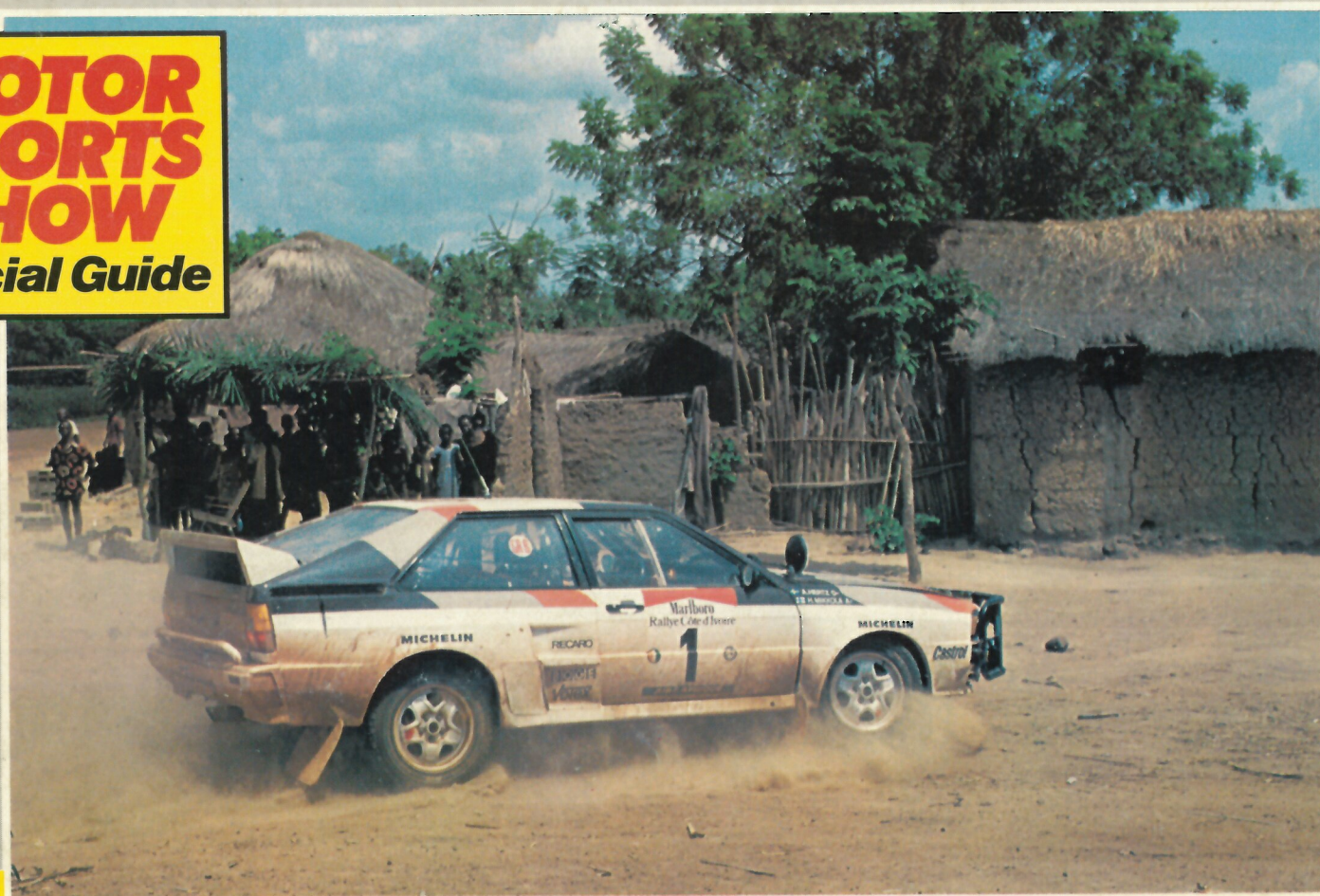


Autosport

A Haymarket publication

January 5, 1984 7

**MOTOR
SPORTS
SHOW**
Official Guide



Mikkola's World Rally Title



Palmer's F2 success

Golden Helmet Top 50

Drag Racing USA

Formula Pacific race act

January 5, 1984
Vol 94 No 1

FRONT COVER

Top: Hannu Mikkola won the 1983 World Rally Championship at the wheel of his Audi Quattro. He clinched the title with a spectacular second place on the Ivory Coast Rally; Peter Foubister's review of the year begins on page 38. Photo: Colin Taylor Productions. Bottom: Jonathan Palmer had a superb year of F2 racing to claim the title with his Ralt Honda. Ian Phillips's review of the European Championship starts on page 26. Photo: Jeff Bloxham.

NEXT WEEK

A full report of the 1984 Motor Sports Show from the Cunard Hotel, Hammersmith — All the major regional rally reviews — Mondial racing from New Zealand and America — The South African sporting scene — Latest F1 testing from Paul Ricard — Plus all our usual news, reviews and features.*

*These items correct at time of going to press.

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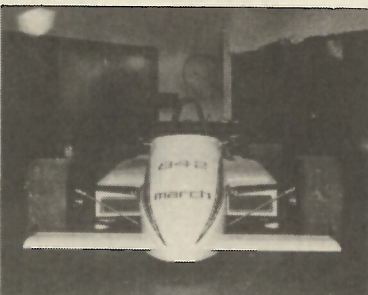
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PIT & PADDOCK 4



Renault continue testing at Ricard — Hesnault signs for Ligier — Sullivan's CART deal for 1984 — Brundle for Tyrrell? — Cecotto signs for Toleman — RAM-Hart takes shape — Trimoco controversy continues — Motor Sports Show latest news.

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March have unveiled their latest, and all new, F2 challenger from the design table of Ralph Bellamy. Ian Phillips reports on the March 842 that he saw on Christmas Eve.

COMMENT 8

The Editor remarks on the major news story of the week — Your comments in the *Correspondence* columns — A history lesson or two with *Then as Now?* — And *Catchpole* welcomes in the New Year in typical style.

GOLDEN HELMET 11



1983 saw the inaugural year of the AUTOSPORT Golden Helmet Award which was won in convincing style by Paul Sleeman. We present the 1983 winner to you and look at the cars he drove as well as provide the top 50 on the Golden Helmet list for your perusal.

PARIS-DAKAR RALLY 14

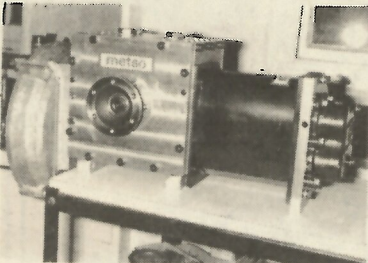


We take a look at some of the weird and wonderful machines participating in this year's gruelling Paris-Dakar Rally, led away by Jacky Ickx, that started on New Year's Day.

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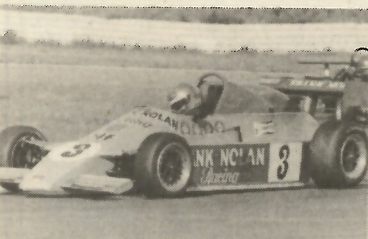
All the rallying news — Kaby clinches Nissan deal for Monte — Controversy over British B-seeds — Gallagher to Toyota — National Breakdown Rally draws nearer — More championship dates . . .

TECHNICAL & OTHERWISE 18



A new gearbox has been designed for small racing cars by Stuart Wallace. Technical Editor John Bolster saw the 'box under construction and reports on his findings.

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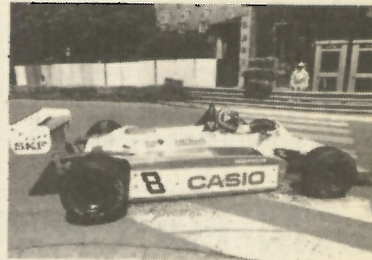


Brian Foley reflects on the 1983 racing season in Ireland. All categories of racing are reviewed here with a few pointers towards where the action will be in 1984 and who will be making the headlines.

SPORTS EXTRA 24

Motor Sports Show side stalls — Manadiant's long term Argo FF1600 project — Metro Breakers back mod-saloons — Latest Delta nearly ready — BARC racing scholarship.

SEASONAL SURVEY 26



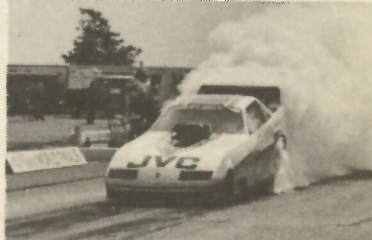
Ian Phillips reviews the 1983 European Formula 2 Championship that was won in convincing style by Britain's Jonathan Palmer for Ron Tauranac's Ralt Honda team.

SEASONAL SURVEY 38



Peter Foubister looks back at the World Rally Championship that at last went the way of Hannu Mikkola and the Audi Quattro. All the events are studied with results for every rally, and championship tables for both the Constructors' and Drivers' Championships.

US DRAG RACING 48



Drag racing is probably the world's noisiest and fastest sport and America is where all the latest innovations seem to be tried and tested. Robin Jackson reports on one of America's most popular forms of motor sport.

SPORTSCARD 52

Paul Radisich's New Zealand Pacific win — Rover wins in Egypt — Andy Elliott's Northallerton double win — Greasley takes Boxing Day Brands Rallycross Polly's winternational.

MOTOR SPORTS SHOW GUIDE

The official guide to the 1984 Motor Sports Show is free with AUTOSPORT this week, so make sure you use it by visiting the show that opens this Friday in Hammersmith.

FISA affirms support for European F2

As a result of the confusion which arose at its Paris press conference just before Christmas regarding the future of Formula 2 and the proposed Formula 3000, FISA issued a clarification last week.

Originally, the governing body had stated that the two formulae would run together in 1984. However, FISA says that this was a misunderstanding, and that the 1984 European Formula 2 Championship will be for F2 cars alone on the 12 dates originally specified.

FISA also stated that, while there was no way it could prevent Formula 3000

from happening, it would give Formula 2 its wholehearted support.

Barry Bland of the Formula 2 Association welcomed the clarification and confirmed support last week, and added that the open letter to FISA President Jean-Marie Balestre published in the French press just before Christmas contained the personal views of the Martini-Oreca team boss, Hugues de Chaunac, and not those of the F2 Association.

There is no clear indication as to

whether FISA intends to change the F2 regulations in the near future to permit the use of the Cosworth DFV 3-litre engine, which it appears a number of people would favour. In order for this to happen in 1985, the full agreement of all parties would be needed to circumvent the two-year stability regulation.

The Formula 3000 scene appears to have gone very quiet. While naturally enough there are a number of drivers keen to participate, there are no cars obviously ready and available, nor teams yet with the money to do the job . . .

Hesnault for Ligier

French Formula 3 driver François Hesnault is the unlikely choice for the number two Ligier Formula 1 drive in 1984. It had been thought that either Michel Ferté (consistently quicker in testing) or Thierry Boutsen (in the event of there being no Arrows-BMW drive for him) would partner Andrea de Cesaris, but Hesnault it is.

French cynics suggest that this move by Guy Ligier may have a financial motive. Hesnault's father has strong Elf connections, for one thing, and it is said that young François may be bringing around \$1m to the team. Quite where he will find a Super Licence (for which he does not appear to be eligible) is less clear . . .

RAM-Hart for Rio

One racing factory which hardly bowed to the Christmas holiday was John Macdonald's RAM Automotive. They are working flat-out to instal one of Brian Hart's turbo engines into a 1983 Formula 1 chassis in time for the Rio tyre tests, while two brand-new carbonfibre/honeycomb chassis are being built and should be ready by the end of the month.

Macdonald was unable to confirm last

week who would drive at Rio. He had long pre-Christmas talks with Stefan Johansson and Jonathan Palmer, while Philippe Alliot and Raul Boesel have also expressed interest in driving. Whatever the final choice, Macdonald confirmed that RAM will only be able to field a single entry. Like Spirit, they have been told that there will only be enough engines from Brian Hart to run just one car apiece.

Bosch's training chassis

After his very nasty accident last year at Diepholz when his F3 Ralt struck a landing light (!) John Bosch is recovering well at home having spent a total of nine weeks in hospital. His long time supporter Kees van der Grint has constructed this mock-chassis for Bosch to train in and build up his damaged muscles. The shock absorber-like device to the left gives weight to the steering wheel, making it a more realistic exercise.



Both Fabis for Brabham?

The question of the second Brabham-BMW drive becomes more involved by the day. One possibility being discussed, we understand, is that of the car being shared by the two Fabi brothers . . .

The Forsythe brothers, who run Teo very successfully in the CART Championship, are understandably not keen to let their man go, but it seems that they would be prepared to release him for the Grands Prix which do not clash with Indycar races.

These races, according to *this week's* calendar, are the Grands Prix of Brazil, South Africa, Belgium, San Marino, France, Detroit, Holland, Italy and Europe.

For the remaining seven races, it is understood, the Brabham-BMW would be driven by Corrado — who would also sign a test contract (with no races in '84) with the Forsythe team, with a view to doing some CART races in 1985.

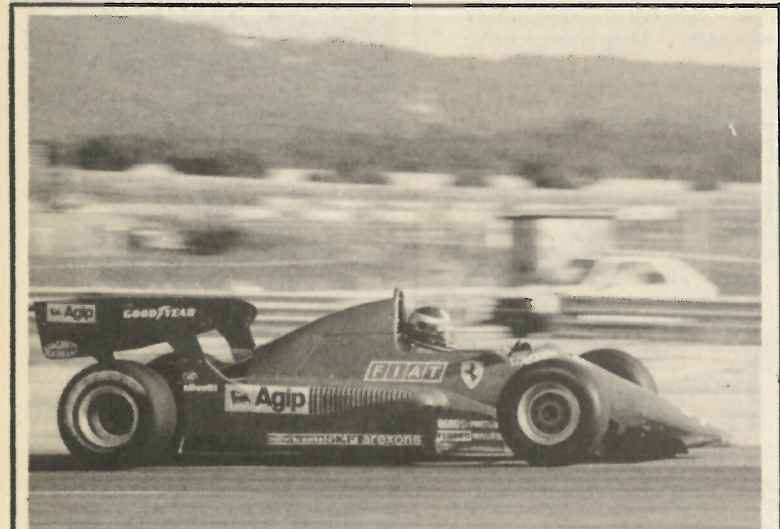
All in all, the idea seems a curious one. Teo's heavy American schedule would probably preclude very much Formula 1 testing — and would he really want to take on a full CART programme plus nine Grands Prix?

Corrado, it will be remembered, signed an option with Bernie Ecclestone some time ago, which has now expired. The younger Fabi looked a likely candidate for the second Toleman (now to be driven by Johnny Cecotto), but at



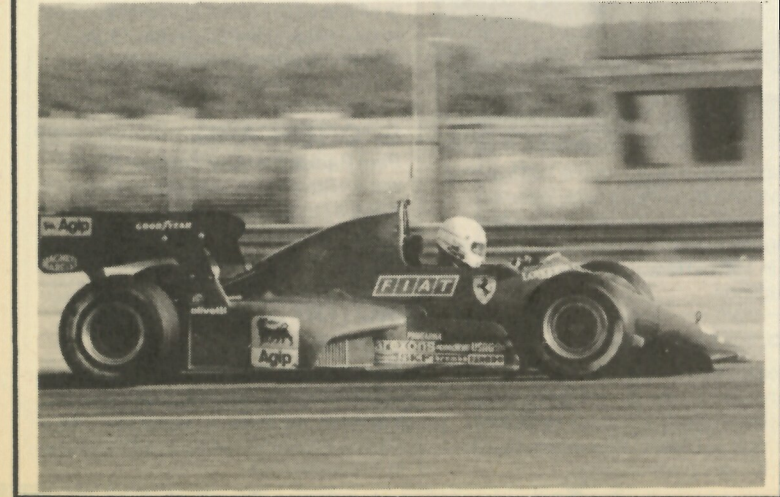
Corrado Fabi — stand in for Teo? The moment has no work for the new season. If it is vital for Parmalat to have an Italian as team mate to Nelson Piquet, why — with Corrado available — have the likes of Mauro Baldi and Pierluigi Martini been considered? And if not, what about John Watson and Stefan Johansson?

Bernie Ecclestone insists that he is in no hurry, and will be quite happy to wait until February before making a decision.



Ferrari still testing

Up until Christmas there were still many F1 teams testing at the Paul Ricard circuit in the south of France. The Ferrari team put in as many, if not more, laps than most and at the end of the tests it was their new signing Michele Alboreto (above) who had set the fastest time. Many new devices were experimented with over the session and these two pictures illustrate well that Ferrari are still undecided about the bodywork for their 1984 contender.



Cecotto joins Toleman

Johnny Cecotto was confirmed as Toleman's number two driver for 1984 a couple of days before Christmas.

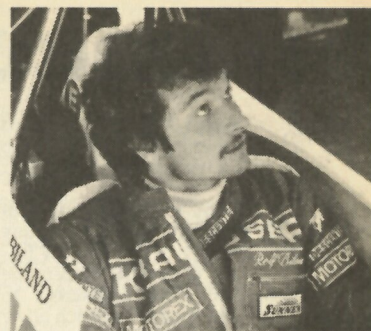
The Venezuelan, who will be 28 at the end of January, joins fellow South American Ayrton Senna da Silva in the Toleman team and both drivers will be present at the FOCA tyre tests in Rio from January 14-20.

Cecotto, the youngest ever motorcycle

World Champion when he won the 350cc crown aged 19, made a favourable impression in F1 with the Theodore team during the early part of 1983. However, budget and equipment problems led to the 1981 F2 championship runner-up quitting before the European GP at Brands Hatch. Cecotto has signed a one-year contract with Toleman with an option for a further year, and brings with

him sponsorship from Italian coffee importers Sagafredo.

Toleman will start the season with two modified versions of last year's Hart turbo powered TG183B, with a completely new Rory Byrne design being ready in April. Pirelli will supply Toleman with tyres for a fourth year in F1 and they have a large test programme planned for Rio.



Rolf Biland — full Formula 2 season.

Hotz to run two-stroke F2 engine

Respected Swiss Formula 2 entrant Markus Hotz has embarked on a V6, two-stroke Formula 2 engine programme in partnership with World Sidecar Champion Rolf Biland and engine builder Folthera.

"It was all looking good a fortnight ago until FISA and Ecclestone tried to kill off Formula 2," said Hotz, "but if they stick to the Yellow Book stability rules, then we shall carry on."

Hotz and his partners have studied three different two-stroke designs and fully expect to be able to produce about 400bhp from the V6. The Swiss Folthera has tuned Biland's sidecar engines for some time, and both are tremendously enthusiastic about the project. "I went with Rolf to the Hockenheim World Championship round," said Hotz, "and he was on pole by 4 seconds. I know he is good, but a lot of that advantage on that circuit was from the engine."

The engine is being developed in conjunction with the Zurich Technical College and Hotz hopes to race it towards the end of 1984: "But if we find a major backer for it then it might appear earlier."

In the meantime, Hotz Horag Racing have modified their March 832s to 'H' specification with suspension and bodywork changes. Biland, who made a good impression in three events for Hotz in 1983, will begin the test programme in January and hopes to do a full European F2 season.

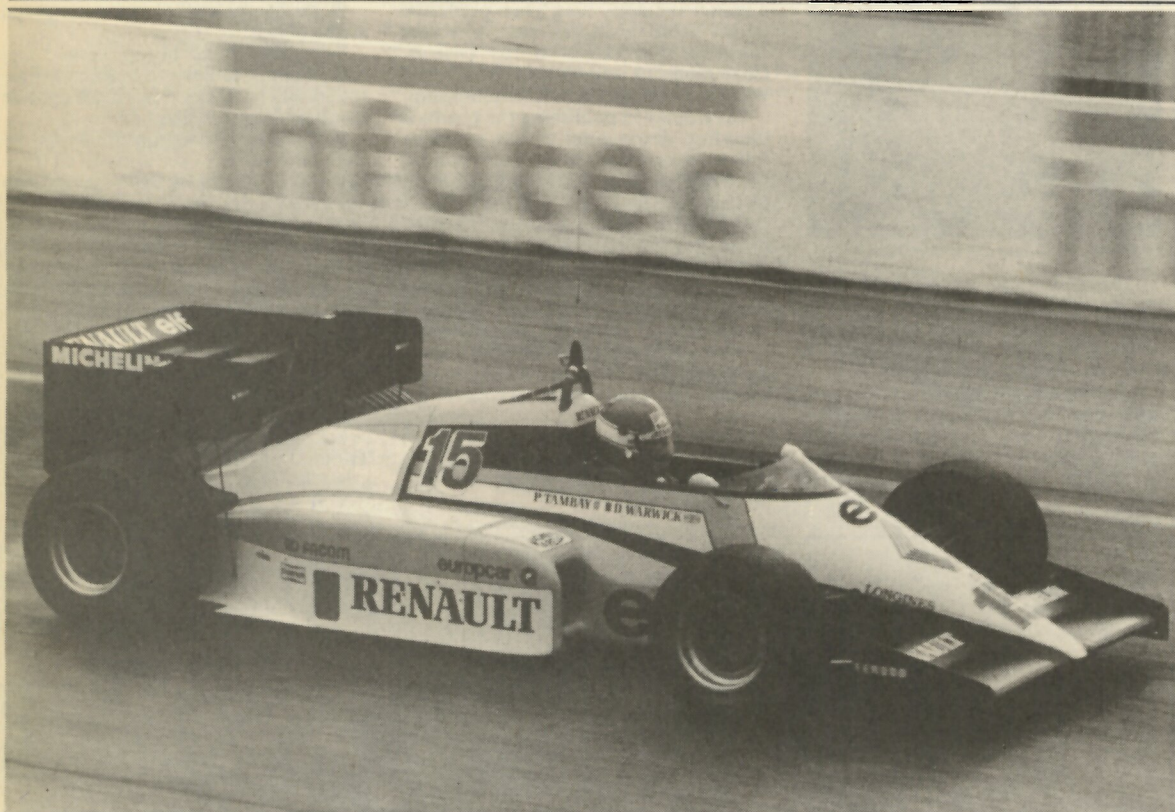
Hotz, who has slimmed down his commercial operation to devote more time to racing, is currently negotiating for a second driver for the team.

Arrows — no decision

Despite persistent rumours that Arrows had bowed to BMW pressure and had taken Stefan Bellof in place of Thierry Boutsen, we understand that, as yet, no firm decisions have been taken.

All the relevant parties were on extended Christmas and New Year holidays and were unavailable for comment earlier this week.

Official announcement of the plans is now expected on January 15. Bellof appears to be favoured for the seat but in Boutsen's favour is the fact that Willy Maurer, Bellof's F2 entrant who has him on a long term contract, is demanding a \$250,000 fee for his protégé's services. Part of this figure is to compensate for the loss of Bellof's Porsche Group C drive and retainer which he would have to forego should he get the BMW-powered Arrows F1 drive.



Despite very little running time in dry conditions, Patrick Tambay remains very optimistic for the future of the new Renault RE50.

Renault remain at Ricard

During the week before Christmas, the Renault team alone stayed on at Paul Ricard, but in very cold and damp conditions little was achieved. Despite the weather, however, the new RE50 went well enough to impress Patrick Tambay.

"On a damp track, the traction is excellent, that's the first thing," he told us. "The car was 12kph quicker on the straight than the RE40 — which is probably a combination of more power from the new engine, a little less weight and the improved traction. Unfortunately,

ly, though, we couldn't really learn very much because we had hardly any running in the dry . . ."

On the Tuesday both Patrick and Derek Warwick had spins in the tricky conditions, and Tambay unfortunately damaged the RE50 in the catch fencing. "The track was pretty well dry everywhere except at Signes. It was extremely cold, with little rivers across the track there, and I just made a mistake. The nose cone was broken, and the wings at both ends."

Damage was not serious, therefore,

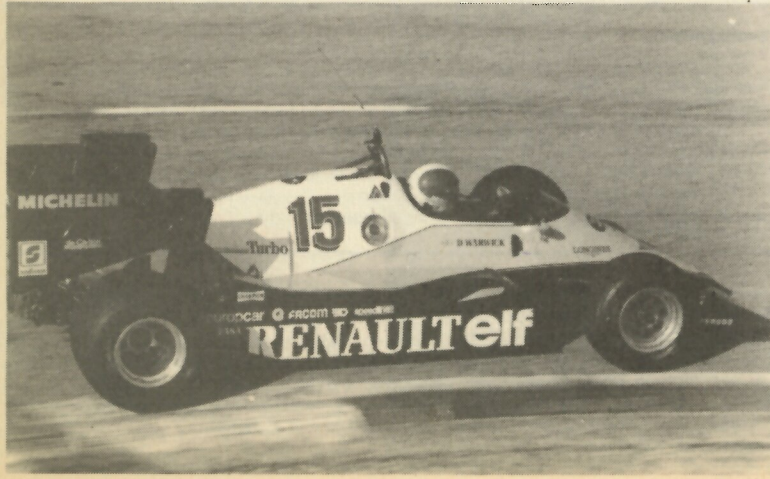
but when the Frenchman started running again he quickly found something awry at the front of the car. "Something was loose in the monocoque where the front suspension pick-up point is, so we put the car away."

Unfortunately this problem came to light just as Warwick was about to have his first run in the RE50. "No, I still haven't driven it," Derek commented at the beginning of the week. "It was just unlucky for me, but these things happen. I was in the RE40 all the time, but I did watch the RE50's behaviour in the wet, and I was very impressed. When the other teams were down there, I reckon the car — in identical slippery conditions — was three seconds a lap or more quicker than any other car. But we're not going to know how good it is in normal conditions until we get to Rio in a couple of weeks."

Warwick was due to return to Paul Ricard this week, for three days of back-to-back tests with Renaults old and new.

For the record, times set before Christmas were as follows: in the RE50 on race tyres Tambay lapped in 1m 05.58s, and in the RE40 on qualifiers his best was 1m 05.87s. Warwick lapped the RE40 (on race rubber) in 1m 07.89s, and the car was also tried by Jan Lammers (winner of the Coupe R5 Turbo this year), whose best was 1m 08.86s, by Renault works rally driver Jean Ragnotti (1m 11.62s) and by competitions boss Gérard Larrousse (1m 12.34s).

Derek Warwick has yet to drive the new car but has become quite at home in the older RE40.



Trimoco Rover dispute continues

The disgraceful saga of the 1983 Trimoco RAC British Saloon Car Championship continued with a barrage of telexes right up to Christmas.

The RAC MSA announced on December 22 that, irrespective of any outstanding appeals, a Tribunal of Enquiry would be convened under the Chairmanship of Lord Shawcross to enquire into "The extent to which all or any of the Rover Vitesse cars entered and/or prepared by Tom Walkinshaw Racing Ltd in the competitions which comprised the Trimoco Saloon Car Championship were ineligible for such competitions or any of them by reason of any breach or breaches of Appendix J . . . in the following respects:

1 — By the addition of a screw to the valve rockers.

2 — By the use of valve rockers made from Ferro Magnetic Steel.

3 — By the use of valve rockers manufactured under the name Bahco.

4 — By the use of non-standard Rover rocker.

Provisionally the Tribunal is convened for 11 January, 1984."

A telex followed the next day from the Director of External Affairs of Austin Rover, J. Weait, saying: ". . . Austin Rover cannot understand the purpose of your (the RAC MSA's) proposed enquiry.



Walkinshaw — cars still in dispute.

"The specification of valve rockers on our Rover cars has already been examined twice this season. On one occasion they were declared legal by an RAC enquiry.

"On a separate occasion subsequent to this enquiry they were declared illegal on one of the Rover cars by the Donington Stewards. The specification of the valve rockers for other Rover cars or events was not recorded. Therefore all such an

enquiry could judge on is whether to overturn the Donington Stewards' decision.

"Your reference to a non-standard Rover rocker is not understood because the specification of rockers on Rover cars has varied and is in any case not an area of the car where homologation is required within Group A.

"Even if the Donington Stewards' decision remains, then your published points table indicates that a Rover car/driver has still won the Drivers' Championship and Austin Rover still wins the Manufacturers' Championship.

"The delay in publishing the results is therefore detrimental to our company following our efforts to win each round of the Trimoco British Saloon Car Championship.

"If a tribunal of Enquiry were to be held a more appropriate task would be to examine the conduct of the Championship by the RAC MSA. Austin Rover would have a substantial weight of evidence to bring forward on this matter.

"Equally if there is to be a retrospective enquiry into the legality of competing cars, this should cover cars other than Rover.

"Austin Rover therefore proposes that the enquiry should be broadened in the way described or should not take place at all."

The following telex was sent by Les Needham, General Manager RACMSA to J. Weait in reply.

"Attention: J. Weait:

"We acknowledge receipt of your telex dated 23/12/83.

"I am not able to comment on the technical matters mentioned in your telex — this is solely for the Tribunal of Enquiry to decide.

"I must, however, correct several errors of fact:

"1 — We have not published any official points table since before the final round on Oct 1/2 in view of the appeals that have been outstanding.

"2 — The Donington Stewards declared the valve rocker arms on all three Rover cars as being ineligible, not just on one car as stated in your telex.

"3 — Two of the cars ran at Brands Hatch subsequent to them being sealed at Donington and prior to them being inspected. The seals were inspected at Brands Hatch and found to be correctly in position.

"The RAC MSA feel that it is in the interests of all competitors in the Trimoco British Saloon Car Championship that the position should be clarified as rapidly as possible and we feel that the proposed Tribunal of Enquiry is the best way of achieving this."

Watch this space . . .

Baldwin moves on

Spirit Racing lost the services of designer John Baldwin just before Christmas. Baldwin has left Gordon Coppuck and John Wickham in order to work for Teddy Mayer and Tyler Alexander on their March Indycar team.

Baldwin, like his former boss at Spirit, Coppuck, is another former McLaren Racing man. He joins Mayer's new team at Woking at the same time as a number of the McLaren International race team, who have been enticed away by their former employers.

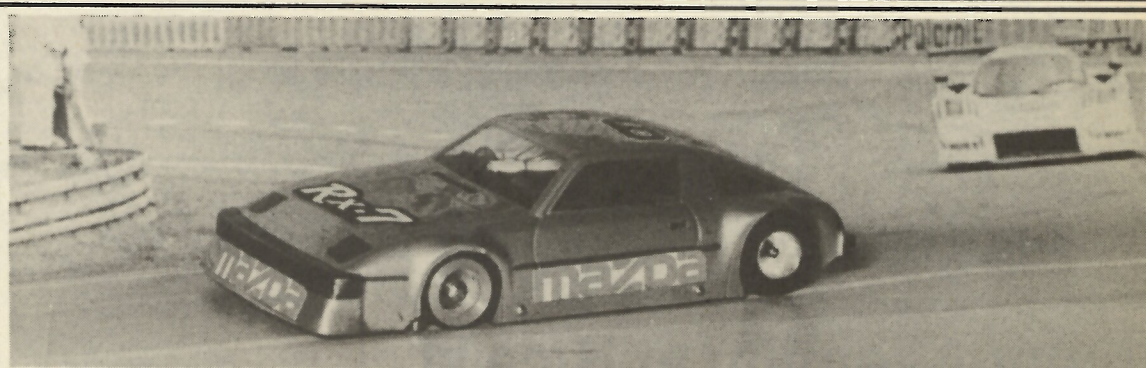
BRIEFLY



Pironi — Ferrari still available.

Enzo Ferrari recently repeated his promise to Didier Pironi: if the Frenchman is ever fit enough to resume his racing career, the Commendatore will provide a car for him . . .

Tommaso Carletti, the grey-bearded Ferrari engineer who worked closely with Patrick Tambay over the last two years, has left the team to work with off-road racing vehicles. There are also rumours that Antonio Tomaini (René Arnoux's race engineer) may leave to run the Osella-Alfa turbo . . .



Slot-cars at the Motor Sports Show

The BRSCC Motor Sports Show, which is being held at the Cunard Hotel in London from January 6-14, will play host to some of the fastest cars in the world — but none more electrifying than a bevy of Mazda RX-7 models that can accelerate from 0-50mph in around a second. These cars are only 13cms long, run on slick sponge tyres 1 1/4cms wide, and will race around a 30-metre circuit being laid out inside the exhibition. Mazda Cars (UK) Ltd are sponsoring the slot-car racing display, and the RX-7 models were created by 101 Products of Chatham. Each day the competition will be open to any member of the general public who, for their entry fee of 50p, will take part in a heat on the six-lane circuit, proceeds from this going to the Motor Racing Safety Fund. Each daily winner will be the entrant who covers the greatest distance in 3mins, and an overall title and main prize will be awarded for the greatest distance covered over the course of the show. Each daily winner will be presented with an attractive Mazda winter-weight anorak, while the overall winner will attend a full-day initiation course at Motor Racing Stables, where he or she will have the chance to drive a full-scale Mazda RX-7 rotary sports coupe on the Brands Hatch circuit.

WEEKEND SPORT

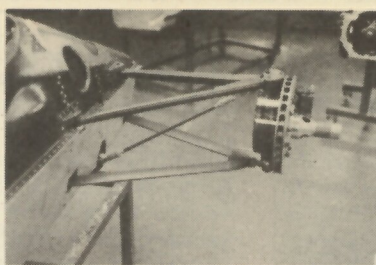
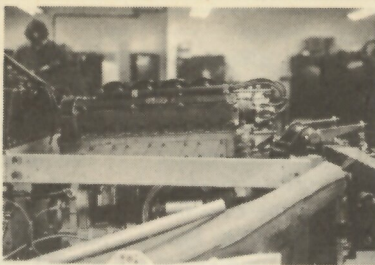
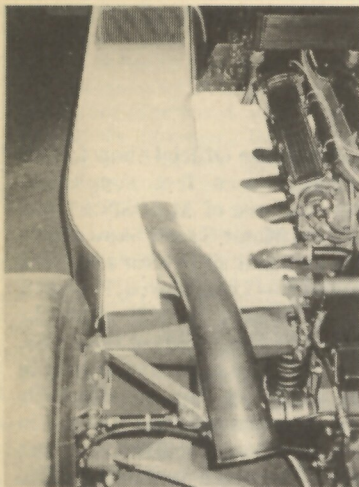
INTERNATIONAL RACING

Date	Venue	Event/Details
Jan 7	Pukekohe, New Zealand	New Zealand Grand Prix — Just Juice International Formula Pacific Championship, round 2 <i>The non-stop action in New Zealand continues with two more races at Pukekohe. The longer, 40-lap race will count officially as the NZ GP, while the secondary 'heat' also scores towards the Just Juice series. Kenny Smith, Brett Riley, Ian Flux and Paul Radisich should be among the prime contenders.</i>
Jan 14	Manfeild, New Zealand	Just Juice International Formula Pacific Championship, round 3.

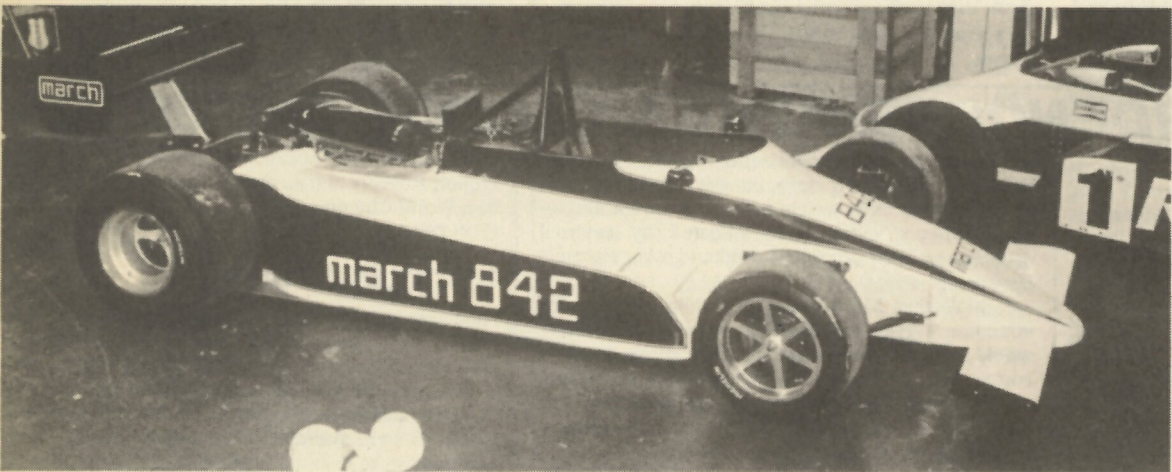
OFF TRACK SPORT

Date	Venue	Event/Details
Jan 8	Kingscliffe, nr Wansford, Hunts	Warco Trial (Peterborough MC) — British Sporting Trials Championship, round 1 <i>This second of the three big Peterborough trials should see all the top contenders in action, especially as the event counts also for the BTRDA series.</i>

Secretaries of the Meeting are requested to send details of forthcoming events to Jeremy Shaw, AUTOSPORT Editorial, Haymarket Publishing Ltd, 38-42 Hampton Road, Teddington, Middlesex.



Below: The completely new March 842 featuring a one-piece honeycomb monocoque with full length carbonfibre top section à la Formula 1. Left: The car has been tidied up at the rear, the exhaust system now tucking into the sidepod. Above left: The engine is mounted with a tilt of 4 degrees rather like the March 84C. Above right: Pull-rod suspension has been adopted at the front.



March 842

IAN PHILLIPS describes the new March Formula 2 challenger.

March Engineering silenced any suggestion of a flagging interest in Formula 2 with the announcement of their brand new challenger for the European Championship on Christmas Eve. Instead of merely revamping the existing design to fulfill a need, March's senior engineer Ralph Bellamy has produced a clean sheet of paper design which he is confident will be capable of recapturing the title lost to the Ralt-Hondas in 1983.

The 842 features a one-piece honeycomb monocoque with a full-length carbonfibre top section which, Formula 1 style, doubles as the bodywork.

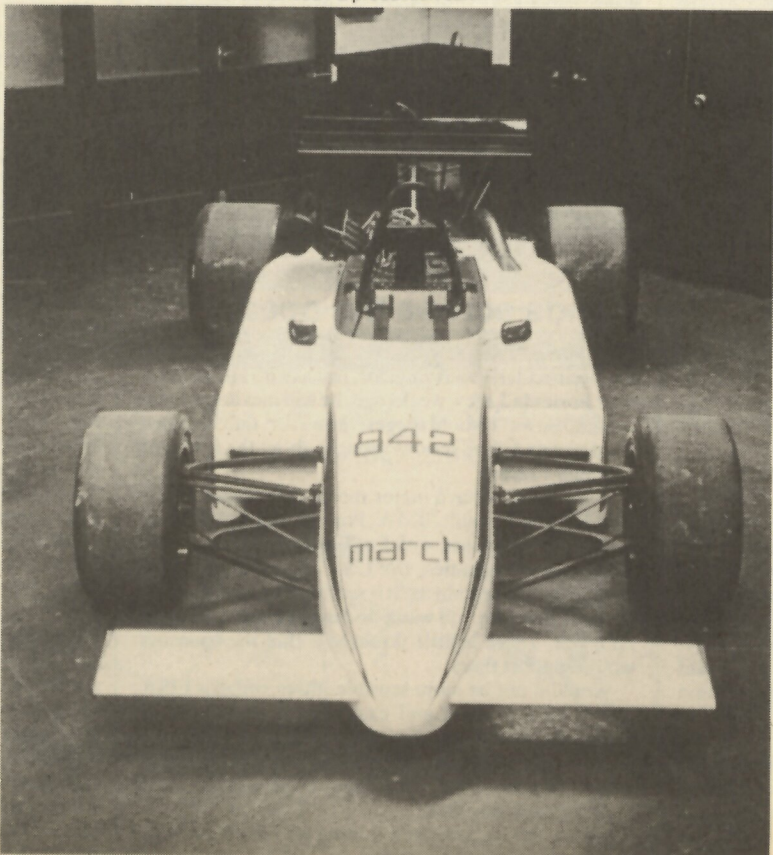
"It soon became obvious when I was discussing the new car with Robin Herd that there really was not much scope left for improvement with the traditional aluminium monocoque," said Bellamy. "The levels of stiffness required in a chassis are almost impossible to sustain over a season using a riveted aluminium tub."

The chassis design very much follows the successful principles employed by March on their Indycars, but represents a further step forward in technique from the lessons learned in the production of the 84C. The result is an expensive looking, quality product.

The new chassis, which weighs 15lbs less than 832, features a combination of honeycomb and machined-from-solid aluminium bulkheads. According to Bellamy, "It represents a major advance not only in stiffness, but also in structural integrity and safety."

During 1983, a moulded carbonfibre cockpit section was added to the 832 to increase the stiffness, but it only went

The March 842... the most advanced F2 production car.



part way to solving the problem, serving really to pinpoint the weak area rather than overcome it. The principle, though, was undoubtedly correct, and on the new car this section extends the full length of the monocoque. An added advantage is that a moulded carbonfibre section is much easier to produce in volume than a full-depth, one-piece honeycomb chassis. The two sections are bonded and riveted together just above the 'waist'.

Following on from his Indycar aerodynamic development work, Bellamy has also tilted the engine on the Formula 2 car. With the new 1984 F2 regulations requiring the body to be level with the bottom of the monocoque, the tilting process has enabled Bellamy to maintain and slightly increase the venturi tunnel size at the rear — thus, hopefully, winning back some of the ground effect lost to the rule book. With a tilt of 4 deg (one more than the Indycar) the whole rear end is changed in detail and tidier. The tilt itself is achieved through the two main castings which bolt to the rear of the monocoque, the actual interface mounting having been improved and strengthened in the light of 832 experience. In order to level off the gearbox and rear suspension, the traditional March oil tank/bell housing casting has been modified in detail and the rocker arm suspension put through a slight twist to complete the tilt compensation process.

The honeycomb engine mounting beams, pioneered on the 822, are retained but mounted vertically rather than horizontally, although this is to improve bodywork fitting rather than stiffness.

Uprights at both front and rear are virtually the same, as is all the rest of the running gear. The rear suspension remains the same clean and tidy arrangement around the Hewland FT200 gearbox, but the front is entirely new. Bellamy has abandoned the rocker arm principle and followed the now almost universal trend to a pullrod system, again essentially in the interests of overall stiffness.

The Australian is cagey about the overall dimensions of the car, conceding only that the front axle has been moved back to produce a shorter wheelbase while the front track has been increased, the package being designed to improve the weight distribution in the interests of suiting the tyres.

With a full 10 days spent in London's Imperial College wind tunnel specifically on the 842, a number of subtle aerodynamic changes have been made. The most noticeable is the rounding off of the sidepods ahead of the rear wheels, leaving the wooden rubbing strip to extend further back forming a definite step. The pronounced flair at the lower edge of the 832 pods has also gone in favour of a flat edge. The normal March one piece pre-preg moulded undertray is used to give a clean, full length underbody profile. Attention has also been paid to tidying up the car around the engine, with the exhaust system now tucking down neatly into the sidepod rather than the more familiar and messy up-and-over system.

The only bodywork other than the sidepods and the carbonfibre nosebox is an access panel above the driver's feet in the front of the monocoque.

The 842 undoubtedly represents the most advanced production car yet seen in Formula 2, and March have laid down a batch of 20 for Europe and Japan. The majority will be fitted with the four-cylinder BMW engine, although provision has been made for other installations including the Honda V6, of which two have already been ordered from Japan.

The prototype car is due to be delivered to Onyx Race Engineering, who will again run the works F2 team, this week. Testing is programmed to start shortly afterwards.

It's Show time again

Tomorrow (Friday) at 4pm, the doors of the second BRSCC Motor Sports Show will open in the Cunard International Exhibition Centre at Hammersmith, west London. For Peter Brown-ing and the British Racing & Sports Car Club, the massive preparation task will be over, and it will be up to you — the British motor sporting public — to attend in large numbers so that the success of the venture is assured.

The BRSCC has gathered together a total of 53 individual exhibitors for this year's Show, and they will again be housed on two exhibition floors. The organisers have altered the format of the Show in order to rationalise the exhibits, so that the Lower Hall will be dominated by displays and competition cars, and the Upper

Hall will feature the bulk of the trading stands. In this way, the BRSCC has allowed more actual vehicles to be shown than was the case last January, and AUTOSPORT is pleased to have co-operated in the compilation of the Central Feature itself, which will comprise a dozen cars from Formula 1, Formula 2, Group C, Group A, Atlantic, Production, Formula Ford and Historic racing, and from rallying.

In addition to the high standard of the static displays and the variety to be found among the trading stands, other attractions will include activities such as model car racing, video games, the cinema, and many functions in the club room.

As you may read in the Official Show Guide, which is published as a free supplement exclusively with this issue of AUTOSPORT, the standing of the 1984 Motor Sports Show can be judged from the fact that all Britain's Big Five race car constructors — Lola, March, Reynard, Royale and Van Diemen — will either be represented or have taken stands of their own. We can think of no other sphere of activity in which a trade exhibition can so effectively double as a show of genuine interest to the man in the street. The enterprise of the BRSCC is once again to be admired, and we hope that the public will respond in the knowledge that it holds in its hands the future of the Motor Sports Show as an annual event.

CORRESPONDENCE

THE EDITOR IS NOT BOUND TO AGREE WITH READERS' OPINIONS

Suite nothing

I note with dismay that yet more prime viewing space at Brands Hatch is being allocated to sponsors and guests with the coming of another block of hospitality suites, doubtless to be filled with many people more interested in sipping champagne than taking an interest in motor racing, (overheard at the '83 European Grand Prix — "I hope that nice James Hunt wins".)

This new building appears to put paid to the enthusiasts' chance of a view of the pits, what with the Grovewood Suite, existing hospitality suites, the new one and the fact that at major events the startline grandstand is mysteriously "fully booked" even before application forms are sent out.

I am sorry if I sound bitter, but you see I still remember the days when racing was more important than the money to be made from it, and most drivers were managing on a shoestring.

I still attend Brands as a spectator (motor racing is in my blood) but I do resent being pushed further and further from the action.

BASILDON, ESSEX

BRIAN JOHN WALPOLE

Kings of the castle

As Stage Commander of SS26 — Castle O'er — on the RAC Rally, I would like to thank all my 30 marshals from the Scottish Sporting Car Club who did their best to run the stage and control the thousands of spectators. For our efforts we have been given the 'Best Stage' of the rally award, so going one better than last year when we were runners-up.

BARBARA A BROWN

Chief Marshal

Scottish Sporting Car Club

Power-to-weight

I would like to reply to Gordon Wade who wrote to AUTOSPORT (December 22/29) and stated that "lightweight" Formula Ford 1600 drivers have "one hell of an advantage" over their plump rivals. If Mr Wade's hypotheses were correct, then 90% of all FF drivers would suffer from anorexia nervosa!

Contrary to Mr Wade's theory, a lighter driver would not have superior deceleration or cornering speed. The performance under these conditions and during initial acceleration (with the driving wheels still 'spinning') is determined by the limiting frictional force available at each tyre, and this is roughly proportional to the wheel loading or corner weight. So a 6% heavier car would have approximately 6% extra retarding, cornering and accelerating forces available and would be at no disadvantage.

Maximum speed is also unrelated to driver weight as it is mainly dependent on aerodynamic drag. Since a driver is only exposed to the airstream from the neck upwards, he would not have an inferior drag coefficient unless he had an abnormally long neck and a large head.

I concede that weight influences acceleration after the initial tyre slipping stage, but this is partially offset by the fact that extra weight will give more stability — heavy drivers will be less affected by external disturbances such as gusts of wind and other Formula Ford cars!

I think that Mr Wade's suggestion to raise the minimum weight limit by 75kgs to include the driver would introduce unnecessary complications, increase cost for light drivers (who would have to use up to 25kgs — four stone — of lead ballast) and not produce any detectable difference in the relative performances of light and heavy drivers.

NORTHAMPTON

EUGENE O'BRIEN

Manly proportions

As the owner of an amateur Formula Ford racing team, I was interested to read Gordon Wade's letter. I have similar problems, only more grotesque: not only do we race against full-time professional teams and drivers, but my driver is 6ft5ins tall and 15½ stone, regularly competing with drivers, some not much more than 7 stone. Having said that, we still win a few.

The problem is no big deal for us as we only race for fun, but consider the big guy who wants to make a career as a racing driver. As Carrol Smith said in his book *Tune to Win*, if you are of manly proportions — forget it.

The big men get culled out long before F1 status, until you get to the very top. The winner's rostrum after a GP race reminds one of a scene from *Snow White*.

Gordon Wade's proposals are sensible, easy to operate and, above all, fair — let's do it.

TODWICK, SHEFFIELD

JACK BOOTH

Hands across the ocean

Jean-Marie Balestre's threats against CART do not seem particularly worrying, for, just as with his outburst over Formula 2 a few weeks ago, he will inevitably have to climb down. I would suggest, however, that Balestre sits down and gives serious thought about the future of Formula 1 racing.

In F1 we now have major motor manufacturers — Fiat, Honda, Renault, BMW, Porsche and Alfa Romeo — providing engines, with Ford soon to join them. To all of these companies, the USA represents a major market for their products. It is reasonable, therefore, to suppose that they will want, and may demand, races in America. There is little doubt also that the sponsors would support them.

Would it not be more sensible, therefore, for FISA and CART to meet and examine the possibility of standardising the specification of the cars and the regulations of the races with a view to creating a new series incorporating ovals and road circuits that encompasses the globe.

Maybe this suggestion will bring protests from both sides of the Atlantic. But think about it; a series pitting

the likes of Mears, Fabi and Andretti against the likes of Piquet, Rosberg and Arnoux — now that really *would* be a World Championship!

GUILDFORD, SURREY

P. C. MCMASTOR

Sticky business

I had been prepared to let sleeping dogs lie until I read Jeremy Shaw's seasonal survey concerning production sportscars (December 8), but the information relating to my non-display of sponsor's decals is inaccurate.

At the opening meeting of the season, at Silverstone, no decals were available at signing-on, as was usual, and mine were eventually given to me by a Uniroyal representative as I was going out for the morning practice session. As I was already strapped into the car, I put the decals into the passenger footwell of my Caterham Super 7 and, due to problems which showed up during the session, promptly forgot all about them. However, nobody from the sponsors or officialdom made any comment in the collection area prior to the race, nor was there any mention made for the decals absence on the grid either before or after the customary warm-up lap.

Only after I had won a hard-fought race was I suddenly confronted by officialdom, who told me that I was ineligible for prize money or points. Quite frankly, I blew my top and told Mike Wilds of the BRSCC, and the rest of the officials, exactly what they could do with their decals! In due course, I was obliged to apologise for my spontaneous outburst, which was accepted.

Unfortunately, the story doesn't end there because as I understand from Mr Shaw's seasonal survey, the outcome of the championship is still in dispute. In the circumstances, I feel I must come clean, and if the rules are strictly adhered to at the beginning of the season then the same should apply at the end: the points gained by myself at Brands Hatch and Castle Combe should be null and void.

At Brands, I was running illegal tyres, which were observed by an RAC scrutineer but allowed (because they were Uniroyals?). Maynard Soares lost points later on for tyre infringements! Later, at Castle Combe, the decals fell off in practice. They were not replaced for the race in which I finished second, thereby earning prize money and points quite illegally.

BRSCC, I am quite happy to return prize money if it provides a satisfactory conclusion to the series.

GODSTONE, SURREY

JOHN STENNING

Further confusion!

As an avid historic racing competitor, I thoroughly enjoyed the *Historic Seasonal Survey* (AUTOSPORT December 1). Unlike my homeland, the USA, we in England enjoy a variety of well-organised historic racing championship events, co-ordinated by organisations such as the Historic Sports Car Club, which receive excellent press coverage in publications such as AUTOSPORT.

In a letter referring to your article (*Correspondence*, December 8), Geoff McAuley, a fellow competitor in the HSCC Bellini Championship, has lightly taken you to task for confusing his Jowett with my Allard in your photo caption of both cars racing at Donington in July. No doubt the enthusiasts for these marques realise which car is which and appreciate the recognition received by both cars which are too infrequently seen at race meetings.

Geoff's Jowett finished ahead of my Allard at Donington in a race that I trust he enjoyed as much as I did. I hope the addition of a supercharger next season to my Allard will help offset the horsepower to weight deficit that the monster Allard faces against the lighter, more agile Jowetts, Healey Silverstones, and so on. No matter which of the cars is faster, I'm sure Geoff and I will continue to enjoy racing in '84. I only hope that more of these historic cars will join us in the competition.

Some of Geoff's comments on the editor's "twisted Nomex knickers" for confusing the two cars in the caption should be redirected at Geoff, since my first name is Pete, not Mike, as stated in his letter. Not to worry, however: Neither Geoff nor I are confused on the race course, where it really counts!

PETE MCMANUS
Allard Owners Club

A classic case

As Chairman and a competitor in Classic Saloon Car Club races, I would like to point out some omissions in your annual survey of our events with regard to the team competitors (December 1).

In Pre '57, the winners were Peter Deffee/Stuart Rose with 45 points and runners up Mike Cox/John Hillsdon/Brian Pollard with 44 points, a rather close fight that was only resolved in the last race by 0.4sec when we finished first and second respectively in the smallest class (as reported in your paper). At no time during the season were either of the drivers above headed by the drivers mentioned in the review when they were entered in the same race.

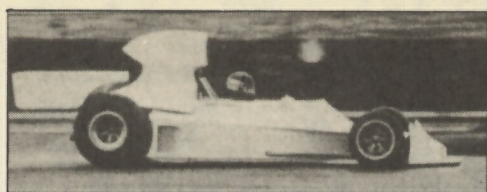
In the Pre '65 series, the Mike Cox/John Hillsdon team won the team prize with only 21 points, but in those two races they were first twice with one fastest lap, beating Robert Trevor, the overall champion, both times in the only two races entered.

The Pre '65 Classic challenge team prize was won by John Dabbs/Rod Jones who will hopefully be racing a Galaxie 500 next year in the Pre '65 series.

Incidentally, it is interesting to look at the growing number of Classic and ex-Classic saloon car drivers making their marks in other fields, such as Chuck Nicholson, Mike Bennion, Roger Andreason, to name a few. Also, the recent record by an Alfa-Romeo GTV6 at MIRA was driven, among others, by three CSCC drivers, Andy McLennan, Glen Maskell and Tony Raine. The CSCC drivers are mainly known for their A35 driving in the Pre '65 challenge series.

BROMLEY, KENT

MIKE COX

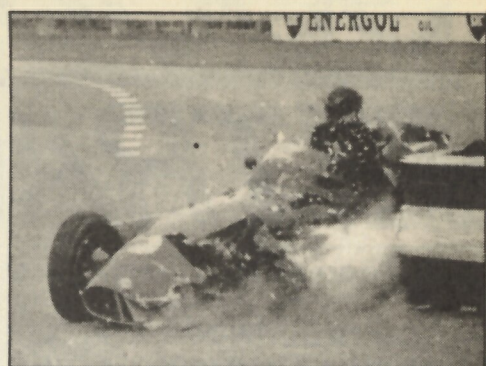


10 Pit & Paddock news 10 years ago this week (AUTOSPORT, January 10, 1974) . . . Hesketh Racing tested their brand new, Harvey Postlethwaite designed Formula 1 car for the first time, with James Hunt at the wheel (above) . . . Marlboro confirmed the renewal of their sponsorship of the Williams F1 team . . . Louis Stanley announced his all-French team line-up for 1974, of Beltoise, Pescarolo and Migault, with backing from Motul, the French oil concern. Stanley was particularly critical of commercial sponsors in motor racing, saying "The whole concept of sponsorship must be revised. The sponsor has no right to dictate racing tactics, racing personnel or politics. Once they have the cars in their colours and their decals stuck on they should keep out of the way. They must not be allowed to control the sport" . . . Embassy Racing with Graham Hill announced a new two-car F1 team, with Guy Edwards as number two to Hill, in the new Lola T370.

Chris Witty profiled Hans Stuck Jr, prior to the young German's F1 debut in the 1974 Argentinian Grand Prix. Stuck's seat in the March team was considered to be a big gamble as his single-seater experience could be counted on both hands, the majority of his experience coming from racing BMW and Ford saloons.

"A disappointing finale," was Ian Phillips' conclusion to the third and final year of 1600cc Formula 3 racing. It had paled in comparison to the two previous years, due to the lack of any outstanding drivers. The formula was seen as becoming too expensive for the private owner, thus leading to technical cheating. Mike Wilds and Tony Brise (pictured below) were two of the leading competitors.

John Davenport reported on the lucrative Bandama Rally. The previous year's event failed to produce any finishers, leaving the prize money untouched, thus winner, Eddie Herrmann, took the doubly large victor's spoils.

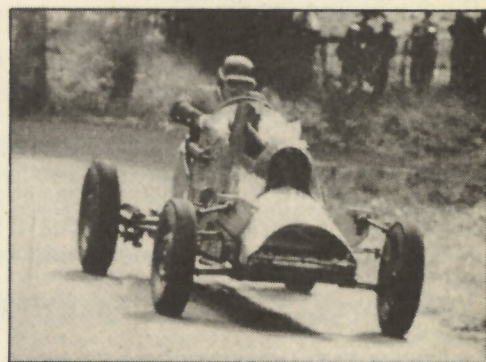


25 Sports News 25 years ago this week (AUTOSPORT, January 9, 1959)...A new Le Mans formula was announced, the First Annual Cup on the Index of Power Output. This was to be based on a function of the cars' average speed, weight and actual fuel consumption . . . Mike Hawthorn was presented with the Guild of Motoring Writers' "Driver of the Year" award . . . Sir William Rootes was created a baron in the New Year's Honours List, and Stirling Moss received an OBE . . . Jean Behra (pictured above), was having a collision at the Goodwood chicane.

Martyn Watkins covered Formula 2 in his *Seasonal Survey*. It had once again been a Cooper year in the formula, but Lotus had been a serious menace, while Porsche had made their presence felt on more than one occasion, scoring a runaway win in the supporting race for the French GP.

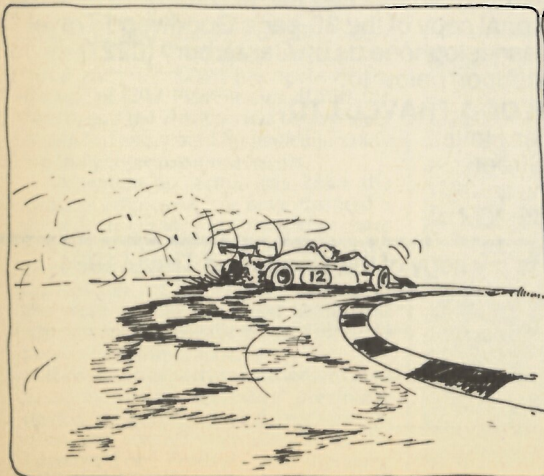
Martyn Watkins also reviewed the national sprints and hillclimb scene. David Boshier-Jones took the hillclimb championship in his Cooper, ahead of some extraordinary machinery, such as the aero-engined de Havilland Special driven by "T. Dryvver" (pictured below).

The European Mountain Championship was won by Wolfgang von Trips in a Porsche from Joakim Bonnier and Hans Herrmann in their potent Borgwards.

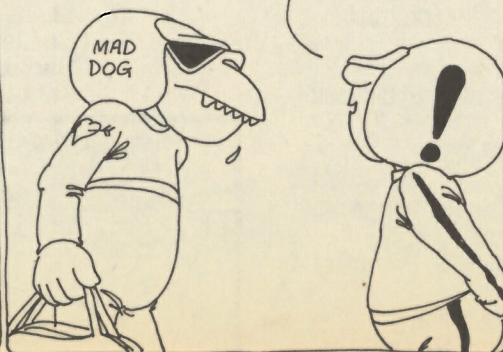


CATCHPOLE

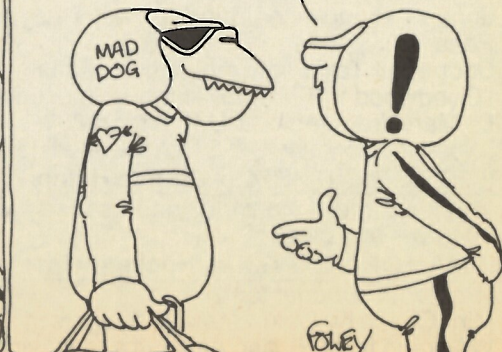
BY BARRY FOLEY



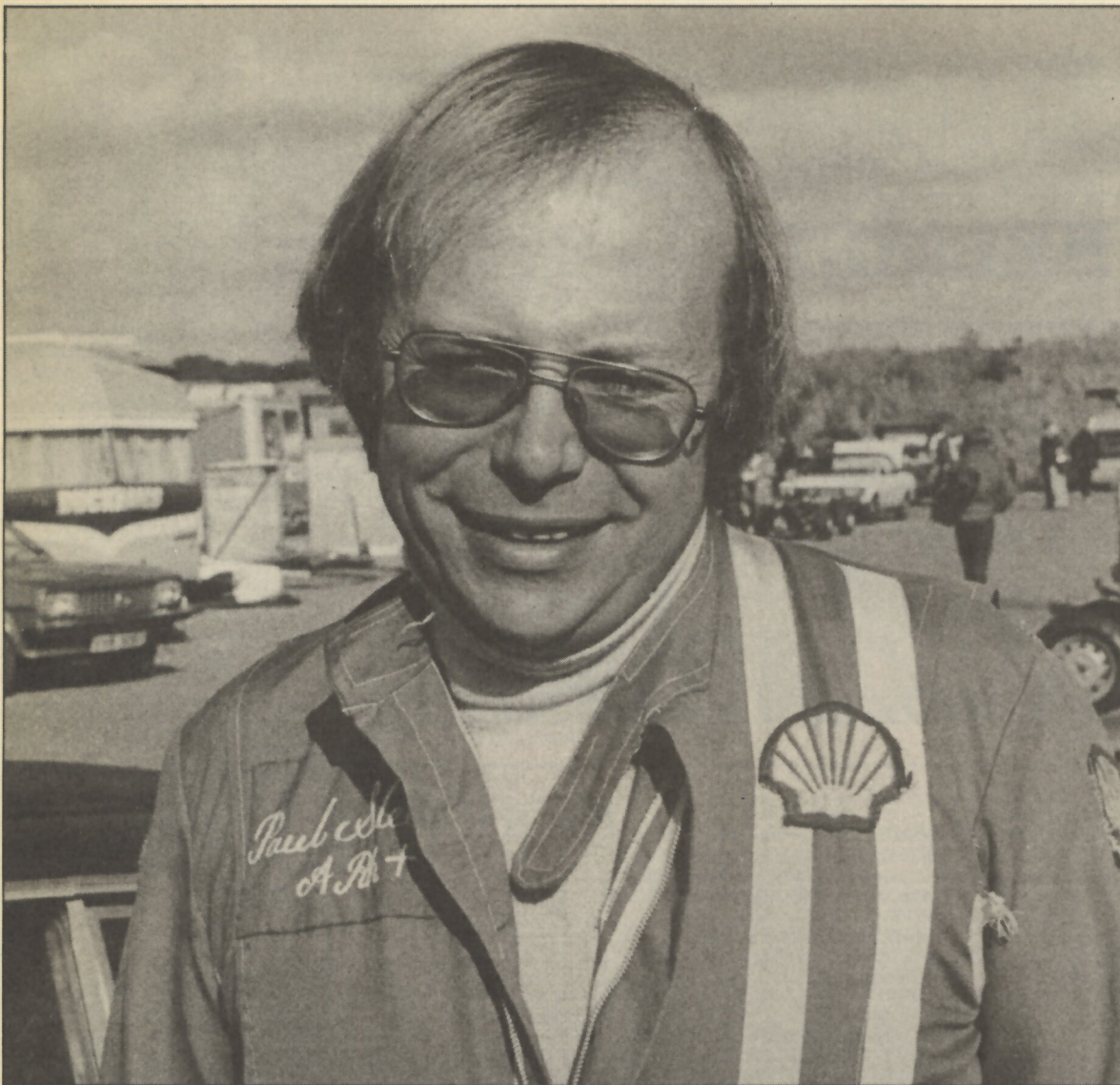
THAT WAS QUITE A SPIN MAD DOG - YOU'VE JUST HAD YOUR FIRST....



...NEW YEAR'S REVOLUTION!



FOLEY



Paul Sleeman — winner of the AUTOSPORT Golden Helmet Award.

Golden retriever

PAUL HARMER talks to the winner of the first AUTOSPORT Golden Helmet Award PAUL SLEEMAN.

The ancient town of Rye in East Sussex has been the setting for Paul Sleeman's winning campaign in the elderly but effective March 713S and Rostron CT3. Paul's tally for the season being an impressive 34 victories, including three championship titles plus the Pre '74 FF1600 Festival honours. A worthy first claimant to the AUTOSPORT Golden Helmet Award.

Nestling cosily in the cobbled streets of the olde Cinque Ports town is the Copper Kettle Restaurant of racing enthusiast Ray Howard, who owns the Lola-bodied March 713S which powered Paul to the Lydden Formule Libre Championship title. Howard relinquished his RAC Competition licence due to ill health, "But there was no reason why the car should not still be seen around, particularly driven with such flair," explains Ray.

The Rostron CT3, one of Carl Rostron's earliest FF1600 designs, was bought 'tired' early in 1982 as a rolling chassis for the sum of £200. Presentation of both the March and the Rostron has been widely acclaimed and would do justice to many big-budget professional outfits.

"Attention to detail has been the strategy employed, we have not had a great deal of money to spend, after entry fees of £800 for the Rostron's season the biggest expense has been tyres, again for the Rostron, at £300," says Paul, rueful at the wear rate of the latest compound which were eligible for BRSCC Pre '74 competitors this season.

If Paul is an expert in achievement, and certainly several 'knockers' previously unwise to the Gillingham driver's exceptional car control were silenced at the Formula Ford Festival, then the same

must be said of his back up team who prepared the 10 year old Rostron with an ingenuity rather rare and kept the 12 year old March in fine fettle.

Bob Curl, a gifted glassfibre body-moulder, lives at Brede just a few miles from the camp. The sports racing Nomad and more recently the re-bodying of the Le Mans contending Dome Zero number among his motorsporting connections. While adapting the canopy from the Dome — more used to travelling at 200 miles an hour along the Mulsanne — Bob found that by turning it around, it made

an ideal engine cover for the Rostron!

Now that the season is over, Bob will be able to change the channels on his television, for the unique brake balance adjuster in the Rostron cockpit is the tuning knob from his set. It is not, as Lydden wags would claim, the 'auto-pilot', but features a turning mechanism which will indicate to the driver the degree of balance on a 24:1 scale. Such ingenious adaptations are necessary, for Paul has a habit of scrounging cast-offs from retired racing cars.

Tony Barnard's engineering experience also plays a vital role in the continuing excellence of race preparation. Together with Curl, 'Barnie' has worked on various bits and pieces scavenged by Paul such as the roll springs from an old Hesketh, and the broken-repaired high ratio steering rack. Value for money has been a prime consideration and it reflects in the keen attitude and somewhat unorthodox approach to their job in hand.

The engine and gearbox for the Rostron cost £500 and Paul's first race in his new acquisition netted a victory in August 1982. Subsequently a winter strip and rebuild, using second-hand pistons and a cylinder head from Ministers, was the only 'luxury' afforded the Pre '74 challenger prior to the new season.

A pursuit of fun was not forgotten either, a double assault was made on the Bodiam hillclimb just one day before an important race at Lydden. Barnie drove the Rostron into second place in the FF1600 class, while Ray Howard enjoyed his third in the Libre class at the wheel of the March. With precious little time available before the next day's racing there fortunately was no need to call upon Barnie or Bob to burn the midnight oil, and both cars duly won their respective races the very next afternoon.

But there was a worrying moment a few weeks later when, had it not been for the devoted enthusiasm of Bob and Barnie, the Lydden FF1600 title could well have been lost. Just as the cars were lining up the battery lead was found to be shorting out on the engine casing, and as regulars to Lydden will know, there's not long to wait once you are sent out onto the track. Thanks to quick thinking, but probably to the despair of his rivals, Paul arrived on the grid with 30secs to spare. "If it hadn't been for Bob and Barnie, then Derek May would have won the Lydden Championship that day," Paul admits.

While the quest for the BRSCC Pre '74 title took the Southern Litho Connaught Motors supported Rostron far and wide to record victories at Brands Hatch (Grand Prix circuit), Castle Combe, Cadwell Park, Donington Park, Oulton Park and Snetterton, plus the Lydden FF1600 Series against modern machinery, the red ex-Nick Cole March stayed round Lydden to clock up 11 wins, often against more powerful and up-to-date cars in the *Formule Libre* Series.

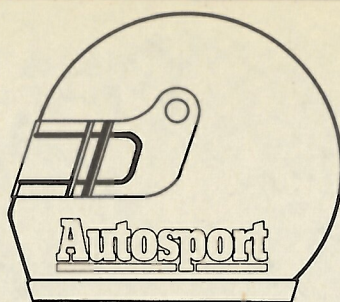
"We would have gone further afield with the March too," says Paul wistfully.

Paul Sleeman in typically flamboyant style at the wheel of the Rostron that helped him win the Golden Helmet.



Autosport

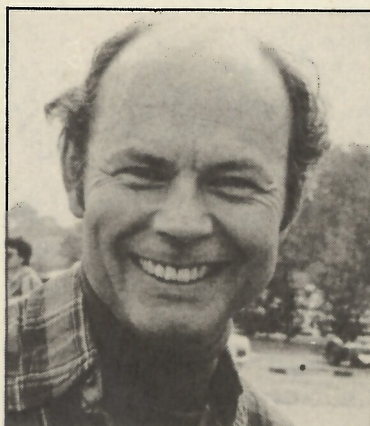
GOLDEN HELMET



Gilbert-Scott — second.



Booth — third.



Brindley — fourth.

Final positions — Top 50

Driver (Nat)	Class(es)	Car(s)	Overall	Class	Total
1 Paul Sleeman (CDN)	FF1600/FLibre	Rostron-Minister CT3/March-Ford 713S	34	—	34
2 Andrew Gilbert-Scott (GB)	FF1600	Lola-Minister T642E/Reynard-Minister 83FF	19	—	19
3 John 'Butcher' Booth (GB)	FF1600	Van Diemen-Gätmo/Peter Harris/Neil Brown RF83	18	—	18
4 John Brindley (GB)	Classic/Historic GT	Lotus 22/23/McLaren M1 C/M8D/Tyrrell 008/Lola T530	10	7	17
5 Maurizio Sandro Sala (BR)	FF1600	Van Diemen RF83/Reynard-Nelson/Auriga 83FF	16	—	16
6 Rob Cox (GB)	Modsports/GTs	Caterham Super 7 'Black Brick'/Lotus Elan	15	1	16
7 Gerry Marshall (GB)	Prodsaloons/sports	Ford Capri 3.0S/Lotus Esprit Turbo	13	2	15
Peter Baldwin (GB)	Special Saloons/GT	Marshall Mini-Ford BDA	11	4	15
John Llewellyn (GB)	Prodsaloons	Volkswagen Golf GTI	1	14	15
10 Tim Davies (GB)	FF2000	Reynard-Neil Brown 83SF	14	—	14
11 John Foulston (GB)	Historic GT/F1	McLaren M8D/M29/Lotus-BRM 24	13	—	13
John Atkins (GB)	Classic sports	AC Cobra	12	1	13
Bill Taylor (GB)	Sportscars	Porsche Carrera RS	12	1	13
14 Ayrton Senna da Silva (BR)	Formula 3	Ralt-Toyota/Novamotor RT3E/83	12	—	12
Chris Lewis (GB)	Mini/Modsaloons	Howley Mini/Howley MG Metro	10	2	12
16 Mick Harris (GB)	750 Formula	Darvi-Reliant Mk4/5	11	—	11
Will Hoy (GB)	Clubmans Sports	Mallock U2-Chamberlain Mk24B	11	—	11
Dave Loudoun (GB)	Ford Fiestas	Ford Fiesta/Minister	11	—	11
Raymond Bellm (GB)	Historic GTs	Chevron B8/B19/B36/Lotus XI	5	6	11
20 David Ellis (GB)	ASCAR	Aston Martin DBS V8	10	—	10
Steve Everitt (GB)	MG racing	MG Midget	10	—	10
Perry McCarthy (GB)	FF1600	Van Diemen-Minister RF83	10	—	10
Mike Whatley (GB)	Formula 4	March-Ford/Whatley 773/4	10	—	10
Andy Barton (GB)	GT racing	AC-Hart 420R 3000ME	7	3	10
Graham Scarborough (GB)	Modsaloons	Ford Capri	7	3	10
David Yates (GB)	Prodsaloons	Ford Capri 2.8 Injection	7	3	10
David Cox (GB)	Monoposto	Ensign LNF3/Merlyn Mk21B	5	5	10
David Sutherland (GB)	Sports 2000	Royale-Neil Brown S2000M	4	6	10
Steven Roberts (GB)	Modsports/GT	Davrian-BL Mk7A	1	9	10
30 David Duffield (GB)	FLibre	Ralt-Ford/Swindon BDX RT4	9	—	9
Mike O'Brien (GB)	Sports 2000	Aquila-CES/Neil Brown RO83S	9	—	9
Christopher Gould (GB)	Mini Se7en	Gould Mini	8	1	9
Mauricio Gugelmin (BR)	FF2000	Van Diemen-Zagk/Nelson RF83	8	1	9
Kevin Martin (GB)	FVee/Austin 7	Scarab Mk2B/Austin 7	8	1	9
Terry Smith (GB)	MG racing	MGB V8 Roadster	8	1	9
Graham de Zille (GB)	FF1600	Lola-Minister T642E	7	2	9
Mark Hales (GB)	Classic/Modsaloons	Attila-Chevrolet/Ford Escort RS2000/Jaguar E Type	5	4	9
Martin Colvill (GB)	Historic/Classics	Ford GT40/AC Cobra	1	8	9
39 Martin Brundle (GB)	Formula 3/ETC	Ralt-Toyota/Novamotor RT3E/83/Jaguar XJ-S	8	—	8
John Fyda (GB)	Clubmans Sports	Mallock U2-Agra Mk24B	8	—	8
Peter Hardman (GB)	FF1600	Van Diemen-Auriga RF83	8	—	8
Mike Salmon (GB)	Thoroughbreds	Aston Martin DB4	8	—	8
John Hewitt (GB)	MG racing	MGB Roadster	7	1	8
Robert Nettleton (GB)	MG racing	MG Midget	5	3	8
Grahame Davis (GB)	MG racing	MGB GT V8	4	4	8
Michael Law (GB)	Special saloons	Sunbeam Stiletto Imp	4	4	8
Ginger Marshall (GB)	Special saloons	Reliant Kitten-Marshall & Fraser	4	4	8
Tony Bridge (GB)	GT racing	Maguire Stiletto Imp	—	8	8
Dave Chaney (GB)	Post Historics	Marcos GT	—	8	8
John Gray (GB)	Post Historics	Triumph TR5	—	8	8

RULES

The AUTOSPORT Golden Helmet will be presented to the driver (irrespective of nationality) who scores the most class victories in RAC approved and defined motor race meetings held in Britain during 1983, of whatever status. Wins in classes in which there have been fewer than three starters will not be counted. The AUTOSPORT Golden Helmet itself is a plated award based on a Bell M-1 full-face helmet as imported into Britain by Road & Racing Accessories of London.

►► "but there is a restriction on Libre racing throughout the country, sadly, and there is just no opportunity."

Niggling gearbox faults intercepted a clean sweep by Ray Howard's March at Lydden, but Paul's sideways style often had the ex-F3 car close to the outright lap record. Although wear rate on tyres accounted for plenty of money on the Rostron, amazingly the March used but half of the £60 budget set aside for the season. Never one to miss a trick, Paul was quick to visit the Silverstone base of the genial Eddie Jordan where he picked up suitable covers at £7.50 a time!

Testing fees for the entire season amount to just £5, "and that was purely to scrub in some tyres and make sure you hadn't done any damage the previous week," on the Thursday prior to the Festival weekend.

Paul's Festival aim had been to reach the Final; that he finished a fine 10th against cars from another decade with a staggering best lap of 49.96s — that is 0.96sec slower than the new record set in the same race — shows just what can be done by "attention to detail".

For the Rostron there was no changing of undertrays, heating up tyres between practice and racing at the Festival. The whole team looked on as the big teams set about their fine-tuning antics aware that their experience of many years has taught them all the techniques old and new. But they remain keen to devote their challenge to reflecting the original FF1600

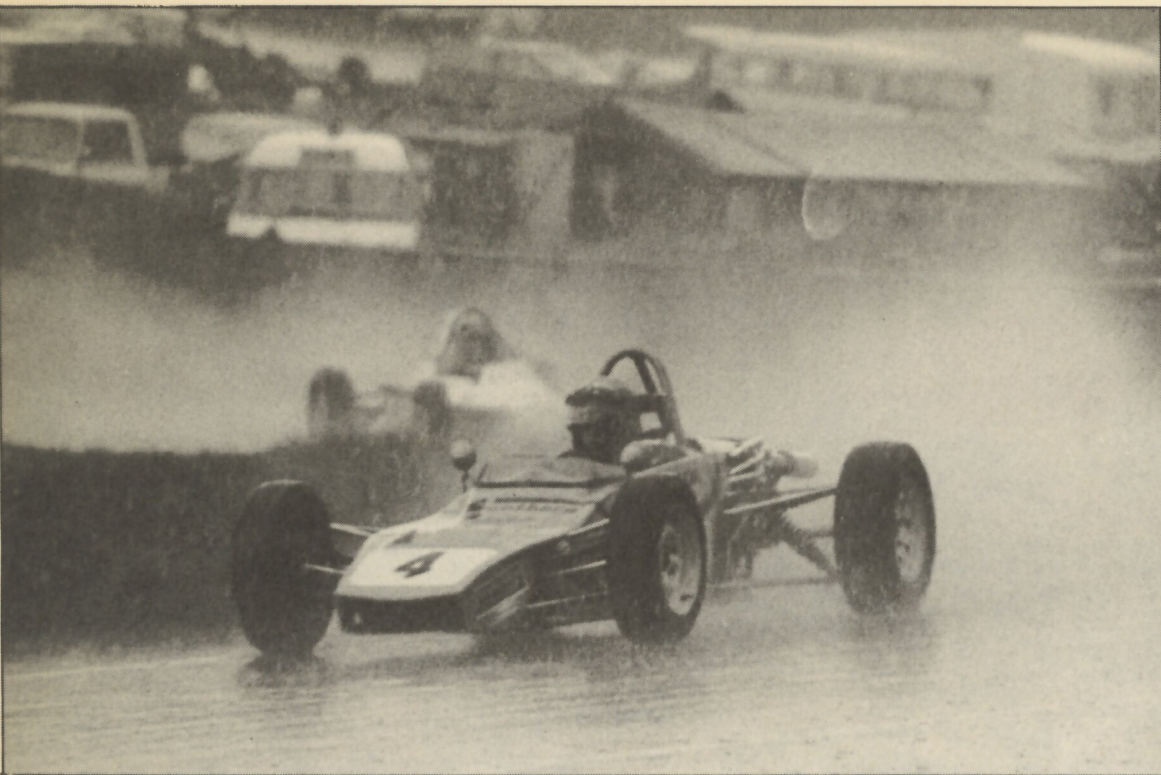


PAUL SLEEMAN

Born: April 4, 1950, Chatham, Kent
Occupation: Sales Representative.
 Spent early teens in Canada with parents; dual-nationality.

Previous Successes: 1977 Marchant & Cox/Lydden FF1600 Champion (Crosslé 25F); 1978 Marchant & Cox/Lydden FF1600 Champion (Rostron CT78).

1983 Successes: BRSCC Pre '74 FF1600 Champion; Marchant & Cox/Lydden FF1600 Champion; Lydden Formula Libre Champion; BRSCC 'Pre '74 FF1600 Festival Winner; Top 'Pre '74 finisher (10th) in First Edition Formula Ford World Cup/Festival; AUTOSPORT Golden Helmet winner (34 wins).



Sleeman lifts his visor to peer through a cloudburst while racing the Rostron at Lydden.

conception — that a complete car could be raced for a maximum of £1000.

Ray Howard, Bob Curl, 'Barnie' Barnard and Bob — no relation — Barnard of Connaught Motors are quick to praise Paul's driving to the limit and Paul is equally swift in declaring the successful season as a result of teamwork.

"Formula Ford 1600 is a great category, especially the Festival and series like the Champion of Brands, it is such great training. A close battlefield where you learn to react instantly to whatever occurs ahead of you. You're swept along, all the time looking for a gap ahead of you, and all the time keeping an eye on the mirror for the chap behind doing the same," says Paul reflecting on his outings against modern day cars rather than his Pre '74 races!

Before an enforced rest from motor racing due to lack of funds Paul had won the Marchant & Cox/Lydden FF1600 Series in 1977 with a Crosslé 25F and again in 1978 with a Rostron CT78 — "my CT3 is quicker than that was!" he claims.

Now firmly re-established among the top of his ilk, Paul is looking to greater things next season, and plenty is cooking in the relaxed atmosphere of the Copper Kettle Restaurant. If success rewards dedication then the whole team, including the delightful Debbie and Janet, deserve the chance to prepare a new challenge and success will surely not desert them.

March 713S

Previous history of the Lola-bodied March 713S is somewhat hazy, except that present owner Ray Howard acquired the ex-Formula 3 racer from Kentish pilot Nick Cole.

My baptism of fire in this 1934cc twin-cam single seater was restricted to a quiet wintry session at Brands Hatch, and hampered by a slow puncture on the nearside rear.

On such a cold day, the Avon slicks were not going to heat up sufficiently anyway, and although my 12 laps were spent coasting and trying to get the hang of a right-hand gearchange for the first time, it was exhilarating.

Paul regularly uses 7500rpm and will go up to 8000 if necessary, but for my first single-seater drive I was content to stick to a maximum of 6800. Even so, I could feel quite a kick in the back from a unit which develops around 175bhp and is capable of something near 150 miles an hour.

The engine has been re-stroked to 1934cc, as opposed to being re-bored, for with a low-budget racer — and one which is capable of mixing with far more up to date machinery — the theme of the exercise is reliability.

Rostron CT3

Choosing such a victorious car for one's single-seater race debut is one sure way of ending the car's winning streak, and bringing the writer down to earth — a lot has been forgotten in the 10 years which have passed since I last raced seriously.

My only previous rear wheel race experience has been limited outings in a Production Sports Lotus Elan and one or two Celebrity Sunbeam drives at Oulton and Mallory — 15mins of practice at Lydden during one of Bill Chesson's rapid-fire Festival of Motorsport meetings is not really much time to get acclimatised.

The first thing you realise is that a Formula Ford 1600 is a car built to race, unlike my various Minis in the past which were modified to go racing in. The second realisation is that you don't drive a single-seater like a front-wheel-drive Mini and the third is... why on earth didn't I try this before!

And here I was sensibly placed on the back of the grid for a Pre '74 race — one that Paul Sleeman was not going to win and neither

Winner's cars tested



The team including Ray Howard (left) owner of the March, Paul Harmer (centre) and Paul Sleeman (front).

was his car! Trying to forget the fact that half an hour later Paul would be contesting the final round of the Lydden FF1600 Series and one week later was the all important Festival.

Perhaps I was a little too optimistic of the Southern Litho/Connaught Motors machine, starting in third gear at least saved me the trouble of braking for the first right hander at Chessons Drift, and I even overtook somebody.

Gareth Lloyd and Len Marchant had already pulled clear to dispute the lead while I managed to keep the third and fourth men in sight (just) by dint of the incredible power coming out of Devils Elbow, from which you can hold second all the way up to the North Bend hairpin.

It took me a few laps before I had gained enough confidence in the car to let her drift

wide through Chessons, rather than try to fight the positive steering close to the inside — there's so little room for error at Lydden, but I didn't feel relaxed enough to change up to fourth for the brief straight across the start/finish line.

I found the hairpin a bit of a scramble, I had seen Paul's style of power on, sliding out the back, but I needed a few more miles behind me before I felt brave enough.

Pulling 6000 on the exit, it's third for the downhill swoop to the notorious Pits Bend which I got right just once I fear (*my good lap — 49.7s!*) and I got the nearside rear hanging out on to the kerbing — if I'd left it to the car we would have go it right more often!

I didn't think I was going slowly enough to be lapped but going down to Devils a black Rostron came into my view and (being a

gentleman racer) I allowed him plenty of room. Then I realised my mistake, he had been a first lap spinner and was merely reclaiming my hard earned fifth place!

Determined to recapture the position I closed under braking for the hairpin on the final lap but — as Paul had warned me but which had not happened and I had forgotten anyway — the bump at the braking point knocked her out of second gear. Two or three fumbling seconds later and I had realised that I had taken the hairpin in neutral and sixth place was, after all, quite satisfying.

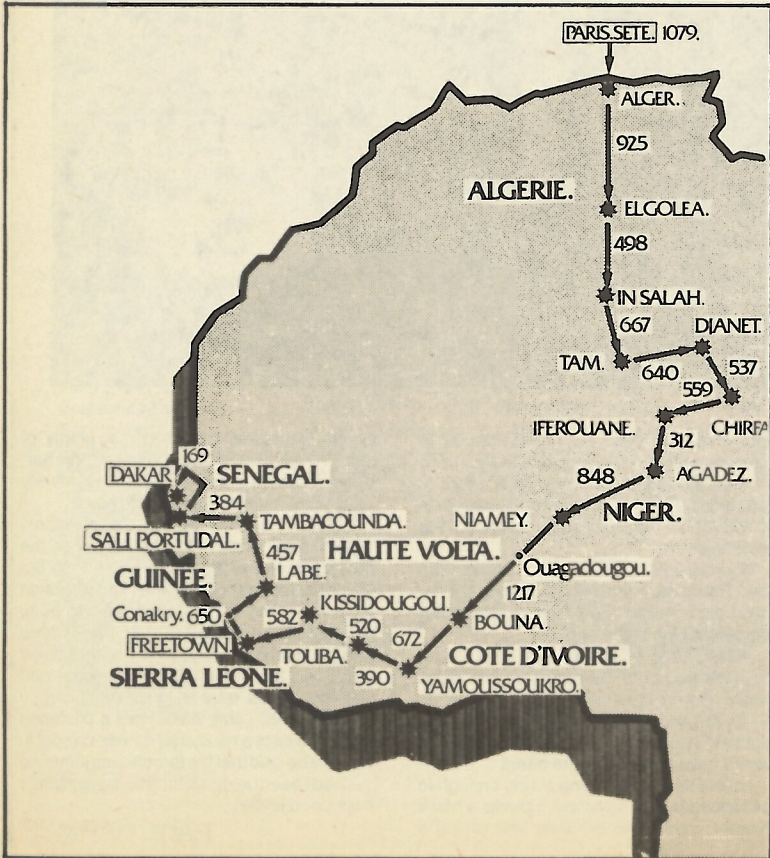
When Paul came back from a blistering (around 3 secs a lap faster) runner-up spot in his race he said that the throttle was jamming... had I been using full throttle it would have happened to me!

PAUL HARMER



The scene in Le Place de la Concorde before the start of the Paris-Dakar event. A great variety of vehicles started the rally; some entered from factory teams, others from brave eccentrics.

The great escape



Over 10,000 people turned out in Paris on New Year's Day to witness the start of the sixth Paris-Dakar Rally Raid. Among the competitors were some of the world's best drivers.

While most of us were recovering from the excesses of New Year's Eve, a vast army of nearly 2000 left Paris for the sixth Paris-Dakar Rally Raid. Such is the popularity of the event (perhaps due in some part to the efforts of Mark Thatcher . . .) that over 100,000 spectators turned out to see the start in the centre of the city.

Ahead of the crews, who feature among their number an array of race and rally drivers, film stars, bobsleigh competitors and assorted 'madmen', lay a 10,000 kms route through the deserts of Africa. The competitors will venture into Algeria, Niger, Upper Volta, the Ivory Coast, Guinea and Senegal before the finish in Dakar on January 20.

Thierry de Montcorge's self built six-wheeler with a Kevlar body and 360bhp engine.



PARIS-DAKAR RALLY

The Paris-Dakar is an extraordinary event indeed. Forget Lancia Rally 037s, Audi Quattros and the rest of the exotic machinery that usually grace a rally special stage. For this challenge the usual choice is Lada Niva, Mitsubishi Shogun or even MAN truck. Anything that can drag itself across the clinging sand is likely to have crossed the start ramp in Paris's Champs Elysees on New Year's day.

But there are some 'special' versions of more recognisable vehicles. Jacky Ickx, multiple winner of the Le Mans 24 Hour race and first home on the Paris-Dakar in 1983, has a Rothmans backed four-wheel-drive Porsche 911 at his disposal. For the fourth time, Ickx (whose birthday it was on the day of the start) will have French film star Claude Brasseur alongside. The pair are backed by two similar cars, driven by racer René Metge and Roland Kussmaul.

Before leading away the 253 cars, 113 bikes, 31 trucks and 29 recovery vehicles from the Place de la Concorde, Ickx was in confident mood and admitted that he was optimistic of a repeat victory.

Belgian rally star, Guy Colsoul, has a Manta 400 fitted with twin rear wheels to give traction in the deep sand while Jochen Mass has a Mercedes 500 SLC automatic at his disposal, huge balloon tyres gracing the rear of the car.

Servicing on the event may be carried out at any point but the service cars themselves must also compete. This is where the trucks come in. These huge pantechnicons follow the event, competing in their own class and providing the necessary back up for the drivers of the faster machinery. They still manage to provide plenty of spectacle in the more populated areas. And then there are the bikes! The prospect of racing across the desert on a motor bike seems to attract this really extrovert element to the event.

It is this variety of challenge that makes the Paris-Dakar event the most revered of the growing number of Raids that take place each year. The challenge of navigating in one of the most barren parts of the world, using the stars and a road book that suggests turning left 'at the skeleton' make it all a unique challenge . . .



Top: Last year's winner, Jacky Ickx, leads away the trio of four-wheel-drive Porsche 911s onto the first test. Below left: The service truck for that amazing six-wheeler leaves Paris. Below right: Would you argue with this 'Push-me-pull-you' DAF at the traffic lights? Two cabs are clearly necessary for such a monster . . .



Above left: An all ladies crew on the first test. Also included in the Mitsubishi team are Andrew Cowan and Johnstone Syer. Aboveright: This automatic Mercedes 500SLC, with its huge balloon sand tyres from Goodrich, will be driven by Jochen Mass. Bottom: Just in case the Porsches hit trouble, this fleet of MAN trucks will be following to keep the Rothmans cars on the straight and narrow . . .



Note the compass by the gear lever . . .

Route details

- January 1: Leave Paris
- January 3: Alger — El Goléa
- January 4: El Goléa — In Salah
- January 5: In Salah — Tamanrasset
- January 6: Tamanrasset — Djanet
- January 7: Djanet — Chirfa
- January 8: Chirfa — Iférouane
- January 9: Iférouane — Agadez
- January 10: Agadez — Niamey
- January 11/12: Niamey — Bouna via Ouagadougou
- January 13: Bouna — Yamoussoukro
- January 14: Yamoussoukro — Touba
- January 15: Touba — Kissidougou
- January 16: Kissidougou — Freetown
- January 17: Freetown — Labé
- January 18: Labé — Tambacounda
- January 19: Tambacounda — Sali Portudal
- January 20: Sali Portudal — Dakar



Monte practice begins — and Kaby gets the Nissan drive

With the New Year only a couple of days old, competitors on the first round of the 1984 World Rally Championship were already making preparations in southern France for the 52nd Monte Carlo Rally. Works teams are expected from Audi Sport, Lancia (the current World Champions) Mazda, VW Motorsport, Subaru, and Nissan.

While the Japanese are only fielding one officially entered 240 RS, British interest will centre on a second privately run Nissan which will be driven by Terry Kaby and Kevin Gormley. The Towcester driver is hopeful that this will be the first of a number of appearances alongside the Japanese team, which will continue to be managed on events by Bob Freeborough.

Kaby and Gormley left earlier this week, and following them in a few days will be another interesting new partnership, that of Chris Lord and Mike

Broad, who will be driving a Talbot Samba run by Mike Little Preparations. "We wanted someone who doesn't weigh too much," commented Mike Little, although Broad (regular partner to Russell Brookes through recent seasons) has already stated that he is to concentrate more on co-driving this year.

The rally itself — which begins on Sunday, January 22 from various points including London — has changed format slightly, with the Concentration Run heading for Aix-les-Bains, although the deciding factor will again be the weather.

The last two events have been held in remarkably clear conditions, with only a little snow, favouring conventional cars, and leaving the four-wheel-drive Quattros struggling.

This time the German team will field Stig Blomqvist, Hannu Mikkola, and newcomer Walter Rohrl; Lancia will have Markku Alen, Attilio Bettega, and Jean Claude Andruet, supported by

Massimo Biasion in a Jolly Club car; while Renault's hopes will be carried by Francois Chatriot and Jean Luc Therier in 5 Turbos.

Support for Group B is, therefore, not particularly strong, (winners will either be Lancia if it's dry — as at present — or Audi if it snows) although the numbers in Group A promise a much more interesting contest.

Kalle Grundel will be there with his all-conquering Golf GTi; Bernard Darniche will run a Yacco-backed Audi 80 Quattro, Shekhar Mehta will have a Subaru saloon, Bertrand Balas an Alfa

GTV 6, and there will be a three car squad of Mazda 323s from the Rally Team Europe of Achim Warmbold for himself, Ingvar Carlsson, and Finnish Junior Team girl Minna Sillankorva. Not all of these entries are made with full factory support, but all have assistance of some kind.

Factory support stretches still further down the line as well, and one of the stars of Group N should be the talented 22 year old Italian Alessandro Nannini, a member of Lancia's Endurance racing team, who raced regularly in Formula 2 in 1983. He will drive a Fiat Ritmo 130.

BRITISH ENTRIES

Pat Anderson/Tony Phillips	Ford Escort	Group A
Terry Kaby/Kevin Gormley	Nissan 240RS	Group B
Peter Morris/Richard Appleton	Talbot Sunbeam Lotus	Group B
Graham Newby/Stephen White	Vauxhall Astra	Group A
Chris Lord/Mike Broad	Talbot Samba	Group A/B?

Stars gather in snow to challenge Wittmann

This weekend's Janner Rally, in Austria, opens the European Rally Championship and a host of top names have been attracted to challenge multiple victor, Franz Wittmann, who appears in his usual Audi Quattro.

Among the top 10 crews are the Toyota team leaders, Per Eklund and Bjorn Waldegaard, although they are both in Audis for this usually snowy event. Eklund (partnered by Dave Whittock) gets an 80 Quattro while Waldegaard will drive a Group B version and will be

partnered by former European Rally-cross champion, Franz Wurzl.

Swiss Grand Prix star, Marc Surer continues his rally career in the Renault 5 Turbo while Shekhar Mehta tries his hand behind the wheel of an Opel Ascona 400. Norwegian ace, John Haugland brings his Skoda and Swedish youngster, Mikael Eriksson (surprisingly absent from the Lombard RAC Rally) returns with his rapid Group A Audi Coupé and could threaten the leaders if the weather deteriorates on the extremely compact event.

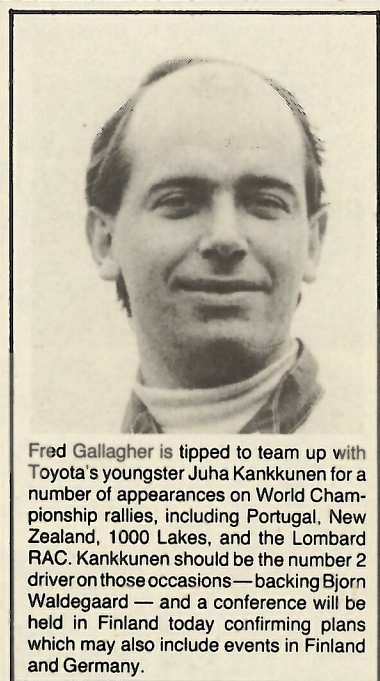
B-seeds nominated

After considerable confusion, the RAC MSA has announced a list of drivers nominated for B seeded status in 1984, additional to the automatic seeds including Jimmy McRae (A), Tony Pond (B), and Russell Brookes (B).

The list includes Simon Everett, Terry Kaby, Chris Lord, Malcolm Wilson and Darryl Weidner, although when the original details were announced Louise Aitken's name appeared, and was then

deleted when someone in Belgrave Square discovered an omission.

The list presented to FISA was therefore withdrawn, and the surprising decision to drop the Junior Team member was made. The move is all the more remarkable as it seems to take little account of either the qualifications required by FISA for inclusion on the list of B seeds, or the future programmes of the individuals, some of whom will base their 1984 programme on British events.



Fred Gallagher is tipped to team up with Toyota's youngster Juha Kankkunen for a number of appearances on World Championship rallies, including Portugal, New Zealand, 1000 Lakes, and the Lombard RAC. Kankkunen should be the number 2 driver on those occasions — backing Bjorn Waldegaard — and a conference will be held in Finland today confirming plans which may also include events in Finland and Germany.

BRIEFLY

■ Bruno Saby will be partnered by Jean François Fauchille in his Renault 5 Turbo this year. Fauchille accompanied French Champion Guy Frequelin in a Manta 400 last year, and this is only one of a series of co-driver changes on the French scene. Jean Marc Andrie — Jean Ragnotti's partner in the works 5 Turbo — has left Renault; while Frequelin will have Tilberg in the factory Opel for 1984.

■ After several years driving an Escort RS, Robin Farrington is to switch to an Astra 1300 this season, with his daughter Jill in the co-driver's seat. The pair have contested a number of events together in 1983, but the high cost of running Group 4 machinery made Robin switch to the low-cost formula for the future.

■ Malcolm Wilson's hopes of running a Lancia Rally in the Open Championship seem to have disappeared. Although there was a car set aside in Turin for Lancia to use, the necessary finance has not been found, and the plans have just about been dropped.

■ The annual children's day, organised by the IRDC, will take place this year on August 1. Having been centred on Donington Park and Gosforth Park in recent years, the 1984 venue will be Brands Hatch Circuit.

■ Mike Stuart, who was married at the end of last year to Dot, is still hoping to find support to run his DR3 again on the Shell Oils/AUTOSPORT National Championship. Contact number is 051-207 4499.

■ The IRDC series of 'Talkabout' evenings continues in 1984, the first being next Tuesday at the Embassy Hotel, Newbridge, Dumfries; Wednesday January 11 at Durham AC's clubroom and the Charlton Arms, Wellington, on Monday January 23. IRDC members and guests will be on hand to discuss international events with films and videos.

■ 1983 ended unhappily for Mike Patison as six wheels and tyres were stolen from outside his hotel bedroom door on the Virgo Rally. Mike would be interested to learn the whereabouts of the 7in Revolution rims and the Pirelli PS215x13 covers.

Successful season

Mike Little Preparations have had another successful season with Antonio Zanini in the Spanish Rally Championship, and the European series with the Spaniard taking his home title and retaining his A seeding by finishing in the top five of the Euro series.

The British run Talbot Sunbeam Lotus scored well on the World Championship qualifier in Portugal earlier this year, and also picked up good points in Bulgaria with outright victory, so that the team retained the Spanish Championship for the second year in succession.

Obviously, Mike Little is keen to continue his association with Zanini in the future, although the driver apparently tried a Lancia Rally 037 for the first time last week. Little is therefore looking at other ways of staying involved both in Europe and on the home seen, where he may become involved in a Samba project.

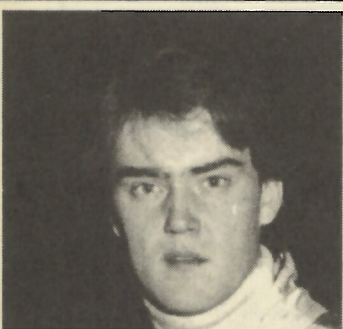
Tarmac settled

With a sponsor now named for the Galway Rally (see *Special Stage*, December 15), the dates for this year's Tarmac Championship are finalised.

The series will remain as last year with the full seven rounds. Galway was cancelled at the last minute due to the loss of necessary backing.

Tarmac Championship

Feb 10/12	Agip Galway Rally
Apr 20/24	Rothmans Circuit of Ireland
Jun 22/24	Donegal Rally
Jul 24/28	Ulster Rally
Sep 12/15	Rothmans Manx International
Oct 6/7	Uniroyal Cork 20
Dec 8/9	Killarney Rally of the Lakes



Harri Toivonen seems to have ended his association with Mazda, but now hopes to appear on a number of Rothmans Open Championship events at the wheel of an Audi 80 Quattro. He already has the car, and would like to be ready for the National Breakdown, while he may also do some German events.

More prizes for Breakdown

Bonus for Open Rally Championship starter

Regulations for the first round of this year's Open Rally Championship, the National Breakdown Rally, are available this week from the Secretary, 11 Pledwick Drive, Sandal, Wakefield WF2 6DE.

The prize fund now stands at over £8000 and the organisers, De Lacy MC of Pontefract, have included three special awards in addition to the eight Open Championship categories. Competitors will now be able to run their old Group 2 and 4 cars; there will be a class for

competitors on their first international event, and a clubmans trophy rally will run on Saturday, February 18.

This special event will be open to drivers who have only National competition licences, will have at least 30 entries, 105 stage miles, three classes and the entry fee will be £120 for private entrants and £140 for the rest.

The rally starts from York Racecourse on Friday, February 17 and will follow a similar format to last year's successful, if snowy, event.

No world series push from Castrol Rally

Having failed to achieve elevation to the World Rally Championship, South Africa's Castrol Rally organisers have decided not to push for inclusion this year. Instead, they will use the money that would be spent on getting FISA observers to the rally to improving the prize fund for middle order competitors and generally maintaining the standard of the

event.

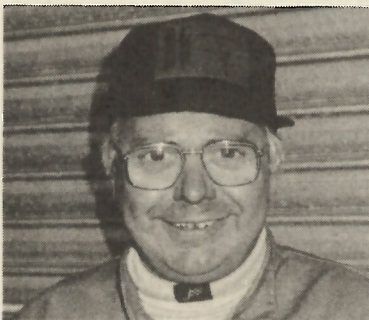
The 1983 rally received 127 out of a possible 145 marks from the observers—apparently the fifth highest score of any rally visited—but still failed to get the appropriate recommendation. For 1984, the Castrol Rally will, however, retain its position in the Pan-African Championship.

Scottish championship retains same format

This year's Scottish Rally Championship (still waiting for Esso to confirm their continuing support) will retain a similar format to last year. There will be 10 rounds again with eight to count and the 'Open' category will remain, enabling anyone to score points. Also retained for 1984 is the 'Challengers' series.

Interest in the new series appears to be healthy at present and, with a new Group A category planned, several competitors are rumoured to be building new cars. Sources north of the border suggest that Jim Fleming will retain his Manta, but could be challenged by Bruce Lyle (now apparently reconsidering his decision to retire to the race tracks) in a similar car.

Jimmy Fleming and Ken Wood are to retain their Toyota Celica and Rover SD1 mounts but, with only Groups A, B or N eligible for the Scottish International Rally, some change of cars will be necessary. Reigning champion Fleming is looking at the possibility of the Celica being eligible for Group B, while Wood will probably get a Group A Vitesse from the factory for the event.



Fleming — defending champion

Scottish Rally Championship

Feb 11	.....	Ladbroke Snowman
Mar 17	.....	Hackle Rally
Apr 1	.....	John Wilsons Bedroom Stages
Apr 14	.....	John Clark BMW Granite City
May 19	.....	Forth Electrical Stages
June 9-12	.....	Scottish International Rally
Jul 14	.....	D&A Arbroath Stages
Aug 11	.....	Andrews Border Counties
Sep 8	.....	Autumn Stages
Oct 27	.....	Sprint Tyres Trossachs Rally

New events for club rally championship

The 1984 *Rally Sport* Championship will comprise 10 events with competitors counting the best six scores from their first eight rounds.

Introduced for the new series are the Goodyear Lakeland Stages and the Devils Tour (on Salisbury Plain) while the ATS (Epynt) Stages replaces the Rally Radio Link Mewla, now promoted to the Shell Oils/AUTOSPORT RAC National Rally Championship.

Goodyear Ultragrip tyres are mandatory for all competitors, regardless of the

surface used by the event, while technical regulations include a ban on turbochargers and superchargers.

Rally Sport Championship

Feb 18	.....	Red Garages Cambrian Rally
Mar 3	.....	Langer Park Forestry Stages
Mar 17	.....	Goodyear Lakeland Stages
Apr 21/22	.....	Lido Trophy Rally
May 12	.....	Newtown Stages
Jul 7	.....	ATS (Epynt) Stages
Aug 26	.....	Devils Tour
Sep 22	.....	Kingdom Stages
Oct 28	.....	Williamson Premier Stages



Mann — switch to Toyota

Group A Toyota for Mann

David Mann, the 24-year-old mushroom farmer from East Anglia, has forsaken the Escort Turbo that he used last year in favour of a Group A Toyota Corolla with which to contest the Open series. Mann, who was a member of the British Junior Rally team, is hoping that the new car will bring him better fortune than the turbo and that his place in the British squad may be regained.

The car is to be prepared by Mike Taylor and will again be supported by Blake and Mann Mushrooms for the series. Co-driver will be the experienced Roger Freeman, who sat with David occasionally during 1983.

British drivers in Sweden

The 1984 Swedish Rally on February 9/12 offers free entry and accommodation to overseas entrants. The second round of the World Drivers Championship is again based in Karlstad and will form part of the city's 400th anniversary celebrations.

The rally will feature 470kms of stages in a total route of 1600kms with practising allowed, but strictly controlled, between January 25 and February 8.

Last year, the British Junior Rally Team made its debut and acquitted itself well on the snowy tracks. This year the team is planning to return and the organisers are clearly keen to attract other foreign crews. Darryl Weidner is also considering the trip with his Quattro.

Regulations are available from the International Swedish Rally, Box 4101, S-650 04 Karlstad, Sweden with entries at 1000SEK closing on January 13.

Weber leads Opel's Euro attack?

Erwin Weber is tipped to be leading an Opel chase for the 1984 European Rally Championship. The young German proved impressive last year (he was sixth on the Scottish) but has been trying to gain as much experience as possible outside his native country. Russelsheim are expected to support the attack.



Gwynedd regs now available

Following the announcement that Skip Brown would sponsor the Gwynedd Rally, Caernarvonshire & Anglesey MC have their regulations available.

The event will feature 70 stage miles, following a similar format to last year's successful event, but competitors will be allowed a longer lie-in as the event begins at 10am this year although this will mean the final stages will take place in the dark.

Entry fees will be £140 with competitors able to pay £50 with their entry form and the balance by February 20. Details are available from Mrs. B Jones, 36 Kersley Drive, Rhyl, Clwyd (please enclose SAE).

Sutherland to chase two titles

Alistair Sutherland is to chase both the BTRDA and the Castrol/*Motoring News* Stage Championships this year in his ET Sutherland/Hanger of London Opel Ascona 400. Following a couple of good results on *Motoring News* road events at the end of last year, Sutherland is confident of a good showing in both championships.

DART set for season

A full range of Dunlop rally tyres will be marketed by DART in 1984 for both the Rothmans Open and Shell Oils/AUTOSPORT Championships. From a new base in Kidlington, Oxfordshire, the company (who have supported Chris Lord and Mike Stuart in recent years) are negotiating deals for the season. Contact is Ian Beveridge on 0327 857275.

DIARY

Lep Winter Stages, January 22: First round of the Swift Motorsport Tarmac Championship takes place over the demanding Otterburn Ranges. Also counts for the Fred Henderson ANECCC Clubmans series. A 110-mile route is available for £44 with details available from Lynda Brabazon, 136 Melness Road, Hazlerigg, Newcastle. Tel: Newcastle 366345.

Opposite Lock Stages, February 19: A single venue event held at the Snetterton race circuit, qualifies for a host of championships and will feature 30 competitive miles in 10 stages. Further details from Jenny Clark, 22 Southill Crescent, Horn-don on the Hill, Essex. Tel: 0375 641099.

Sutherland Dukeries Rally, March 3: This year marks the event's silver jubilee but the entry fee is significantly higher than the 15s required for that first event! The £83 fee is actually reduced from last year with 55 stage miles available. The event counts for both the BTRDA series and the EMAMC Championship. Details from Mrs. V Moss, 14 Pump Hollow Road, Forest Town, Mansfield, Notts. NG19 0AX.

Metso — a new racing gearbox

Looking for a new gearbox for your F3 or FF car? The Metso could be your answer . . .

A new gearbox for small racing cars has been designed by Stuart Wallace and produced under the name of Metso. It is at present available in four-speed form for Formula Ford, rated at 100bhp, or for Formula 3 with five-speeds and a 160bhp capacity. The 'box is of unusual appearance because the differential housing is rectangular in shape, but this has distinct advantages for mounting in the average chassis. The gear cluster is contained in an overhung extension and changes of ratio can be made quickly and easily.

The clutch on the engine flywheel drives a quill shaft, which passes through a concentric slave cylinder for clutch release. The quill shaft proceeds beneath the differential and is connected by a muff coupling to the forward end of the layshaft, which is manufactured of a nitriding steel for maximum rigidity. The reverse drive gear and the spur transfer gears for the forward speeds are all keyed to the layshaft by 24 tooth involute splines. The mating constant mesh gears are supported on the pinion tailshaft by caged needle roller bearings, and each has an integral seven-tooth face dog clutch.

The constant mesh transfer gears are engaged, as required, by seven-tooth clutch rings which have a low inertia for quick changes. The selector forks are aluminium bronze and are operated by the usual right-hand lever and extension shaft. All the gears are of high tensile gear carburised nickel chromium steel.

The spiral bevel gears are designed according to the Klingenberg Pallod system, manufactured to a high degree of accuracy and lapped together as matched pairs, the standard ratio being 9:31. The differential is supported on tape roller bearings, carried by the side plates of the rectangular housing, with crownwheel adjustment by shims. This side plates are dowelled and secured by cap screws, plus

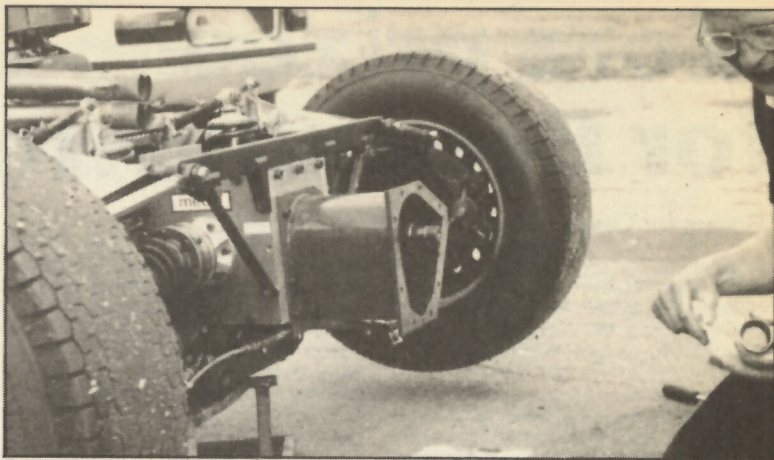
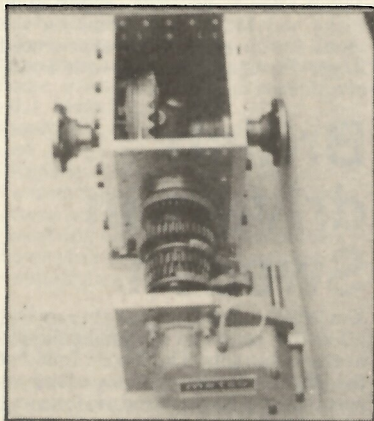
The spiral bevel gears are lapped together as matched pairs.

the use of aircraft-type adhesive. Inspection is to aircraft standards and checks include 100 per cent crack testing.

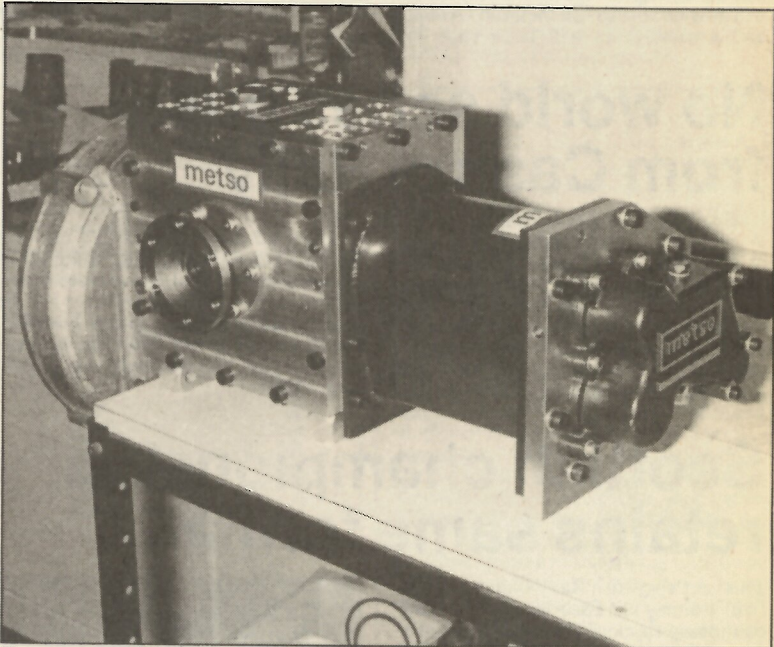
When changing the gear ratios, it is relatively easy to do the job in the comfort of the workshop but out at the circuit there is the danger of dropping the cogs in the dirt. Stuart Wallace has produced a false mandrel, on which the gears may be threaded in the correct order and then fed into the box. As is usual with racing gearboxes there is no synchromesh and in seven-tooth dog clutches, undercut to keep them in engagement, ensure rapid and easy changes, with no danger of a missed gear.

Metso transmissions are manufactured on numerically controlled machine tools and three axis digital read out inspection machines. For further details, contact Stuart Wallace at 292-4 Kew Road, Richmond, Surrey TW9 3DU. 01-940 3572.

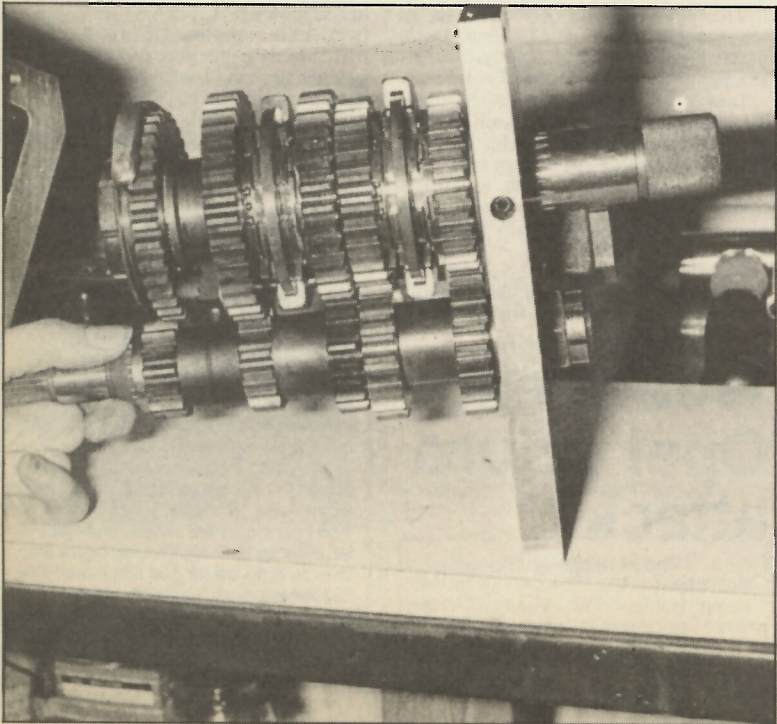
JOHN BOLSTER

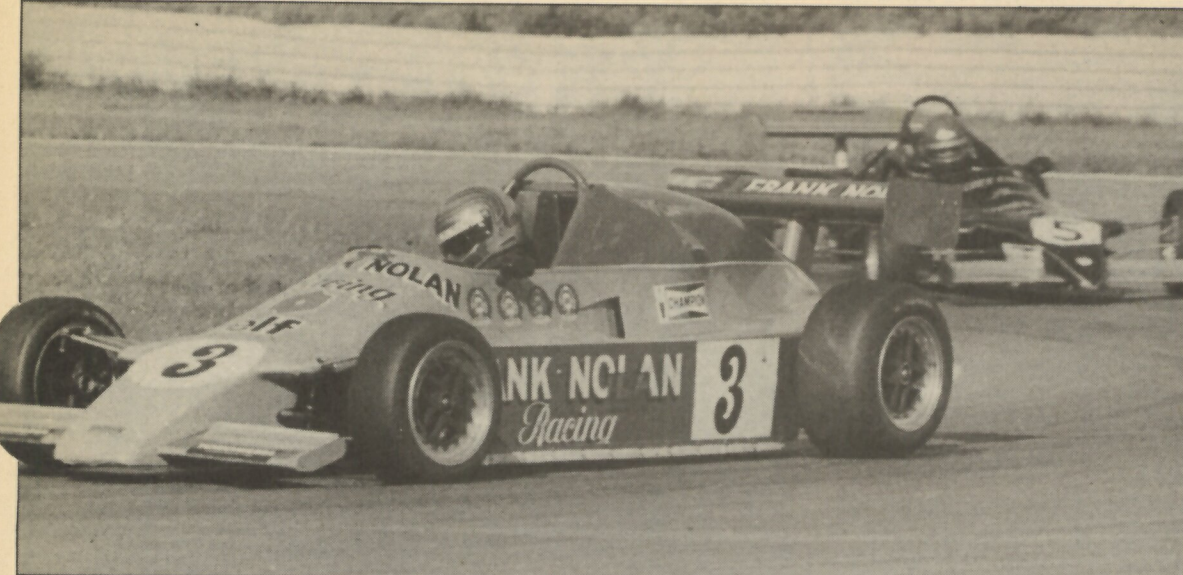


The gear cluster is housed in an overhung extension to facilitate ratio changes.



The rectangular differential housing lends the 'box an unusual appearance. Designer Stuart Wallace stands proudly next to his new Metso gearbox.





Martin Donnelly, in the Frank Nolan Van Diemen RF83, leads Colin Lees in the Crosslé 56F. Donnelly went on to win the championship.

Surviving the year

BRIAN FOLEY looks back on the past year's racing activities in Ireland.

It may not exactly have been a vintage year in Irish motor racing but it was a pretty eventful season and one that proved that racing could survive the most depressing recession ever in the Republic. This time one year ago the prospects looked pretty grim. Mondello Park was being offered for sale as a 'going concern', Colliers had pulled out of sponsoring the prodsaloon championship(s) and there was no sponsor for the Formula Ford 2000 class. Formula Atlantic seemed to be banished by sheer cost to the point of no return, while initial rumours were rife that there would be no racing at Phoenix Park. Frank Williams had shown Derek Daly the door for Formula 1, and, indeed, the few things to be happy about were John Watson's two Grand Prix wins (remember Belgium and Detroit) and Tommy Byrne's British F3 title.

A year on, and there may be fewer highlights to reflect upon, but Mondello was not sold nor closed and Phoenix Park *did* again host two days of real road racing, even if it all happened only on a circuit that barely proved adequate for today's requirements. Formula Ford 2000 took over from Atlantic as Ireland's premier league, although the Atlantics made a brave six-race showing and promise to be back in '84. Meanwhile, Daly disappeared to the USA and with Wattie now left out in the cold, Irish interest in Formula 1 considerably diminished.

On the sponsorship scene, Elf Lubricants took over the Formula Ford 2000 Championship; and Bruce Ashmore was responsible for the Ashmore Ryder sponsorship of the prodsaloons. Now the old dilemma is with us again as Elf and Ashmore Ryder sponsorship hangs in the balance for '84; and the Irish Nationwide Building Society will not go with the Formula Ford 1600 'A' category. Ashmore Ryder, the famous Dublin crash repair specialists, may come around again; and there should be no problem getting a bigger sponsor than Irish Nationwide for the ultra-spectacular Formula Ford quick boys.

Elf sponsorship of the Formula Ford 2000 Championship came through Smiths Distributors Ltd, who handle Renault cars and commercial vehicles and other related French auto products, as well as a nationwide chain of Renault retail garages. Against this background it was hard to get Elf money for a Formula Ford Championship.

Ford of Ireland play particularly low key in Irish motor sport, involvement in Phoenix Park being a sort of token PR gesture — but this will change in '84 following a directive from Ford of Europe to offer some support for Formula Ford 1600. Yet Ford get a lot of exposure from the FF2000 and three 1600 championships, without spending a penny!

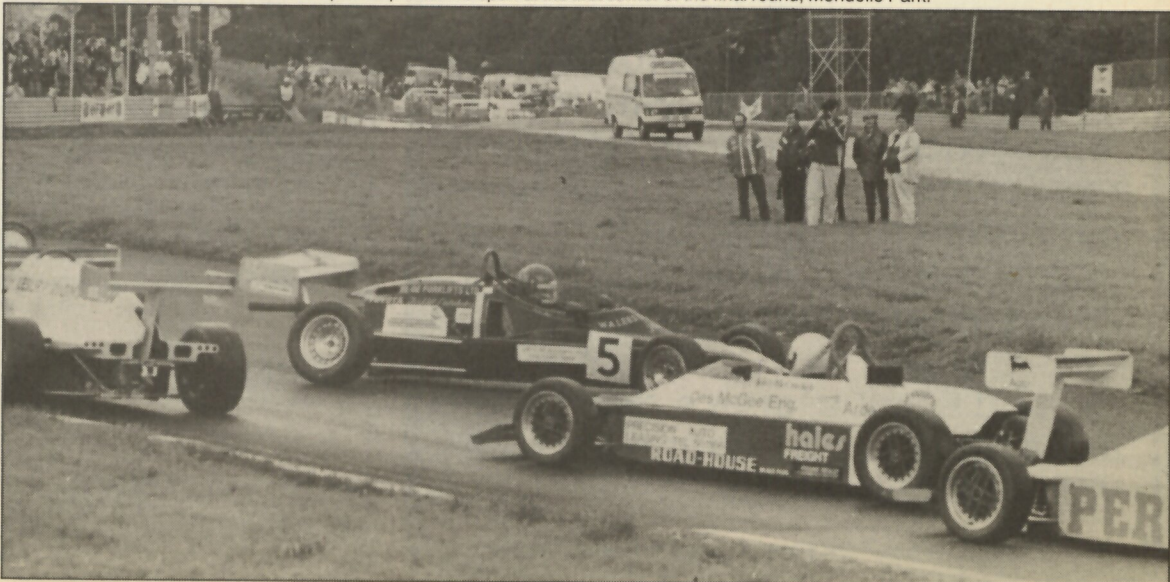
boring championship. It was all change when the German Zagk engine specialists were caught with their knickers down, and the naughty Huns were severely whacked on the bare buttocks for a batch of 'illegal' motors. Nolan had his Zagk engine voluntarily checked and when declared illegal, he immediately surrendered all 48 points accumulated by his driver Donnelly. This sent Donnelly back to zero and put Crosslé drivers Colin Lees and Denis McGall seemingly way out of reach on 26 points each.

Young Donnelly played the game of snakes and ladders with great determination to get back up there, controlling the way the dice scored for him, and not throwing them about in wild abandon as others might have done in desperation. It is exactly this maturity, this racecraft, this ability to sum up situations and act sensibly when all seemed lost that marks Donnelly as the driver most likely to make it to the top in motor racing. It can be argued that Donnelly had the best of equipment in the Van Diemen RF83 run by Frank Nolan Racing, but he also had to contend with pressure from Nolan and his dad Martin Donnelly Senior. The volatile Nolan and the reserved Donnelly

Donnelly's Championship

Back on the Irish scene, the Elf Formula Ford 2000 Championship was won by Martin Donnelly driving a Van Diemen RF83 for Frank Nolan Racing. At mid-season Donnelly was so far in front of the rest that it was turning into quite a

Colin Lees lost all hopes of the Elf championship when he spun at the first corner of the final round, Mondello Park.



were perhaps rather strange bed-fellows, but in fact they gelled together to form a very effective team. Donnelly is no big rave up in the personality stakes, the reverse of Tommy Byrne in terms of modesty. Of course he has youth on this side and the personality cult can come later. Right now, Martin's sole target is winning motor races. When the chips were down, following the Zagk affair, he showed no emotion, only a determination to get stuck in and back in the championship chase.

In just two races Donnelly was up to fifth place, and with two races to go the scoreboard read: Lees 46 and Donnelly 39.

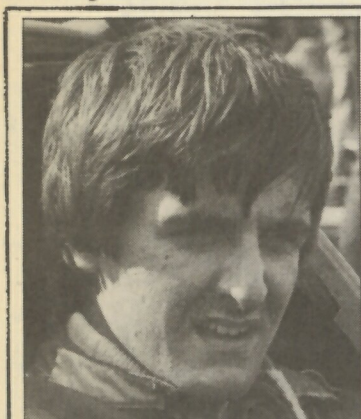
Donnelly led Lees across the line at Phoenix Park, and going into the last race, it was Lees on 52, Donnelly on 48 and McCracken on 44. All three were in with a chance but Lees and McCracken both blew it. The televised Mondello race was held on a streaming wet track. Lees took the initiative at the start but lost the Crosslé 56F at the first corner and was shunted into instant retirement. As at Phoenix Park, John McCracken was out of the picture completely, and so Donnelly romped home an easy winner to take the Elf title with 57 points. Lees who tried really hard in the somewhat difficult Crosslé 56F was second on 52 and McCracken was third on 44, from McGall (Crosslé 51F) on 39. McCracken ran a Van Diemen RF82 on a low key budget and he summed up his season pretty well — "anytime I had new tyres I won" — which was twice.

Mark Galvin put in some meteoric drives with an Argo JM14, and like a meteor he fizzled out in a big way, totalling the car during practise for the televised Mondello race.

Highlight of the FF2000 season was the Euro round at Mondello, won by Dutchman Cor Euser from Brazilian Mauricio Gugelmin. But Donnelly was the race hero, recovering from a start line shunt caused by Julian Bailey to finish third, setting a new class record of 56.9s with a deflating tyre! Donnelly then went on to win the final Euro round at Donington, and also impressed with an Eddie Jordan Ralt RT3 in his F3 debut at Silverstone, qualifying ninth in this one-off drive, his prize for winning the appropriately named 'Star of Tomorrow' race at Phoenix Park.

FF2000 in Ireland really needed someone to put the rule to Donnelly and that someone should have been Bernard Devaney. He had a few sizzling laps way back at the very start of the season in a 'works' PRS, but his engine expired in a big way and the PRS deal fizzled out. Then at the end of the season he was entered in a Reynard SF83, but this car never materialised. So the undoubtedly

talented Devaney once again found himself victim of his own inability to get his act together.



Donnelly — Elf champion.

IRISH ELF FF200 CHAMPIONSHIP

Final placings	
1 Martin Donnelly (Van Diemen RF83)	57
2 Colin Lees (Crosslé 56F)	52
3 John McCracken (Van Diemen RF82)	44
4 Denis McGall (Crosslé 51F)	39
5 Brendan McKenna (Van Diemen RF82)	36
6 Harry Johnston (Crosslé 46F)	13
Mark Galvin (Argo JM14)	13
8 Chris Murphy (Van Diemen RF82)	12
9 Leslie Wright (Van Diemen RF83)	11
10 Tommy Reid (Van Diemen RF82)	9

Formula Atlantic survives

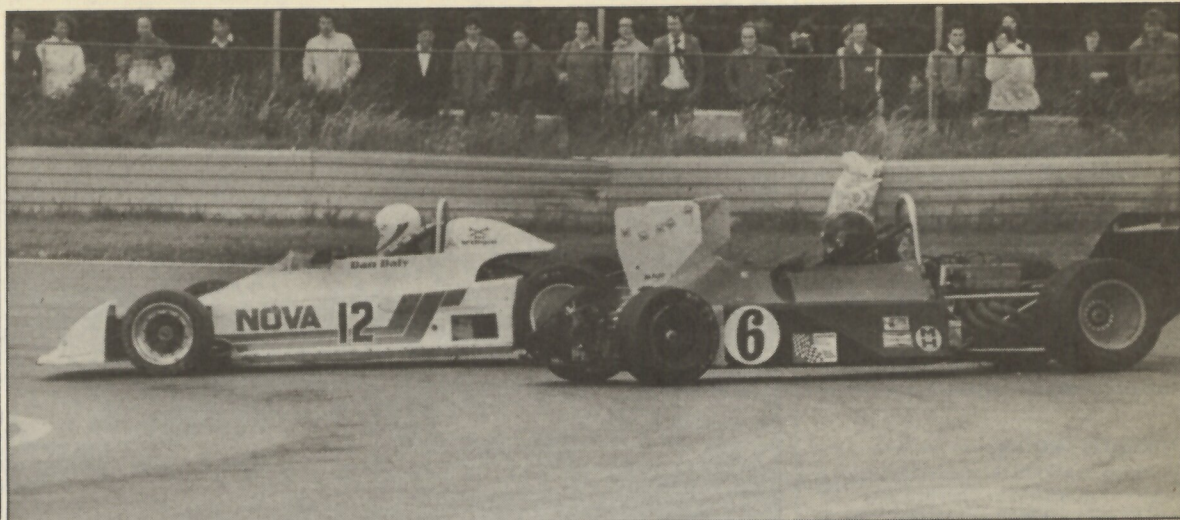
The arrival of ground-effect cars spelled the demise of Formula Atlantic in Ireland. Last year the Ralt RT4s of Trevor Templeton and Colin Lees totally eclipsed the older cars, and so the formula just about struggled into 1983 on a low key. **Paraic Mooney** never won a race with his Brabham BT39, but he picked up sufficient good placings to win the unsponsored championship from **Dan Daly** and **Gary Gibson**. Of the six races held, Gibson won one at Mondello and two at Kirkistown, while Daly also scored on the two circuits and Templeton had one Kirkistown win.

It's a great shame that Atlantic never caught on in Europe, as the cars are quick and really sound right — just imagine how a full grid of Atlantics would sound at Brands or Monaco, instead of those flat-noted F3s. Well, Atlantic looks like making a big comeback to Irish racing in '84, with an eight-race championship already backed by guaranteed starting money. And some of the great supporters of the formula are expected to be making a comeback, including Ken Fildes and Bill Gowdy, no doubt attracted by the banning of ground-effect cars. Templeton, who finished third behind Irish-born Alo Lawler and Ian Flux in the British series, is to forsake his RT4 for an older-type chassis.

Murray's FF double

Anthony Murray was the man in FF1600, winning both the Irish Nationwide and STP Northern Ireland Championships with his faithful Crosslé 40F, which he also campaigned last year to winning the Irish Nationwide. He scored a prestigious win at Phoenix Park in the works Crosslé 55F, and went on to finish a great sixth in the First Edition World Cup at Brands. Anthony, who hails from a motor sport family, is a tough little cookie who likes to win. If he was a few years younger and not committed to family and business, he would surely go places in racing, but the Murray motivation is purely just for sport.

Vivion Daly's more famous brother Derek set up a deal for a new Reynard FF83, which Vivion took to major wins at



Daly (Chevron B42) recovered from this spin with O'Leary's Ralt RT1 (6) to win the F Atlantic counter at Mondello.

the televised Mondello and the Champion Plugs Formula Ford Festival. **Alan Kelly** in the Zanussi Van Diemen RF82 and **Robert Lee Lewis** in a Reynard FF83 also had good wins, but both suffered from being perhaps that bit over-anxious. **Derek M. Daly** should have had more points at the end of the season with his Van Diemen RF82, but his attentions were divided between racing and the organisational side of the sport as President of the Irish Racing Drivers' Association and as Formula Ford representative on the Competitions Advisory Committee of the RIAC. His best showing was 17th in the Brands Festival.

Denis Sheehan (PRS) won the Shell Oils 'B' Championship and first-timer **Philip Hughes** won the Silkolene 'C' Championship with the Southside Motor Factors Crosslé 32F.

A few youngsters occasionally looked promising, particularly **Ruari O'Coileain** and **Alan Hick**, and yet FF1600 somehow did not produce any exceptionally noticeable talent in '83, despite good entries and some very close dicing in all three championship classes.

Formula VW 1600

David Sheane was instrumental in starting Formula VW 1600 as a 'low-cost' single-seater class, on similar lines to Formula Vee but using almost standard Variant-type 1600 engines rather than the race-tuned 1300s of F Vee. The class has had its critics, but at least it has given a lot of people a lot of enjoyment and provided the only opportunity open to those who could not possibly afford Formula Ford, and particularly the costly latest 'high technology' chassis.

This year saw the Formula VWs racing at Kirkistown for the first time, and as a result, several Northerners are going F VW in 1984. Sheane Engineering of Blainroe, Wicklow, can supply Sheane-VWs in complete or kit-form at unbelievably low prices (somewhere for around £2000 to £2500 Sterling for a ready-to-race single seater). A recent Sheane test day at Kirkistown attracted some 50 prospective customers, so things are really looking up for Formula VW.

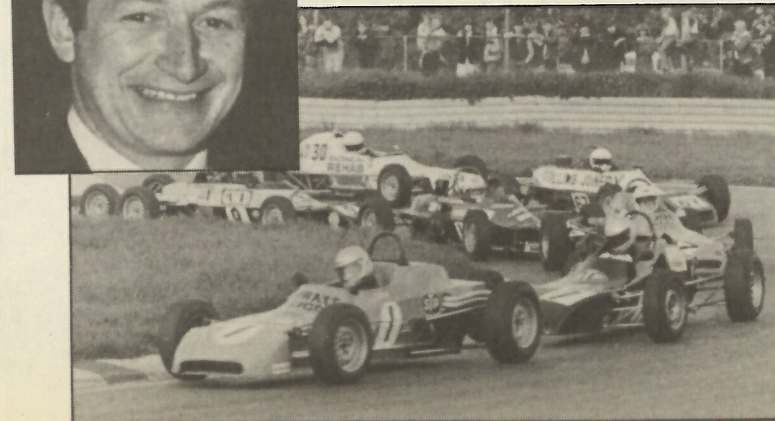
Paul Deveney was the championship winner from **Liam O'Sullivan**. Paul originally ran a Scarab which he wrote off in a hillclimb in Cork. He reappeared with a Sheane chassis and went on to win the Grange Motors Championship. Next year he moves into Formula Ford 2000 along with fellow F VW graduate **Dave Kidd**. Both will drive Van Diemens. Deveney in the ex-David Manley/Maurice Dunne RF81 and Kidd in the ex-John McCracken RF82.

Mondiale racing cars

As well as Crosslé, the new Mondiale Car Company (based in Bangor) will produce cars for Formula Ford 2000/1600 in '84. Men behind the Mondiale project are Leslie Drysdale (formerly with Crosslé), Crosslé racing drivers Colin Lees and Denis McGall, McGall's business associate Tom Acheson, and David Manley (Dublin). Manley, winner of the 1983 Pioneer Hillclimb Championship, is the Southern agent for Mondiale and will campaign one of the new Drysdale-designed 2000s on the hills and will run Maurice Dunne in circuit racing with the same car.



Anthony Murray (inset and below) leading Peter McLeer and the rest of the field, won both the Irish Nationwide and STP FF1600 championships.



The first Mondiale has yet to turn a wheel, and it's been quite a frantic time for Drysdale to get set up with all the right production machinery in the refurbished factory. The first Mondiale should be under test early in the New Year and cars are expected to be available for sale before the season starts at Mondello on March 17. One of the first orders for a Formula Ford 1600 has come from **Michael Barrable**, one of the front runners in 82 and just back into racing at the tail end of the '83 season. Mondiale will not run works cars as such, as it is not their policy to compete against customer cars.

Drysdale has valuable American contacts from his Crosslé days, and was recently in the States canvassing Mondiale orders. It is to the USA market that the Mondiale Company is looking for the orders that will make the venture a viable project.

In the meantime, the Crosslé Car Company, under the direction of John Crosslé and Colin Scott, will produce revised versions of the 55F (1600) and 56F (2000) for '84, as well as supplying spares for the still popular 30F, 32F and 46F models, and well known branded racing components.

Any rumours that the Crosslé Company might be sliding out of the racing business, after 25 years, are totally unfounded. This is indeed good news as the Crosslé name is synonymous with Irish motor racing, all of Ireland's top drivers having cut their racing teeth in Crosslé cars, notably Watson, Daly, Kennedy, Jordan and Byrnes.

The Crosslé-Mondiale rivalry will probably be good for the two Northern Ireland companies, as well as providing keen competition for the English cars such as Van Diemen, Reynard and Royale in Irish racing.

Irish sports cars

Sports and GT racing in Ireland has never been very strong, both in numbers of cars and the overall quality of the machinery. The 1983 modsports/special saloons, the so-called GT class, was the worst ever. The MG Midgets of championship winner **Morgan Dempsey** and the Liam Plover car generally raced by **John Keaney** were the only quick modsports, and **John Hayes's** 1.3 Mini the only consistently quick special saloon. Dempsey ran away with the championship as Keaney did not compete often enough to mount a serious challenge, getting himself totally involved in the TMC Costin project as official test driver, on a voluntary basis. Keaney had his reward with a first time out victory in the works racer at the televised Mondello and will

SEASONAL SURVEY

▶▶ run the TMC Costin with an all-steel 1.6 Vegantune engine in '84.

Dempsey reckons the GT class is in for that overdue revitalisation in '84, and is running a Midget with a 1.6 Ford engine and some more modern bodywork than the original boxy MG shape which is now dated. A few quick space-frame Minis will add more variety, to be driven by George Crozier (Maguire Mini) and John Hayes. With Clan models now being built in Newtownards, Will Corry about to produce his Davrian-based cars in Lisburn, Thompson Manufacturing Company making the TMC Costin in Wexford, and some Ginettas supposed to be coming along, there should be no lack of variety in the new look GT class.

Saloon racing

Production saloon car racing Irish style is highly competitive, particularly the 1300cc class, which developed into an Alfasud versus Opel Kadett battle this season, with some early season intervention from a few of the quicker and better prepared Fiat 128 Sport and 3P derivatives. For the first time in '83, all the prodsaloons racing in the Ashmore Ryder Prod-Saloons Championship were fitted with slicks. It was generally reckoned a good idea, as the slicks gave more grip and better braking — and did not wear out as quickly as ordinary road tyres.

Initially, it looked as though the 1300cc class would be dominated by the Kadetts of **Des Cullen**, **Lorcan Johnson** and **Bob Montgomery**, chased by Alfasud drivers **John Burns**, **Ivan Thompson** and **Alan Murray**.

Pat Murphy ran a Ford Fiesta and **Fintan Cunningham** was picked for the Sanyo-sponsored 'works' Austin Rover Ireland run Metro. Neither Murphy, nor Cunningham proved competitive and, in fact, both were on the roof during the season. Murphy's Fiesta executed the most terrifying series of rolls, which the unhurt Pat attributed to a case of too much grip when sliding sideways on slicks, the car literally took off when the tyres bit in. Cunningham was nudged in a little move-over incident involving Thompson's Alfasud.

In the 2000cc class it was mostly down to the Escort RS2000s of **John Wood** and **Eddie Regan**, once **John Smith** metal-balled his old type Opel Kadett GT/E at Enniskerry Hillclimb and thereafter missed most of the season. 'Little Lemon' Wood won the class by virtue of doing more races than 'Elder Lemon' Regan. Why Regan wastes his time in this class is beyond the simple comprehension of those who remember him at his best in some really quick full-house



John Burns, winner of the prodsaloon championship, in typical action at Phoenix Park.

Minis. Chevron sports-racers and an equally quick Gryphon clubman car back in the '70s and further back in Dunboyne road racing days.

The big guns brought out **Derek Shortall**, **Brian Tuite** and **Norman Williams** as the regulars in a trio of Ford Capri 3000s. 'Shortie' (to give him his more polite nickname) and 'Tuitie' always had the measure of the rest. Towards the end of the season Tuite came into his own and had a great dice with **Phil Sparkes'** Alfa Romeo GTV6 at Phoenix Park, eventually finishing second. Big bogey of the Capris proved to be over-heating brakes, which reduced braking efficiency from half way during Mondello 10-lappers, a factor compensated for by the sheer power of the V6 engines.

So to the championship chase, and at

the end of May the overall leader was Shortall on 47 points from Cullen on 44. Burns in the TI Auto Engineers Alfasud Ti wasn't in the picture at all, with 22 points in sixth spot in the 1300 category. Prior to Phoenix Park at the end of August, it was still Shortall and Cullen battling for outright honours and level pegging on 91 each. But, Burns was up to second on 83 points in the 1300 class and challenging for the overall classification.

Burns was in scintillating form at Phoenix Park, whereas Cullen never got to grips with the whole weekend, at which he actually celebrated 25 years of racing in Dublin's park.

Burns is also an accomplished rally driver, with some notable performances to his credit at the wheel of a quick Escort-BDA. At Phoenix Park he was in his element, revelling in high speed

cornering and setting up the little 'Sud to take it through on three wheels with the power fully turned on. An absolute natural at the wheel, Burns came away from Phoenix Park in a really challenging second to Shortall, on 104 to 105 points. Then the 'double points' for Phoenix Park were scrapped and the scores amended to read: Shortall 98, Burns 94, Cullen 93; but with Shortall having to drop seven points and Cullen having to drop two, it was all going for Burns in that final frantic fling before the TV cameras at Mondello Park in early September.

And what an amazing race it turned out to be, as graphically reported by Marcus Pye in AUTOSPORT (September 22). Lorcan Johnson won in the rain, Burns was second and with Cullen duly shunted down to sixth, it was good enough to give Burns the championship; and Regan, Tuite, Smith headed Shortall in the over 2000cc race, although Regan was later penalised for a jump start.

The only other form of saloon racing in the Republic, apart from some occasional races for the Kirkistown Sunbeam/Escort contingent, was for modified Mini 850s. **Dick Smyth** not only won the Austin Rover Ireland Championship (from **Ian Averill** and **Stuart Cosgrave**), but also won the prestigious RAC Dunlop Sexton Trophy Championship, covering races, hillclimbs and sprints. Smyth had a great season in the Fortune Racing/Wynns Mini, prepared by Seamus O'Connor and capably supported by his team mate and Mondello director **Stuart Cosgrave**. Runners-up in the 'Sexton' were Paul Deveney and John Burns.

Paul Deveney — Formula VW Championship winner — will be moving into FF2000 next year.



Below left: Lorcan Johnson and Des Cullen (Opel Kadett SRs) lead Burns's Alfa. Right: Dick Smyth (right), winner of the Sexton Trophy and Mini 850 championship with Stuart Cosgrave.



Motor Sports Show side attractions

The BRSCC's second Motor Sports Show opens tomorrow (Friday) at the Cunard Exhibition Centre in Hammersmith, West London — see official Show Guide, free with this issue — and runs until Sunday, January 15.

In addition to around £2 million worth of competition cars, ranging from Formula 1 and Group C sports endurance machines to 'club' racers and karts, a

wide variety of associated equipment will be on offer. A number of side shows are bound to attract the attention of ardent racegoer/competitor and casual viewer alike. Many of these will also be used as a focal point for more specialised groups of enthusiasts.

Videovision are again running the fabulous cinema presentation which proved so popular last year while Mazda

are sponsoring the model motor racing feature. Marlboro Turbo racing simulators will give many visitors the chance to 'drive' and they can enter the new Marlboro Challenge competition.

Club nights for the BRSCC (Jan 12) and Club Lotus (Jan 14) will be held as will an SRDC meeting (Jan 10) and the MGCC Day of "special activities" on January 13.

Argo build FF1600 car

Manadient Engineering, sole concessionaires for Anglia Cars's super Argo JM14 FF2000 chassis — which John Kirkpatrick Racing ran to good effect in its debut year, last season — has embarked on an FF1600 derivative of the neat car.

The project was started by Manadient boss Kevin Barrett and his dedicated crew before Christmas and it is envisaged that the prototype chassis will run towards mid-season with a view to commercial development for 1985.

Naturally, the FF1600 programme must take a back seat, at this stage, to the Market Harborough equipe's 2-litre effort. New machines are currently under construction for the 'works' team of Anthony Reid and Ross Cheever.



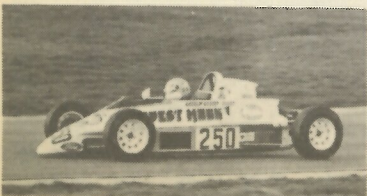
Headmaster Taylor — scholarship deals.

Taylor's big prizes

The combined resources of the BARC, Reynard Racing Cars, STP and Ian Taylor's Racing Drivers School at Thruxton have been pooled to form one of two special driving scholarships to be offered by Taylor during the 1984 season.

The BARC Scholarship, open exclusively to club members, will result in the best driver at each of three BARC-only opens days (July 27, July 25 and August 29) receiving a free three-day course at the school. The best of the trio will win a free race in a Reynard FF1600 car at Thruxton in November . . .

This could be YOU in the Reynard FF1600!



A typical battle among the spectacular, steel-shelled, modsaloons last season.

Modsaloon Metropolis

Tony Cleary's Hendon-based Metro Breakers Company has picked up the sponsorship of the BRSCC's successful modsaloon category which has a 15-round championship visiting eight circuits in 1984. Prize money for the Metro Breakers Modified Saloon championship has been increased to £50, £35 and £25 for the first three finishers in each class. Each overall victor will, in addition, receive a magnum of champagne. Trophies will be presented to the overall championship winner and class winners

at the end of the season. Supporting publicity and promotional backing has been forthcoming from *Performance Car*.

Modsaloon stalwart Barry Barnes, who has run Ford Capri, Escort and Fiesta models to the modsaloon regulations in previous seasons, is the series co-ordinator. Prospective competitors should register themselves and their cars by contacting Barry on Orpington 32234.

A driver's best 13 scores will count towards the final championship table. Regulations are unchanged from 1983.

Part of the furniture

Bristolian contract furnishers Pubs 'n' Clubs are to sponsor the 1984 RACMSA British Sprint Leaders championship as part of an increased involvement with motor sport. The business entered the sprint and hillclimb scene for the first time last year, sponsoring the superb yellow Martin BM18 sports car of Colin Cordy. The ex-Simon Dominey Martin will again sport Pubs 'n' Clubs logos in 1984. "Both sponsorships are an important part of our business development plans", commented Roger Riggs and

David Timmins, announcing the deals.

Pubs 'n' Clubs offer a comprehensive contract furnishing package, from design to job completion and supply, specialising in licensed trade and office work.

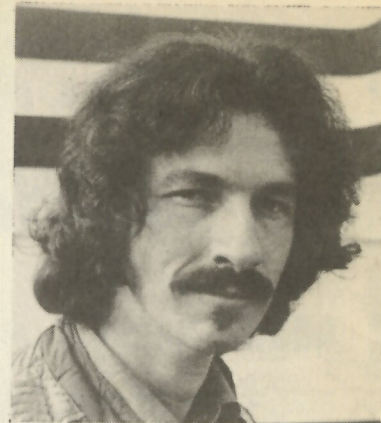
The sprint series starts at Curborough on April 29 and visits Lydden (May 12), Colerne (May 13), New Brighton (June 2), Curborough (June 17), Blackpool (June 24), Pembury (June 30), Colerne (August 27), Brighton (September 8) and Isle of Man (September 23) before the Weston finale on October 6.

Dutch Lola changes

Stef Visser Racing Preparation has been appointed official distributor for Lola Cars in the Benelux countries, following long-time agent Jim Vermeulen's decision to concentrate on his duties as a Director of Zandvoort circuit.

Visser, based at Heiloo, 15 miles from the Dutch track, has prepared the last five Netherlands Sports 2000 series-winning Lolas, so customers are assured of continued standards of service. Huub Vermeulen emerged champion in 1983.

This year, Stef will be running at least two of the latest T596 sports cars as well as taking increased interest in FF1600, through Lola's proven T640/2/4 family of chassis. Single-seaters may also be run from his modern workshops.



Delta boss Nick Crossley.

New Delta T842 soon

Following a couple of encouraging outings with their 'development' T832 FF2000 chassis at the end of last season, Delta Race Cars are currently building the first of Ken Taylor's substantially revised T842 versions which is destined for erstwhile F4 Delta man Peter Meyrick.

BWRDC honours

Barbara Cowell may have only just failed to win the National Mini Se7en Challenge last season but the plucky Pullox-hill bank clerk did clinch the BWRDC's top award, the Goodwin Trophy, for her troubles in the Club's 21st year!

The Ladytune Oselli Mini driver beat Davrian pilot Julie Thwaites into second place with Lorina Boughton (Davrian and Gemini FJ) and Antonia Loysen (Royale RP26) next up, ahead of Josie Tolhurst and Susan TP-Jamieson in FJunior Cooper and F4 Tucker-Ford respectively.

Sharon Nicholson, seventh in the big series, was the only claimant for the Jean Denton award with her prodsaloon Opel while Susan Buxton (Fiat X1/9) took the Helen Spence Trophy.

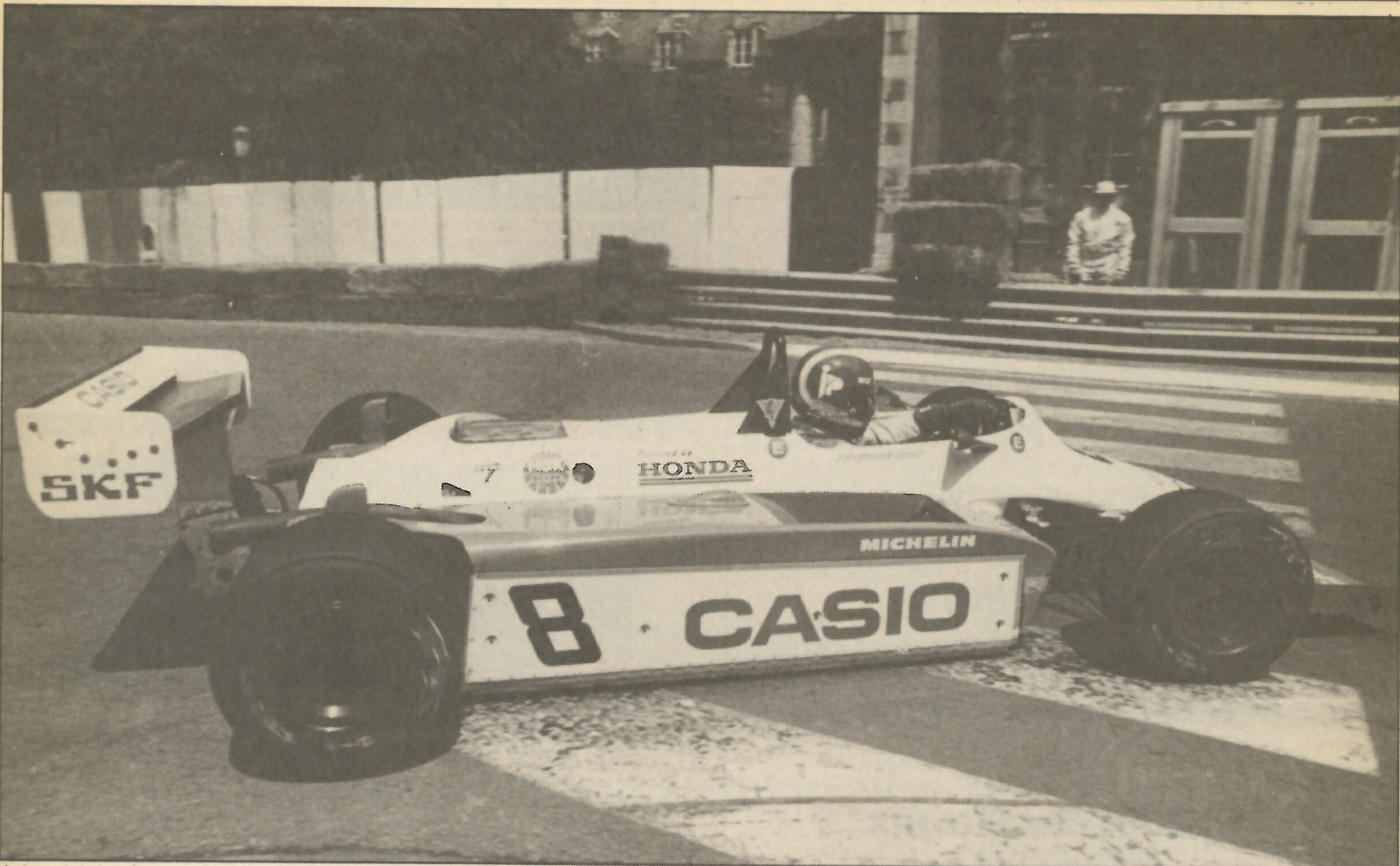
Meeting in the Saloon

The Special Saloon Register is holding an important meeting on Sunday, January 15, to discuss a number of interesting ideas for the new season's sport. All are welcome to air their views at the Spider's Web Motel, A41 Watford by-pass (close to the M1). Kick-off is 10am.



Tankerton at Lydden

Graham Buck (left), owner of Whistable Austin/Rover dealers Tankerton Garage, has taken over as backer of the Lydden FF1600 championship from Marchant & Cox, sponsors for the past eight years. With Buck is Dennis Humphries, the former World banger racing champion, whose Royale RP26 also competes at the Canterbury Circuit in Tankerton Garage colours.



A shrewd choice of tyres enabled Jonathan Palmer to finish well up at Pau, although he was yet to reveal the form that saw him victorious in each of the last five races.

Has Honda, wins races

The 1983 European Formula 2 championship season saw Dr Jonathan Palmer hone his effective, Ron Tauranac-designed, Honda-powered Ralt RH6 into an all-conquering combination, as IAN PHILLIPS recalls.

"Win Races" was the sole objective of Honda's continued involvement in Formula 2 in 1983. In supplying their V6 engines exclusively to Ron Tauranac's Ralt team, they left the Australian with freedom of choice on drivers and tyres. All the combination had to do was win. And, ultimately, win they did in, statistically, the most dominant manner since March-BMWs won every race in 1974. The Casio-sponsored Ralt-Hondas won the final six races on the trot, with Jonathan Palmer setting a new all-time F2 record of five consecutive Championship race wins to clinch the title at the penultimate round ahead of team-mate Mike Thackwell.

But prior to the start of the second half of the season it had looked a very different story. Palmer had scored the first of his six wins at round three and Thackwell had led three races, but March had won four out of five and had generally been the pace-setters, the Ralts showing reliability but no hint of superiority.

After the sixth race at Pau, Honda reminded Tauranac, in a typically naïve Japanese way, but in no uncertain terms, of the pre-season objective: win. After that they had no cause for complaint even though the start of the sequence was marred by controversy. At the previous three races the dual-springing system on the Ralts had been called in question and protests threatened. At Jarama the protest materialised in a messy fashion. On a point of law Ralt kept their points but didn't resort to the controversial system again to score the next five wins.

Before the start of Palmer's record-breaking winning sequence at Donington, Tauranac decreed that the Englishman was to win the European Championship, which was fair reward for his persistent enthusiasm for what, at times, had looked a lost cause. Not for one moment did Palmer lose sight of his objective and he more than made up for what he may lack in natural flair by his obsessive search for chassis performance and perfection. It was this ruthless determination to achieve his goal which put Palmer in a clear class of his own and made him the most worthy of Champions.

Palmer was superbly supported by his team's reliability record. Only in the opening race did he fail to finish, thereafter scoring points in every round in an

unparalleled run of points finishes. As well as producing what became a technically superior combination, Tauranac won the political battle hands down, playing for time and getting it on the spring issue and swinging the Michelin pendulum firmly his way by successfully planting a rumour that he was on the verge of switching brands mid-season, which was perhaps the master stroke.

The rest can only blame themselves for letting it happen, and only AGS emerged with any credit during the second part of the year with Philippe Streiff being the only driver consistently capable of giving the two Ralts any worthwhile challenge. March perhaps allowed themselves to become complacent after their early victories and then totally side-tracked by the skirt issue and they never recovered their technical composure or confidence. The Maurer threat never really materialised through indulgent management, while Minardi and Martini lacked consistency.

While taking nothing away from the Ralt-Honda 1-2 result, it has to be said that it was served up to them by their competitors and because of this it wasn't an exciting season in terms of racing. But nobody should write off the level of competitiveness in Formula 2 or the rôle it has to play in motor sport. It is a tough and demanding exercise for the driver and engineers. It still represents excellent pound-per-mile value — for a privateer equal to Euro F3 — and whereas Formula 3 throws up an exceptional driver once every five years ready and able to hold his head up in Grand Prix racing, Formula 2 can provide anything up to six at a time who would never let down anybody. This year was no exception.

One final point in the formula's defence. If 1983 was to be the year that the recession finally bit the formula, the fact that, on average, 22 cars started each race and each grid contained a minimum of 20 brand new £30,000+ chassis suggests that it has escaped extremely lightly and has an inbred health; if the numbers were considered to be low, consider too one other relevant factor — new safety regulations made virtually every existing chassis obsolete and therefore kept the privateer contingent small.

TEAMS

After the failure of their strong-on-paper, two-pronged Spirit and Ralt assault on the 1982 European Championship was whitewashed by the BMW teams, Honda retracted during the winter to a single team. Once again they decided to supply their V6 engine exclusively to Ron Tauranac, despite the dismal defence of their 1981 Championship.

Within days of the end of the 1982 season, Tauranac had re-signed Mike Thackwell to drive alongside Jonathan Palmer and briefly the team had tested the Michelin tyres whose consistency had been a major influence in the March-BMW steamroller. A new pull-rod front suspension was also tested and raced in Japan and three brand new honeycomb chassis were built up to join the late '82 spec car. Other than the incorporation of changes to meet the 1983 driver survival cell regulations, the only major change to the chassis was the lowering of the top of the monocoque forward of the front bulkhead by four inches. A two inch wider front track was the only dimensional change, all other modifications being related to the aerodynamics, resulting in a tauter and more purposeful looking car both on and off the track.

Honda revised their engine to give a quoted 340bhp at 10,700rpm but, more importantly, with the use of single ring pistons, made the power that was still abundant over 11,000rpm safe to use without the risk of valve damage. The most obvious change was moving the metering unit to the top of the engine in a move to eliminate the fuel boiling problems of the two previous years.

While the ample supply of engines from Tokyo were being readied for the season, the chassis lay idle at the Ralt factory and the team missed altogether the first Michelin tests at Ricard, which turned out to be a mistake. After just one day's running at Goodwood, during which Thackwell peppered a tub with stones in a high speed spin, two cars went to the second Michelin test but only Thackwell was able to run through the programme, Palmer's car throwing up every weakness in one shot. A few days

later at Thruxton wasn't much better, neither driver enjoying the ride across the now vicious bumps in the Hampshire circuit. A fortnight before the season began it wasn't looking too bright for the team, especially when Thackwell had the rear body fly off in the Silverstone chicane and the resultant slow spin kinked the front of the tub. But towards the end of that day Palmer and Tauranac sorted out a pairing of springs and sidepods which worked harmoniously and when they left the circuit confidence was in ascendancy.

New regulations over the winter had seen the introduction of a 14 tyre restriction per car per meeting and the threat of a laser beam measuring device to discourage flagrant abuse of the 4cms at all times ride-height rule. Ralt's lack of familiarity with Michelin created problems for them at Silverstone once they were into the restricted tyre period. Palmer was confidently quickest in the opening timed practice but he'd used his tyres too quickly and could only do full tank runs in the afternoon as he got elbowed down to fourth place. Thackwell effectively sat out that session as the first of a recurring series of fuel valve problems stranded him out on the circuit before he'd completed a lap. In the second session he almost casually qualified second on his first proper run with the car. He complained only of lack of straight line speed, a defect which was obvious for all to see during the televising of the race, which he led until Gabbiani's March steamed by on the straight on the first lap. The Maurers did the same but he was able to hold on to claim second place. For Palmer it seemed as though the ogre of '82 would never disappear as he stopped out on the track with a blocked fuel relief valve. It seems that Honda's preparation cleanliness left something to be desired as virtually every fresh engine which arrived from Japan in the early races gave the same trouble.

Overall though it was an encouraging start and when Thackwell comfortably took pole at Thruxton it looked like they were on the right track. Palmer again had problems and qualified seventh. Both cars had completed practice on a set of soft race tyres (after Silverstone, Taura-

nac had banned the use of qualifiers for the time being) and with a sudden temperature drop just before the race began both cars started on the soft option. Thackwell drove hard from the start and built up an 11secs lead before the tyres went off after 25 laps. Palmer went comparatively gently in the early laps but by the time he'd got up to third place his were gone too. With Thackwell being passed by Gabbiani's March, the Ralts finished second and third and already looked stronger than ever they had the year before, if not yet on the pace of the number one March.

At Thruxton, the Ralts were fitted with dual springs, the secondary upper spring being encapsulated in a can. There was nothing new about the set up, Ralt having meddled with a system the year before and Maurer having made it work with their locking device. The laser beam also appeared but was found to be an ineffective tool.

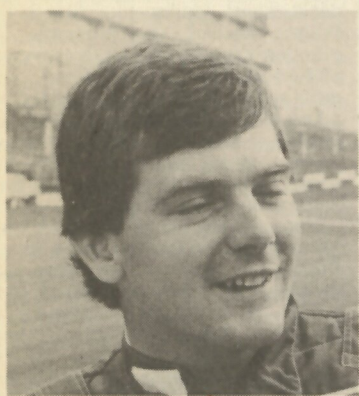
At Hockenheim, Palmer's luck changed and he set the pace throughout, although he was pipped for pole in the wet practice while running in the T-car. Thackwell had all the problems this time and missed the Friday unofficial session which, until an hour before the race, was the only dry practice. Palmer simply walked away from the field in the race to win his first F2 race and erase the agonies of the preceding 12 months. Thackwell's seat broke on the second lap but he held on to take third place.

The world had noticed that the Ralts were running close to the ground at Hockenheim; a fortnight later, at the Nürburgring, the cans covering the secondary springs were called into question as constituting a "device intended to lower the car" as specifically forbidden in the revised rule book. Tauranac satisfied the F2 Association's Barry Bland that there was nothing illegal about his car and nobody pressed the point as on this occasion the cars were badly off the pace. A switch to single springs for race day went some way to curing the problems and Palmer worked clear of a bunch to finish fourth with Thackwell, asleep at the start, seventh. At Vallelunga the duals and cans were back on and the cars were working well, Palmer qualifying

third and Thackwell eighth after testing alternative diffs, tyre sizes and spring packers and not bothering with qualifying. In the race they were the only two to challenge the Marches, finishing second and third.

The springing system was debated privately at Vallelunga by all the main teams (Minardi had arrived with a "device" fitted but never used it). Tauranac pleaded that any protest would see Honda pull out on the spot and that in any case, he hadn't enough single springs to go round for this meeting. However, it was agreed that an independent judge, Peter Jowitt, would inspect the system in England.

Vallelunga should have been a circuit where the power and punch of the Honda gave the Ralts an advantage. The car were working efficiently but it appeared now that their biggest handicap was the excess weight which they carried. An early season weigh-in had suggested that the Marches and Maurers were spot on the limit (ballasted) while the Ralts were some 20kgs over. Satisfied that the mechanicals were now right, Tauranac gave the green light to a ready awaiting weight-saving body kit in time for Pau. Thackwell would probably qualify pantehnic on Pau, and again without qualifiers put the car on the front row in the only dry session. Palmer had a rocke break in that session and it rained in the second, stranding him in 11th place. The springs and cans were fitted again but a cup of coffee conversation between Tauranac and fellow Aussie, the high revving Ralph Bellamy, saw the cars on single springs for the race. It was a crazy race, starting wet and drying out. The organisers, acknowledging their inadequate pits, said they would stop the race in such an eventuality. Thackwell disappeared into the lead, then dropped to second to await the red flag. It never came. He and leader Gabbiani both too it upon themselves to stop for slicks. The inadequacy of the pits caught out the Ralt team who were sent sprawling while another car set off with their air-lin around its rear wheels. Thackwell lost couple of laps rejoining on slicks but promptly spun as the rain restarted. The warranted a new wing and wets again



1 ▲

3 ▼



Top Ten

For the third successive year a number of leading Formula 2 team managers and engineers were asked to vote for their top 10 drivers based on the year's all round performance.

Those who participated were: Ralph Bellamy (March), Giacomo Caliri (Minardi), Hughes de Chaunac (Martini), Mike Earle (Onyx), James Gresham (JG Racing), Markus Hotz (Horag Racing), Henri Julien (AGS), Giancarlo Minardi (Minardi), Bertram Schafer (Schafer Racing), Ron Tauranac (Ralt).

Votes were cast on the basis of 10 points for first down to one point for 10th. (Figures in brackets denote Championship position)

4 ▼



1. Jonathan Palmer (1) 89
2. Philippe Streiff (4) 87
3. Mike Thackwell (2) 64
4. Alessandro Nannini (7) 59
5. Stefan Bellof (9) 58
6. Beppe Gabbiani (3) 43
7. Alain Ferté (12=) 28
8. Philippe Alliot (12=) 26
9. Christian Danner (5) 18
10. Michel Ferté (20=) 16

Others who scored were: 11, Jo Gartner, 13; 12, Quique Mansilla, Pierluigi Martini, 11; 14, Thierry Tassin, 9; 15, Roberto del Castello, 4; 16, Rolf Biland, 3; 16, Lamberto Leoni, Dave Scott, 2; 17, Kazuyoshi Hoshino, Fulvio Ballabio, 1.

Maximum points were scored by Palmer (x4), Streiff (x3), Gabbiani (x2) and Alain Ferté and Mike Thackwell one apiece.

5 ▼



2 ▲

6 ▼



SEASONAL SURVEY

Later he stopped for slicks again and in harmony with fellow three-time stopper Stefan Bellof started lapping seven seconds quicker than the rest of the field. Palmer, inevitably, took the right decision and stayed out on wets and with the first and third placed Maurers being disqualified he ended up with third in the results.

So, with six races to go, Gabbiani led the championship by 10 points from Palmer with Thackwell six points further back. With Palmer's form at Vallelunga and Thackwell's at Pau, there was little wrong with the Ralt performance. But Honda were not satisfied and in long telexes and letters to Tauranac they spelt it out — W-I-N. They also suggested that Tauranac should spend his trackside time with Palmer while their Mr Hagi and Alan Howell would look after Thackwell. It was really unjustified pressure but, coupled with Palmer redoubling his personal enthusiasm, it had the desired effect, although not before Honda had officially supported Tauranac in a temporary withdrawal from the competition in the height of an argument over spring systems at Jarama.

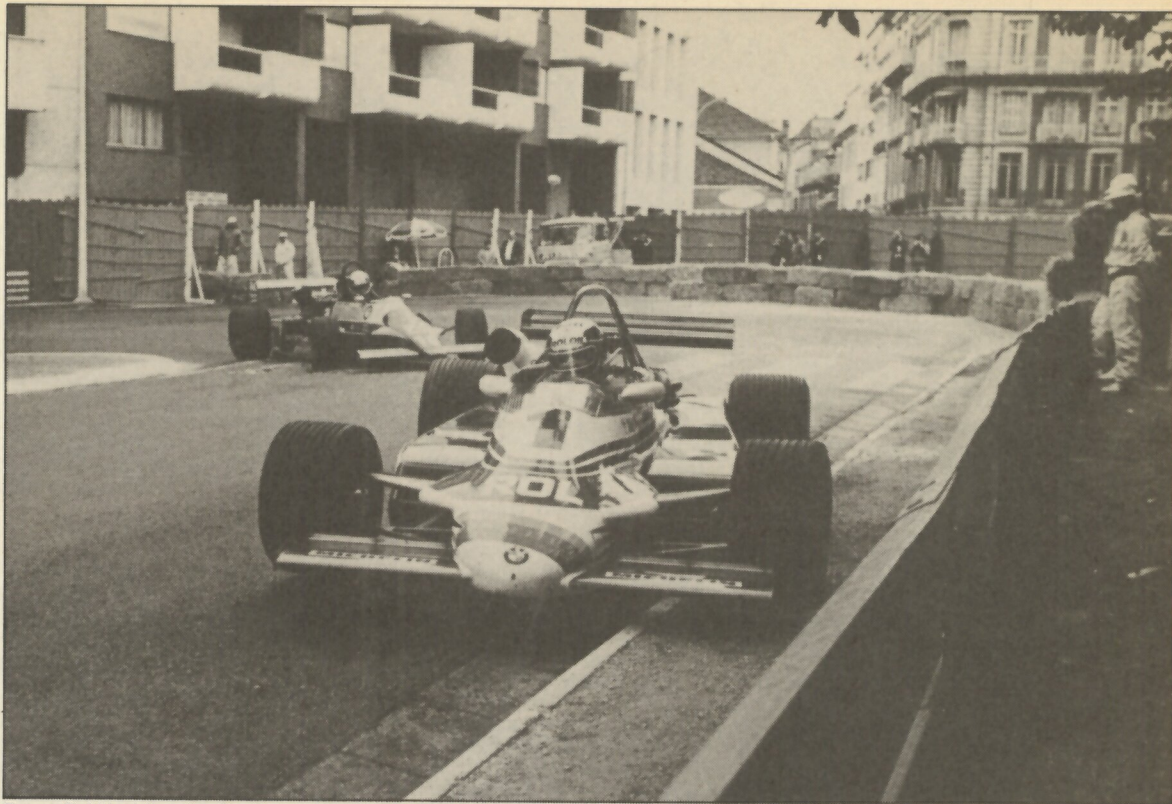
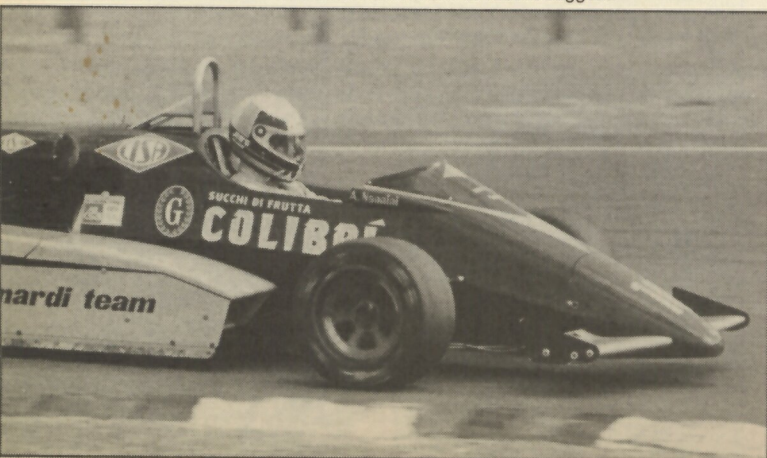
The two Ralts appeared at the new-for-F2 Spanish venue fitted again with double springs. On the long straights past the pits, the cars were clearly running on the ground. As early as the fourth lap of the first practice session, Palmer had done enough to take pole. In what looked like an act of sour grapes but in fact was the reality of a promise threatened two races before, the March team protested the springing system after the first practice. Palmer ran the second session on single springs and was second quickest. The arguments over the protest went on into the night. If it was to be upheld — and Tauranac naturally wanted a decision there and then before deciding what to use in the race — then the Ralt team were to have been withdrawn officially.

However, the Stewards decided that they were unable to interpret the rules without taking advice from FISA. That couldn't be done until the following week and after a further check by the scrutineers the Ralts and AGS, using similar systems, were allowed to race in their chosen trim. What nobody was really clear on at that stage, however, was whether that protest still stood.

The Ralts dominated the race, Palmer leading until 11 laps from the end when Thackwell, minus front nose and wing since lap four, emerged from his teammate's slipstream as the Honda coughed for fuel, to win as he pleased. The New Zealander's first win since March 1981 was soured by a repeat of the practice protest against the first five cars, all of which ran dual springs.

FISA issued their clarification eight days later; any type of spring system was allowed but at no time must cars cheat the 4cms ground clearance barrier. If they were observed to do so then they would be black-flagged.

Alessandro Nannini went better in the Minardi than the final results suggest.



Beppe Gabbiani, here leading Sandro Nannini's Minardi at Pau, started the season superbly for the works March-BMW team.

Three days after that, after the unofficial practice at round 8, Donington, the Jarama stewards delivered their verdict on the protests. What they did in fact was act on the practice protest using photographic evidence and decided to exclude both Ralts and AGS. Both teams appealed — basically on the premiss that had they been told after practice they were running illegal systems they would not have raced them. The appeal was upheld and the points returned to Messrs Thackwell, Palmer and Streiff.

While Tauranac was satisfied and felt his system had been vindicated, it appeared that he won his case more on a point of law over the protest procedure rather than technical correctness. There were grounds for March to appeal again (and their grounds were as much about procedure as the technicalities) but with the Ralts now winning on single springs they decided not to press ahead unless, in the finality of it, the Championship was at stake. It wasn't and they didn't.

At Donington, having been excluded from Jarama but with no real effective ruling, the Ralts ran exclusively on single springs from official practice and did so for the rest of the season. And as if to make their point, Palmer won all the remaining five races for them and the team took four out of five pole positions.

It was at Donington, where the team

scored its first ever 1-2 on the grid and in the race, that Tauranac made himself take the most unpleasant of all decisions, to decree which of his drivers would win the championship. He had heard the pair of them discussing plans to race each other over the final 20 laps of the event and thought a firm decision now would prevent either one doing anything silly. Counting the Jarama points as ultimately scored on the road, one point separated the two Ralt drivers, Palmer's total being six less than series leader Gabbiani. If the Jarama exclusion stood, Palmer was 16 points adrift and Thackwell 22. Tauranac's choice could only be Palmer, not so much for his points advantage, but for his tremendous unflagging input into the team over the past 18 months. Thackwell, to his credit, never told anyone or complained but on the other hand he never put himself in a position whereby any concession had to be made.

After all the hassle — or was it excitement? — of the first part of the season, the second half was a pure Ralt-Honda demonstration. The Donington 1-2 was repeated at Zolder and Mugello, while at Enna the best they could manage was 1-3, Thackwell fluffing his start from pole! The cars ran like trains and there were no mechanical failures of any sort. There was even some innovation with the appearance of narrow track push-rod rear suspension which was finally raced at Mugello.

After two years of producing indifferent cars, Tauranac really had it right this time. The car probably wasn't the best in any one area but as an overall package it was extremely efficient and reliable. The team itself was a far happier and more coherent one than ever before and each man involved played his part in the Championship domination; but special mention must go to the world's most patient men, Palmer's mechanics Colin Denyer and Ian Dyer.

The heady success of 1982, perhaps against all but their own expectations, left March with a winter headache. How to follow it? The survival cell regulations dictated change and the monocoque was entirely new, although very similar to its predecessor. Honeycomb bulkheads made the otherwise conventional aluminium tub stiffer. Naturally enough Ralph

Bellamy deviated little other than in detail to the concept of the 822, the most noticeable change being the shifting forward of the driver slightly and an even more pronounced rearward taper on the body as an extension of the previous year's aerodynamic thinking. On the whole, the car was a logical development on the previous model and its initial performances suggested it was as good.

The running of the works team was entrusted to Mike Earle's Onyx Race Engineering and moved away from Bicester to Bognor Regis as March Engineering needed the space to expand. The works team again relied on engines from Paul Rosche's BMW Motorsport department. Under the direction of Walter Waitzel, the venerable four cylinder, entering its 11 successive year of F2 with March, was refined a little more and unquestionably did all that was asked of it during the year. As well as producing adequate power, it was supremely reliable and none of the three works drivers ever failed to finish because of engine failure.

Naturally the works team stuck with Michelin for their rubber and at the two Ricard test sessions they were again showing class, Christian Danner, in the process of establishing a new F2 'lap record' at the circuit, actually going considerably quicker than his ex-Champion team-mate Corrado Fagioli, who was testing an F1 Osella. There was a worrying spate of driveshaft failures when a new specification German set-up, replacing the now obsolete British one, wasn't what it was cracked up to be, although the situation was quickly brought under control.

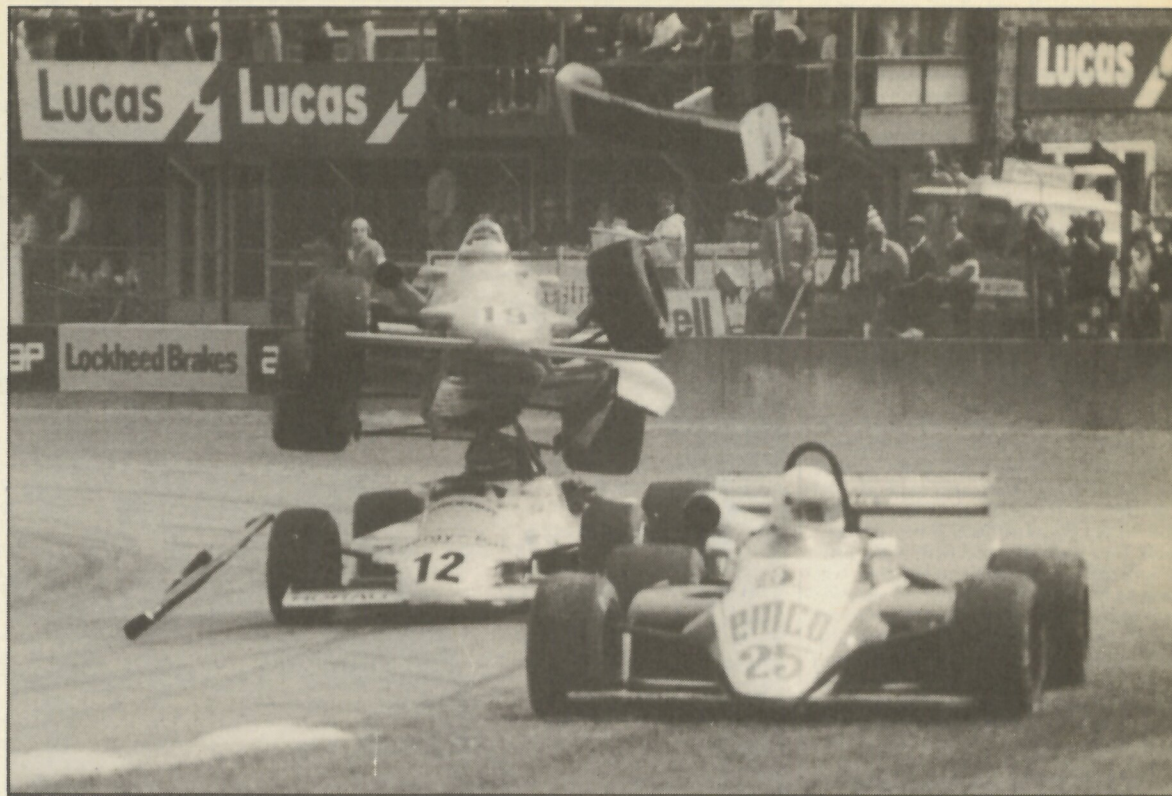
According to the drivers, the noticeable improvement in the car came in its high speed corner performance — a tribute to the Indy-inspired aerodynamics. At Silverstone, Thruxton, Nurburgring and Vallelunga the car won in the hands of Beppe Gabbiani. It won easily and Gabbiani was always able to get away with using a grade softer tyre than anyone else. It probably should have won at Pau too (and had it done so the championship would surely have been settled) but after changing on to slicks, Gabbiani spun and a driveshaft broke as he hurried to get back on the

track. Sitting in the truck, provided for the purpose but unused, was a special, stringer set-up.

At Jarama, the protest drama masked the fact that the cars were off the pace, highest qualifier Danner being 1sec off pole in fifth place. It might well have been the spring systems but all of a sudden the drivers couldn't make the tyres last; something they'd never previously had a problem with. That Danner was the quickest may have been related to the fact that his monocoque was new. At Donington it was a struggle too, understeer being the big complaint although it must be said that Gabbiani kept the Ralts well and truly in sight until an oil pipe fell off (and there was that embarrassing spate of exhaust pipe failures too). A stiffening job before Misano which involved a carbon fibre top section and front cross beam wasn't received by the drivers in the optimistic mood it should have been and they denied themselves the usual half second psychological benefit they should have had. Just by watching in the slower corners, where the understeer had been a problem, it seemed better, but the drivers never allowed themselves to believe it. A twisting test on one of the Gresham 'B' team cars had proved they were going soft and it was probably true that the stiffening process didn't go far enough back in the chassis to the root cause.

Further aerodynamic additions appeared at Zolder and it was a bit better still but by then the advantage had swung well and truly away to Ralt on the chassis and tyre front to the extent that it wasn't always possible for all three drivers to have the same tyres. In truth the car wasn't as good as it should have been but then neither was it as off-pace as the end of season races made it look. In amongst the protests, riding on the euphoria of the early season results, the objective was lost. Bellamy felt he was racing to a different set of rules and steadfastly refused to attempt to lower the car (even though a test at Zolder running at 3.5cms showed there was a second to be had). There wasn't enough room in the tub to accommodate a dual spring set up and so there was nothing to be done, even had the will been there. It was an interesting observation to make that the three teams who built brand new cars for the year, March, Martini and Minardi, didn't give themselves the latitude to run low which those that just modified did. Those new designs were finalised following the first FISA "clarification" of the skirt ruling in November and the threat of the laser beam. Everyone knew the laser beam couldn't really be an effective crime-buster but it would have been interesting to have seen how the season would have developed had it been retained as a deterrent. On the one occasion it was used, everyone was jumpy. Its readings were irregular and erratic, not to say inconclusive. It went away and never came back and you've never seen such relief in a paddock . . .

Another team with an appalling reliability record was Minardi. Giacomo Caliri produced perhaps the best chassis of the year, using a unique blend of honeycomb and carbon fibre in what was unashamedly a DFV-intended F1 concept. A giant bell housing filled the gap between the Mader BMW and the gearbox, and pull-rod suspension was fitted all round. The aerodynamic treatment was a little ahead of its time in being in the flat bottom F1 trend. The car was barely tested before the season began and as well as looking gripless had an amazing appetite for tyres. The old faithful Fly 281B model was brought out for the Nurburgring and at last Sandro Nannini was able to show the star quality everyone suspected was there, chasing Gabbiani to the flag. Thereafter there was much swopping around of old and new chassis, the newer car getting a



Drama at Donington: Aldo Bertuzzi's March climbs over Beat Jans's car towards Pierre Chauvet's stricken Spirit.

revised rear end treatment but in fact right up until they stopped comparing them it was never more than marginally quicker, and certainly less reliable. Just four points finishes in the year was a poor reflection on the team, especially as two of those were second places.

Automobiles Martini made a welcome return to F2 for the first time since they won the Championship in 1977. Tico Martini produced a very simple straight-forward car for Hughes de Chaunac's Orea team to run with Marlboro support. It was very much along March lines but its initial handling was way off the mark and the enthusiastic style of driver Philippe Alliot was not complimentary. The result was a number of accidents caused either by exuberance or breakages or a combination of both. Pull-rod front suspension appeared on the spare car at Nurburgring but both were destroyed during practice. The team missed Vallelunga to concentrate on a test programme which paid untold dividends. From then on they were genuine top six runners and deserved a rostrum finish, but it never came. The best chance was at Misano where Alliot was leading quite comfortably until the rear suspension broke. Towards the end of the year the team began to field two cars in an effort to accelerate development but even though they didn't have the results to prove it, their diligence made them a competitive force earlier than many expected. For the first year, it was really one of considerable promise for the future.

Other than Ralt and March, the only other chassis to win a race during 1983 was Spirit. The works team moved on in company with Honda to F1 but two of the chassis which Thierry Boutsen and Stefan Johansson had used to such good effect were sold to Austrian Jo Gartner's Vienna based Emco Racing team. The cars came at an advantageous price but had to be converted to take Heidegger BMW rather than Honda engines. This was made easy by the back-door acquisition of March oil tank/adaptor plates, while Gartner also managed to keep Bridgestone tyres for his car for which it had been designed. But the car was never designed as anything but a works-run

chassis and proved to be difficult to maintain without that sort of a back-up and expertise.

Henri Julien's little AGS team nearly didn't make it to F2 in 1983. During the winter various company takeovers saw them lose their traditional Motul and GPA helmets backing. Undaunted the team carried on and produced the JH19B model. Using the familiar long tub of the previous year, pull rod front suspension was grafted on plus a unique rear end arrangement which had the dampers and twin springs mounted horizontally, north to south, atop the gearbox. A new one-piece underbody, March-style, gave a good clean venturi tunnel. BMW France arranged Rosche-spec engines which were maintained by Heine Mader, while the rubber was, of course courtesy of Michelin.

Despite total lack of sponsorship, the team retained faith in Philippe Streiff who'd shown impressively towards the end of the previous year. Six races were planned and if no money was forthcoming that was to be it. Matters were made worse by a fire at Ricard in testing (where Streiff all-but equalled Danner's 'record') and the terrible financial constraints and lack of spares dampened Streiff's enthusiasm early on. However, a saviour appeared after the Nurburgring in the shape of Italian privateer Fulvio Ballabio, who threw the team a £100,000 life line to drive the second unmodified car. It took a further three races for Streiff to get on the rostrum but for the last half of the season AGS were carrying the BMW challenge. Making fullest use of the limited resources, they produced new bodywork and a narrow track and not only was every step well thought out and well executed, each one was going forward. The team's two wet wins in 1980 may well still be their own favourite memories but 1983 was the year AGS became a very serious contender at any circuit in any conditions. The dour Mr Julien turns a deaf ear to any political rumblings in the paddock and almost seemed not to notice the Jarama protest. As he was quite entitled to do, he kept his dual springs throughout and never once fell foul of the law. Long may he and his team be part of the scene.

Perhaps the most disappointing manufacturer of all was Maurer. Once again Paul Owens' little factory in outer Manchester produced a super, expensive-looking car, this time to a Paul Brown design but close in outline to the Gustav Brunner original. There was more use of carbon fibre and pull-rod suspension. Team owner Willy Maurer chose to split the works team from the production facility and ran it out of Germany. Max Heidegger supplied the engines initially and another mercurial Silverstone performance by Stefan Bellof in the opening round (halted by a broken throttle cable on the last lap) suggested they were on course for a good year. But sadly it all went wrong. At Hockenheim, Heidegger called in the police to get his engines back, alleging non-payment. Maurer said the engines were no good. To all intents and purposes they forfeited that race and turned up at Nurburgring with Heine Mader built, ex-Motorsport units which had lain idle for the best part of the year. Beaten by the Marches in practice, Bellof drove one of the most inspired first laps probably the 'Ring has ever seen only to have the throttle cable break again at the end of it.

A superb drive at Pau ended with disqualification for running underweight, which was unforgivable. Bellof was the only man capable of matching the Ralts at Jarama and finished second. At Donington the cars were all off the pace; at Misano they didn't start after arguments with officials over ride-heights; at Enna Bellof made a rare mistake and crashed while leading; at Zolder they couldn't make the tyres last. Four points finishes were all that the works team could show in the year which was frankly disgraceful. On paper they perhaps presented the strongest threat of all to the Ralt team — certainly at the start of the year — but really have only themselves to blame for not making better use of it.

Too often, components failed that would normally have been changed as a matter of routine by a well funded factory. Wheel bearings were a particular weakness, but placing the ancillaries for the BMW engine was also an initial headache. But given the fact that

SEASONAL SURVEY

Gartner himself was chief engineer as well as driver, the team did a good job. They carried out an excellent weight-saving programme which almost brought them to the point of disqualification at Misano and the win at Pau — courtesy of Bridgestone's long lasting wets, was what Gartner himself deserved after years of persistence.

That everlasting enthusiast Arturo Merzario commissioned a new chassis bearing his name from ex-Autodelta engineer Ernesto Degan. Two of these M28s arrived for the first meeting being essentially very basic honeycomb construction with strains of carbon fibre thrown in. It, too, had fashionable pull-rod front suspension but the overall effect was not aesthetic or, in practice, quick. There were some alarming failures too and after the roll-over hoop came away in the jaws of a removal crane at Nurburgring, Merzario said his last goodbye to his original driver pairing. The brave Richard Dallest was brought back into the team and with not a little help from his old mates at AGS he was able to bring some constructive ideas to the team. Merzario went like never before on occasions, although unreliability, as ever, was the stumbling block and by the cruellest of fates it was a broken plug which robbed them of their first ever points at Misano when everything else went well.

Probably for the last time, a Toleman chassis ran in the formula, in San Remo colours, until mid-season and actually scored a point at Vallelunga whereupon Alberto Colombo switched to Marches. At the same time he swapped his remaining old Hart engines for unreliable Heidegger BMWs and later swapped his Avon tyres for Dunlops.

James Gresham Racing was a new name on the scene, the long-time March employee being entrusted with the son-of-the-works 'B' team, based in premises close to Bicester and manned by the championship mechanics of the year before. Using Mader engines and Bridgestone tyres, they began the season well and took pole at Hockenheim but both drivers had money problems in mid-season which caused missed races and changes, with the normal resultant drop in morale from which they never truly recovered.

Markus Hotz's Horag Racing ran their traditional March using Mader power and Avon tyres but again suffered from switches of driver and a persistent shortage of funds but to their credit they scored points on three occasions with three different drivers. Glen Waters' Intersport team made the move from F3 to F2 at the behest of the Scott family and were equipped with Heideggers and Bridgestones on March chassis. It was a bold move which faltered through unreliable hardware and poor direction above the capable Waters.

Maurer chassis appeared in two other teams outside the works although neither did a full season. Paul Owens started the year with two cars using Heidegger engines and Bridgestone tyres, but by his last race at Donington was down to one car on Michelins. It was a combination which if enthusiasm and hard work were the sole criteria for success should have worked, but lack of finance and inconsistent hardware ruled the day and sadly they were unable to finish their programme.

Bertram Schafer modified his two MM82 chassis to '83 safety spec and was the works Avon runner but when number one driver Frank Jelinski ran out of money after four races it was an uphill battle to keep the show on the road with an inexperienced and under-financed number two only.



The winning combination: Jonathan Palmer with Ralt chief Ron Tauranac.

Engines

As already stated, the Honda engine was super-reliable all year, once the dirt had been cleared out of the fuel systems. They were significantly more powerful than the BMWs but they were consider-

ably heavier too and a little more thirsty, which helped to level it all out. It was originally planned that John Judd should take over the rebuilds from mid-season but with the Championship in their sights Honda continued to take all responsibility and not once did they let anybody down.

Driver	Races led	Wins	laps led (total 605)	per cent	miles led (1559.739)	per cent
Jonathan Palmer	7	6	297	49.09	791.248	50.82
Beppe Gabbiani	5	4	146	24.13	436.898	28.01
Mike Thackwell	4	1	76	12.56	160.457	10.28
Jo Gartner	1	1	47	7.76	80.605	5.16
Phillippe Stroiff	1	—	11	1.81	23.837	1.52
Christian Danner	1	—	10	1.65	19.98	1.28
Stefan Bellof	1	—	9	1.48	27.684	1.77
Phillippe Alliot	1	—	9	1.48	19.03	1.22
Fastest laps:						
Thackwell	4	(Thruxton, Pau, Jarama, * Donington)				
Palmer	3	(Hockenheim, * Zolder, * Mugello)				
Alliot	1	(Misano)				
Bellof	1	(Silverstone)				
Danner	1	(Nurburgring*)				
Gabbiani	1	(Vallelunga*)				
Nannini	1	(Enna)				
*lap record						
Pole positions:						
Palmer	4	(Jarama, Donington, Zolder, Mugello)				
Thackwell	2	(Thruxton, Enna)				
Alliot	1	(Misano)				
Bellof	1	(Pau)				
Danner	1	(Nurburgring)				
Gabbiani	1	(Vallelunga)				
Leoni	1	(Hockenheim)				
Scott	1	(Silverstone)				
Tyre manufactures						
	wins	poles	fastest laps			
Michelin	11	10	12			
Bridgestone	1	2	—			
Avon	—	—	—			
Dunlop	—	—	—			
Average no of qualifiers:	22					
Average no of starters:	21					
Average no of finishers:	12					

Systems were modified during the year until it looked like a remodelled six cylinder DFV. But let it not be presumed that it is as unbeatable as it looked in the second half of the year. If the opposition had got their chassis and tyre combinations better organised, the difference would not have been nearly so great.

Both BMW Motorsport and Heine Mader found more power from the BMW in 1983 and more importantly they both found impressive reliability. But in their quest for this performance, they did require the mileage to be kept low. The alternative for the real privateer was Mader's long distance engine which was entirely adequate for those prepared to accept they'd never be at the front anyway. Where everyone presumed that Honda might pull out of F2 if they won the series, it was, in fact, BMW who announced the withdrawal of official works support even before their cause was lost. Had it been the other way around, and BMW left to supply the formula exclusively, then the long distance Mader engine with about 300bhp supplied to everyone might well have been a strong life-support to the formula. As it is they have to continue to chase extra bhp for a 12th year which while obviously not impossible may prove expensive.

Heidegger continued to produce a 'screamer' and a long distance version of the BMW too. However the Hockenheim bust-up with Maurer was almost the end for the Liechtenstein concern. Jo Gartner stayed faithful but suffered terrible reliability problems while Intersport cracked under the strain of the unreliability. San Remo used the less powerful version which often misfired and after the promise of the year before it was a disastrous year for Heidegger.

Sadly, the Hart four cylinder never really featured. San Remo used old units rebuilt by Heidegger initially while the only appearance of a factory unit was at Donington in the back of an 822 March where Hart reckoned he'd misjudged what was needed by 5bhp. The potential is still there if only somebody would come up with the right package.

Tyres

There was a lot of mumbling and grumbling early in the season when the 14 tyres per meeting restriction came into being. There were a few anomalies in the wording of the rules which were quickly sorted out but really the whole thing ran very well. Because of unpredictable weather, there is a strong lobby to make race tyres free of restriction on the grounds of safety, which seems logical enough.

For the second year running, Michelin took the honours. Their choices were not always as conservative as they had been the previous year but in every condition bar the wet they were the superior option. They only came into F2 at the behest of BMW in 1982 and one got the impression occasionally that the formula was a low priority, but they are to continue in 1984 with tyres available to everyone at a very reasonable cost of \$500 per set.

For Bridgestone, it was very much a year of consolidation. Since their immediate success of 1981 and high pressure season of '82, they had barely had time to establish a proper European base which is what they set about to do in 1983 while playing a lower key racing rôle. A proper factory unit was opened in Basingstoke and Peter Grzylinski's Supagrip Race Tyres organisation contracted to put the service side on a full time professional basis with the use of a 40ft artic instead of the old rented trucks. The show looked good and if the technical groundwork covered is proper-

ly utilised Bridgestone will be a force to be reckoned with in 1984 backing a major works team again.

The Japanese wet tyre was extremely good and enabled Lamberto Leoni to take pole at Hockenheim and Jo Gartner to win at Pau. There was perhaps still the fault of the race tyre choice being too large which was more especially a problem working with teams with inexperienced drivers, as they were. It was interesting that when the experienced Japanese driver Kazuyoshi Hoshino made a one-off appearance at Donington he knew exactly what he wanted and produced an excellent result while the others floundered.

The Italians found a back door supply of Japanese Dunlops which seemed to be a good bet for the privateer and with Dallest aboard the Merzario proved really quite effective. Some of the successful radials introduced in Japan mid-season found their way into Hotz's hands for Zolder but with precious little testing time their true value wasn't seen.

Life was tough for Avon who could never be certain which privateers would turn up and want tyres. Again, without a major team to do any worthwhile testing and development, they didn't stand a chance of making a breakthrough even though the tyres were a good long-lasting quality which for the privateer is essential.

Drivers

The statistics show that **Jonathan Palmer** completed the second most successful F2



Derek Daly had one abortive outing in the unique March-Hart at Donington.

season of all time by one driver. The only man to have bettered his record of six wins in a 12-race season is Bruno Giacomelli with eight in 1978. But Giacomelli had the advantage in driving the March 782, perhaps one of racing's classic cars. Despite its record the Ralt-Honda would never be in that category but Palmer must take most of the credit for cajoling the team into getting it to a state of near perfection. Like Ron Tauranac, Palmer has a ruthless obsession with getting the car right, and the partnership, often argumentative, was extremely strong. By the time Palmer hit on his winning streak he had such an understanding of the car that he was able to put in a pole winning time within 10 minutes of the start of a session

and would spend the rest of practice, often including the warm-up, experimenting with different combinations, not so much expecting increased performance but confirming that the original set-up was right and preparing himself for potential changes of conditions during a race.

To persevere with the total, uninterrupted dedication which Palmer did, after the disappointments of the previous year and the opening race — even the opening half dozen races save his Hockenheim win — required extraordinary personal discipline. He proved conclusively during the year that no matter what gifts you are born with there will never, ever be a substitute for solid graft. The whole team were caught up in

Palmer's obsession but above all he made it happen for himself.

Jonathan's great strength is driving a race from the front and he succeeded in putting himself in such a position almost every time to such an extent that most of his wins were boring as a result of him first out-thinking the opposition and then being able to out-drive them. It is difficult to pick out a highlight in his year which was totally consistent in its quality but for me it was the shattering pole position time at Donington where he comfortably bettered his own flat-bottomed F1 record test time in the Williams just a week or two before.

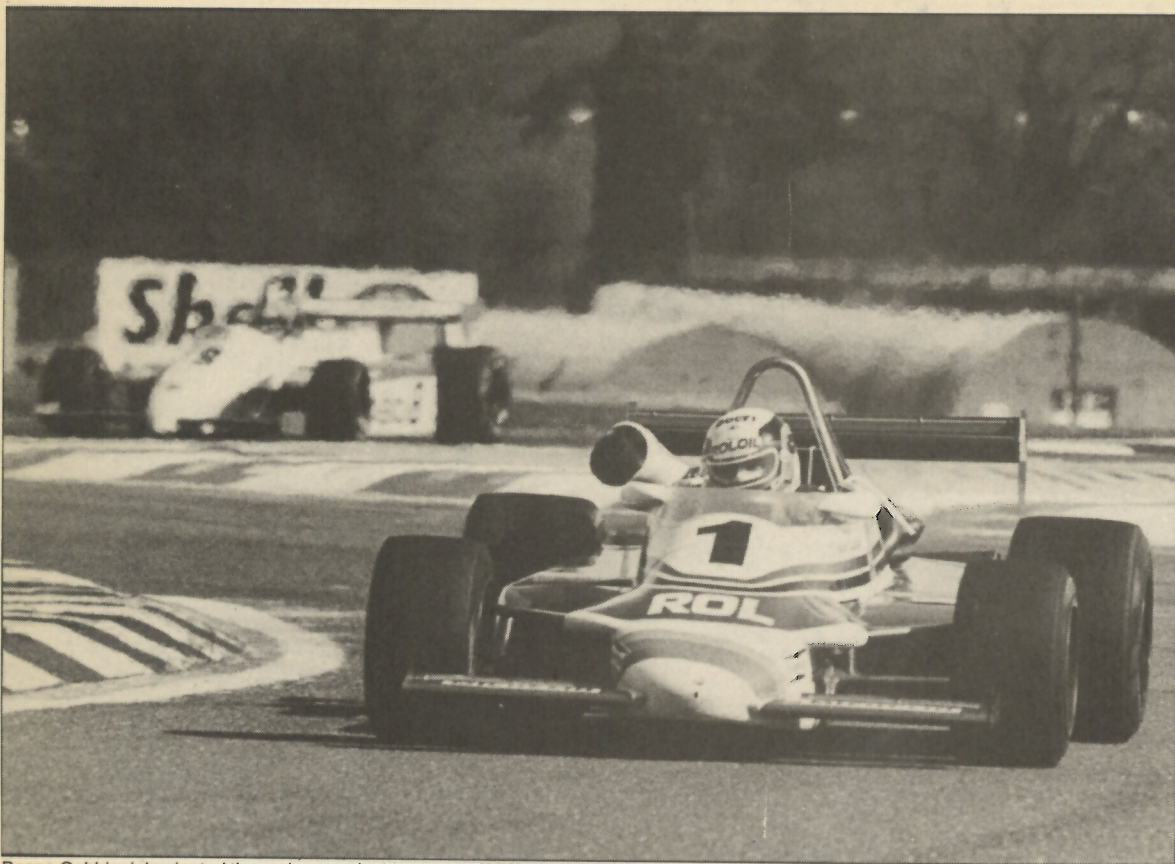
His whole approach to every aspect of his job was calmer and more calculated than it had been the year before and the two years he spent in Formula 2 with lessons well-learned will see him enhance F2's reputation as a training ground. And with that determination he might well just be the F2 Champion who really makes the grade.

For **Mike Thackwell**, it was a difficult year. The handful of races he'd done with Hotz the year before were enough to convince Tauranac that he'd got all his marbles back after his horrific 1981 Thruxton crash and he got his drive before the previous season was over. However, by the time testing began, late, he was slightly behind in the confidence stakes, not having driven for over six months, and it seemed almost the harder he tried to play himself in the more trouble he would get into. He reckoned it

1983 FIA EUROPEAN FORMULA 2 CHAMPIONSHIP

Driver	Silverstone (GB)		Thruxton (GB)		Hockenheim (D)		Nurburgring (D)		Vallelunga (I)		Pau (F)		Jarama (E)		Donington (GB)		Misano (I)		Enna (I)		Zolder (B)		Mugello (I)		Total points	
	Q	S	Q	S	Q	S	Q	S	Q	S	Q	S	Q	S	Q	S	Q	S	Q	S	Q	S	Q	S		
1 Jonathan Palmer (GB) .....Ralt Honda RH6/83H ¹	4	R	7	3	2	1	9	4	3	2	3	4	1	3	1	1	2	1	2	1	1	1	1	1	68 (75)	
2 Mike Thackwell (NZ) .....Ralt-Honda RH6/83H	2	2	1	2	7	3	10	7	8	3	2	8	3	1	2	2	10	R	1	3	2	2	3	2	51	
3 Beppe Gabbiani (I) .....March-BMW/Rosche 832	3	1	8	1	11	R	2	1	1	1	4	R	9	7	3	R	11	R	13	4	12	R	12	9	39	
4 Philippe Streiff (F) .....AGS-BMW/Mader JH19B	9	5	13	8	12	R	5	R	6	5	5	10	6	4	5	3	4	R	6	2	4	3	2	3	25	
5 Christian Danner (D) .....March-BMW/Rosche 832	12	3	12	13	6	2	1	3	2	10	9	5	5	9	10	5	14	R	11	7	5	4	8	10	21	
6 Jo Gartner (A) .....Spirit-BMW/Heidegger 201	16	R	14	R	4	4	14	NC	7	R	6	1	8	17	4	R	5	R	5	5	13	R	7	7	14	
7 Alessandro Nannini (I) .....Minardi-BMW/Mader 283	13	R	15	9	13	5	—	—	11	7	—	—	7	R	6	R	6	R	4	11	10	R	4	4	11	
Thierry Tassin (B) .....Minardi-BMW/Mader FLY281B	—	—	—	—	—	—	4	2	—	—	7	R	—	—	—	—	—	—	—	—	—	—	—	—		
9 Stefan Belloc (D) .....March-BMW/Rosche 832	5	R	3	4	9	6	11	6	5	4	8	4	—	—	—	—	—	—	—	—	—	—	—	—	11	
10 Kenneth Acheson (GB) .....Maurer-BMW/Mader MM83	9	4	4	R	20	R	3	R	—	—	1	DQ	2	2	18	7	DQ	—	3	R	3	7	—	—	9	
Pierluigi Martini (I) .....Maurer-BMW/Mader MM83	10	R	10	10	8	10	12	9	9	11	13	2	10	R	14	8	—	—	—	—	—	—	—	—	6	
12 Roberto del Castello (I) .....Minardi-BMW/Mader 283	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12	2	—	—	—	—	—	—	6	
Guido Dacco (I) .....March-BMW/Mader 832 ³	20	R	16	R	17	R	—	—	12	R	NQ	—	14	11	15	11	9	3	14	13	14	10	14	NS	4	
Alain Ferté (F) .....Merzario-BMW/Mader M28	22	R	21	R	16	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	
Phillippe Alliot (F) .....Toleman-BMW/Heidegger T850	—	—	—	—	—	—	19	R	16	6	20	R	—	—	—	—	—	—	—	—	—	—	—	—		
16 Kazuyoshi Hoshino (J) .....March-BMW/Heidegger 832	—	—	—	—	—	—	—	—	—	—	—	—	18	R	20	R	17	4	15	R	20	R	11	R	—	
Dave Scott (GB) .....Maurer-BMW/Mader MM83 ⁴	6	R	2	NC	22	12	7	5	4	14	3	DQ	11	5	16	R	—	—	—	—	—	—	—	—	4	
Fulvio Ballabio (I) .....Martini-BMW/Mader 001	11	R	11	5	3	8	NQ	—	—	—	10	R	4	R	7	R	1	R	7	12	6	5	5	R	4	
19 Enrique Mansilla (RA) .....March-BMW/Mader 832	1	R	9	R	14	R	15	11	10	R	NQ	—	22	16	12	6	15	R	16	R	7	R	6	5	3	
Oscar Larrauri (RA) .....Merzario-BMW/Mader M28	24	R	23	R	24	14	21	R	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	
Emilio de Villota (E) .....AGS-BMW/Mader JH19	—	—	—	—	—	—	—	—	19	R	16	7	19	12	22	NS	19	5	18	9	16	R	10	6		
20 Lamberto Leoni (I) .....March-BMW/Mader 832	7	R	6	7	—	—	17	NS	14	R	—	—	13	6	9	10	13	R	17	R	8	6	13	R	2	
Frank Jelinski (D) .....Maurer-BMW/Mader MM82	17	6	5	11	1	7	8	R	15	9	15	R	—	—	—	—	—	—	—	—	—	—	—	—	1	
Rolf Biland (CH) .....Maurer-BMW/Mader MM83	18	R	18	6	—	—	6	8	—	—	—	—	—	—	—	—	—	—	—	—	—	17	R	—	1	
Michel Ferté (F) .....March-BMW/Mader 832	—	—	—	—	15	9	16	12	—	—	18	6	20	10	—	—	—	—	—	—	—	21	11	—	1	
Fredy Lienhard (CH) .....Martini-BMW/Mader 001	—	—	—	—	—	—	—	—	—	NQ	—	—	—	—	—	—	13	12	7	R	9	6	—	—	1	
Pierre Petit (F) .....March-BMW/Mader 832	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20	6	19	10	—	—	—	—	1	
Pierre Chauvet (A) .....Maurer-BMW/Mader MM83 ⁶	19	8	19	12	5	R	13	10	13	12	17	R	12	R	11	R	18	W	8	R	11	R	—	—	—	
Oscar Larrauri (RA) .....Spirit-BMW/Heidegger 201	23	R	20	R	19	R	—	—	17	R	14	R	15	R	17	13	16	R	—	—	—	18	12	15	R	—
Emilio de Villota (E) .....Minardi-BMW/Mader 283	14	7	17	R	10	R	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9	R	—	
Tomas Kaiser (S) .....March-BMW/Mader 832	15	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Bert Stadler (A) .....Minardi-BMW/Mader 283	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Aldo Bertuzzi (I) .....March-BMW/Mader 832	21	R	22	R	18	R	20	R	20	8	19	9	—	—	—	—	21	R	—	—	—	19	R	—	—	
Peter Sturtz (D) .....Maurer-BMW/Mader MM82	—	—	—	—	21	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Richard Dallest (F) .....Toleman-Hart/Heidegger TG280	—	—	—	—	23	13	22	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Patrick Neve (B) .....March-BMW/Heidegger 832	—	—	—	—	—	—	—	—	21	13	NQ	—	21	15	24	R	21	R	20	NS	22	13	—	—	—	
Derek Daly (IRL) .....March-BMW/802	—	—	—	—	25	R	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Beat Jans (CH) .....Merzario-BMW/Mader M28	—	—	—	—	—	—	18	R	18	R	12	R	16	8	—	—	8	7	10	R	—	—	—	16	8	
Enzo Coloni (I) .....March-BMW/Rosche 832	—	—	—	—	—	—	—	—	—	—	—	—	17	14	—	—	—	—	—	—	—	—	—	—	—	
Paulo Barilla (I) .....March-BMW/Mader 832	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Didier Theys (B) .....Minardi-BMW/Mader 283	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Didier Theys (B) .....Minardi-BMW/Mader 283	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Didier Theys (B) .....Martini-BMW/Mader 001	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9	9	—	—	

Table key
Q: No of qualifiers; S: No of starters; R: Retired; NC: running, not classified; DQ: Disqualified; NS: Non-starter; W: Withdrawn.
¹ Best nine scores to count; ² Used Heidegger-BMW at Silverstone, Thruxton. DQ at Pau for underweight having finished third; DQ at Misano having qualified third for "insulting behaviour"; ³ Used Heidegger-BMW for first seven races; ⁴ Used Heidegger-BMW at Silverstone, Thruxton. DQ for underweight at Pau having finished first on the road; ⁵ Used Heidegger engines for first seven races; ⁶ Used Heidegger-BMW at Silverstone, Thruxton.



Beppe Gabbiani dominated the early races for March and BMW.

would take four races to get back in the swing of things and really have a go. In two of those races he out-qualified and beat Palmer but it wasn't until the warm-up at Vallelunga that he really came alive. He appeared to take the car by the scruff of the neck and make it perform as he had done with the beast in early 1981. He was way back on the grid and had no advantage but literally forced his way to third behind Gabbiani and Palmer by the end. He should have won comfortably at Pau but the ill-timed pit-stop led to a series of disasters. At Jarama he did win and set a lap record without the nose and front wings. Before the start of the Donington race he agreed to Palmer winning the championship, and after leading for 18 laps he surrendered a three second lead in one lap, ostensibly through tyre problems, and thereafter never put in a serious challenge until the last race when he chased Palmer to the flag despite being dragged up against 'flu to claim his fifth second place of the year. In a couple of the intervening races he was detailed to harass Streiff to get his tyres to go off and generally did what he was told, which is perhaps where his weakness lies.

Undoubtedly he felt over-powered by Palmer's input into the team and despite having been the quicker of the two in the opening races he went along with Palmer's thoughts rather than developing or pushing his own. He was really too content to rely on his own natural flair, which remains quite outstanding, to get him through. Of course he is still only 22 years old and has time on his side. His relationship with the Ralt team is almost too comfortable perhaps, and he'd do well to develop a constructive argumentative streak over the winter.

Having agreed not to contest the Championship with Palmer, he naturally lost some of the definite emerging ambition which was showing at Jarama. He is being given an unimpeded chance with the team in 1984 and hopefully the full extent of that natural talent will emerge.

Without wishing to detract from Palmer's Championship title, it has to be said that it really should have belonged to

Beppe Gabbiani. Up to Jarama he was the man to beat and with four wins from the first five races he had the title in his pocket. The combination of events that led to his retirement from the lead of a fifth race at Pau would have been foregiveable in the context of a full season had the remainder been faultless. Never could Gabbiani have been accused of not making an effort in the remaining races and he didn't make mistakes either—his equipment didn't serve him well. He must take some blame for this on his own casual approach to testing and even practice—"give me a car that's right and I will win the race," appeared to be his motto.

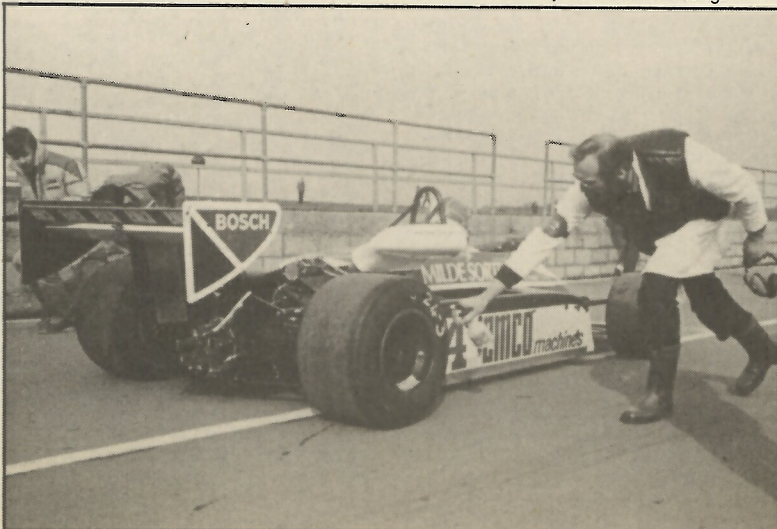
At the age of 26, Beppe was at the right age to make his career take off. He'd used up the difficult years gaining experience and a reputation for being quick if erratic, but without ever becoming a premature has-been. It was the personal judgement of Robin Herd alone that earned him the number one Roloil-sponsored Onyx March drive and he responded with an approach and style the situation warranted. Much of the credit for the mature approach must go to his

'engineer' Peter Gethin whose real strength and value was his personal management of a potential problem child. But at the end of the day although Beppe raced his heart out to the flag he'd lost confidence in the technical approach which saw him starting races with an impossible task from way down the grid.

His wins were all good ones—Silverstone in treacherous conditions; Thruxton from eighth on the grid with a tyre-conserving drive; Nurburgring under great pressure all the way through; and Vallelunga, from his only pole, was another calculated affair to save the tyres. Only at Hockenheim did he show a sign of recklessness. There can be no doubting now his ability to be a successful racing driver, it remains to be seen if he can sustain his application and morale through difficult times. He certainly deserves to be given the chance.

The man who emerged with unquestioned credit from the season was Frenchman **Philippe Streiff.** It is always difficult to judge a driver in a one-off car like the AGS; it was certainly a very much underrated car but it was Streiff alone who was able to carry the challenge to the

A new rule imposed in 1983 restricted each driver to the use of 14 tyres in each meeting.



two Ralt-Hondas in the second half of the year. There was never any surplus finance for testing and he never had the benefit of having a team mate whose input was more than financial. Streiff showed Palmer-like application to the task and really deserved to have won a race. His driving was always stylishly neat and he emerged from the season with a lot going for him. To his credit, he is repaying AGS's loyalty to him in troubled financial times by sticking with them for a third year in the face of on-paper more attractive offers: A sure-fire race winner in 1984.

Like his Onyx March team mate Gabbiani, **Christian Danner** began the year with a string of good results which looked like more than justifying BMW's decision to give him a third opportunity. He finished in the top three in three of the first four races, including pole and lap record at Nurburgring, and was tipped out of more points on the last lap of the fifth having led the early laps. He wasn't a match for Gabbiani in the races but with less than 50 single seater events under his belt this was hardly surprising. His close relationship with Ralph Bellamy often gave him the best opportunity in qualifying which he used to his benefit but, caught up in the general second half malaise, he lost consistency and that is where the big question mark still hangs. There can't be much wrong with a driver who is on pole at Nurburgring and he is worthy of another crack at it.

Jo Gartner had his best season in terms of results with his win at Pau, although it was doubtful if his choice of the Spirit chassis was really the best way to have gone. The cars demanded too much attention from Gartner himself, who filled the role of engineer and team manager and so he was never really able to concentrate on the job of racing. As the season wore on, he established himself as the quickest Bridgestone runner, although his reluctance to concede places or use his mirrors disturbed fellow competitors.

Perhaps the biggest disappointment of all the drivers during the year was **Alessandro Nannini**, whose debut year had promised so much. The new Minardi was clearly not up to the job for much of the year but given his head in the old car at Nurburgring he gave a superb wheel-to-wheel chase of Gabbiani, only to nearly throw it all away at the final corner. His Lancia sports car drives have confirmed he really does have what it takes and given the equipment he will do it in F2 next year.

Just when it looked like **Thierry Tassin** was getting to grips with F2, his year fell apart when promised sponsorship failed to materialise and he had to vacate his Onyx March seat after Pau. He really had to discount his previous fragmented season and start F2 afresh in 1983. He went well in pre-season testing but made a silly mistake in the opening race. Thereafter though he showed consistency and increasing competitiveness, finishing in the points every time. All this was despite the fact that constant uncertainty over his sponsorship position only served to increase the pressure on himself. The impetus of his Spa 24 Hours win will hopefully have secured his 1984 budget and he's a very determined young man who should eventually come good.

Despite having a wretched second F2 season, in complete contrast to his first, there is no doubting that **Stefan Beloff** is going places. Ninth place and nine points do no justice to his ability which was badly let down by his team.

At Silverstone, as he had the year before, he flew through the field in impressive style; at Nurburgring he flew on the first lap like no other only to succumb to the same problem which

SEASONAL SURVEY





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Above: Stig Blomqvist tackled few World Championship events but was always spectacular. Below: Lancia got their sums right and clinched the Manufacturers' title before the final round. Photos: Colin Taylor Productions.

Man and machine

PETER FOUBISTER reviews the year's rallying in which Hannu Mikkola won the Drivers' Championship and Lancia took the Manufacturers' title.

Dry roads, sunshine, and racing speeds on the 1983 Monte Carlo Rally were hardly the conditions that Audi's top management wanted to see, as their team undertook the defence of the Manufacturers' World Championship for the first time. It meant that while the Germans remained the only team intent on collecting the sport's premier awards, the rival Martini Lancia faction had gained an early, unexpected advantage. A little bit like 1982 in fact.



And as the months went by, the similarities to that previous season continued, with Audi seemingly denied those precious points where they most expected to roll up and collect. Beaten on Safari by an Opel Ascona, thrashed in Corsica, and thwarted in Greece by the Lancia duo of Walter Rohrl and Markku Alen, the mid-point of the year saw some pretty dour looking Germans.

And, in contrast, the Italians produced calculators, began booking rooms in Argentina, working out the pros and cons of front-engine four-wheel-drive versus mid-engine rear-wheel-drive over Finnish gravel roads and, of course, began the Big Build Up for Sanremo. Then they spent the cash, expanded the programme, and the two way battle for the Manufacturers' Championship developed swiftly.

The calculators had been correctly programmed, and when the Acropolis success was repeated in New Zealand, not only did the Italians look on course for the Manufacturers' title, but both Rohrl and Alen seemed outside bets for snatching the Drivers' award from Hannu Mikkola. In reality everything was decided in Italy, when Markku Alen ran home first, earning his team their award, and thereby effectively putting himself out of contention in the Drivers' contest, leaving 41 year old Mikkola to collect the title at last.

He of all people would confirm that it had been a difficult season, and problems appeared following the introduction in May of the latest evolution Quattro. Of lighter construction, and with a revised motor, it should have been quicker but actually took time to 'tune' to rallying conditions.

There were other newcomers to the scene through the year, most noteworthy perhaps being the Toyota Celica Turbo which won in the Ivory Coast with Bjorn Waldegaard; and the Opel Manta 400 which didn't win anywhere. Indeed the only success in world terms for the Rothmans Opel Rally Team — in their last season together — came with the ageing Ascona 400 on its last appearance in Safari country. Ari Vatanen and the experienced Terry Harryman were the victors, Terry becoming the first British competitor ever to win a Safari Rally.

Otherwise, British appearances involved Fred Gallagher who partnered Henri Toivonen; Tony Pond who chucked one of the cumbersome Nissan 240 RS models round Corsica to sixth, and Terry Kaby who also got a Nissan into the top 10 on Portugal. And we must not forget the performance of Jimmy McRae, who started the season with hopes of a number of World Championship drives but ended up with a couple, finishing third on the Lombard RAC Rally, to give the new Manta 400 its best result of the year in the series.

WORLD RALLY CHAMPIONSHIP FOR MANUFACTURERS

	Jan 22/29 Monte Carlo	Mar 01/06 Portugal	Mar 31/Apr 04 Safari	May 05/07 Corsica	May 30/Jun 02 Acropolis	Jun 24/29 New Zealand	Aug 02/06 Argentina	Aug 26/28 1000 Lakes	Oct 02/08 Sanremo	Nov 19/23 RAC Rally	Total points
1 Lancia.....	18	14	—	18	18	18	(10)	14	18	—	118
2 Audi.....	14	18	16	—	14	—	18	18	6	18	116
3 Opel.....	10	9	18	12	12	—	—	9	12	14	87
4 Nissan.....	—	4	12	8	8	16	—	4	—	—	52
5 Renault.....	6	—	—	10	—	—	11	—	—	—	27
6 Toyota.....	—	—	10	—	—	—	—	8	—	6	24
7 Subaru.....	—	—	—	—	—	13	—	—	—	—	13
8 BL Cars.....	—	—	—	—	11	—	—	—	—	—	11
8 VW.....	—	—	—	—	—	—	—	—	11	—	11
10 Vauxhall.....	—	—	—	—	—	—	—	—	10	—	10
10 Peugeot.....	—	—	10	—	—	—	—	—	—	—	10

But to back almost 12 months, there was every reason to expect a strong German grip on the series, with, maybe, a few Lancia victories when conditions dictated. The months before had seen the Italians working hard to find reliability with their supercharged racer, whereas the Audi boys at Ingolstadt already seemed to possess those necessary factors which constitute a rally winner.

The difference, perhaps, lay in the experience that the two parties could boast. While Lancia directed considerable efforts at specific trouble spots (and remember the traction problems near the

start of the Rally's life before Pirelli produced the goods) and fixed them once and for all, Audi engineers seemed to lack direction.

On more than one occasion their star drivers — **Hannu Mikkola**, **Stig Blomqvist** and **Michele Mouton** — confirmed that their cars seemed slower than those used in 1982, leading one to question the factory catch-line, "Progress through technology". Indeed, perhaps it was this particular theme that sparked a number of the troubles which afflicted the enormous effort that the Germans put into the competition. Instead of introducing a new car gradually as it proved itself, it was chucked in at the deep end, mid-season.

It is worth noting that until the new A2 Quattro arrived in Corsica, bringing with it such goodies as a smaller capacity engine — permitting a lower minimum weight limit according to the Group B regulations — plus a lighter gearbox, and lots of Kevlar panels, the team had a pretty fair reliability record. Monte Carlo had been far from ideal for the big turbocharged monsters as they fought the nimble Lancia racers over dry tarmac for the most part, but the only works car that retired sealed its fate when Mouton drove it into the scenery.

Both factory cars survived Sweden, and in Portugal, perhaps the scene of one of the fiercest Italian/German confront-

Helicopters are becoming more important to the teams as each rally progresses. This one hovers in Finland.



HANNU MIKKOLA

★★★★★

Age: 41

Lives: Finland/America

1983 results: 1st, Sweden, Portugal, Argentina, 1000 Lakes; 2nd, Safari, Ivory Coast, RAC, 4th, Monte Carlo.

Drives: Audi Quattro

This was the year which finally gave Hannu Mikkola the World Championship that he has chased for so long. Not that it came easily, and in a full season — he was the only person to start every rally — there were troubled times, mixed with the high spots.

Through it all, Mikkola's driving seemed to be the one consistent part of the act, and if conditions allowed, then he could be expected to be in the running for a top place. Victory came four times, if he finished then he was always in that top four, and he missed out four times when mechanical problems intervened.

He feels his best success was on home territory, on the 1000 Lakes, because he had to battle not just with the other drivers, but struggle to beat numerous mechanical problems. The margin at the finish was small, but enough to give him considerable satisfaction. He acknowledges that he may not be the fastest Quattro driver under certain conditions, but in the overall championship, his record is more than impressive. In many ways he is the complete professional, and is sure to be a fine ambassador for the sport in his title year through 1984.

WORLD RALLY CHAMPIONSHIP FOR DRIVERS

	Jan 22/29 Monte Carlo	Feb 11/13 Sweden	Mar 01/06 Portugal	Mar 31/Apr 04 Safari	May 05/07 Corsica	May 30/Jun 02 Acropolis	Jun 24/29 New Zealand	Aug 02/06 Argentina	Aug 26/28 1000 Lakes	Oct 02/08 Sanremo	Oct 25/30 Ivory Coast	Nov 19/23 RAC Rally	Total points
1 Hannu Mikkola (SF).....	(10)	20	20	15	—	—	20	20	—	15	15	—	125
2 Walter Rohrl (D).....	20	—	12	15	20	20	—	15	—	—	—	—	102
3 Markku Alen (SF).....	15	—	10	20	15	—	8	12	20	—	—	—	100
4 Stig Blomqvist (S).....	12	15	—	—	12	—	15	15	—	—	20	—	89
5 Michele Mouton (F).....	—	10	15	12	—	—	12	—	4	—	—	—	53
6 Ari Vatanen (SF).....	8	6	—	20	—	10	—	—	—	—	—	—	44
7 Attilio Bettega (I).....	—	—	—	10	8	12	—	—	—	12	—	—	42
8 Lasse Lampi (SF).....	—	12	—	—	—	—	—	4	—	—	10	—	26
9 Shekhar Mehta (EAK).....	—	—	—	—	6	10	10	—	—	—	—	—	26
10 Per Eklund (S).....	—	—	—	—	—	—	—	10	—	12	—	—	22

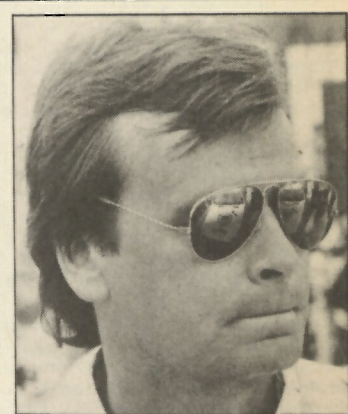
ations of the year, the only retirement was Blomqvist, and that too was down to the character in charge of the steering wheel. On Safari, Mikkola and Mouton got back to Nairobi, leaving **Vic Preston Jr** sitting at the roadside having clobbered a bank after leading and then struggling in the dust of **Ari Vatanen's** Opel Ascona 400.

So coming to the Corsican road race — reckoned by all involved as the toughest test of a crew, with endless twisting and turning round the mountain sides at high speed — the Audi score sheet looked good in terms of reliability. Eight finishes from 11 starts, and Mikkola for one was more than pleased that, although things were still far from perfect regarding back up plans and servicing, the Group B car — an evolution from the Group 4 machine used through 1982 — at least seemed up to the competition.

The new car . . .

Then the new car arrived, the championship lead which Audi had eased out (by the third place in Monte, the win in Portugal, and the second on Safari) went bang. And with it went Hannu Mikkola's advantage in the Drivers' Championship as the team's fortunes took a serious dive.

Indeed, Mikkola began to reflect on years past — especially 1982 when he had desperate luck mid-season — and the



MARKKU ALEN

★★★★★

Age: 32

1983 results: 1st, Corsica, Sanremo; 2nd, Monte Carlo, Acropolis; 3rd 1000 Lakes; 4th, Portugal; 5th Argentina.

Drives: Lancia Rally

A man who loves the world of international rallying, both for the competition and the razzamataz that goes with it. For some time he had played second fiddle to Lancia's super-star Rohrl, but this last season has seen the "Italian-Finn" bounce back and earn a double success, the later victory coming on the all-important Sanremo round of the world series where Lancia clinched the title.

Maybe he lacks some of the technical sophistication offered by his German team-mate of 1983, but Alen more than makes up for that by his sheer will to win. He will go anywhere, test anything to aid his team, and over the last 10 years he has played a big part in many of the Lancia/Fiat successes.

His record shows that he has started events where he was maybe handicapped compared to the Audis, (Argentina, 1000 Lakes), but he played the professional role and earned the points. And he proved that Sergio Limone's two-wheel-drive design can complete in conditions, which maybe seem to favour four-wheel-drive.

With the departure of Rohrl, it is possible that Alen will face an even greater threat this coming season. While he will tackle the greatest number of events for Lancia, Henri Toivonen could just step into the role that Rohrl has just left.

summer of '83 took on a pretty dim outlook. He went to Greece seeking a first ever finish on the Acropolis (!) but was denied in the closing hours while well ahead when a hinge pin failed, leaving the whole boot assembly trailing through a rocky stage, eventually discarding the oil cooler connections mounted on top of the boot spoiler.

"Never ever, did I believe that I could retire from a World Championship!"

SEASONAL SURVEY

competition because of a hinge pin," explained a disconsolate Mikkola at the Glyfada resort, the scene not just of a dreadful rally result, but also of an unfortunate robbery which saw Hannu's family possessions stolen from a beach bungalow. "You could say that I have lost everything."

And for team boss Roland Gumpert, his number 1 driver had perhaps summed it up perfectly, as that hinge pin failure meant the door was opened to Lancia, who stepped in, recorded a famous one-two victory, and immediately committed themselves to an attack which, they hoped, would extend their newfound advantage in the Manufacturers' Championship. The Acropolis, in fact, proved the centre point of the series, as it had always been regarded as a "safe" Audi seat with the rough gravel roads including lots of difficult climbs, and twisting rocky sections where there are considerable advantages in having power at all four corners of the machine.

And it was then, when the pressure switched back to the German department, that things began to look ragged. It was a disease which affected not just the much-criticised mechanics, who still put in lots of effort but don't seem able to produce the goods, but those at the other end of the scale as well.

For while Mikkola quietly hoped that the competition programme would concentrate on solving a few on-going mechanical problems evident on the new car, (including, for example, a rev band that only gave the drivers useful power at the top of the range), and maintain a



Michael Bish's drive in New Zealand gave the Mini its first ever World Championship points.

championship programme with the two lead cars, the management opted for a three car effort in New Zealand.

Political rows

But they chose to enter the third Quattro after the closing date for entries, and the year's major political row marred what was otherwise a superb rally. The argument raged between Lancia and Audi, between officials and stewards, and as the drivers fought over the opening stages, the court room wrangles continued until someone, somewhere, banged the table and the unfortunate Mr Blomqvist was sent home.

The remaining Audi personnel followed at periodic intervals, with Mikkola and Hertz clambering back up the order after a camshaft pulley belt jumped (and the traditional helicopter popped in to keep the main man in the rally), only to suffer an engine fire and the inevitable early flight home. Mouton was not so far behind and she actually looked like winning, until an errant con-rod altered the positions. So, by the time everyone returned to Auckland, the Lancias were on their own, and the German crisis was growing to critical proportions.

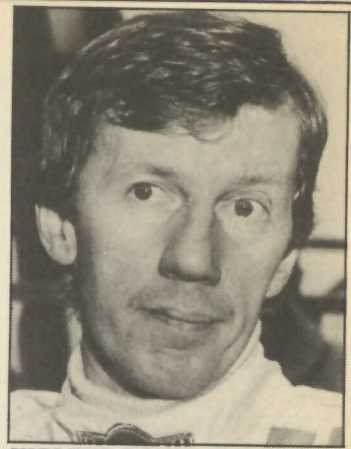
The Argentina onslaught, which managed to halt the swing, with snow and some ice ensuring that the large Quattro contingent (including Shekhar Mehta, and Franz Wurz in a private 80 Quattro) stayed on top and kept alive glimmering

hopes of a championship success, although with average speeds on stages reaching 110mph, there were a few grey hairs . . .

But to recover the game would mean maximum points at every venue, and so again the Ingolstadt cars were backed up in Finland with Per Eklund roped in as Toyota chose to ignore him. While Eklund was impressive, the true star of the occasion was Mikkola, again involved in an earl delay (this time it was front diff failure) but attacked every inch of the smooth winding forest roads which ensure that the 1000 Lakes remains one of the real challenges of any World Championship season. It is, of course, an arena which has been dominated by the Finns, while the only 'outsider' ever to have scored a victory there was also in the Audi camp, Stig Blomqvist. And with Mikkola involved in an event-long struggle, it looked for so long as if the Swede would repeat that 1971 victory, until Mikkola just eased ahead in the closing stages, angered in his moment of triumph by suggestions that Jyvaskyla had been the scene of team orders similar to those which had helped him to victory in Argentina just one month earlier. He had earned the victory at home.

Back in the chase

Success there put him back into contention for the Drivers' title, and gave the German marque some hope, but they



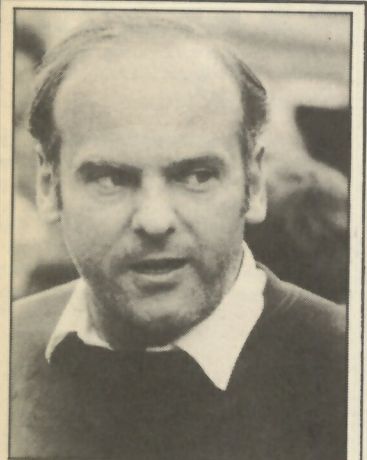
WALTER ROHRL
★★★★★
Age: 36
Lives: Regensburg, Germany
1983 results: 1st, Monte Carlo, Acropolis, New Zealand; 2nd, Corsica, Sanremo; 3rd, Portugal
Drives: Lancia Rally

A thoroughly professional driver, the 1982 champion capitalised on every mistake by the rival German team, and ended up playing a crucial part in Lancia's success in the Manufacturers' series. Not that all his victories were inherited, and in conditions that he enjoys, there is no-one in the world to touch him. Inch-perfect judgement, coupled with a clever, tactical approach ensures that the German remains in demand, and he has obviously been happier since he rejoined the experienced Lancia equipe 12 months ago.

On both occasions that he finished second he was delayed by a puncture, setting about carving off time from his rivals and team-mates alike, until team orders slowed his progress, and he obediently held station. The third place could — had fate played a slightly greater part in Portugal — actually have also been a first, and so from only six starts in the season, Rohrl must be well satisfied.

The problem remains that he is not even remotely interested in contesting events which he does not like. Africa, Argentina, Sweden, are parts of the world he does not enjoy, and so this year he was perhaps the most talented "specialist" on the scene, steering clear of those rallies where he would perhaps start with a disadvantage. He did them last year, of course, and proved he was quite capable.

In 1984 he moves to the Audi set up in Ingolstadt, and it could be an interesting period as he adapts to the Germans' methods, and fits into an already established frame work.



STIG BLOMQVIST
★★★★★
Age: 37
Lives: Sweden
1983 results: 1st, RAC; 2nd, Sweden, Argentina, 1000 Lakes; 3rd, Monte Carlo, Acropolis
Drives: Audi Quattro

In his long-term plan, 1983 was perhaps the year when Blomqvist could have expected to get a crack at the World Championship, because of his supporting role in Audi's efforts for some time. It didn't quite happen, Mikkola stayed at number 1, and the Swede would have to wait another 12 months before he got a full programme.

Which meant that through this year, he has been asked to ease off a little on occasions (specifically Argentina); found himself excluded because of internal mistakes (New Zealand); only finally won an event on the RAC, when he underlined his true talent.

He has also had a few technical problems through the year, and also crashed in Portugal, and on the final night of Sanremo. It's a long time since he wrecked a car, but that last tarmac section of the Italian event — with the Lancia's ahead — saw total attack from Blomqvist which had to end one way or the other. . .

Hannu Mikkola's Quattro lies at a Sanremo roadside. The charred shell resulted from one of a series of fires that befell the German cars.



had to win in Sanremo, which, after all, had been the scene of a couple of famous victories for the Germans in the last two years. There was Michele in 1981 — first lady to win a championship event, and first victory for the car on a Makes' rally — and she was followed by Blomqvist's 1982 success when he dominated play after only a minimum of practice time. Something, incidentally, which seems almost irrelevant to this super Swede, as he used Mikkola's pace notes (through lack of time) on several occasions through this season, and it appeared to make little difference.

Hopes dashed

But the German hopes lasted only a matter of hours, and along with steering servo problems over the opening asphalt tests, the cars seemed slower than the Group 4 version, the drivers unhappy. Lancias were in control. Mouton's car had a misfire, and Mikkola charged hard, but was denied a finish when the car burst into flames mid-stage and was totally destroyed. Even the engine block melted, such was the heat of the fire.

It was an embarrassing problem for Audi. Throughout the year their Quattros had been catching fire, sometimes

with quite frightening results. The most common trouble spot appears to be the excessively high temperatures reached around the turbocharger, which then has further, more serious consequences down the line.



MICHELE MOUTON

★
Age: 32
Lives: Grasse, France
1983 results: 2nd, Portugal; 3rd, Safari, Argentina; 4th, Sweden; 8th, Sanremo; 16th, 1000 Lakes.
Drives: Audi Quattro

Not a year which Michele will want to remember, as after such sensational performances through 1982, her results this year have slumped. Three times she retired after an accident and maybe the increasing pressure — both from inside the camp, and from other teams — was to blame. Indeed, the problems probably originated from her own programme which was very hectic, only the Ivory Coast being missed, so when things started going badly, she never recovered.

The parts she will remember include another good run in the snow of Sweden, an impressive first performance on Safari, and parts of the New Zealand affair which for a long while looked like giving her a victory. The times she will prefer to forget centre on those periods when she was at her busiest, including Corsica — where the new car made its first appearance — Acropolis where she took perhaps her most impressive victory in 1982 and was sidelined on the first stage one year later; and of course the RAC Rally, which seemed to combine all types of team problems, coupled with an eventual accident which put her out of the event. A more carefully planned programme in 1984 is bound to suit both her and the team much better.



BJORN WALDEGAARD

★
Age: 40
Lives: Sweden
1983 results: 1st, Ivory Coast;
Drives: Toyota Celica Turbo

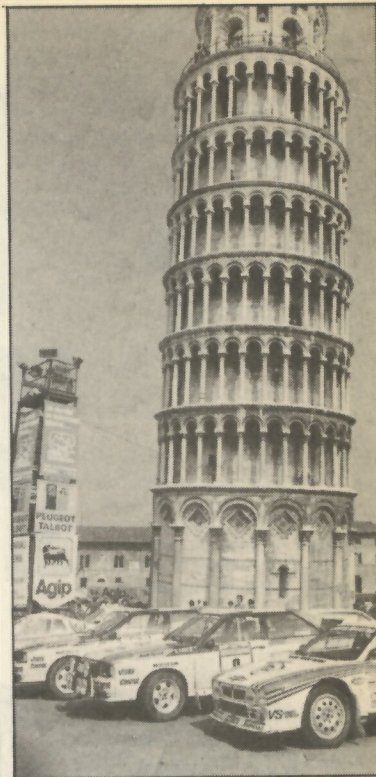
Towards the end of the 1983 season this pleasant character — who was the first man to earn the World title back in 1979 — underlined the current, odd, state of rallying in the '80s. Without any contribution to the world series at all until the mid point of the year, because the machinery was not there, he then proceeded to show real professionalism on a series of drives under greatly differing circumstances.

Firstly there was a Ferrari 308 GTB outing on Sanremo which ended prematurely with engine problems, but saw the Swede display some of the those old talents. Then he moved to the forests of the Ivory Coast, and promptly took on and beat Mikkola's Quattro, and finally he came to Britain for the RAC.

The Celica Turbo was not fully developed, there were obvious problems with the tyres, but he banged it up to second place before disappearing in Grizedale forest on the Monday.

In doing so, he underlined that there are many great names sidelined in World Championship rallying, because their factories do not have the machinery available. That if Audi and Lancia eventually give way to Toyota, and Peugeot, we may see a few of those names from the late '70s back in the results sheets, and some familiar ones back out in the cold.

Blomqvist went out on the final night of Sanremo when he crashed, something he had not done since Portugal, and so with the Manufacturers' Championship settled, Audi were left to honour an obligation to Hannu Mikkola, the man who had put so much effort into their rallying programme, since its announce-



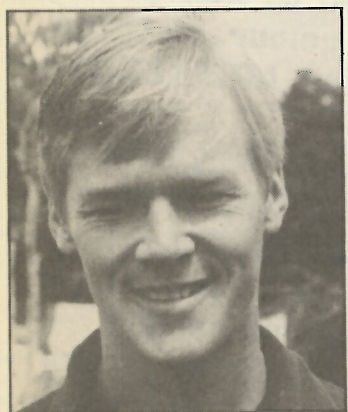
The scenic parc fermé at Pisa.

ment back in 1980.

They went to the Ivory Coast, pumped in all the technical back-up (perhaps to learn just a bit more about African rallying for the future as well), and then suffered further problems, not all entirely of their own making. For this is one of the more dangerous events for the crews, and Mikkola slipped to second when he hit a pile of logs placed in the middle of the road in the dead of night. The local villagers were apparently used to night time raiders, and this was their initial defence... Mikkola would have to go all the way, before he could truly call himself the World Champion.

No final victory

And an early mistake on the final event in Britain meant that he did not get the end-of-year victory he desired, being forced to trail the British built Audi Sport UK car of Stig Blomqvist on the anti-clockwise trip round the country. Perhaps the Swede felt that he had made a point, but Mikkola's second place meant that he finished the clear points



ARI VATANEN

★
Age: 31
Lives: Cookham Dean, England
1983 results: 1st, Safari; 4th, Acropolis; 5th Monte Carlo, 6th Swedish.
Drives: Opel Ascona/Manta 400

A strange year for the 1981 World Champion, which offered on the one hand a tremendous victory on the Safari Rally, and yet also saw Ari kept in place by team-mate Henri Toivonen on the other. Following the Vatanen style, there were a few bent cars at the end, but he never gave less than his best, and he could be relied upon to feature somewhere behind the super cars (Audi and Lancia) if there was half a chance.

He did not seem troubled by the fact that he had a less-than-competitive machine this year, (compared with previous seasons), but was perhaps ever more determined to capitalise on whatever advantages he held.

In so doing, he would usually be near the head of 'Division 2', with all the drama and excitement that would entail as drivers struggled to push their machinery nearer the latest Group B machinery, or simply stay ahead of the other also-rans. Vatanen certainly displayed his world class on a number of occasions, and aside from the East African adventure, Ari must have been fairly satisfied with the Monte performance, and the 1000 Lakes where he was running high, before problems intervened. Disappointing moments probably include Sanremo, where Toivonen was very quick, and the RAC when he went off early, in the first forest complex.

Michele Mouton adjusts the lights on her Audi Quattro before tackling the night sections of the Sanyo Rally of New Zealand.



MONTE CARLO RALLY (F)

Jan 22/29
Based Monte Carlo
4100kms with 31 special stages
totalling 780kms — mainly asphalt
stages with some snow and ice



Rohrl and Lancia start the year in dramatic, winning style — Audis thwarted by a complete lack of snow yet again — Blomqvist takes third, Mikkola fourth, but Mouton crashes — Vatanen beats Toivonen in an Opel duel — Therier holds lead for Renault on the first stage, but retires — Ragnotti disappointing in the factory 5 Turbo — Lancia success is the first win for a Group B machine in World Championship rallying — British interest centres on Louise Aitken, Coupe des Dames winner in an Alfasud, and Chris Lord proves impressive but crashes — Alfa win Group A.

1 Walter Rohrl/ Christian Geistdorfer	Lancia Rally	7h58m57s
2 Markku Alen/ Ilkka Kivimaki	Lancia Rally	8h05m49s
3 Stig Blomqvist/ Bjorn Cederberg	Audi Quattro	8h10m15s
4 Hannu Mikkola/ Arne Hertz	Audi Quattro	8h13m02s
5 Ari Vatanen/ Terry Harryman	Opel Ascona 400	8h14m03s
6 Henri Toivonen/ Fred Gallagher	Opel Ascona 400	8h15m54s

SWEDISH INTERNATIONAL (S)*

Feb 11/13
Based Karlstad, Varmland
1500kms with 25 stages totalling
440kms all over snow and
ice-covered roads



Mikkola erases 1982 memories and stays at the front from start to finish — Blomqvist chases and takes second with the 80 Quattro on its World debut — everyone else is left behind — Grundel an amazing fifth in a Group A VW Golf GTi — Eklund retires Saab 99 Turbo in the early hours — Vatanen makes the headlines before the start, showing off a prototype four-wheel-drive Manta — British Junior Team impress on first showing, with Wood up front and Aitken winning Group N.

1 Hannu Mikkola/ Arne Hertz	Audi Quattro	4h28m47s
2 Stig Blomqvist/ Bjorn Cederberg	Audi 80 Quattro	4h29m34s
3 Lasse Lampi/ Pentti Kukkala	Audi Quattro	4h32m51s
4 Michele Mouton/ Fabrizia Pons	Audi Quattro	4h33m56s
5 Kalle Grundel/ Rolf Mellorh	VW Golf GTi	4h38m33s
6 Ari Vatanen/ Terry Harryman	Opel Ascona 400	4h40m38s

PORTUGAL RALLY (P)

Mar 1/6
Based Estoril
2400kms with 43 stages of 670kms
over a mixture of gravel and
asphalt roads



Mikkola again on top after a dramatic closing section — punctures threaten to turn results board upside down — Mouton takes second — Rohrl manages third to keep Lancia in the Championship hunt — Blomqvist crashes — leading Portuguese driver is Joaquim Santos — British honour upheld by Kaby in a Nissan which takes eighth — Zanini takes Talbot Sunbeam Lotus to sixth — Group A falls to Marc Duez in an Opel Manta GT/E which finishes 16th — Lancia and Audi level in the Manufacturers' Championship — Mikkola easing ahead in the Drivers' series.

1 Hannu Mikkola/ Arne Hertz	Audi Quattro	7h17m24s
2 Michele Mouton/ Fabrizia Pons	Audi Quattro	7h18m19s
3 Walter Rohrl/ Christian Geistdorfer	Lancia Rally	7h19m14s
4 Markku Alen/ Ilkka Kivimaki	Lancia Rally	7h24m29s
5 Adarico Vudafieri/ Maurizio Perissinot	Lancia Rally	7h41m49s
6 Antonio Zanini/ Victor Sabater	Talbot Sunbeam Lotus	7h50m29s

MARLBORO SAFARI RALLY (EAK)

Mar 31/Apr 4
Based Nairobi-Mombasa
5000kms all competitive with no
stages but very rough open roads



Vatanen and Harryman spring surprise victory to give Opel their long-awaited Safari victory — Audi set to dominate but late problems deny a first time success — Mikkola eventually satisfied with second, by just 6 mins — Subaru four-wheel-drive takes fifth — Munari denied a finish with his Alfa — Aaltonen on his 20th attempt retires while set for victory — Nissan's long run of victories broken as the 240RS fails — Collinge retires Range Rover after exciting trip which took him up to fifth place — all dry event makes life 'easy' for the crews...

1 Ari Vatanen/ Terry Harryman	Opel Ascona 400	6h36m00s
2 Hannu Mikkola/ Arne Hertz	Audi Quattro	6h42m00s
3 Michele Mouton/ Fabrizia Pons	Audi Quattro	7h35m00s
4 Jayant Shah/ Aslam Khan	Nissan 240RS	7h58m00s
5 Yoshio Takaoka/ Shigeo Sunahara	Mitsubishi 1800	13h51m00s
6 Yashuiro Iwase/ Sudhir Vinayak	Datsun PA11	14h03m00s

winner, and a deserving champion.

However, more than anything, he had wanted to win the premier award through his own results, and not because others failed. In that respect he was denied satisfaction, when Markku Alen's hopes of starting the RAC were dashed by politics at Turin. Maybe Mikkola's nerves had, in any case, suffered enough through the year, although it was a shame for Markku and the British crowds that the Lancia never made it to the Bath start.

Cesare Fiorio had, however, confirmed from the start that the only goal in his sights was the Manufacturers' title. That was the way it had been in previous seasons and 1983 would be no different. To that end, still without a full programme in the early months of the year, Fiorio and Nini Russo planned a campaign which would include specialists on events to back the team leaders. It was this lack of commitment to the series that led to the Italians not including the Safari in their early campaign, intending to capitalise on specific occasions when they could reasonably expect to hold the strong cards and avoid events where the four-wheel-drive opposition would prove to be untouchable.

Revised line-up

Monte Carlo saw the first appearance of the revised driver line-up, Walter Rohrl returning to the fold as the current Champion, earned of course during a stormy time with Rothmans and Opel through 1982. Now he was back, establishing himself at the top of a line-up which still included the ever-loyal Markku Alen, plus Jean-Claude Andruet. The Martini team were less than optimistic about their chances at a pre-event conference in Sestriere if the snow forecast hit the route, although Rohrl, in particular, was full of confidence for his

British success in Monte Carlo. Louise Aitken and Ellen Morgan took the ladies prize after a fine drive in a Group N AlfaSud.



SEASONAL SURVEY

TOUR DE CORSE (F)

May 5/7
Based Ajaccio, Corsica
1700kms with 32 stages of
1160kms over
asphalt roads



Alen back on the winning trail — Lancia dominate, as Audis fail — Rohrl holds second place after puncture — Pond stars for Nissan with sixth place after a spectacular performance — Group A goes to Couloumies in an Opel Ascona — Andruet retires with a blown engine — Renault hopes falter with Ragnotti as cow lands on roof — Coppiet an amazing ninth with Citroën Visa — Beguin retires the BMW M1 with engine problems — Début of new Group B Quattro and Manta 400.

1 Markku Alen/ Ilkka Kivimaki	Lancia Rally	12h43m38s
2 Walter Rohrl/ Christian Geistdorfer	Lancia Rally	12h45m27s
3 Adartico Vudafieri/ Luigi Pirolo	Lancia Rally	12h50m08s
4 Attilio Bettega/ Maurizio Perissinot	Lancia Rally	12h57m27s
5 Bruno Saby/ Chris Williams	Renault 5 Turbo	13h25m37s
6 Tony Pond/ Rob Arthur	Nissan 240 RS	13h44m51s

ACROPOLIS RALLY (GR)

May 30/June 2
Based Athens
2260kms with 46 stages of
840kms over
rough gravel roads



Rohrl and Alen take sensational one-two result for Lancia against all the odds — Italians extend lead in the Manufacturers' Championship — Audi left in disarray as Mikkola loses lead through broken boot hinge on last night — Blomqvist survives troubled time to take third, Mehta a cool fifth with the Nissan — only 36 finish out of 120 starters — Toyota Corolla entered by local driver wins Group A — Mouton crashes on the opening stage — Renault in trouble again with front suspension.

1 Walter Rohrl/ Christian Geistdorfer	Lancia Rally	11h12m22s
2 Markku Alen/ Ilkka Kivimaki	Lancia Rally	11h18m42s
3 Stig Blomqvist/ Bjorn Cederberg	Audi Quattro	11h26m18s
4 Ari Vatanen/ Terry Harryman	Opel Manta 400	11h35m11s
5 Attilio Bettega/ Maurizio Perissinot	Lancia Rally	11h36m38s
6 Shekhar Mehta/ Yvonne Mehta	Nissan 240 RS	11h49m41s

RALLY OF NEW ZEALAND (NZ)

Jun 24/29
Based Auckland
2620kms with 13 stages of
1100kms over smooth gravel
roads with a little asphalt

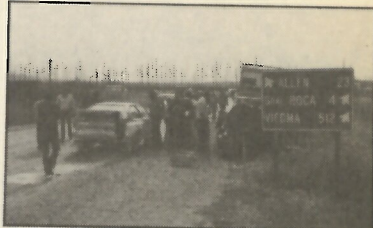


Rohrl again, this time as Mouton retires on the final morning — Audi in the doldrums as Mikkola goes out early and Blomqvist is excluded — Salonen boosts Nissan with second place for the 240 RS — Jim Donald top home driver in fifth — 33 finishers — Lancia versus Audi battle hots up over German late entry — memories of a popular rally clouded by political wrangling between the parties — Rohrl leads Drivers' Championship, after third success — low support for new Groups, and no-one enters Group N.

1 Walter Rohrl/ Christian Geistdorfer	Lancia Rally	12h10m13s
2 Timo Salonen/ Seppo Harjanne	Nissan 240 RS	12h26m11s
3 Attilio Bettega/ Maurizio Perissinot	Lancia Rally	12h41m42s
4 Shekhar Mehta/ Yvonne Mehta	Nissan 240 RS	13h10m35s
5 Jim Donald/ Chris Porter	Datsun Bluebird	13h20m50s
6 Malcolm Stewart/ Doug Parkhill	Ford Escort RS	13h30m58s

RALLY OF ARGENTINA (ARG)

Aug 2/6
Based Buenos Aires and San Carlo
Bariloche
3100kms including 18 stages of
1290kms on gravel — some snow



Mikkola and Audi back on top — Quattros fill top four places as Blomqvist takes a tactical second place — top Lancia is Alen in fifth — Italians and Germans only start in chase for championship points — snow and ice mean ideal conditions for the Quattro — studded tyres forbidden — fast speeds scare drivers — Rallycross champion Franz Wurz is sixth in 80 Quattro — Mehta joins Audi and finishes fourth — Renault 18 GTX is top local finisher run by local importers — Vudafieri retires after accident — Bettega doesn't make the start.

1 Hannu Mikkola/ Arne Hertz	Audi Quattro	10h18m54s
2 Stig Blomqvist/ Bjorn Cederberg	Audi Quattro	10h21m28s
3 Michele Mouton/ Fabrizia Pons	Audi Quattro	10h25m35s
4 Shekhar Mehta/ Yvonne Mehta	Audi Quattro	10h40m02s
5 Markku Alen/ Ilkka Kivimaki	Lancia Rally	10h50m12s
6 Franz Wurz/ Rudolph Stohl	Audi 80 Quattro	12h09m37s

Ari Vatanen gave the Rothmans Opel Team their only success of the year when he took the Ascona 400 to victory on the Safari. Terry Harryman, Tony Fall and Vatanen celebrate.



new "racing car", if the weather improved.

When the competition began in Grenoble, the temperatures were rising, and it could go either way. Some early stages offered both snow and dry tarmac; the second test was just such an example. In order to lessen the disadvantage to his drivers, Nini Russo and a couple of expert mechanics were based mid-stage for a swift rear wheel change which equipped the Lancias for the later dry section of the test, for a time loss of less than a minute. It was a typical example of the expertise which could be brought into play through the competition.

As days passed, the roads dried, the Lancias took control, and by the time everyone reached the delights of the Principality, it was an event which required masses of slick racing tyres, and intense concentration from the crews and their ice noters as they tried to pick up the very rare patch of ice, lurking to catch those who tried too hard.

Unexpected weather

In Portugal, during the days before the start, the drivers recorded remarkable weather conditions, with some of the snow expected in France drifting wide of the mark and causing a few anxious moments for the competitors — and their tyre representatives — before the Port Wine affair.

This promised to be one of the most interesting events for Lancia, convinced that they should have an advantage on the asphalt sections near the start, but curious to see how much Audi would benefit over the difficult gravel stages. In the event, punctures would play an important part in the proceedings. Rohrl even threatened to defeat the Audis of Mikkola and Mouton for a while, but he too punctured on a stage, and had to be content with third.

1000 LAKES RALLY (SF)

Aug 26/28

Based Jyväskylä

1460kms with 50 stages totalling 475kms all over fast gravel roads



Mikkola takes seventh home success after thrilling finalé — Blomqvist second again, with Alen third for Lancia — Eklund stars in Quattro — Kankkunen gives Toyota sixth on début of Celica Turbo — both Manta 400s retire, but Toivonen impresses — Group A to Mikael Sundstrom in an Ascona i2000 — Mikkola back at the top of the Drivers' table — Lancia keep Audi back in Makes Championship — Nissans eighth and ninth — Mouton the highest placed non-Scandinavian; 16th after a fire.

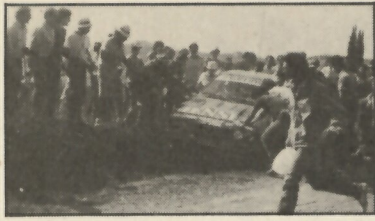
1 Hannu Mikkola/	Audi	
Arne Hertz	Quattro	4h23m44s
2 Stig Blomqvist/	Audi	
Bjorn Cederberg	Quattro	4h24m05s
3 Markku Alen/	Lancia	
Ilkka Kivimaki	Rally	4h24m33s
4 Per Eklund/	Audi	
Ragnar Spjuth	Quattro	4h26m03s
5 Pentti Airikkala/	Audi	
Juha Piironen	Rally	4h32m09s
6 Juha Kankkunen/	Toyota	
Steffan Pettersson	Celica	4h34m49s

SANREMO RALLY (I)

Oct 2/8

Based Sanremo, northern Italy

2700kms with 58 stages with approximately half on tarmac and half on gravel



Lancia treble gives Italians another World Championship for Makes — Alen on top as Rohrl is delayed by a puncture — Mikkola's worst fears realised as his Audi is burnt out — top Audi is Mouton in seventh — Toivonen finishes fourth — Biasion impressive for Lancia Junior Team — Blomqvist crashes on last night — Waldegaard looks good in Ferrari but engine breaks — Darniche ninth in a Quattro — Group A to Noberasco in an Alfa Romeo GTV 6.

1 Markku Alen/	Lancia	
Ilkka Kivimaki	Rally	8h50m17s
2 Walter Rohrl/	Lancia	
Christian Geistdorfer	Rally	8h52m26s
3 Attilio Bettega/	Lancia	
Maurizio Perissinot	Rally	8h55m27s
4 Henri Toivonen/	Opel	
Fred Gallagher	Manta 400	8h59m49s
5 Massimo Biasion/	Lancia	
Tiziano Siviero	Rally	9h00m42s
6 Dario Cerrato/	Opel	
Giuseppe Cerri	Manta 400	9h08m04s

IVORY COAST RALLY (IC)*

Oct 25/30

Based Abidjan

4700kms with no special stages, but held over open public roads of gravel surfaces



Toyotasensation as Waldegaard beats Mikkola through dusty conditions — but it's Hannu's Championship at last — entry list boosted by standard cars to make the minimum 50 starters — just eight survivors — bad routing sends cars through Tai forest in daylight, and promotes problems — both Audi and Toyota run back up "entries" — Ambrosino fifth for Peugeot.

*Denotes round of World Rally Championship for Drivers only

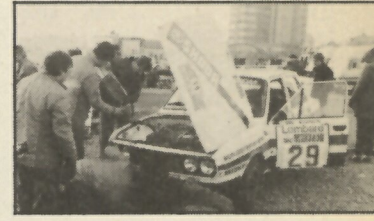
1 Bjorn Waldegaard/	Toyota Celica	
Hans Thorszelius	Turbo	5h18m00s
2 Hannu Mikkola/	Audi	
Arne Hertz	Quattro	5h29m00s
3 Per Eklund/	Toyota Celica	
Ragnar Spjuth	Turbo	6h58m00s
4 Samir Assef/	Toyota	
Solange Barrault	Celica	12h09m00s
5 Alain Ambrosino/	Peugeot	
Daniel Saux	505	14h22m00s
6 Eugene Salim/	Mitsubishi Lancer	
Clement Konan	Turbo	16h08m00s

LOMBARD RAC RALLY (GB)

Nov 19/23

Based Bath

1900 miles with 45 stages, mostly over forest tracks.



Blomqvist the cool victor on his first championship event win of 1983 — Mikkola follows but crashes on spectator stage early on — McRae takes excellent third place — dry clear conditions for the first time in 15 years — Strong Group A contest dominated by Grun-del's VW Golf GTi — Brookes fifth after last night accident on Welsh ice — Toyota again saved by Kankkunen after Waldegaard stars but crashes — Audi Sport UK beat the Ingolstadt boys — Swedish Junior Team wins first International Cup — Wilson gives Ford a class win.

1 Stig Blomqvist/	Audi	
Bjorn Cederberg	Quattro	8h50m28s
2 Hannu Mikkola/	Audi	
Arne Hertz	Quattro	9h00m21s
3 Jimmy McRae/	Opel	
Ian Grindrod	Manta 400	9h12m19s
4 Lasse Lampi/	Audi	
Pentti Kukkala	Quattro	9h16m57s
5 Russell Brookes/	Vauxhall	
Mike Broad	Chevette	9h19m01s
6 John Buffum/	Audi	
Neil Wilson	Quattro	9h21m16s



Any boost to the Italian's championship push was soon countered, however, when the rest of the teams set off for Africa, leaving Lancia personnel to prepare for Corsica, without doubt the event most suited to the supercharged mid-engined machine. They could restore the balance, perhaps, with a good result. And that they did, bringing in Andruet again, Adartico Vudafieri in a Jolly Club car, and factory driver Attilio Bettega, making a return to the sport after an horrific accident on the island a year earlier when his Rally 037 hit a wall.

The 1983 story was different, with a Lancia result that saw Alen back on top, Rohrl held in second (despite his protests), 'Vuda' third and Bettega fourth. Audi did not finish, and the Italians seemed to have escaped without penalty.

Their position was strengthened still further later that month when the trio of Martini drivers — Bettega was now fully restored and was to play an impressive part in the team from now on — kept the leading German machine back in third.

So, as Audi hit the doldrums, Fiorio's mechanics hurried to expand the building programme, Nini Russo rushed off to Argentina to look at the route, and Markku Alen made secret plans which could, at the end of the year, earn him the Drivers' title.

Russo — key figure

Russo was, in fact, to play a major part in the developments over the next couple of rallies in these far off parts of the world. In New Zealand, he reacted quickly and effectively when Blomqvist's name was added to the entry list, scuttling around, chasing officials in his helicopter, serving protests on a selection of persons, and eventually reducing the opposition to just two cars, both of which failed to finish. His chaps notched

Guy Frequelein reflects on the Opel rear axle which has given so much trouble.



up another top result, courtesy of Mr Rohrl.

Russo's second role was perhaps less successful, as the organisers of the Argentina Rally considered whether or not to allow studded tyres. Either way such a decision was far too late to allow the teams to prepare properly, but without any such aids the Lancias could hardly expect to match the Audis through the snow. Eventually, the Argentinians agreed to cancel any stages which were all snow and ice. Russo agreed, but then found himself fairly powerless, with the rally in motion over tests which were mostly covered in snow and ice, but not totally white and, therefore, not cancelled. So Alen scraped home, Vudafieri crashed, and everyone was relieved to turn their attentions to a better known commodity: the 1000 Lakes.

Rohrl had never considered starting there, convinced that he could not compete against the Finns on home ground, so Fiorio fielded Alen plus Pentti Airikkala, making his first appearance in Martini-Rossi colours. Alen was fairly optimistic about his chances, but the route used a number of stages untypical of the normal Finnish forest road, with its fast, sweeping bends, and the world famous jumps. Instead, the roads were rougher, with numerous tight winding sections, and the scene for the Audi experts to take maximum advantage and stay ahead.

Crucial points

Still, crucial points for Alen's Lancia Rally 037 and enough to keep the pressure firmly on the Germans, as the circus moved to Italy and a real showdown. Reports during weeks before the rally suggested that Lancia would have up to 13 of the evolution Rally 037s on the event, and it was certainly a strong line up. Rohrl was back, with Alen and also

SEASONAL SURVEY

Bettega in the Martini cars, and able support from the Junior Totip-backed machines of Vudafieri, **Antonio Tagnana**, **Micky Biasion** — the new Euro Champion — and a few other private cars.

Sanremo is such a careful balance between the alpine mountain tarmac stages, and the sweeping gravel of Tuscany that it was an event which required the most careful planning. More than ever before, the Italians needed to extend an immediate lead over the first sections, making Audi fight from the back, if they could. The Italian crowds were more than delighted when at the end of those opening stages, "their" cars filled the top seven places.

Without a doubt, this early pressure helped ease the Martini cars to a superb victory, although a crucial part of the plot was the meticulous development work put in by Pirelli and Lancia's Giorgio Pianta, the key man in the development of any Fiat/Lancia competition machine. Pirelli had produced a new tyre for Sanremo, and with a new compound and construction it was labelled the "NT". Later that month, Michele Mouton had a chance to drive on the rubber, and she immediately accepted that maybe Lancia were justified in their pre-event confidence. "Now, I see..." she commented.

So that wrapped up Lancia's 1983 programme. Starting cautiously, capitalising on successes, and throwing in the big guns when the effort was needed. Throughout that schedule all the typical Italian 'urgency' was in evidence, and a punctured tyre for either Walter or Markku could easily be mistaken for a death in the family by an outsider at the next service point. They remain at their best when the pressure is on; it may not look as such at times, but the team are well-disciplined, and some of the best in the business, always looking for new approaches to specific problems. On more than one occasion, Nini Russo was on-hand at the scene of a mid-stage problem to aid a stricken car, getting it back into the competition with the minimum of fuss.

Reliability

"Some may believe that using a helicopter is expensive," commented Russo, later in the year, "but it allows us to use our best mechanics at the most important spots. And we don't have to have lots of vans rushing around everywhere." Such efforts undoubtedly helped maintain the team's remarkable reliability record, with only two Martini-backed cars listed as retirements during the season.

This new generation of rally cars in the '80s is becoming increasingly sophisticated, and the challenge to designers nowadays is to produce just such a machine which can still boast simplicity, to keep on-event problems to a minimum. It is something the Italians have achieved. The days when teams would plan half-a-dozen gearbox changes throughout the course of a World Championship rally are — for the most part — gone, along with the Group 2 and Group 4 machinery which finally departed the World scene at the end of 1983.

That is not to say that the early months of a new car do not continue to produce headaches for team managers, however, as Opel found out in a fairly big way with the launch of the Manta 400. For so long, this had been the light at the end of the tunnel for the Rothmans drivers, struggling with their solid, reliable, but slow Asconas. Axle problems, a bit of engine development, and work to the brakes meant it would be some time before the new car was at its — still conservative — best.



The Lombard RAC Rally, at the end of the year, provided an ideal platform for Kalle Grundel to show his talents with the exciting Golf GTI.

More Kevlar, more heat

Principal improvements on the car centred on the installation of a more powerful engine — and the inclusion of more Kevlar panels, itself a factor which caused problems for the whole team on the Acropolis — a central part of the smaller Rothmans Opel Rally Team programme which was undertaken through the 12 months. **Guy Frequelin** debuted the car on Corsica, but Greece was the first major team appearance. Without sheets of metal to soak up the heat from the engine bay, the driver's compartment became a sauna, and the crews reported temperatures inside the car of up to 60°C in training. They were more than delighted when it started to rain on the long haul north of Kalambaka, while team boss Tony Fall was probably happy to see a couple of the cars — **Ari Vatanen** and **Terry Harryman**, plus **Jimmy McRae** and **Ian Grindrod** — at the finish. The third partnership of **Henri Toivonen** and **Fred Gallagher**, perhaps the quickest, ended their trip at the roadside on the last night.

It was the two Finns who formed the basis of the Opel World series programme, all the time aware that the best they could hope for was that either Lancia or Audi — or both — should hit problems,

Why Therier struggled in Corsica...



and maybe allow the Opels into the competition.

The drivers never gave anything less than their best, and with the leading two teams often playing tactical games, the red, white and blue Opels were often responsible for providing much of the drama and excitement. Ari took fourth on the Acropolis, Henri fourth on Sanremo, a result which not only pleased the crew — who had lacked a good result for quite a while — but delighted the Italian crowds who are not slow in demonstrating their love for a man prepared to produce the goods. If he lacked that certain sparkle through the last night, then maybe it was because one eye was constantly watching the temperature gauge, with the knowledge that the head gasket had blown days earlier, the Cosworth lump struggling on to the finish line — just.

The Lombard RAC Rally marked the final appearance of all three drivers together in one team, and end-of-year celebrations were rather marred the night before the start, when Rothmans announced that they were sacking Fred Gallagher, despite Henri Toivonen's feelings: this the night before the start of a major rally. As it happened, both Ari and Henri chucked their cars at the scenery, and Jimmy McRae took his best ever result with a third place, on an event loaded with FISA A seeds.

It was the best result for the Manta, but no way did it come near the team's top finish of the year, which belonged to Ari Vatanen and Terry Harryman — the two emerging as the stars of a classic Safari Rally — with their Ascona 400 back at Easter time.

In a dream...

Days after the finish, Harryman was still convinced that it was all a dream, recounting discussions that the two men had had early in the rally, about whether even to continue. One early section involved averaging 141kph for 110kms, through dust and over tricky tracks, when the Ascona broke its axle, and as Audi rescued a troubled Mikkola by helicopter, the crew had to wait for a van to fight its way to help. By the time the car reached Mombasa, it had suffered five punctures, and on the way back, it hit a zebra, bent the steering, and then had another axle fail. They were hours behind the leading Quattro.

But with **Rauno Aaltonen**, always a key figure in Opel's Safari efforts, retiring through a failed oil pump, Vatanen could gradually see himself climbing back up the leader board. Preston — the leader — had crashed; the remarkable Range

Rover of **Rob Collinge** was now struggling to keep pace; Mouton was in engine difficulties; **Timo Salonen** had retired with a broken camshaft; and suddenly, on that last leg, the Opel duo found themselves holding a slender lead over Mikkola — still charging back up the order, after his early cylinder head problems. And that's the way it finished up front, with Mikkola denied victory by just 6 minutes, in one of the most nail-biting finishes ever.

New rival

Six months later on the same Continent, the World Champion elect was forced to accept another second place, as a new rival entered the fray and produced the other surprise result of the championship year. **Bjorn Waldegaard** — for so long relegated to the role of test and development driver with Toyota, as they fought to get a Group B car into competitive trim — popped up, and won the Ivory Coast Rally. The team may have been absent for a while, but the expertise of team boss Ove Andersson, Henry Liddon and the Cologne-based mechanics ensured that their return came cleanly and efficiently.

The car, Andersson admitted, was not what he had ideally wanted to build,

David 'this is real sweat' Whitehead.



being a two-wheel-drive turbocharged Twin Cam Celica, with around 350bhp. "I wanted a four-wheel-drive car," he commented before the launch on the 1000 Lakes, "but this is what I got, so we must make the most of it." Capitalising on the wealth of experience in the Ivory Coast, he used Per Eklund, Waldegaard, and youngster **Juha Kankkunen** in impressive manner; leaving the — admittedly thin — opposition to pick up the pieces. How the rally continues as part of the sport's major championship continues to remain a mystery to most involved, however, and again locals were signed up to drive cars across the start ramp in Abidjan, just to make up the numbers!

On both of the other two events which Toyota entered this year there was something of a contrast, with Kankkunen emerging as the performer, getting his Celica round the route safely while his team mates floundered. Sixth on the debut event in Finland, and another top 10 finish on the RAC did a great deal to advance this Timo Makinen protégé; surely the next name to emerge from Finland.

Nissan's nadir?

While Toyota fortunes improved, therefore, as the season developed, the same could hardly be said of their Japanese rivals, Nissan. Now committed to the 240 RS model — which features few real improvements over the old Violet and isn't as strong — Nissan had to watch as their cars failed badly on the Safari, an event which has gone their way on the last four occasions. Their high spot must have been Timo Salonen's second place in New Zealand, where he drove well, but perhaps not nearly as well as **Tony Pond** on the Tour de Corse.

Brilliant Pond

Entered by Team Nissan Europe, run by Blydenstein Racing from Shepreth for a limited number of European appearances for the team, Pond and **Rob Arthur** used a "nicely run-in example" to tremendous effect around the twisting asphalt, and earned sixth overall, against opposition which included factory efforts from Lancia, Audi, Opel, Renault and even BMW.

With Salonen crashing on the RAC Rally, the only other notable finishes came courtesy of Shekhar Mehta, who toured round Greece in traditional — effective — style to take sixth, and from **Terry Kaby**, who managed to get one of the cars to Portugal and finished eighth.

Thus, while Nissan relied on a variety of men around the world, Renault did just the opposite, releasing **Jean Ragnotti** to drive a solo factory Renault 5 Turbo "Tour de Corse" on a few occasions. The new model — a development of the Group 4 car — always suffered tyre problems, because of the Group B restrictions or rim widths depending on the engine capacity. Still they tried in Monte, in Corsica — where a cow landed almost on co-driver **Jean Marc Andrie** — and on the Acropolis, without much effect, heading home to think again, and leaving **Jean Luc Therier** to attack — with gusto — in his semi-works machine. He even led Monte for the opening stage, but went out; starred for a while in Portugal; and had to give best to **Bruno Saby** on the Tour de Corse, where the Philips backed driver finished fifth behind a queue of Lancias.

Corsica also saw an appearance from the works Citroen drivers, Guy Verrier's project gradually gaining momentum with the confirmation of a four-wheel-drive project for 1984, and the real machine in 1985 for a major World series attack.



Although the spectacle is largely confined to the cars, people matter too. Harryman, Grindrod and Gallagher play three wise monkeys . . .

For now, however, the all-French driver line-up stuck with the Visa Chrono, a front-wheel-drive 1440cc plastic special, and started several European rounds, gaining experience, never quite repeating some of the sensational top 10 finishes of 1982, although **Alain Coppier** was ninth in Corsica. Still, they were a regular class winner, and the model is a major feature in Europe, something which the enthusiastic Citroen GB management obviously hope to see reflected in Britain in the not too distant future.

Future ambitions

Next year, however, the French factory team must be looking at events further afield, and particularly Africa if they hold title ambitions for the future. The vastly differing conditions experienced by competitors in the World series mean it is no simple exercise to chase the premier awards. What would be good in Africa, would be disastrous on the RAC, and it is unfortunate, but understandable, that many factories prefer to stick with events on which they can expect to feature strongly; and add to the true flavour of the occasion.

An example would be the appearance of a Saab 99 Turbo in the snows of

Sweden for Per Eklund, and **Bernard Beguin's** 400bhp BMW M1 in Corsica, events which offered both men considerable opportunities, but might appear rather unlikely contenders should they appear on each other's patch.

Other factories which made brief appearances included a Mitsubishi, now based in England with Andrew Cowan and Allan Wilkinson in control, running a solo Lancer Turbo for **Harri Toivonen** on the 1000 Lakes and RAC; Mazda, who used the same man in Greece with an RX-7 in Group 2 trim; Subaru, who appeared on the Safari again; and even Vauxhall, who benefited from **Russell Brookes's** efforts on his home event.

Anyones game

It is obviously one of the symptoms of the new technical formulae that no-one has actually looked seriously at Group A in the championship, with the category usually open to any local contender in the right place at the right time. It must almost be a continuing embarrassment to those in Paris that the new Groups received virtually no support whenever the series moved out of Europe.

Over the more familiar events, however, there was growing enthusiasm, and a few professional teams looking ever

more closely at the potential. The successes were evenly spread between front-wheel-drive and rear-wheel-drive, with Alfa Romeo GTV 6s collecting the category on Monte Carlo and Sanremo, and **Kalle Grundel's** Golf GTi dominant in Sweden and Britain. For the RWD fraternity, honour was upheld in Portugal by **Marc Duez** in a Manta GT/E. GM machinery also featuring in Corsica and the 1000 Lakes where it was the older Ascona which came out on top. In Greece it was a Toyota Corolla. And splitting things down the middle Franz Wurz gave the 80 Quattro an easy success in Argentina, for the first 4WD Group A victory. The car, however, had already made a major impact on the scene earlier in the season — before qualifying for the production category — when Stig Blomqvist threatened to win the Swedish Rally outright on its debut, chasing Mikkola's Group B Quattro all the way.

It seems likely that it will be the other half of the VAG empire which develops Group A, with suggestions that a Golf GTi will contest several events next year. For their part FISA seem to be trying to establish a separate Group A series, including the biggest European Championship rallies, aimed at the young, aspiring driver.

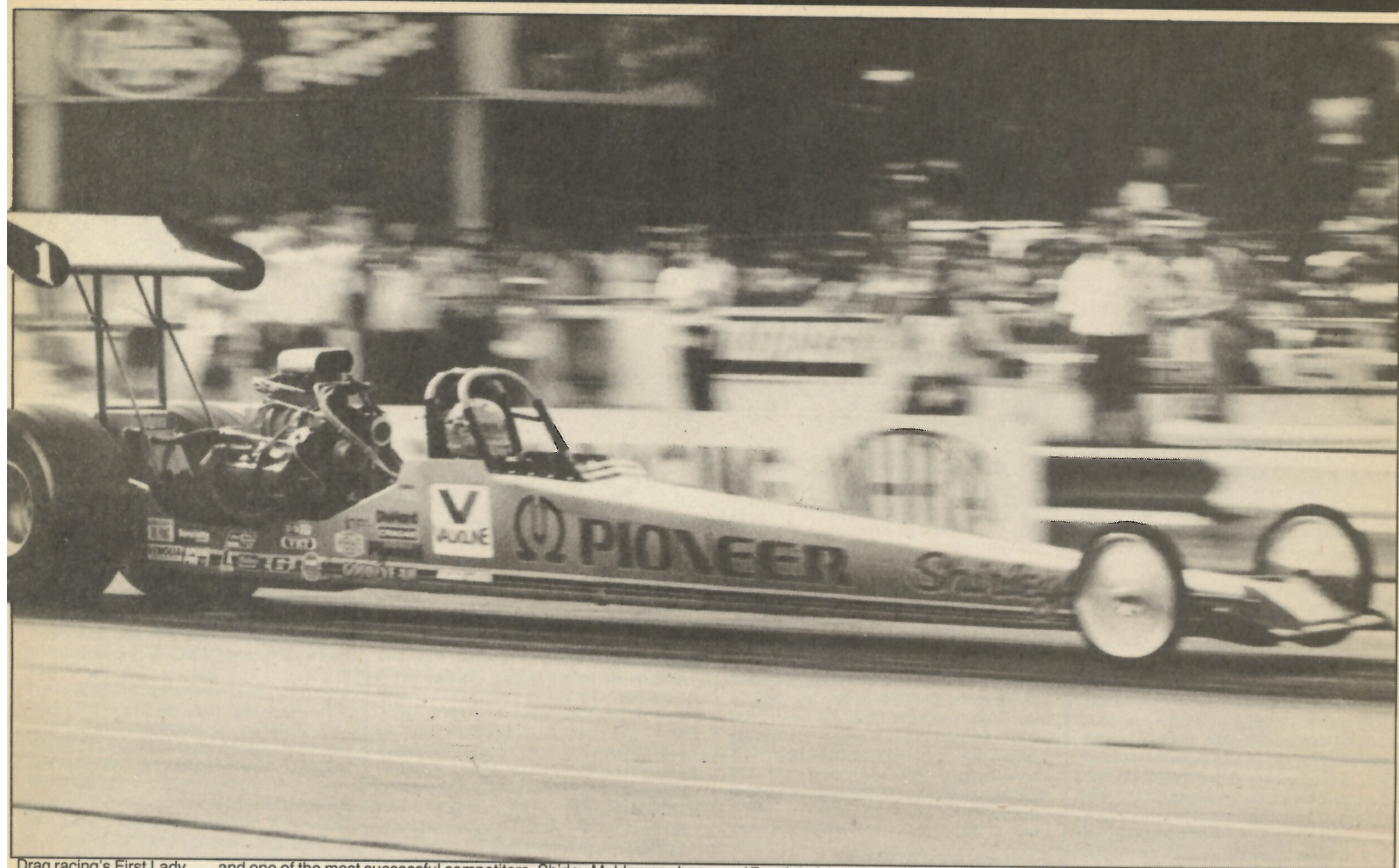
The Junior Teams

Maybe it will prove too expensive and the real young talent will continue to appear on a few World events, supported in certain countries by the recently established Junior Teams. Britain, Sweden and Finland already have such squads, with established personalities working hard to help those determined to make the grade. It is an ambitious idea, but already in this country many crews have taken their first lessons about winter driving in Sweden, coped with intense heat in France, and been helped in their efforts to tackle the RAC. The effect on the championship events where these teams have appeared has been a new — friendly — rivalry between the countries, and given a new spark of interest to competitions which have often proved a little less than exciting behind the opening pack.

In a time when the average age of our competitors is rising steeply (Mikkola is 41, while Blomqvist's co-driver **Bjorn Cederberg** is now 46), because experience counts for so much, anyone still in their twenties needs to learn as many lessons as they can quickly. Only then — irrespective of any talent they may possess — can they hope to find a works drive and add their contribution at the highest level.

. . . while Eklund, Blomqvist and Waldegaard are pictured taking a sauna in Finland.





Drag racing's First Lady . . . and one of the most successful competitors. Shirley Muldowney has won 17 national events and three Winston World Championships so far.

The heavy metal kids

ROBIN JACKSON takes a look at one of America's most popular forms of motor sport, drag racing

"One good thing about coming to the drag races," declared an American TV commentator, "is that it's made me deaf and I can't hear my wife nag." Drag racing is the world's noisiest, as well as fastest, motor sport. "A pair of nitro-burning dragsters or funny cars," says motoring writer Brock Yates, "make a whole field of Formula 1 cars sound like a lawn party" — and this has caused problems in areas of the States where urban sprawl has edged out towards once-isolated tracks. So too has the attendant rise in land values, inviting commercial developers to cast covetous eyes at dragstrip sites across the country. These difficulties, though, are mere thorns in the side of a sport which, in all other respects, is booming. The National Hot Rod Association, American drag racing's premier sanctioning body, is bullishly confident about the sport's well-being through the 1980s, an attitude stimulated not only by the ever-growing number of participants but also by the readiness of big business, inside and outside the car industry, to pour money into its coffers.

Locally organised 'bracket' races held at tracks all over the States attract weekly entry-lists, often numbering into the hundreds. At this basic level, drag racing is simple and accessible: competitions are divided into separate time-brackets to accommodate cars and motorcycles, so that vehicles will be evenly matched, regardless of size or type, with others of similar performance. The key to success is consistency of tuning and refinement of driving skills, rather than mechanical genius and abundance of funds; higher

Pro Stock ace, Bob Gledden, blasts off in his Thunderbird . . . 0-180mph in 7.6s.



winnings paid by the quicker brackets, as well as a racer's natural instincts, provide the incentive to go faster.

The grass roots

Bracket racing today represents the sport's grass roots, having supplanted the more sophisticated and demanding 'class' racing which still forms the backbone of the National Hot Rod Association's Winston World Championship Series, an annual programme of 30 divisional and 12 national events catering to the nominal amateur, or 'sportsman', with a professional attitude to his pastime. The national event is the equivalent of a Grand Prix, where sportsmen mix with the genuine professionals, whose spectacular, high-speed activities defy belief and keep the crowds flocking back for more.

Flagship event

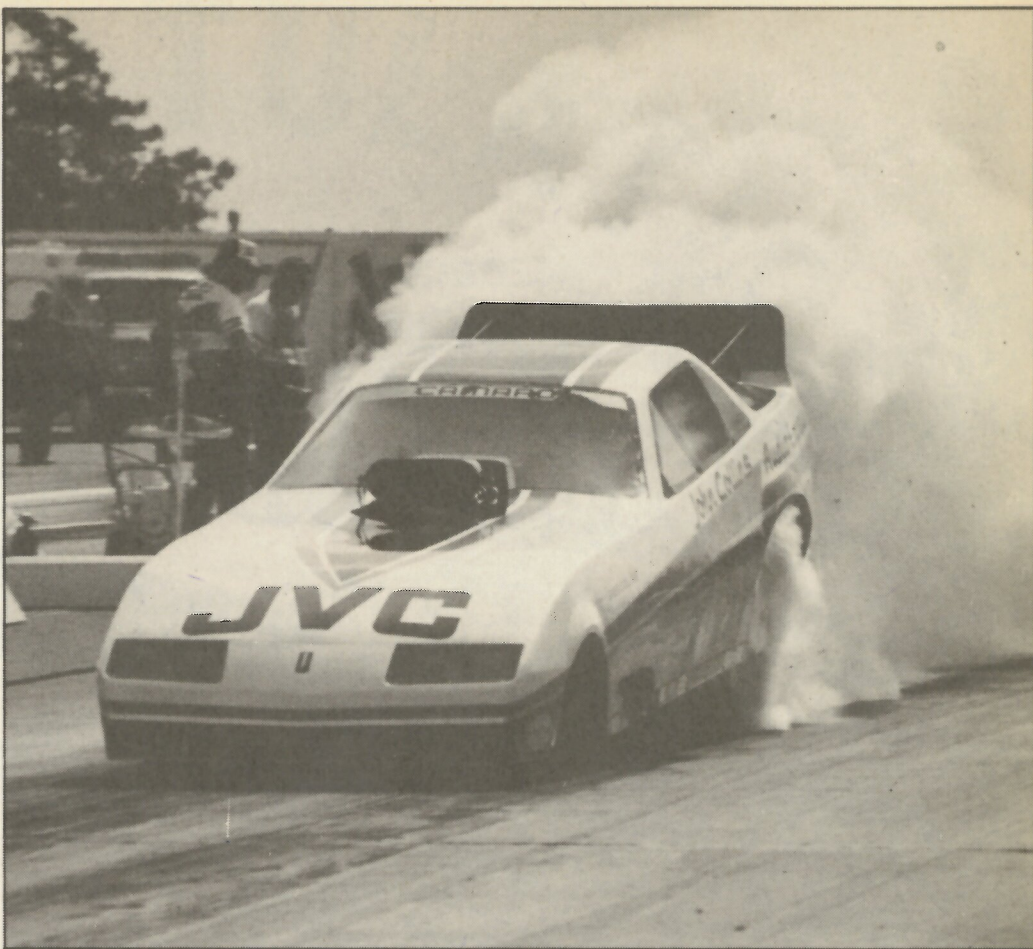
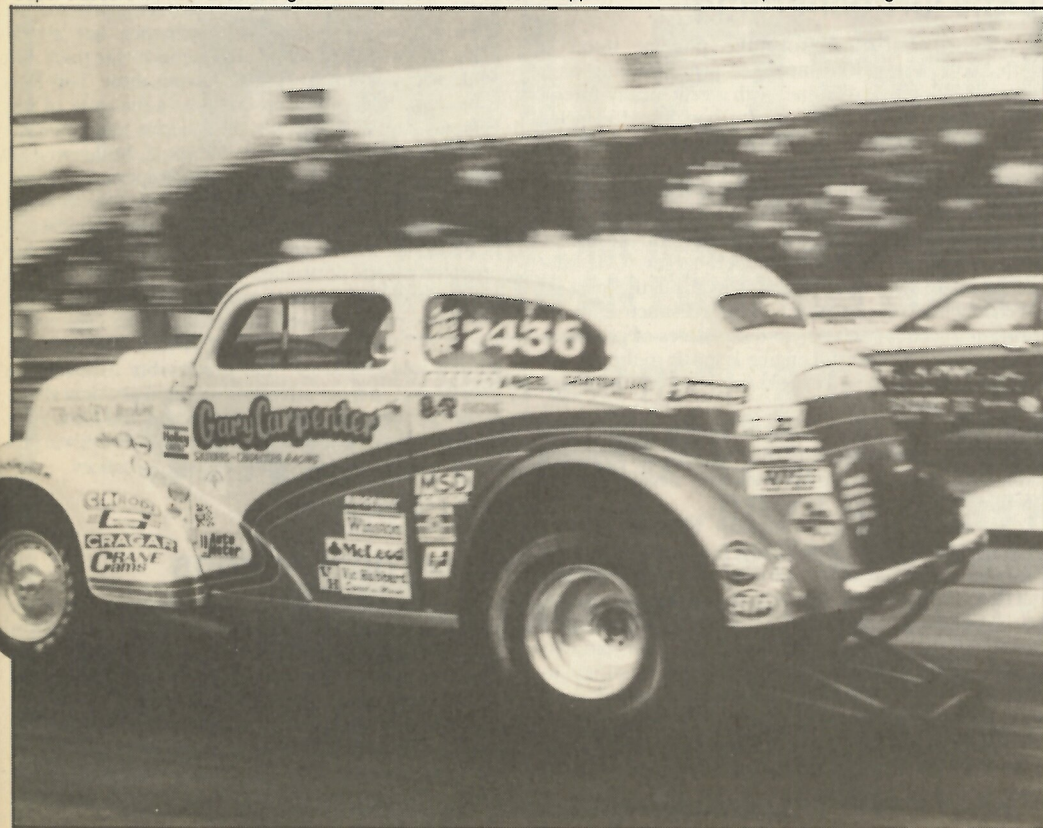
The flagship event of NHRA's calendar is the US Nationals, held each September at Indianapolis, which annually attracts around a thousand entries. The sight of Indy Raceway Park's extensive pits, positively bulging with so many vehicles, is one of the more remarkable in motor sport, and the organisation which co-ordinates the entries, right down to their correct pairs, over five days of ceaseless, dawn-to-dusk racing, with scarcely a slip in the schedule, is little short of miraculous.

Competition is intense at all levels, with no 'next lap' on which to remedy one's mistakes. Everything has to be right first time. To win at a national event requires, among other things, stamina: at Indy '83, for instance, once qualifying against the clock had been completed, the fields in Stock and Super Stock Eliminator each numbered 96 qualifiers, who had then to eliminate one another until an eventual winner remained; the Super Gas field was a 128 strong.

Split-second racing

The racing itself is literally split-second — Super Gas at the 1983 Spring nationals, in Ohio, featured a field of 64 cars in which just 0.032sec separated the first and last qualifiers; the spread covering the 128 runners at Indy was all of 0.068sec. Unlike the other sportsman eliminators, in which a vehicle's type, capacity and weight define its class, Super Gas is a bracket-type

'Super Gassers' come in all sorts of guises. The rules allow freedom of appearance, but demand precision driving.



Funny cars have proved extremely popular, but while the spectacle still remains, it has led to cut-throat competition.

competition, in which competitors not only have to beat their opponents, but must do so in a time as near to 9.90 seconds as possible — anything quicker merits disqualification, anything fractionally slower usually merits a loss to the opponent. As the only bracket eliminator in NHRA's national event programme, it maintains the sport's links between top level and grass roots, reflecting drag racing's still-recent, populist origins.

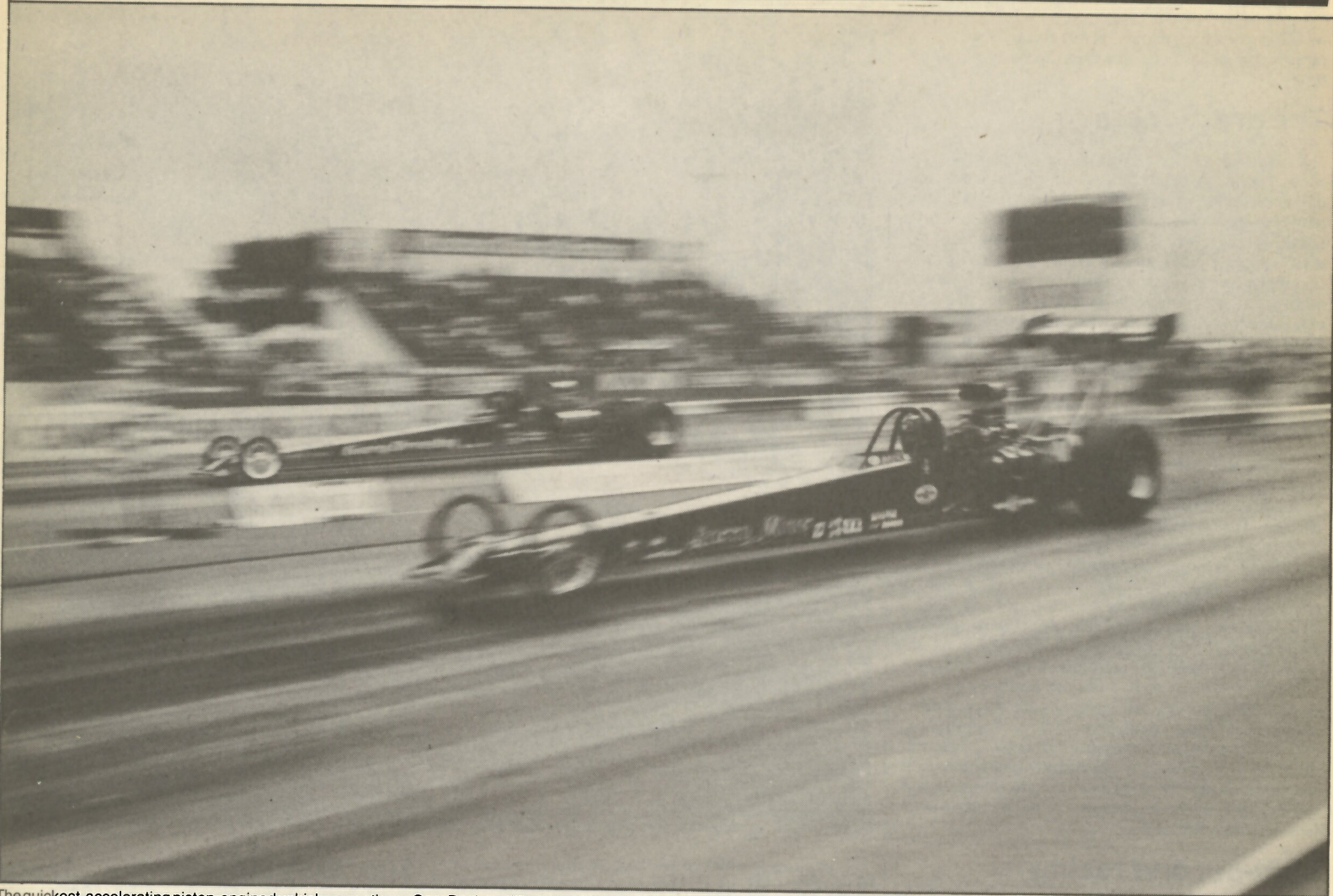
The 'Keith Black'

Even the high-dollar professionals retain some links. In the early 1960s, drag racing's so-called 'Golden Age', every street-block in Southern California seemed to boast its own fuel dragster operation, consisting of three or four enthusiasts who would pool their resources to build and operate a dragster on an annual budget that would scarcely keep one of today's teams in fuel and pistons for one big meet. Then, large-displacement Chrysler V8s, with their hemispherical cylinder heads, were the engines most suited to burning the potent, nitro-methane fuel which came to be drag racing's hallmark. Engine-builders like Keith Black would rejuvenate old truck blocks, often liberated from junkyards, equipping them with sharp cams, heavy-duty cranks and top-mounted superchargers, turning them into potential winners for growing lists of clients. Now, the dominant engine in fuel racing is the 'Keith Black', a lightweight, high-tech V8 derived from the Chrysler hemi, and filled with the specialised and costly parts needed to develop the 3000 horsepower claimed for today's fuel dragsters and funny cars.

Gary Beck

Using this power most emphatically is Gary Beck, who, in 1983, drove team boss Larry Minor's fuel dragster through the quarter-mile in just 5.39s, crossing the finish-line at over 257mph. Beck's fortunes might be compared with those of Renault's Formula 1 cars in recent years, often threatening to swamp the opposition but seldom succeeding in the heat of competition. In 1983, though, everything paid off for Beck. He swamped the opposition, on a sufficient number of occasions, to secure a second Top Fuel World Championship, having last won it in 1974. Beck is chief among those who have reaffirmed Top Fuel's customary eminence.

For a time, during the late '70s, Top Fuel performance standards stagnated, and pressure grew to rationalise (a situation akin, in circuit racing terms, to having a technically-similar, rival class rubbing shoul-



The quickest-accelerating piston-engined vehicle on earth... Gary Beck qualified Larry Minor's dragster on pole on 10 out of 12 occasions.

►►
 ders with Formula 1), by dropping the dragsters and concentrating solely on the usurping funny cars. Even now, there is a gentlemanly, Corinthian air about Top Fuel, while the funnies (so called since the '60s when, as recognisable sedans sprouting high-performance parts, they looked 'kinda funny') are all hard-headed business and the favourite target for corporate sponsors. Partly, this is due to their shape — the broad, flat expanses of a funny car's body are deemed to have greater billboard qualities than the narrow panels of a long, lean dragster — and, partly, it stems from their popularity. Americans have a strong sense of brand loyalty towards cars, after the fashion of Italy's Ferrari fans, and drag racing audiences can identify with funny car bodies — light, plastic replicas of current saloon designs — even though the vehicles underneath are, to all intents, simply short-wheelbase dragsters, equipped with the same hardware and running almost as quickly. Even Detroit is in on the sponsorship act: Ford and General Motors support certain cars carrying their body styles, and Chrysler like it to be known that the engines lurking beneath are invariably derived from one of theirs.

The V8

Professional drag racing's links with everyday motoring, in reality already tenuous, may recede further as the V6 engine replaces the V8 on Detroit's production lines. As America's staple performance powerplant, the large-displacement V8 has featured largely in drag racing's development. V6s are infiltrating the lower echelons of the sport, but at its highest levels, there is no substitute for cubic inches to satisfy its special, muscular demands. There is already a thriving business in purpose-built V8s — Chryslers from Milodon and Donovan, as well as Keith Black, and Chevy derivatives by Rodeck and Arias — and recent rule changes in the third professional category — Pro Stock (carburetted, gasoline-burning 'factory hot rods') — only confirmed this independence, replacing

the old 'weight breaks' (which related a car's engine capacity to its type and weight), with universal, 'mountain motor' rules specifying a minimum weight (2350lbs) and a maximum capacity of 500 cubic ins. One sees few 8-litre V6s on the horizon.

Little turbocharging

Another departure from the popular trend is reflected in the paltry impact of turbocharging on a sport thoroughly acquainted with mechanically-forced fuel induction. On occasions, turbocharged vehicles have met with success in slower classes, but development programmes for heavyweight, fuel-burning applications, have always foundered short of fruition. Much of the blame is credited to turbo-lag, an effect found unacceptable in circles accustomed to the instant response of a conventional supercharger. One suspects, also, an unspoken reluctance on the part of dedicated fuel racers to sacrifice their distinctive, *basso profundo*, artillery clatter to the dictates of progress. The sound of a powerful engine is music to the ears of any car enthusiast, and drag racing assuredly occupies the 'heavy metal rock-'n'-roll' end of motor sport's Tin Pan Alley. At close quarters, blown fuel motors provide a uniquely sensual experience; muffled, whining, turbocharged pieces are decidedly less thrilling.

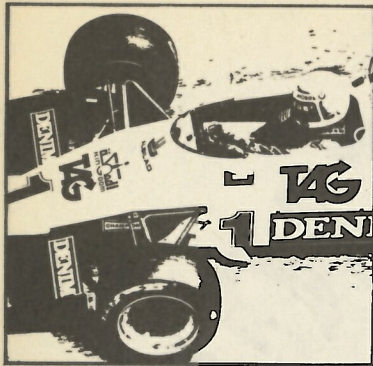
The sport's audience-ratings are higher than ever before, and the increased involvement of major firms keen to associate with a thriving concern improves NHRA's influence in the media market-place. NHRA racing received its first television coverage 20 years ago; today, all their main events are recorded for national airing, and glimpses are sometimes seen fleetingly in Britain, on ITV's *World of Sport*. Channel 4 have said they are considering a one-hour drag racing special during 1984, though, given that station's fondness for televising American sport, British drag fans might even have hoped for a little more.

However, drag racing's biggest bonus may come

from an unlikely source; the cinema. With few exceptions, car films have never brought critical or popular acclaim, and drag racing's screen history, such as it is, remains unremittingly awful. Now Hollywood has seen fit to produce a biopic of Top Fuel driver Shirley Muldowney, presently the sport's most visible personality. In recent years, female racing drivers have been known to acquire a prominence not always consistent with their accomplishments on the track, but Muldowney is an exception, having three Top Fuel Championships to her credit — as a measure of this achievement, Gary Beck's 1983 success made him the first *man* to win two. Within the sport, Muldowney is respected as an equal, by some, and a superior, by most, but her wider fame undoubtedly still owes much to her sex — though this once proved as great an obstacle as it is today an advantage, since only determined and repeated efforts persuaded the authorities at the time even to countenance her licence application, much less her active participation. Her struggles are depicted in the film, called *Heart Like A Wheel*. The subject-matter, and the banal title, predictably deterred the general public from attending selected preview showings, but its appearance at the Toronto and New York Film Festivals, of all places, was received with warmth and delight by professionally critical audiences.

Oscar nominations

Most importantly, from a publicity angle, there has been talk of an Oscar nomination for its star, actress Bonnie Bedelia. Drag race devotees, sobered by years of media neglect, are naturally cynical about all the fuss, but it would seem the movie is not at all bad. It is certainly too early to contemplate the possibilities posed by its eventual success, if any; but then, even a year ago, anyone suggesting that a drag race movie might get this far would have been given a very wide berth indeed.



INTERNATIONAL RACES

BAYPARK

Right for Radisich

New Zealander Paul Radisich took his Ralt RT4 to victory in the opening round of the Just Juice Formula Pacific Championship at Baypark Tauranga on January 2. He won both 38 lap heats, fighting off a stern challenge from fellow Kiwi Ken Smith (Ralt RT4) in the second race.

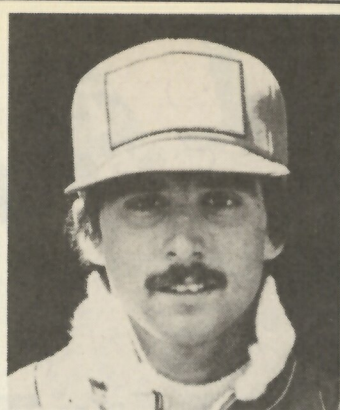
In the first event, Radisich won by 3.8secs from the Dart 83M of yet another New Zealander, Brett Riley with Smith a close third. Britain's Ian Flux never figured in the top placings after engine and handling problems with his Abdex Ralt.

Radisich, New Zealand's 1984 Driver to Europe winner, started from pole position and was never headed in either races. He led Riley, Californian Justin Revene (Ralt RT4), New Zealand's Dave McMillan (Dart 83M) and Ken Smith at the start while Smith moved into third on the opening lap and closed in on Riley, although was never able to pass the Dart. Revene and McMillan battled for fourth with McMillan passing the American on lap 8. It was then the turn of Kiwi Graeme Lawrence (Ralt RT4) to attack Revene, the local driver moving through on lap 35 when Revene's car lost power and fifth place. Radisich and Riley shared fastest lap of 54.98secs, which was outside the Formula Mondial record of 53.8s for the 1.33 mile track, set by Roberto Moreno in 1982.

Smith made a much better start in heat two and began to battle with leader Radisich. He tried everything he knew to find a way past but had to be content with a close second. Riley assumed third and drove a lonely race in that position, while Revene and McMillan ran fourth and fifth throughout.

Graham Watson (Ralt RT4) ran next

Two wins have taken Paul Radisich into an early lead in the Just Juice series.



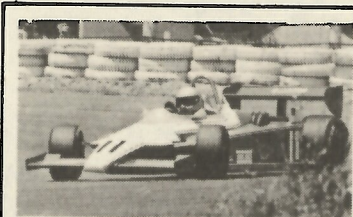
Radisich — promising youngster.

QUALIFYING

1 Paul Radisich (NZ)	Ralt	53.97
2 Ken Smith (NZ)	Ralt	54.32
3 Brett Riley (NZ)	Dart	54.42
4 Justin Revene (USA)	Ralt	54.51
5 Dave McMillan (NZ)	Dart	54.52
6 Graham Watson (AUS)	Ralt	54.55
7 Graeme Lawrence (NZ)	Ralt	54.70
8 Grant Campbell (NZ)	Ralt	55.82
9 Ian Flux (GB)	Ralt	55.87
10 Charlie Thomassen (NZ)	Ralt	56.18

until a spin relegated him to the tail of the field.

On lap 20, Radisich and Smith were still locked together with a 6secs gap to Riley, who was 3secs up on Revene, these leading positions remaining unchanged to the finish, although Smith set fastest lap.



Smith displays his press-on style.

BAYPARK (NZ)

Jan 2

Just Juice International Formula Pacific Championship, rounds 1 & 2 2 x 38 lap heats — 101.08 miles

Heat 1

1. Paul Radisich (Ralt RT4), 35m 05.33s, 86.42mph;
2. Brett Riley (Dart 83M), 35m 08.20s;
3. Ken Smith (Ralt RT4), 35m 08.85s;
4. Dave McMillan (Dart 83M), 35m 11.18s;
5. Graeme Lawrence (Ralt RT4), 35m 20.21s;
6. Justin Revene (Ralt RT4), 35m 34.65s.

Fastest lap: Radisich and Riley, 54.98s, 87.09mph.

- Heat 2: 1, Radisich, 35m 01.82s, 86.56mph; 2 Smith, 35m 02.00s; 3, Riley, 35m 15.50s; 4, Revene, 35m 19.70s; 5, McMillan, 35m 28.64s; 6, Grant Campbell (Ralt RT4), 35m 57.50s.

Fastest lap: Smith, 54.75s, 87.45mph.



NATIONAL RALLIES

NORTHALLERTON STAGES

Elliot's Charge

York driver Andy Elliott drove his Ford Escort to a hard earned 38secs victory on the recent Northallerton Forest Stages, sponsored by Northallerton Engineering Services and Motoscope. The rally was run over six stages in the fast Dalby, Staindale and Wykeham Forests, although the tests were covered in snow and ice which made the conditions treacherous.

The first to be caught out was Ian Oldfield who rolled his Ford Escort on a fast right hander before the flying finish of the first stage. He regained the road but was forced to retire. After three stages, Steve Bannister's Escort led Mark Desort's TR7 V8 with Piggy Thompson making a return to rallying in third with his Porsche. On the fourth test, however, Bannister broke a stub axle and took a maximum to put him well down the field.

As the rally entered Wykeham for the final two stages, Desort led from Thompson with Elliott third but at the previous service area Elliott had put on some new Finnish Hakka snow tyres in readiness for a late charge. He was able to pull out over 1min from Desort on the last stage, the latter also passed by Thompson. Elliott's win on his first outing with the new car was managed with a new engine that was only run in on the way to the start.

MARK WILFORD

NORTHALLERTON FOREST STAGES (GB)

Dec 11

1. Andy Elliott/Mick Dent (Ford Escort RS), 36m08s;
2. Piggy Thompson/Dave Elcock (Porsche 911), 36m46s;
3. Mark Desort/Dave Lambourne (Triumph TR7 V8), 36m55s;
4. Anthony Eaton/Dave Boyes (Ford Escort RS), 37m19s;
5. Pete Slight/Stewart Anable (Ford Escort RS), 37m29s;
6. Patrick Johnson/Dave Bell (Opel Kadett GT/E), 37m36s.

CHRISTMAS STAGES

Christmas pudding

Andy Elliott and Mick Dent scored their third successive win on Northallerton AC's Sherwoods Christmas Stages Rally, the day after Boxing Day. Elliott's Escort finished 48secs ahead of Anthony Eaton's similar car with Russell Close a

further 1m34s adrift in his Group A Manta GT/E.

The rally comprised 18 stages on military land but the action began at Croft rallycross circuit where Elliott opened up a 14secs lead over Eaton with Steve Shaw's Escort holding third from Close. Malcolm Davey lost time after hitting tyres and Steve Bannister fell back with road penalties.

By lunch, Elliott had extended his lead on the wet stages to 22secs with Close moving into second when Eaton chose unsuitable tyres. Bannister fell even further behind, drowning out on the third stage, and later retired along with Alec Cannon's Avenger.

Eaton regained second place on the four stages immediately after lunch while behind Close, Mark Peacock was chasing hard and catching Dave Turnbull in fourth.

The final stages included a return to Croft — now in darkness — but it did not trouble the leader who came home well in the clear. Close, on the other hand, was lucky to take third as the differential began to break up and he lost a lot of time. Peacock was able to snatch fourth from Davey by 17secs at the end.

The Northallerton AC Challenge to the driver who scored the lowest aggregate over the two events, the Forest Stages and the Christmas Stages, was won by Elliott from Eaton and Close.

MARK WILFORD

CHRISTMAS STAGES (GB) Dec 27

1. Andy Elliott/Mick Dent (Ford Escort RS), 56m36s;
2. Anthony Eaton/Gordon Reid (Ford Escort RS), 57m26s;
3. Russell Close/Dave Wilford (Opel Manta GT/E), 59m00s;
4. Mark Peacock/Sandra Cargill (Ford Escort RS), 59m31s;
5. Malcolm Davey/Howard Turner (Ford Escort RS2000), 59.58s;
6. Dave Turnbull/Graeme Kallett (Ford Escort RS), 60m38s.

VIRGO RALLY

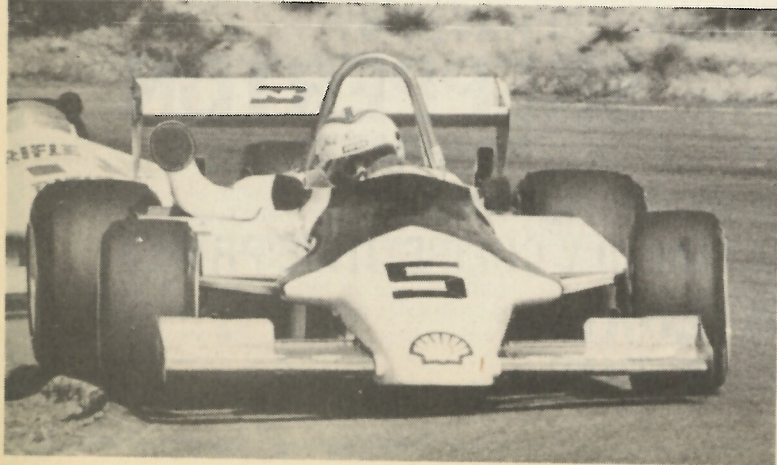
Happy New Rover

Phil Collins was sailing serenely towards victory on the Schreider Zenith Virgo Rally on New Year's Eve over the gale swept Epynt tarmac and with only one stage to go he held a lead of over 1min.

But suddenly it all went wrong. The red Opel Manta 400 clipped a rock, puncturing a tyre and the resultant delay while the wheel was changed, and a momentary engine seizure near the finish, demoted him to third and 13 fastest stage times became suddenly irrelevant.

Victory therefore went to the new Rover SD1 of Epynt expert, Bob Fowden. The heavy car with its innovative fully floating half shafts was a real handful on the twisty bits and lost out heavily to the more nimble opposition. Down the straights, however, the 340bhp beast really came into its own and he claimed six best times during the miserable day. Between Fowden and Collins, the Talbot Sunbeam Lotus of Mal Stuart ended a storming day in runner up position.

For the opening round of the Castrol/Motoring News Tarmac Championship, there was a healthy influx from across the Irish Sea. 17 crews among the 120 strong entry. James Doherty benefitted best by employing local man Ed Morgan and was rewarded with fifth place, only a fraction behind Mike Pattison, who was furious to discover six wheels and tyres stolen from



VIRGO RALLY continued

outside his hotel bedroom just one hour before the start.

Hugh O'Brien/Flint McCullagh pipped their arch-rivals Bertie Law/George Miller by 2secs but Ken McKinstry's times were thrown in the dustbin when he swapped co-drivers at half time!

The Port Talbot MCEvent was also the opening round of the new Nicolet Instruments Welsh Tarmac Championship and 29 of the registered 80 drivers got amongst the points. In the over 2000cc class, Fowden and Stuart took top honours, while the rapid Renault 5 Turbo of John Price had 5mins in hand over Brian Jones's RS2000 in the under 2000cc section.

The Talbot Sunbeam of Carwyn Davies took the prize for the 1300 to 1600cc category, while Graham Cole's nimble little Davrian set a searing pace to win the smallest class by over 10mins.

DEREK HILL



OFF-TRACK SPORT

BRANDS RALLYCROSS

Gracious Greasley

John Greasley ruled the roost at the fifth and final round of the Shell Oils Rallycross Championship at Brands Hatch on Bank Holiday Tuesday, when his Dage Group 3.4 litre Porsche set BTD during qualifying, won the Division 2 final, and then led the Superfinal from start to finish.

Barry Hathaway had already clinched the championship overall, and so his victory in the Division 1 final provided the icing on his cake. John Welch retained his points advantage in the over 1600cc class, and Tony Barty drove well to become the under 1600cc champion.

For once a Division 1 car set the pace in qualifying, Barry Hathaway holding BTD after the first runs with a time of 3m 07.0s. The elder of the Hathaway brothers went even quicker on his second run, but the little Fiesta was pipped during the next heat when Greasley got down to 3m 04.8s.

The final qualifier, race 13, certainly proved unlucky for some. Barry Squibb's Escort pulled off with electrical failure while leading; John Welch confessed to making an error when his 2.3 Escort spun round under braking for Paddock Turn and lost the lead, and Graham Hathaway was forced to retire when a low-profile tyre assumed an even lower profile and rolled off its rim!

The Division 1 'A' Final was led all the way by Barry Hathaway, who steadily pulled away from Tony Barty's faithful

1500cc Mini. Dave Pritchard's smart Metro led the chase, followed by Peter Brown (Fiesta), the ever-improving Vic Moyce (Mini), Nigel Humphreys' familiar Mini and Tony Brant (Escort).

The Division 2 'A' Final was much more exciting. Rob Gibson's Porsche out-dragged John Greasley's later model at the start and slid into Paddock Turn just ahead. Dennis Atkinson's red example completed the leading trio of Porsches, pursued by Colin Howard (Escort), Squibb, Will Gollop, whose Saab is now resplendent in contrasting shades of light and dark blue, and the hard-charging Dimi Mavropoulos in his new Audi.

Next time round, Greasley found some extra grip up Druids Hill and powered past Gibson to take the lead. Gollop moved ahead of Squibb as the Escort slowed with a flat rear tyre, but then the Saab slid round a shade too far as he descended Hoppy's Drop. The front offside corner clobbered a pile of tractor tyres used as markers which promptly rolled lazily across the track in front of the opposition!

Then on the last lap Gibson dropped out when his Porsche plunged into the tyre barriers at the Esses. Greasley stormed across the line to win from Howard (who seems to have found a new lease of life), Atkinson, Mavropoulos, who was hampered by a recalcitrant gearbox, and then Mark Lloyd.

In the 'B' final of the smaller class, the Escorts of Stan Booty and Ross Browning led until Booty's car went sick and Browning almost tipped over as he strayed off course at Langley's Gap. From then on Humphreys led all the way from Phil Hunt's Mini.

John Cross led the larger class 'B' final until his Escort overslid at the chicane and Graham Hathaway's Fiesta scrambled past Len Pepper's Renault 5 turbo to take a long overdue victory. John Welch held third place until his engine, which had been misfiring all day, eventually expired.

John Greasley made no mistake in the Superfinal, and led throughout. Colin Howard had his Escort really wound up and held second place in fine style until he slightly overcooked it at Langley's Gap and spun gently to a halt. Atkinson was going well in third place, but harried hard by Barry Hathaway until the two cars collided at Tumbledown Hill on lap 2, the Fiesta grinding to a halt with damaged suspension.

Hardy then took over the mantle of the leading Division 1 driver and closed right up on Atkinson, but he soon dropped back again and settled for a secure third place, well clear of Mark Lloyd. Sadly, Mavropoulos was a non-starter and so he was denied the chance to gain a little more experience of four-wheel drive.

KERRY DUNLOP

BRANDS HATCH (GB)

Dec 27

Shell Oils Rallycross Championship, round 5

Superfinal:

- 1, John Greasley (3.4 Porsche), 4m 13.0s;
- 2, Dennis Atkinson (3.3 Porsche), 4m 15.8s;
- 3, Tony Barty (1.5 BL Mini), 4m 17.6s;
- 4, Mark Lloyd (2.1 Ford Escort), 4m 19.2s;
- 5, Dave Pritchard (1.5 Austin Metro), 4m 21.7s;
- 6, Peter Brown (1.6 Ford Fiesta), 4m 23.9s.

Division 1: 1, Barry Hathaway (1.6 Ford Fiesta), 4m 09.4s; 2, Barty, 4m 20.0s; 3, Pritchard, 4m 20.5s; 4, Brown, 4m 21.5s; 5, Vic Moyce (1.5 BL Mini), 4m 23.1s; 6, Tony Brant (1.6 Ford Escort), 4m 27.5s.

Division 2: 1, Greasley, 4m 13.0s; 2, Colin Howard (2.0 Ford Escort), 4, 16.0s; 3, Atkinson, 4m 17.0s; 4, Dimi Mavropoulos (2.6 Audi Quattro), 4m 17.7s; 5, Lloyd, 4m 26.1s; 6, Will Gollop (2.0 Saab), 4m 26.1s.

Final Championship positions — overall: Barry Hathaway, 139pts. Division 1: 1, Tony Barty, 69; 2, Tony Brant, 61; 3, Ian Thompson and Dave Pritchard, 60. Division 2: 1, John Welch, 101; 2, Trevor Hopkins, 87; 3, Barry Squibb, 79.

WIMBLEDON HOT RODS

Star-let

George Polley began his New Year celebrations a little bit early when he took a handsome victory in Hot Rod sport's richest-ever race on December 31. A first prize of £2000 was the offering in the Facey Leisure Gold Cup which featured as part of the 'World of Sport' televised Winternationals from Wimbledon Stadium.

Starting in graded order, the early pace in the 50-lap race was set by Bill Bridges with Pete Winstone quick off the mark to take up second. Polley, though, was the man making the most impression and by the midway stage had closed right up on the leaders. Passing both men with little problem, Polley's Blue Line Toyota Starlet hit the front and despite back-markers enabling Winstone to maintain his impressive drive, George was always in command and went across the line with a quarter lap advantage. Winstone in second, came away £750 the richer, while Bridges inherited Barry Lee's third spot. Still running his turbo-powered Escort under an experimental licence, Lee was unable to accept his placing and prize money.

ANN NEAL



Polley's victorious Toyota Starlet.

WIMBLEDON (GB)

Dec 31

Facey Leisure Gold Cup

- 1, George Polley (Toyota Starlet); 2, Pete Winstone (Ford Escort); 3, Bill Bridges (Ford Escort); 4, John Stone (Ford Escort); 5, Ray Brammer (Ford Escort); 6, Ormond Christie (Toyota Starlet).

JB TAYLOR TRIAL

Wright on

Ian Wright borrowed back the Sherpa he built for triple-champion Chris Highwood and convincingly won the JB Taylor Trial on Sunday, December 18. But Chris Highwood maintained his lead in the Southern Championship as his closest rival Robin Alexander fell by the wayside with a differential failure.

The trial was held at that haven of chalk lovers, Peters Pit at Wouldham and comprised three rounds of eight hills. Ian Wright led from the start and it was left for Simon Durling to lead the rest home, albeit 27 points behind and 11 points ahead of his own nearest challenger who was Tony Bristow, maintaining his recent good form.

Quite a few drivers fell by the wayside. As well as Alexander, Bob Maton and Ernie le Bihan also broke diffs, while Phil Haydon had front end trouble and Tony Tickle had a propshaft come adrift. Of the finishers, Jerry Walters relished the conditions to finish fourth ahead of Norman Flury and Martin Wright. Further down the field, Simon Balderson won the novice award.

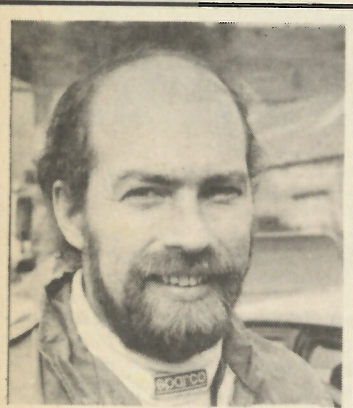
PAUL SHELDON

WOULDHAM (GB)

Dec 18

JB Taylor Trial

- 1, Ian Wright (Sherpa), 25pts; 2, Simon Durling (SRB), 52pts; 3, Tony Bristow (Ibex), 63pts; 4, Jerry Walters (Mandasport), 68pts; 5, Norman Flury (Ibex), 73pts; 6, Martin Wright (Ibex), 75pts.



Collins — led until the last stage.

VIRGO RALLY (GB)

Dec 31

Castrol/Motoring News Tarmac Championship, round 1

Nicolet Welsh Tarmac Championship, round 1

- 1, Bob Fowden/Howell Thomas (Rover SD1), 92m59s;
- 2, Mal Stuart/Ken Rees (Talbot Sunbeam Lotus), 93m49s;
- 3, Phil Collins/Chris Jones (Opel Manta 400), 94m44s;
- 4, Mike Pattison/Peter Watts (Ford Escort RS), 95m36s;
- 5, James Doherty/Ed Morgan (Vauxhall Chevette HSR), 95m42s;
- 6, John Price/Derrick Davies (Renault 5 Turbo), 96m44s.

An inspired Colin Howard leads the Porsches of Greasley and Clark during a heat.



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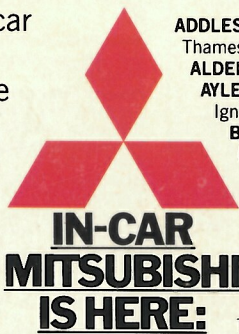
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