia or Le Mans)
Darracq V8 record-breaker 1905
Napier 6 record-breaker 1905
Porsche 356 (open, soft-top of coupe)
Mercedes-Benz W154 1939
Mercedes-Benz W196 1954
Auto Union C-type 1936
Auto Union D-type 1938
Auto Union record-breaker (open or closed wheels)
Bugatti Brescia 1921 (blue or black)
Bugatti Type 59
Bugatti Type 57S (blue or black)
Talbot-Lago 26C (blue or yellow)
Maserati 250F
Maserati 8CTF (1938 works, 1939 Indy or 1940 Indy)
Vanwall
Bentley 4½ litre 1928 (open or closed)

POST & PACKING CHARGES FOR BRUMM MODELS: UK and Ireland — add 50p to order total. Overseas — £1 for each model

VIDEO

We stock a large selection of videos. Listed below is a small selection.

1984 GRAND PRIX HIGHLIGHTS: an hour-long video of each of the 1984 Grands Prix is available. Commentary is by Simon Taylor. Colour, 60 mins, **£29.90** (EACH) — specify which GP(s) required.

GRAND PRIX '83: the official FOCA video of the 1983 Formula 1 season. Full coverage of each GP with all the incidents. Colour, 108 mins **£34.50**

GRAND PRIX '82: A classic this, with witty narration by Clive James — but Renault fans won't like it! The highlights and sad moments of the 1982 season. Colour, 90 mins **£29.90**

START TO FINISH — THE 1981 FORMULA 1 GP SEASON: The 1981 FOCA video capturing the highlights of that year's Grands Prix. Colour, 90 mins **£29.90**

HAVOC 5: Over 100 accidents and incidents from motor sports, including car racing, motorcycling, rallying, powerboating and desert racing. Colour, 60 mins **£29.90**

HAVOC 4: One hour of film clips from accidents in motor sport, mainly from 1982 season. Colour, 60 mins **£29.90**

24 TO ZERO — LE MANS '84: Superb coverage including in-car camera. Interviews, pit-stops, incidents. Colour, 75 mins **£29.90**

THE LOMGEST DAY — LE MANS '83: Full account of a dramatic race with in-car camerawork. Colour, 60 mins **£29.90**

LE MANS '82: Ickx's sixth Le Mans win plus the gallant effort by the Nimrod-Aston Martins. Colour, 50 mins **£29.90**

NURBURGRUNG 1000-km 1983: On the old 'Ring, round 3 of the Group C Championship. A lap with Derek Bell! Colour, 55 mins **£29.90**

MONZA 100-KM 1983: Lancia v Porsche in the opening round of the Group C Championship. Colour, 53 mins **£29.90**

DAYTONA '83: American style sports car racing featuring the Daytona 24-hours. Colour, 60 mins **£29.90**

BRANDS HATCH 1000-km '82: The nail-biting final of the '82 Endurance Championship for drivers with Jacky Ickx at his best. Colour, 55 mins **£29.90**

RED MIST STUFF: Brian Redman (Lola) stars in IMSA Mosport race plus 1983 Mosport 6-hours. Recommended. Colour, 80 mins **£29.90**

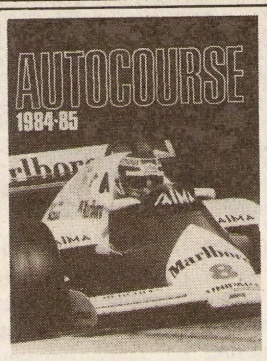
POST & PACKING FOR VIDEOS: *Britain and Ireland — £1 for any amount of videos; NO CHARGE if included with book order. Overseas — £1 for each video.*
PLEASE STATE WHETHER VHS OR BETAMAX REQUIRED. *Some are available on the Video 2000 format at no extra charge — please check beforehand. NTSC (American system) tapes of most titles are also available at £5 extra.*

AUTOCOURSE

For the past two years the publishers of AUTOCOURSE, the finest Grand Prix annual, ran out of books within weeks of publication, leaving many disappointed fans. Don't be caught out this year.

MILL HOUSE BOOKS are offering AUTOCOURSE 1984/85 POST-FREE at £15.95. Send your order off today to guarantee early delivery. Books will be despatched as soon as supplies are received in mid-December.

This offer applies to UK customers only and expires on December 31. Overseas customers should add £2 p&p for one book plus £1 for each extra copy.



AUTOCOURSE 1984/85 — see separate panel above for POST-FREE offer.

AUTOCOURSE 1983/84 edited by Maurice Hamilton. Review of 1983 motor racing season. Few copies left **£15.95**

AUTOCOURSE 1982/83 edited by Maurice Hamilton. 1982 season. Collector's item **£29.95**

AUTOCOURSE 1981/82 edited by Maurice Hamilton. 30th anniversary edition covering Piquet's first championship year **£13.95**

AUTOCOURSE 1980/81 edited by Maurice Hamilton. Very rare edition **£24.95**

AUTOCOURSE 1979/80 edited by Maurice Hamilton. Schecker's year **£19.95**

GRAND PRIX '84 by Peter Windsor. Autocar's Grand Prix reports of the year in magazine format **£2.50**

RACE YEAR '83 edited by David Hassall. Nicely-produced Australian annual covering Australian and worldwide motor racing **£11.95**

HISTORIC CAR RACING 3 (1983/84) edited by Rob de la Rive Box. Covera 1983 FIA Historic Racing Championship **£17.95**

24 HEURES DU MANS 1983 edited by Christian Moity and Jean-Marc Teissedre. French-language annual with many photos, race data, etc **£19.95**

GRAND PRIX! Vol 1, 1950-1965 by Mike Lang. Race-by-race account of World Championship **£9.95**

GRAND PRIX! Vol 2, 1966-1973 by Mike Lang **£11.95**

GRAND PRIX! Vol 3, 1974-1980 by Mike Lang **£14.95**

SECIAL OFFER! Vols 1, 2 and 3 set £29.95

THE ANATOMY AND DEVELOPMENT OF THE FORMULA 1 RACING CAR SINCE 1975 by Sal Incandella. New second edition covers 1984 cars **£14.95**

COUNTDOWN TO A GRAND PRIX by Tony Howard. Readable account of the world of Grand Prix racing. Paperback edition **£2.95**
Hardbound edition £9.95

ARROWS: Kimberley GP Team Guide 9 by Jonathan Nash **£2.50**

TOLEMAN: Kimberley GP Team Guide 10 by Bob Constanduros **£2.50**

IN 630 TAGEN AN DIE SPITZE: Die Weltmeister-Story Des BMW Turbo by Uwe Mahle. A BMW book dedicated to Piquet's 1983 championship-winning season. Lots of colour for Piquet fans, German text **£7.50**

THE GUINNESS GUIDE TO GRAND PRIX MOTOR RACING by Eric Dymock. Revised (1983) second edition **£11.95**

THE POWER TO WIN by John Blunsden. Remember the DFV? This is the story of Grand Prix racing's most successful engine ever. 232 pages **£12.95**

FORMULA ONE: The Cars And The Drivers by Michael Turner and Nigel Roebuck. Turner's excellent paintings plus Roebuck's pithy prose **£9.95**

THE AUTOMOBILE YEAR BOOK OF SPORTS CAR RACING by Denis Jenkinson. Fabulous photographic account of sports car racing between 1953 and 1973 with long captions by Jenks **£19.95**

FORD VERSUS FERRARI: The Battle For Le Mans by Anthony Pritchard. Updated edition of famous '60s book to include 1968 and 1969 races **£12.95**

MILLE MIGLIA 1927-1957 by Giovanni Lurani. English text, 207 large pages with superb photos **£15.95**

BRANDS HATCH: Past, Present And Future by Mark Cole and Mike Kettlewell. 52 pages, magazine-format **£1.00**

VILLENEUVE featuring photographs by Alan de la Plante. Foreward by Jody Scheckter. 128 pages **£14.95**

GILLES VIVO: Le Febbre Villeneuve by Cesare de Agostini. Large-format 200-page book dedicated to Gilles. Italian text, but many pages of colour photos with English captions **£13.95**

MR MONACO: Graham Hill Remembered by Tony Rudlin **£9.95**

DRIVE IT! THE COMPLETE BOOK OF FORMULA 2 RACING by Tristan Wood. 128-page account of Formula 2 racing, many photos **£6.95**

DRIVE IT! THE COMPLETE BOOK OF FORMULA FORD by Phillip Bingham. Account of racing's most popular category **£6.95**

DRIVE IT! THE COMPLETE BOOK OF FORMULA FORD by Phillip Bingham. Account of racing's most popular category **£6.95**

PREPARE TO WIN by Carroll Smith. American preparation guide with many tips for the competitor. 175 pages **£12.95**

TUNE TO WIN by Carroll Smith. Companion to above **£12.95**

HOW TO MAKE YOUR CAR HANDLE by Fred Puhn. Gain a second a lap **£5.95**

FORMULA FORD RACE PREPARATION by Steve Robinson. 1984 edition **£5.00**

RACE & RALLY CAR SOURCE BOOK by Allan Staniforth. A-D-I-Y guide for the amateur competitor **£8.95**

Motor Racing

AC/FORD/SHELBY COBRA by Rod Grainger. Super Profile **£4.95**

AC (SHELBY) COBRA by F. Wilson McComb. Osprey AutoHistory. 136 pages **£7.95**

ALFA ROMEO: A HISTORY by Peter Hull and Roy Slater. Large 320-page revised (1982) edition **£21.00**

ALFA ROMEO GIULIETTA by Evan Wilson **£11.95**

ASTON MARTIN AND LAGONDA by Chris Harvey. Classic Car Series, lavish 245-page history **£17.95**

ASTON MARTIN V8s by F. Wilson McComb. Osprey AutoHistory covering all V8s, including Lagonda **£7.95**

ASTON MARTIN & LAGONDA: Six-cylinder DB Models by Andrew Whyte. Collector's Guide, including racing models **£8.95**

AUDI QUATTRO by Graham Robson. Rally Library series, 68 pages **£4.95**

AUDI QUATTRO by Alan Henry. 160 pages **£8.95**

THE AUSTIN SEVEN by R. J. Wyatt. Third edition **£9.95**

HEALEY edited by Peter Garnier. Autocar reprints covering Austin-Healey, Nash-Healey and Healey. 160 large pages **£9.95**

SPRIDGETS: MG and Austin-Healey Chris Harvey. Classic Series, 256 pages **£14.95**

BMW: Bavarian Driving Machine by Jan P. Norbye. 256 pages, hundreds of photos **£8.95**

BMW 6-SERIES by Jeremy Walton. 176 pages **£8.95**

BUGATTI: Le Pur-Sang des Automobiles by H. G. Conway. 463-page third edition **£9.95**

GREAT MARQUES: BUGATTI by H. G. Conway **£4.95**

GRAND PRIX BUGATTI by H. G. Conway **£19.95**

CORVETTE: America's Sports Car by Jay Koblenz. 256 large pages **£8.95**

COOPER CARS by Doug Nye. 320 pages **£20.00**

THE Z-SERIES DATSUNS by Ray Hutton. Collector's Guide covering 240Z to 280ZX **£8.95**

DE LOREAN: Stainless Steel Illusion by John Lamm **£12.95**

ERA: The History Of English Racing Automobiles by David Wegulin. Comprehensive, 288 pages, 473 illustrations **£45.00**

FERRARI: The Road And Racing Cars by Godfrey Eaton. 256 pages, 300 photos **£9.95**

FERRARI by Hans Tanner and Doug Nye. New sixth edition enlarged to 672 pages. Suerpb! **£39.95**

FERRARI: Sports-Racing And Prototype Competition Cars by Antoine Prunet. 432 pages **£19.95**

FERRARI 250LM by Marcel Massini with Rob de la Rive Box. 192 pages on the 32 250LMs built **£14.95**

FERRARI 250GTO by David Clarke. Osprey AutoHistory, 136 pages **£7.95**

WORLD SUPERCARS 1: FERRARI DAYTONA 365GTB/4 by Doug Nye and Paul Frere. Mouth-watering photos **£9.95**

FIAT SPORTS CARS by Graham Robson **£12.95**

FIAT X1/9 by Jeremy Walton. Osprey AutoHistory **£7.95**

FIAT X1/9 by Barrie Gill and Michael Frostick. New second edition **£12.95**

THE SPORTING FORDS Vol 1: CORTINAS by Graham Robson. Collector's Guide, including sporting models **£8.95**

THE SPORTING FORDS Vol 2: ESCORTS by Graham Robson. Collector's Guide, including sporting models **£8.95**

THE SPORTING FORDS Vol 3: CAPRIS by Jeremy Walton. Collector's Guide, including sporting models **£8.95**

FORD CORTINA Mk 1 by Jonathan Wood. Osprey AutoHistory, includes Lotus Cortina **£7.95**

THE WORKS ESCORTS by Graham Robson. New revised edition. 256 pages on all works cars **£12.95**

ESCORT PERFORMANCE by Dennis Foy **£7.95**

FORD ESCORT RALLY PREPARATION by Charles Reynolds. Official Ford book **£5.50**

HOW TO MODIFY FORD S.O.H.C. ENGINES by David Vizard. 224 pages covering 1300, 1600 and 2000 cc sohc engines from 1970 ..... **£7.95**

CONSUL, ZEPHYR, ZODIAC by Michael Allen **£10.95**

FORD POPULAR AND THE SMALL SIDEVALVES by Dave Turner. 192 pages on Ford's people's car **£12.95**

FORD GT40 by John Allen. Super Profile **£4.95**

FRAZER NASH by David Thirlby. 208 pages **£6.50**

GINETTA: An Illustrated History by John Rose **£9.95**

JAGUAR: THE COMPLETE ILLUSTRATED HISTORY by Philip Porter. Important new 128-page book with over 300 photos **£14.95**

JAGUAR: Sports-Racing And Works Competition Cars To 1953 by Andrew Whyte. 415 informative pages **£19.95**

JAGUAR D-TYPE & XKSS by Graham Robson. Osprey AutoHistory. 136 pages **£7.95**

JAGUAR D-TYPE & XKSS by Andrew Whyte. Super Profile giving facts, figures and photos **£4.95**

JAGUAR E-TYPE by Andrew Whyte. Super Profile **£4.95**

JAGUAR XJS by Rivers Fletcher. 160 pages **£8.95**

THE XJ-SERIES JAGUARS by Paul Skilleter. Collector's Guide, covers sixes and 12s. Early December **£9.95**

JENSON INTERCEPTOR by Mike Taylor. 160 pages **£8.95**

LAMBORGHINI COUNTACH by Jean-Francois Marchet and Peter Coltrin. Osprey AutoHistory **£7.95**

LOTUS: The Complete Story by Chris Harvey **£5.95**

THE THIRD GENERATION LOTUSES: Elite, Eclat, Esprit, Excel by Graham Robson. Collector's Guide **£8.95**

LOTUS ELAN by Ian Ward. Osprey AutoHistory **£7.95**

LOTUS: The Elite, Elan, Europa by Chris Harvey. Classic Car Series, 236 pages **£14.95**

LEGEND OF THE LOTUS SEVEN by Dennis Ortenburger. From the early Mk 6s to the Caterham 7s, full account **£11.95**

LOTUS SEVEN by Graham Arnold. Super Profile .. **£4.95**

MASERATI SPORTS, RACING & GT CARS FROM 1926 by Richard Crump and Rob de la Rive Box. Second edition **£14.95**

MERCEDES-BENZ: The First Hundred Years by Richard Langworth. Large 256-page history, good value ... **£8.95**

MG by F. Wilson McCombe. New third edition, 320 pages **£11.95**

MGB: Guide To Purchase And D-I-Y Restoration by Lindsay Porter. 224 pages, many photos **£8.95**

MG MIDGET/AUSTIN-HEALEY SPRITE: Guide To Purchase And D-I-Y Restoration by Lindsay Porter. 254 pages **£8.95**

Technical

TURBOCHARGING AND SUPERCHARGING by Alan Allard. For road and competition use. 192 pages .. **£9.95**

TURBOCHARGERS by Hugh McInnes. Large 192-page book **£6.95**

PIPER TUNING MANUAL by Bob Gayler **£3.95**

AUTOMOTIVE FUEL INJECTION SYSTEMS by Jan P. Norbye **£5.95**

WEBER CARBURATORI TUNING MANUAL. Official Weber book **£3.95**

ADVANCED RACE CAR SUSPENSION DEVELOPMENT by Steve Smith. Setting-up. 168 pages **£6.95**

THEORY AND PRACTICE OF CHASSIS TUNING by Jan P. Norbye **£3.95**

FORMULA CAR TECHNOLOGY by Howdy Holmes and Don Alexander. 160 pages **£7.95**

METAL FABRICATOR'S HANDBOOK by Ron Fournier. For race and road cars **£7.95**

POST & PACKING CHARGES FOR BOOKS: *UK and Ireland* — £1.50 for orders up to £25, FREE over £25. Overseas — 15% (minimum £2) up to £25, 10% 25-£100, FREE over £100. Overseas and Irish customers should remit by £ sterling using bank draft, Eurocheque or international money order. Or write or telephone quoting your ACCESS, EUROCARD or MASTERCARD number. Sorry, no Visa.

Rallying

RALLYCOURSE 1983/84 edited by Mike Greasley. Covers 1983 season **£14.95**

RALLYCROSS 1982/83 edited by Mike Greasley **£13.95**

AUDI SPORT WORLD OF RALLYING 6 by Martin Holmes. Full coverage of 1983 rallying season. Large format **£8.95**

ROTHMANS WORLD RALLYING 5 by Martin Holmes and Hugh Bishop **£12.95**

ROTHMANS WORLD RALLYING 4 by Martin Holmes and Hugh Bishop **£7.95**

RALLY CARS GIVEN THE WORKS edited by Graham Robson. 27 rally cars tested, from Healey 3000 to Audi Quattro **£8.95**

DRIVE IT! THE COMPLETE BOOK OF RALLYING by Stuart Turner and Tony Mason. Revised 1983 edition **£6.95**

RALLY NAVIGATION by Martin Holmes. Second (1983) edition of useful book **£6.95**

THE HOT SEAT: A Complete Manual of Rally Navigation And Co-Driving by Steve Fellows. From 12-car local events to full-scale internationals **£7.95**

Makes A-Z

ABARTH by Pat Braden and Greg Schmidt. 144 large pages **£14.95**

COBRA by Trevor Legate. Massive 256-page look at AC Cars and Shelby. Superb photos **£34.95**

SALE BOOKS

THE CHAMPION BOOK OF WORLD CHAMPIONSHIP FACTS & FIGURES by Mike Kettlewell. Was £3.25 **£1.00**

DRIVING AMBITION by Alan Hones and Keith Botsford. The 1980 World champion's story. Was £6.95 .... **£3.95**

THE MAN WITH TWO SHADOWS: The Story Of Alberto Ascari by Kevin Desmond. Was £6.50 ..... **£2.95**

RACING MECHANIC: Ermanno Cuoghi, Mechanic To A World Champion by Jermy Walton. Was £7.95 .... **£3.95**

TARGA FLORIO by David Owen. Was £8.95 ..... **£4.50**

RACING AND ALL THAT by Stirling Moss and Mike Hailwood. Two great men compare modern racing with the scene when they started racing. Was £6.95 .... **£3.50**

FERRARI'S DRIVERS by Michele Fenu. From Nuvolari to Villeneuve. Was £5.95 ..... **£2.95**

ONLY HERE FOR THE BEER: GERRY MARSHALL by Jeremy Walton. Was £6.95 ..... **£2.95**

TRACK TESTS: SPORTS CARS by Michael Bowler. Sports, sports-racing and GT cars from the past. Was £7.95 ..... **£2.95**

PIT & PADDOCK: A Background To Motor Racing 1894-1978 by Michael Frostick. 122 pages. Was £7.95 **£2.95**

BATSFORD GUIDE TO RACING CARS by Denis Jenkinson. A-Z guide featuring well-known and forgotten makes. Was £5.95 ..... **£2.99**

ROTHMANS WORLD RALLYING 3 by Martin Holmes and Hugh Bishop. Covers 1980 season. Was £7.95 .... **£3.95**

RALLYING: A Practical Guide To Successful Competition by Chris Sclater and Martin Holmes. Was £1.95 **50p**

THE PACE MOTOR RACING DIRECTORY by Mike Kettlewell. A few copies left of this comprehensive guide to British motor racing published in 1981. 350,000 words and 1000 photos in 585 pages. Was £7.95 **£2.95**

ALFISSIMO! The Post-War Four-Cylinder Twin-Overhead Camshaft Alfa Romeo by David Owen. Was £12.95 ..... **£6.50**

RACING WITH THE DAVID BROWN ASTON MARTINS Vol 1 by John Wyer with Chris Nixon. 240 pages giving insight into Aston's racing exploits in 1950s and '60s. Was £16.95 ..... **£8.95**

RACING WITH THE DAVID BROWN ASTON MARTINS Vol 2 by Chris Nixon. Interviews with team personnel. Was £16.95 ..... **£8.95**

SPECIAL OFFER! Vols 1 & 2 for £15.00

I LOVE GTO FERRARI by Fabrizio Pasquero and Franco Varisco. Beautifully produced book celebrating GTO's 25th anniversary. 104 pages. Was £12.95 ..... **£6.95**

LA LANCIA: 70 Years Of Excellence by Wim H. J. Oude Weernink and Adriano Cimarosti. Large 303-page history. Was £19.95 ..... **£12.95**

THE STORY OF LOTUS 1947-1960 by Ian H. Smith and **THE SOTRY OF LOTUS 1961-1971** by Doug Nye. Save £6.95 — two books for **£12.95**

THEME LOTUS: 21 Years Of Grand Prix And Indianapolis Cars by Doug Nye. Detailed Lotus racing history to 1978. 200 pages. Was £9.95 ..... **£4.95**

THREE-POINTED STAR: The Story Of Mercedes-Benz by David Scott-Moncrieff. Was £14.95, then £9.95 .. **£5.95**

MILL HOUSE BOOKS, The Mill House, Eastville, Boston, Lincolnshire PE22 8LS. Tel: New Leake (020 584) 377

Say it ain't so . . .

The year of 1984 was an unhappy one for Jean-Marie Balestre and FISA. Putting aside for the moment matters such as the Monaco Grand Prix and Monte Carlo Rally controversies, the out-of-the-blue fine on Nigel Mansell after Detroit, and the slight upon Jacky Ickx's integrity after Monaco, the real gaff of the FISA year was the banning from the Formula 1 World Championship of the Tyrrell team.

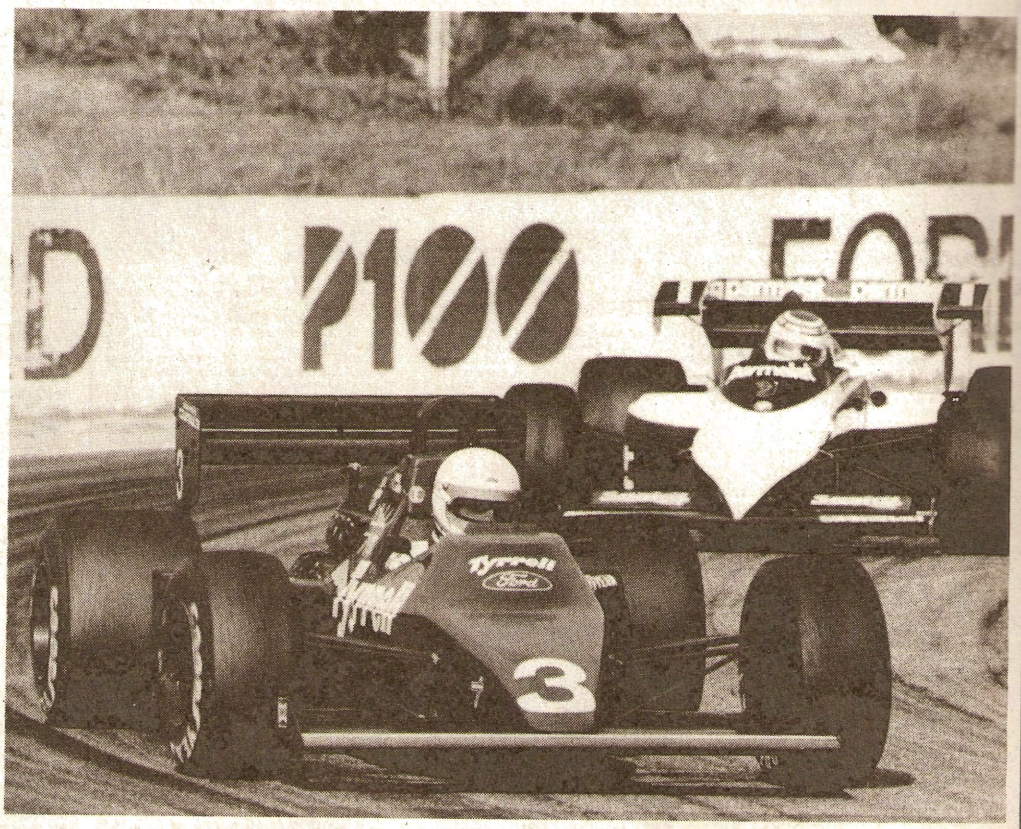
A few days before Christmas, Ken won an injunction against FISA (and the FIA), which suspends all sanctions imposed upon him by the governing body, and gives him back his 1984 World Championship points (see *Pit & Paddock*).

At the time of the ban, AUTOSPORT denounced FISA's decision. Considering that the case against the Tyrrell team was anything but proven, it was an outrageous punishment to mete out, jeopardising the livelihoods of a great many people.

It will be recalled that the ban on Tyrrell (and the consequent loss of his place on the F1 Commission) came only 24 hours before the F1 Commission was due to vote on the matter of fuel regulations for 1985. All but Tyrrell wanted a rule change (retaining 220 litres for another year, rather than reducing to 195, as originally agreed), and a rule change needs *unanimous* appoval — which this one would not have had, if Tyrrell had been present.

At the time, Ken Tyrrell did not want to believe that he had been banned simply to keep him from voicing his opinion at the F1 Commission meeting. Now he has changed his mind: he believes that the timing of the ban was stretching coincidence too far. And the text of the French court's judgement, in granting him his injunction, appears to agree with him.

If this be the case, then the banning of Tyrrell's team becomes something altogether more sinister than merely a Draconian penalty. Banning a man for breaking the rules is one thing. Banning a man for being *suspected* of breaking the rules is quite another. But banning a man to silence him is different again . . .



Surely this interpretation of what occurred is mistaken. No one can seriously think that motor racing's governing body and Tyrrell's colleagues acted in collusion to railroad him out of Grand Prix racing (perhaps resulting in his going out of business) simply because he alone opposed a change in the rules.

If FISA and the other constructors are genuinely concerned about the integrity of this sport, they should lose no time in confirming that these suspicions are unfounded.

CORRESPONDENCE

THE EDITOR IS NOT BOUND TO AGREE WITH READERS' OPINIONS

The thin black line

Congratulations on the fabulous review of the 1984 Grand Prix year, which provided me with several hours of entertainment. I would like to take Mr Roebuck's point about treaded tyres one stage further however, particularly after the BBC's recent Horizon programme which showed the cars of the twenties and thirties.

"It still seems to me that narrower tyres — or, dream of it, treaded tyres — would impose their own restrictions on horsepower. . ." comments Mr Roebuck. Horizon's, *Supercharged — the Grand Prix Cars from 1924 to 1939* underlined that the racers from that era possessed enormously powerful engines, but that with such thin strips of rubber putting the energy onto the ground there was plenty excitement. If the current cars all had to run 8ins rims, they would certainly look awkward, but wouldn't the spectator get better value?

SURBITON, SURREY — PAUL ASHBOURNE

No easy answers

Roger Chilman's views regarding the National Rally Championship (*Correspondence*, December 20/27, 1984), must give the RAC something to think about, although it seems to me that there can be no easy answers. Banning four-wheel-drive instantly means that some of the most interesting projects, such as Allan Edwards' Escort, or the Quattros are excluded, taking away the tremendous variety we have seen in events during the last 12 months.

Of course four-wheel-drive is more expensive, but costs are escalating throughout rallying, and if someone has the money, then they will simply buy the best available. I still wonder if Darryl Weidner was a worthy champion with the Quattro, but surely Dai Llewellin has proved that more conventional machinery can still be made to bring in results.

Regarding Mr Chilman's comments on Group A, I agree that the costs are spiralling here as well, but wonder if ultimately it does hold the answer. In Sweden, after a long period of transition, it is the 'standard' categories which make up most of the entry lists, and it appears easier to be fairly compeitive for a smaller intial outlay. As with the four-wheel-drive dilemma, it is possible to spend vast amounts of money and have an advantage even before you get to the special stages. Banning 4WD or switching to Group A holds no easy answers, but Mr Chilman is right to be encouraging the RAC to find ways of keeping costs under control.

BATH, AVON — JONATHAN RIDDLE

On the right lines

Well another year has passed and I am pleased to note that there are signs of hope for the future of British talent. From the rally world, the British Junior Team has managed to fulfil many of its aims and two of our young drivers have attracted the eye of top manufacturers.

Dai Llewellin and Mark Lovell look set to move on to greater things and it is to be hoped that they will continue to flourish.

British manufacturers are playing a large part in the development of the rally cars of the future. Hewland have supplied transmission components to Lancia's new Delta S4, in addition to their long term involvement with Ford's completion history. And Ford themselves are about to enter the World Championship arena again with the purposeful looking RS200.

All of this would appear to promise much excitement for the British enthusiast in the years to come. And, I hope, the media will react accordingly. Following the excellent television coverage during 1984 of both the National Rally Championship and the RAC Rally by the BBC, the Open Championship films on *World of Sport* and the growing awareness from TV-am, perhaps at last there will be a significant improvment in the amount of motorsport that reaches the 'box'.

As far as rallying is concerned, 'Well done Britain' and best wishes for the future.

LONG DITTON, SURREY — ARTHUR ROBERTS

More of the same please

Thank you to the BBC for their ambitious coverage of the Lombard RAC Rally. Despite Barrie Gill's attempts to out 'Murray Walker' Murray Walker at times, and William Woollard's bland treatment of Ari Vatanen's roll in Wales, the reportage was much appreciated. But what happens now? Do we really have to wait until next November for a similar burst of enthusiasm? Let us hope that the BBC have seen the

light and will be prepared to give similar, if perhaps less extensive, coverage to the Open Championship events. As many of them take place during the week when many spectators would be unable to get into the forests or wherever the event is held, a *Top Gear* Rally Report would surely make sense.

Just one final thought. Did Malcolm Wilson really retire from the event to get away from Sue Baker?

CURRY RIVAL, SOMERSET — WALTER BURKE

Putting on the style

Whatever happened to style in car design? With the notable exception of the delightful Peugeot 205 Turbo 16, the current batch of rally cars seem to have been designed by driving into a brick wall at top speed. In short, they are ugly.

Currently, my award for the worst looking car of the year goes to the Audi Quattro Sport, but there seems to be a chance that the new Lancia may just sneak in to pinch the prize by the start of 1985. I can appreciate that, with the ludicrously low production run of 200 cars, manufacturers such as Lancia and Audi may not be too worried about selling their cars to the public. But there will still be a demand for the cars and it seems only fair that some thought should go into producing a 'pretty' version.

Who could conceivably want a Quattro with knee chopping back seat or a Turin hearse?

The Quattro and the Delta may turn out to be more powerful in the horsepower stakes, but personally I hope that the Peugeot drives serenely past the broken down boxes to a string of wins next season. That way the champagne pictures will be worth printing.

LONDON SW19 — MICHAEL MOUNT

Italian cover-up

It is with great dismay that I write this letter to AUTOSPORT, but I feel that I must put pen to paper to register my disgust at the course that motor sport is taking.

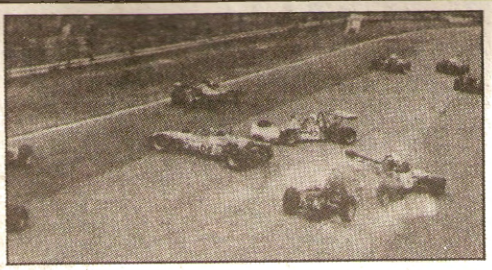
The governing bodies for motor sport in both Britain and France have both recently been the subject of much media attention . . . and for all the wrong reasons — giving the sport a rather tarnished and undersirable reputation. And a recent story in *Pit & Paddock* (AUTOSPORT, December 13) concerning Pino Trivellato's licence suspension capped it all . . .

When a governing body for any organisation decides to ban one of its members for simply speaking out against them, then that body is surely in a sorry state. If Mr Trivellato is wrong in his accusations, then fair enough, he is wrong. But if he is, perchance, correct, then the CSAI have surely punished the innocent party, and it is *they* (the CSAI) that should take the rap for covering-up the matter in question.

I hope that the present legal wranglings that are plaguing the sport can be settled as soon as possible, and that none of the governing bodies can ever be accused of either covering-up or following a course of inaction simply because it was easiest for them at the time. Come clean and let's see justice prevail.

LONDON SW1 — HERMAN PHILIPS

THEN AS NOW?



10 The New Year celebrations were well underway 10 years ago this week (AUTOSPORT, January 2, 1975). On Boxing Day the Formula *Libre* regulars celebrated in style with a huge eight car accident as they streamed into Paddock at Brands Hatch (above and below).



Across the Atlantic Richard Petty, Cale Yarborough, David Pearson and Buddy Baker were planning a different sort of celebration when they announced they they would be truckin' down to Nashville to cut themselves a record for the fans. Petty, it seems, was going to be the soloist. Even in those days the NASCAR stars could afford to indulge in any passing whim, a fact underlined by the news of the 1975 prize fund — a cool $2,850,000!

Some racing drivers, however, remained impecunious. Keke Rosberg, young and fresh-faced, announced his plans for '75, and, having failed to get the money to do F3 or F5000, he would be back in Super Vee again, although he was planning to spend time trying "to get contacts needed for 1976, when I will definitely be racing in some bigger formula".

From one future champion to another, Jody Scheckter joined the magazine as a regular column writer, and bewailed the fate of drivers "done up like frilly penguins pattering up to collect the goodies" in the end of season dinners. The problem, it seemed, was that the poor drivers never had enough hands to hold all prizes. At the FIA dinner in Paris, Ken Tyrrell, however, had stepped in to help his encumbered driver. "There was no way I could hold a cheque in one hand, a pot in the other and adjust the microphone." Quick as a flash Ken said. "Here, I'll hold that," grabbing not for the pot, but the cheque. Jody had not seen it since. . .

Looking ahead, the South African outlined who he thought would be the men to beat in '75. There was Regazzoni. . . Reutemann. . . Andretti . . . Peterson . . . Fittipaldi. Not a word about one Niki Lauda. . .

25 There was a good deal of excitement in the motor racing world 25 years ago this week (AUTOSPORT, January 1, 1960) when Mercedes announced that they were entering a works team for the Monte Carlo Rally. And while this did not necessarily signify a return to circuit racing too, it was seen as a step in the right direction, especially considering that the Unterturkheim concern had previously stated that they would not take part in the event as they considered it to be more of a gamble than a competitive rally.

The publicity that could be reaped from rally success was evident in the form of an advertisement in the magazine by Renault for their Dauphine model, following its victory on the Tour de Corse. How advertising styles have changed! See below.

Sports News carried an announcement from Tony Brooks in reply to a statement from Ferrari that he was retiring from racing. Tony stated that he had no definite plans for 1960 because of the pressure of work due to setting up his own garage, but hoped to take in a limited programme of Grands Prix, though not for Ferrari.

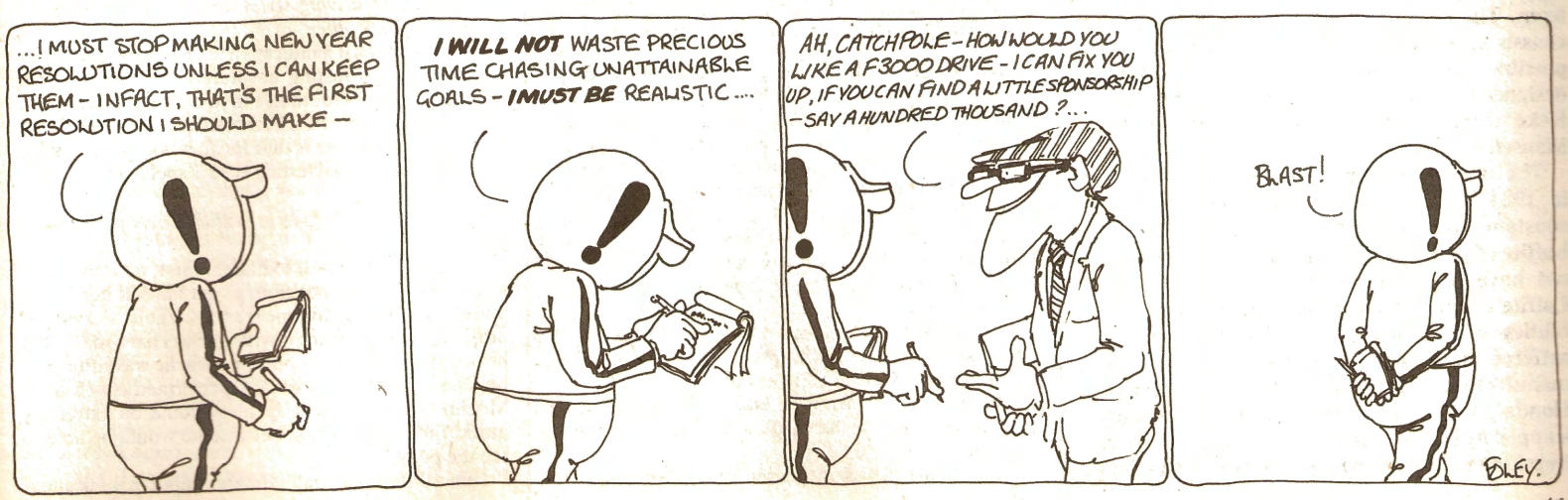
For those that wished to get out of the house on Boxing Day, there was the traditional Brands Hatch meeting — one which was said to "restore a rather jaded appetite in nice time for dinner". The opening race, for production sports cars, saw Jim Clark tear through the field from the back of the grid in a Lotus Elite, only to lose it in a big way at Paddock Bend. Graham Warner won the race in a similar car, having usurped JG Tallis's Frazer-Nash Le Mans on the penultimate lap.

The recipe for success was thought to be a Lola, though, with Alan Rees defeating all-comers in cars of far greater capacity than the Lola 1100cc in the unlimited sports car race. Another Lola was out in the Formula Junior race, but was sandwiched in the results by the Elvas of Arundell and Threlfall.



CATCHPOLE

BY BARRY FOLEY



Keke Rosberg: aiming higher

MIKE DOODSON in conversation with 1982 World Champion, Keke Rosberg

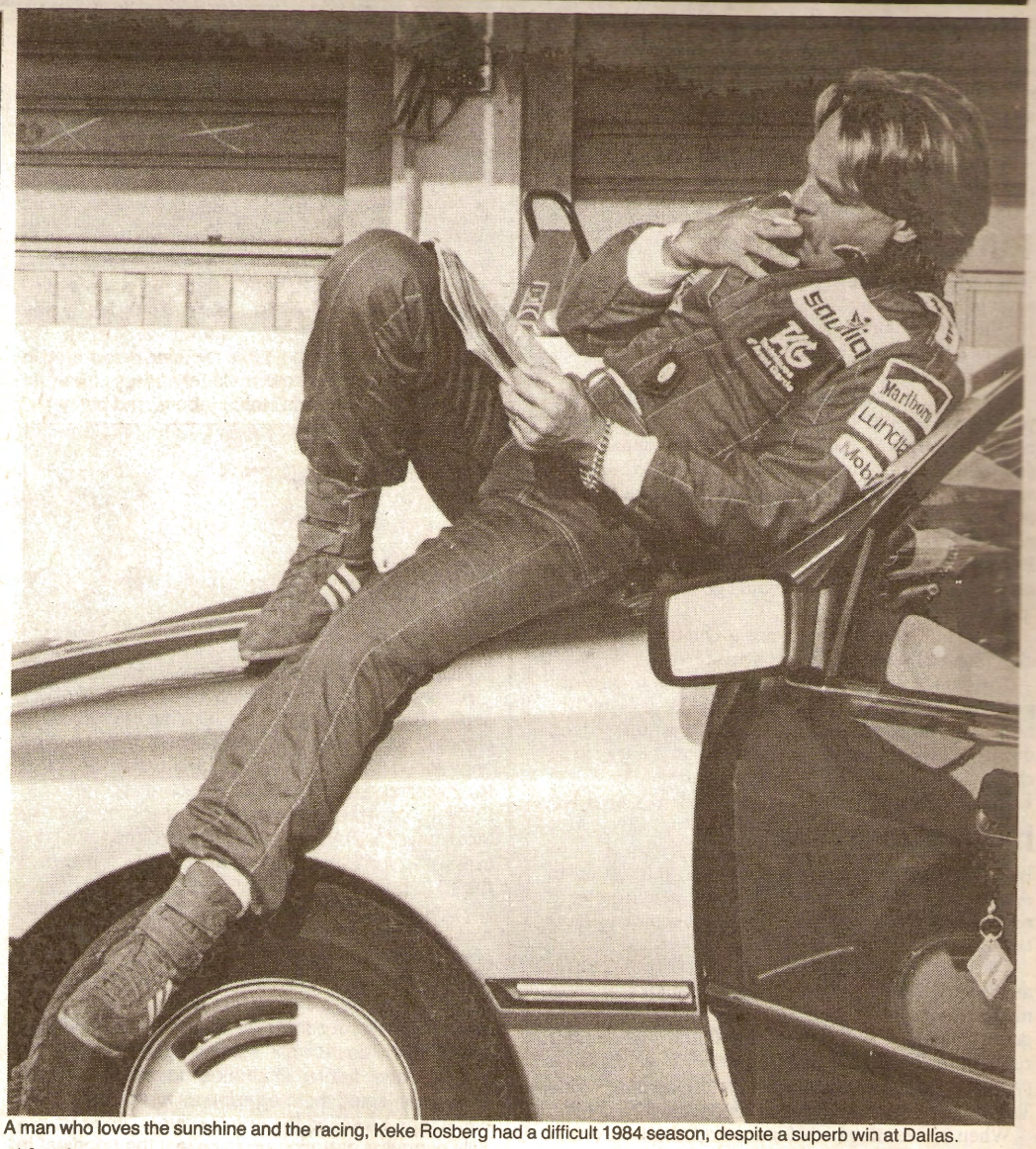
No other driver in Grand Prix racing is as familiar with lean times as Keke Rosberg. Between 1978, when he won an electrifying International Trophy for Theodore Racing at a sodden Silverstone, and 1982, when he took over Alan Jones's place at Williams, he hovered on the fringes of Formula 1 with ATS, Wolf and Fittipaldi. He snatched the World Championship in 1982 on consistency rather than bravado, yet he remains the sport's greatest charger. Now, at the age of 36, the suntanned Finn leads a somewhat dispirited Williams team into 1985 with the task of revitalising a winning streak that faded to nothing after his (and their) last victory at Dallas in July, which happens to be the last F1 race that he finished.

More than anyone, except perhaps Nelson Piquet, Keke Rosberg likes to lie in the sunshine. When the 1984 racing season was over, he arranged — with Frank Williams's agreement — to take a holiday that would last into the New Year. Nigel Mansell, the new Williams recruit, would undertake the winter testing of the Honda engine as part of the process of establishing himself with his new team in the interim period before the new composite FW10 chassis was ready for testing.

Accompanied by Sina, his wife of one year, Keke was soon chasing the sun. Via California to Tahiti, and onwards to Australia, he was able to hit the beach at some very choice spots. I found the Rosbergs in Surfers' Paradise on Australia's sunshine coast in early November, visiting his friend and former team mate Bruce Allison. But it was not until ten days later, when he was taking part in the Formula Pacific Australian "Grand Prix", that he would do an interview, which he regards as work.

Despite that splendid victory at Dallas, the 1984 season had been a trial both for Keke and his team. The poor handling of the Williams FW09 chassis in early races had started rumours of a possible rift between Frank Williams and his designer Patrick Head, and (later in the year) of Keke threatening to quit altogether if Nigel Mansell were to be recruited.

The nature of the problems that beset Williams in 1984 was complex. Among them were the constant complaints from Keke and Jacques Laffite of poor handling from a chassis that may not have been stiff enough for turbo power; Laffite's own unwillingness to share test responsibilities with Rosberg; the development pains suffered by Goodyear in its debut year as a manufacturer of racing radial ply tyres; and Honda's inexperience in modern racing, handicapped by the illness of a senior engineer. I began by asking Keke when it had all started to go wrong.



A man who loves the sunshine and the racing, Keke Rosberg had a difficult 1984 season, despite a superb win at Dallas.

After that encouraging fifth place using the Honda turbo engine for the first time, at Kyalami in October 1983, what happened to the Williams team? Frank himself suggested that the team had "gone to sleep".

That's not true, it's not the right summary at all. Let's put it this way: we (Jacques and I) complained about an understeering car in that race, but don't forget that at that stage we were on Goodyear crossply tyres, with a small rear wing. Then we went to the radial ply Goodyear tyres and a large rear wing for later tests at Kyalami and it was *constant* understeer. If the team went to sleep at all, it was probably at that stage, because they didn't take me and Jacques seriously enough.

We needed some big changes to the car, it was more than a question of detail improvements, but it took two or three months from the time of that test to realise that the understeer was there and we weren't going to make

> "We had to disconnect the front roll bar completely to get the car around in a respectable time."

it go away. I remember very well that at that test, which took place in February, we had to disconnect the front roll bar completely to get the car around in a respectable time. Now, disconnecting the front bar is a huge change, at least to make as little difference to the handling as it did, and if the car doesn't react well enough to changes, then you normally take fairly drastic action.

But there was another way of looking at things, which was to conclude that maybe the chassis — or some other components — were not stiff enough for the big wings, the radials or the turbo power, etc. Now in that situation you have to look for the weaknesses and start beefing things up from there.

Team Williams was not geared, and not prepared, to go for a composite chassis: my understanding is that Patrick Head was not sufficiently confident about the techniques, from a safety point of view, to do a rush job of a composite chassis in April or May, only to run the risk of discovering in August that it was only a halfway job. There would not have been enough time for testing and it could even have been unsafe: I must say that Patrick is very safety-conscious, and so am I, because they're my legs and head in the car.

So the only solution left to us was to make detail changes to the car: they weren't the sort of things that you'd be able to see from outside, but there has been a lot of work going on with the car all year. Unfortunately, we never really changed it, although we gained a lot of information and experience about the various components which will be valuable next year.

Did it handicap the team to have two drivers like you and Jacques whose driving styles are almost the complete opposite of each other?

No, but I think it handicaps a team to have one driver who doesn't go testing absolutely flat out. I'm not criticising Jacques for that, I'm just stating a fact: he's a super guy and one of the best team mates that I've ever had. But the problem is that Jacques doesn't go testing at 100% speed — and testing at 90% speed isn't going to produce a lot.

Why didn't he really fit in at Williams over the past two years?

He really has himself to blame. First, he's too nice a guy to push for his position, to get himself heard and known: he'd rather disappear and play golf. Second, his attitude towards testing is wrong. But I have to say that he probably ran at 90% only because he was sitting in a hopeless car: if he had a car that performed as well as the McLaren did this year, Jacques would be extremely quick, including testing, because he would be able to see the point in testing.

I am a different animal, I'm too stupid to think about

whether there's any point to it all. I was born with a desire to race cars as fast as I can, and that desire is switched on 24 hours a day, it doesn't matter whether it's racing or testing.

Isn't there a danger that someone who always drives flat out will tend to drive around the problems of his chassis?

As a good racing driver, you must have the ability to drive around problems. No Formula 1 car will ever be perfect, it can always be improved. But when the race starts it's too late to improve. You'll always start a race with a handling or other disadvantage, and if it's serious you must be able to drive around the problem. In testing, though, you have to be able to analyse the handling.

How do you assess your own test driving ability?

I don't know. It's not up to me to assess it: I do the best that I can, and either the team likes it or they don't. I don't ask them if they're happy, any more than the cleaning lady asks if the shop is clean when she's finished. I do my job and then I go home. If the shop was dirty, though, like the cleaning lady I'm sure that they would either complain or fire me. So I assume that they're satisfied.

And if there was a lack in my testing ability, I think that their choice of a second driver of this year would have been different, so I think that confirms that they're reasonably happy with my test driving ability.

With so little experience in racing radial tyre technology, Goodyear probably did well to win two GPs in 1984. How big a factor was Goodyear's lack of experience, in the Williams team's change of fortunes?

In our situation it's very difficult to say, because we have to be honest and admit that our car was disastrous. It was only half bad on empty tanks, but on full tanks it was a total disaster. So to evaluate the Goodyears I would prefer to use Lotus as an example, because they probably had the best chassis in the business, they didn't have a bad engine, and Elio had a fantastic reliability record in the first part of the season. But they didn't win a race, and that leaves you with the question, 'Why?'. I can't answer, I can only make assumptions.

"If there was a lack in my testing ability, I think that their choice of a second driver for this year would been different."

Let's turn to the Honda engine. I remember that it was criticised for being 'peaky' to drive, but at least it had some reliability at the beginning of the season. Were you aware of the changes that the engineers in Tokyo were making subsequently which resulted in the loss of reliability?

Obviously I was conscious of changes, because their people were working flat out and very hard. I don't know where it all went wrong, because for the first half of the season at least we had reasonable consumption, power and reliability. By the end of the season we hadn't improved the 'peakiness' and we were in serious problems with consumption and reliability. In fact, in the team's last 14 starts with our two cars we recorded only one finish.

I'm sure that Honda will use all the data which they gathered in the season to do the best that they can for 1985.

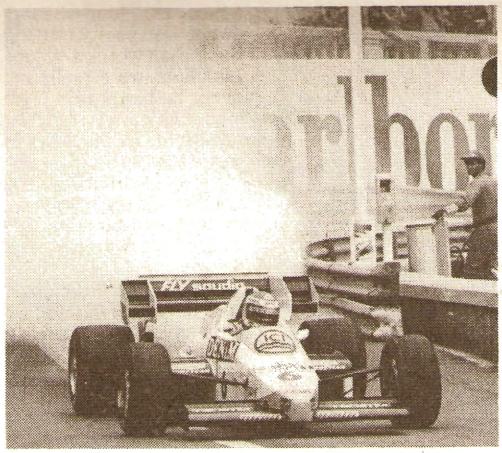
What about the practical difficulties of having to communicate with a company whose workshops are on the other side of the world?

On the telephone or telex, it doesn't make any difference whether you're calling Stuttgart or Tokyo. They were very quick on response, the problem was that it wasn't always the right solution. The main problem, I believe, was that it was hard for their own people to *commute* between Tokyo and Europe. An engine doesn't get tired sitting in a JAL jumbo, but a human being does, and that is a problem.

I also believe that too much weight lies on the shoulders of one man, Mr Haji, the chief of the other mechanics and an excellent guy. But one man can't win a war on his own.

For many of your fans, I'm sure that your fight with the car to lead the first few laps of the Portuguese GP was a highlight of the season. Were there any particular high points that you remember?

Not really. I suppose I was quite impressed with my



Practice at Monaco was a nightmare for the Finn.

own ability to stand the heat in Dallas. I've always known that I can: Brazil, for example, never bothers me. It was more than two hours of racing, it was exceptionally hot, and I saw people dropping out of their cars, but I didn't have a problem. I was pleased with that and I think my love of the sunshine really paid off for me.

Should Dallas even have been run?

If you'd asked me six months before the race, I would have said No, because the international rule-book says that there has to be an international race run on the track before the Grand Prix takes place. There are good reasons why that rule was made, and we had disasters at both Detroit and Dallas when it was waived.

Therefore I don't understand why the governing body should make such a fuss about it afterwards, because the blame isn't entirely with the Dallas organisers. On Sunday morning, with 100,000 spectators filling the grandstands and 40 countries expecting live TV, you can't change your mind.

Therefore I didn't take part in the Sunday morning driver meetings, I went back to my hotel to watch Wimbledon on the telly and to wait for a phone call from the team manager about what was going to happen.

OK, we, the drivers, had been put in an awkward

The lonely walk back to the pits . . .



situation, but if we drivers are so strong about safety, we should have said six months before that we wouldn't race unless everyone had followed the rules. At the end of the day it was a deadlock situation, and since this is a fairly highly paid job, it was a matter of taking your skill and your brains in your hand and just do the best that you can.

If you're worried, you can always trundle around in last place . . .

What are you looking for in 1985?

It's very simple: I'd like to be competitive again. Not just in one race, but over the whole season.

It's a hard business, and boy, is it a long haul when your car is not only bad but also unreliable.

Imagine what it's like for a driver in a situation like mine at Zandvoort, where I was running in third place with 50 laps to go, knowing that I was going to run out of fuel before the end. What do you do? Screwing down the power makes no difference, the guy in fourth place starts catching you because he's got 200 horsepower more than you. You can pull into the pits and say, 'Forget it, the thing's going to run out of fuel,' but they might not believe you. There was a 0.1% chance that I had failed to understand the instruments, and I had to go for it, driving 110% on a 0.1 option: it was that or coming in to retire. And three laps from the end, it stopped, out of fuel.

"It's a hard business, and boy, it is a long haul when your car is not only bad but also unreliable."

But the biggest disappointment this year was Austria, where for the first time in my life I brought in a car that was still technically OK. Its handling wasn't just understeer or oversteer, it was sort of deciding its own way through those fast corners. I couldn't control it at all: I had come in once to make some changes, then I came back, stopped and explained the situation.

Now, that is a very big test of the relationship between a driver and his team.

What sort of a debrief did you have on this occasion?

It was very short: "Have a good trip home," they said. The healthy reaction would have been to say, "Gee, the car must be really bad, because Keke can't drive it anymore."

Maybe there were indications that they felt they had to live with me, so they would take things as they were.

After the tough things you said earlier this year about Nigel Mansell, you seem to be approaching your partnership with him in a constructive manner. Were you worried purely because he seems to create disarray around him?

That's right. It was nothing to do with him banging wheels with me in Dallas, and nothing to do with the private Nigel Mansell, because I think he's a charming guy. It just worries me that according to reports I heard he created chaos in his Formula 2 team, and I happen to know that he did the same at Lotus.

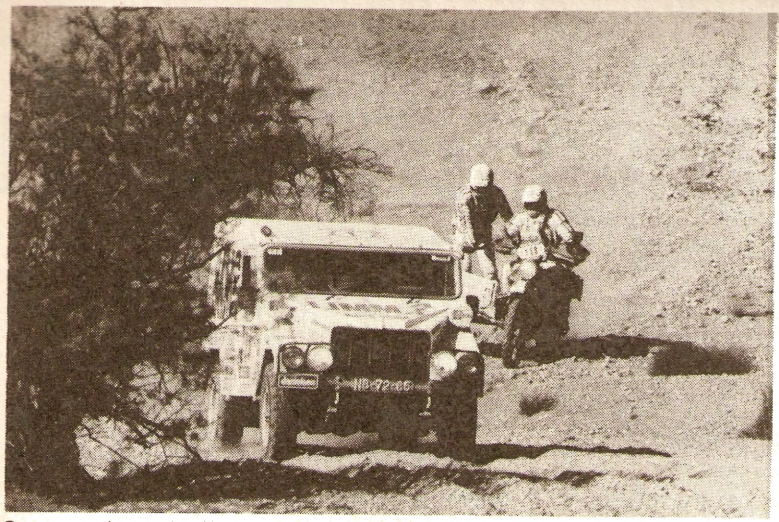
I know Elio; I know Peter Warr very well, having worked with him under much more difficult circumstances than could ever exist at Lotus today; and I know Gérard Ducarouge well. What on earth is there to cause problems in that team? Elio and Duca are really easy guys to get along with, and Peter is a hard working organiser who runs his team with a strong hand, so there should be nothing wrong. But there is, or has been, until Nigel left.

You were talking about getting together with Nigel after Estoril. Did you manage to hammer out any problem?

Unfortunately we didn't have time for the meeting in Estoril, because there were a lot of commitments that weekend. We were at the Rallysprint together, but we were just talking about the sunshine then. We saw each other on the grid at Estoril, when there were about seven minutes to go before the start. I decided that it was probably better to do some talking there rather than not at all.

We discussed our relationship and we both seemed to have a constructive attitude. I think he is aware that he has a huge advantage over me, in being an Englishman — and five laps later he was all over the back end of my car!

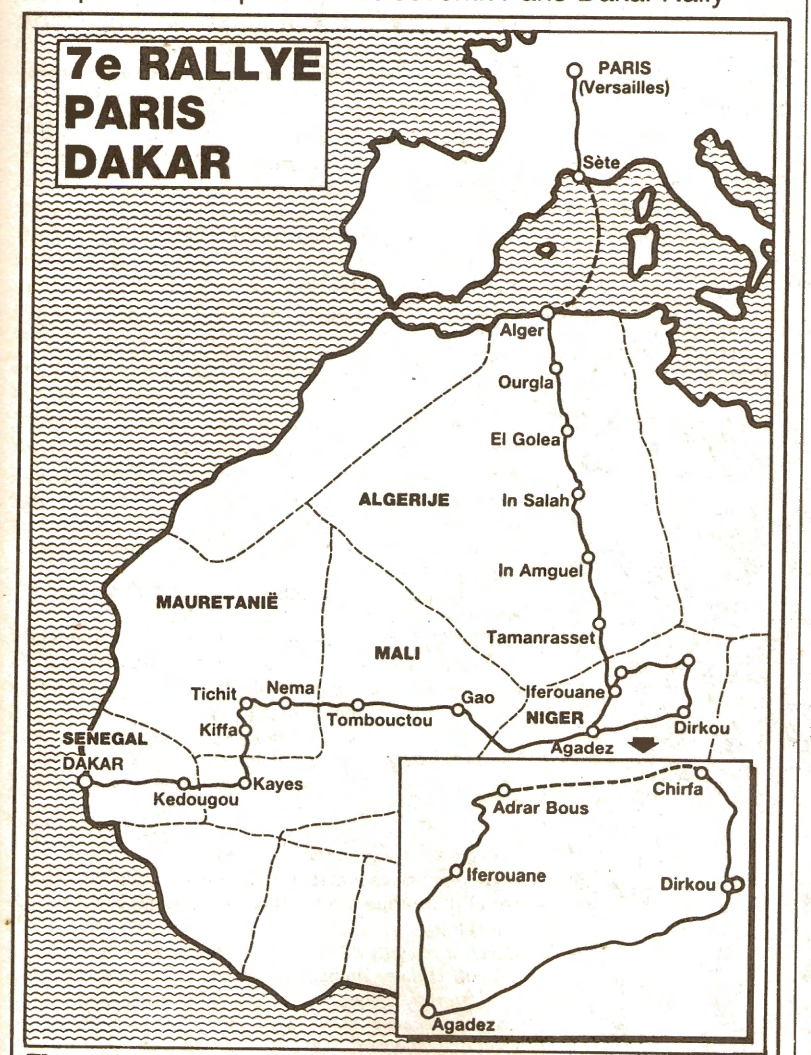
I don't know how constructive that talk was, but I'm sure we can work it out somehow or other. If we can't, it's going to be a helluva long season . . . ■



Once more, the terrain will be rugged in the extreme, and the competition varied.

Saharan sortie

Three weeks of ultra tough North African territory awaits the competitors. We preview the seventh Paris-Dakar Rally



The route

Dec 31: Prologue, Cergy-Pontoise off-road driving school.
Jan 1: Paris (Versailles)-Sete, 1076kms.
Jan 3: Algiers-Gardahia, 628kms.
Jan 4: Gardahia-El Golea, 485kms.
Jan 5:El Golea-In Salah, 500kms.
Jan 6: In Salah-In Amguel, 600kms.
Jan 7: In Amguel-Tamanrasset 263kms.
Jan8: Tamanrasset-Iferouane, 650kms.
Jan 9: Iferouane-Agadez, 350kms.
Jan 10: Agadez-Dirkou (Via Fachi, Bilma) 610kms.
Jan 11: Dirkou-Iferouane — Agadez (Via Chirfa, Adrar Bous) 1150kms including 370kms by compass.
Jan 12: Rest day at Agadez
Jan 13-14: Agadez-Gao (via In Gall, Tamoua, Talcho, Anderamboukane-Menaka-Ansongo) 1200kms
Jan 15: Gao-Timbuktu, 424kms.
Jan 16: Timbucktu-Nema, 680kms.
Jan 15: Nema-Tichit, 500kms.
Jan 18: Tichit-Kiffa, 440kms.
Jan 19: Kiffa-Kayes, 300kms.
Jan 20: Kayes-Kedougou (via Satadougou), 310kms
Jan 21: Kedougou-Sali Portudal (via Kossanto, Dialakoto — Tambacounda), 700kms
Jan 22: Sali-Dakar (via Thies — M'Boto) 360kms including 80kms on beach.

When the four-wheel-drive Porsches swept last year's Paris-Dakar, Thierry Sabine got worried. It looked as if the big batallions were really moving in on an event he has always presented as stressing individual skill and a sense of adventure as much as technology and works support.

Sabine hit back. The seventh Paris-Dakar will be the longest ever, at nearly 14,000kms, all but 2,000kms timed stages. "It will be very tough," said Sabine.

Neither the difficulties nor the Porsches have deterred the amateurs — and an astonishing 350 cars, 150 motorcycles and 50 trucks have entered. Sabine says, "85 per cent of them are amateurs".

Sabine has introduced two new major hurdles in the event to try to level the chances and take the accent off technical development. In the Tenere Desert of northern Niger, there is a 1900km loop, with 370kms from Chirfa to Adrar Bous to be driven by compass, with no trail markings provided.

The cars and trucks will also run the rally's first night stage, 335kms from Iferrouane to Agadez. A rest day in Agadez will be to 'sweep up' the lost.

What may prove the toughest stage of all will take the competitors through the southern Sahara in Mauritania. There are no vehicle tracks (pistes) in the area at all, says Sabine, describing the terrain as combining sand dunes, rocks and cliffs. "It will be almost impossible to keep to the compass bearing and it will be a real map reading exercise," he says.

"Anyone who doesn't take care may never find the route out to Senegal," he warns.

There is no question of being radio-guided by support vehicles or planes. The only radio allowed to competitors is a sealed, transmit-only, distress unit. Any radio equipment found on board means instant disqualification.

The rally started on December 31 at an off-road driving training school at Cergy-Pontoise near Paris, bringing in the public and establishing a leader board. After a formal departure at Versailles on Tuesday, the caravan drove south to Sete without any stages to board ship for Algiers.

At the time of writing Algeria still has not given formal permission for the rally but is expected to do so after the usual last-minute, expensive, negotiations. A fall-back plan to ship everyone to Dakar and run the event as a loop through Senegal, Mauritania, Mali and Niger has been mentioned.

The start of the rally proper is today, with the cars heading south from Algiers, in classic territory, through, Ouargla, El Golea, In Salah, In Amguel, Tamanrasset to Iferouane and Agadez in Niger for the Tenere loop. More desert stretches ahead, 1,200kms non-stop to Gao in Mali . . . and then to Timbuktu.

Then, on to Nema and into the formidable Mauritania stretch via Tichit and Kiffa, usually traversed only by camel caravans. Back into Mali, the survivors turn at Keyes and head for Senegal, ending with the traditional blast along some 80kms of golden beach into Dakar on January 22.

The entry

Top of the entry list must be 'Team Jacky Ickx' fielding, with a little help from its friends, the 1984 champion, Rene Metge and Dominique Lemoyne, and Jochen Mass with Ekkehard Kiefer, and Ickx with French film star, Claude Brasseur in prototypes of the new Porsche group B car, 4×4 but without a turbo engine. The team is also running Germans, Kussmaul and Unger in a Mercedes 280 GE.

There is a works 280GE for Fruebauer and Brosche, others from Mercedes France and Italy's Jolly Club, and privateers including Jean-Pierre 'Jumper' Jarier.

But the favourite cars are established 4×4s. There are 36 Mitsubishi Pajeros, 36 Range Rovers, 18 Land Rovers, and 58 Toyotas of various kinds.

Another Ex-F1 driver, Jean-Pierre Jabouille, with pop singer Michel Sardou has a very special silhouette Lada, suspension by Jabouille and a PRV engine bored out from 2.6 to 3.5-litres with a Cosworth crankshaft giving 280bhp and strong low-down torque. African veteran, Andre Trossat heads a semi-official Lada Niva team.

Henri Pescarolo joins with Jean-Pierre Gabreau, a Dakar veteran in a Land Rover rebuilt with Kevlar body and a chassis for rectangular carbon-fibre tubing and aluminium and carbon-fibre honeycomb, saving 150kgs.

Paris-Dakar has always seen unusual vehicles, and another Le Mans winner Jean-Pierre Jaussaud, will be running a six-wheeler.

Based on a Mercedes 280 GE, it has a Merc 190 body and the 5-litre V8 from a 500SL, giving it a top speed of 200kph. It is a prototype for a car to give hurried (and wealthy) foresters quick transport to logging sites.

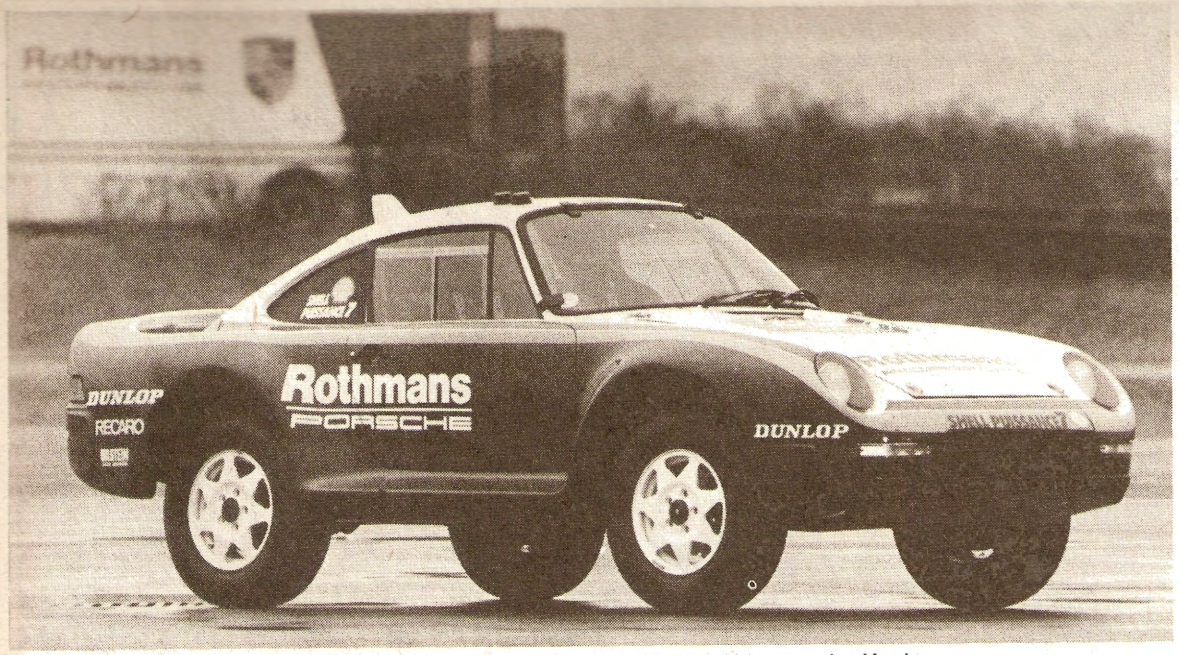
Rallying veteran Jean-Luc Therier and Michel Vial are down to drive a Citroen Visa, and Bernard Darniche and Valian Mahe have one of three Audi Quattros. Guy Colsoul, who put in a surprising performance last year in a two-wheel-drive Opel, is back again with a Manta, and the Marreau brothers, winners of several of the earlier events in their 4×4 Renaults, have entered something described only as a prototype. Achim Warmbold has Jean-Claude Andruet's old co-driver, 'Biche' with him in a Mazda Familia.

Two Britons are listed on the entry sheet, Tony Fowkes in a Subaru, and there are two entries by a Nick Bottomley in a Datsun.

And with the Monte looking lost for next year, Monaco is solving its winter publicity problems handily. Crown Prince Albert and a Monaco friend, Jean-Pierre Marsan are taking part in a Mitsubishi Pajero, while first lady, Princess Caroline and husband Stefano Casiraghi will be driving an Italian Astra six-wheeled truck, with retractable tank-track drives each side to get them out of the sand. ■

Guy Colsoul, placed fourth last year, returns in his two-wheel-drive Opel Manta 400.





The high riding Porsche 959 prototype, one of three entered on the Paris-Dakar Rally Raid that started on Monday.

Test run for Porsche 959

Three prototype Porsche 959 cars started the Paris-Dakar Rally Raid on December 30, entered by Jacky Ickx and carrying Rothmans colours.

While the cars are externally similar to the latest Group B car, only the bodyshell and new, variable two or four-wheel-drive system remain the same. The cars are all powered by a 225bhp version of the familiar 3.2 litre engine.

The team will comprise Ickx, last year's winner Rene Metge and Jochen Mass, while Porsche engineer, Roland Kussmaul, will drive a Mercedes 280GE as part of the service back-up. Two of the huge MAN trucks will also take part in the event.

Porsche racing manager, Peter Falk, explained that the event is, "The most effective way of carrying out pre-production testing."

Dunlop have developed a special version of their D4 tyre with reinforced sidewalls and special tread pattern. Bilstein are providing long stroke shock absorbers with a wide variety of variable settings. The new units are designed to withstand 240°C of desert heat. Oil will come from Shell in the form of the new Puissance 7.

The 'real' version of the 959 is due to begin production later in the year.



Hannu's Ford test

Hannu Mikkola tested the RS200 just before Christmas, completing a considerable distance on tarmac. It appears that David Sutton was also in attendance, and with the Finn still to sign a contract for Audi, perhaps he will reverse the situation in 1980, when he combined a year of rallying Fords with Audi testing . . .

New names for Junior Team in '85

The British Junior Rally Team will again venture abroad during 1985. On the programme of events are the Swedish, Costa Smeralda, Asturias and Lombard RAC rallies which, as team manager, John Taylor, promises, "Offer our youngsters the full range of events. There is a snow rally, one with hot gravel stages, an Alpine type road race with pace notes and the showcase event in Britain."

The identities of the team members have not yet been announced but Stuart Nicholls (winner of this year's Astra Challenge) and former Escort Turbo driver, Simon Davidson, have been invited to join the team for the season. It is anticipated that the more experienced team members will go to Costa Smeralda with the newcomers gaining experience in Sweden and Asturias.

National Circuit?

Opinion in Southern Ireland is forcing the organisers of the Rothmans Circuit of Ireland to consider running a National rally as part of the traditional Sunday Run of the Circuit.

A clubmans rally was tried a few years ago, running at the back of the main entry and tackling the whole event. Sadly, this idea proved to be a total flop and has not been tried since.

But the Ulster AC are currently being lobbied by crews south of the border to run this National event and the club are prepared to give serious consideration if the demand is high enough.

If it does run, the National event will be open to cars complying with the old Groups 2 and 4 and will not permit the current groups to enter.

Timing changes?

As we closed for press, it was suggested that Jean Todt had asked FISA to consider a change to the 1min gap between cars on World Championship rallies.

If Todt gets his way, on loose surface events, seeded drivers will start special stages at 2mins intervals for the first *etape*. Thereafter, the top 20 in the overall classification will get the benefit, other cars starting at the conventional gap. The scheme is likely to promote lively discussion. . .

Corolla for Boucles

Team Toyota GB have entered the Boucles de Spa Rally on February 8/9 with a new Group A Corolla, currently nearing completion at the team's Coulsdon base.

The new car will incorporate many detail changes intended to lower the weight and increase the power from last season. A more refined computer and different cam shaft profiles should produce a more reliable engine with around 10bhp more.

The car will be entered on the Belgian Euro round by IMC, the Toyota importers and will mark the anniversary of the debut of the Corolla GT in Group A competition.

Toyota's decision to build another Group A Corolla would appear to indicate another year in the category. While there has yet been no announcement from the team, it seems increasingly likely that they will also run a Supra on certain events during the 1985 Open series.

British B-seeds nominated

Chris Belton of the RAC MSA had no trouble in persuading FISA to accept the British nominations for B-seeding in 1985. And the news will come as a great relief to Bertie Fisher who suffered more than most during 1984.

Jimmy McRae, Tony Pond and Russell Brookes achieved their grading through results on World and European events, while Fisher, Terry Kaby, David Llewellin, Mark Lovell and Malcolm Wilson were nominated by the RAC MSA.

Wilson's nomination raised a few eyebrows as he failed to finish an FIA graded event during 1984 and should therefore not have been eligible. The FISA accepted him on the basis of his 1983 RAC Rally result. . .

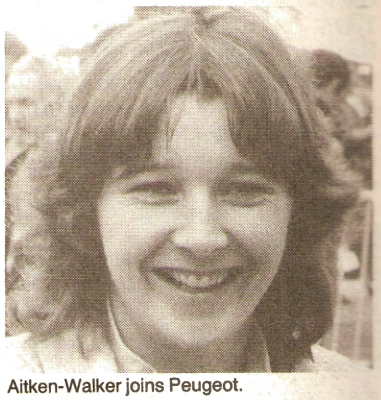


Ragnotti testing the new car.

Ragnotti to chase Euro title

Gerard Toth, the new Director of Renault Sport, revealed in Paris before Christmas that Jean Ragnotti would contest 10 major European Championship rallies this season, probably including five in France.

Ragnotti will chase the Euro title in a Philips Autoradio backed Maxi 5 Turbo which should be available for the start of the season.



Aitken-Walker joins Peugeot.

Louise for 205 GTI

Peugeot Talbot Sport last week confirmed that Louise Aitken-Walker would join Mikael Sundstrom in their Dealer Team for this year's Open Championship.

The two car team of 205 GTIs will be run from Coventry and Paul White will return to the co-driver's seat to accompany Sundstrom.

For Louise, the news means a break from the Ford marque after many years, but her experience in the front-wheel-drive RS1600i will prove invaluable.



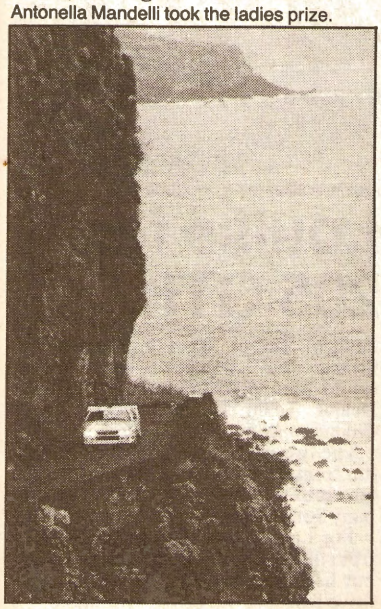
Carlo Capone had to withstand the most serious pressure for some time in the Euro series as Henri Toivonen threatened to steal the crown from the West backed Lancia on several occasions.

Smokescreen over Europe

Last season's European Rally Championship saw a fierce battle between rival cigarette manufacturers as their sponsored cars fought for the title. HUGH BISHOP reflects on the year with his words and pictures

The 1984 season produced the closest fought European Rally Championship for many years with two professional teams declaring their intention early in the year. 27-year-old Italian, Carlo Capone, with his American born co-driver, Sergio Cresto, driving a Lancia Rally for the Tre Gazelle team with backing from the German-based West cigarette company, was ranged against the might of Rothmans International who, under the guidance of the entrepreneur David Richards, had formed the Rothmans Porsche Rally Team. The Rothmans team was led by ex-Ford man, Charles Reynolds, with Henri Toivonen sharing his time driving for them on the European series, while driving a few World Championship events for the Martini Lancia equipe, This eventually proved to be his undoing as, sustaining a back injury on the 1000 Lakes Rally, he put himself out of the rallying for the rest of the season having only just put himself into a commanding position in the Euro series, leaving the title to Carlo.

Antonella Mandelli took the ladies prize.



The season kicked off as usual with the ever popular Castrol-Janner Rally in Austria, with Audis filling the first six places producing an incredible ninth victory on the event for local hero **Franz Wittmann** despite opposition in the form of the experienced Bjorn Waldegaard in an Audi Quattro. F1 exponent **Marc Surer** was also making a welcome visit to the rallying scene, but his Renault 5 Turbo suffered traction problems on the snow and ice covered tracks around Freistadt.

Round 2 was in the even colder climes of the Arctic Circle where the Quattro proved unbeatable once more over icy wastes, this time with **Antero Laine** at the wheel. He had been trying for 10 years to win the Arctic Rally. Round 3 saw the debut of the West equipe on the Boucles de Spa event in Belgium where **Tony Pond** led initially in a Blydenstein-prepared Nissan 240 RS. **Carlo Capone** closed, however, as he learned to drive the Lancia, and it was only a matter of time before the much more powerful and nimbler Lancia swept past the heavy Nissan. The next event, the Swedish, counted for both the World Drivers Championship as well as the Euro series and saw victory go once more to an Audi, but this time the factory car of 'Super-Swede' **Stig Blomqvist**, who was untouchable on home ground.

The first West versus Rothmans confrontation occured on the Costa Brava Rally held in the hills around San Hilario in Spain. The first leg of the event is all tarmac and suited the Lancia which took control immediately setting fastest time on the first 13 stages, while **Henri Toivonen** soon fell by the wayside when a drive coupling came adrift on the Porsche. This left Capone in a commanding lead, but he unnaccountably threw the Lancia into a ditch on the very first gravel stage, where it stuck fast in soft sand. Fellow Italian, **Michele Cinotto**, reunited with his Audi Quattro after a disastrous year in a Lancia, finally overhauled the Opel Manta 400 of **Salvador Servia** who was slowed by shock-absorber problems.

Audi Quattros were also successful on the next two rounds, with Antero Laine again quickest on the first of these, the Hankiralli based on Helsinki, until a clutch failure allowed **Lasse Lampi** through to win from Henri's younger brother **Harri Toivonen** in a Group A Audi 80 Quattro, which gave him the

Ola Stromberg's second place on the South Swedish gave him the FISA Group A award.





Henri Toivonen challenged Capone with the new and powerful Rothmans Porsche 911SC RS until a back injury forced him into an early withdrawal from the championship.

lead in the new Group A Challenge. German champion **Harald Demuth** then took victory on the Sachs Winter Rally before the 'battle royal' was recommenced on the RACE Costa Blanca Rally back in Spain. This was an all tarmac event and once again Capone proved to be the quickest, with Toivonen holding on to second spot until a suspected oil-pressure failure eliminated the Finn. This gave Capone the lead in the series for the first time.

The Rothmans-Porsche team then moved on to France for the first of two events to be tackled in the south, the Garrigues Rally, with Henri finally bringing the Porsche to the finish ramp for the first time in the ancient Roman city of Nimes. It was a fantastically close battle with just 47 secs covering the first four places at the finish. **Jean-Claude Andruet** was awarded the winner's laurels in the Chardonnet Lancia, with **Guy Frequelin** snatching second spot away from Henri by just 11 secs in the Manta 400. The next round took place on the island of Sicily and saw **'Tony' Fassina** in an old Lancia battling with the Ferraris of **'Lucky' Battistolli** and the Spaniard **Antonio Zanini**, although Antonio's 308GTB was well down on power. Early leader **Adartico Vudafieri** retired after just three stages when the throttle linkage snapped. Henri rejoined the fray on the Criterium Alpin where he managed to finish in front of Frequelin this time, but behind the factory Renault 5 Turbo of stunt driver **'Jeannot' Ragnotti**.

Henri quickly moved on to Ireland . . . for the Circuit of Ireland, during which he was encouraged to take part in a celebrity go-kart race, which proved a big mistake. Henri was involved in a nasty accident, in which he badly twisted his ankle and wrenched his back! He continued in the event with the use of pain-killers, but was later forced to retire with gearbox failure. With the Opels of **Russell Brookes** and **Jimmy McRae** out of the running, Corkman **Billy Coleman** was able to take his first international victory for many years at the wheel of his Manta 400.

Toivonen was then whisked straight off to Sardinia to take part in the Costa Smeralda Rally, where he faced the stiffest oppostion of the year over the 600kms of gravel stages. The field rapidly decimated itself, with **Attilio Bettega** wrecking the only factory Martini Lancia on the second stage — leading to the cancellation of the stage, but not before **Michele Cinotto** (Audi Quattro) and **Ola Stromberg** (Group A Saab 99 Turbo) had both gone out with engine failures. A similar fate later befell both the Lancias of Fassina and Vudafieri who had been battling closely with Capone and Toivonen for the lead. However, a front wheel puncture for Capone gave the limping Toivonen the edge, which he managed to hold until the finish in Porto Cervo despite rear-suspension failure in the closing stages.

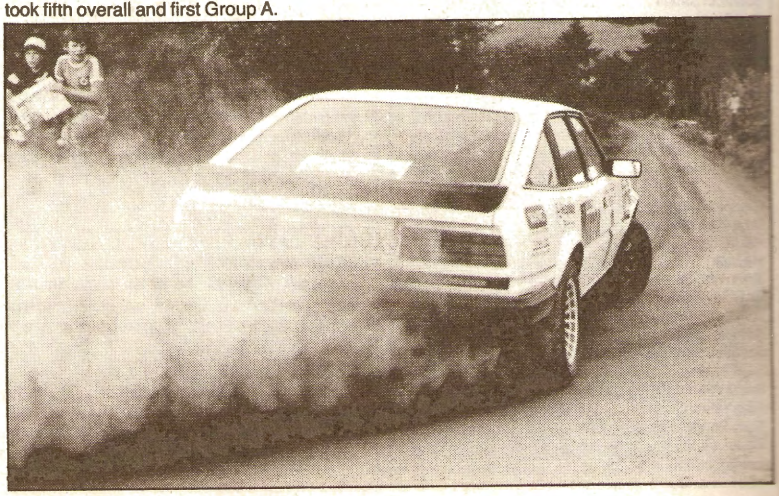
The leading teams then travelled to probably the least popular event of the year, the Zlatni Piassatzi Rally in Bulgaria. Bad food and poor weather conditions did little to raise the image of this iron-curtain country in the eyes of the European competitors. The two West cars, with **Gabrielle Noberasco** being given an outing in his Group A Ritmo 130 Abarth, and the Rothmans Porsche were joined by a third cigarette packet, another Porsche 911SC RS, that of the Belgian **Robert Droogmans** in Belga colours. Sadly, a mistake by Toivonen's co-driver, Ian Grindrod, who booked him in 5 mins early at a time-control cost Henri first place and cost Ian his place in the hot-seat, Henri preferring to take his Finnish friend Juha Piironen with him on future events — Juha having originally been contracted to co-drive in the Lancia. Carlo took the opportunity to increase his ECR lead to 31 points, while Droogmans managed to hold off **Terry Kaby** in another Freeborough Nissan over the rough stages, despite running out of petrol on the very first stage through the streets of Albena.

After his disappointing retirement in Sardinia, Adartico Vudafieri had a much more successful time on the 4 Regions Rally based near Milan taking an easy victory in his Lancia from the Conrero-prepared Opel Manta 400 of **Dario Cerrato.**

Round 18 was also the fourth round of the Group A Challenge which wasn't really getting much in the way of publicity, because no-one was quite sure of the scoring system. Certainly not the powers in Paris who are supposed to control our sport. I would seem that as a result of his excellent second place on the South Swedish Rally behind Bjorn Waldegaard's Toyota Celica Turbo and fourth on the Hankiralli Ola Stromberg had notched up enough points in his Saab 99 Turbo to take the title. However, the ▶

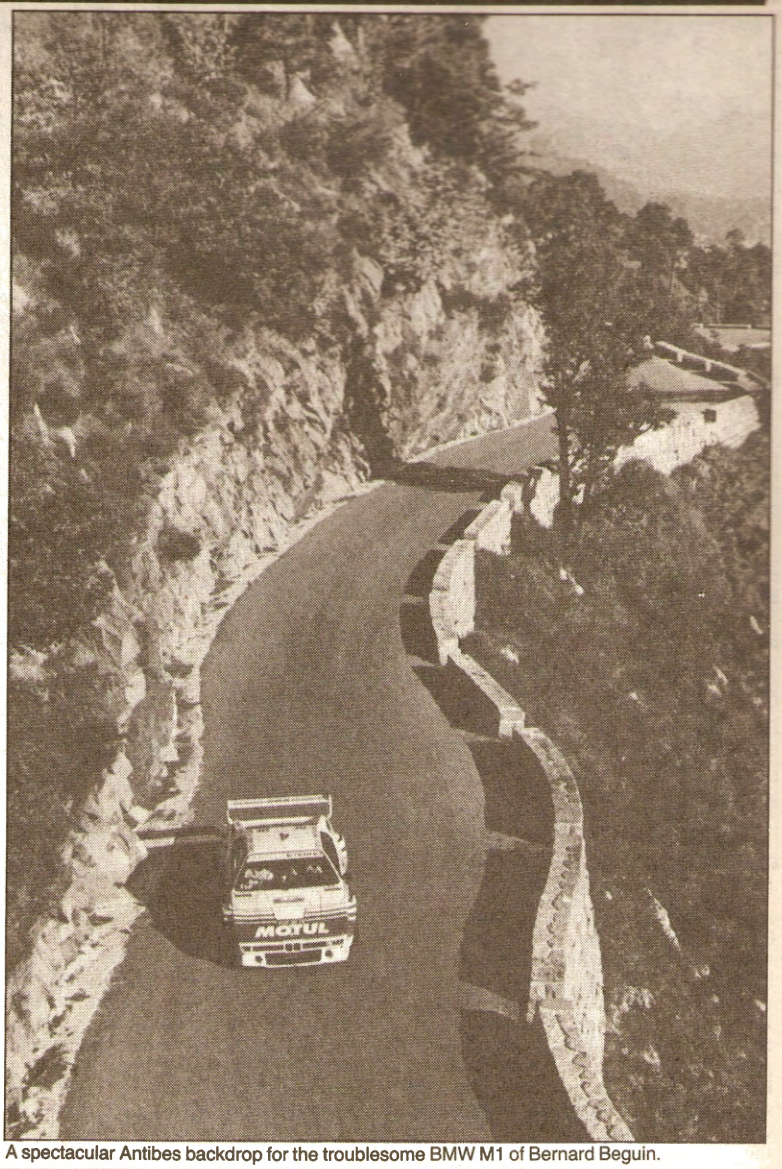


Salvador Servia (above) snatched an A-seeding for 1985 with a fine late score on the Catalunya Rally. The Hunsruck Rally brought a change of fortunes for Tony Pond's Vitesse (below) when it took fifth overall and first Group A.





Harald Demuth took a couple of wins with his Schmidt prepared Quattro.



A spectacular Antibes backdrop for the troublesome BMW M1 of Bernard Beguin.

▶▶

Italians dispute this, claiming that Noberasco should be first.

Over a month was to pass before the next important rally in the over large series, with the beautiful island of Elba returning to the calendar, providing **Gianfranco Cunico** with his first International victory at the helm of another Lancia. Ypres was the venue for the next co-efficient 4 round and as always attracted a most competitive entry list headed by Jimmy McRae in his Manta 400; but once again the top runners were quickly depleted, Droogmans went out after just two stages with a broken gearbox on the Porsche, and two stages later, a rare mistake by Bernard Beguin sent the beautifully rorty BMW M1 sliding into a wall, and **Lars-Erik Walfridsson** suffered a similar fate. Henri Toivonen drove brilliantly to finish just 27 secs ahead of Andruet taking the championship lead by a point Andruet was well ahead of **Patrick Snyers'** Porsche and Capone's Lancia which had been dogged by mechanical problems having to do some eight stages without the limited slip differential working. The results of the rally remained provisional following an appeal, and Andruet was later disqualified for having changed a wheel inside a time-contol zone. This controversy somehow led to the event being downgraded from co-efficient 4 to 2, though only those in Paris may be able to tell us why.

Teams then shipped their cars to the idyllic holiday island of Madeira. The rally, over twisting tarmac and paved roads, is one of the toughest on the calendar, but Capone's run was short lived, sliding into a stone wall on the first wet stage. Toivonen got off to a bad start as well, an obscure electrical fault bringing the Porsche to a half several times, dropping Henri well down the field. The Belgian driver Patrick Snyers in yet another cigarette packet, his a Bastos Porsche, grasped the opportunity to open up a healthy lead. But as so often happens on this mountainous mid-Atlantic island, the hills were in the clouds. In conditions which suited Henri perfectly he set fastest times on almost every stage now that the electrical fault had mysteriously been cured. He quickly climbed back to second place and set about chasing Snyers, helped by a failing rear-suspension on the red Pors-

EUROPEAN RALLY CHAMPIONSHIP 1984

	A	SF	B	S	E	F	D	E	F	I	A	D	F	GB	I	BG	I	S	P	TR	B	I	GB	R	D	H	B	CS	PL	CS	BG	P	D	GR	B	I	BG	GB	YU	E	F	CY	CH	E	F	E	P	B	RSM	F	
	Jan 02/07	Jan 28/29	Feb 03/05	Feb 10/12	Feb 18/19	Feb 24/26	Feb 24/26	Mar 17/17	Mar 30/31	Mar 29/31	Apr 12/15	Apr 07/08	Apr 14/14	Apr 19/24	Apr 26/29	May 12/13	May 17/19	May 18/20	May 23/27	May 26/27	Jun 02/03	Jun 07/09	Jun 09/12	Jun 22/24	Jun 22/27	Jun 28/30	Jun 29/Jul 01	Jun 29/30	Jul 06/08	Jul 14/15	Jul 27/29	Aug 03/05	Aug 16/19	Aug 20/23	Aug 31/Sep 02	Aug 30/Sep 02	Sep 01/02	Sep 12/15	Sep 14/16	Sep 18/23	Sep 23/30	Sep 26/30	Sep 26/30	Oct 05/07	Oct 11/14	Oct 26/28	Oct 31/Nov 04	Nov 02/04	Nov 08/11	Nov 24/25	
	Janner Rally (Co-eff 2)	Arctic Rally (2)	Boucles de Spa (2)	Swedish (4)	Costa Brava (4)	Hankki Rally (2)	Sachs Winter (2)	RACE (3)	Garrigues (2)	Targa Florio (3)	Arbo Rally (1)	Saarland Rally (2)	Criterium Alpin (3)	Circuit of Ireland (2)	Costa Smeralda (4)	Zlatni Plassatzi (4)	Four Regions (2)	South Swedish (2)	Rally of Portugal (2)	Gunaydin (1)	Haspengouw (1)	Isola D'Elba (2)	Scottish (2)	Danube Rally (1)	Hessen Rally (2)	Della Lana (2)	Ypres 24 Hours (4)	Barum Rally (1)	Polish Rally (2)	Skoda Rally (1)	Rally Vida (1)	Madeira (4)	Hunsruck (3)	Halkidiki (4)	Bianchi Rally (1)	Rally Piancavallo (1)	Hebros Rally (2)	Manx International (2)	Yu Rally (2)	Principe de Asturias (2)	Tour de France (4)	Cyprus Rally (3)	Rally du Vin (2)	Corte Ingles (1)	Antibes Rally (3)	Cataluna Rally (3)	Algarve Rally (2)	Rally du Condroz (1)	San Marino Rally (3)	Rally du Var (1)	
Carlo Capone	I	—	—	40	—	—	—	—	60	—	—	—	—	—	60	80	—	—	—	—	—	—	—	—	—	48	—	—	—	—	—	80	—	—	—	—	—	—	—	—	—	60	—	—	—	—	—	428
Henri Toivonen	SF	—	—	—	—	—	—	—	24	—	—	—	45	—	80	60	—	—	—	—	—	—	—	—	—	80	—	—	—	—	80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	369
Harald Demuth	D	—	—	—	—	—	40	—	—	—	—	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20	—	—	—	60	—	—	—	—	—	—	—	—	40	—	—	—	—	—	45	—	245
Salvador Servia	E	—	—	—	60	—	—	—	—	—	—	—	—	32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	40	—	—	—	—	60	—	—	—	—	—	192
Guy Frequelin	F	—	—	—	—	—	—	—	30	—	—	—	36	—	—	—	—	—	—	—	—	—	—	—	24	—	—	—	—	—	—	—	—	—	—	—	—	—	48	—	—	36	—	—	—	—	—	15	189
Adartico Vudafieri	I	—	—	—	—	—	—	—	—	—	—	—	—	—	—	40	—	—	—	—	20	—	—	—	40	—	—	—	—	—	—	—	—	—	—	20	—	—	—	—	—	—	—	—	—	60	—	180
Attila Ferjancz	H	—	—	—	40	—	—	—	—	—	—	—	—	32	—	—	—	—	—	—	—	20	—	—	—	—	—	—	—	—	—	—	—	—	—	40	—	24	—	—	—	18	—	—	—	—	—	174
Jean Ragnotti	F	—	—	—	—	—	—	—	—	—	—	—	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	80	—	—	30	—	—	—	—	—	—	170
Patrick Snyers	B	—	—	24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60	—	—	—	—	60	—	—	—	—	—	—	—	—	12	—	—	—	—	—	—	—	—	156
Jimmy McRae	GB	—	—	—	—	—	—	30	—	—	—	—	—	—	—	—	—	—	—	12	—	30	—	—	—	40	—	—	—	—	—	—	—	—	—	—	40	—	—	—	—	—	—	—	—	—	—	—	152
"Lucky"	I	—	—	—	—	—	—	—	45	—	—	—	—	40	—	—	—	—	—	—	30	—	—	—	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	145
Robert Droogmans	B	—	—	—	—	—	—	—	—	—	—	—	—	—	48	—	—	—	—	20	—	—	—	—	—	—	—	—	—	—	—	—	—	20	—	—	—	30	—	—	—	—	—	—	—	20	—	138
Manfred Hero	D	—	—	—	—	—	30	—	—	—	24	—	—	—	—	—	—	—	—	—	—	—	—	30	—	—	—	—	—	—	—	36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	120
Jean C. Andruet	F	—	—	—	—	—	—	—	30	—	—	—	—	24	—	24	—	—	—	—	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	120
Gianni del Zoppo	I	—	—	—	—	—	—	—	—	—	—	—	—	48	—	30	—	—	—	—	24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	115
Dario Cerrato	I	24	—	—	48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20	—	12	—	—	—	—	—	—	—	—	—	—	—	—	8	—	—	—	—	—	—	—	—	—	—	—	106
Per Eklund	S	—	—	—	—	80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	102
Michele Cinotto	I	—	—	—	—	—	—	—	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60	—	—	—	—	—	—	—	—	—	100
Erwin Weber	D	—	—	—	—	—	—	—	—	—	—	—	—	—	16	—	—	—	15	—	—	—	—	—	—	—	—	20	20	20	—	—	24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	100
Radislav Petkov	B	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	95
John Buffum	USA	—	—	—	—	—	—	45	—	36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60	—	—	—	—	—	—	90
Antonio Zanini	E	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	85
Joaquim Santos	P	—	—	80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	80
Stig Blomqvist	S	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	40	—	—	—	—	—	—	40	—	—	—	80
Franz Wittmann	A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15	—	—	—	—	—	—	—	—	—	—	—	—	80
Gianfranco Cunico	I	—	—	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24	—	—	—	—	—	—	—	—	—	—	24	—	—	—	—	—	—	—	—	—	—	—	79
Tony Pond	GB	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30	—	—	—	—	—	—	—	—	—	—	—	—	24	—	—	—	—	—	—	—	—	—	—	—	—	—	30	—	—	—	78
Carlos Bica	P	—	—	—	—	—	—	—	—	—	—	30	—	—	—	—	—	—	—	—	—	—	—	40	—	—	—	—	—	—	—	16	45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	76
Antonella Mandelli	I	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	48	—	—	—	—	—	—	—	—	—	—	—	—	24	—	—	—	72



Guy Frequelin's second place for Opel on the Rally du Var took him into fifth spot and guaranteed an A-seeding for the coming season.

che. Henri took the lead just three stages from the end giving him an 81 point advantage. Snyers limped home, scraping the sump on the ground at every small bump, while the delectable **Antonella Mandelli** slipped her Jolly Club Lancia into third spot to become the leading lady in the championship once again.

The Hunsruck rally in Germany saw Harald Demuth in his Schmidt Quattro fighting with the young **Erwin Weber** in his Opel after Russell Brookes had rolled his Opel out of the event very early on. The British flag was still being flown however by Tony Pond who totally dominated GroupA in the Austin-Rover Vitesse finishing in an impressive fifth overall. Victory finally went to Demuth, moving him up to third place in the series.

Capone then went on to Greece for the Halkidikis which he was able to win comfortably winning 17 of the 24 stages, Shekhar Mehta picking up second place in a Nissan. This reduced Toivonen's lead once more to just one point. While Carlo was in Greece, Henri was in Finland driving for the Lancia team on the 1000 Lakes where the spectacular jumps took their toll on Henri's back and he had eventually to go into hospital to get the slipped disc sorted — putting him out for the rest of the season. Of course Capone could never be certain that Henri would not recover and had yet to regain the championship lead. His trip to Cyprus was fruitless, an engine failure putting him out when only in fourth place on probably the roughest and twistiest event of the series. It was the US champion **John Buffum** that finally notched up a win for the BF Goodrich Audi ahead of Brookes' Opel.

Running at the same time was the long, drawn-out Tour de France which produced yet another tooth and nail fight between Andruet's Lancia and Ragnotti's Renault. This time fortune smiled on the Renault driver who took victory by just 21 secs. But it was already apparent that the young **Didier Auriol** was going to be the new French star of the future, finishing fifth on the Tour-Auto despite spinning into an Auberge. He then led the Antibes Rally two weeks later until a rear tyre exploded, sending his Renault crashing into the barriers. Capone then battled with BMW M1 of Bernard Beguin over the classic Monte Carlo stages, finally getting the edge on the BMW driver just two stages from the finish, but Bernard was delighted to bring his car to the finish ramp having retired the brutish car all too often with mechanical failures.

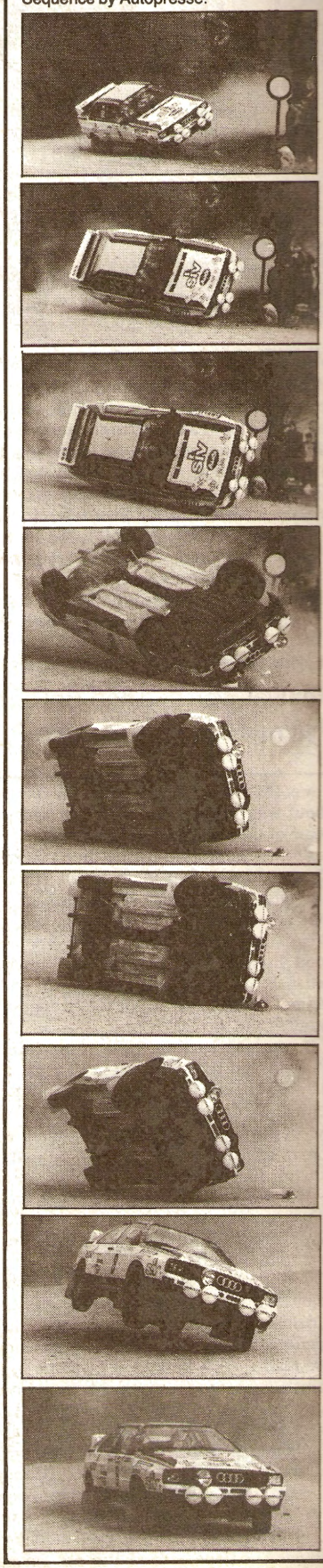
This was enough to give the Italian the European Drivers title, although the all important top five places (which assure drivers of their A-seedings for the following year) were far from settled. Henri Toivonen's second place was never in danger, while Harald Demuth secured his third place by taking his Audi Quattro to second place on the all gravel San Marino Rally behind Adartico Vudafieri — who took the Italian championship with his Lancia. As a result of winning the Catalunya Rally after a hard fought battle with Antonio Zanini's Ferrari 308GTB, which was only resolved when the Ferrari shed a drive-shaft, Salvador Servia in the Opel Manta 400 shot up from ninth to fourth overall in the series. While the Frenchman Guy Frequelin also in a Manta 400 snatched the fifth spot with his second overall on the final round the Rallye du Var. ■

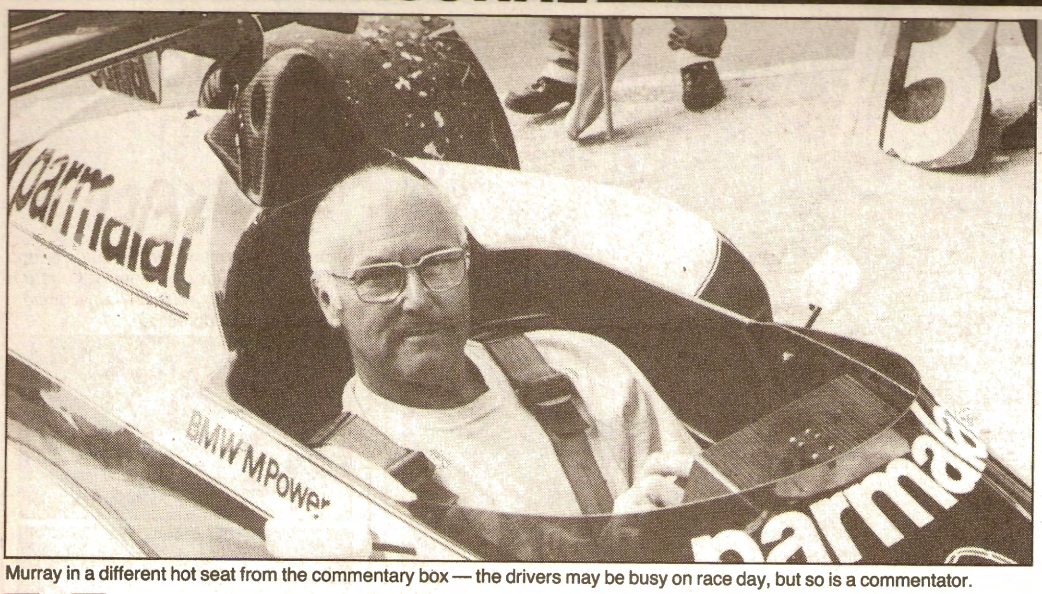
Snyers combined his Euro outings with the Belgian series, where he finished on top.



Cinotto's flipping Quattro

Michele Cinotto managed this quick flip on the San Marino Rally at the end of the year, the car surviving relatively unscathed. Sequence by Autopresse.





Murray in a different hot seat from the commentary box — the drivers may be busy on race day, but so is a commentator.

Merry talker

MURRAY WALKER outlines the difficulties of being a television commentator.

I feel very flattered and genuinely honoured to be able to talk to AUTOSPORT readers like this because in my job I obviously have to *try* to keep on top of every detail, of every aspect of motor sport, and one of the things I do is to read every word on the subject which is published. That means to say that I read AUTOSPORT with enormous enthusiasm, every week, and certainly regard it as the premier publication.

Now, I was thinking . . . I've just been asked, by BBC Television, to do for *Breakfast Time* on December 19, a look-back at 1984 from my point of view and to say what it was that pleased me — and maybe what didn't — about what's happened in motor sport during 1984. Some of the readers, and I hope a lot of you, may well have seen what I did by the time you're reading this. Now, the thing that immediately struck me, is how incredibly lucky British enthusiasts are — and I hope they appreciate it — with a magnificent selection of circuits and racing practically every weekend; very good organisation all over the country; the best marshals' organisation in the world; and as if that all weren't enough, we've got the strongest motor racing industry and the best teams.

> "Only one World Championship Grand Prix was won by a non-British team, and that was Ferrari in Belgium."

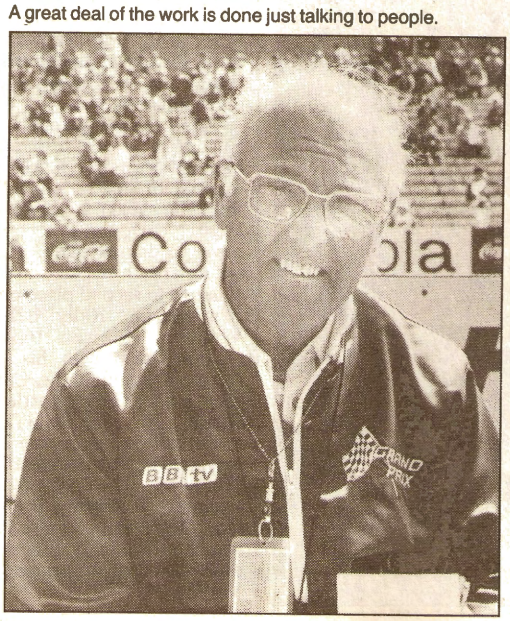
If you look back on 1984 in the various formulae, what do you see? You see McLaren, a very British team, sweeping all before them, admittedly with two continental drivers. Of the 16 Grands Prix, they won 12; two of the others were won by a team which keep on coming up to me and saying 'for God's sake remind 'em, Murray, that we're British!' — that's to say, Brabham — and we had Williams winning a Grand Prix too. Which means to say that only one World Championship Grand Prix was won by a non-British team, and that was Ferrari in Belgium.

Now look at Formula 2. A British team, Ralt, admittedly with a Japanese engine, but never mind, it's a British team, won in steamroller fashion for the umpteenth year, and it's the same in Formula 3. No-one else really gets a look in at Formula 3, if they're not British, except to say maybe Martini. Look at Formula Ford — Van Diemen, Reynard, Lola, winning everything. Even American racing; the CART series is dominated by British cars. What have I missed? Group C. Well maybe we're not so strong in Group C just at the moment. But overall it's pretty impressive.

And if I may say so, from a purely personal axe-grinding point-of-view, even though there is a lot of wingeing, I hope — and I'm not saying this in any arrogant sense at all — British enthusiasts realise how lucky they are from the point-of-view of television coverage of their sport. It's not just the BBC (for which I'm lucky enough to work) who do a super job, but in rallying I think Independent do an absolutely marvellous job, thanks to Barry Hinchliffe. But when you look back, it's not so very long ago, 1978, that we restarted doing Grand Prix racing, and now the BBC, with the exception, I think, of Brazil, is literally the only national broadcasting company in the world that covers all the Grands Prix. It's maybe not as much as enthusiasts want in terms of time but I, this year, have also done Formula Ford 1600, Formula Ford 2000, Formula 3, Formula 2, saloons of every description, and rallycross. The BBC has also done rally coverage, notably the RAC last month which I thought was superb, while Independent have also done rallying jolly well. And if you add all that up, I think the enthusiast gets a pretty good deal.

If I might digress for a moment, it is a matter of enormous sadness to me that we have a tragic contrast between the motorcycle and car factions in Britain, because while, as I've just said, the car side is enormously strong, the motorcycle side is pathetically weak. I won't go on and on to a car audience who may only be interested about the motorcycle side in passing, but we haven't got a motorcycle industry any more and the great names like Norton, AJS and Matchless, who used to sweep all before them, simply don't exist now. There is a Norton firm making excellent machines for the police but that's not the same. The racing movement is very strong in this country but they're all on Japanese bikes and unfortunately the audience and the users of motorcycles tend to be — indeed are — the young people, who've got less money than most these days. As a result of this they can't buy bikes; as a result of this they can't go to meetings; and as a result of this they're not interested. Thus, unfortunately, the whole motorcycle movement is in a pretty parlous state. And when you look at truly great races, like the TT, which is showing every signs, to my enormous personal regret, of going the way of the Targa Florio and other great motoring events, it really is tragic. However, that's another subject . . .

A great deal of the work is done just talking to people.



Back to motor sport of the four-wheeled variety. People often ask how easy or difficult it is to keep abreast of all the different forms of cars and racing. Well, it's not *difficult*; I'm terribly lucky in that now, having retired from my job, I can spend all my time doing what I want to do — and as I say in my after-dinner speeches, since I was propositioned by a girl in a lift in Rio recently, at least it *looks* as though I can do it! What I want to do is actively pursue my enthusiasm for motor sport. I can now go to Press launches, to test sessions, and attend functions to do with motor sport, which I wasn't able to do before. It's not difficult to keep in touch, you just have to be prepared to work jolly hard at it.

What I've got to do is be prepared to talk — I hope authoritatively and entertainingly — about any aspect of motor sport at the drop of a hat, because the BBC will ring me up and say, as they did recently, 'We want you to do Formula Ford 1600 and Formula Ford 2000 one weekend, we want you to do rallycross the next weekend'. Now those two events involved something like 400 competitors that one doesn't normally see, but you've got to know about the subjects, about the drivers, about the cars because as sure as God made little apples you can be sure that they, and everybody that they know, are going to be watching and they're going to be down my throat like a ton of bricks if I get it wrong. A lot of people say that I do, but hopefully I get it more right than wrong!

> "I'm terribly lucky in that now, having retired from my job, I can spend all my time doing what I want to do . . ."

Of course it's very, very easy to get the information — because there's nothing that anybody likes more than talking about himself! — but I have a regular procedure where I arrive at any meeting as early as I possibly can, which means when the scrutineering begins, over however many days the meeting is being held, and I spend the whole day walking around and talking to people; *going* to the scrutineering bay, talking to the officials, to the drivers, to the mechanics, to the team managers, and to the marshals; because even though you probably only get to use a fraction of the information you carry in your head you can be quite sure that someone is going to spin off, for instance, during an event and it will be number 47, who is, say, Bert Bloggs from Heckmondwike, who, if you hadn't talked to him you wouldn't have known who he was, how old he was, what he did . . . And if you can say, 'that was Bert Bloggs from Heckmondwike and it's not at all surprising that he spun off because he's actually got a wooden leg and I know he has a lot of trouble operating the accelerator', it adds a touch of authority and realism to what you're talking about.

You can't possibly hope to talk to everybody. At the rallycross meeting which I've just attended, for example, I can reveal that we all actually dropped a colossal clanger because there was a bloke called Jacques Aita who was down as driving an Audi Coupé in the programme. I must confess that he was one of the, I hope, comparatively few people that I failed to get to; as a result of which his Audi Coupé, which to me means a two-wheel-drive machine — and I'd been banging on about how well this guy was doing in a two-wheel-drive Audi Coupé against all the four-wheel-drive Quattros and so on — turned out in fact to be an Audi *Quattro* Coupé four-wheel-drive car! Even the organisers hadn't appreciated this because in all the times that

were being sent up to us, he was being shown as having no five per cent penalty and consequently was leading one of the qualifying runs.

But the true enthusiast, and particularly the true rallycross enthusiast, will say, with justification I must admit, 'Bloody Murray Walker, should have known that, should have got round and talked to these people. That's what he's paid for.' And they're absolutely right.

The fact is, though, that it is a physical impossibility given the timescale within which one has to work to go round and talk to everybody. Particularly so when they don't speak any English and it is to my regret that I don't speak any other language. Sometimes you can have a very real communication problem. This is not an excuse, by the way, it's just an explanation!

"While I'm on this subject of the difficulties of commentating — and let me hastily say that I'm not whining for sympathy — I'm just about to explain that the job is not quite as easy as a lot of the punters at home seem to think. If you sit at home, you're looking at your large television screen with total concentration, generated by the fact that you are avidly watching something in which you are passionately interested in and — if you're an enthusiastic reader of AUTOSPORT — deeply knowledgeable. You have nothing to distract you, apart from mother bringing in the cup of tea and you'll probably tell her to put it down on the table quietly. Contrast that with the commentator's situation. Alright, my situation! I am invariably standing — that's how I always do my commentaries — in front of a television screen which will be at best a 12-inch set, in a commentary box, overlooking the circuit. My job is to look at the picture that the enthusiast sees, I don't see any other pictures. A lot of people seem to think that I have got a bank of television screens in front of me which give me a global view of the whole circuit and that in some magical way I select which picture they are going to see. It's amazing how many people say, 'why don't *you* get away from the leader and show us the interesting battles that are going on behind?' Well, the answer is that it has got nothing to do with me, it's the producer who decides what picture is to be shown. In the case of the continental Grands Prix I have no communication at all with the producer, who, in the late lamented Spanish Grand Prix, for example, probably does one motor race a year; so it's not altogether surprising if he concentrates on the leader because after all he's supposed to be showing who's winning the race.

Anyway, I'm standing in the commentary box with my 12-inch screen, in *broad daylight*, and that's a point I'd like to emphasise in that the picture cannot possibly be as good as the one that the enthusiast is seeing at home in a semi-darkened room. I therefore have to read the race from my monitor. Occasionally I look away to the track, but not too often because the moment you look away from the monitor you can be in trouble. I also wear a pair of earphones, through which, in the case of the continental Grands Prix, I can hear not only the local BBC producer — who is sitting next to me — or next door but one to me in actual fact — but also the *Grandstand* producer, in *London*. So I can be standing at Kyalami, in South Africa, and the producer in London can be saying, as he repeatedly did in 1983, 'where's John Watson?' John Watson, at the time, was probably indulging in his customary charge through from 22nd on the grid where he started after an abysmal practice. If he's not in the first six which I am carrying in my head at the time then I won't know where John Watson is. So I will then look at my lap-charter to see where number seven, John Watson, is on the chart. Now by the time I've looked at the lap chart, found him and registered where he is, it's not impossible that the leader has had a puncture and stopped. Believe me things can happen very quickly! I will then look back at the screen and say, 'now it's very interesting to note that John Watson, who started 22nd, has now made his way up to 12th.' The bloke sitting at home will then say, 'what's this bloody idiot talking about John Watson for? — who we haven't even seen — when Piquet has just stopped and been passed by Lauda; and the twit hasn't even mentioned it!'

"There's no point in me saying, 'Sorry folks, it wasn't Prost it was Lauda', All I can do is just plough on . . ."

That's one of the problems you have to face with commentary and another is that, unlike the written word, you can't correct a mistake if you make one. You don't always realise you've made one in the heat of the moment but let us say, staying with McLaren for a moment, that I have been talking about Prost, because they've been showing him on the screen, when the producer suddenly cuts to Lauda in an, externally, identical car. I will inadvertantly say, 'and so as Prost enters the such-and-such bend . . .' and the enthusiast will say, 'bloody fool, it's Lauda!'

Now let me assume that I immediately realised it *was* Lauda and not Prost; there is no point in me saying, 'sorry folks, it wasn't Prost it was Lauda; I did actually realise it was Lauda but there was some sort of malfunction between the brain and the mouth and I said the wrong thing . . .' All I can do is just plough on, even if I know I've made a mistake.

There are, however, some occasions when I can correct myself, one example of which came during a motocross commentary I once did and concerned Arthur Lampkin, who was a famous motocross rider.



Murray tackles all motorsport, here he talks to Tony Pond.

This was a long time ago — in the days when they had separate saddles and bum-pads on the bikes — and Arthur hit a bloody great bump, took off, his feet came off the rests and he landed with his crutch stuck between the saddle and the bum-pad! And I said: 'My God, he's trapped his knackers!' Now that was what I was actually *going* to say, but in the split-second that it takes for the thought to get from the brain to the mouth I actually said to myself, 'they're not going to like this, Murray!' So what I *actually* said was, 'My God, he's trapped his knickers!' Now that wasn't the greatest line but I'm sure it saved me from instant dismissal!

What I was saying, though, was that the commentator has got to read the race from the picture that the viewer sees at home and *unlike* the viewer at home he has all sorts of other pressures and distractions on his eyes and ears, quite apart from the fact that the viewer at home doesn't actually have to sit and talk — knowledgeably, authoritatively and entertainingly, one hopes — about what he's looking at. I say to the people that come up to me at race meetings and bang on about my not doing this or that, to do me a favour and next time they are watching a Grand Prix turn the volume down and talk about it from what they see, and see whether they still think it's easy. I must emphasise here that I'm not trying to make excuses, because I do, like most people, make mistakes occasionally, but just have a go yourself; I hope I'm able to give you some kind of insight.

"In the split-second that it takes for the thought to get from the brain to the mouth I said to myself, 'they're not going to like this Murray'!"

I know that the viewer is not a commentator and he will rightly say that I am, but if you have a go that way you'll realise that maintaining the flow of information while the pictures are hopping from one part of the course to another, and from one car to another, is not quite as easy as some people may think it is!

I'll give you another instance about how things can go wrong in a broadcast; there's the one I think of as the 'Lydden-rallycross-holes' story, where I'd followed my usual procedure and there was a bloke racing with holes in his windscreen. To my surprise, as he certainly wasn't among the aces at the meeting, this chap was actually leading at one stage and I related how very interesting it was that he had drilled all these holes of random size and pattern in the windscreen so that if any mud landed there'd always be a hole he could see through . . . as I said this he went off the circuit, up a bank, through a dirty great barrier and the commentary ended up with me talking about this guy with the holes in his windscreen . . . as a result of which he can see wherever he's going '. . . *what am I saying? What am I saying!*' This turned out to be the most popularly requested item in *Sportsnight with Coleman,* I think, for six weeks in succession! Which just goes to show that sometimes you just can't win!

I'd like to finish, though, by saying that I regard myself as an enthusiast. I know I'm very lucky to be able to do what I do, meet the people I meet, go to the places I go to, and to be able to talk to *fellow* enthusiasts; and I can only sincerely hope that they enjoy hearing it, seeing what I do on the 'box', half as much as I enjoy doing it. ■

Derek Bell in a Ford digger with Murray looking on in the BBC *Driving Force* programme.





The Corolla GT has a sporting body dropped onto the previous Corolla liftback chassis offering slightly more than 2+2 accommodation.

Rear drive racer

The Corolla saloon is front-wheel-drive but the Corolla GT is a thinly disguised, rear-wheel-drive performance machine. MIKE McCARTHY has tried it and enjoyed it

The Toyota Corolla GT Coupé is something of an enigma. It raised a few eyebrows when it was announced; since the Corolla saloon had gone front-wheel-drive some time before, and it would have seemed logical for any sporting derivative to follow suit. Yet the GT Coupé is front-engined and has rear-wheel-drive — about the only thing it shares with the saloons is the name. Then again, it could be called an homologation special, except that it is being produced in far greater numbers than would be needed for homologation purposes — and motor sport is not exactly at the top of Toyota's list of priorities.

What Toyota have done, it seems, is to install a brand new engine in a known chassis, that of the previous Corolla liftback, rebody it, and sell it as a large scale proving exercise for the engine, in the process producing a sporting car with stronger appeal to the enthusiast than might be the case with a front-wheel-drive car. That they have also produced an efficient rallying device is shown by the fact that Per Eklund took one to the Manufacturers' award in this year's Rothmans/RAC Open Championship.

The most important facet of the new car is the engine. Coded 4A-GE, it is based on the basic 4A cast iron block from the Carina II engine, topped off with a light alloy head. This features twin overhead camshafts driven by a single belt and operating on four valves per cylinder, plus the almost inevitable pent-roof combustion chamber that results from this configuration. Toyota have taken advantage of the eight inlet ports thus provided to come up with a clever 'dual fuel' system. Basically, at low speeds and throttle openings only one inlet tract per cylinder is operational, the other being closed by a butterfly valve — this ensures high gas velocities and thus efficient cylinder filling and mixing. At high speeds — above 4800rpm — and under full throttle conditions, an intake control valve opens the butterflies and thus the second inlet tract, which in turn allows full advantage to be taken of the better breathing properties of a four valve head. The system is vacuum operated and electronically controlled.

With the bore and stroke of 81mm and 77mm, the 4A-GE engine has a capacity of 1587cc and, on a compression ratio of 10.0:1, gives 123.8 bhp (DIN) at 6600rpm, and 104.8 lb ft (DIN) torque at 5200rpm. To put this into context, the Alfa Giulietta 1.6 produces 109bhp, the Lancia Delta 1600GT 105bhp (both are twin cam units, though not four valve), while the injected Ford Escort XR3i gives 105bhp. Thus, for a similar capacity, you have to look at turbocharging to achieve similar or better outputs.

The power is taken via an 8ins clutch and an all-synchromesh gearbox, suitably uprated, to a limited slip differential at the rear. Front suspension is by MacPherson struts with an anti-roll bar, while the live rear axle is suspended on coil springs and located by four trailing arms and a Panhard rod, with another anti-roll bar. Steering is by rack and pinion, braking by discs all round (ventilated at the front), and 185/70HR13 tyres are fitted to 5J x 13 alloy wheels.

When it comes to competition, there really isn't much in the front-engined, rear-wheel-drive coupé market that can match the Toyota's engine specification. At £6995, it is almost in a class of its own. The Alfa Romeo Sprint Green Cloverleaf is both front-wheel-drive and more expensive at £7610, BMW's 316 is rear-wheel-drive and a little closer at £7350 (but is not a coupé), Fiat have two possible contenders in the Strada 1600cc 105TC (£6345) and the 2-litre Abarth 130TC (£7800), Ford's evergreen Capri, in 2.0-litre form, is good value at £6,569, the little Honda CRX is close in price if nothing else at £6950, the Lancia Delta 1600GT is a full five-door hatchback at £6250, the Mitsubishi Cordia 1600 GSL is another Japanese contender that is close at £7299, while possibly the biggest threat (on road and rally) comes from the Opel Manta GTE coupé which gives you a lot of car for £7281. Finally, two that always have to be considered when hot little saloons are talked about are the Vauxhall Astra GTE, £7344 in its latest guise, and the evergreen VW Golf GTI, expensive in this context at £7992.

For what is, on paper, a high-tech machine, the Toyota's engine shows a remarkable lack of temperament, starting instantly, idling cleanly, and with no hiccups, flat spots or other irritations when treated gently. In fact, at low throttle openings and at revs below 5000rpm, you could be sitting behind any competently designed Japanese engine with a quite mundane and ordinary specification.

New personality

But, use of lot of throttle, and keep the revs up above 5000rpm, and it assumes a whole new personality. Although peak power is developed at 6600rpm, the red line ('for occasional use'!) is at 7700rpm, and those last 2700rpm bring out the engine's character: it is nothing more nor less than a very thinly disguised racing unit. Although it *sounds* frenetic — like an ordinary engine taken to valve bounce — it pulls strongly, cleanly and oh so crisply, revelling in revs, with very little apparent fall-off in power above the peak. It is one of the most exhilarating power units around today, and a very big plus factor for the enthusiast.

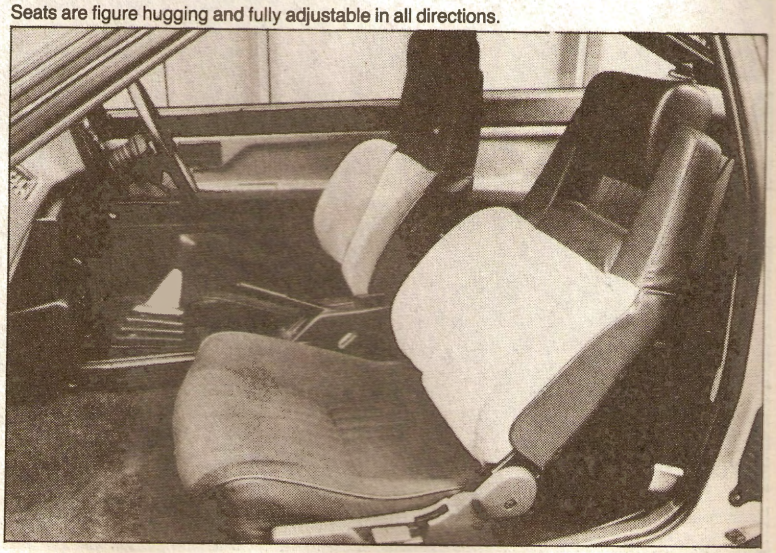
Toyota claim a top speed of 122mph, and we did in fact see this indicated on one occasion, but as ever the speedometer flattered: *What Car?* achieved a genuine 118mph under test conditions. Nevertheless, this is very quick for an unblown 1600 — the Alfa Sprint manages 110mph, the BMW 109mph, the Fiat 105TC 111mph, and so on — and only one or two of the 2-litre machines can even match the Toyota. The 0-60mph time of 8.6secs (closely matching Toyota's claim of 8.7secs) is again very quickly for a 1600, and not at all bad for a 2-litre, come to that! Thus the actual performance lives up to that which is promised on paper.

Nor is the get-up-and-go achieved at the expense of fuel consumption. In spite of the almost irresistable urge to use the engine hard whenever possible, we managed a very frugal 30.2mpg while the car was in our hands.

Most Japanese cars have pleasant, light, quick and easy gearchanges, and that of the GT is no exception — in conjunction with the engine's willingness it is a pleasure to play tunes on the 'box, snicking up or down a ratio, depending on conditions, to keep the revs up. The ratios are ideally spaced for acceleration but, for more general use, felt somewhat low. Fifth, for example, only gives 18.3mph/1000rpm, although we doubt whether this will bother an enthusiast too much. The clutch was as pleasant as the gearchange, being light but smooth and progressive.

Like the engine, the suspension feels as if it has been biased more towards

Seats are figure hugging and fully adjustable in all directions.



roadholding and handling than ride. On the plus side is the fact that it feels well balanced and taut. The steering is nearly perfectly weighted and direct with loads of feel. The normal cornering characteristic is mild understeer but, thanks in part to the limited slip diff, when you put the power down in a corner it becomes more neutral and can even be provoked into a gentle tail-out attitude. On the negative side, though, mild-corner bumps can have the car hopping all over the road rather unpredictably, a legacy of a live rear axle and firm springing. In general, there is again more than a touch of the racer to it on the road since it is responsive and entertaining — on smooth surfaces at least — with that slightly nervous feel that comes when rubber bushings and compliance have been kept to a minimum.

Firm under braking

The all-disc braking set up is not only easily capable of stopping the GT in a hurry when needed, but pedal feel is excellent too.

Yet another feature of the GT Coupé, which shows its competition orientation, is the interior. To look at it is rather cheap and plasticky — very 'Plain Jane' in fact. But the driver's seat, complete with adjustment in almost every direction you could wish for, is superbly hugging — perhaps a little too contoured, since a couple of drivers complained that it didn't give enough in some areas — and keeps you firmly in place so that you don't have to rely on the steering wheel or belts to do the job. All the major controls, too, are well sited, the gear lever, for example, being but a hand's span away from the wheel, and there is a useful left foot brace beside the clutch. Visibility in all directions is commendably good, thanks to plenty of glass area and slim pillars.

Space-wise, the GT is more than a 2 + 2 but not quite as spacious as some of the hot saloons such as the Fiat 105TC. The rear seats are mounted very low, which gives passengers the idea that they're almost sitting on the floor and can be awkward and rather claustrophobic, but, with suitable give and take between front and rear legroom, a reasonably comfortable position can be attained. Tall people will find their heads up against the roof, however. A true hatchback, the rear seats can be folded down (with a 50/50 split) to increase luggage space which is just as well since, with them up, there isn't very much.

The two main dials — speedometer and tachometer are large and clear, the rest less readable. The minor controls are scattered, while the rotary switches on either side of the instrument binnacle, which operate the wipers and lights, require some acclimatisation, but once you're used to them their action feels quite natural.

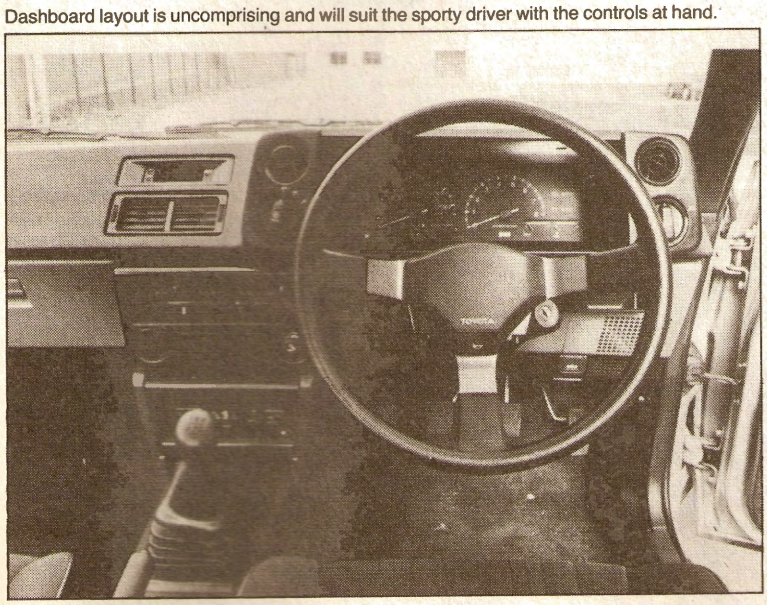
As might be expected, the GT is not a particularly quiet car. For a start there is that engine noise which is very pronounced at high revs (you either enjoy it or drive gently), but tyre roar, wind noise and even some transmission whine add to the general levels. Still, if you look on it as a potential rally winner, it is probably more than acceptable. Even as an ordinary road car, most owners would probably adjust to it without much difficulty — just don't look for refinement.

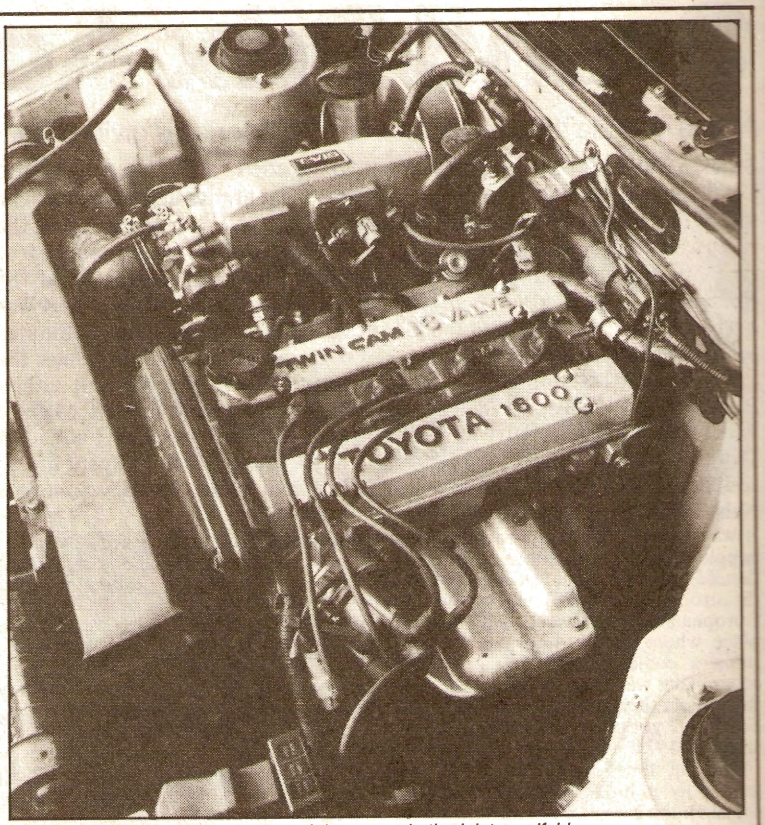
Summing up, the GT Coupé feels much more of a ready-to-race-or-rally hot shot than the majority of such machines. Quick, easy to drive, taut. It can be superb fun if the mood takes you — and yet, by contrast, is not at all temperamental or fussy in traffic or around town. Drawbacks are the harsh ride and noise, but, having driven a number of cars which are even worse in this respect, and yet sell well, we cannot see this putting off the sort of enthusiast who enjoys a good, slightly old-fashioned, rorty fun machine. ■



Handling is excellent and the limited slip differential can be used to good effect. While the steering is direct and nearly perfectly weighted.

Dashboard layout is uncomprising and will suit the sporty driver with the controls at hand.





Twin-cam and 16 valve unit. Part of the secret is the inlet manifold.

TOYOTA COROLLA GT COUPÉ

£6,995

Specification

Cylinders/capacity	Four in line/1587cc
Bore × stroke	81.0 × 77.0mm
Valve gear	Twin overhead camshafts, belt driven, four valves per cylinder
Fuel system	Electronic fuel injection, variable induction
Power/rpm	123.8bhp (DIN) at 5,200rpm
Gear ratios	3.587, 2.022, 1.384, 1.000, 0.861:1
Final drive	4.300:1
Steering	Rack and pinion
Brakes	Discs all round, ventilated at front
Wheels	Light alloy, 5J × 13
Suspension (F)	Independent, MacPherson strut, anti-roll bar
Suspension (R)	Live axle, coil springs, four link location, Panhard rod, anti-roll bar

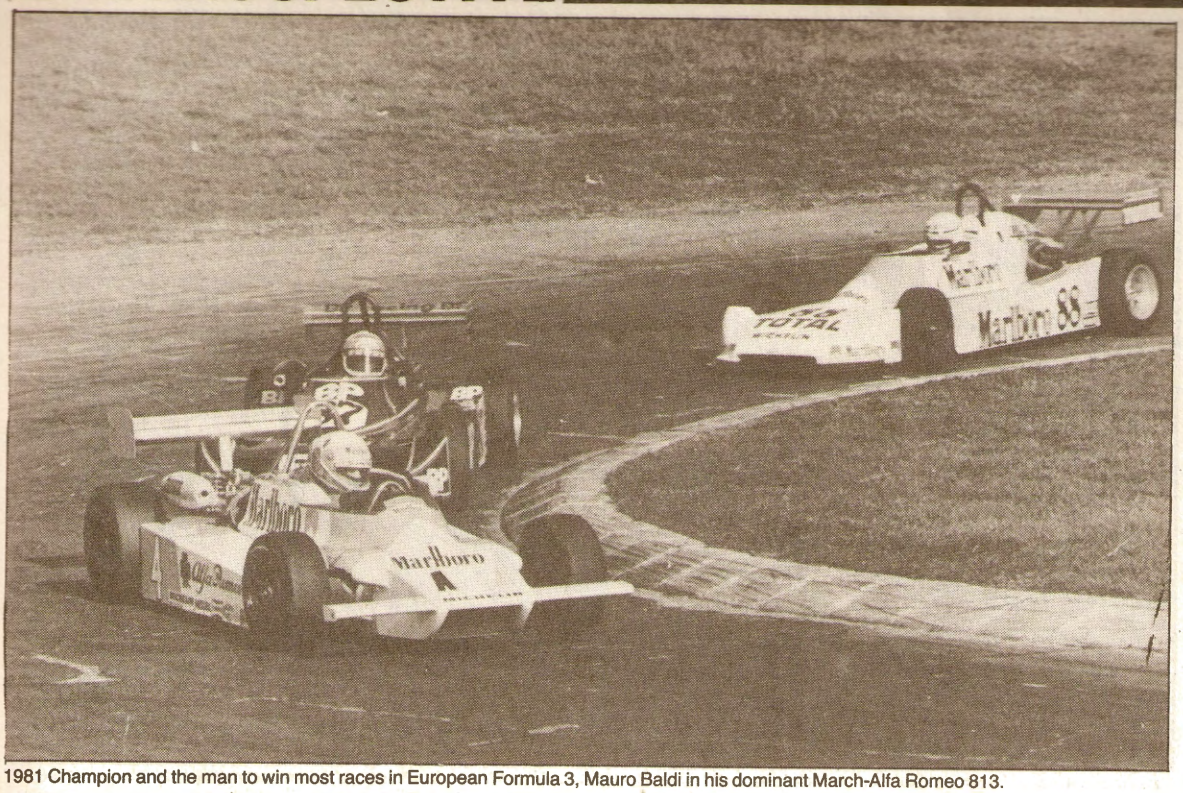
Dimensions

Wheelbase	94.5ins
Track (F/R)	53.3/52.9ins
Length	164.6ins
Width	63.7ins
Weight	19.1cwt

Performance

(*What Car?* figures)

Maximum	118mph
0-60mph	8.6s
50/70mph (fourth/fifth)	6.3/8.7s
Consumption (Urban/56/75mph)	31.7/45.6/34.9mpg
Overall test consumption	30.2mpg



1981 Champion and the man to win most races in European Formula 3, Mauro Baldi in his dominant March-Alfa Romeo 813.

Grand Prix Academy

After a decade the European Formula 3 series is giving way to make room for the new F3000. JOE SAWARD looks back over the years, with their high and low points

Let there be no mistake, European Formula 3 has always had its critics. The series, they would declare loudly, at regular intervals, was too expensive, the races were held at circuits not really fit for Formula Ford racing and the free tyre situation seemed to dictate that he who had the contract, had the championship. And, after all, the British series was so much better. *There* was a series where there were not too many confusing variables. Look at the star names the British series has produced over the years, and out comes the impressive list: Nelson Piquet, Ayrton Senna, Derek Warwick, Jonathan Palmer et al. Whoever raced in Europe? Well, there *was* Alain Prost, Michele Alboreto, Riccardo Patrese, Elio de Angelis, the brothers Fabi, Jan Lammers, Mauro Baldi, and lest we forget, a young Brazilian spent a year trekking Europe, before he swept all before him in Britain. His name was Nelson Piquet . . .

It was almost exactly 10 years ago that people began to talk about an international Formula 3 series. 1974 had been a disastrous year for the category, and the European series was seen as a boost. A place where the best of the national runners could compete against each other. That was the plan. The FIA gave the project their support, and European Formula 3 got off to a shaky start in the spring of 1975.

At that time F3 did not have the monopoly it holds today. France had forsaken the category to concentrate on Formula Super Renault, to the extent that they had contrived a European Series, where the young generation of French Grand Prix stars learned their trade. In Germany there was the Super Vee series, that too had expanded into a European Gold Cup, and at national level there was a variety of other formulae in direct competition with Formula 3. Insular attitudes prevailed, and in that first year, there were very few European 'gipsies'. In each country they visited, the leading locals showed well, but it seemed the series was a backwater, and an expensive one at that. Not even strong FOCA backing seemed to help (F3000 be warned).

Although it was an inauspicious start, the seeds for future success had been sown. The Italians joined *en masse* in for 1976, and over the next few years more and more different nationalities joined in. The Italians were followed by the Scandinavians, the French came back to the fold in 1978, but in keeping with Britain's offshore location, it was not until 1982 that the Brits began to appear regularly. James Weaver, Eddie Jordan and Yokohama tyres won three races that year and shook the establishment.

The Ralt became the car to have, and the series enjoyed a huge resurgence in 1983. This year we have seen Italians, French, Swiss, Austrians, Danes, Swedes, Spaniards, Belgians, Irish, Dutch, even the occasional Finn, and from further afield, a brace of Americans. After a 10 year struggle, the series had finally become *the* European series.

So what did go wrong? Why, when everything looked good, did the series fold up like a house of cards. It was not the tyres. That problem had been solved at the start of 1983 with the introduction of the '10 tyre rule', which reduced the teams to sensible levels of tyre usage, after several years when contracted teams could run through their entire range in a weekend, in search of the best options. Much has been written (and even more has gone unpublished) about the technical infringements this year — that tore the middle out of the series when it most needed to be protected. Yet, in the end, it seems to me that the collapse of the series came about through its very transitional nature. Teams and drivers passed through, but there was never a strong enough core to band together to protect the series. The International Formula 3 Association failed early this year, and the Grand Prix teams took little interest in what was going on. One cannot help thinking that the best years were yet to come . . .

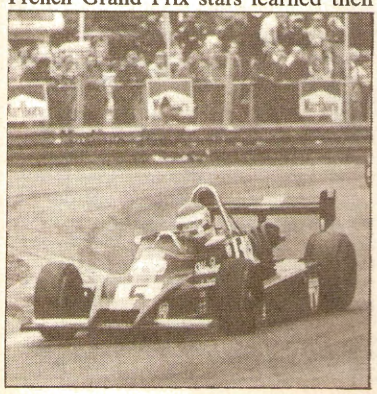
The gradual progress made was intermittent. In the late seventies, as its popularity grew, bigger more professional organisations moved in. It was not an unhealthy situation, but the competitive edge they sought meant that before long they began to hold an unhealthy domination. Michelin supplied the tyres and if you did not have the best, you might as well have stayed at home. People did, in huge numbers, and in early 1982 it reached an all-time low, with grids of less than 10 cars, with perhaps two potential winners, usually team-mates! The champions began to look manufactured.

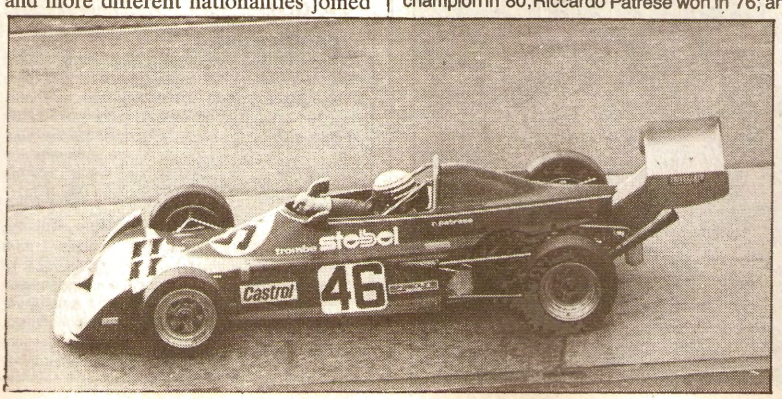
It was a far cry from the early years, when privateers ruled the roost. 1975 was the first year of Ralt cars and at the end of the year the bespectacled 'Cowangie Kid' Larry Perkins won the RT1 the title against a host of March 753s. March had a strong team with Conny Andersson, already an F3 veteran, and Gianfranco Brancatelli among their entries. Almost everyone ran with Goodyear rubber, although several other companies had a look at the series.

The following year, 1976, the British series enjoyed the exploits of Rupert Keegan and Bruno Giacomelli, while in Europe, the battles were fought between Andersson and Italy's latest star, Riccardo Patrese. Andersson and team-mate Brancatelli ran in Pavanello Marches ▶



Above: Nelson Piquet and Derek Daly do battle in 1977. Below left to right: Michele Alboreto was champion in '80; Riccardo Patrese won in '76; another Grand Prix man—'77 champion Ghinzani.







European Formula 3 championship facts

European Formula 3 Champions 1975-1984

1975	Larry Perkins	AUS	Ralt-Ford/Novamotor RT1
1976	Riccardo Patrese	I	Chevron-Toyota/Novamotor B34
1977	Piercarlo Ghinzani	I	March-Toyota/Novamotor 773
1978	Jan Lammers	NL	Ralt-Toyota/Novamotor RT1/78
1979	Alain Prost	F	Martini-Renault MK27
1980	Michele Alboreto	I	March-Alfa Romeo/Novamotor 803
1981	Mauro Baldi	I	March-Alfa Romeo/Novamotor 813
1982	Oscar Larrauri	RA	Euroracing-Alfa Romeo/Novamotor 101
1983	Pierluigi Martini	I	Ralt-Alfa Romeo/Novamotor RT3/83
1984	Ivan Capelli	I	Martini-Alfa Romeo/Novamotor MK 42

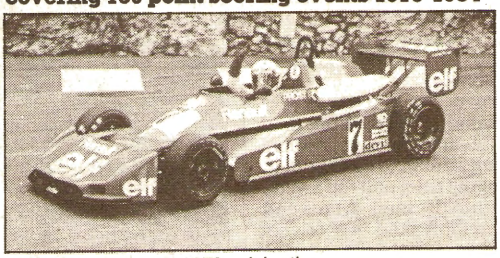


Mauro Baldi — not one of his good days . . .

Leading European Formula 3 points scorers (qualification: 40 points)

Driver	Nationality	Points	Scoring Seasons
Mauro Baldi	I	165	4
Emanuele Pirro	I	133	3
Anders Olofsson	S	131	4
Oscar Larrauri	RA	130	3
John Nielsen	DK	125	5
Alain Ferté	F	117	3
Philippe Alliot	F	105	3
Michele Alboreto	I	79	2
Alain Prost	F	77	2
Jan Lammers	NL	71	1
Piercarlo Ghinzani	I	69	2
Gerhard Berger	A	67	2
Pierluigi Martini	I	66	1
Conny Andersson	S	66	2
Ivan Capelli	I	65	2
Michael Bleekemolen	NL	62	3
Thierry Boutsen	B	60	2
Philippe Streiff	F	60	2
Didier Theys	B	58	3
Claudio Langes	I	57	3
Johnny Dumfries	GB	53	1
Riccardo Patrese	I	52	1
Tommy Byrne	IRL	50	2
Corrado Fabi	I	50	1
Patrick Gaillard	F	50	2
Teo Fabi	I	45	1
Gianfranco Brancatelli	I	42	2
James Weaver	GB	40	3
Roberto Ravaglia	I	40	2

European Formula 3 Championship winners covering 130 point scoring events 1975-1984



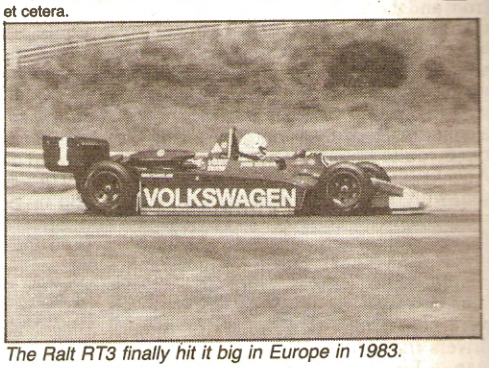
Alain Prost — spent 1979 celebrating.

Drivers	Nationality	Wins
Mauro Baldi	I	11
Oscar Larrauri	RA	8
Alain Prost	F	8
Anders Olofsson	S	7
John Nielsen	DK	6
Emanuele Pirro	I	6
Conny Andersson	S	5
Ivan Capelli	I	4
Pierluigi Martini	I	4
Michele Alboreto	I	4
Jan Lammers	NL	4
Riccardo Patrese	I	4
Johnny Dumfries	GB	4
Thierry Boutsen	B	3
Teo Fabi	I	3
James Weaver	GB	3
Piercarlo Ghinzani	I	3
Philippe Alliot	F	3
Gerhard Berger	A	2
Tommy Byrne	IRL	2
Alain Ferté	F	2
Michael Bleekemolen	NL	2
Nelson Piquet	BR	2
Mike White	ZA	2
Larry Perkins	AUS	2
Oscar Pedersoli	I	2
Gianfranco Brancatelli	I	2
Patrick Gaillard	F	2
Corrado Fabi	I	2
Martin Brundle	GB	2
Brett Riley	NZ	2
Claudio Langes	I	1
Roberto Ravaglia	I	1
Roberto Moreno	BR	1
Philippe Streiff	F	1
Michael Korten	D	1
Richard Dallest	F	1
Mike Thackwell	NZ	1
Derek Warwick	GB	1
Derek Daly	IRL	1
Elio de Angelis	I	1
Beppe Gabbiani	I	1
Terry Perkins	AUS	1
Renzo Zorzi	I	1
Freddy Kottulinsky	S	1

Most successful chassis/engine combinations 1975-1984

Ralt-Toyota	28
March-Toyota	22
March-Alfa Romeo	15
Euroracing-Alfa Romeo	10
Ralt-Volkswagen	10
Martini-Alfa Romeo	9
Martini-Renault	9

et cetera.



The Ralt RT3 finally hit it big in Europe in 1983.

Chassis overall successes

Ralt	50
March	34
Martini	26
Euroracing	10
Chevron	8
Modus	1
GRD	1

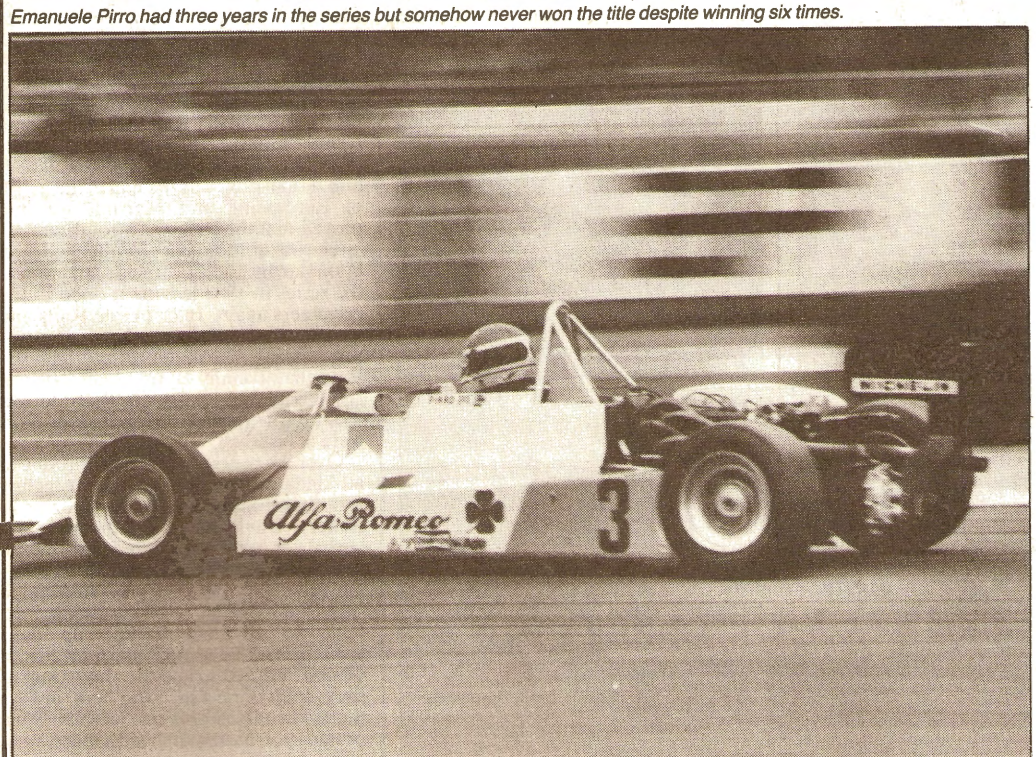
Engine overall successes

Toyota	62
Alfa Romeo	43
Volkswagen	10
Renault	9
Ford	3
BMW	1
Triumph	1
Lancia	1



Pierluigi Martini — consistent finisher in '83.

Emanuele Pirro had three years in the series but somehow never won the title despite winning six times.



Summary

Smallest Championship margin: No fewer than five times in ten years the championship has been resolved by less than ten points — twice with the leading runners on equal points:
1976 Patrese and Andersson 52.
1978 Lammers and Olofsson 71.

Biggest championship winning margin: 39 points, Alain Prost, 1979.

Most wins in a season: 8, Mauro Baldi, 1981.

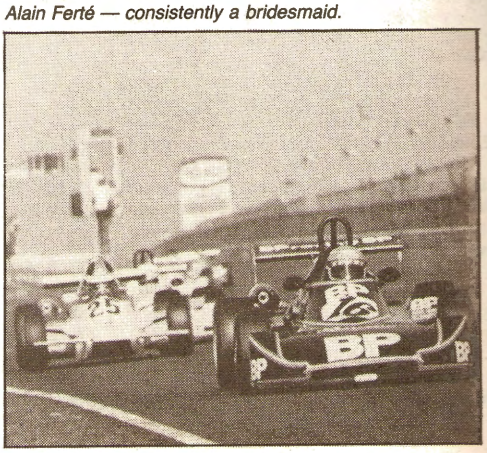
Best winning sequence: Alain Prost won four consecutive races in 1979.

Most points in a season: Mauro Baldi scored 94 in 1981 from 15 races.

Best points scoring sequence: Pierluigi Martini 9 consecutive races 1983.

Most second places: 10 — Alan Ferté (6 in 1981).

Alain Ferté — consistently a bridesmaid.



with Patrese in a Trivellato Chevron. The year ended with histrionic scenes at Vallelunga with Patrese winning the title at the last gasp from Andersson. The two drivers actually finished equal on points, but the title was awarded to Patrese. Andersson had missed the title again. He deserved more . . .

Looking back, the next few seasons were the heyday of the series before the big combines moved in. Goodyear retained a near monopoly on the tyre front and the first round boasted an entry of some 54 cars at Paul Ricard. Once again it was Trivellato against Pavanello, and at Ricard there was sensation when a young 18-year-old Beppe Gabbiani (in only his second single seater race) beat allcomers. Beppe was one of a string of rapid young Italians. There was Elio de Angelis, Piero Necchi and Oscar Pedersoli, with opposition from the man who stepped into Andersson's mantle to lead the Scandinavians, Anders Olofsson, plus Nelson Piquet, David Kennedy and a young John Nielsen. At the end of the year however, the flashes of brilliance were not enough to gain any of these drivers the title and it was Pavanello's man — Piercarlo Ghinzani — who took the title with a string of top three placings. The grids were huge (68 at the Nürburgring) and there were signs of the French getting involved when Dany Snobeck turned up at Zolder with a Martini MK21. The car was taken to Monaco by Didier Pironi, in his only Formula 3 outing, and it won. Behind him, chaos resigned (as usual in Formula 3) and there were only six other finishers.

Having shown well in 1977 Anders Olofsson returned to the fray the following year, but found the Dutch in force, with the Roger Heavens run Dutch Racing Team of Jan Lammers, Huub Rothengatter and Arie Luyendijk in trusty RT1s. "The racing was much better than it is these days," remembers Heavens, "nearly everyone was on Goodyears, and there were lots and lots of accidents. In those days the cars were so close together it was bound to happen. I remember at Monaco the whole 20 car field ran nose-to-tail like a train." One disaster in particular stands out. "It was at the Osterreichring in the snow, 11 cars went off at one corner, and just stacked up at the side of the track — including the entire Argo team. The drivers all got out and wandered back laughing about it." The same thing happened at Knutsdorp, although on this occasion there were only seven cars involved.

The '78 title went to Jan Lammers, but the opposition was strong, with Michael Bleekemolen, 22 year old Teo Fabi, and perhaps more importantly the French began to drift in with Patrick Gaillard, Jean-Louis Schlesser and a young man called Alain Prost. As two years previously, it all came to head at the final round of the series at Vallelunga; Anders Olofsson and Jan Lammers were both in with a chance of the title, and the Swede was punted off into the sand. At the end of the day, incredibly, the two drivers were tied on points, and the title went to Lammers who had accumulated more second places over the year.

The writing, however, was on the wall and in 1979 Alain Prost, in a Renault-engined Martini turned up and pulverised the opposition. The big combines were moving in, and the privateers, struggle as they might, could not keep up, despite spirited showings from Michael Bleekemolen, and another Swede destined to go to F1, Slim Borgudd.

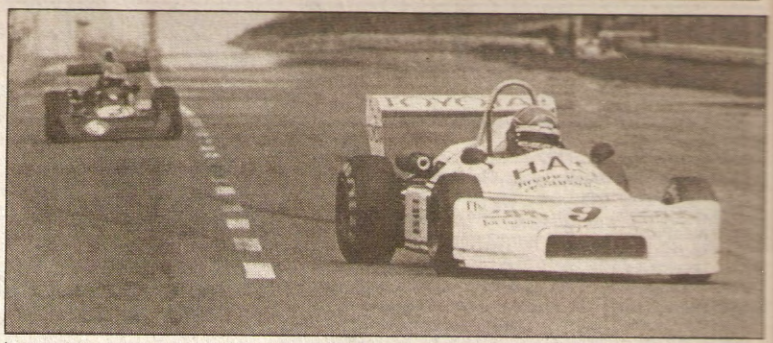
Among the young drivers who had to sit and watch Prost were the men who would form the backbone of the series for the next two years, Michele Alboreto Thierry Boutsen, Mauro Baldi and Philippe Streiff, who were joined in 1980 by Philippe Alliot, Alain Ferté, Kurt Thiim and Oscar Larrauri. The competition that season was increasingly restricted to the works Martinis and the Marches fielded by Pavanello. Tyres became increasingly expensive as M&H, who had been around on the fringes for years, and Goodyear fought it out. There were only five drivers in with a chance — Mauro Baldi, Michele Alboreto and Chevron) and Philippe Streiff in a Ralt. Thierry Boutsen and Philippe Alliot in Martinis. Budgets rose to over the £100,000 mark, and the others were left standing, despite some fine privateer showings from Kurt Thiim (in an old Chevron) and Phillippe Streiff in a Ralt. Alboreto took the title, and the following year Euroracing set about retaining their title with Baldi as their number one.

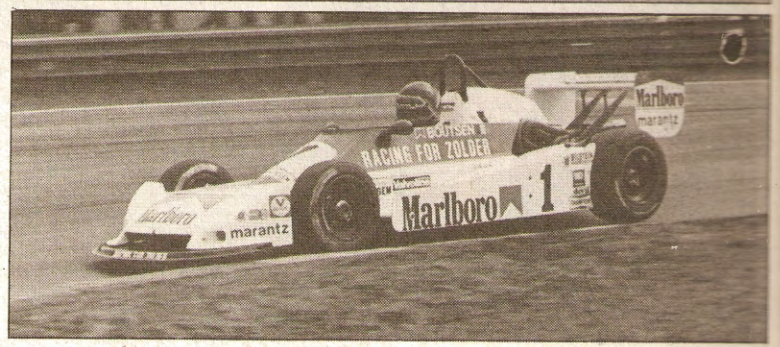
Mauro Baldi is, in terms of wins and points, the man who would seem to have been the best of them of all in European F3, but he had huge advantages over the rest. Euroracing did a deal with Michelin and received free tyres. Baldi simply disappeared into the distance. Behind him frustration boiled over with wild driving, protests and bad feeling. Despite this, the signs were that competition would be even better in 1982 with Avon, Bridgestone and Pirelli all looking to usurp the Michelin position, Ralt's RT3 clocking up its first win, and Dallara too looking for a way in.

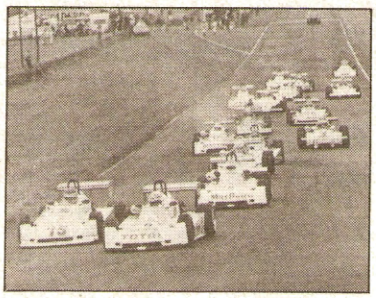
It was not to be. 1982 saw the withdrawal of March cars, but Euroracing re-jigged the 813, named it a Eurorac ing 101 and disappeared again with Oscar Larrauri taking the title from teammate Emanuele Pirro. The Martinis struggled to compete, but the Ralts began to appear in increasing numbers in the hands of Paolo Giangrossi, John Nielsen and James Weaver. "We had absolutely no money," remembers James, "but Yokohama tyres wanted to get into the series. We won at Donington, and then later in the year headed down to Nogaro. We were staying in a bed and breakfast place paying about £2.50 a night, ringing up England trying to raise some money to keep going on to Jarama. We won at Nogaro, but were stuck in the middle of France without a penny to our names. If it hadn't been for the prize money, we'd probably still be there now!" The Europeans however did not seem to be particularly impressed, and it was not until Jarama that they began to take notice of the Ralt and Yokohama tyres. "Larrauri had the best rubber Michelin had available, and we still beat him. I think that was the nail in the coffin of Euroracing and Martini, we had proved that the Ralt was a good car."

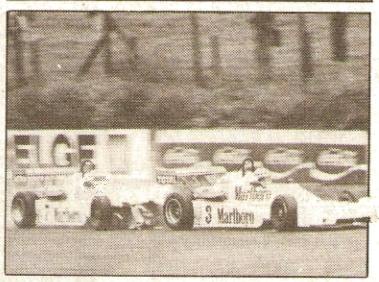
The warning did not go unheeded, and both Martini and Euroracing abandoned the series in 1983 leaving it open to the privateers again. In came the Ralts and the '10 Tyre rule' and the racing was magnificent. Emanuele Pirro, Roberto Ravaglia, Tommy Byrne, John Nielsen and Pierluigi Martini, all in Ralts, fought it out to the finish. . . The bad old days were at last over.

Over the years the series has produced all kinds of heroic tales, the struggling privateers (epitomised by the amazing Jo Zeller), David and Goliath tales, but perhaps a word should be said for the unsung heroes at Novamotor. The Novara engine concern won all but one title, but through it all, they supplied fairly to all, and backed up their challenge with on-track assistance from Gianni Pedrazzani and the almost legendary John Penistan, who was always there when the teams needed him. Such preparation has established a record that none of the combines could hope to match. . . ■

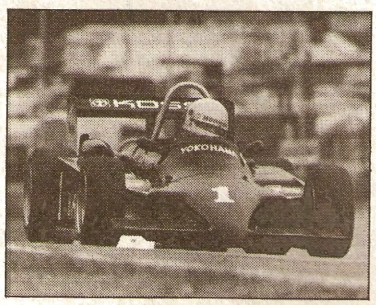




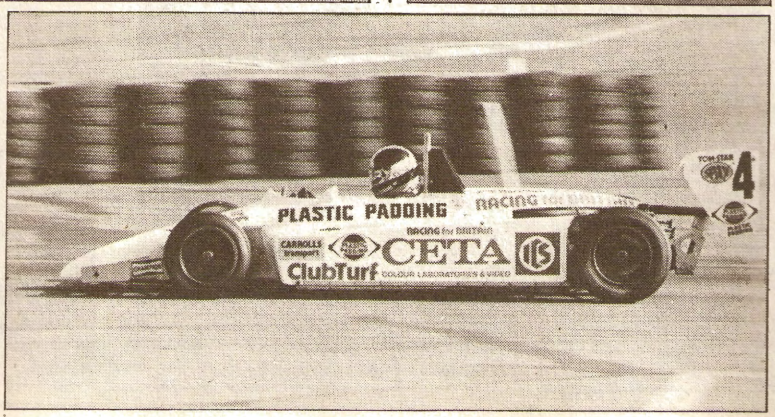








Top to bottom: 1978 Champion Jan Lammers in his Racing Team Holland Ralt RT1. Thierry Boutsen 'Racing for Zolder' at Zolder in 1980. A famous incident at Croix en Ternois 1981: Philippe Alliot squeezes out Emanuele Pirro at the start as his team mate Jean-Louis Schlesser follows, although later in the race Alliot is despatched into the barriers when his team mate lost his brakes. The two were running first and second at the time! The story of 1982, Oscar Larrauri's Euroracing dominated. Here 'Poppy' leads the Martini of Didier Theys. In 1983 Tommy Byrne was twice a winner for Eddie Jordan. The most sponsored car of them all, James Weaver won three races out of four in 1982.



Race proven for streetcred

TIFF NEEDELL joined Jim Busby and the BF Goodrich Lola-Mazda team for track and tyre testing in the USA

Having visited, viewed, experienced and seen every other type of research and development used by BFGoodrich to develop their road tyres (see *Industry Insight*) the final test of their product came at Riverside International Raceway California where I had the opportunity to drive one of their team's Lola-Mazda T616 Group C2/IMSA GTP sports cars. BFGoodrich have always believed that motor sport forms a vital element of road tyre design and after 13 years of racing their T/A High Tech radials in standard street legal form, 1984 saw the first appearance of a BFGoodrich slick racing tyre. Named the Experimental T/A, and used as a radial research tyre, this tyre does, however, retain exactly the same construction as their current top of the range tyre — the Comp T/A. Handicapped by a 30 per cent weight penalty due to this construction, the BFGoodrich slicks have performed admirably in their first year and took the C2 class win at Le Mans as a high point of the year.

It was after Le Mans in 1982 that the idea of the slick Experimental T/A was first mooted. Jim Busby and Doc Bundy had just taken a 924 Porsche Carrera Turbo to victory in the IMSA GT class, finishing 16th overall, running on standard Comp T/A radials and the question was what to do next. Busby had a meeting with Jim Pursley, the Vice President of Marketing Services, and the planning of the 1984 season began to take shape. Having made their mark on the international racing scene, BFGoodrich wanted to stay there and slick-tyred prototype sports cars were the only option.

To leap from production tyres for road cars to rubber for 600bhp Porsche 956s would probably have been rather ambitious and BFGoodrich, under the guidance of Jim Busby, wisely chose to move into C2 in a joint venture with Mazda. Since the end of 1980 BFGoodrich had entered RX-7s in IMSA GTO and the same 13B rotary engine was well suited to the C2 regulations. With its lightweight, and a reliable 300bhp, it was about right for BFGoodrich's requirements — steady undramatic finishes.

Busby did the usual shopping around for a chassis and found Lola most sympathetic to his needs. The T616 was virtually designed in liaison with Busby's ideas and the requirements of the BFGoodrich tyres — for this year they will have to adapt to their Porsche 962s, but for their first season it was better to buy a chassis designed to meet their requirements. T616-01 was delivered in June 1983 at the same time that Mazda were proving the engine choice by winning C2 at Le Mans with their own chassis.

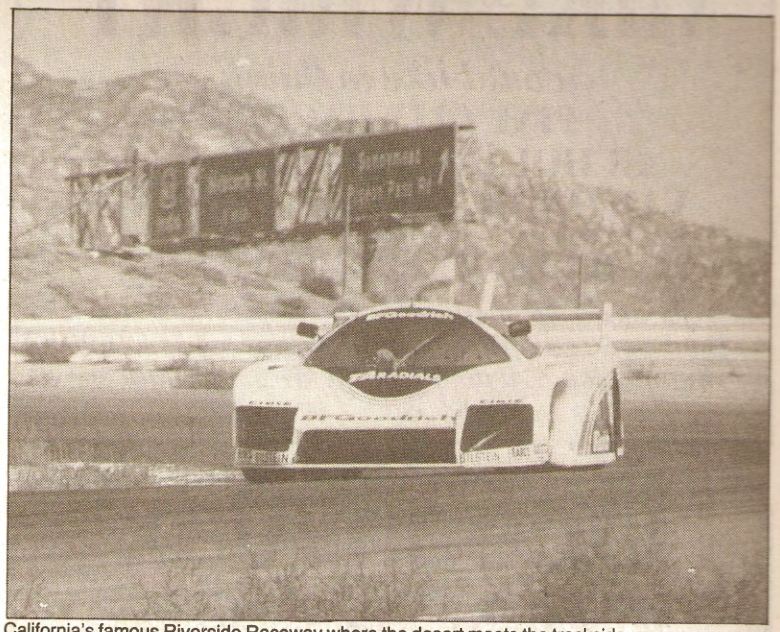
Jim Busby Racing, who run the team from their Laguna Beach base in California, took delivery of chassis 02 and 03 before the team's first race at Daytona at the beginning of February this year. Two other 616s were built, one for the ambitious American 'plastic' engine project and a second, also for IMSA in America, powered by a turbocharged six-cylinder Nissan engine. Jimmy Tully, who managed Ron Dennis's Formula 3 entries in the late seventies and early eighties, is the team manager, with Steve McNaughton chief mechanic on one chassis and another British 'refugee' Alan Turner in charge of the other.

While running two cars in Europe and one in America, the team numbers were up to some 17, but with the American car 'retired' to the showroom after Watkins Glen, the week after Le Mans, this had dropped to 11 by the time of our test. Indeed, for a team that entered a maximum of two cars for any one event, they almost seemed to have more drivers on call than mechanics — a fact which, deliberate or not, helped the BFGoodrich Team steal maximum publicity.

In all, nine drivers drove for the team in the 15 starts the Lola-Mazdas made at nine meetings during 1984. Jim Busby naturally drove in all nine events with fellow Americans Rick Knoop doing eight and Pete Halsmer five. Austrian Dieter Quester and Dutchman Boy Hayje both did four races, American Ron Grable two and Japan's Yoshimi Katayama joined Americans John O'Steen and John Morton for a one-off class winning drive at Le Mans.

From their 15 starts the BFGoodrich Lolas were classified finishers 11 times with two wins, one second, two thirds and a fourth in the WEC C2 class and two fifths, a sixth, an eighth and 17th overall in IMSA races where there is no division in the prototype GTP class. They were unclassified once at Monza, due to accident damage, and retired three times due once to the gearbox, once the electrics and once (at Daytona) due to engine failure.

Riverside Raceway is about 30 miles inland from the glittering seafront at Los Angeles and its dusty pit lane looks the same in reality as it has done in the innumerable Hollywood epics filmed there over the past three decades as the hero smacks the heroine on the lips and disappears to his fiery destiny. Its dusty days, however, are numbered as the housing estates appear on the horizon like Indians on the war path. Happily, motor racing is due to move to another site nearer Los Angeles where a new circuit is to be built.



California's famous Riverside Raceway where the desert meets the trackside.

Sadly, I doubt if the new circuit will be able to match the old for character or challenge. Inevitably, modern designed circuits lack the unexpected tricks of the old circuits which often followed an old dirt track or path. Riverside looks easy but each 'turn' has its very own character and there aren't any corners where you drive them once and say "Well that's the correct line — there". With three 2nd gear corners, a mildly banked 180 degree loop in 4th and some esses in 5th it certainly sounds a doddle but is actually quite interesting — especially as a trip off the tarmac takes you on a very rough ride through some *very* rutted desert!

Best laid plans

As with all best laid plans, our test of a Lola-Mazda T616 was not with the intended race car but with the slightly neglected American 'showcar'. For reasons better known to themselves, the Japanese had kept the team's two race cars for nearly four weeks after the Fuji WEC round — and, along with the cars, all the spares that could have been used to update the 'showcar' to race specification! Still the Californian sky was clear blue, the temperature was in the eighties, it was late October and it was a long way from my last test in a pair of Formula Fords at Snetterton!

When we arrived, Jim Busby was pounding round trying to set the car up as best he could, but with no spare springs or anti-roll bars it was proving difficult. They had warned me in advance that it would only be the show car, but if I hadn't been told, I wouldn't have noticed the difference, for as at any race meeting this year, the car was very smartly turned out. The circuit, however, had been prepared courtesy of the infamous winter 'Santa Ana' winds which had spent the previous day liberally coating the track with the contents of the surrounding desert — a sand 'rooster tail' followed the car wherever it went and getting out of the 'groove' that Jim had so kindly cleared was unadvisable!

Having got the car the best he could, Jim eased himself out of the cockpit and gave us a guided tour of the very neat Lola. The handling problem was created by the fact that there was only the tallest 'high downforce' rear wing available and the correct springs and roll bars were . . . in Japan. So we were to run with the rear wing as flat as possibe, the front on maximum, the rear anti-roll bar fully stiff and the front full soft — and still have to live with some understeer! Two other rear wings were used this year, the ultra low 'trim tab' at Le Mans and a medium height everywhere else with 'our' tall wing only used around Miami's street circuit.

The T-616 is an aluminium honeycomb monocoque with fibreglass and Kevlar bodywork and carbon fibre honeycomb ground effect tunnelling underneath. The front air intake, between a conventional splitter and an adjustable front wing, leads to a bulbous airflow divider that splits the flow up onto the windscreen and down into the venturi flow. The Lola uses the more popular 'single tunnel' system under the Group C legal flat bottom area — which stretches right across the car — and then divides into the exit tunnelling either side of the engine and gearbox.

The chassis has room for the IMSA legal 120-litre fuel tank, although this must be reduced for WEC races, and can run for 1hr45mins in this condition — a big advantage in the three hour IMSA races where only one stop is required to most of the opposition's two. The suspension is fairly conventional, front and rear, with outboard A-arms at the front and outboard control arms at the rear, just above the venturi tunnelling, with the spring/damper unit located at the top by the cross-beam. Bilstein gas dampers are used all round and we used 600lb front and 1200lb rear springs on the day. Single twin-pot AP calipers are used all round for braking and the Gotti wheels are 13×11 inch fronts and 13×14 inch rears.

The radiators sit in front of the rear wheels, fed by ducts in the top of the doors, and they seem to dwarf the tiny rotary engine lying between them. The 13B peripheral port Mazda rotary engine is mounted on a sub-frame and, weighing a mere 105kgms, helps the Lola maintain its regulation minimum weight of 700kgms. The actual volumetric displacement of 1308cc is doubled to 2616cc for racing regulation purposes and produces the same 300-odd horsepower as full blooded Formula 2 2-litre racing engines. These 'Racing Beat' tuned works-assisted engines have been known to run for 3600 miles but they are normally rebuilt after 20hrs running.

With Bosch mechanical fuel injection and an AP twin plate clutch, the power is fed to a Hewland FGB five-speed

The Mazda with the high rear wing.



gearbox complete with Salisbury limited slip differential. The reliability of these units is certainly impressive, although one blown engine at the Daytona 24 Hours this year was a disappointment but otherwise the engines never let them down. The rotary motion minimises vibration and thus helps the rest of the chassis to survive these marathon events.

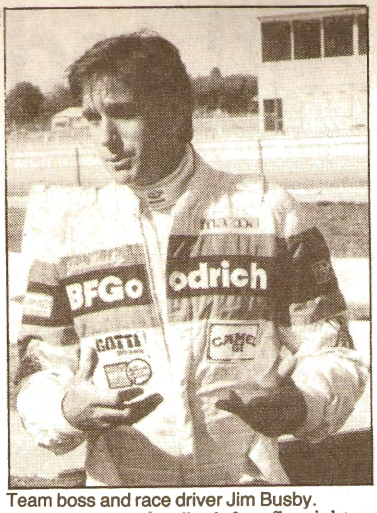
Driving in luxury

Inside the cockpit the stretched-out driving position is a positive luxury with the weight of the steering not requiring the bent arm muscle pose of most modern ground effect cars and the tiny engine probably allowing the designers to donate a little more space to the least of their concerns . . . the driver! The instrument panel is mounted up away from the monocoque dashboard and looks like a single seater's layout with the rev counter and water/oil/fuel/temperature/pressure gauges visible through the top half of the Momo steering wheel. The ignition, indicator, light and wiper switches are stretched out to the left on the dashboard and the adjustable brake balance is down to the right.

With the seat already set for the six foot Busby I slotted in nicely and soon felt quite at home; once I had a rough idea of the direction the track chose through its dusty surroundings. The steering, with a dusty track and an understeering car, was initially *too* light, the handling was hardly confidence-inspiring as the conditions left you wondering if there was any grip at all at the front and the lightness encouraged you to put on *too* much lock to counter conditions which really weren't as bad as they 'felt'.

The BFGoodrich Experimental T/A Radials, which were the main reason for the test, certainly felt no different to 'racing construction' racing tyres with no 'squiggle' or white lining effect as the car rode the varying cambers and surface changes of the 3.25 mile circuit and none of the steering vagueness often felt on new or cold racing radials. It was also possible to throw the car into an oversteer — which can often be fairly drastic with a chassis that's doing its best to understeer straight on — and the Lola 'came back' from some very wild angles. The breakaway was also predictable and gave plenty of warning.

A lap of Riverside sees you cross the start-finish line in front of the pits just as you change up to 5th gear. At the end of the pits there is a bumpy and blind left-hand kink easily taken flat out and then a short straight to 'Turn 2' — the beginning of the 'Esses' which I felt should be re-named the 'Snakes'. You reach 8000rpm in top before dabbing the brakes for the right handed 'Turn 2' that's



Team boss and race driver Jim Busby.

then followed by a flat left, a flat right, a *tiny* lift right, a flat left and a flat right — all done in 5th — before braking and dropping to 3rd for the left handed approach to Turn ? . . . 6! I guess you take your pick as to which of the esses you name 3, 4 and 5, but whatever, the arithmetic doesn't add up!

Desert problems

The problem with the Esses is that you can hardly ever see the edge of the track such are the cambers and the fact that the track edge is unmarked and seems to merge with the desert run-off. Certainly this section is a major feature of the track and such a series of high speed top gear corners does give a chance to the men to separate themselves from the boys — in the 300bhp Lola it was interesting, in a 600bhp Porsche 962 it'll be another story!

'Turn 6' is an awkward uphill-entry right-hander with the apex on the crest of the hill and then a long wide apex. Taken in 2nd gear the entry is fairly obvious but cresting the apex with the car positioned at the wrong angle could lead to all sorts of problems! It was here, and at the next two long yet wide 180 degree 2nd gear corners, that I found the rather wide screen/door pillar coming just where I wanted to look, but otherwise the Lola visibility was excellent.

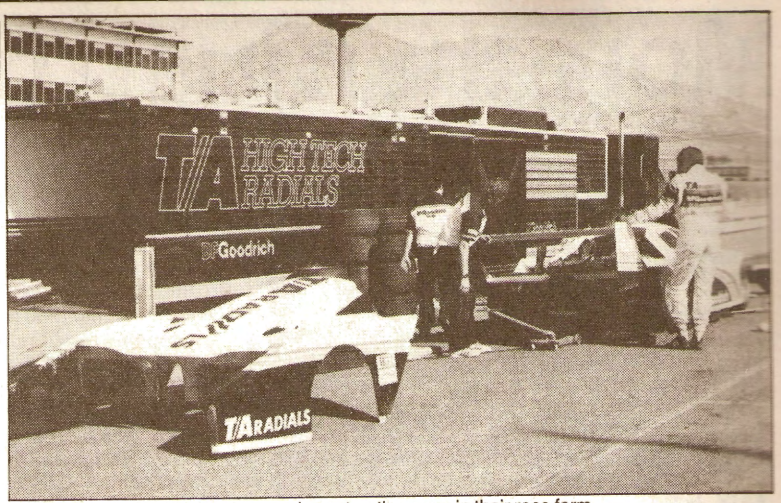
The exit of 'Turn 6' saw the need to grab 3rd gear before you'd finished the corner — a bit like exiting Coppice at Donington with the crested apex and wide exit. Up to 4th gear on the straight leading to 'Turn 7', a totally blind left hander over the top of another crest. This time you brake and drop to 2nd just as you approach the crest and then, as soon as you're over the top, you have to dive for the downhill apex almost before you can see it. You exit at 8200rpm with a wag of oversteer trying to avoid the edge of the track where tarmac becomes desert.

Again only 4th gear is reached before 'Turn 8' which is the trickiest of the three 2nd gear turns. The braking is done across a right hand curve just as the 'Sports Car Long Course' re-joins the 'Stock Car Course' which takes a short-cut straight from 'Turn 6' to 'Turn 8'. Having got down to 2nd gear and turned into the corner, it then promptly tightens up even more and you always seem to be heading for the desert and not this tight apex right at the critical moment. Exiting the turn down an adverse camber with plenty of opposite lock, the edge of the track races up to meet you with a gaping drop from tarmac to desert to really ruin the kerb-loving driver's day. At the same moment, the track flicks left to start the long back straight so you almost deliberately over-correct the oversteer which gives you a pendulum 'tank-slapping' effect and flicks the car in line for the straight.

As ever the exit from 'Turn 8' is critical for good speed down the following straight in order to make an overtaking opportunity. The straight is very wide indeed and takes you through a gentle left hand curve just before the approach to the final turn — number 9 — flat out in 5th at 8500rpm. Without wild understeer, 'Turn 9' should be a dab of the brakes, a drop to 4th gear and then power hard on all round this mildly banked right hander. As it was, and especially with this turn being lined by 'ye good olde brick wall', it was a rather messy dab-slide-lift-dab-slide-lift as the front end washed out towards the concrete and a lift of the throttle was necessary to tuck it back in.

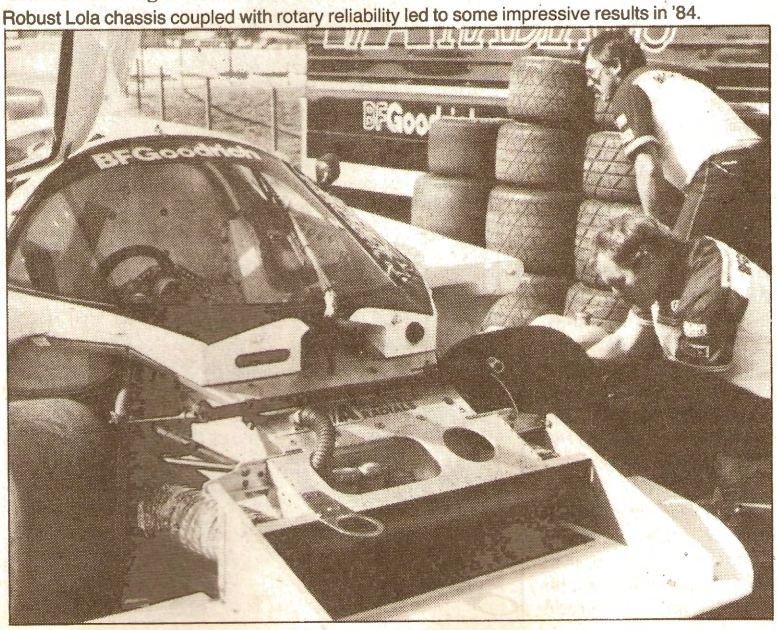
The high speed 'Turn 9' and the esses were both badly affected by the aerodynamic imbalance of the Lola and the turn-in to the slower corners was also poor. However, learning the 'feel' of the car and discovering there were few vices soon led to some rather over-the-top driving techniques which flicked the car into oversteer at the apexes of turns 6, 7 and 8 and created some easily controlled power slides. Driving 'properly' simply asked for a power understeer that led only to a dusty encounter!

It was frustrating not to be able to get stuck into a good day's testing, adjusting the car and having the satisfaction of seeing the lap times improve but, as ever, it was enjoyable to drive another different car on another different racing circuit. The ultimate test of BFGoodrich tyres *does* provide information to improve the future breed of road tyres and BFGoodrich have certainly spread their word via last year's Lola-Mazda racing programme. This year they join the big boys with a pair of 962s and a direct comparison with the performance of identical cars on special racing construction tyres. I wish them well. ■



High Tech radials are based on road construction even in their race form.

Robust Lola chassis coupled with rotary reliability led to some impressive results in '84.



BFGOODRICH-MAZDA LOLA T616 SPECIFICATIONS

Chassis	Lola T-616 Monocoque, aluminium/carbon-fibre honeycomb
Engine	Mazda 13B rotary, two rotors, in-line Maximum power (approximate): 300hp at 8500rpm Maximum torque (approximate): 182lb/ft at 8500rpm Displacement: 654cc × 2 = 1308cc Compression ratio: 9.4:1 Intake system: Peripheral port Fuel injection: Bosch, mechanical Lubrication: Dry sump Cooling system: Vane-pump, water circulation Ignition system: Mitsubishi twin transistor capacitive-discharge Alternator: 12volt Weight: 231lbs
Transmission	Hewland FGB transaxle Five forward speeds plus reverse Limited-slip differential
Steering	Rack and pinion, Lola-built
Front Suspension	Independent, unequal-length A-arms Bilstein coil-over gas shock absorbers Twin-blade 1.5in anti-sway bar
Rear Suspension	Independent, single lower control arms Bilstein coil-over gas shock absorbers Cockpit-adjustable, twin-blade 1.0in anti-sway bar
Tyres	BFGoodrich Experimental T/A Radials Front: 275/35VR13 Rear: 385/35VR13
Wheels	Gotti, three-piece modular alloy Front: 13×11in Rear: 13×14in
Brakes	Outboard, ventilated discs with cooling ducts Lockheed four-piston magnesium calipers Ferodo DS11 pads
Fuel System	Capacity for IMSA: 120lts Capacity for World Endurance Championship events: 55lts Reserve capacity: 2.8lts Triple Facet low-pressure feeder pumps, plus Bosch twin high-pressure pumps
Clutch	Twin-plate, racing type
Safety Equipment	Six-point, Sabelt safety harness Halon fire extinguishers: 5.0kg for driver's compartment 2.555kg for engine compartment
Dimensions and Capacities	Front track: 59.5in Rear track: 60.5in Wheelbase: 104.0in Height: 39.0in Length: 185.3in Width: 78.5in Weight: 1543lbs
Radio	Motorola, military-specifications, two-way system
Body	Fibreglass, five-piece Laminated windscreen Single, full-sweep Lucas wiper/washer

More than just round and black



There is more to a tyre than rubber and steel belts, as TIFF NEEDELL discovered on a visit to BFGoodrich

Of course everyone knows that a typical two-ply polyester steel belted radial tyre consists of 25% Carbon Black, 21% Styrene Butadiene Rubber, 18.2% Natural Rubber, 7% Oil, 5.7% Non-black Filler, 5.6% Belt Wire, 5.6% Cis-polybutabiene, 4.2% Curatives/Protectants, 2.8% Polyester, 2.8% Bead Wire and, of course, not forgetting the 2.1% Halobutyl Rubber.

You didn't? Well now you do. However, I recently had the opportunity to visit the BFGoodrich World Headquarters in Akron, Ohio, USA and discovered that a lot more than that goes into the manufacture of one tyre and I hope the following insight will go some way to explaining the vast background, in terms of research and design, that builds up to the moulding together of those raw materials.

BFGoodrich are a relatively new name in this country and yet by concentrating on the high performance tyre market and proving their product on the race tracks, primarily with Colin Blower's production racing programme, they have a rapidly growing reputation for producing an excellent range of Comp T/A high performance 'V' rated low profile road tyres. The 'V' rating is of course the European standard that the American manufacturers have had to satisfy for tyres to be used at speeds above 130mph. They also produce an 'H' rated Euro T/A together with chunky on/off road All-Terrain T/As and Mud-Terrain T/As.

They may have only been in England some four years but BFGoodrich have been around for a lot longer than that. To most Europeans Akron, Ohio is synonymous to Goodyear, and indeed they set-up there back in 1898, before Firestone and General made the place the tyre capital of America. BFGoodrich beat them all to it when Dr. Benjamin Franklin Goodrich set up shop way back in 1870. Mind you, they're all put in their place by the real founder of Akron industry — Ferdinand Schumacher made the town famous with one Quaker Oats Company set-up in 1854! We even stayed in the Quaker Square Hilton which is built *inside* the mills and silos of the original cereal factory — not a square room in the place.

Of course, Dr. Goodrich wasn't manufacturing tyres in those days but he was already establishing the company's reputation for innovation by producing the first cotton-covered rubber fire hose. Indeed, Goodrich claim more than 200 'firsts' in the field of rubber and chemicals, with a list that includes many of the major contributions to the rubber industry since the discovery of vulcanisation of rubber in 1839.

In 1896 BFGoodrich was commissioned to make some pneumatic tyres for automobile pioneer Alexander Winton and these were to be the first ever made for a car destined for commercial sale in the US. In 1899 and 1906 the BFGoodrich rubber research laboratory made two important breakthroughs, firstly by developing the alkali process for reclaiming rubber (a valuable economic process that reclaims more rubber today than all other methods combined) and then discovering organic accelerators. This latter breakthrough is regarded as the most important since that discovery of vulcanisation 67 years earlier. These accelerators reduce the time of vulcanisation by as much as 75% and increase tensile strength and durability.

By 1906 tyres were BFGoodrich's main business — although in 1899 they produced the first golf ball with a wound-rubber-thread centre! In 1910 they produced America's first cord tyre — the 'Silvertown' — and made another discovery that changed the appearance of car tyres for ever. Until now, car tyres had mostly been white, but experiments with a colouring pigment known as carbon black showed not only a colour change but a distinct improvement in the abrasion-resisting properties of rubber. Ten years later, all car tyres were black and the average mileage of a tyre had risen from 3,500 miles to 13,000 miles, and the price had *dropped* by nearly a sixth.

By 1940, convinced that war was on its way and worried about American rubber supplies, BFGoodrich had produced the first man-made rubber tyre on sale and they had discovered a method for plasticizing polyvinyl chloride — the birth of PVC. The synthetic rubber developed for the man-made rubber tyre also brought forward the tubeless tyre in 1947, thanks to its superiority in various areas, and created another major breakthrough.

Leading the way

By the mid-sixties Europe was leading the way with radial tyre construction and BFGoodrich were the first American manufacturers to see the advantage and produced radials for American cars in 1965. As early as 1967 they developed the collapsible 'Space Saver Spare' and 'Runflat' tyres — which are still struggling for acceptance in England. By 1970 BFGoodrich were into proving their products on the race tracks, taking 'street legal' radial tyres and exposing them to open competition all over the world with John Greenwood thundering down the Mulsanne Straight in 1972 with 60-series Radial T/As supporting his Chevrolet Corvette.

In fact, as Jim Pursley, the Vice President of Marketing Services, explained, it was around that time that BFGoodrich and Detroit moved in different directions — Detroit being used to represent, as it does, the entire American car industry. The manufacturers were dozing off into a non-performance, low rolling resistance demand for tyres. The European 'H' rated 130mph tyre that could more than double the American speed limit seemed of no interest to Detroit and 'V' rating for over 130mph was for moon rockets — or perhaps Space Shuttles?!

Now, of course, the BFGoodrich experience, gained from racing and producing their 'V' rating approved Comp T/A in 1981, is standing them in excellent stead at Detroit where performance tyres are much in demand with the realization that you don't *have* to exceed 100mph let alone 130mph in order to gain benefit from the characteristics of a 'V' rated tyre. Of course, they also won the contract for the Space Shuttle tyres, but I think that had a little more to do with their reputation in the aerospace world where they've long been manufacturers of aircraft tyres, wheels and brakes.

BFGoodrich have no doubt that their racing programme has been invaluable in covering certain areas of technology that would otherwise have been missed, and this one element of background information, that is fed into the vast system of tyre design for the future, leads me into our tour of the BFGoodrich activities at Arkon, Ohio; Brecksville, Ohio; Bellefontaine, Ohio; Pecos, Texas and racing circuits all over the world.

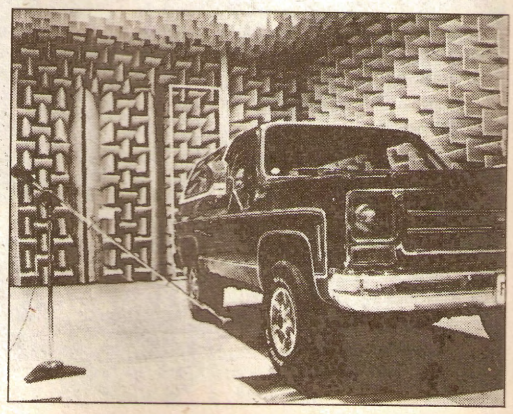
Road tyre construction

Before any tour of the departments is started you must be reminded of BFGoodrich's most cherished insistence that their racing tyres *are* of the same construction as their road tyres. It *is* quite obvious when shown a slice of the two tyres, and especially when compared to that of a true racing tyre. They quite happily suffer a weight penalty of some 30% but insist on their street construction in order that the racing programme continues to supply direct information relative to the production of future road tyres — indeed a grooved wet racing tyre as used by the BFGoodrich Group C Lola Mazda is road legal.

So, at BFGoodrich, there's no racing department at all. The sections that we visited are all much a part of the road tyre development as they are the racing development. Tyre scientist, Bill Shufflebotham, attends most races to give the team any on the spot advice, and note any of the drivers' comments, but come Monday morning it's back to the same office in Akron to deal with all tyre problems in general. Items 'extra' on the Goodrich tyre as opposed to a normal racing tyre are folded belts, nylon overheads, a rim cushion with extensive sidewall rubber, a taller or higher sidewall stabilizer and an inner liner. All these items are designed for road use durability with damage and puncture resistance of key importance — reassuring for the team's racing drivers.



Technology plays a major part in tyre design. Above: Ride, noise and vibration are computer checked. Below: The noise vibration laboratory in use.

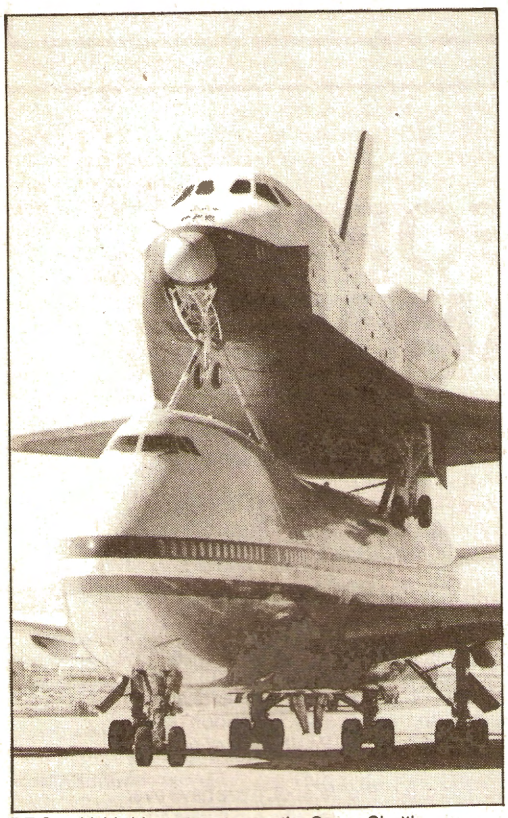


We started our tour at the test garage where the vehicle dynamics area is located along with the high-speed uniformity machine. Mike Kerastas, a tyre development engineer, guided us through his systems that investigate ride, noise and vibration. The high-speed uniformity machine was of most interest to the racing programme and one of next year's BFGoodrich IMSA Porsche 962 tyres was running on the 67" diameter 'road' wheel under the machine.

This machine can run tyres at anything from 5mph to 80mph and with a loading identical to that expected of it on the road. As it automatically balances wheel and tyre combined — telling the engineer where to add weighs later — any force variations or vibrations will be a direct cause of the tyre itself. Drumming sounds experienced in the first running of the Lola-Mazda Experimental.

Jim Stafford, tyre analysis research manager, took me straight back to my days at university when he launched into his explanation of Finite Element Analysis which is where the great computer takes over tyre design. With extravagant non-linear equations defined for each tiny element of the broken-up cross section of a tyre, computer graphics inflate, load, corner, brake and accelerate every tiny corner of the construction matching each tiny element with equations for different materials.

After lunch the much simpler yet equally important aspect of tread and mould design and styling was explained to us by department manager Strides Makris. Here the aesthetics of the design come into play — an important factor in the acceptance of a 'V' rated tyre in a 55mph country — and this department receives not only designer input but also marketing input. The 'Rubber to Void' ratio will be supplied by the engineer to ensure sufficient water displacement while the use of the tyre will dictate the general angle of the pattern block design — a snow tyre will demand as much across the tyre as possible to give traction, a dry road performance tyre more around the tread to give cornering bite.



BF Goodrich's biggest customer, the Space Shuttle.

Day two saw a departure from Akron and a short blast 'North on 77' to their research and development centre at Brecksville. First stop was a visit to the eerie and somewhat uncomfortable confines of a sound dampened 'Noise' room of the Noise/Vibration lab managed by tyre performance researchist Marion Pottinger. The room simulates open air conditions with a solid floor and walls covered in fibreglass 'cones' a metre in depth. With its 120" diameter 'road' wheel underground, this laboratory alone cost $1.2 million.

In this laboratory tyre noise is broken down into its two components — airborne and vibration fed. Most of the research is done at modest American speeds, but in any case all airborne tread noise has disappeared at 90mph.



Tyres are tested for 'feel' on a tightly coned circuit by Bob Strange, a production car race driver.

Senior research and development engineer Eric Weissman had us all a bit lost in the Optics Laboratory, and his long row of converging, splitting, enlarging and deflecting lenses lined-up to play with the intended course of a pair of laser beams had me back at university again — back row of the lecture room reading AUTOSPORT! The purpose of it all is to analyse stress by a system of photo mechanics known as Moiré fringe creation. Five hundred lines per inch are etched or imprinted on a rubber section and the stretch of these lines — that can be measured to 10 millionths of an inch — shows the particular strain on that element.

Our sixth and final research department in our sample of many was that of Thermography. As a final visit it was nice to be able to see a visual image of what was being explained to us. Here the tyre is once more run on a road wheel and an infra-red scanner picks up the temperature at any point in the tyre at simulated speeds of up to 200mph. The results are relayed to the operator on a colour television screen, plotting the temperature changes in changing colours from blue-cold to red-hot. A 60 degree Centigrade surface temperature will normally mean around 150 degrees inside the shoulder of the tyre. Different loadings and a slip angle of up to two degrees can be applied to the tyre and the important rolling power loss can be determined from this test. It also tests for flaw detection.

So, Vehicle Dynamics, Finite Element Analysis, Trend and Mould Design and Styling, Noise and Vibration, Optical Analysis and Thermography all supply information that is fed back to the tyre scientists and a picture begins to build-up.

Now you will have noticed a couple of areas of requirement not yet fulfilled and all to do with handling. Fortunately the human touch is not yet obsolete and at this stage empirical results from testing are fed into the tyre design system. There are already computerized test rigs pounding trucks over simulated rough roads with the truck standing still and the 'driver' operating the computer. These destructive tests for suspension are however less sensitive than the 'feel' required for tyre testing.

BFGoodrich have three tyre testing facilities. The first, their own, is down at Pecos, Texas and a little out of our way, while the second takes advantage of the Transportation Research Centre of Ohio (TRC). Pecos is a huge, circular, track testing facility *nine* miles round its outer circuit and the testing here is simply routine wear and durability. Twenty four hours a day and virtually all year, three shifts of drivers pound Goodrich tyres around the various courses and the information feeds back to the same Akron desks that the research work arrives on.

One of those Akron desks is that of senior tyre development engineer Bob Strange who heads his own one-man test team. Being not only a tyre engineer but also a very successful production sports car driver — this year in a Porsche 928 — Bob has developed, and is continuing to develop, systems for objectively evaluating the handling characteristics of tyre/vehicle systems. His main objectives are improved repeatability, detection of small differences, maintenance of a data base and increased testing efficiency.

With cars rigged with on-board instrumentation, Bob relates lateral acceleration with steering wheel angle and lateral acceleration with time. With cornering g-forces becoming an advertising ploy in the States this lateral acceleration becomes of importance for marketing reasons alone. One test of 'Steady State Ramp Steer at 50mph, shows peaks of 0.9g for BFG265/50VR15 tyres.

Almost all of Bob's testing is done on his own specially designed courses laid-out on the vast TRC vehicle dynamics area, which is an asphalt pad measuring 1200 by 1800 feet covering some 50 acres! The TRC is 40 miles north west of Columbus close to the town of 'Bellefontaine', pronounced 'Bell Fountain' and consequently quickly renamed 'Bloemfontein' by the English visitors!

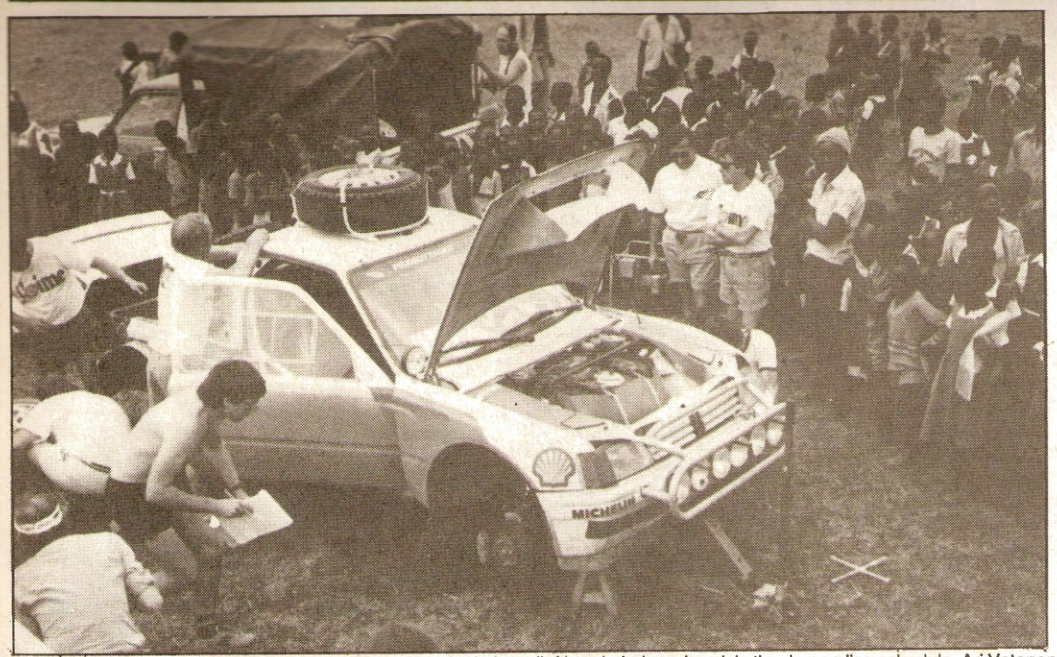
Opening in 1972 the TRC provides every type of test imaginable and is a profit-making concern open to all and sundry who wish to hire the facility. Being only 170 miles from Detroit, and with Akron even nearer, a fair bit of development is done at this facility.

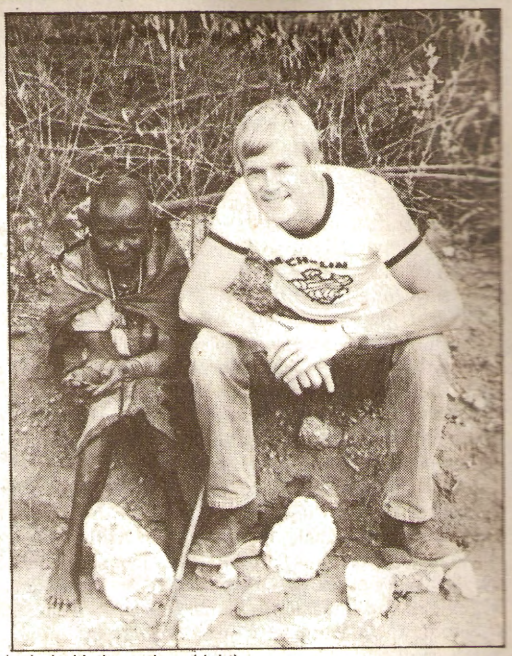
Apart from his steady steer tests done on the open pad, Bob concentrates on 'feel' in a very tightly lined, coned course that simulates every type of corner envisaged, creating tightening radius, opening radius, braking into a turn and all sorts. This course is precisely laid out time and time again and, although only allowing speeds of up to 50 or 60mph, gives a constant feedback for tyre performance under given conditions. For high speed stuff Bob visits a variety of racing circuits where he again has a set course and well established base lines.

Race tested

The third testing facility is, of course, the race tracks of the world and information is gleaned not only from their own racing team, headed up by their Experimental T/A tyres as on the Lola Mazda this year, but also from the innumerable competitors all over the world running production racing cars on standard Comp T/As. Away from road car tyres a similar process is being done with John Buffum's rally programme and the Radial All/Terrain T/A also begin used for Baja.

So the pieces of the jigsaw come together and out of it all comes a new generation of tyres with better handling and improved durability. Every piece of information is examined and considered before being used, or stored to fulfill the requirements of a future tyre. My visit certainly opened my eyes to the vast amount of background work going on in the tyre industry and I hope I have managed to impart that impression to you. It also gave to the old argument that 'racing does improve the breed'. My thanks to Dr. Benjamin Franklin Goodrich and all who followed. ■





The presence of the 205 Turbo attracted a host of local admirers (left) and, during a break in the demanding schedule, Ari Vatanen mingled with the natives (right).

Peugeot's sunseekers

TERRY HARRYMAN reveals how Peugeot went to Kenya in search of Safari testing

If you want to have sun and fun in October/November then Kenya doesn't seem like a bad place to go to. Having recently returned home from there, I can say that there is definitely a lot more sun there than in Britain at present and that everybody in our party had some fun. However, as it was a Safari Rally test programme that took us there, the 12 day sojourn wasn't all roses; in fact it was hard work, and at times frustrating, exciting, disappointing and dangerous.

Soon after our Thursday morning arrival we went down to the Peugeot workshops of Marshalls, the distributors for Kenya. On show were three cars, two of them in full African Rally spec, with 'roo-bars', roof and under-the-engine-cover mounted spare-wheels, with an extra 65 litre fuel tank mounted in the front where the spare-wheel usually resides. There were also various other little gadgets including the non-return valves in the floor to let water out but (hopefully) not in, and washers for the auxiliary lights. In fact, these were the cars that had been prepared for Cote d'Ivoire before their appearance was cancelled when it was felt that the time and money would be better spent on a full blooded Safari testing exercise. The third car was a more standard rally version that had been brought out for the use by the large party of (mostly) French journalists who had been invited along to view the proceedings.

In Marshalls' offices, Charley Pasquier and myself were supplied with the Road Books and maps, etc., that had already been drafted for the 1985 Safari to enable us to attempt the whole of next year's route. The organisers, headed of course by Mike Doughty, were most helpful and had given the team full use of their radio system so that they were in constant touch to offer every assistance. The following day was spent going through the route, marking up service points and sorting out where our 1983 pace notes could be used; less than 50 per cent would be of any worth.

On Saturday morning Jean Todt and J.P.N. (Jumbo as he's known) arrived from Paris along with the genial Dr Duby, while Andre de Cortanze jetted in from Tokyo where he'd been looking at motorbike engines. At noon with the sun blazing down, it was 'sauna' time as we headed south-east over the first sections down to an overnight halt at Taita Hills Lodge. It was hot, I can tell you, but maybe not just as bad as we'd expected.

It was immediately obvious that next year's Safari could well be the fastest ever (if it's dry!) with speeds in excess of 200 kph (125 mph) regularly seen during the early sections that were only just 'on'. Ari and I got to the overnight halt without problem but Jumbo and Charley had oil leaking onto their clutch, making it slip and forcing them to cut and run to the hotel.

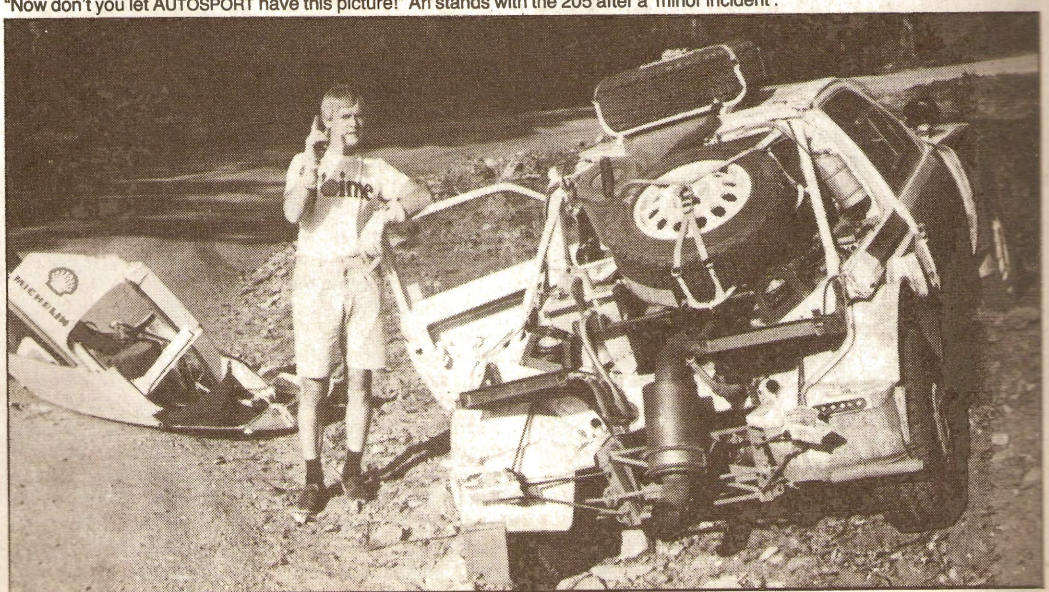
Hard, late hours by the mechanics saw both cars fully fit for an early start the following morning and we headed on down to the coast at Mombasa, firstly over an incredible new section in the Sagalla hills with the most difficult descent I've ever seen. (If it's wet it will be completely impossible!) Then it was flat out down the main road to Mariakani — averaging 200kph to a service/lunch halt, after which both cars soon hit problems. First we broke our prop-shaft — an experimental, lightweight unit — and had to crawl through to Mombasa and service, while Jean-Pierre had a front, upper wishbone break, and he had to be rescued.

The heat down there at sea-level was only just bearable as we tackled the next couple of sections on our way back to Taita, losing fifth gear and collecting a puncture on the way, but we were by now running into darkness and it got a bit cooler. Again the mechanics had a late night working on the cars and as a result we didn't get started too early the next day. First it was through the Taita Hills again, rough, tortuous and very slow, before another high-speed run up to Nairobi.

One particular section from Bura to Loitokitok via Taveta, skirting Mt Kilimanjaro and the Tanzanian border is just unreal. The first 74 kms to Taveta took us no more than 24 mins! And this on a loose, gravel road which is pretty straight but has quite a number of (un) level-crossings over the railway. The next part to Loitokitok is not just as quick but we were still averaging 175 kph with about 40 kms to go when we hit a hole in the road and broke both rear top wishbones. Naturally this reduced our speed markedly but we were just able to crawl out of the section (with 1 min to spare over the scheduled allowance) before the car finally cried enough. We now had to wait for help to come 100 kms back to us with the necessary parts and during the wait the other car limped past with a broken rear shocker — at least we were finding out the cars weaknesses!

With new parts fitted we continued on to Sultan Hamud to take on fuel before the final two sections into Nairobi. JP was now way in front of us, so that when we next hit trouble about 30 kms later, we were completely on our own — not that anybody could really have helped. The car started to misfire and then lose power altogether — just like a fuel pressure problem although the gauge was normal. For some reason Ari looked over his shoulder into the engine compartment and found a raging fire just behind us. After setting the extinguisher system into operation, we abandoned while I got the hand-held extinguisher out in a futile attempt to quell the inferno. ▶

"Now don't you let AUTOSPORT have this picture!" Ari stands with the 205 after a 'minor incident'.



Ari, meanwhile, rescued some of my belongings but was unable to get everything so the entire pace notes for the first leg and several other things in the door pocket went up in smoke. In no time at all the car was gutted — the fact that it had just been re-fuelled obviously didn't help matters! Incidentally our two non-finishing cars in Corsica and Greece have both been destroyed by fire now, this one being the Acropolis car — if they don't win, incinerate 'em!

With radio contact impossible, we hitched a ride in a Matatu (African bush taxi of kinds) back to the main road just in time to catch the service vans on their way to Nairobi so that we weren't stranded for too long. Unfortunately it isn't really known what caused the fire as everything was completely burned, but it's suspected that a fuel pipe could have been the culprit.

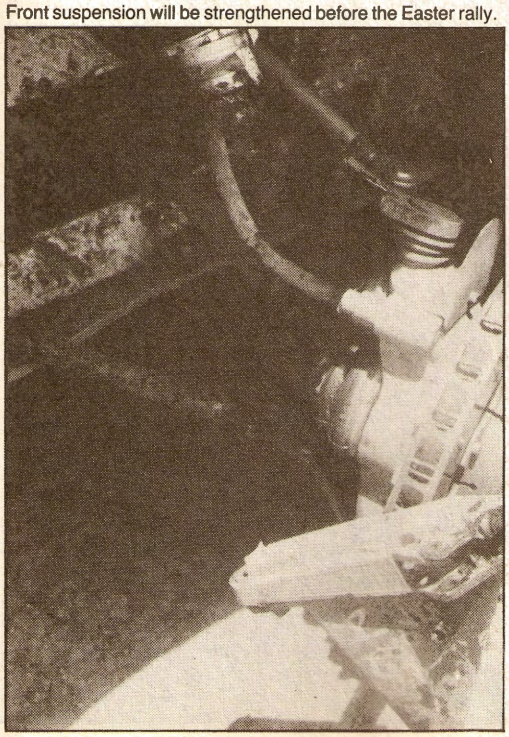
Was this the end of our personal test session? No way. Jean-Pierre and Charley 'kindly' stepped down so that we could continue with our 'fun' the following day. So Tuesday morning saw us heading north-west on the second leg with high hopes of getting a good day's work put in before the night halt at Kisumu. Such things were not to be however; less than two hours from Nairobi a roughish piece of road left us with a broken front upper wishbone — just the same as Jumbo had suffered on the second day. Unfortunately for us we were in a radio 'black spot' and although we could just hear others talking, nobody could hear us. So it was sunbathing time until they retraced the route and found us almost 3 hours later.

We were by now getting quite adept at removing the broken parts and had everything except the damaged drive-shaft (no spanners for this) removed when the crew arrived. Even so we had lost about 4 hours when we finally hit the road again and later in the evening it was decided that we should 'short-cut' our way to the Sunset Hotel in Kisumu on the shores of Lake Victoria. This we achieved with no further problems, even though we had to do one section in quite heavy rain and darkness, the subsequent mud and inability to see any major holes or bumps slowing progress only slightly.

Wednesday proved to be a good day as we climbed to Kakamega and into the Cheringanis to nearly 10,000 ft. However a 'minor' incident on the subsequent descent towards our night halt in Eldoret, meant we had to skip the final 50 kms or so and get into the town so that various bent bits could be replaced in readiness for a fresh start the next morning. By now several of the team were suffering from various little maladies, mostly probably induced by tiredness. The ever present Doc Duby tended to those in need but even his care didn't stop one mechanic from falling asleep under the car while he was waiting for one of his colleagues to hand him down a couple of bolts!

The 1985 route goes through the infamous Kerio

Front suspension will be strengthened before the Easter rally.





Terry Harryman stands with the car, holding one of the broken wishbones, and waits for assistance.

Valley on two occasions and this is where we headed on Thursday morning, although we weren't going over Cheblok Bridge and up to Kabarnet, but were taking a new road across the valley floor to rejoin the usual route at Tenges. This turned out to be quite a good road so imagine our surprise when another front, upper wishbone (left side) broke just after we'd left the Fluorspar Mines and were going through a minor drift. Again the radio didn't do its job — possibly because we were low down in the valley — and we resorted to trying to use the 'phone at the security gate to the Mines. The idea was to ring Philip Hechle in Marshalls' office in Nairobi in the hope that he could reach one of our crews through the radio relay stations and send them to us. As it took nearly two hours to get through to him, it turned out to be a waste of time, as the service team already knew we had a problem and Philip himself had heard this over the radio in his office.

It took nearly 5 hours for us to get mobile again, so that any chances of following the route to Nairobi had gone by the board. When the replacement wishbone broke in exactly the same manner about 50 kms later, our target was to get to Nairobi by any means so that some re-inforced front arms that had arrived from Paris that morning could be fitted. One small problem: all the replacement arms had now been used up so that when the service crew arrived with us after about 40 mins, a welding job was necessary before we could continue. By the time we got to Nairobi it was heading towards bed-time so that again the mechanics would have a late night re-fettling the machinery.

The third leg is identical to the second one as far as Elburgon and as we now had the strengthened wishbones and knew what the early roads held in store for us, we expected to have an easy run to start with. One should never presume such things with a rally car! Near the end of the very first section to Naivasha all drive disappeared with a bang and the engine went dead at the same time. It was another rescue job, this time on the end of a tow-rope down to a garage in Naivasha. Examination revealed that the clutch has exploded, damaging the gearbox bell-housing and the flywheel actuated ignition sensors. The replacement parts had to come from another van from further up country so we went off to Lake Naivasha Hotel with the team hierarchy and a party of journalists for morning coffee and, eventually, lunch.

The repairs took a lot longer to effect than originally thought — due no doubt to the internal damage — and it was late afternoon before we were on our way again. At a routine service halt at Elburgon another rear wishbone was found to be breaking up and by the time this had been replaced the decision had been made that we should head straight for the Sirikwa Hotel in Eldoret again. Here Jean Todt gave me the glad tidings that I was now *'en vacance'*, as chassis engineer Jean-Claude Vaucard was going to sit-in for the following day's run through the Kerio Valley and over to the Mt Kenya Safari Club. The test session would then be terminated so that everyone could relax for almost 24 hours in very pleasant surroundings before heading back to Nairobi.

Obviously the car much preferred the presence of Jean-Claude as their problems were minimal — a puncture (only the second), a detached turbo pipe, and broken engine cover mountings, which resulted in the whole ensemble lifting up like a giant air-brake at speeds over 150 kph! The Mazda 323 Estate that I was in with Charley was possibly not so happy with my presence, as close to the service halt at Rumurutti we had a 'gentle' head-on collision with the similar vehicle of Jacques Levacher resulting in a pair of 323s with very sore noses. And, honest, I wasn't driving!

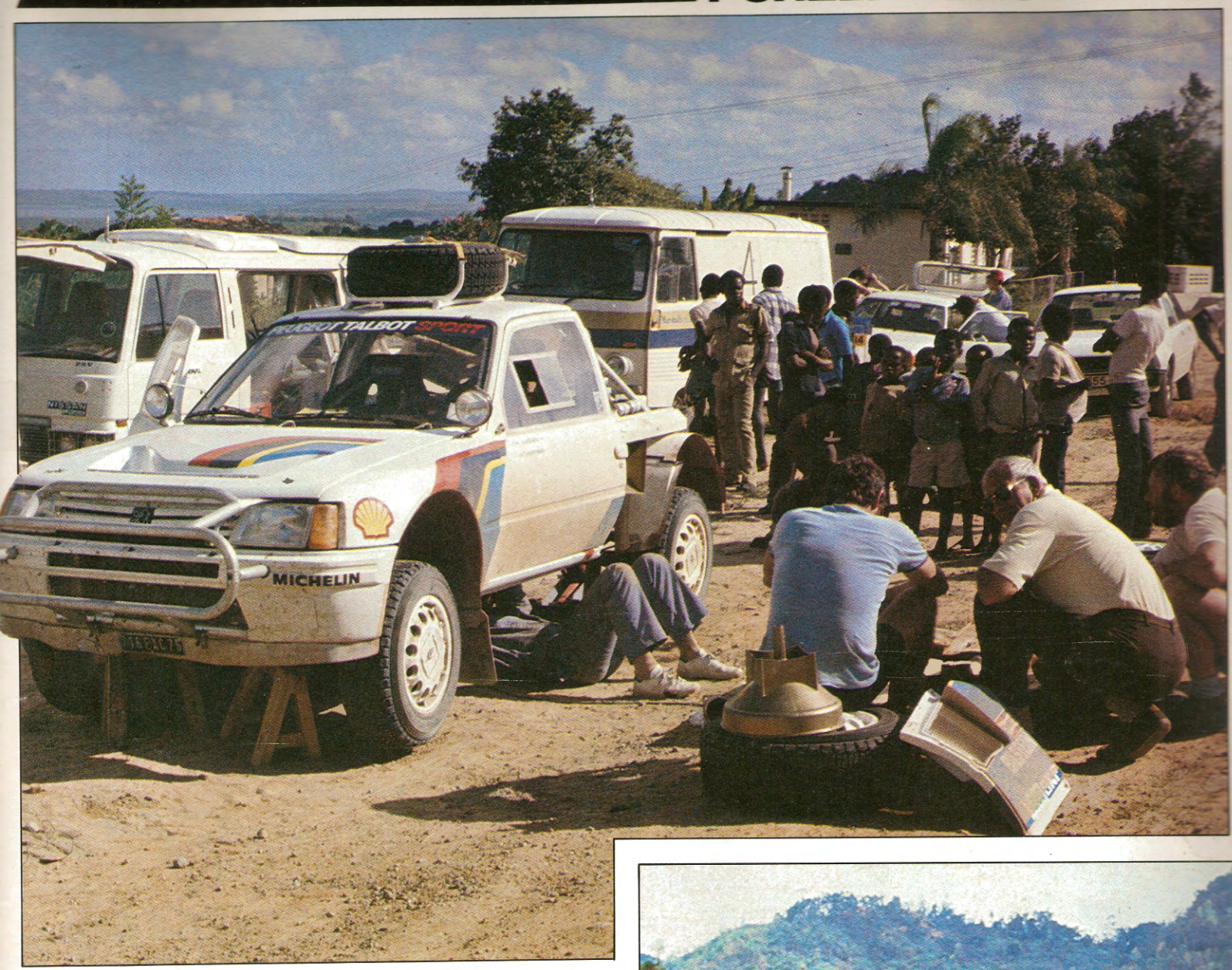
Thus the test session ended on Saturday night allowing everyone to enjoy themselves on Sunday — playing tennis, golf, and so on, or just admiring the scenery. But the drama wasn't over yet.

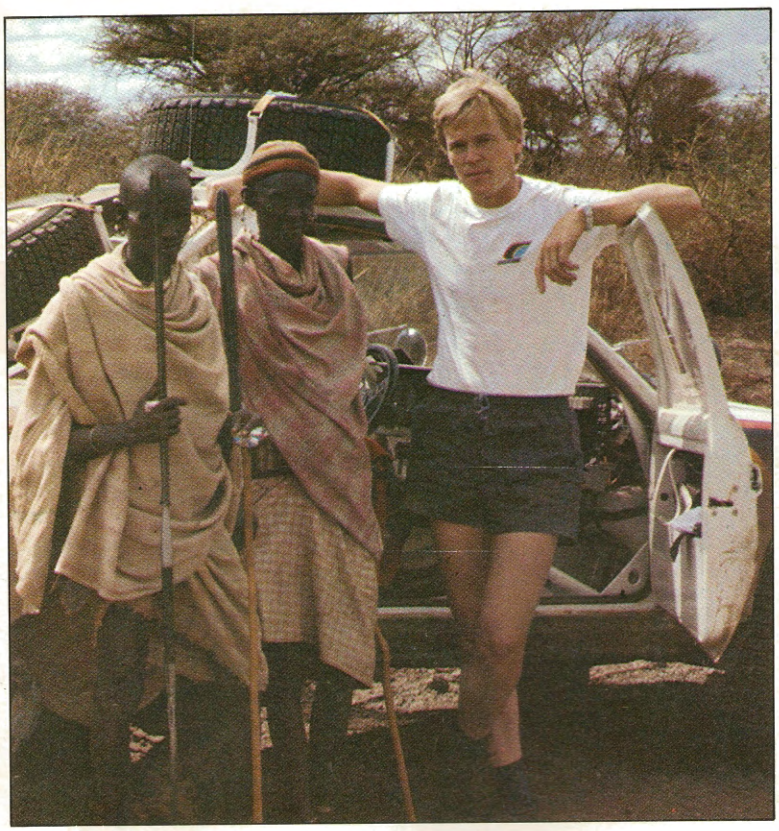
On Monday the Press 205 Turbo, which the previous week had been 'roofed' by a journalist, was again put on its side, while poor Corrado Provera, the P R supremo, rolled his loaned 504! And then to cap it all the Air France Jumbo (no, not Jean-Pierre!) that was to take us all back to Paris, had a bird-strike in Mauritius and was grounded. So everyone was put on different flights, some to Zurich, others to Frankfurt.

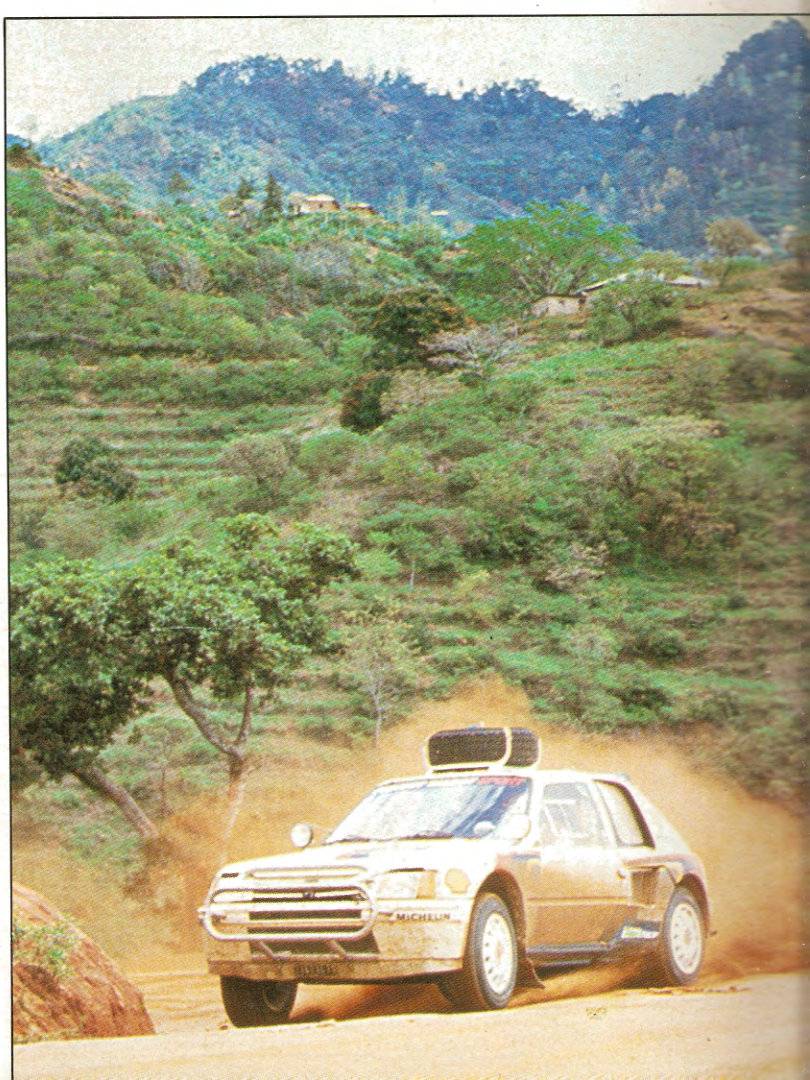
Me an' Ari, we got inna First Class section on a B A Flight direct to London, didn't we? At last something had worked out well for us, while for the engineers, it may have seemed hard work but they had gained valuable experience for the 1985 Safari. ■

FACING PAGE

Peugeot Talbot Sport personnel work on the car during its pre-Safari expedition (top). Ari seems to enjoy himself, willingly posing for photographs (bottom left) during the rest periods. The 205 with roof-mounted spare wheel and roo bars rushes through typical dry safari conditions.


PEUGEOT TALBOT SPORT
MICHELIN




MICHELIN



MAURIZIO SANDRO SALA - Madgw

BRITISH FF200



ck Motorsport - **REYNARD 84 SF**

CHAMPIONS

Autosport



Maurizio Sandro Sala's consummate talents shone again, in FF2000, the young Brazilian emerging as British champion, and runner-up Europe in his Spax Reynard.

Maurizio and Mauricio

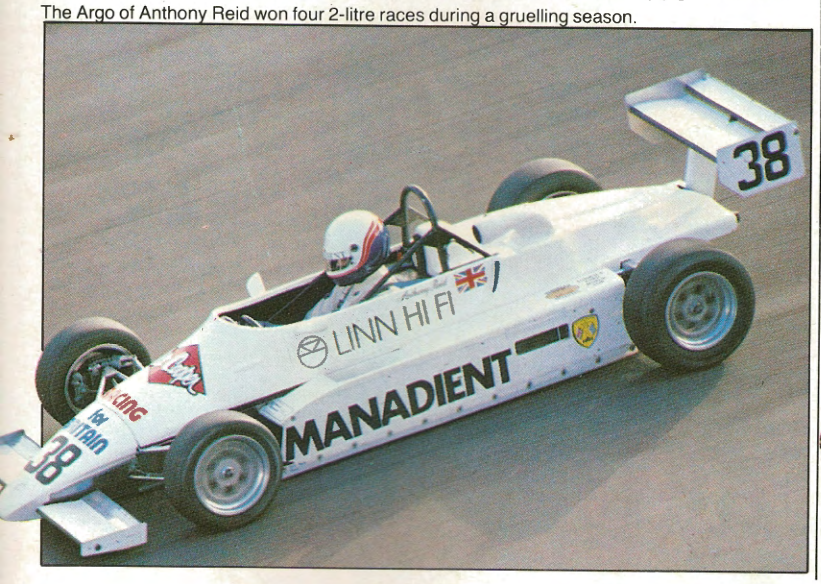
MARCUS PYE reflects on a year in which the Brazilians reasserted themselves at the head of the FF2000 pack

Ayrton Senna da Silva established a pattern in 1982, dominating the British and European Formula Ford 2000 championships in flamboyant style. By last year, with our National F3 title safely under his belt, the Brazilian was the hottest new property in the F1 arena, accepted within the hallowed ranks by those who had gasped, incredulously, at his first lap lead in the Austrian Grand Prix supporting race, two seasons earlier.

It had to happen eventually, an FF2000 graduate reaching F1! Not one, but two made the grade in 1984, for Martin Brundle cut his single-seater racing teeth in MCD's 2-litre category — albeit on a less successful note — back in 1980. The formula has become more technical and increasingly professional since then, but it is a course which many F1600 graduates choose for about half the cost of a representative F3 budget.

Sennas countrymen Maurizio Sandro Sala and Mauricio Gugelmin, both determined to continue his trend, emerged from last year with a title apiece, and are set to embark upon F3 in 1985. . . Sala seized the Racing Displays British championship — still the one they all want to win — after the hardest fought title race in years, his Madgwick Motorsport Reynard beating the similar cars of Julian Bailey, Gugelmin and Andy Wallace. In Europe, meanwhile, Gugelmin and Rushen Green Racing pipped Sala to the spoils in the 11-round EFDA promotion.

The Argo of Anthony Reid won four 2-litre races during a gruelling season.



Champions both, Alastair Lyall and Martin Donnelly in Reynards at Brands.



nterest ran high in FF2000 over the inter, although most potential competiors thought the BARC/BHRC promted British championship schedule to be ver long, at 24 rounds. This was to prove ttle problem to the wealthiest teams of ourse, but in the long run grid sizes iminished badly as the body of priateers began to feel the pinch — many onserving their relatively meagre fiances for a crack at the popular elevised BBC 'winter series'. For the econd successive season, Frank Bradey's Racing Displays concern sponsored he title race, injecting additional finance or one 'big money' (£750 for the winner) vent in each quarter of the chamionship. Otherwise, race victors made do with £100, a totally derisory figure when one notes the prize and bonus funds available to 'one make' saloon car competitors in certain series, for far less financial input . . .

Technical regulations for the formula remained the same as before, but stipulations of 30 minute qualifying sessions and 30 mile British championship races, as minima, were well received by all serious competitors. Improved media coverage was welcomed by the entrants, and did not harm the reputation of the Racing Displays series, in which 32 drivers (one fewer than in 1983) from 10 nations scored points. The television coverage of two end-of-season races was a welcome fillip to the teams, and one which hopefully will be repeated, on a more regular basis, within the national championship itself in 1985.

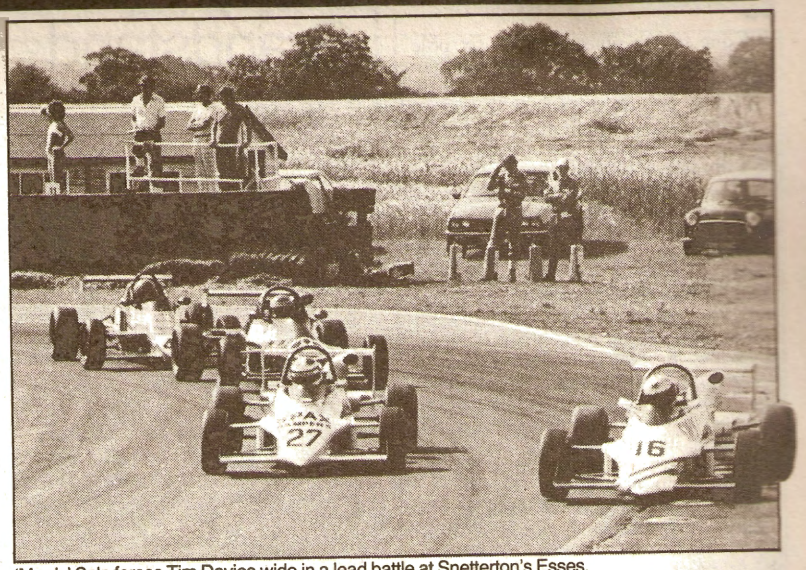
Having built up the 'senior' Ford formula to good effect over the past 11 seasons, it was worrying to note founder John Webb's apparent intention to undermine the successful FF2000 category (now run throughout Europe and North America) with a turbocharged 'alternative'. Formula Turbo Ford was not generally well received, and the lengthy development of a recalcitrant test hack did nothing to suggest that it was economically viable, if indeed there was room for another series on the crowded British racing calendar. Inevitably more expensive than FF2000, which all too few can afford at its present, professional, top level, Turbo Ford was due to start this year. Sense has prevailed, happily to record, and the idea has been shelved — if only for another season, according to Webb, who is still insistent that it will happen.

The actual racing in FF2000 varied tremendously during 1984, from processional to scintillating, but by and large the action was good at the sharp end of the field, where six or seven determined drivers did battle for the coveted British title. That Maurizio Sandro Sala eventually scooped top honours in his first season of FF2000 was a most satisfactory conclusion to an intriguing season. The Sao Paulo man should go far in the sport — and immediately into F3, together with the closest of his rivals, finance permitting!

Sala shows the way

At the start of the gruelling Racing Displays championship, the experienced Rushen Green, Penistone, Swallow and Manadient teams had fresh opposition to weigh up, in the form of championship-winning FF1600 graduates Pegasus and Madgwick Motorsport. Despite the visual opulence of the former and the resourcefulness of the latter, the establishment's first mistake was to underestimate the potential of these organisations, feeling that the newcomers would spend at least half a season learning the ropes of their new challenge. Indeed they had much to learn, but while Brian de Zille's Pegasus Motorsport team chose the season's 'wrong' car — in the Van Diemen RF84 — and failed to help itself in this sense, Robert Synge's compact Madgwick equipe pulled a few punches from the outset.

It was only two years ago, at the end of the Silverstone team's formative season, that the Old Stoic rescued **Maurizio Sandro Sala** from the obscurity of the Brazilian domestic racing scene, and Synge has nurtured his protégé's career with guile and hard graft ever since. Sala, now 26, was a popular winner of the 1983 Esso FF1600 title in his first British season, and set about his 2-litre task with similar relish and determination. Armed with a new Reynard and one Nelson-prepared engine, the fanatical and fastidious car preparation of Paul Haigh, and a modest budget — most of it earned through peripheral pursuits within the sport — this happy little band took on mighty opposition, and won. Few people gave them an earthly chance, initially, but Sala so nearly wrested the EFDA Euroseries title to complement the British crown: 'Establishment' 1; 'Underdog' 1!



'Morris' Sala forces Tim Davies wide in a lead battle at Snetterton's Esses.

Limited pre-season testing of the immaculate British Racing Green Silkolene-backed car rubbed home the urgency of the team's need to familiarise itself with the vagaries of slick tyres, wings and a more complex race 'set-up', but it was an engine problem which left them off the pace at the first meeting, Sala scratching home eighth, albeit glad to get a few competition miles behind him. The team may have posed little threat to anybody, first time out, but things were about to change — soon all those who smirked at Brands were wiping their 'Told you so' grins away.

The sequence thereafter displayed a positive and methodical approach to the formula. Third at Thruxton (with a hopelessly down-on-power engine) became second at Silverstone (despite a deflating tyre) and that psychologically important first win, at Donington. Suitably fortified, Maurizio won three of the next four rounds — and a couple of Eurorounds for good measure — *en route* to a record of nine successive top three finishes in the British championship.

The ingenuity of Haigh and Synge, behind the scenes, was tested heavily in the early stages of the season, as the teams battled to maximise the grip of their Yokohama tyres in cold conditions, and make their — with the sole exception of the Argo — non-ground effect cars work really well on the tighter circuits. Madgwick evolved the most effective answers to both problems, and proved them winners without further ado.

The patent 'tyre oven' was a master stroke which drew cries of horror from others, several of whom had experimented with 'tyre cosies' and heated/insulated 'tyre boxes' between warm-up laps and the grid-clearance signal, to little acclaim. A converted Reynard pit trolley, with asbestos lagged aluminium kiln aboard, the oven was trundled onto the grid at Donington from whence materialised the pre-heated race rubber. While the system took some time to perfect, Sala's rocket-like start and domination of this particular event bore testament to its efficiency. Moves to ban it, on the spot, met with little success, for when the BARC omitted to write the necessary clause into the ASRs for a Silverstone round, it popped up again, with useful results. Observant fellow, Synge.

Less consistent were the pods, which aided Maurizio in a Zolder Euroround, yet conversely hindered his progress at Cadwell Park, a driver's circuit on which, one would have thought, his immense natural ability would have matched those of anybody. The pods, in continuously revised form, nevertheless made the car slightly easier to drive. A plethora of less obvious chassis revisions — to stiffen the spaceframe and anterior components — were painstakingly carried out by Haigh, making the Reynard more consistent and responsive.

Sala actually scored points in every British round he contested, taking the championship lead at round seven. He never looked like relinquishing his advantage, despite the best efforts of Julian Bailey, Mauricio Gugelmin and Andy Wallace, who squabbled over the minor placings to the end. Maurizio's seasonal tally of six wins (plus four in the EFDA series), six seconds, four thirds

▶

The machines: Reynard top dog again

Reynard Racing Cars's dominance of top-level FF2000 continued into 1984, Adrian's design team, and Wiet Huidekoper in particular, having evolved a 'third year' development of the second generation chassis from Bicester. Considerably stiffer than its predecessor, and rather more durable, the 84SF met with immediate success, winning all but three of the 24 British championship rounds, and cleaning up virtually all of the major 2-litre world titles.

The forcefully-marketed Reynard cars were selected by the majority of teams, and many privateers, at the start of the season, and there were few regrets. The swoopy 84SFs are well-balanced and easy to drive in standard form but, when 'customised' to meet the demands of the leading professionally-run competitors, their handling characteristics, braking and traction were developed still further. AUTOSPORT was fortunate to be able to track test Madgwick Motorsport's British championship/winning version mid-season (June 21, 1984).

Ranged against Adrian Reynard's contemporary offering (distinguished immediately from its predecessor by the wider-based rollover hoop and more pointed nose with deeper canard fins — and, less obviously, by extensive chassis bracing between cockpit and engine bays) were an all-new Van Diemen and an updated version of the Argo which showed such promise in 1983. A couple of new Rays appeared, in the hands of underfinanced competitors, from time to time, while the Danish Sparton agent brought an SE320 model over towards the end of the year, and a Crosslé 56F and Mondiales also appeared. Alas, the Delta Tiga machines were not seen in the Racing Displays national championship.

Only Martin Donnelly stood by the ultra-narrow **Van Diemen** RF84 throughout the 24-race British series, as the works representative. A lot of work eventually licked the problem of chassis flex at the rear of the car — which seemed also to sap engine power — and the Dave Baldwin-designed car finished the season with a flourish, Donnelly winning a Silverstone race, and pushing the Brands Hatch class lap record into 1985. A completely new FF2000 contender, based on Baldwin's very promising RF85 FF1600 chassis, should put the Norfolk *marque* (British FF2000 champions in 1981-2), back into the title race with a vengeance next year.

Manadient's purposeful little **Argo** chassis was more than a match for the numerically overwhelming Reynard contingent on several occasions, and proved invincible at both Oulton Park counters on the British championship trail. On the Cheshire track, at both Brands circuits and usually at Donington, Reid's JM14B usually went well, although it could rarely be persuaded to run well at Silverstone or Thruxton, within the confines of a tight budget. Having said that, the well-built and smartly-presented design was tried without sidepods — in an effort to gain straight-line-speed — at some circuits, so the team's efforts never lacked commitment. Kevin Barrett's Market Harborough-based team, concessionaires for the JM14 car, have decided to run Van Diemens this year, leaving the Argo challenge in the hands of the factory, and Jo Marquart's '85 design, apparently on the stocks.

Reynard, Mondiale and Van Diemen cars.



On the engine front, there was little to choose, overall, between the Ford Pinto products of **Nelson Engine Services** in Wiltshire, and Spalding's **Neil Brown Engineering**. Sam Nelson looked to have the initial advantage, but inevitably this brought out the best in his rival. In Britain, the national championship eventually saw Nelson win the title with Sala — and a 13/11 score over Neil's units — while Gugelmin brought the EFDA title to Sam's hard-pressed team too!

After the debacle with German-built Zagk engines in 1983, no one looked to the continent for power this year. Only John Dunn, of **Swindon Racing Engines**, offered a concerted challenge to the longstanding FF2000 experts in this department, Virage Racing running his 'development' engines in a Reynard for the experienced Rick Morris.

The Kendrick brothers's Pacemaker concern, European distributors of **Advan-Yokohama** tyres, supplied the 'control' FF2000 rubber for the second successive season. The Bridgnorth company also provided service facilities at international, national and top regional championship levels.

and one fourth place — with six pole positions and fastest lap on no fewer than eight occasions — tells its own story. Only one non-finish, when he started from the back at Donington (coil failure having prevented him from taking up pole in the 84SF, by then yellow in deference to Spax's new-found support) and was taken off while dicing for sixth place (!) spoiled his finishing record.

A tough opponent, Sala's competitive spirit is as much a part of his success as uncanny car control (particularly in the wet), supreme mechanical sympathy and raw courage. First class team back-up gave him the much-needed break in FF2000 and he did not disappoint, never giving less than 100 per cent effort in the car. Sala drives with his head, constantly appraising his situation with regard not only for race position, but also his championship aspirations. Intelligent, with a precocious sense of humour, the diminutive Brazilian should have a big future. He's on his way now, thoroughly deserving of greater success.

Julian Bailey, eventually second in the national championship, is something of an enigma. Widely experienced, and often blindingly quick, the London-based youngster still strives to find that vital — and elusive — consistency which would make him a champion in a slick-shod formula. Continued sponsorship from BP placed Bailey in reigning champion Trevor Hegarty's Penistone Racing outfit, alongside Gary Brabham.

His season started — and finished — on a high note, with wins at Brands Hatch, the opening 'maximum' score somewhat fortuitous since Anthony Reid, first past the flag in the Argo, had been penalised for weaving on the warm-up lap, expressly prohibited this season on safety grounds. Nevertheless, they all count and Bailey took three more victories in a season punctuated by incidents. An unnecessary clash with Martin Donnelly in the wet at Brands wrecked both cars (neither man admitting responsibility), but a faultless drive at the same venue put him back in the reckoning at a double points counter in May.

Hegarty's lads coped admirably with a series of prangs, but they took their toll on the budget, leaving the black car looking a little frayed — understandably — from time to time. A blown engine at Snetterton mid-season tested the crew again, but they bounced back with a strong finishing run, Julian clawing his way past Andy Wallace and Mauricio Gugelmin in the final reckoning.

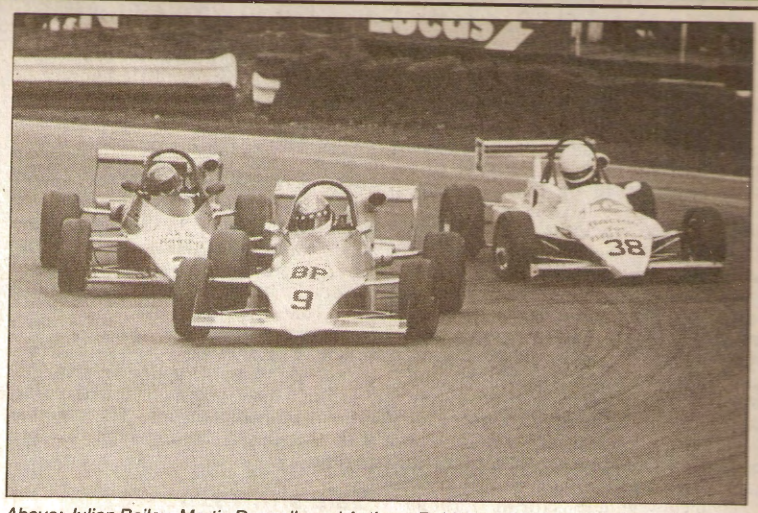
Grandstand view

For the second successive year, Motor Circuit Developments joined forces with the British Broadcasting Corporation to promote a five race mini-championship for British competitors at the end of the season. With the pressures of the major series now off, and the prospect of two races being televised on the Saturday afternoon *Grandstand* programme — an appealing carrot to dangle before sponsors — support was high, over 25 cars appearing at each round.

The first counter, at the Formula Ford Festival meeting, saw a number of top drivers switch from their season-long teams to other outfits, **Martin Donnelly's** move to Rushen Green Racing also entailing swapping Van Diemen for Reynard chassis. His team-mate was **Gary Brabham**, whose previous Penistone Racing partner **Julian Bailey** (the defending BBC champion) moved to Madgwick Motorsport, to drive the ex-Sala British championship-winning Reynard. Add in **Andy Wallace** (Swallow to Pegasus), **Peter Hardman** (Abram to Penistone) and RAC/TT FF1600 champion **Dave Coyne** — in one of the unloved Van Diemen RF84s — and confused lap-charters were the order of the day!

As it happended, the major protagonists in the title race were Donnelly and **Anthony Reid**, whose Manadient/Linn HiFi Argo was in fine fettle, with four rounds at its best circuit. The pair scored a brace of wins apiece from the first four rounds (Martin taking the odd Thruxton event), so the outcome hung on the double-points finale, in early December. By this time, Bailey (who had missed the opening race while his BP deal was finalised), **Rick Morris** and Coyne had notched up some useful points, and Brabham was in with a shot at the championship itself, with a couple of second places on the Sparkomatic slate.

Reid went into the last race just four points behind the Ulsterman, needing to beat him from first or second place to take the title which narrowly eluded him last year. No one was more aware of his threat than Martin, who responded with a fine drive to the flag, in the wheeltracks of Julian who handed down his crown in style.



Above: Julian Bailey, Martin Donnelly and Anthony Reid in a BBC dispute at Brands.

FF1600 ace Coyne in the Van Diemen RF84



Bailey's testing ability, oft-criticised in previous years, showed little improvement while he was at Penistone, although strangely the Madgwick crew found his feedback most beneficial when he contested the BBC series in the ex-Sala car. While Les Thacker of BP has unceasing faith in his talent, it appears that Julian currently lacks confidence in his own ability even though he is more than capable of mixing it with — and beating — anyone.

Having made such an impression on his graduation to FF2000 in the 1983 BBC series, it was pleasing to see **Andy Wallace** able to undertake a full season of FF2000 with the Donington-based Swallow equipe. Andy's ever-enthusiastic sponsor-manager Phil Flook was able to secure his drive through the offices of fellow Oxford resident Robert Maxwell, the publishing tycoon promoting his BPCC organisation on the Tim Stakes-owned Reynard 84SF. Engaged all year in the duel for 'best Briton' tag, Wallace started out superbly well, finishing second to Bailey first time out and heading a Swallow Racing one-two in the double-points round at Thruxton, a week later.

The Oxford driver thus led the national championship, but Sala relentlessly eroded his advantage over the next few events. A puncture at Cadwell Park put him out of the points for the only time in the first 15 races (during which Andy was never out of the top five), but a return to the spectacular Lincolnshire track then saw him eliminated in a big first-lap pile-up. Andy and Anthony Reid collided at first, starting a chain reaction which left Bailey, Mark Galvin (in the second Argo) and Rick Morris (Reynard) in the bank. Wallace was fortunate to emerge with a badly bruised arm, although his car was destroyed.

From there on, his assault lost momentum for a while, but good wins at Thruxton and Brands in the closing stages of the season — by which time Sala had tied up the title and stopped racing in Britain — saw him rally. Overshadowed mid-season by the inclusion of defending champion Tim Davies in the Colin Essex-run team, Wallace may well need the attention of a one-car team to really shine, but his one-off run in an FF1600 Rondeau reassured him of his sometimes hidden talent when it mattered.

Mauricio Gugelmin came into the 1984 series with a point to prove. Runner-up to Davies the previous season, with the initially heavy and cumbersome Van Diemen, the South American accepted an offer to join Pegasus Motorsport, taking with him not only a works-loaned RF84, but the responsibility of showing the team-owner's son, BP FF1600 cham-

Oops! Victor Rosso takes to Donington's kerbs as he tried to shake off Bailey.





Champion Maurizio Sandro Sala's efforts were aided by the fine car preparation of Paul Haigh (right).

Racing Displays British FF2000 championship

1	Maurizio Sandro Sala (BR)	Reynard 84SF	328 (330)
2	Julian Bailey (GB)	Reynard 84SF	296 (304)
3	Mauricio Gugelmin (BR)	Van Diemen/Reynard	276 (286)
4	Andy Wallace (GB)	Reynard 84SF	262 (270)
5	Martin Donnelly (GB)	Van Diemen RF84	225
6	Gary Brabham (AUS)	Reynard 84SF	150 (151)
7	Anthony Reid (GB)	Argo JM14B	145
8	Tim Davies (GB)	Reynard 84SF	125
9	Rick Morris (GB)	Reynard 83/84SF	103
10	Peter Hardman (GB)	Reynard 84SF	102

etc.

MCD/BBC Grandstand Trophy series

1	Martin Donnelly (GB)	Reynard 84SF	37
2	Anthony Reid (GB)	Argo JM14B	29
3	Julian Bailey (GB)	Reynard 84SF	26
4	Gary Brabham (AUS)	Reynard 84SF	21
5	Rick Morris (GB)	Reynard 84SF	8
	Dave Coyne (GB)	Van Diemen RF84	8

etc.

DRC Superguard FF2000 championship 1984

1	Victor Rosso (RA)	Reynard 84SF	98
2	Alastair Lyall (GB)	Reynard 83/84SF	57
3	Frank Bradley (GB)	Van Diemen RF84/83	56
4	Graham de Zille (GB)	Reynard 84SF	42
5	Peter Meyrick (GB)	Reynard 83/84SF	35
6	John Bright (GB)	Reynard 83SF	29

etc.

Sabre Fabrications British Pre'80 FF2000 championship

1	David Jacklin (GB)	Lola T580	60
2	Tony Halliwell (GB)	Lola T580	36
3	Martin Wood (GB)	Lola T580	29
4	Julian Cutler (GB)	Reynard 79SF	17
5	John Davis (GB)	Sparton SF79	13
6	Robert Mears (GB)	Reynard 79SF	11

etc.

pion Graham de Zille, the FF2000 technique.

While the team raved about the Van Diemen, and their Neil Brown engines, in pre-season testing, it quickly became apparent, under racing conditions, that its initial performances flattered only to deceive. Even before the third race, the Trevor Foster-managed team had ordered Reynards, almost *de rigueur*, for the second season, if one wanted to win. Relationships became strained in the Pegasus camp — used to winning after their remarkable triple-championship FF1600 season of 1983 — and Gugelmin walked out after Snetterton in June, dramatically joining Dennis Rushen's set-up for the following day's Euroseries counter in Denmark. There he stayed, eventually netting the EFDA title after a protracted scrap with Sala.

Even then, the charming Brazilian had to wait until the 15th round of the British series to score his first win, on the championship's annual visit to Castle Combe. Immediately, his composure and confidence returned, and at Cadwell a week later, the story was the same. Notoriously hard on his engines while at Pegasus, Gugelmin settled down in the second half of the season, winding up splitting Bailey and Wallace, third in the table, with three wins, five poles and five fastest laps. Still with youth on his side, Mauricio will take his Perdigao (poultry) backing into F3 this season — hopefully to take on Sala, Bailey, Wallace and several more of the FF2000 leading lights of 1984.

Such was the dominance of the Reynard 84SF chassis, both numerically and in terms of consistent performance, that **Martin Donnelly** and **Anthony Reid** were effectively relegated to a fight for 'class B' honours during the season, behind the top four. That may sound an unfair assessment, for early on the Scot's Argo showed a worthy turn of speed and, late in the season, the Ulsterman's Van Diemen enjoyed a brief moment of glory, with a splendid lap record at Brands Hatch and victory at Silverstone in the autumn. Alas, both teams found difficulty in maintaining momentum, although neither the Manadient crew (Argo) or Mike Galter (Donnelly) gave up trying to beat the Bicester hordes.



Martin Donnelly won a Silverstone race in the Van Diemen, but on this occasion he leads Davies and Wallace, early in the year.

Donnelly, a much underrated driver, worked hard with the Frank Nolan-funded works-aided team to sort the spindly RF84, short of traction and cornering power at first. Carrying the entire weight of the Norfolk *marque* — itself rarely catchable in the formula in 1981-2 — when all the other owners of the latest machines had packed them away, the Irish champion's small team was additionally hampered for a long time by a lack of spare engines. Huge testing mileage, for chassis development purposes, strained the units further.

Ever cheerful, Martin tried everything he — and his experienced technician — knew to rescue a situation which would have demoralised lesser men, but the Belfast lad is of tough stock and will benefit in years to come from lessons learned. Fifth overall was poor reward for admirable persistence but a switch to an RGR Reynard chassis provided a morale-boosting win in the BBC *Grandstand* series, which brought the FF2000 season to a close.

Reid's fortunes, if anything, were more heavily laden with woe, especially in the first few Racing Displays rounds. After the Brands penalty and an off track excursion at Thruxton (while trying the pretty Argo JM14 without sidepods), he picked up a second fifth place at Silverstone, where the car was never at its excellent best.

More galling troubles were to follow. On the front row betwen Sala and Bailey at Donington, Anthony and Julian crept, marginally but identically, before the lights turned green. Despite poleman Maurizio's dragster-like getaway, perfectly timed and executed, Reid found himself penalised and Bailey (nearer the judges) untouched. Injustice. At Brands, the Argo led magnificently, only for a wheel bearing to fail when victory looked assured. Sala was there to pounce. Five races down, and only 17 points to show. "You make your own luck in this game," grimaced at philosophical, but sporting, Reid later. His revenge was to come at Oulton Park.

The Cheshire circuit, visited twice by the FF2000 contingent in three weeks, provided Reid with a pair of copybook victories, the Gary Pope-run machine performing faultlessly. By this stage of the season, Anthony had been joined in the team by **Mark Galvin**, the promising Irishman quickly showing his mettle in the second, Jeremy Arnot-fettled JM14B. Mark's driving matured quickly, with professional guidance for the first time, and he was able to match the rapid, if erratic, Reid's pace before long. Galvin, who also took in some World Endurance, Thundersports and F3 events in a varied and ambitious season, had a run in a Manadient Van Diemen at the Thruxton FF2000 round in August, and was 12th overall in the seasonal standings. A fine effort.

While the team did not lose faith in the Argo, it is widely felt that Reid's temperament influenced its performance as much as any handling traits. A ridiculous accident with Gary Brabham at Silverstone — totally Anthony's fault — resulted in the blue JM14 barrel rolling to rest in front of the pits, its driver mercifully unscathed. Not so his entrants's wallets though, so he was 'rested' for a while, only to re-emerge strongly as a front-runner in the BBC series. If he keeps his head, the quiet Glaswegian has a lot to offer, and gain from, the sport. But who can tame him?

Lolas sharpen Sabre

Run for the first time in 1984, the BARC administered national championship for Pre-1980 FF2000 cars attracted backing from Sabre Automotive, part of the Reynard group. While Reynard cars won the major British and inaugural European championships in 1979 (driven by David Leslie and Adrian Reynard himself), the contemporary Lola T580 chassis were dominant five seasons later!

The trio of beautifully-presented Huntingdon-built machines did, in fairness, boast a strong driver line-up — **David Jacklin, Tony Halliwell** and **Martin Wood** also doing more rounds than anyone else — but their pace was rarely challenged nonetheless.

Jacklin, well remembered for his early racing exploits in a swift Crosslé 25F FF1600 car, returned this year (after a season's lay-off), not with the Lola T580 he owned in 1982, but a similar car bought from Keith Lawrence in Scotland. Wood had the ex-Rob Cooper/Neil McGuigan/David Corbett/Jacklin/Marcus Pye T580, while Halliwell's example was bought from Mike Boyd-Maunsell in 1983, but rebuilt around a new chassis following its Lydden roll later that year.

David Jacklin was mighty in the Pre-'80 series, heading a Lola one-two-three!



Between the three, there was little to choose initially, Halliwell's Sunset Propety-backed car winning the first round from Wood, who promptly reversed the order next time out at Donington. By Snetterton, though, Jacklin really had his car sorted, five of the remaining six races falling to the Worthing man. When Wood sold his T580 on, Tony bounced back with a win at Oulton, but didn't show again. At season's end, not only the inaugural title, but also the full set of lap records, belonged to David, however.

Behind the blue, white and red Lolas, **Julian Cutler**'s Reynard upheld Bicester honour on a minimal budget, while **John Davis**'s Sparton and **Rob Mears**'s Reynard (run on shoestrings too) completed the top half dozen. The smart Deltas of **Tony Sturgess** and **Alan Tulloch, Derek Simpson**'s Tiga/Viper and the Reynard-mounted **Mark Badcock, Peter Ware,** ex-karter **Gary Killpack, Bob Jarvis** and **Richard Fuller** also scored points in the 'low cost' series.

A plentiful supply of Pre-'80 2-litre cars (many at under £2000 complete!) should guarantee a promising future for the National series, in much the same way as Pre-'74 and '74-'78 FF1600 has captured the imagination of impecunious competitors in recent years. Inexpensive to run, and fun to drive, these older FF2000 machines could provide your best way into racing!

Gary Brabham, in the second Team BP/Penistone Reynard, seized sixth place in the championship from Reid at the double-points finale. Starting from pole, and in wet weather, at Brands Hatch (the circuit which has adopted him this year), the Australian drove a grand race behind team-mate Bailey — with whom he tangled while disputing the lead at Thruxton, seven months earlier.

In the meantime, Brabham rarely looked likely to win a race, although he was cruelly robbed of a good placing by an engine malady at Cadwell Park. Every time it rained, Gary was a competitive proposition though, balancing his 84SF superbly in adverse conditions.

Having taken on **Tim Davies**, for his experience and his car-sorting expertise — at the same time as the speedy **Victor Rosso**'s money ran dry — the Swallow Finance team put a lot of time and money behind the Welshman, grooming him for F3 in 1985. Davies, of course, made the most of a plum drive, winning four of the six races he contested, before the decision was taken to start the F3 project with Reynard.

Davies dispirited team-mate Wallace with his pace — and won one Snetterton event with a real screamer from Neil Brown's workshops — engaging in a couple of good dices with Sala. Tim's determination and racecraft, learned in an over-long apprenticeship in the Ford Formulae, should come into its own this year. He finished eighth in the Racing Displays championship, on a quarter of a season!

Rick Morris and **Peter Hardman** were often locked together in the 'chasing group' in the course of the season, Morris upgrading from Reynard 83SF to a new version after a few races, with guidance from Paul Pearce's industrious, if shoestring-run, Virage Racing team. Morris enjoyed himself, as ever, while actively developing the Swindon engine, earning two fourth place finishes and a very consistent scoring record on

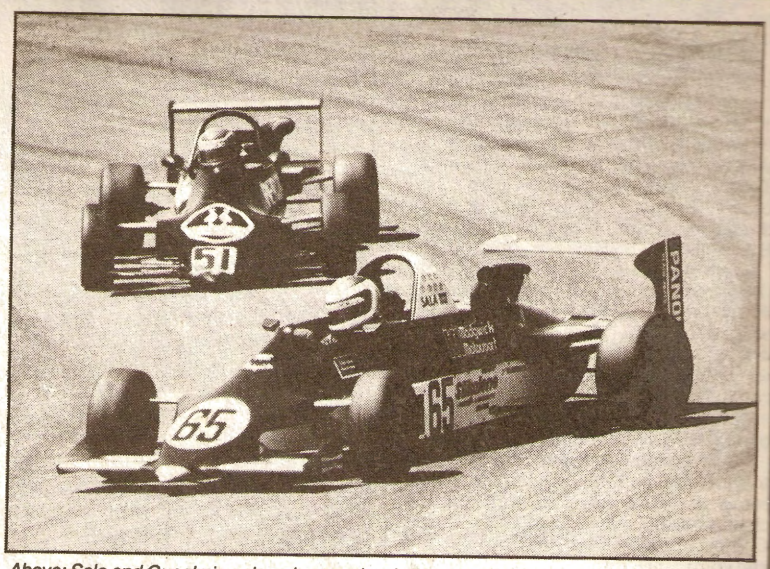
Brazilian blend

The sixth Euroseries, run by the European Formula Drivers Association with backing from Townsend Thoresen, opened at Brands Hatch on April 1, **Maurizio Sandro Sala** showing that he was no fool with a masterful victory over **Peter Hardman** and **Neil Cunningham** in awful conditions. Privateer **Roger White** deserves mention too, for his gritty fourth place. Sala won at Zolder the following month (his Reynard sporting Madgwick-developed sidepods in Belgium) but gave the Jyllandsringen a miss as it clashed with a British championship round. While his Euro budget was tight, team owner Robert Synge resolved to keep finding the finance — as long as Maurizio stayed ahead . . .

Tim Davies, by this time with Swallow Racing (having started the year with Rushen Green's outfit) won in Denmark, but was eliminated in an incident with Sala and **Andy Wallace** at Hockenheim, a fortnight later, where **Mauricio Gugelmin** made up lost ground in the points standings with an easy win. He, too, had switched teams, from Pegasus to RGR, and was starting to put together a purposeful charge.

Gugelmin's close second place to Sala at Donington in the intermediate weekend had boosted his confidence, but Maurizio had to chase the Madgwick man home again at Zandvoort, after a sort out at Tarzan corner in which Davies was elimininated as he tried to defend his lead. Gugelmin gained valuable points over Maurizio at Hockenheim, Sala struggling home seventh, minus clutch.

Back at Zandvoort in August, Gugelmin won convincingly, whittling Sala's advantage down to a manageable level again while Martin Donnelly guided the Van Diemen to victory at the Nürburgring! The turning point of the EFDA season came at Mondello Park in Ireland, where Gugelmin again emerged victorious, taking not only the Leinster



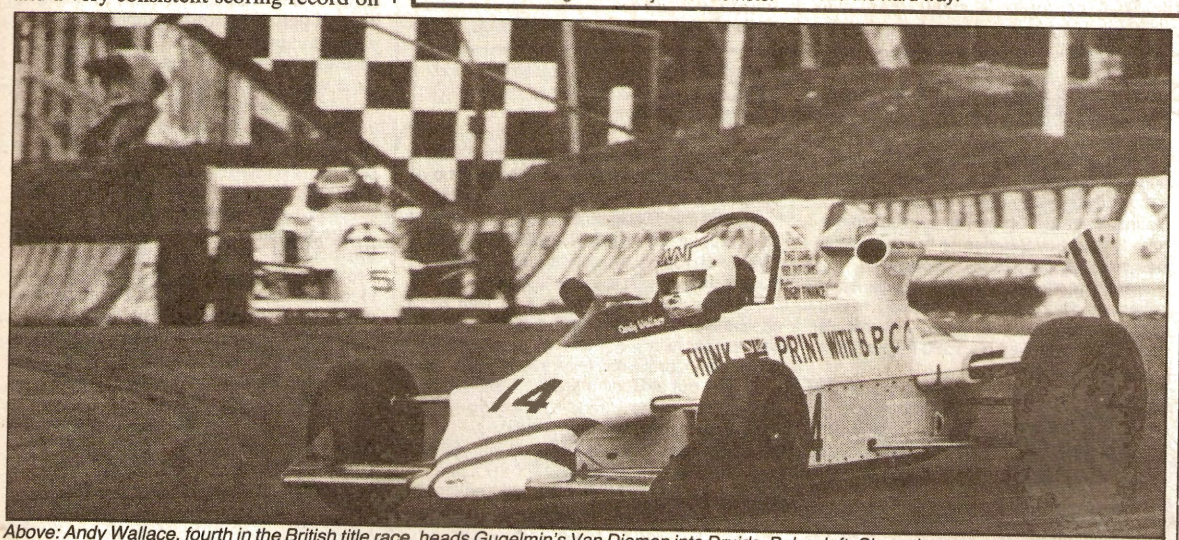
Above: Sala and Gugelmin enjoyed some classic scraps, notably here at Zandvoort.

Trophy feature race, but also the Euroseries lead, with one round remaining. Sala crashed heavily in practice and was making progress up the field when he was nudged off by **Thomas Jans**, Gugelmin's team mate.

So it was all down to the final race at Zolder. Sala desperately needed to win this one, with his rival well down the order, if he was to retrieve the situation. His efforts were thwarted, however, after a great start, when poleman **Bernd Schneider** spun in front of him at the first corner. With nowhere to go, Sala and **Harald Huysman** collided with the German, while the canny Gugelmin sat back and watched the drama. His eventual fourth place made him a worthy champion, the race being won by Dane **Henrik Larsen.** Larsen finished fourth, behind Sala and Donnelly in the end-of-season table, but there is no doubt that the Bucton Green driver earned the team's third Euroseries title the hard way.

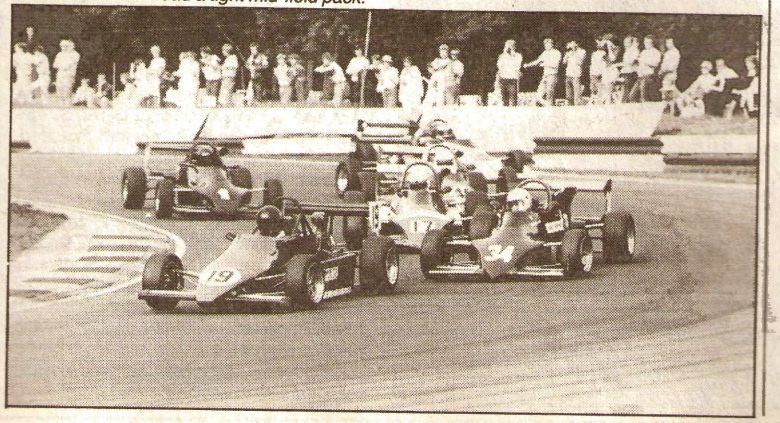
Mauricio Gugelmin was a worthy winner.





Above: Andy Wallace, fourth in the British title race, heads Gugelmin's Van Diemen into Druids. Below left: Champion team managers Robert Synge (left) and Dennis Rushen. Right: Galvin, Morris and Hardman head a tight mid-field pack.





Flint Motor Engineers FF2000 championship

1	Martin Wood (GB)	Lola T580	132
2	Peter Boutwood (GB)	Lola T580	89
3	Steve Holland (GB)	Royale RP30	86
4	John Dickinson (GB)	Van Diemen RF81	83
5	Peter Ware (GB)	Reynard 79/81SF	82
6	Tony Howard (GB)	Lola T580	89

etc.

BRSCC Northern FF2000 championship

1	Alastair Lyall (GB)	Reynard 83/84SF	48
2	John Bright (GB)	Reynard 83SF	31
3	Phil Hoyland (GB)	Van Diemen/Argo	14
	Bev Jones (GB)	Van Diemen RF83/84	14
5	Mark Galvin (IRL)	Argo JM14B	11
6	Chris Knight (GB)	Van Diemen RF82	9

etc.

BARC (NW) FF2000 challenge

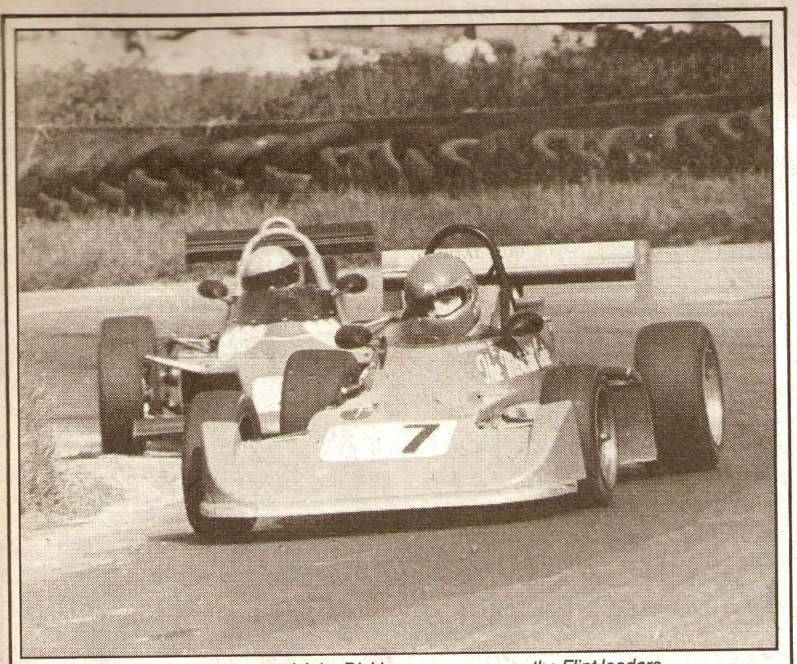
1	John Davis (GB)	Sparton SF79	34
2	Peter Meyrick (GB)*	Reynard 83/84SF	33
3	Phil Hoyland (GB)	Van Diemen/Argo	20
4	David Jacklin (GB)	Lola T580	18
5	John Hoyle (GB)	Reynard 79SF	15
6	George Ostroumoff (GB)	Reynard 83-4SF	13

* = Post-'80 class winner

EFDA Townsend Thoreson FF200 Euroseries

1	Mauricio Gugelmin (BR)	Reynard 84SF	128
2	Maurizio Sala (BR)	Reynard 84SF	113
3	Martin Donnelly (GB)	Van Diemen	108
4	Henrik Larsen (DK)	Reynard 84SF	89
5	Tim Davies (GB)	Reynard 84SF	70
6	Neil Cunningham (AUS)	Reynard 84SF	52

etc.



Lydden stalwarts Peter Ware and John Dickinson were among the Flint leaders.

Around the regions

Outside the big British championship, 'second division' series catered for genuine 'club racing' competitors at Lydden, and in the north of England with the well-promoted Superguard championship at Donington as a useful stepping stone between these and the highly-professionalised Racing Displays national series for the more ambitious, or wealthier, entrants. As before, the action was no less intense in these series in 1984, although levels of support naturally varied according to regulations and catchment area.

The Donington Racing Club's eight-race trail strayed away from the home circuit on three occasions, participants getting a couple of runs at Oulton Park and a super chance to use the exacting high-speed Silverstone Grand Prix course — an opportunity sadly denied to those who partook of the full British championship schedule. Regardless of venue, it seemed, there was rarely anyone to touch **Victor Rosso**'s pace, the pleasant young Argentine duly making light work of keeping the DRC spoils in the portals of Tim Stakes's Swallow Racing team.

The pleasant young Argentine, who concentrated on the Midlands series when funds to follow the national championship ran dry, was only beaten once in his new quest, former F3 driver (and subsequently FF2000 stalwart) **Steve Pettitt** accepting the chequered flag at Oulton Park in June, with his Steve Shepherd-run BRS Reynard. Rosso's similar '84SF, prepared by Colin Essex's lads, went superbly all year, Victor desperate to avenge his narrow defeat in the 1983 series.

Loughborough motor trader **Alastair Lyall** had an excellent season, basically as a privateer although with on-track advice and technical assistance from Bob Salisbury, whose engine he used. Lyall started the year with a Reynard 83SF, but switched to a new 84SF later on, with enthusiatic backing from GRAB Resins. Alastair's confidence grew continually, and he 'grabbed' second place in the DRC table from **Frank Bradley** at the final round. He also won the BRSCC Northern title with comparative ease.

Graham de Zille, fourth, drove a mighty race with Rosso at Silverstone, and finished off in his wake once again at the finale. **Peter Meyrick** (who ran the only Delta T84 seen in the country, before moving on to Reynard 83 and 84 models in a busy year) and **John Bright** (in Roy Bates 83SF) completed the DRC top six. Of the others, ex-Renault 5 driver **Chris Knight** showed promise in a two-year-old Van Diemen, while Spaniard **Carlos Sainz** (Reynard) and AUTOSPORT's **Marcus Pye** (Argo) proved themselves competitive also, dicing fiercely with Meyrick on one-off appearances in the series.

The Lydden championship, backed again by competitor Tony Howard's Flint Motor Engineers concern in Hove, continues to grow in stature, although few 'outsiders' regularly ventured to Kent to take on the circuit specialists. By co-operation with the BRSCC, the series actually opened at Oulton Park (!), but resumed its normal order thereafter.

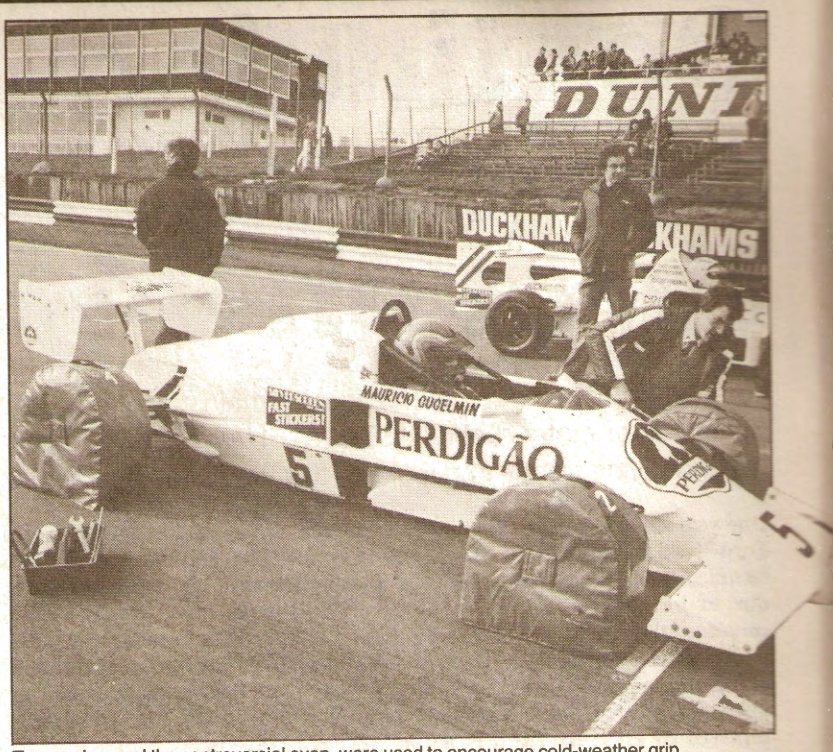
While former Oceanair Clubmans champion (and F3 competitor) **Martin Wood** made the Flint series his own from the outset — his Simpsons Mercedes supported Lola-Minister T580 winning the first five rounds — the minor placings were only decided after a protracted season-long struggle between several closely matched drivers.

Newcomer **Peter Boutwood** (hiring David Jacklin's Sabre Pre-'80 series winning Lola) got his act together well, without actually winning a race, but a string of second and third positions saw him pip **Steve Holland** (Royale), **John Dickinson** (Van Diemen) and 'International Racing Driver' (remember Trinidad '83?) **Peter Ware** (Reynard), for second place overall. Howard himself ended the season on a high note, clawing his way to sixth in the final standings in another Lola.

Up north, grids tended to be small, Lyall and Bright being the only regular 'aces' to contest the BRSCC series. John scored a hat-trick of victories over Alastair mid-season, but his Transatlantic commitments prevented a full run at the crown, leaving Lyall home and dry.

Phil Hoyland won the opening round at Oulton Park in his Van Diemen, before buying a new Argo, the Yorkshireman eventually tying with Shropshire's **Bev Jones** — who ran 1983 and '84 Van Diemens — for third place in the series, after spasmodic outings. Having bent the front of his Argo in the Racing Displays race, earlier in the afternoon, **Mark Galvin** and the Manadient crew straightened it out for the young Irishman to take an accomplished victory at Cadwell Park in July. That fine run alone gave the Dubliner fifth position in the championship — no one else got into double figures in the points stakes.

The BARC's North Western challenge series was a very low key affair, split into Pre-'80 and later classes. **John Davis** was the only driver to score in all six events, his old Sparton winning the poorly supported earlier division — and the series — with two wins, neither over rapid opposition. Peter Meyrick had a similarly easy run to Post-'83 spoils, Galvin, Hoyland and **George Ostroumoff** (Reynard 83-4SF) taking a race win apiece in this category. **David Jacklin** trekked north of the last couple of counters, decimating the Pre-'80 opposition.



Tyre cosies, and the controversial oven, were used to encourage cold-weather grip.

his way to ninth in the championship. Hardman, the 1983 P&O FF1600 champion, ran one of two Dave Abram-run Solarfilm Reynards, the second chassis appearing also in the hands of Ulsterman **Niki Phillips**. The Lancastrian sat out a few events, to conserve money, and deserved better than his 10th place, a point adrift of his sparring partner.

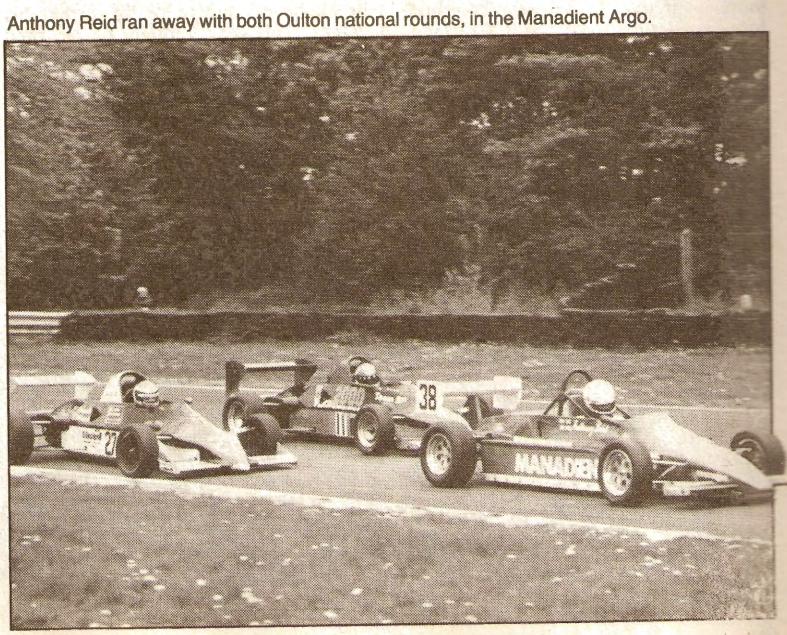
Elsewhere, **Thomas Jans** and **Dennis Vitolo** showed flashes of form under the guidance of Rushen Green Racing (the Swiss having abandoned his Van Diemen early on), while **Frank Bradley** alternated between his RF84 and the previous year's model, before finally admitting defeat and displaying his Uniroyal Tredaire backing on one of the all-conquering Reynard designs in the BBC series. Bradley had one previous run in an 84SF, one of Swallow's three examples, at Oulton Park over Easter, but could not repeat his now almost customary wet weather win this season.



Brabham, de Zille, Vitolo and Cunningham, pursuing the Donington leaders.

Graham de Zille capitalised at Cadwell, after the incident in July, but otherwise had to make do with regular results at the back end of the top 10 at national level, and is now preparing for a go at F3. **Neil Cunningham** again looked useful from time to time, before running out of cash, while Canadian champion **John Jones** (Gulf Reynard) and staunch FF2000 supporter **Steve Pettitt** also did well, on occasional outings. The talented **John Robinson** started with the new Ray — also tried briefly by Brabham, when his Reynard was damaged — before taking the Reynard route. If you couldn't beat them, you had little other option . . . ■

Anthony Reid ran away with both Oulton national rounds, in the Manadient Argo.



Continuing the trend through 84

Formula Ford continues to provide the mainstay of national single-seater motor racing. JEREMY SHAW notes some of the underlying trends and looks at this year's top exponents



Fraught action as Newby and Penfold interlock wheels in pursuit of Pratt, Coyne and van Kouwen.

One year on, the sentiments expressed in our survey of the 1983 Formula Ford 1600 season stand true. The formula *has* become increasingly technical and specialised — witness some of the recently unveiled chassis due to be raced next year — Lola, Van Diemen and Reynard have *continued* their struggle for the nomination of 'top chassis', and the gap *has* widened between the premier championships and an ever-growing number of regional or local series. Only the drivers' names have been changed, the likes of Andrew Gilbert-Scott and Maurizio Sandro Sala, top dogs in '83, replaced by another crowd of ambitious young racers.

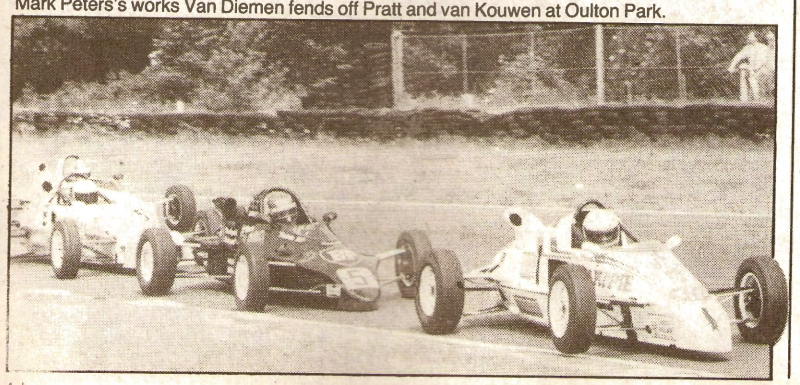
The competition, however, remains just as intense as ever and continues to provide excellent entertainment for spectators as well as invaluable experience for those taking part. The most significant aspects of the season just past, at least for the writer, were the greater European interest shown in what was one of the best ever Formula Ford Festival meetings and, actually from the same weekend, the news that the RAC, Ford, Townsend Thoresen and the major organising clubs have at last put their heads together constructively and announced that there will be just one top-line, national Formula Ford championship for next season. For too long, the RAC, TT and P&O Championships have tended to dissipate the action, as it were, spreading the icing on the Formula Ford cake too thinly. Now, thankfully, we will have a really significant prime target for all aspiring future champions. So how about the organisers of the two 'novice' series following suit?

This initiative by the major clubs shows that the RAC do, after all, have some interest in national motor racing and their decision is to be applauded. The new 1985 RAC Townsend Thoresen British Formula Ford Championship will consist of 16 rounds, taking over from the total of 37 races that comprised this year's RAC, TT and P&O series. Such rationalisation is essential in the modern economic climate wherein young drivers find it increasingly difficult to raise the necessary finance. Perhaps, as a knock-on effect, the increased prestige of the new series will make the provision of a budget more justifiable for potential sponsors, too.

Looking back on the 1984 season, no driver stands out above his colleagues, at least at the top level, but there are several who could perhaps be bracketed together. In alphabetical order they are Alvaro Buzaid, Dave Coyne, Mark Peters, John Pratt and Gerrit van Kouwen. All told, they mustered 47 race victories between them during the national season and in common each took at least one win during the festival weekend.

In evaluating their seasons, one must start with **Dave Coyne**, winner of both the RAC British and Townsend Thoresen championships this year. For the 26-year old from Frimley, Surrey, this really was a crunch year. Winner of a Grovewood Award Special Commendation in 1980, Dave struggled through a difficult year of FF2000 with inferior equipment and then tried to move up into F3 before financial constraints forced him to withdraw. He had the talent but wasn't able to get the break he needed to really further his career. This year, though, he returned from the wilderness, found a drive with the works Van Diemen team and stepped back to FF1600. It was a brave move; with his experience and armed with the very best equipment that Ralph Firman could provide, Dave *had* to succeed. And succeed he did, as two championship titles and 13 race wins will amply testify. Coyne also earned an enviable finishing record, his only retirements from 22 RAC and TT events coming after an incident with John Pratt's Reynard in the Brands Hatch GP supporter and another with 'team-mate' Mark Peters, also at Brands, in the penultimate TT round.

Mark Peters's works Van Diemen fends off Pratt and van Kouwen at Oulton Park.



In truth, Coyne was involved in several scrapes during the year, although his worst moment came when he was eliminated from the First Edition Festival final in an incident with Harald Huysman. It seemed that his Scholar engine wasn't on a par with the best that day and Dave wasn't able to justify his tag as one of Britain's main hopes of victory. Nevertheless, his tally of 13 wins and 11 seconds, plus a marvellous one-off return to F3 when he set fastest lap on his way to a rousing third place at Spa-Francorchamps, put the name of Dave Coyne firmly back on the motor racing map.

In terms of race wins, **John Pratt** was the next most successful driver. Into his fourth season of Formula Ford, John arranged to drive a works-supported Reynard 84FF with some (but not particularly substantial) backing from Team BP. Ex-racer Peter Morgan was in charge of preparation on his Madgwick Motorsport entry, his car always immaculately presented, and John, on his day, was blindingly fast. Several lap records fell his way *en route* to his tally of 11 race wins but these were punctuated by an inordinate number of incidents. His Minister-powered Reynard was often the fastest car on the track and if John had been able to find the same kind of consistency that Coyne employed then he would certainly have ended the year with at least one major title. One had to feel sorry for John, particularly at the Festival when the pressure was really on. As lap record holder, an acknowledged Brands expert and with his regular black 84FF powered by Minister's famous 'Patch' engine, undefeated in 16 Festival races over four seasons, John was another hot favourite until spinning out at the semi-final stage. He was devastated. He deserved better, too. Still, a gentlemen by the name of James Hunt never really found a properly controlled streak until he reached F1 and Mr Pratt is certainly not short on talent.

Upon the demise of Coyne and Pratt, Festival honours were claimed in scintillating style by young Dutchman, **Gerrit van Kouwen**. His Fleetray Racing Lola T644E also motivated by one of the very best Minister engines, Gerrit not only won all four rounds of the competition but also eclipsed John Pratt's old lap record, his effort at 48.889s earning him a bonus of £5000 put up by TL Clowes (Insurance) and Road & Racing Accessories as the first driver to better 49secs.

That wasn't his only major success of the year either. Van Kouwen claimed top honours at the prestigious Brands Hatch Grand Prix day event and also took the EFDA/Energy Release Euroseries title — for the second successive year — after an epic duel with Harald Huysman (see panel). When the pressure was on, the Dutchman showed himself to be a remarkably cool customer. He should go far next year.

Another man tipped for future honours is **Alvaro Buzaid**, the latest in an ever-increasing number of talented young Brazilians to cross the Atlantic in search of success. Basing himself at Silverstone, initially under the guidance of Madgwick Motorsport but later opting to run his Reynard 84FF, with Gatmo engine, alone, Alvaro quickly acclimatised to his new surroundings, soon

icked up a good command of the nglish language and equally swiftly egan to impress on the race-track. Jnlike the others so far mentioned, uzaid concentrated his efforts on the ilverstone-based Esso championship ut also made strenuous efforts to roaden his experience and visit other ircuits. It was July before he was able to ecord a maiden race win but this was ollowed by six more as Alvaro tied up he series title with a succession of fine esults. His win in the final round at ilverstone was perhaps his best, coming s it did at the end of one of the best ever ormula Ford races. Such an accolade is ot given easily, this formula having rovided innumerable classic events ince its inception in 1967 — many of hem at Silverstone, whose fast straights eem ideally suited for the perfectly-natched cars and engines — but this vent stood out as Buzaid, **Andy Wallace**, who gave the brand new Rondeau M585 an outstanding debut, and John Pratt took the flag within the space of just 0.01secs! The term 'blanket finish' simply didn't suffice that day.

His primary objective achieved, Buzaid then set his sights on the Festival. Despite having raced at Brands only once before, Alvaro won his heat and remained in contention until sidelined by a terminal engine failure.

Mark Peters, the second of this year's Van Diemen factory representatives, has been the other primary contender for the national titles, third place in the RAC series his best achievement. Without in any way wishing to underplay the considerable effort expended by the Norfolk concern this year, or to detract from team colleague Coyne's successes, it appeared that Peters and his Slush Puppie RF84 were definitely the second string-runners, there primarily to ease Dave's task. Mark didn't see it that way, though, and they never became what might be termed 'close team-mates'. The rivalry between them was intense, often obvious, and perhaps Peters's driving suffered as result. He was, usually, every bit as fast as Coyne, beating him several times in straight fights but one had the impression that Mark felt himself let down, especially in the latter half of the season. His last significant win, apart from one in the heats at the Festival, came at Donington in June; the wind seemed to have been knocked from his sails thereafter.

Esso runner-up

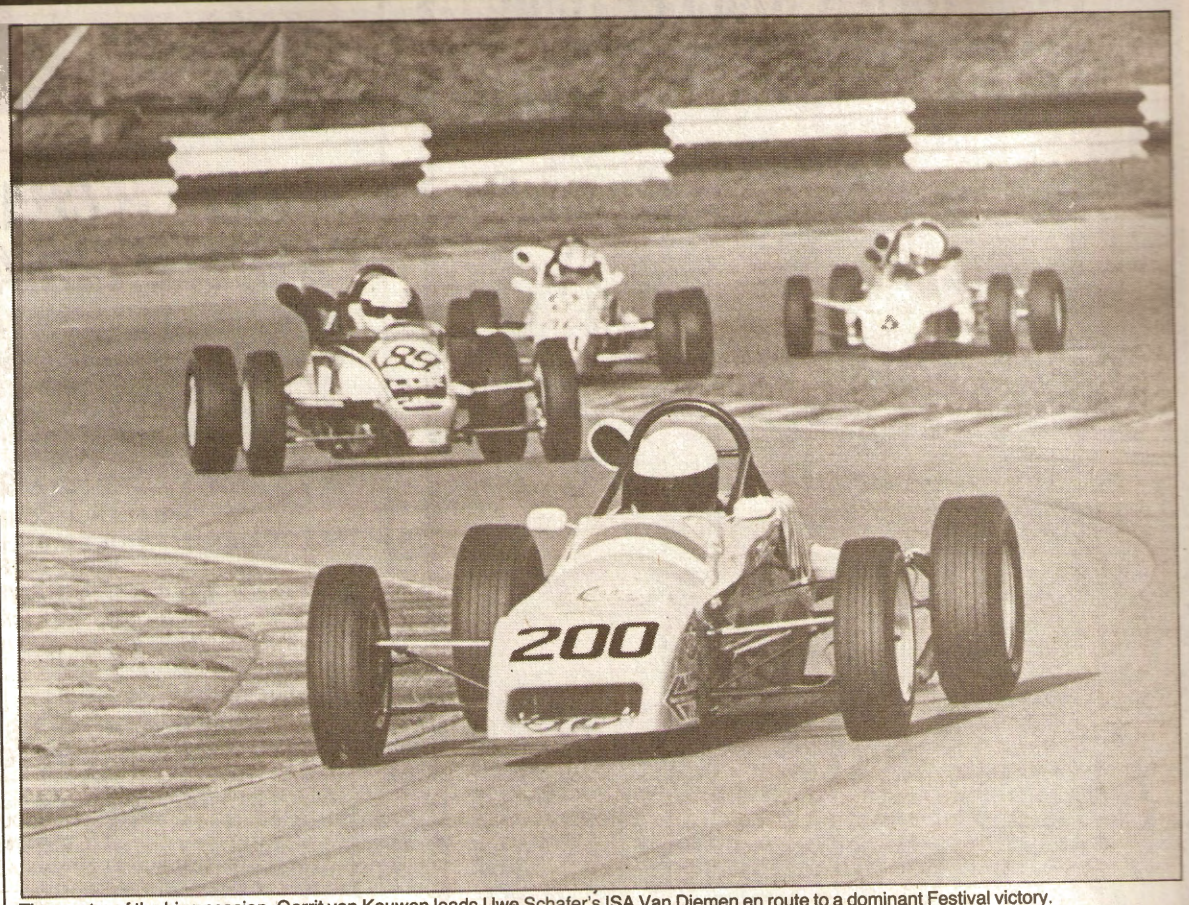
Runner-up in the Esso series and several useful performances in the RAC and TT rounds represented the fruits of **Mark Newby**'s season with another BP-liveried Reynard. Perhaps one might have expected him to show a little more strongly, given the experience he has picked up over the past few seasons. **Peter Rogers** was a regular top six scorer in the top series with a similar Howard Drake-tended 84FF, while **Tim 'A' Jones**, son of Brands Hatch commentator Brian Jones, lest we forget, performed most creditably with a Mike Parkes-run Reynard. Tim, indeed, must be regarded as one of the finds of the year, grafting hard to secure proper finance and developing well. The former merchant seaman, still only 23, is striving now to secure a pukka works drive for '85, which, if successful, could catapult him to much greater things. Tim's drive at the Festival — admittedly, his home track — was particularly impressive until he was cruelly sidelined by a broken throttle cable of all things.

Novice graduates

John Penfold and **Paul Mather**, both graduates from the novice championships, battled hard with their non-works Van Diemens, securing many good placings but perhaps emphasising the difference between those with factory assistance and those without, while **Perry McCarthy** should have been in the same bracket but for a simply enormous accident at Oulton Park from which he was more than fortunate to emerge without serious injury. His dramatic exit from the proceedings certainly served to display the strength of a modern-day Formula Ford chassis, evenif it didn't assist the former 'Star of Tomorrow' champion's plight. Welshman **Karl Jones** (Reynard), Irishman **Ruari O'Coileain** (in a third factory Van Diemen) and Kevin Gillen (Van Diemen) also served notice of their intentions within the RAC and TT series, while Londoner **Drew Barwick** returned to the FF fray towards the end of the season and ran particularly well with a Quest-run Van Diemen at the Festival.

Whereas the premier RAC and TT titles were fought out almost exclusively by the four 'works' drivers, the BRDC's Esso series proved rather more tense with as many as seven drivers still in with a chance of claiming the spoils prior to the last couple of rounds. Buzaid and Newby clinched the top two places ultimately, while John Pratt also shone in the rounds which he was able to contest, finishing an eventual fourth.

Also right in contention, though, were **Mark Goddard** (Savoir Fare Van Diemen RF84), **John Village** (Crompton Lighting Royale RP36), **John 'Butcher' Booth** (Avercet Van Diemen RF84) and **Paul South** (*Daily Express*/Silverstone Racing School/BRP Van Diemen), all bar Booth leading the title chase at one stage or another. It was particularly nice to see Goddard as a major title challenger, the Leicester man having worked extremely hard to find a top-line drive over recent years. He picked up third place honours having notched his maiden national championship race victory during the year, while 'veteran' Village, a winner of the title back in 1981, drove superbly to win the opening round and could always be considered a possible victor. ▶



The master of the big occasion, Gerrit van Kouwen leads Uwe Schafer's ISA Van Diemen en route to a dominant Festival victory.

RAC BRITISH FF1600 CHAMPIONSHIP

Final positions:

1	Dave Coyne (Van Diemen RF84)	94
2	John Pratt (Reynard 84FF)	77
3	Mark Peters (Van Diemen RF84)	62
4	Gerrit van Kouwen (Lola T644E)	50
5	Paul Mather (Van Diemen RF84)	44
6	Peter Rogers (Reynard 84FF)	36
7	Tim 'A' Jones (Reynard 84FF)	32
8	Mark Blundell (Lola T644E/ Van Diemen RF84)	20
9	Mark Newby (Reynard 84FF)	19
	Gary Ward (Lola T644E)	19

TOWNSEND THORESEN FF1600 CHAMPIONSHIP

Final positions:

1	Dave Coyne (Van Diemen RF84)	218
2	John Pratt (Reynard 84FF)	189
3	Gerrit van Kouwen (Lola T644E)	179
4	Mark Peters (Van Diemen RF84)	160
5	Peter Rogers (Reynard 84FF)	92
6	Tim 'A' Jones (Reynard 84FF)	88
7	John Penfold (Van Diemen RF84)	66
8	Mark Newby (Reynard 84FF)	58
9	Paul Mather (Van Diemen RF84)	45
10	Karl Jones (Reynard 84FF)	21

ESSO FF1600 CHAMPIONSHIP

Final positions:

1	Alvaro Buzaid (Reynard 84FF)	172
2	Mark Newby (Reynard 84FF)	132
3	Mark Goddard (Van Diemen RF84)	121
4	John Pratt (Reynard 84FF)	109
	John Village (Royale RP36)	109
6	John 'Butcher' Booth (Van Diemen RF84)	108
7	Paul South (Van Diemen RF84)	107
8	Gary Ward (Royale RP33/Lola T644E)	81
9	Dave Coyne (Van Diemen RF84)	42
10	Harald Huysman (Reynard 84FF)	37

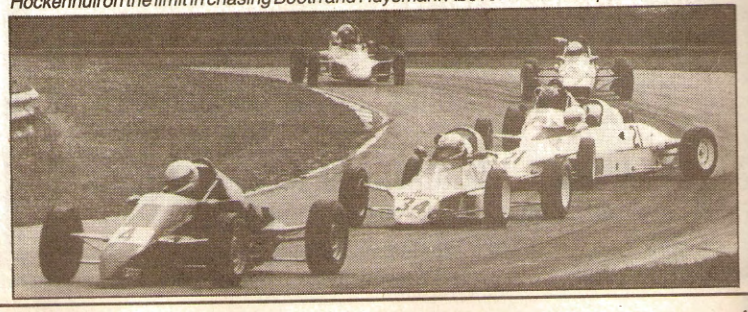
P&O FERRIES FF1600 CHAMPIONSHIP

Final positions:

1	Pete Townsend (Lola T640E/Reynard 84FF)	70
2	John 'Brolly' Booth (Van Diemen RF83/Reynard 84FF)	45
3	Mark Blundell (Lola T644E/Van Diemen RF84)	22
4	Alexander Arbis (Lola T644E)	18
5	John 'Butcher' Booth (Van Diemen RF84)	17
6	Dave Coyne (Van Diemen RF84)	16
7	Ross Hockenhull (Lola T644E/ Reynard 84FF)	11
8	Mark Peters (Van Diemen RF84)	10
	Charles Tilley (Van Diemen RF82)	10
	Lee Marzorati (Van Diemen RF84)	10



Hockenhull on the limit in chasing Booth and Huysman. Above: Wallace on pole for Rondeau.



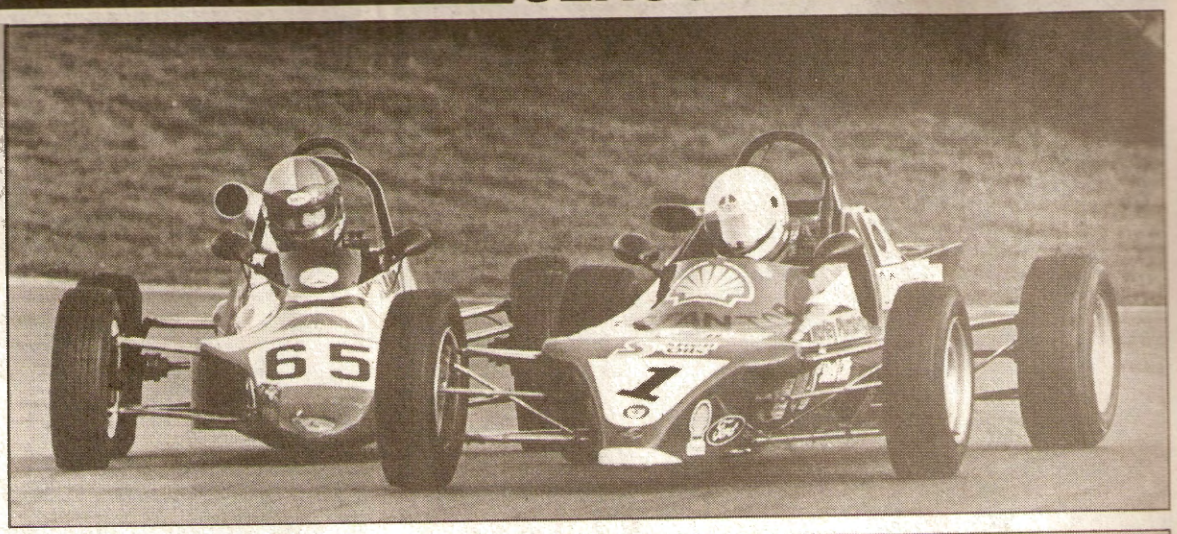
Fellow South Yorkshireman, **Booth**, never really came to grips with his RF84 and couldn't repeat the same kind of success he had enjoyed in 1983, while perhaps the same could be said of Paul South. This young man looked a good bet for honours and started the year well enough, winning third time out. But then in the June RAC round he was involved in a quite horrific end-over-end accident at the Woodcote chicane. Maybe this affected his confidence, for Paul was rarely on the real pace again and struggled particularly when the series visited circuits further afield.

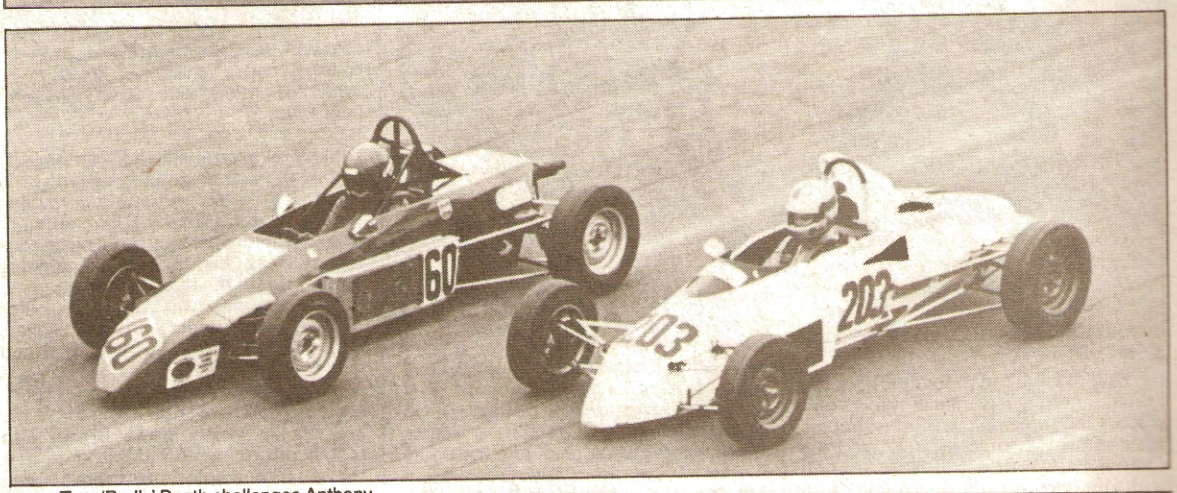
Team-mate in the BRP *equipe*, **Allan Seedhouse**, runner-up in last year's Marlboro Challenge, impressed with several very sensible drives, regularly up among the points scorers, while another youngster, **Gary Ward**, opened his account with a fine second place in the opening race with his year old Royale RP33. Local sponsors SDC promptly stepped in to assist the Ringstead man and acquired a brand new Lola T644E but, oddly, Gary never really showed as strongly again until right at the end of the year. He was, nevertheless, among the points on all bar two occasions, no mean feat in itself. **Tony Chambers** provided several stirring drives in his Hot Chocolate Reynard, as did **Andrew Rickman** on occasion with a similar Madgwick entry, while Belgian **Harald Huysman** took in a couple of races with his Marlboro Reynard. One of them resulted in a thrilling victory over Village when the visitor was tapped into a spin on the exit of the final corner, while leading. His car slewed sideways across the track but Village, tight in behind, was unable to jink past and could only sit helplessly as his Royale effectively T-boned Harald's car across the winning line!

In stark contrast to the BRDC's championship, which never failed to draw a good entry, the BARC's P&O Ferries series was plagued with pitifully small grids, such that only two drivers even bothered to contest more than half the race. **Pete Townsend**'s overall victory was therefore somewhat diluted, although this should not detract from several fine drives by the young Essex man. Armed firstly with a two-year-old Lola and then a brand new Reynard, Pete (Who? no, not him!) did develop his talents nicely during the year and made full use of his racing mileage. Perhaps one of his best drives came in finishing third at a very wet Oulton Park meeting in May, right behind local experts **John Booth** and John Booth, 'Brolly' narrowly defeating 'Butcher' on that occasion.

The umbrella manufacturing Booth, from Penistone, near Sheffield, also made excellent progress this year. He began with his year old Van Diemen and showed the same sort of volatile form that had characterised his driving in '83 but later, after a short break, returned with a brand new Reynard run by Steuart Veitch's Jubilee Racing concern and immediately displayed a new-found maturity. John, like his namesake, is a big, tall man who looks like he would hardly fit into one of the current, spindly Formula Fords but his season brought reward in winning the 'Champion of Oulton' series as well as second place in the P&O, despite missing several rounds.

Mark Blundell, one of this year's most impressive crop of novice drivers (of whom more later), claimed third in the points table in this largely meaningless series, by dint of winning a couple of races, while others to win races were Dave Coyne, **Mark Peters**, **Charles Tilley** (Van Diemen RF82), 'Butcher' Booth, Gerrit van Kouwen, **Alexander Arbis** (Loal T644E), who scored in the late-season Lydden event, and **Jonathan Bancroft** (Reynard 84FF), another of the novices.





Top: 'Brolly' Booth challenges Anthony Murray's works Crossle. Above: Hall's Jamun and Creswell's Ray do battle at Brands. Right: Shortle's Getem in trouble.

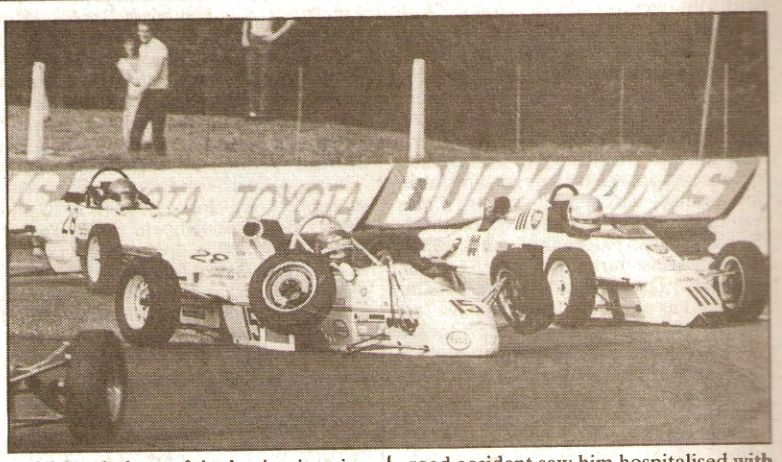
Regional championships

I counted a total of 17 Formula Ford 1600 championships on the British mainland this year and it is interesting that virtually all of them were well-supported. The regional or local, one-circuit series have become increasingly popular in recent seasons, providing competitors with good, regular racing without the need to incur excessive costs or to spend money on testing.

The SMRC's Scottish series will be covered at a later date by our Scottish correspondent, but suffice to say that **Tom Brown** was again in control at both Ingliston and Knockhill, claiming the title, this time with a Crossle 55F, for the fifth successive season. Notable performances, though, also came from **Willie Rose** in a new Reynard and **Harvey Gillanders**, particularly once the Aberdonian had replaced his old (crashed) Van Diemen with a new RF84 model.

In the north of England, the Bernard Hunter Cranehire-supported BRSCC (Northern Centre) series continued to provide the main focus. 'Butcher' Booth remains the man to beat in these parts and duly claimed the title after several fine showings in his Van Diemen. **Mike Lindley**, though, pushed him hard with a new Reynard, powered, interestingly, by an engine built by top motor cycle racer, Mick Grant.

Leicester's **Don Hardman** (Marque Cars Royale RP36) returned after a year's lay-off, remained loyal to the Bedfordshire marque and posted a couple of wins at his local Mallory Park circuit — now thankfully back in full swing once more — to claim third in the points table, well clear of **Colin Verity** (Van Diemen RF82). Mark Blundell and **Ross Hockenhull** also recorded good wins in this series.



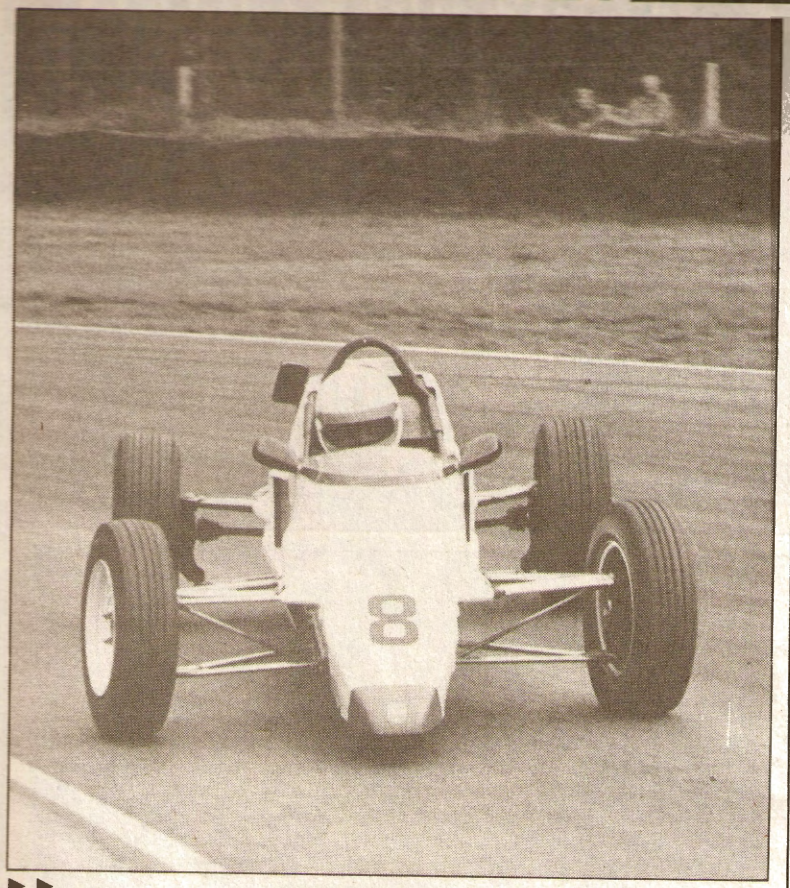
Of the plethora of single-circuit series, that at Brands Hatch perhaps provided the best racing. Harrow dentist **Chris Ringrose** made a concerted return after a year away from the circuits and drove one of Rob Creswell's Ray 80/82F chassis with great verve. He scored only four wins but backed these up with many other high placings and ended the year as a clear and deserved champion, securing the top prize of £1,000 and a new Minister engine for his trouble.

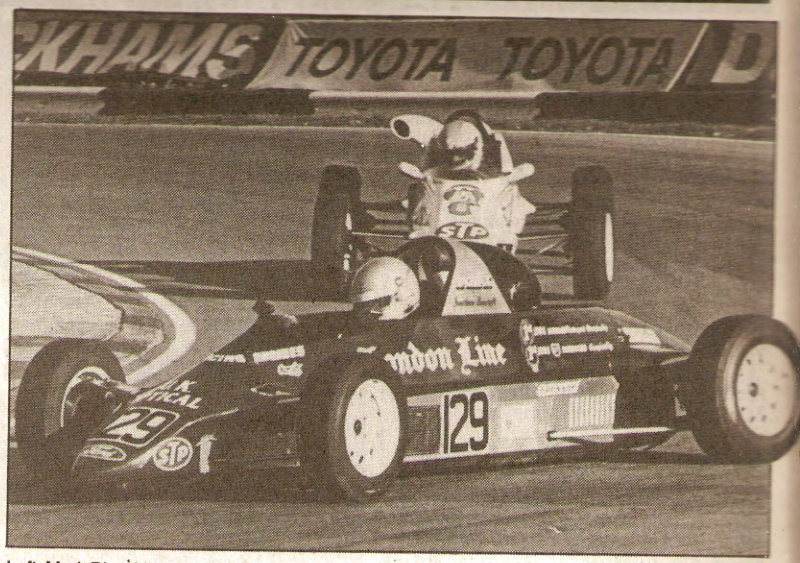
One of the features of the Brands series has always been the opportunity for some of the less well-known marques to grab some of the limelight, so it is especially pleasing to report that Tony Munday's very neat Jamun FFT12 finished a fine second overall thanks to the spirited performances of Sutton despatch rider, **Chris Hall**. In the same vein, **Rick Shortle** scored as many wins as the champion with Alan Brunning's novel Getem GD114. The Dartford man was always a strong contender, but one who often seemed to suffer at the hands of other people's accidents. Sadly, poor Rick's bad luck continued to dog him away from the tracks, where a very nasty road accident saw him hospitalised with nasty injuries that precluded his appearance at the Festival.

Shortle was placed fifth in the final points, behind **Glenn Board**, who was always a front-runner with his Quest-run Van Diemen RF84, **Chris Creswell**, who scored a fine debut victory for Bert Ray's latest 85F chassis in October, and **Len Greenney**, who ran very strongly at the beginning of the year with his year-old Lola T642E but rarely featured later on.

Len Bull took a fine opening round win in his Ideal Homes Van Diemen RF82 before a bad accident curtailed his activities — ditto **Trevor Stiles** in a car one year younger — while **Colin Stancombe** (Lola), **Ted Whitbourn, Tim 'East Grinstead' Jones** (both in Rays) all featured from time to time. Right at the end of the season, **Eddie Irvine** extended his visit from Ireland to the Festival by scoring a couple of fine results in his neat Mondiale M84S, while Drew Barwick took a fine win with the new Quest FF85 at another of the late-season winter events.

'Brolly' Booth also made a few trips to ▶





Left: Mark Blundell extracts maximum potential from his Van Diemen. Above: Jonathan Bancroft meanwhile scooped both novice titles.

►►

the Brands circuit in preparation for the Festival, netting a couple of fine second places (and three pole positions) but his main effort was concentrated upon the Oulton Park series, which he secured with a fine victory at the final round. With a couple of races to run, six drivers still held ambitions of taking the title, although this was whittled down to three pretenders at the last hurdle, of whom Booth emerged the best. Local racing school instructor, **Richard Peacock**, the 1982 winner, returned after a year's absence to secure the runner-up slot in his orange Crossle 55F, with **Chris Latham**'s Reynard relegated to third. Buxton's Ross Hockenhull made excellent progress during the year with his Richard Dutton-run Reynard and emerged as a real contender for the last couple of months, while Mike Lindley (Reynard) and **Eric Pennington**, until a big crash halted his efforts in the ex-'Butcher' Booth Van Diemen, also remained in contention. The butcher himself preferred to concentrate his efforts elsewhere but still won three events in his RF84, as did Mark Blundell with his similar car. **Paul Stott**, in between his Sports 2000 commitments, improved to notch several good placings in another Dutton-run car, this time a Lola T644E, while **Bryan Mullarkey** (Van Diemen RF80), **Gary Whitelegg** (Royale RP26) and **Adrian Cunliffe** (Van Diemen RF83) were also regular scorers.

Midlands Mallory

The Midlands Centre of the BRSCC reconstituted a similar series at their base, Mallory Park, which not surprisingly fell the way of local ace Don Hardman, although he won only three of the nine races, beaten four times running in the middle of the year by fellow Leicester resident, Mark Goddard. Mark Blundell underlined his capabilities by taking the other two rounds, once in a Lola, once in his new Van Diemen, while others to show well included **Malcolm McKillop**, untill his Lola was destroyed in another of the year's big accidents, 'Butcher' Booth and Mike Lindley. **Nick Hammerton** (Royale RP33) and **David Storey** (Royale RP26) were other locals to record good regular finishes.

Blundell appeared just often enough in the 'Champion of Snetterton' series, winning seven of the 15 races and narrowly out-pointing the ever-present Sparton FF82 of **Stephen Barnes**, who always ran strongly. **Pc Nicholas Owen** (Van Diemen RF82) was another regular scorer, while former champion **Simon Davey** decided to concentrate upon the Monoposto series this year, although still fitted the regulation Dunlops often enough to win three races with his Colin Thorpe-tended Van Diemen. **Chris Tolchard** (RF81), **John Love** (RF81) and **Steve Bottoms** (Royale RP33) were others to show a commitment to the series, while **Miles Johnston** (Reynard), Alvaro Buzaid and, with a fine effort at the final race, **Adrian Willmott** (RF84) also recorded race victories.

At Castle Combe, meanwhile, Cornishman **Martin Cooper**, who now bases his racing effort near to the Wiltshire circuit, produced a fine run of three wins from the final three races to secure the BRSCC South-West title. Martin found his updated '83 Reynard a more effective weapon than the RP33 Royale with which he began the year and was just able to fend off a determined challenge from the similar Reynard of **Howard Lester**. **David Llewellyn**, who must have owned more Royales than most people have owned cars, finished a good third overall after some good showings in his latest RP36, while Bristol's **Mike Wright** (BID/Pine City Van Diemen RF84) emerged in fourth after a tie-break with **Chris Chantler**'s rare Image 681. **Chris Skellern**, a Formula Ford front-runner in the middle-70s, scored some good results with his three-year-old Van Diemen with **David Mears** (RF81), Malcolm McKillop (Lola), **Mick Lord**, **Ken Harvey** (Royale RP26s), **Robert Davis** (RF84) and **Bart Toogood** (Royale RP33) also running well on occasion.

Another one venue series was run at Lydden, near Dover, where **Dennis Humphries** won the Tankerton Garage Trophy with the sponsor's own Van Diemen RF80. The ex-Hot Rod racer, however, had quite a tussle with ex-Mini man **Derek May**, these two making contact on several occasions and hardly ending the year on good terms with each other. May, after winning the opening four races in his similar RF80, opted to drop out before the final three races, thus surrendering his chances of pipping Humphries to the title.

Dave Connor was the only other regular front-runner, with a Royale RP26, although **Roy Lewington** returned with a newer RP29 to score several good placings along with former series sponsor, **Len Marchant** (Elden Mk24). At the end of the year, **Steve Brown** also returned with his PRS 81F to show that the final outcome might have been different had he contested the entire series.

One other low-key Formula Ford championship is that run for 750 Motor Club members, this comprising 10 rounds at five different circuits. This admirable little series is run primarily for the members' own enjoyment, although it also provided an absorbing battle for hounours between Nicholas Owen (RF82), **Andy Mathew** (RF78/80) and **James Buckton** (Sark 2) before they were finally classified in this order. **Barry Pomfret** (Tiga FF77), **Andrew Woods** (Sparton FF78) and **Martin Gilbert** (RF80) were other regular contestants, while David Storey claimed a couple of maximums with his Royale RP26.

Novice championships

One of the most noticeable aspects of this Formula Ford season has been the impression created by several novice drivers. The BRSCC's Dunlop/AUTOSPORT 'Star of Tomorrow' series, first run in 1976, and the BARC's BP 'Superfind' Junior series, which (unnecessarily in most people's view) has run since 1981, have provided an excellent opportunity for young drivers to learn the tricks of the Formula Ford trade without having to compete at the highest level but so far, oddly, none of the series winners have yet gone on to achieve any great success in higher formulae. Perhaps, after this year, that is about to change.

Godalming's **Jonathan Bancroft** has become the first driver to win both novice championship titles, starting the year with a new Van Diemen RF84 and then switching to a new Reynard with equal success under preparation guidance of Mike Baker's Racefax concern. Jonathan amassed an impressive tally of 12 race wins with his Van Diemen, opening up unassailable leads in both title chases by mid-July but he thereafter won only two races with the Bicester chassis, just one of them in a proper novice race.

In short, Jonathan lost his momentum in the latter part of the year and came under threat from a variety of other drivers. It must be said, too, that he had undertaken a fairly full season of racing last year as well as a couple of exploratory outings in '82. His record of finishing seventh in last year's 'Star of Tomorrow' series and eighth in the BP contest indeed caused a degree of concern that he should again be contesting the novice series this year but perhaps in 1985 he will continue to make use of his experience and shine once again in the major series. Certainly, judging by his excellent showing at the Festival, where he finished as first Briton in fourth place overall, and his equally impressive maiden FF2000 run in one of the Brands *Grandstand* events, where he finished fifth, Jonathan could have quite a future ahead of him.

The same goes for **Mark Blundell**, who, with absolutely no prior experience, quickly came to grips with a new Lola T644E. He won his third ever motor race, a mixed event at Silverstone's BMRMC meeting, and then quickly gained in confidence before notching his first 'proper' win at the Snetterton DSoT round in May. Over the next four months, Blundell recorded a further 23 race wins (most of them with a newly acquired Van Diemen RF84 which replaced the Lola in July) to move up to second place in both novice series and become regarded most definitely as *the* man to beat in the later stages.

It needs to be said that young Blundell, now 18, competed in as many as 70 races during the year — more than many drivers do in a lifetime — but the fact remains that he quickly sprung to prominence and was able to record a sustained sequence of race wins. His performances may have tailed off a little right at the end of the season (probably due to tiredness more than anything else!) and he was eliminated at the first round of the Festival after spinning (but also setting his heat's fastest lap), yet he still remains an exciting prospect for the future.

Third place in the DSoT was claimed by **Mike Wright**, who recorded two fine wins but wasn't able to show the same kind of consistency, ahead of former Mini racer, **Miles Johnston**, who seemed to lose his way after exchanging his successful Jonathan Lewis-run Reynard for a new Van Diemen (these novices seemed to have money to burn this season). Scot **Stewart Roden** (ICR Van Diemen RF84), who has scored points in Scottish Championship events for the past three seasons, also showed well in later events, while **James Taylor** (Reynard). **Andy Sim**, Ross Hockenhull (all in Reynards) and **Johnny Herbert** (Valour Racing Van Diemen) also showed promising form in at least some races.

DUNLOP-AUTOSPORT 'STAR OF TOMORROW' FF1600 CHAMPIONSHIP

Final positions:

1 Jonathan Bancroft (Van Diemen RF84/Reynard 84FF) 96
2 Mark Blundell (Lola T644E/Van Diemen RF84) 84
3 Mike Wright (Van Diemen RF84) 73
4 Miles Johnston (Reynard 83/4FF/Van Diemen RF84) 67
5 Stewart Roden (Van Diemen RF84) 33
6 Johnny Herbert (Van Diemen RF84) 24
7 Alan Cooper (Reynard 83/4FF) 22
8 James Taylor (Reynard 84FF) 18
9 Douglas Lague (Lola T642E) 17
Andy Sim (Reynard 82FF) 17

Gresswell heads the Pre '74 pack.



BP 'SUPERFIND' JUNIOR FF1600 CHAMPIONSHIP

Final positions:

1 Jonathan Bancroft (Van Diemen RF84/Reynard 84FF) 88
2 Mark Blundell (Lola T644E/Van Diemen RF84) 60
3 Eugene O'Brien (Lola T642E/Reynard 84FF) 39
4 James Taylor (Reynard 84FF) 33
5 Miles Johnston (Reynard 84FF/Van Diemen RF84) 29
6 Ross Hockenhull (Reynard 84FF) 28
7 Andrew King (Van Diemen RF84) 27
8 Johnny Herbert (Sparton SE316/Van Diemen RF84) 19
9 Jeremy Packer (Reynard 83FF) 11
10 Damon Hill (Van Diemen RF84) 10

BRSCC PRE '74 FF1600 CHAMPIONSHIP

Final positions:

1 Jeff Gresswell (Merlyn Mk24S) 147
2 David Porter (Elden Mk10C) 87
Bob Berridge (Van Diemen FA73/Lotus 69) 87
4 Peter Hancock (Merlyn Mk20A) 72
5 Alexander McIntyre (Dulon MP15) 57
6 Chris Whittingham (Dulon MP15) 49
7 Peter Lawrence (Royale RP3) 46
8 Gareth Lloyd (Dulon Mp15) 28
9 Chris Woodcock (Dulon MP15) 27
10 John Roberts (Dulon MP15) 17

In the BP series, **Eugene O'Brien**, younger brother of Sports 2000 racer, Mike, picked up a good third place after driving Lola and Reynard cars with some promise, while James Taylor, again, **Jeremy Packer** (Reynard), **Andrew King** (Van Diemen), Johnston, Hockenhull and Herbert again ran well, the latter having missed most of the season after breaking a leg in a nasty accident at Oulton Park. His Sparton SE316 was completely destroyed in that incident, although the former kart expert did look good at the end of the year with a new Van Diemen.

Another of the Snetterton-built cars was used to good effect by **Damon Hill,** who switched from racing motor cycles to cars in August and showed very definite promise in only a relatively few races — particularly at the Festival, where he claimed a fine fifth in the final, while Adrian Willmott posted a couple of good results after swapping his old RF82 for a new chassis.

Outside the novice championships, Liverpudlian **Allan Seedhouse** earned respect with his outings in the Esso series — perhaps outshining the man who pipped him to the Marlboro Challenge honours, **Tony Bottoms**, who nevertheless looked quite promising (with little luck) in a Murray Taylor Racing Van Diemen — while **Jason Elliott** and **Richard Dean,** both sons of former successful racers, also displayed considerable talent with their respective year old Van Diemens.

Pre '74 Championship

Paul Sleeman abdicated his pre '74 FF1600 crown in pursuit of Thundersports events this year but his throne was capably filled by former Brands Hatch school instructor, **Jeff Gresswell**, who returned to racing after a lengthy absence. Armed with a Merlyn Mk24S and Auriga engine Scunthorpe-based Jeff took the series by storm, winning eight of the first nine races (and 10 in all) to emerge as a clear champion.

Gresswell rarely came under any great threat, although a close tussle for second in the overall series was only decided by a tie-break, **David Porter** (Elden Mk10C) just having the edge over **Bob Berridge** (Van Diemen FA73 and Lotus 69) by one win and five seconds to one win and three seconds.

Peter Hancock was another seasoned and worthy competitor in his trusty Merlyn Mk20A, while a host of competitive Dulon MP15s included those of **Alexander McIntyre** (always up among the points), **Chris Whittingham**, whose maiden victory came at Donington in April, **Gareth Lloyd**, **Chris Woodcock** and **John Roberts**.

Peter Lawrence's pretty Royale RP3, **Howard Done**'s Hawke DL11 and **Dave Lowe**'s Lotus 61 provided further variety among the front-runners on occasion, while youngsters **Danny Wright** (Van Diemen FA73) and **Jesse Crosse** (Merlyn Mk17) both chose this series to cut their racing teeth, each turning in a good turn of speed, particularly Crosse, who won on the only outing at Thruxton in August.

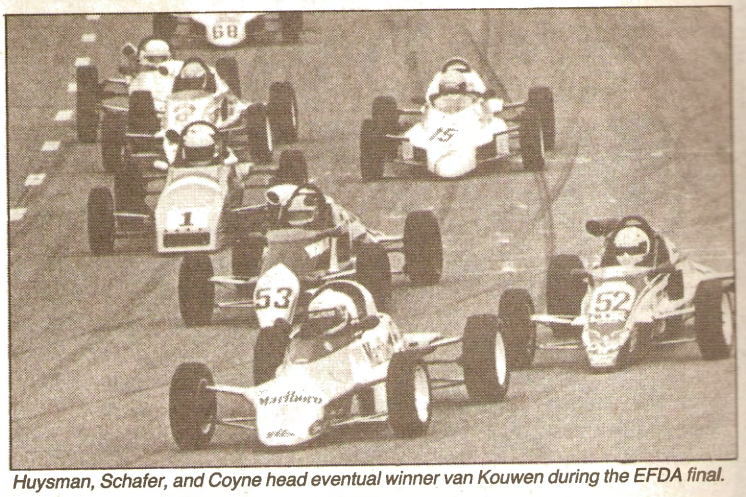
Following a series of pilot races in 1983, the BARC decided to run a proper championship for cars built between 1974 and 1978 this year, which also provided valuable enjoyment for those with eligible cars. In the end, though, there was quite a hoo-ha about the final championship placing (yes, even at this level in the 'sport'). One ract at Oulton had been run with a couple of local Royale RP26s taking part and the subsequent exclusion of these moved **John Wardle**'s PRS RH01 up to second in that event and therefore enabled him to clinch the title spoils over **Christian Radage**'s Merlyn Mk31.

Radage did win three races to the two of Wardle but could not match the Mansfield man's tally of other placings (he was among the top six every time out) and so had to accept the runner-up placing. **Wil Arif** won twice with his Crossle 25F, while **Malcolm Barfoot** took an Oulton round with his newer 32F model. **Chris Whibley** (Royale RP21), **Rod Townsend** (Van Diemen RF78), **Alan Mugglestone** (Merlyn Mk31) and **Kevin Spencer** (Royale RP24) were the only other regular scorers. ■

Newby's Madgwick Reynard fends off impressive newcomer Damon Hill at the Festival.



Van Kouwen in Europe



Huysman, Schafer, and Coyne head eventual winner van Kouwen during the EFDA final.

Dan Partel's EFDA Euroseries Formula Ford 1600, this year with sponsorship from Energy Release, provided a very well-supported series which began with four qualifying regions and then creamed off the leading contenders in each for a one-off final at Zandvoort on September 15.

Each of the regional series were held over four rounds with the eventual winner, **Gerrit van Kouwen** (Buddy L Models Lola T644E) only qualifying fourth in the Channel Region events. Dave Coyne's works Van Diemen headed this section with two wins and one second place with Irishmen **Anthony Murray** (Crossle 55F and **Eddie Irvine** (Mondiale M84S) also among those to reach the final.

The Franco-Benelux Region, meanwhile, saw some hard competition before **Harald Huysman** (Marlboro Reynard), **Uwe Schafer** (ISA Racing Van Dieman) and **Eric Bachelart** (Rondeau M584) emerged as the pace-setters, to be joined by young Belgian **Bertrand Gachot**, who was later to star in the Formula Ford Festival in taking a marvellous third place overall. Gachot, by the way, will contest next year's British series, probably with a works Reynard.

West German champion Schafer also qualified through the Central Region series, along with the likes of **Bernd Schneider** (Ray 84F), **Hans Furrer** and **Markus Osterreich** (Van Diemens), while young Finn **Jari Haavisto** swept the Scandinavian section with his Van Diemen RF84 in much the same way as he dominated both the Finnish and Nordic Championships.

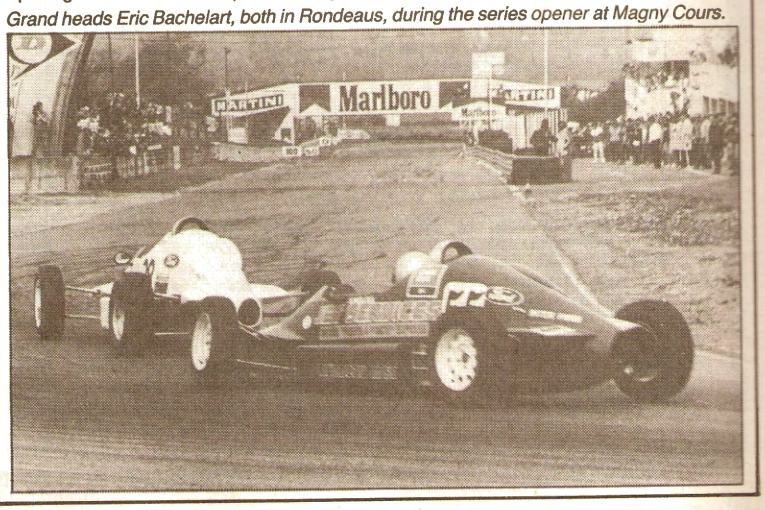
In the Zandvoort final, Schafer's Gätmo-engined Van Diemen quickly moved away in the lead before misfortune struck; his car's mandatory silencer fell off and poor Uwe was obliged to retire. This left van Kouwen and Huysman to enact a marvellous battle in his absence, which ended with the Dutchman ahead by inches. The two had made contact as they sped down the final straight, Huysman looking for a way past, but Harald saw no need to protest until he was goaded into it by some of his colleagues. Later that evening, the Dutch officials excluded van Kouwen, although his subsequent appeal was later upheld and the Lola driver was confirmed as victor — for the second successive year.

Eric Bachelart followed at a respectful distance, his Rondeau not handling too well as a result of an earlier mishap, while a monumental sort-out over fourth place finally fell in favour of Dave Coyne's Duckhams Van Diemen, which the Englishman had driven superbly after being edged into a spin on the very first lap. He was followed by Haavisto and Osterreich with **Frank Biela** (Reynard), **Arnaud Guiot** (Lola), **Wolfgang Jandl** (Van Diemen) and **Allard Kalff** (Reynard) making out the top 10.

F-French debut a success

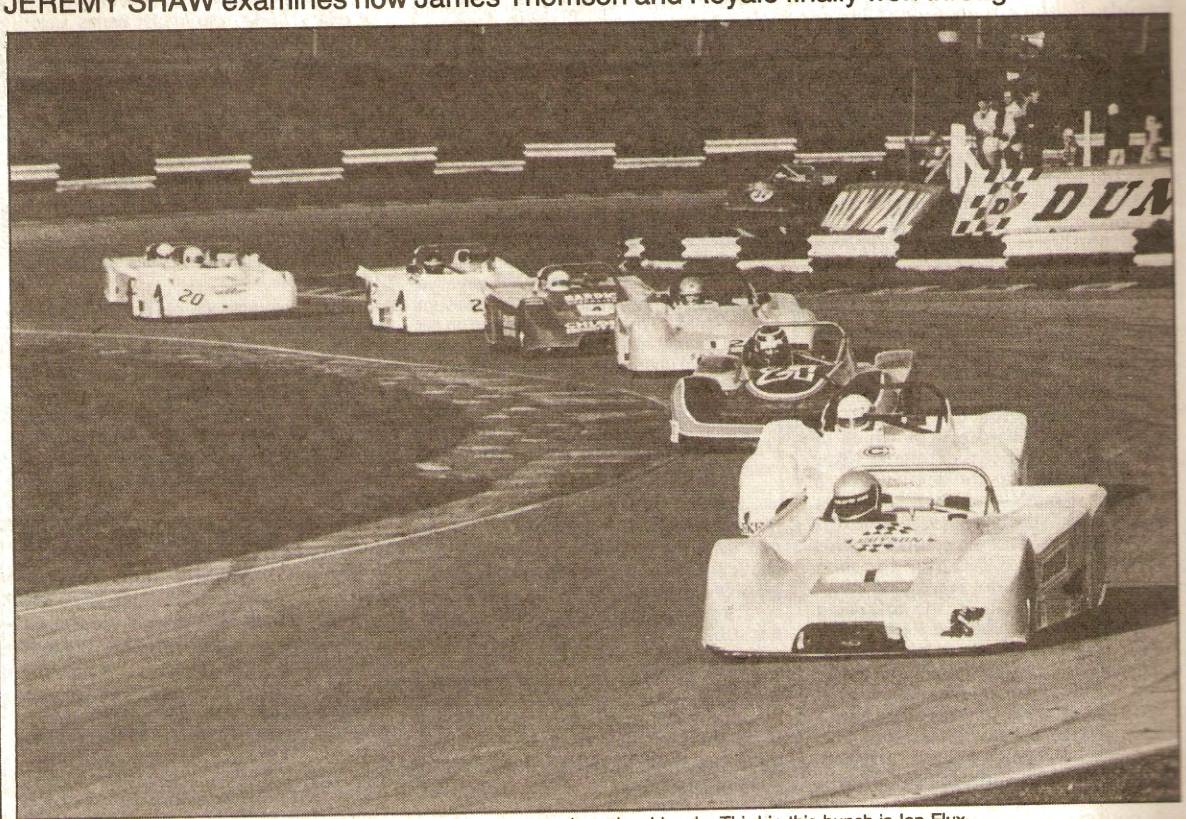
The introduction of Formula Ford to the French national racing scene has proven most popular this year, even though sometime Group C racer Jean-Philippe Grand has romped away with the inaugural title with his works-run Rondeau M584. Grand won the opening five races in impressive style, although others to show promise in a year that included some excellent racing included Philippe Gache, Antonio Mangia, Christian Bonnal, Philipee Jaffrenou and Swiss, Philippe Lambert, a successful FF racer in England some seasons ago.

Grand heads Eric Bachelart, both in Rondeaus, during the series opener at Magny Cours.



Three way fight

A close contest between three drivers dominated the 1984 British Sports 2000 scene. JEREMY SHAW examines how James Thomson and Royale finally won through



James Thomson leads the field at Brands Hatch on his way to a championship win. Third in this bunch is Ian Flux.

The die was cast at an early stage. Three different drivers shared the spoils of victory from the opening four rounds of this year's British Sports 2000 Championship, backed ostensibly by *Grand Prix International* until the magazine's collapse. These three then took it in turns to head the points table and continued this healthy rivalry right through to the 16th and final race. James Thomson, Sean Walker and Mike O'Brien thoroughly dominated proceedings, but did so in such a way that the final outcome was always in doubt. Indeed, only on one occasion, — and then at the very last race — did any other driver climb even as high as second place in an event.

Before the culmination, on a thankfully dry October's day at Snetterton, **Sean Walker** led the points table and, taking into account the fact that both drivers would have to drop scores if they finished within the top 10, Sean's task was clear. Even if **James Thomson** should win the race — and pick up the bonus points available for securing pole position and fastest lap, the FAI Engine Components Royale driver would need only to cruise home within the top four to claim the spoils. Given that Walker had failed to do that only once from the 14 races he had started (he was forced to miss one in recuperating from a cartilage operation on his knee), he seemed odds-on favourite to take the title. He didn't.

An inspired drive took Thomson away into a clear lead, while poor Walker, after changing a down-on-power engine after practice, found the replacement equally sluggish and could manage only sixth place. His only remaining hope lay with an RAC appeal court following an exclusion earlier in the season, but when this was turned down he was forced to concede defeat. Thomson had taken the title by a scant two points.

It is interesting to note a similarity between this series and the World Drivers' Championship in that Thomson gave best to Walker in terms of race victories by five to seven in the 16 rounds — as did Niki Lauda to Alain Prost from an identical number of races — but the fact remains that there was nothing to choose between the two Royale drivers from beginning to end. And right in there pitching, too, was the 1983 series champion, **Mike O'Brien**, who was always able to give a good account of himself in either of Richard Owen's Aquila or, latterly, Shrike cars. This trio provided some excellent racing, even if, on occasion, there was some seemingly unnecessary bodily contact.

Amazingly, apart from Evan Clements finishing second with his Royale at the final race and Paul Stott securing a new lap record at the same meeting, Thomson, Walker and O'Brien held a monopoly on first and second race positions as well as the extra points for pole and fastest lap. They were, in a nutshell, head and shoulders (even elbows and knees, as singer/songwriter Jake Thackray might suggest) above the opposition.

Either driver would have made a worthy champion but it was to Yorkshireman James Thomson that the honour eventually fell, thereby securing the first Sports 2000 title for Alan Cornock's (sadly now defunct) Royale marque. It was in 1981 that Royale first introduced a Sports 2000 challenger (their first sports car model, in fact, since the ill-fated Formula 100 days), designed by former Lola man Bob Marston. This car, designated the S2000M, reaped many successes over the ensuing couple of seasons but it wasn't until this year, when detail modifications under guidance from Wiet Huidekoper saw the car marketed as an RP37, that the car became a regular winner.

Championship battle! Mike O'Brien tangles with James Thomson at Oulton Park.



Team rivalry

Grantham-based Richard Dutton Racing continued their role as official suppliers of the Riseley-built cars and once again ran a highly effective team, spearheaded from the beginning of the season by Messrs Walker and Thomson. As the season progressed, however, so did the rivalry between these two (exacerbated by tussles with O'Brien as well) and the wisdom of having two such determined drivers in one team came under question. Each was trying their utmost to emerge on top, the team divided in their loyalties.

A split seemed inevitable by mid-season, although the circumstances which brought it about were unfortunate, to put it mildly. The drama came in the series' most prestigious single race, a supporter to the John Player British Grand Prix at Brands Hatch. Walker emerged from a typically close and exciting race with O'Brien and Thomson to win on the road, only to be later excluded when his car was found to possess an empty fire extinguisher bottle. A second Dutton-prepared car, that of Evan Clements, who finished fourth, was also thrown out. But Thomson's was OK.

It is unanimously accepted that there was no intention of cheating by either the team or the drivers but the fact remains that the fire bottle was empty and therefore not only potentially dangerous but illegal. The exclusion came as a bitter blow to Walker's championship aspirations, of course, so that he and father Ian decided to appeal against the penalty. "As far as we are aware," said Sean afterwards, "the bottle was full when the car was originally scrutineered. No one can prove otherwise now, but I feel disqualification is too harsh a penalty to have to pay."

The RAC decreed otherwise. After another absurdly long wait — it took our marvellously efficient governing body more than three months to convene the appeal — and, ironically, just 24 hours after the final round of the championship was run, Walker's appeal was thrown out. His disqualification would stand and, most significantly, he would have to count that 'nil' points score from the GP meeting among his '13 best results' from the 16 races. Thus, instead of taking the title by a four point margin, he had to concede defeat by half that amount.

After the debacle at Brands Hatch, Walker quickly arranged to take over the running of the Royale. Due to the proximity of the next race at Snetterton on the following weekend, Sean remained with Dutton for that meeting — which he won — but thereafter the car was prepared by Richard Naylor's team. His final tally of seven wins, four seconds and a third represented a good year's work but he was left to rue that exclusion at Brands plus the fact that he had been forced to miss that Snetterton race just three weeks earlier. There again, if excessive tyre wear in the second round at Thruxton back in early March hadn't misled him into thinking he had a puncture (he pitted and could finish only 10th), then he might, even so, have been champion. Motor racing is full of ifs and buts . . .

James Thomson's only major mistake of the season came at the penultimate round when he spun out of the lead at ▶

Thorkild and Tiga

The European Formula Drivers' Association (EFDA) once again ran their Sports 2000 Euroseries this year, with Denmark's Thorkild Thyrring back on top form and regaining the title he last won in 1982. Thyrring's Denim Aftershave Tiga SC84 was generally the best of the field during the eight-race series, one that failed to draw any significant response from British competitors but which did produce some interesting rivalry between Benelux and Scandinavian regulars.

Aside from being involved in an incident with Henny Vollenburg during the second round at Avus in Berlin, when he spun out of the race, Thyrring remained undefeated from the first six races and was therefore able to stitch up the title with a very conservative drive into ninth place in the penultimate event at Zandvoort. When the series closed on his home ground at the Jyllandsring, Thorkild once again underlined his superiority with a clear win and fastest lap.

Dutchman Charles Zwolsman won the two races that Thyrring did not, to finish as runner-up in the points table, although he and Henny Vollenburg — both Tiga-mounted, incidentally — were involved in many a close race, as they were in the Dutch S2000 Championship.

The only other major contender to race on a regular basis was former series victor, Hans Edvinsson, whose latest Lola T596 claimed a couple of second places. Hans, though, would probably have featured rather more strongly had he relied upon Nelson power for the full season.

Young Dane, Erik Thinghoej, ran promisingly with an ex-Thyrring Tiga SC83 to notch some useful results on the Scandinavian tracks, while Norwegians Knut Backe, Rune Berg and Birger Schanke were regularly among the points if not the pace-setters.

Paul Stott took one of Richard Dutton's Royale RP37s to a few of the early rounds but lacked the experience to feature strongly, although the Dutton team's prime contender, James Thomson, did give Thyrring a run for his money at the series' only visit to these shores, at Donington in June. James, though, was not registered for the series and so remained ineligible for points.

BRITISH SPORTS 2000 CHAMPIONSHIP

Final positions

1	James Thomson (Royale RP37)	224
2	Sean Walker (Royale RP37)	222
3	Mike O'Brien (Aquila RO83S/Shrike P15)	196
4	Evan Clements (Royale S2000M/RP37)	93
5	Paul Stott (Royale RP37)	67
6	Dud Moseley (Motus Mk10BX)	63
7	Tony Dunderdale (Tiga SC80)	55
8	Richard Morgan (March 84S)	46
9	John Bright (Royale RP37)	34
	Richard Long (Aquila RO83S)	34
11	Bill Coombs (Tiga SC79)	33
12	Tony Westwood (Royale RP37)	31

Pre '80 class:

1	Bill Coombs	58
2	Tony Llewellyn-Davies (Tiga SC79)	35
3	Andreas Kramer (Tiga SC79)	22
4	Martin Chambers (Lola T492)	16

EFDA SPORTS 2000 EUROSERIES

Final positions:

1	Thorkild Thyrring (Tiga SC84)	134
2	Charles Zwolsman (Tiga SC84)	90
3	Henny Vollenberg (Tiga SC84)	79,
4	Hans Edvinsson (Lola T596)	62
5	Erik Thinghoej (Tiga SC83)	41
6	Rune Berg (Tiga SC83)	36
	Knut Backer (Tiga SC82)	36
8	Harald Lauritzen (Tiga SC83)	24
9	Leif Hellberg (Tiga SC83)	18
10	Atle Granaas (Tiga SC78)	16

Brands Hatch's notorious Paddock Hill Bend but he was otherwise, arguably, the most complete and consistent driver of the three. The former British Hillclimb Champion had shown well in the single-seater Formula Ford 2000 category over the previous two seasons, wherein he also sparred with Walker, and quickly worked up to the pace in the sports car formula, finishing runner-up at Thruxton on only his second outing. His only non-finish apart from the late-season Brands Hatch race came at Oulton Park in August when he was rudely punted out of the lead by O'Brien at the tight Island Bend. This, plus his own error later on, could have contrived to lose him the series but perhaps luck remained on the Yorkshireman's side. He nevertheless showed himself to be a quick and resourceful driver, who plans to move up into Formula 3 for 1985 where his talents should continue to develop.

O'Brien, of course, has moved the other way, running a couple of seasons in F3 with both March and Anson chassis before stepping into the Sports 2000 arena. Mike has certainly now found a nice little niche for himself and he remains a useful yardstick by which to judge the relative merits of others. After a promising start to the season with a second at Brands and then a win at Thruxton, also on pole and setting fastest lap, O'Brien looked well on course for his second successive S2000 title, but then came a couple of major set-backs.

A loose plug lead in the following event on the Silverstone GP circuit dropped him out of a secure lead and into fifth place (although he incurred the wrath of John Bright on that occasion for a quite blatant piece of weaving in a vain attempt to keep the Royale driver behind on the final lap) while worse was to follow when an obscure carburettor problem saw him unable to capitalise on his fine pole position at Donington.

These problems together with a spin into the tyre barrier at Snetterton at the end of July took the edge off his challenge, although at this same meeting he was excluded from the results for contravening the standing regulations by effecting a tyre change on the grid without the authority of the clerk-of-the-course. It was perhaps the team's high-handed attitude that brought about the exclusion more than the offence itself, although, as in the case of Walker, this result had then to count towards O'Brien's final tally. Thus, despite a maximum score at the penultimate round with the new Shrike P15 design from Richard Owen's fertile drawing board, Mike was out of contention for the title and indeed opted to miss the final race completely. Perhaps if the new chassis had been readied earlier and Mike had not had to rely on the year-old Aquila RO83S for so long, then the outcome may have been different. . .

The top trio had matters very much their own way for most of the year, although **John Bright** and **Richard Morgan** were able to challenge whenever they appeared. Bright began the season with a new Royale in the colours of RE Bates, but quit the scene after a sad mis-understanding with Cornock — Royale's dire loss, one felt — while Morgan suffered various engine dramas in his Plygrange Racing-run March at the beginning of the year. Matters improved when Richard took to running the car himself, although later he took the opportunity of a job in America (as did Bright, by co-incidence) and so was lost to the scene.

These two aside, **Evan Clements** picked up many useful results with another Dutton Royale, replacing an older chassis with one of the new RP37s mid-season, without ever being regarded as a front-runner, while team-mate **Paul Stott** began to show improving form in the latter part of his first season after racing both in Europe and in Formula Ford 1600. Stott, indeed, claimed a fine new lap record in the very last race and could be a man to watch next season.

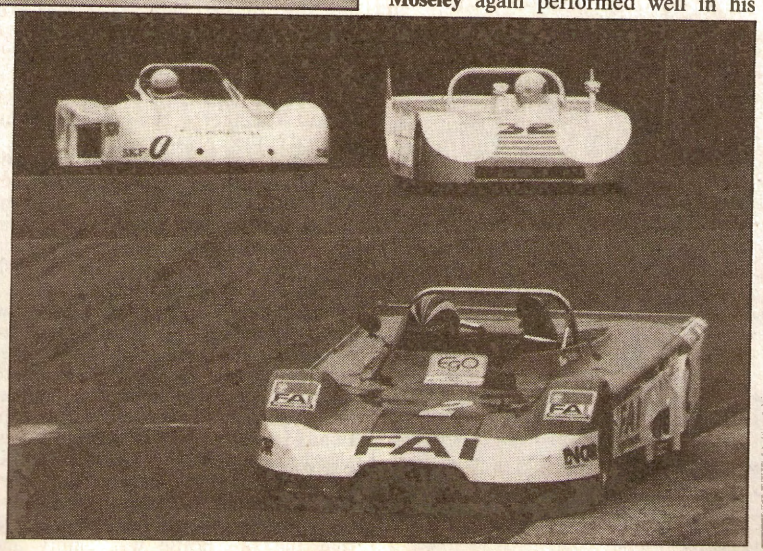
Former Clubmans champion **Dud Moseley** again performed well in his self-constructed Motus Mk10BX, despite several mechanical dramas without which he might easily have finished higher than his eventual sixth in the points table. **Tony Dunderdale** was another regular scorer in his old Tiga, while former Special Saloon exponent **Richard Long** picked up some placings in a year-old Aquila. This car eventually passed into the hands of ex-F3 man **Ian Flux**, who appeared in a couple of late seasons races and promises to back for a full season in '85. That could be interesting!

The Royales of **Tony Westwood** and **Tony Hilton** were also in the points more often than not, while **Bill Coombs** displayed his talents in easily sweeping up the Pre '80 award with Tony Jones's Tiga SC79. Sometime FF1600 contender Coombs often humbled far more modern machinery, despite a car that was far from right following a monumental early-season crash.

The special class for older cars proved a worthwhile addition to the series, which was enthusiastically monitored this year by Val Adaway on behalf of the Sports Racing Drivers Club, and indeed for next year the scope will be widened slightly to allow 1980 cars to be included in this division. Apart from Coombs, **Anthony Llewellyn-Davies** (Tiga) and **Martin Chambers** (Lola) were the only regular contenders, although **Andreas Kramer** showed well enough when he was able to make the trip over from his home in Switzerland! Former Midget-man **Dave Karaskas** (Lola) and ex-Formula 1300 champion **Keith Messer**, with his delightfully rebodied Lola, also raced on occasion, along with the newer SC82 Tiga of former modsports racer **Robert Speak**. Clubmans supremo **Will Hoy** also found time for a few outings in the new Chamberlain Engineering-run Tiga SC84 — the only new car from the highly successful High Wycombe manufacturer to appear in the British series, for some strange reason — while further variety was provided by a new Chevron B60A for either **Mark Storer** or **Roger Andreason**, who now holds the rights to build these cars, and the very slow old Elden of **Del Bennett**.

Despite the best efforts of Ms Adaway and the SRDC, grids were generally on the thin side during 1984, which came as a major disappointment, although the quality of racing at the front was especially intense. Matters, we are reliably informed, will improved next season, however, when Sports 2000 enters its ninth full season. ■





Above: the results of a first corner tiff between Andreas Kramer and Stephen Taylor at the Brands Hatch meeting in March. Right: Sean Walker, pictured here leading Dud Moseley and Mike O'Brien, looked set for a championship win but finished second.

BRITISH SPORTS 2000 CHAMPIONSHIP STATISTICS

	Wins	Seconds	Thirds	Poles	Fastest Laps
James Thomson (Royale)	5	6	2	7	4
Sean Walker (Royale)	7	4	1	4	6
Mike O'Brien (Aquila/Shrike)	4	5	2	5	5
Evan Clements (Royale)	—	1	3	—	—
Paul Stott (Royale)	—	—	1	—	1
Dud Moseley (Motus)	—	—	1	—	—
Richard Morgan (March)	—	—	3	—	—
John Bright (Royale)	—	—	2	—	—
Will Hoy (Tiga)	—	—	1	—	—



Manadient ran the Argo JM14 FF2000 project but now the factory has its own effort.

Anglia to run Argo FF2000s

Jo Marquart's Anglia Cars concern is poised to enter the FF2000 market in its own right this year, with an all-new Argo contender, designated JM17. The Swiss designer's previous interests in the category have, of course, been handled by Manadient, who looked after the JM14 project for two seasons.

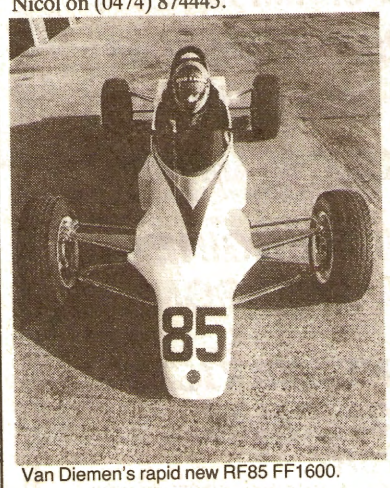
The Norfolk-based constructor will be running a works JM17 in the 1985 Racing Displays British championship, and producing replicas for use in the growing number of Ford 2-litre markets.

American Bob Carville (21), President of the Ultra-Techna Corporation in New York, will campaign the factory-run machine, which incorporates lessons learned from its predecessor, and the fine little JM16 IMSA GTP sports car. An FF1600 version is also planned.

Sport for all from BRSCC

The BRSCC is to run a 12-round series for sports cars this season, using the 'prodsports' regulations as a basic guideline. All production sports machinery currently, or previously, listed in the RAC 'blue book' will be eligible.

One round, at Oulton Park in May, is a 100-mile, two-driver, endurance event which carries double points. Sponsors for the championship are being sought although it promises to provide close, low-cost racing. Full details from John Nicol on (0474) 874445.



Van Diemen's rapid new RF85 FF1600.

Ambitious Van Diemen

Premier Grovewood Award winner Mark Blundell (newly signed as one of Van Diemen's works FF1600 drivers in Britain this year), was at the La Chatre circuit in France before Christmas, demonstrating the new RF85 chassis to potential customers invited by Claude Chantala, the marque's importer.

The FF2000 derivative of the car is now well advanced — and likely to run for the first time this month — but the smaller version continues to impress, wherever it runs.

Adrian Barnard (Mark Peters's mechanic last season) has been promoted to works FF1600 team manager this year, with 'Puddy' and Andy Fulford running the factory chassis in the big series. Barnard will also liaise with customers on technical matters relating to any Van Diemen FF1600 chassis and be available to advise at the circuits.


Deborah Gregg — new British Brumos base?

British base for Brumos?

Rumour has it that Deborah Gregg, the American FF2000 driver, is to set up shop in the Silverstone area, to run a two-car team in the formula this year. Deborah enjoyed her first season of single-seater action in 1984, her smart Brumos Reynard run in Britain and Europe by Trevor Hegarty's Penistone team.

A likely candidate for the second Brumos seat is Anglo-Canadian Bertrand Fabi, the rapid lad enjoying backing from Reynard importer Raymond David.

BRIEFLY

■ The FF1600 race at the recent New Zealand GP meeting, Pukekohe, resulted in a one-two finish for the Reynards of John Crawford and Lou Schollum. Both lads are experienced race mechanics — John, in fact, ran Gerrit van Kouwen and John Pratt in Britain this season — and each was running an ex-Madgwick 84FF, equipped with the longer US-spec tailpiece and flared nosecone set.

■ Dutchman Lammie van der Heuvel, winner of the Benelux FF2000 title last season, is expected to contest selected Racing Displays British 2-litre rounds this year. He is tipped to join Jeremy Packer at Motiv Racing.

■ The American Swift company, which inspired several of the contemporary FF1600 designs from British *marques*, has added David Bruns-penned FF2000 and S2000 chassis to its range for 1985.

■ Brands Hatch Racing is exporting its services to Portugal this month, where around 800 would-be racers will undergo tuition in a fleet of new Tiga FF1600 chassis. The FF1600 category is due to be introduced to the country in 1986, and should spread to Spain also.

Silverstone sponsored

Esso Petroleum, Trimoco, British Car Auctions, Uniroyal and Crompton Parkinson Marketing have confirmed their continuing sponsorship for the BRDC's National racing championships, based at Silverstone circuit.

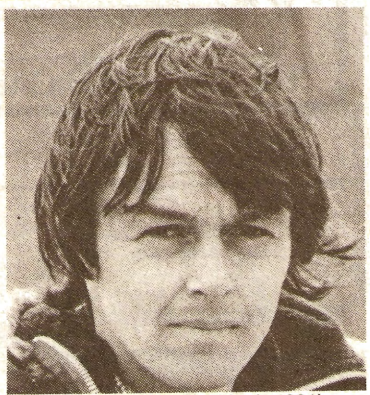
Particularly good news for FF1600 competitors is that Esso have boosted the prize fund (£100 for a win), while this series, and the Trimoco clubmans trail, will visit the challenging Cadwell Park circuit in 1985.


Ross Hockenhull — graduating to FF2000.

Hockenhull moving up

Derbyshire youngster Ross Hockenhull, who began to go really well towards the end of an intensive first season of FF1600 last year, is graduating to FF2000 this season, having sampled the category in the recent BBC TV series.

Hockenhull will again be run by Richard Dutton Racing, probably in a two-car team alongside his F3 equipe. A new Reynard 85SF has been ordered.


Reynard — 31 championships in 1984!

Reynard's grand year

Reynard Racing Cars, winners of some 31 FF1600 and FF2000 championships world-wide last season, will be testing their new FF1600 and FF2000 chassis at the Moroso Motorsports Park circuit (formerly West Palm Beach) in the next few weeks. The 2-litre version's bodywork moulds were finished in the week before Christmas and its shakedown tests are now imminent.

On the FF1600 front, Adrian Reynard has confirmed Bertrand Gachot as a factory driver for 1985, while US run-offs victor Jackson Yonge will continue to receive works support in America. His pukka 85FF race car (not the prototype seen at Road Atlanta) is now with him for the winter races in Florida.

The 1985 Reynard FF1600 contender.

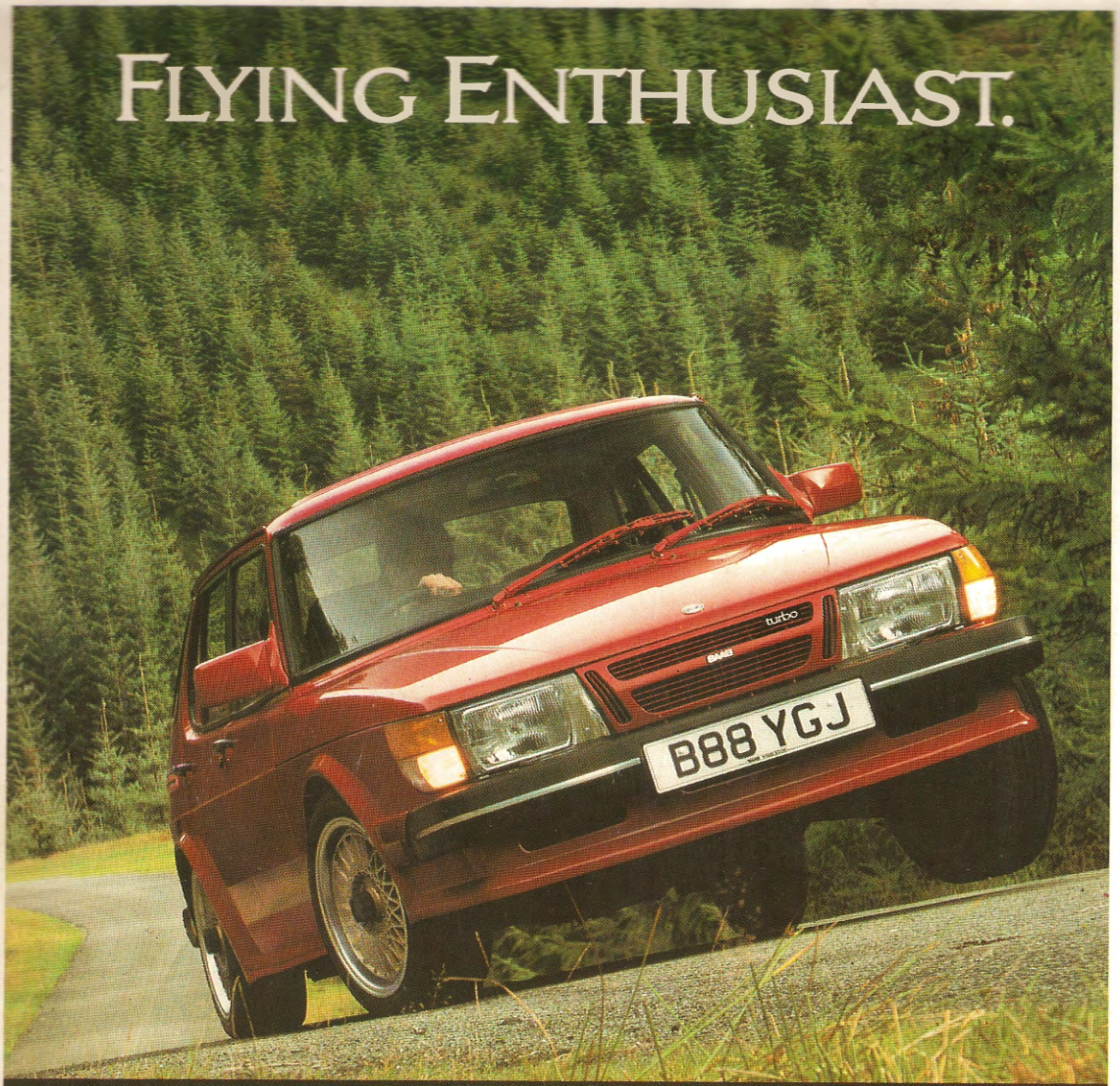




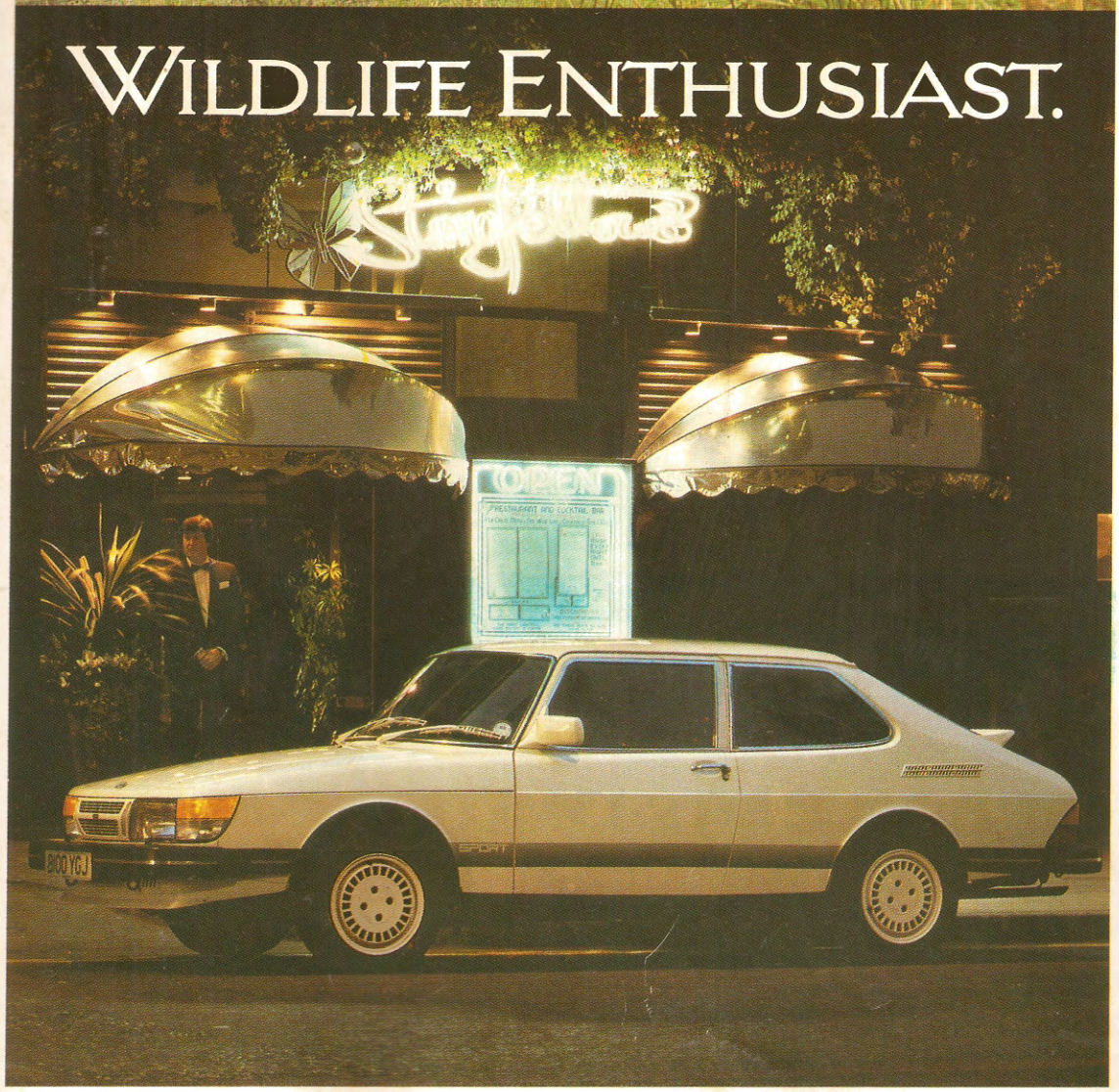
Howitt boosts GT series

The Derby-based Howitt Printing Group, staunch supporters of motor sport at Donington Park, is supporting a three-event 'mini-series' for GT cars within the Motoring News Transnational championship this season. It is hoped that the additional prize money posted by Howitts will bring out even more of the spectacular hybrid machines (such as Jeff Wilson's BMW M1-bodied Chevron-GA B30, pictured), in the twin DRC-organised classes.

FLYING ENTHUSIAST.



WILDLIFE ENTHUSIAST.



● THE NEW SPRINT FROM SAAB WIMBLEDON. A CAR PRODUCED BY ENTHUSIASTS FOR ENTHUSIASTS.

SPECIALLY COMMISSIONED BODY KIT MEANS DRAMATIC STYLING. NEW LOWER, STIFFER SPRINGS, AND PIRELLI P7 TYRES ON 7" X 16" WHEELS RETAIN COMFORT, INCREASE ROAD HOLDING.

WIMBLEDON INSTALLED TURBO INTERCOOLER BOOSTS PERFORMANCE.

THE SPRINT CONTAINS A HOST OF COSMETIC ADDITIONS, INCLUDING FULL COLOUR CODING AND 3-SPOKE LEATHER STEERING WHEEL.

● THE SPORT FROM SAAB WIMBLEDON. PRODUCED FOR FANS OF ALL SPORTING ACTIVITIES.

ALLOY WHEELS, FULL COLOUR CODING AND SPOILERS GIVE STUNNING APPEARANCE. UPRATED SUSPENSION FOR OUTSTANDING ROADHOLDING.

OTHER ADDITIONS, INCLUDE 3-SPOKE LEATHER STEERING WHEEL, CLARION STEREO, ELECTRIC AERIAL, TO COMPLEMENT EXCITING ENGINE PERFORMANCE.

THE ENTHUSIAST TO CONTACT IS PAUL WEST, AT SAAB WIMBLEDON, 14 MORDEN ROAD, LONDON SW19. TEL: 01-542 2454.

SAAB
WIMBLEDON

THE ENTHUSIAST SAAB DEALER.