

Autosport

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Indycar Racing Special



Face to face with Mario Andretti

Paris - Dakar latest ■ New F1 Toleman

FRONT COVER

Just one photograph on our front cover this week, and that's Mario Andretti in the Newman/Haas Budweiser Lola T800. Andretti added to his already impressive list of achievements by taking the CART/PPG Indycar championship last year. Gordon Kirby reviews the Indycar season starting on page 32 and talks to Indy champ, Mario, starting on page 44. Photo: Paul Webb.

NEXT WEEK

Full review of the World Rally Championship — Toleman designer Rory Byrne interviewed — More from Paris-Dakar — *Armchair Enthusiast* — Monte Carlo Rally preview — Ford Capri 2.8i on test*.



*These items correct at time of going to press.

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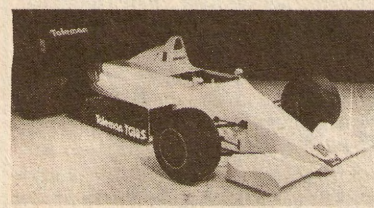
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Autosport

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PARIS-DAKAR 14



Mitsubishi now lead the Paris-Dakar rally, with Britain's Andrew Cowan in second after a blinding leg on the desert stage, while early leader Guy Colsoul dropped down the order after losing his way in the Sahara. All the Rothmans-Porsches have quitted the scene, too . . . A report from Martin Holmes.

ANDREW COWAN 16

Andrew Cowan is the 'old man' on the Paris-Dakar Rally, having spent 25 years in the sport. But, the seasoned campaigner put all his experience to good use on the Raid Santos de Cartier — a charge through the desert with no route instructions, only compass bearings to help navigation — and stormed up to second in the placings. Martin Holmes spoke to him in the middle of the desert to find out more.

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Two *From Our Correspondents* for the price of one this week. Brian Foley takes a look at the racing scene south of the border on the Emerald Isle, while Richard Young sums up the northern sector's season of racing in 1984.

ROAD TEST 24

Mike McCarthy took Austin-Rover's new medium size saloon, the Rover 213 Vanden Plas, out on the road recently, to evaluate this British/Japanese collaboration, and found it a curious mixture to say the least.

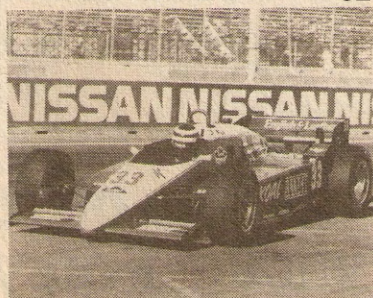
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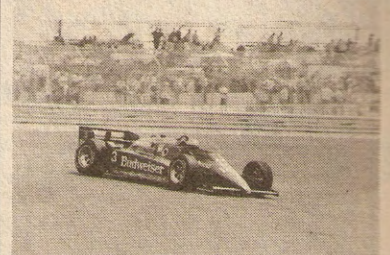
Champions honoured at RAC presentation — New Reynard FF2000 car — Latest FF1600s show well in USA — Big Formula Ford deal for Systime Racing for Britain — First Talon chassis take shape at ARC — Porsche marque racing expansion in '85.

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Last year's CART/PPG Indycar championship was a close fought thing, Mario Andretti only making absolutely sure of the title at the final round at Caesars Palace, Las Vegas. Gordon Kirby provided a detailed insight into the 1984 season.

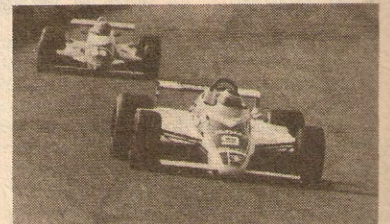
MARIO ANDRETTI 44



Gordon Kirby talks to Mario Andretti, the 1984 Indycar racing champion, about his attitude to the sport, his relationship with Lola and the Newman/Haas team, and a variety of other topics relating to the Indycar/Formula 1 scene.



ROBERTO GUERRERO 51



Roberto Guerrero left Formula 1 racing at the end of 1983 when the Theodore team folded and went to America in search of an Indycar driver. In his first year of CART racing, the young Colombian proved himself well, winning the Rookie of the Year award. John Zimmerman interviewed the talented Guerrero.

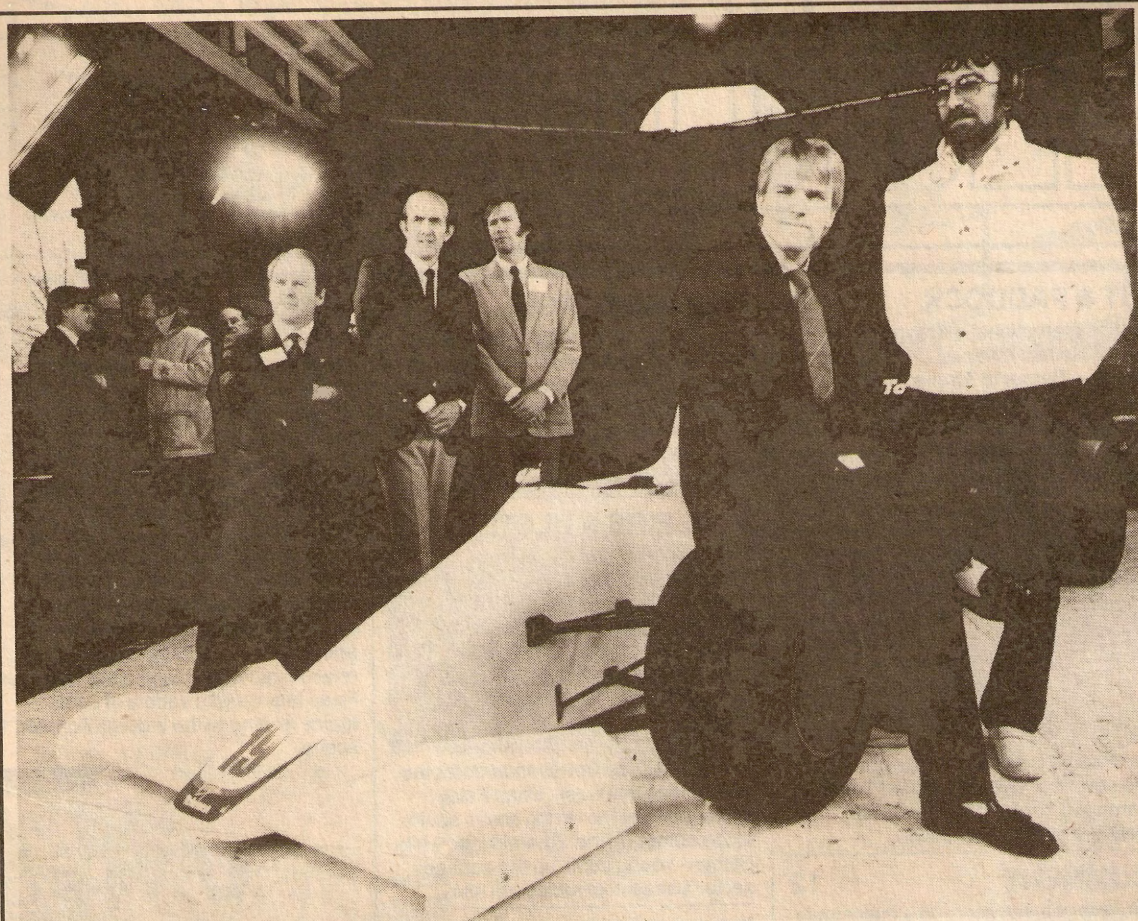
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Our various regional scribes report on last year's club rallying season.

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Formula Ford 1600 action from the States — Final Irish championship points standings — Rallycross from Mondello Park and Brands Hatch — Antero Laine wins opening Finnish rally championship round — Plus the Archie Langley trial.



No tyre deal yet for new F1 Toleman

The Toleman team announced its latest Rory Byrne Formula 1 design, the Hart turbo powered TG 185, at a press reception in London on Tuesday of this week. The all-new car (described in full on page 10) will be raced by Stefan Johansson; his team mate has not yet been named, and nor has the team's tyre supplier. Both Goodyear and Pirelli have indicated that they cannot supply Toleman, whose only hope seems to be to change the position of the tyre companies, or to attract a new supplier (Bridgestone?). Left to right above: Team Manager Peter Gethin, engine builder Brian Hart, designer Rory Byrne, driver Stefan Johansson, and Toleman MD Alex Hawkridge.

F1 Peugeot engine in '86?

At the beginning of this week we heard strong rumours that Peugeot is at work on a Formula 1 engine. And we are led to believe that it will be based on the turbocharged four-cylinder motor developed for the highly successful 205 Turbo 16 rally car.

Sources suggest that the engine could be ready for F1 use by the start of the 1986 season, and there is speculation that it could be used by a new French Grand Prix team being put together by Jean-Pierre Jabouille.

Ayrton Senna recovers

We are pleased indeed to report that Ayrton Senna has recovered almost completely from the virus he contracted at the end of the Grand Prix season, and which caused temporary facial paralysis.

The Brazilian was due back in England at the beginning of the week, and is expected to have his first run in a Lotus very shortly — either in this country (weather permitting) or in the forthcoming tests at Estoril.

Andretti Sr for IROC

Reigning CART Champion Mario Andretti will be among the 12 drivers in this year's IROC series, others so far named including Darrell Waltrip, NASCAR Grand National Champion Terry Labonte and defending IROC Champion Cale Yarborough. There will not,

we understand, be any Formula 1 drivers taking part, despite the fact that none of the races clashes with a Grand Prix.

The races, to be screened in America by CBS, will be run at Daytona (February 15), Mid-Ohio (June 8), Talladega (July 27) and Michigan (August 10).

Michael Andretti quick in new March at Phoenix

Just a week or so after his parent impressively tested the new Lola T900 at Laguna Seca, Michael Andretti was similarly swift in shakedown laps of his new March 85C at Phoenix.

Andretti Jr did 30 laps of the Phoenix oval, his efforts hampered by a severe

fuel pick-up problem. Despite this, however, (and running on worn tyres) Michael lapped in 24.40s, which compares well with the fastest ever lap at Phoenix, 23.15s, which was set by Jacques Villeneuve on his way to pole position last October.

Holmes or Teo Fabi for vacant Forsythe drive?

Our American Editor reports that Howdy Holmes, out of a CART drive with the demise of Mayer Motor Racing in the series, is now rumoured to be joining Forsythe Racing as number one driver. Members of the team continue to say, however, that they are holding out for Teo Fabi. The Italian's F1 future as

Nelson Piquet's number two at Brabham is still to be resolved.

It is also rumoured that Forsythe Racing has lost the backing of Skoal Bandit. Unconfirmed reports say that the tobacco company's green and white colours will instead be seen on Tom Sneva's new works Eagle-DFX.



Warwick — Ricard tests hampered by snow.

Weather hampers Renault

The south of France, too, has been suffering from inclement weather. Derek Warwick and Patrick Tambay spent last week at Paul Ricard, hoping to get in five days of testing for Renault, but the elements intervened.

"We got there on Monday," Warwick told us, "to find the track covered in snow. Patrick and I spent Tuesday in the race shop playing table tennis, but then were able to run a little bit on Wednesday afternoon. That was quite useful — I was testing new engine bits. We managed 30 or 40 laps on Thursday in sub zero temperatures, and then on Friday morning there was a blizzard as soon as we got up to the track . . ."

Derek and his family are now installed in Jersey — also in the grip of snow. "We're settling in well," he said, "but the house still isn't completely finished, and we're living in a little cottage surrounded by tea-chests . . ."



Berger — on the road to recovery.

Arrows F1 seat likely for Berger

Gerhard Berger looks set to join Thierry Boutsen in the Arrows line-up for 1985.

The young Austrian, still recovering from the nasty road accident injuries he suffered last November, said at the beginning of this week that he thought "there was a good chance" of his getting the Arrows drive and that he expected a firm decision within a week.

Berger, who impressed with his handling of the ATS during occasional F1 outings last year, has cancelled plans to race a BMW in New Zealand next month while he concentrates on regaining his fitness. His return to health programme is being run by Niki Lauda's man Willy Dungs.

Bellof to quit Formula 1 if no turbo available?

Maurer wants WEC champion in turbo car for 1985 and release from Tyrrell contract

Stefan Bellof will quit Formula 1 rather than drive a Cosworth engined Tyrrell this season. That was the claim from his mentor Willy Maurer on Tuesday of this week.

"It will be better for Bellof to stop rather than carry on," Maurer told us.

Okay, for one year the Germans understood him driving a non-turbo car; but now he is the World sports car champion they will not understand why he won't qualify for races using a non-turbo engine. He just cannot race with a Cosworth next year.

"We have been in contact with Brabham, Toleman and Arrows, but because Tyrrell says he has a contract with us they won't talk, even though they want to run Bellof. After the Senna situation I can understand that, but our contract has options on both sides and if we can't have a turbo engine we want to go somewhere else. We signed with



Maurer — wants turbo deal. Tyrrell in good faith and on this understanding a year ago — we could



Bellof — no F1 this year? have easily signed with Arrows who already had a turbo."



Gabbiani — back to Onyx for F3000?

Gabbiani and Onyx talk

Beppe Gabbiani opened negotiations with Onyx this week to rejoin the team which gave him four Formula 2 wins in 1983. Gabbiani is very keen to do Formula 3000 and Onyx's Mike Earle reported that the Italian has always been a prime candidate for the team alongside Emanuele Pirro.

Alain Ferté visited Onyx's Littlehampton workshops last week as part of a British tour which included further talks with Toleman.

Pirro will definitely drive the F2-based March F3000 prototype at Onyx's Estoril test with Avon at the end of this month. The Italian was in England last weekend and reports that he hopes to be able to do some sports car races between his F3000 commitments this year.

"F3000 is my main priority and I'm really looking forward to it, but I feel I need to get in as much experience as I can at this stage," said Pirro.

Redman stays with Jaguar

Brian Redman will continue to lead the Group 44 Racing team of Jaguars in the 1985 Camel IMSA GT Championship, which will commence at Daytona next month. The great Lancastrian will team up with Hurley Haywood, Bob Tullius and the team's young recruit, Chip Robinson, the American SuperVee driver who replaces Doc Bundy (now racing for Ford).

The Tullius run Jaguar XJR-5 IMSA GTP design by Lee Dykstra has been revised over the winter, primarily to pare off some weight, and at Daytona the lighter chassis will also be equipped with more powerful versions of the normal induction, 6-litre V12 engine, race-prepared in Coventry. Meanwhile research continues into the new four-valve racing cylinder heads, which could become available to the Virginia based team in mid-season to replace the current two-valve engines.

The American team has confirmed that it will contest a full IMSA programme and that its only planned participation in the World Endurance Championship is the Le Mans 24 Hours. The team will again field two cars in the French classic and these are expected to be joined by two Group C1 entries from

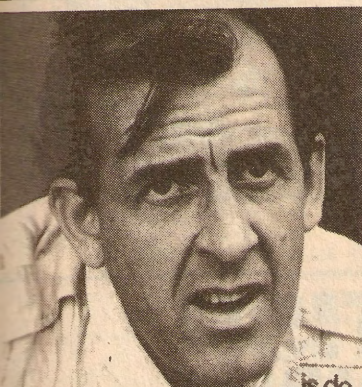
Tom Walkinshaw Racing.

The TWR team is planning to enter its new Jaguars for several events in 1985, and the intended Group C programme is likely to mean a reduction in the team's effort in the European Touring Car Championship with the Jaguar XJS Group A cars. For WEC events, TWR will also get the latest engines from Coventry.

Redman — Jaguar team leader.



The Jaguar XJR-5 will be equipped with a more powerful version of the 6-litre V12 at Daytona.



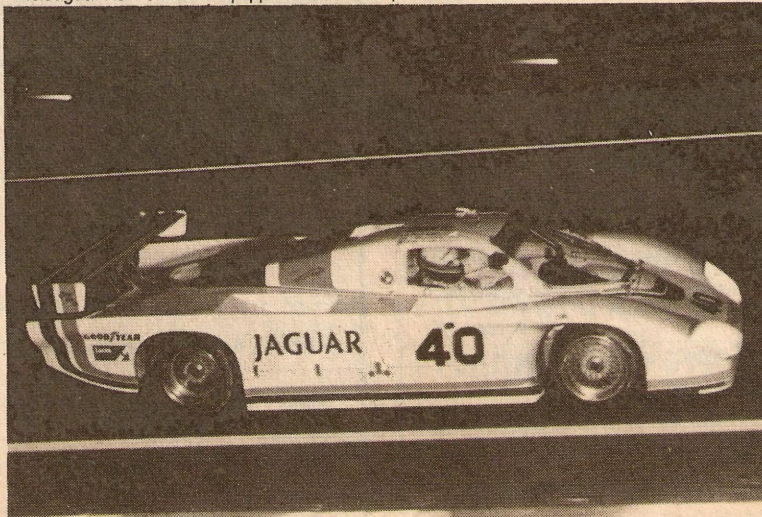
Hobbs — new car not ready.

Record entry for Daytona 24 Hours

A record number of IMSA GTP cars, no fewer than 40, are among the 94 entries received for the forthcoming Sun Bank 24 Hours which opens the 1985 Camel IMSA trail at Daytona on February 2/3. The depth of this exciting entry list reflects the growing status of the series, and encompasses the greatest ever inter-marque competition.

As DeAtley Motorsport's new March-Chevrolet 85G will not be delivered in time for the Floridian classic, drivers David Hobbs, Darin Brassfield and CanAm champion Michael Roe have taken up the offer of Phil Conte's spare Buick-powered 85G, to be run alongside John Paul Jr, Bill Adam and Witney Ganz in Conte's 'race' version.

Reigning IMSA champions Randy Lanier and Bill Whittington will, similarly, not have their new March in time, but will take over the 85G belonging to the Leon brothers, Al and Art. NASCAR title holder Terry Labonte and Strata-graph's Billy Hagen will drive the Lola (Corvette) T710 replica for Lew Price's team. Tim Richmond is now off the driving strength of the Chevrolet-engined coupé.



F3000 Lola on show

The Lola Formula 3000 car is due to be completed and shown at the Beatrice Foods Formula 1 team launch on January 29. As there will not be a Lola F1 chassis ready for the announcement this is an ideal time to launch the new car and Formula 3000 to a captive audience.

"Testing will start in the UK immediately afterwards," reported Jean-Francois Mosnier at the weekend. I have spoken to many, many drivers, but nothing is settled yet. However, it is likely that Thierry Tassin, Johnny Dumfries and Corrado Fabi will be involved in the initial testing."

Mosnier then plans to take the car to Italy and invite a number of prospective Italian drivers to test the car.

Italian interest

Formula 3000 appears to be taking off in Italy. News comes through that former Autodelta engineer Pierluigi Corbari is involved with Bernie Ecclestone in setting up a team which will use Lola chassis. San Remo Racing are also planning a two car team with Gabriele Tarquini confirmed as one driver. Trivellato expect to field one car rumoured to be for Roberto Ravaglia. At least two Minardi chassis are anticipated probably to be run separately from the factory. Enzo Coloni, too, is planning a team, while Luciano Pavesi will probably join the series at mid-season.

BP withdraw completely from all sponsorship

Oil company's announcement a set-back for young British hopefuls

BP dropped a bombshell on Monday when they announced that, following a wide-ranging reappraisal of its marketing expenditure, they were withdrawing from all forms of motor sport sponsorship.

BP has been one of the stalwart trade sponsors of motor sport and their recent policy of directing all their support to promoting and bringing on the best

British talent has been invaluable. Derek Warwick, Jonathan Palmer, Martin Brundle and Johnny Dumfries are the most obvious examples, but BP sponsorship has been spread through the various Ford engine formulae to many promising young drivers.

Commenting on the decision, BP motor sports manager Les Thacker said: "We have thought long and hard about

this and regrettably the decision has to be made."

Thacker was the man who was instrumental in BP's admirable 'Back British' programme and he added: We hope that our efforts over these past years in finding and sponsoring young British drivers into higher echelons of the sport will be carried on by other British companies."



Kempe — returning to the fray in F3.

Intersport sign Kempe

Welshman Phil Kempe, winner of the 1981 Dunlop-AUTOSPORT 'Star of Tomorrow' FF1600 championship, has signed to drive for Glenn Waters's Intersport Racing equip for a full Formula 3 programme this season. The Rhiwderin farmer actually finalised his sponsorship deal — a representative budget — early last year, but elected to wait until 1985, and the availability of Waters's expert guidance, before returning to the fray.

Kempe, a regular instructor at Brands Hatch Racing's school, competed in a few F3 events in 1982. These runs whetted his appetite for a proper go and thus the money was sought. Phil will test the ex-Russell Spence Ralt RT3 initially, before RT30. Volkswagen engines will power the cars. His sponsor will be formally introduced at Brands Hatch in a fortnight's time.

Wallace's F3 plans unclear

Andy Wallace, winner of last year's second Grovewood Award for his efforts in FF2000, is apparently undecided as to which team he will drive for in Formula 3 this season. While it has always been assumed that he would stay with his 1984 entrants, Swallow Racing, we hear that the Oxford lad has been offered the second drive at Pegasus, for whom he raced in a couple of end-of-season FF2000 events.

Swallow's men are currently at Bicester, building their Reynard-VWs, while Pegasus (with new Ansons on order, and a Ralt test car) is an attractive option. It is thought the rapid Tim Davies, team-leader at Swallow, may well influence the choice of Andy and his manager/sponsorship negotiator Phil Floor.

Class B for Goddard

Mark Goddard, third in last year's Esso FF1600 championship, is moving into F3 this season, thanks to his long time sponsor Harvey Pallett who has bought him one of Eddie Jordan's Ralt RT3s to use. Pallett's Savoir Fare concern will be advertised on the car in Class B of the Marlboro British championship.

Powered by an Aldon-prepared Toyota engine (the Brierley Hill concern having previously built Mark's FF1600 units), the car will be run from the Silverstone base of Rob Arnott's Solar Racing organisation, Co-sponsors will be announced later.

Double blow for Price

Dave Price Racing were dealt two body blows last week when first Rothmans decided that they were not going to back a Formula 3000 programme and then BP announced their total withdrawal from motor sport (see separate story).

DPR has successfully run the BP F3 programme for a number of years and had plans to combine their support with

Rothmans for an F3000 programme for Johnny Dumfries in 1985.

"I'm not sure what we are going to do now," said Price on Monday. "We don't have any British programme at all. I shall concentrate my efforts on trying to set up a British F3 team because obviously that is the area where we are best known. I would certainly consider Formula 3000 if

the right deal came along but probably we'll have to sit and watch for a year."

Price says that he would like to run a two car F3 team in Britain "but the only thing that is certain at the moment is that we will use VW engines."

DPR will again be contesting the French F3 championship with Jean-Paul Belmondo.

Ross Cheever leaves Valour Racing for F3000 or Pegasus Motorsport seat

Valour Racing boss John Upton confirmed last week that his team would not, now, be running Ross Cheever in this year's Marlboro British Formula 3 championship as originally anticipated.

The Wrotham-based outfit ran the fast, but erratic, young American without external sponsorship in a full programme of F3 events last season, bringing him to the attention of Australian Ralt importer Graham Watson, for whom he won the International Formula Pacific championship 'down under'.

"Ross came back ecstatic about the higher powered cars," explained Upton, "and, having asked the opinion of many people, has decided to seek a Formula 3000 budget for 1985 instead. Obviously we cannot fund it, much as I'd like to help, but he is determined to make the break."

Cheever's late decision to change course will not improve his chances of finding the money, but he is known to have had talks with several leading F3 team managers in an effort to cover his

options if he cannot come up with the F3000 funds of around £250,000.

He is believed to have talked to Eddie Jordan about a possible F3000 drive, although it is rumoured that he may join Pegasus Motorsport in F3, while other F3 teams will certainly be interested in his services, as a proven front-runner.

Valour Racing will not, thus, be involved with F3 at top level, but will field a car in Thundersports among other projects.

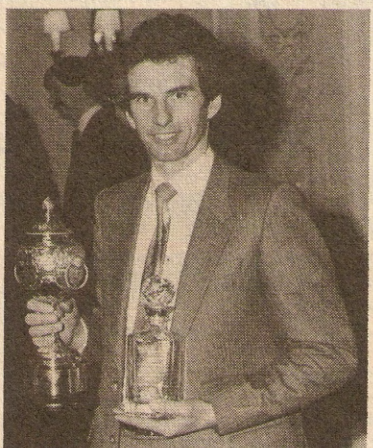
Yet more F3 for Marlboro

Marlboro have recently announced that in addition to sponsoring the British F3 series they will also be backing the National series in France and Italy. Rumours continue to suggest that there will be some sort of international Formula 3 'run offs' towards the end of the year to produce a European F3 champion from the front runners of the various series.

Off to India

Bob Fearnley's RK Racing set-up is fielding a pair of Chevron B42-5 chassis in next month's annual Indian racing festival, for Britons Jim Crawford and Tiff Needell. The duo will compete in the Bangalore and Madras Grands Prix with sponsorship from Vijay Mallya's United Breweries company. The beer producer, himself a former winner of the Madras race with an F1 Ensign, exports his products to North America, where he is a co-sponsor of Crawford's CanAm and CART racing programmes.

The Indians have recently switched to a 1600cc single seater formula for their top category. Vicky Chandhok's ex-de Angelis Chevron B42, Daljit Chager's Brabham and several former British circuit and hillclimb cars should comprise the race fields, together with some fairly outdated FF2000 and FF1600 machinery.



Rouse — double trophy winner . . .

Surprise prize

Having gone through all the trouble of taking away Austin Rover's 1983 RAC Group A championship win, imagine Andy Rouse's surprise at picking up the Trophy for the past two years at the RAC's prize giving last week and finding that the engraved inscription credited him with driving a Rover Vitesse in both years. We take this opportunity to remind the people at Belgrave Square that a long drawn out legal case awarded the 1983 series to Andy Rouse for his drives in an Alfa Romeo.

MTR close to F3 deal

"I hope to be able to announce my team for this year in about a week's time," commented Murray Taylor when we spoke to him on Tuesday. The drivers believed to be 'possibles' include a young American Formula Russell graduate Jo Foster, the Saudia-backed Mike Mackonochie, who ran with Taylor a couple of times this year, or Gary Evans.

Evans, of course, ran with West Surrey Racing last year and showed promise, but with Dick Bennetts signing Mauricio Gugelmin and Harald Huysman waiting in the wings, there does not seem to be any room for the young Englishman. Gary has recently been signed up by CSS Promotions and will be backed again this year by DAF trucks, Diversey and Trimoco leasing.

Taylor looks certain to run Ralt-Volkswagens once again and his decisions are awaited with interest.

Avia seek replacement

The Avia La Chatre racing school is to hold new tests to determine who will race for them in French Formula 3 this year. The original *Volant Avia 85* winner, Philippe Couchet, who, sadly, was killed in a road accident in France shortly before Christmas.

RAC MSA policy against street races in the UK

At a press conference in Belgrave Square last week, Peter Cooper of the RAC MSA effectively ruled out any possibility of street racing in this country. Speaking about the efforts being made in Birmingham to stage a saloon car race in August, 1986, Mr Cooper stated that the MSA's policy was not to authorise meetings in cities.

The decision had been taken, he said, because of the enormous investment made by organisations in charge of permanent race circuits. Prestigious events, he felt, should therefore be held at these venues and not at temporary venues. He acknowledged that there

were benefits from taking major motor sport events to the people, but was also aware that the permanent tracks needed big events to survive.

In addition to the Birmingham event, several other cities and towns had been investigating the feasibility of staging races, including Glasgow, Torquay, Weston-super-Mare and Blackpool.

Speaking about the possibility of Donington Park actually staging a Grand Prix in 1988, Robert Langford underlined that the circuit owners had undertaken to have their circuit up to Grand Prix standard by next year. If the extension to the track was not completed

in accordance with the RAC MSA's schedule, then that 1988 date may be reviewed.

Discussion then turned towards the different attitudes taken by the various ASNs, highlighting the RAC MSA's demand that Donington should be prepared to GP standards some two years prior to actually holding a Formula 1 race. In contrast, the Italian authorities were prepared to nominate a date for a Grand Prix in Rome this year with a track that was still at the design stage, and with the various organising bodies still in conflict over who will take responsibility for the race.

German GP prize for Quiz winner

The Christmas Quiz once again produced a fine crop of entries to win a fabulous Page & May trip for two to the German Grand Prix, although yet again no one managed to get everything right

Last year we had three names battling for the prize, and this year the two 1984 runners up were back. Mr Tim Murray of Bristol versus Mr R Prentice of Shropshire. Sadly, Mr Prentice, you lost out on the tie-breaker, as Mr Murray's present to the AUTOSPORT staff of "a stapling machine that works" had us rolling round the office with glee. Twice the bridesmaid, Mr Prentice, but there is always next year... Close behind these two were what we can only assume were a pair of Hobbs brothers — one from Shropshire and one from Herefordshire, whose answers bore a striking resemblance. The third place, however, goes to Mr J Hobbs — "A do-it-yourself course in French law" — so Mr T Hobbs, you'll have to sharpen up the tie-breaker...

If you remember, you had a crossword, and 40 questions including four pictures to answer. There were a few tricky ones which caught you out — quite a lot of people met JR at Dallas, but

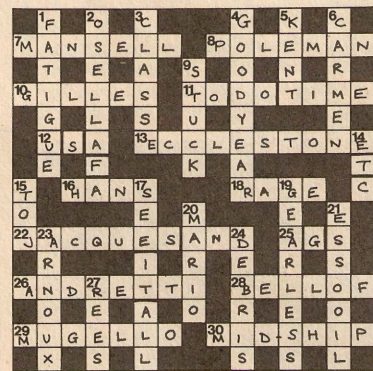
Manfred Winkelhock was the only one to climb up to the man. Johnny and Bob were both Earls, although the horse racing fans among you decided that champions was just as good an answer — well, you caught us out on that one! The Big Cats at Le Mans caused a few hiccoughs too. There were two Jaguars, one Cougar and a Tiga! Four in all.

The other one to get most of you was number 12, the driver in question was Philippe Streiff, but the team was what we wanted, and that was Renault — you'll have to be more careful! The crossword might have produced a few groans at the puns employed, but didn't catch anyone out...

The answers

The crossword answers appear in the grid, so here are the answers to the questions. 1, Manfred Winkelhock; 2, Cosworth V8; 3, Michael Roe in the CanAm race; 4, Niki Lauda at the Osterreichring; 5, Nelson Piquet and Alain Prost; 6, Detroit, where Rothen-gatter reverted to Cosworth power; 7, Martin Brundle — he drove for Tyrrell in F1, and Renault at the British Truck Grand Prix; 8, David Sears; 9, Pierluigi Martini and the Martini MK42 won the Euro F3 series in the consecutive years, the drivers were also both Italians; 10, Bob Earl is an American driver and Johnny is the Earl of Dumfries; 11, There were four Big Cats at Le Mans which raced — two Jaguars, one Cougar and a Tiga; 12, Renault; 13, Win Percy lived up

to his name; 14, Kevin Cogan; 15, Ford Escort; 16, Henri Toivonen; 17, Shell Oils; 18, Austin Rover came back to the Lombard RAC Rally — briefly; 19, Stig Blomqvist; 20, Dai Llewelin; 21, Ken Wood; 22, Maurizio Gugelmin and Maurizio Sandro Sala; 23, Zeus; 24, Mike Littlewood; 25, Damon Hill; 26, Abbey Farm Racing; 27, Gary Brabham; 28, Swift DB1; Picture A, Charlie Crichton-Stuart leads Carlo Facetti; Crichton-Stuart and Dumfries are cousins; Picture B, Mickey Thompson Harvey Aluminium Special, 1963 Indianapolis; Picture C, Pentti Airikkala, and the car was a Vauxhall Chevette; Picture D, Solar Productions Porsche 908/2, driven by Herbert Ling and Jonathan Williams, a camera car for the Le Mans Film.



BRIEFLY



Pancho Carter — Galles March in '85 CART.

■ Pancho Carter has been signed to drive for Rick Galles' CART team this year, alongside Geoff Brabham. Carter will run in all the championship races, and his March 85C will be powered by the turbocharged Buick V6 engine — which should make him especially competitive at Indy. Under USAC rules, this engine is allowed 10ins more boost than the Cosworth DFX...

■ With seven weeks still to go before the start of the new Formula 3 season, John Judd has closed his order books for Volkswagen engines. John has had enquiries for nearly 100 engines, but only has the capacity to build 50.

■ An interesting new departure in Italian F3 is the formation of a new Crugnola/Dallara team. Mario Crugnola who has run Emanuele Pirro and Kris Nissen in European F3 will manage the team which will race the new all-carbonfibre Dallara. Drivers will be Fabrizio Barbazza, and rapid young Formula Fiat Abarth graduate — Felice Tedeschi, better known as 'Happy Germans'.



Pierluigi Martini — more delays for the Minardi.

■ Pierluigi Martini and the Minardi F1 car will not be seen in competition until July at the earliest, we hear. Although the car has tested with an Alfa Romeo V8 engine, there is no possibility of racing the car in this form, and Carlo Chiti's new engine will not be ready for six months.

■ Chip Ganassi, out of racing since his horrific crash in the Michigan 500, looks set for a full CART season in a new Lola T900 run by Primus Racing.

■ Franco Scapini, winner of several Italian F3 races last year with the Automotor team from Ravenna has re-signed for another full assault on the championship. Italian F3 too is going to be closely fought this year...

■ Our own Nigel Roebuck and Simon Taylor will be joining Murray Walker and Peter Garnier (formerly Editor of Autocar) at the National Motor Museum at Beaulieu on Saturday January 26 to talk about what life is really like as a Grand Prix reporter...

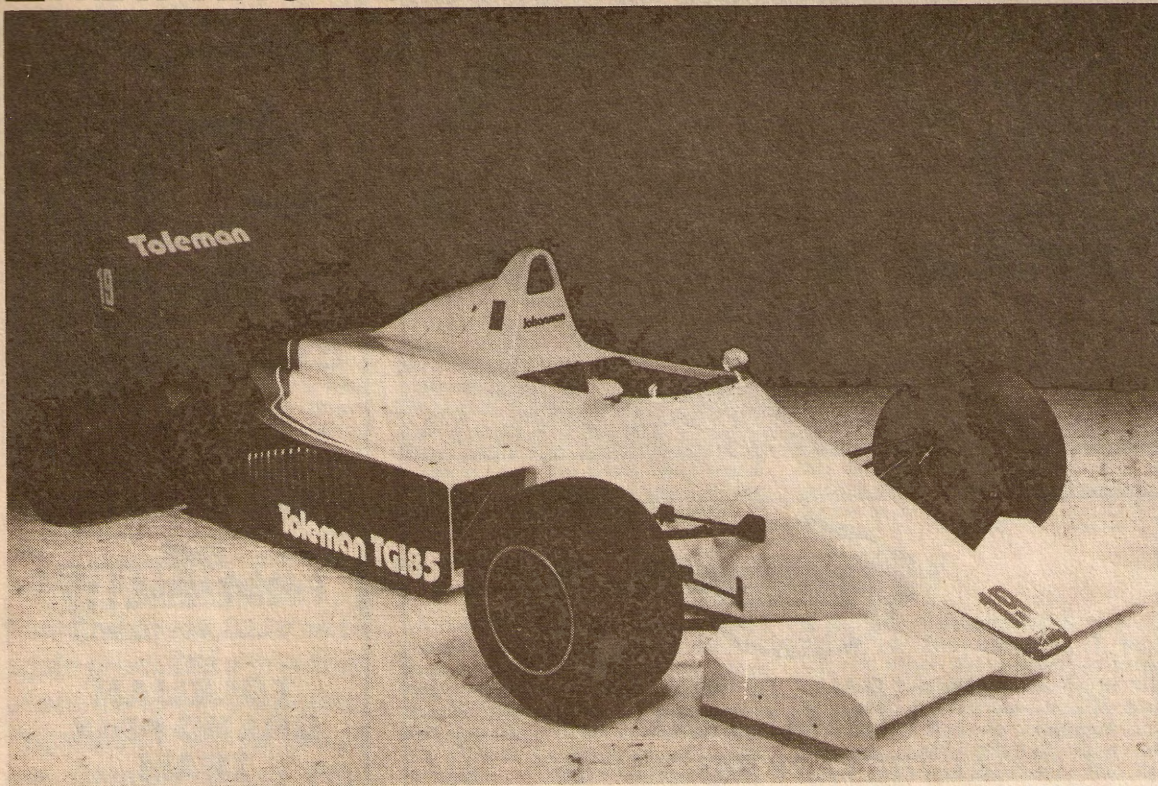
■ Our Cosworth spy reports that Tyrrell's seven DFYs have recently been returned for building in time for next week's Estoril tyre tests. Other sources insist that Ken does have a turbo deal with a company already involved in F1. Tyrrell, however, is saying nothing.

WEEKEND SPORT

OFF TRACK

Date	Venue	Event/Details
Jan 19	Boyd's Autodrome, Mallusk, N. Ireland	Belfast Car Ferries Rallycross Championship, Round 3 (Larne MC). <i>The favourite to win the meeting will be the winner of the last round, Colin Richards in his Porsche, but current champion Ronnie White (also leading the 1984-5 series) is expected to lead the opposition which includes Con Carey and rally driver Ken McKinstry.</i>
Jan 20	Brands Hatch, Nr Fawkham Kent	Shell Oils/BTRDA Southern Rallycross Championships, Round 1 <i>Reigning Brands champion, Barry Hathaway in his Fiesta, leads the entry in his bid to secure a third successive title, but expect Keith Ripp, Trevor Hopkins and Dimi Mavropoulos to give him a hard time. John Welch will also be out with his new four-wheel drive turbo Escort. Practice starts at 9.45, racing from 11.30am.</i>
Jan 20	Boxley, Maidstone, Kent	Brian Lewis Trial (Maidstone & MKMC) <i>This event is a round of the BTRDA Fiveways Tyres/RAC National Championship. Julian Fack, Robin Alexander and Ken Harrison are the leading contenders, with Chris Highwood who was last year's champion fighting to regain his title. Events starts at 10.00am.</i>
Jan 20	Baronwood, Cumbria	Armstrong Trophy Trial (Northern Sporting Trials Club). <i>This event is a round of the Northern Trials championship and it starts at 11.00am.</i>
Jan 27	The Belfry, Wishaw, Nr. Sutton Coldfield, W. Midlands	BTRDA Annual Luncheon and Prizegiving 1985. <i>All BTRDA awards including the Gold Star Rally outright winner, Clinton Smith, Sporting Trials, P.C.T.'s, Motoring News/BTRDA Road Rally Winners, Autotests, Autocross, Allrounders and the usual host of special awards will be presented. Tickets are available to everyone at £9 each from Ron Kemp, Blunts Green Farm, Henley in Arden, Solihull, West Midlands and application for tickets should be made as soon as possible.</i>

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



The new Toleman TG185 bears a strong family resemblance to its predecessor, but like the carbonfibre monocoque, everything is new.

Toleman TG185: GP winner?

Apart from McLaren International's emphatic fulfilment of their multi-million dollar potential, another positive element of the 1984 Formula 1 season will remain clear in the memory: the dramatic emergence of the essentially privately run and financed Toleman team.

From almost embarrassingly raw newcomers in 1981, Toleman, in conjunction with Brian Hart's relatively small engine company, made steady and sure progress in 1982-83 to the point where they gained their first championship point at their 39th Grand Prix, (Austria 1983).

That was with their 183B chassis, the third design from chief engineer Rory Byrne. The next car, the 184, arrived almost unnoticed at a test day at Zolder last season. Its Dijon debut was not particularly noteworthy except that the team finally dumped the Pirelli rubber which, to everyone outside the team, had apparently negated any chassis or engine development. Starting with Ayrton Senna's sensational second place at Monaco, the Toleman name was virtually never out of points contention again.

They emphasised their newly defined position with a tremendous performance at the final round of the series at Estoril, where Senna was only beaten into third place by the two McLarens, and Stefan Johansson was never out of the top six until forced into a pitstop after an incident with Niki Lauda, who had been unable to get past him for some 30 laps.

That solid team performance perhaps got lost amidst the McLaren euphoria. Satisfied, but far from smug, the Toleman and Hart connections went back to their respective workshops in the knowledge that the next step forward could turn them into Grand Prix winners. The result is the Toleman-Hart TG185, launched in London this week.

With, typically, no British motor industry support, both Toleman and Hart have developed their package with budgets which would have kept most of their opposition well away from the public gaze of the world's race tracks. It is probably not too wide of the mark to suggest that the season-long test budget of some constructors would be equal to the resources Toleman and Hart have

spent in four years.

The bubbling optimism which was so apparent at the launch of the new car stems from the decision of Toleman Group Chairman Ted Toleman to give the Motorsport offshoot the go-ahead to produce the new car last September. Rory Byrne, and his strong design team of Pat Symonds and Dave Kelly, have revelled in the luxury of a four-month research and design period, which they had never before experienced.

Every racing car is produced under pressure, but the need to get this one finished exactly to schedule was so as to initiate a full test programme well before the season begins. Last September, the aim was to finish the first car on January 14, and almost on the stroke of midnight that was achieved. The specification of the car at its January 15 launch may well change by the first race in Brazil on April 7, because Byrne already has a full programme of items to try between now

and then.

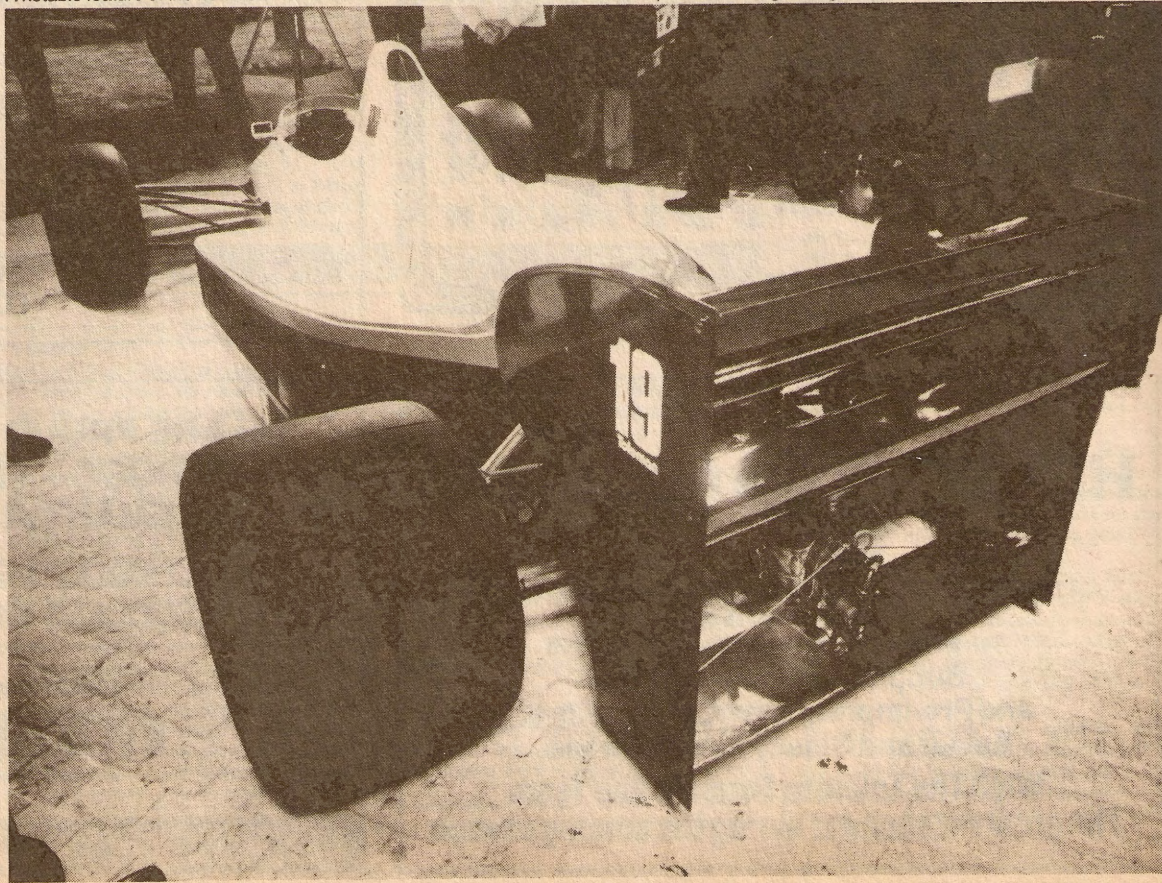
The new car is described as a refinement of the 184, but almost every component is new. Other than the rear end aerodynamic treatment (necessitated by the change in regulations), it does not look a great deal different to its predecessor and certainly the actual layout remains essentially unaltered.

The carbonfibre composite monocoque chassis is entirely new and, for the first time, has been produced totally in-house. Out has gone the tapered bottom end (derived from the ground-effect era) to be replaced by a slab-sided design. Following current trends the external surfaces double as the bodywork—a first for Toleman. The major chassis change is that for the first time the in-line four-cylinder Hart engine is used as a semi-stressed member, which will greatly improve the rigidity of the entire package. This has been achieved totally through the chassis design, with no alterations to the alloy block engine. A composite roll-hoop has also been incorporated, and the package successfully passed the mandatory Cranfield crash test.

The suspension layout remains similar to the 184, using fabricated uprights and wide-based upper and lower wishbones. Pullrods at the front and pushrods at the rear operate the Koni spring damper units. The steering rack has been moved behind the line of the front wheel centres, while iron discs are used in conjunction with Brembo calipers. As weight is not a problem, and finance is restricted, there has yet been no move towards carbon discs. However, one of the early experiments will be a new rear brake system being developed in conjunction with AP.

The new car features Toleman's own gearbox. The ever-increasing power output of the F1 turbo engine has rendered the off-the-shelf Hewland 'box marginal, while adapting their standard casing to suit individual requirements has meant that a purpose-built casing was financially justifiable. Toleman's package, from the casing and bell housing/oil tank through to the input and output shafts, gears and diff carrier, is essential-

A notable feature of the new Toleman is the rear end treatment with its unusual triplane rear wing arrangement, and all enveloping bodywork.



ly their own. It is a five-speed 'box, Byrne hoping that improvements to the torque curve of the Hart engine will negate the need for six speeds which many of their rivals use to overcome engine characteristic deficiencies.

Although there was little new about it, there was much fuss given to the end-of-season revelation that McLaren had used a Torsen diff in 1984. Other teams, including Toleman, were offered the use of such a unit, which has suddenly become a fashionable component to research and develop. Byrne is prepared to admit only that he has done his homework in this area, but he won't be specific.

The Hart engine, described officially as producing 740bhp plus, is lighter than all other F1 turbos, but also requires more cooling to keep it at its optimum 75deg water temperature. Thus the 184 systems, with intercooler on the left and water radiator on the right, have been retained, having proved their efficiency even in the extreme of the Dallas heat last year. In order to optimise the aerodynamic plan, the components have been repackaged to tuck the single Holset turbocharger unit tight into the engine.

Also, permanent provision has been made for the electronic management system which appeared at Monaco last year. The digital system (developed in Britain by Brian Hart and ERA) was the envy of many rivals last year and resulted in dramatic developments in engine performance.

Having the use of their own quarter-scale wind tunnel facility for the best part of the last 12 months, under the direction of Pat Symonds, has resulted in very much a refined 84 shape for the new car. For the first time a Toleman chassis has a fully enclosed engine. Brian Hart has been against this development on cooling grounds, but new regulations banning the secondary rear winglets virtually dictate that the airflow to the permissible rear wing is as clean as possible.

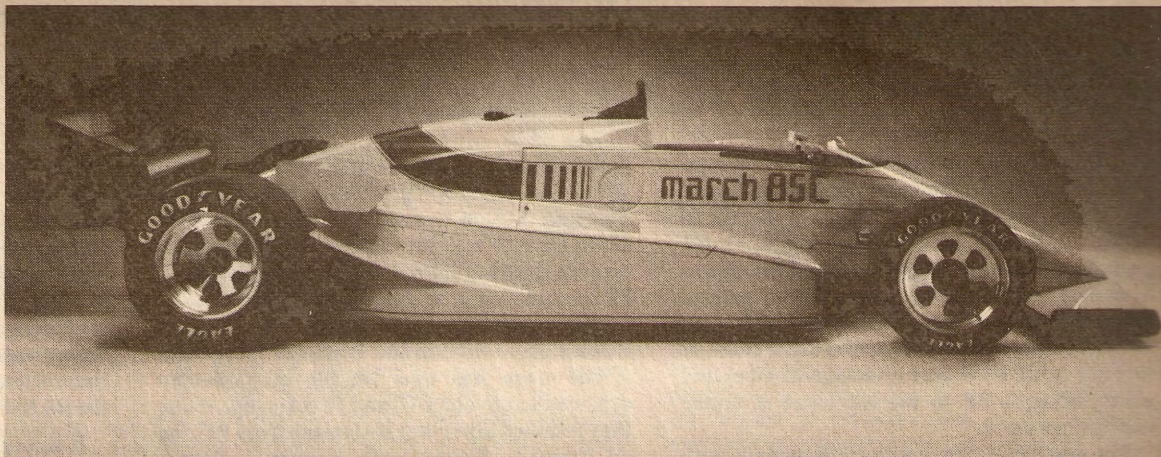
Byrne has never been afraid to take an individual approach to aerodynamics — remember the front-radiator 183 and the twin rear wing 184 — but it remains to be seen if his distinctive triplane rear wing is the common solution to replacing the downforce lost to the rulebook. The top plane consists of three elements, the middle one of two, and the lower plane is a single element.

Byrne has long favoured the coke-bottle shape aerodynamic treatment around the rear end, and the repackaging of the engine ancillaries makes it more pronounced on the TG185 than on its predecessor. The majority of components being produced in-house, the quality and the detail of the new car is obviously superior to those of previous Tolemans, which tended to reflect the haste and restrictions under which they were built.

The biggest remaining question mark remains over which tyres the car will run. Having switched from Pirelli to ultimately three totally different generations of Michelins during the course of 1984, Byrne and his team are well aware of the work involved, and all eventualities have been covered in the new design.

After last year's performance, nobody will underestimate Toleman in 1985. In signing Stefan Johansson to replace the mercurial Ayrton Senna, they have a similarly explosive talent to fully expose the potential of the new car. Few would bet against the Toleman name joining the ranks of Grand Prix winners this year.

IAN PHILLIPS



March's second generation Indycar — the all-new 85C. Forty-three have been ordered to date.

March 85C Indycar challenger

Although pipped at the post to the 1984 Indycar Championship by Lola, the catalogue of records and successes achieved by March cars in 1984 — such as their 30 out of 33 qualifiers at Indianapolis — made it the best year yet for the Bicester concern since they turned their attentions to the USA in 1981.

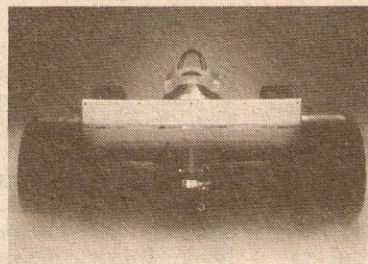
The new 85C certainly has a difficult act to follow, but is a totally new design from Robin Herd and March's Indy Project Engineer Adrian Newby. March took a gamble last year with the 84C in extending the life of the initial 81C design for another season and work on the 85C actually started before the dominant Indy 500 performance. The 81C was designed with virtually no in-house experience of the CART scene: the 85C reflects the four years of first-hand experience, during which the marque gained 22 Indycar wins, more than any other manufacturer during that period.

The first batch of 85Cs to be delivered are all to road race specification, reflecting the change in emphasis in the CART series in recent years, and also March's dedication to improving their road race performance, which never matched the speedway potential of the previous designs. The 1985 regulations virtually dictate that the speedway and road race cars should be different in any case. Having won the final three races of the 1984 series, which included two road circuits, March were obviously on the right lines with their 85C thinking, and there is tremendous enthusiasm for the new model at the factory.

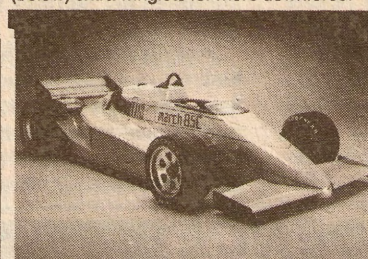
The biggest problem with the 84C was that it was overweight and, without being more specific than to say that the 85C is on the weight limit, everyone is entirely satisfied that this will not be a problem on the replacement car.

The monocoque chassis itself is 20lbs lighter than that of the 84C. It still features an aluminium honeycomb lower section, but the use of carbonfibre for the top section, which now doubles as the bodywork, is increased. The cockpit section incorporates a 'strong ring' around the opening to act as a barrier against wheel intrusion, which is often a serious consequence of speedway accidents.

The regulations insist on an additional bulkhead ahead of the master cylinders and, on the 85C, this is a combination of honeycomb and machined-from-solid aluminium. Further to reduce the chances of injury in a front end impact from the master cylinders and pedals, March are developing a sliding pedal system which will 'give' under impact. The chassis features five main structural bulkheads and all the suspension pick-up points are tied to these for added safety. All the inner skins of the monocoque are



The 85C features wider venturi tunnels and (below) extra winglets for more downforce.



Kevlar carbon composites, with specially reinforced panels inside the footbox.

One of the main requirements of the new design was to lower the centre of gravity and improve the overall weight distribution for better turn-in performance. This has been achieved by reducing the height of the standard size fuel tank mounted behind the driver. The oil tank is mounted at the rear of the fuel cell instead of in the gearbox bellhousing, which reduces the wheelbase by 1in.

As well as being much lighter than the previous chassis, the 85C is torsionally twice as stiff as the 84C. The prototype has already been subjected to a Cranfield test shunt which more than satisfied the design parameters.

The suspension geometry is as on the 84C. A refined version of the pullrod front suspension is used while, at the rear, March's unique transmission housing enables the use of narrow-profile, top rocker operated inboard spring damper units. Short (2ins) anti-roll bars save weight but also offer a good velocity ratio. New cast magnesium uprights are used all round, while March have produced their own uprated wheel bearing package. The uprights permit much better cooling to the new open back brakes, which themselves cool more efficiently and accommodate larger diameter discs.

The drive train is based around March's 85T design, a refined multipurpose version of that successfully pioneered on the 84C. The slim casing, with its over-the-top selector system, houses the CV joints and the spring damper units, permitting an extra 6ins width in the all important venturi tunnels. On the 85T, which has already

been successfully tested on the 85G sports car, a single airjack is mounted on the gearbox endplate, rather than the pair previously situated in the bell housing. After a number of disappointing crownwheel failures in 1984, March have designed and manufactured their own for the 85C.

The familiar Cosworth DFX engine will be fitted to the majority of 85Cs. March have again mounted the engine on a tilt, although this is reduced from 3 to 2 degs. The repositioning of the oil tank has resulted in the turbo unit being mounted 5ins lower, while March's own inlet runner and carbonfibre plenum chamber units makes for a tidier and aerodynamically more compatible package. The only material connection between the 84C and the 85C is the retention of the proven cooling system, with water and oil radiators in the right- and left-hand sidepods respectively.

Contributing to the lightweight package is the all carbonfibre bodywork. The aerodynamics are the result of intensive wind tunnel research at Imperial College, Southampton University and MIRA. The different regulations for 1985 for speedway and road courses have demanded a new approach to the aerodynamics, which has traditionally been March's strong point. Their trademark single-piece underwing remains the crucial element, while the neater package of chassis components has produced a sleek new shape especially around the engine cover. The flip-up and winglets ahead of the rear wheel are obvious alterations, but further details of the improvements are being kept under wraps, save to say that March confidently predict that they have more than recovered the downforce pinched by the rules with no additional drag penalty.

The 85C features greatly improved detail engineering which has contributed significantly to the weight saving programme. As a true second-generation Indycar design, March proudly claim that the 85C is the best engineered car they have ever built. To date 43 cars have been ordered, worth in excess of \$5 million, and with nine cars already delivered a strenuous test programme has already begun.

Early indications are that the new car has more than made up for the deficiencies of the 84C in road race trim, and that once more March will be at the forefront in bringing the major US honours back to Britain.

IAN PHILLIPS

Dimensions	
Wheelbase	106.00ins
Front track	71.50ins
Rear track	66.25ins
Overall length	182.00ins
Overall height	38.00ins
Overall width	55.00ins
Weight	540kgs

Dimensions	
Wheelbase	110.2ins
Front track	66.0ins
Rear track	63.0ins
Overall length	180.0ins
Overall width	80.0ins
Weight	783kgs

BP — end of an era . . .

The shock announcement of BP Oil's total withdrawal from motor sport sponsorship, early this week, has brought to an end a decade in which the British industrial giant has placed particular emphasis on the manifold benefits to be gained from this truly international sphere. While BP was involved in Grand Prix racing, on a highly successful if low-key level in the 1950s, it was not until 1975 that a change in company policy brought BP to the forefront of motor racing once more.

The new campaign, designed to coincide with the launch of BP's Super Visco oil, linked the evolution and development of a specific product with an aggressive marketing programme to which motor racing was ideally suited. Such was the success of this promotion that the company chose to actively pursue this line of attack in generating public awareness of its subsequent BP VF7 light viscosity oil and refined Visco 2000 and Visco Nova products.

Having sponsored the BARC's Formula 3 championship for four seasons, and extended personal support to champions Gunnar Nilsson, Rupert Keegan, Derek Daly and Nelson Piquet, BP graduated to F2 in 1979, continuing an association with Derek Warwick. The company's promotion of VF7 was geared to this project, Warwick and engine builder Brian Hart working closely with BP's research establishment in the endless quest to improve an already stringently tested lubricant still further, under the most arduous conditions.

Capitalising on lessons learned in all aspects of the racing programme, BP Oil joined forces

with Toleman Group Motorsport the following year. The superbly professional package — Toleman TG280 chassis, BP lubricated Hart 420R engines and Pirelli tyres — went on to capture first and second places in the European F2 championship, and the public's enthusiastic attention and support, through the efforts of Britons Brian Henton and Warwick once more.

The stage was thus set for the Toleman organisation to enter Grand Prix racing. While they retained lower-key assistance from BP, the oil company looked back towards a deeper involvement with F3, and the advertising of the Visco 2000 and, later, Visco Nova oil brands. Throughout recent campaigns, the company has maintained an admirable 'Back British' philosophy.

Much of the credit for BP Oil's high profile presence in motor racing must go to Les Thacker, the company's seemingly tireless Motor Sport Manager. A marketing man within the organisation for over 20 years now, Thacker always strove to maximise the return on his company's investment. While precedence was always given to one project — last season to Johnny Dumfries's spectacularly successful F3 rout of Britain and Europe — Les has never forgotten the 'nursery slopes' at the foot of the motor racing ladder.

While it is fair to say that BP's race advertising budgets in FF2000, and particularly FF1600, have not been the fattest in these arenas, a professional presence has always been maintained, with a great deal of success. As a marketing exercise, therefore, these campaigns

have been very cost-effective for the company. And that spells good sense. Last year, for instance, BP backed two drivers in FF2000 and a further three in FF1600 (under Visco 2000 and Visco Nova banners), in addition to supporting Stirling Moss — one of their original F1 contractees — on his occasional Historic racing appearances. Novice drivers were looked after too, with a fourth year of sponsorship through the BARC's BP Superfind FF1600 series.

It is, perhaps, ironic that BP should decide to pull out of motor sport just as the Toleman Group Motorsport team — the outfit for which they did so much on the road to F1 — seems set to take on the world's Grand Prix teams on equal terms for the first time, yet without a major commercial sponsor. On recent form there would seem to be a lot to be gained for someone here . . .

BP has enjoyed a good run since 1975, however, and their enterprise has reaped dividends. We feel sure that they will return to motor racing in the years to come, after they have sampled alternative forms of advertising and promotion.

In the meantime we would hope that another progressive company will see fit to pick up the gauntlet worn by BP for so long — and carried so proudly for Britain — in the mutual interests of product advertising and motor sport. While BP could never justify the all-pervading levels of support offered in France by the Government-owned Elf concern, nobody could ever accuse them of lack of commitment to the joint causes.

CORRESPONDENCE

THE EDITOR IS NOT BOUND TO AGREE WITH READERS' OPINIONS

Racing for Germany?

Congratulations Zakspeed! At last there seems to be a Formula 1 team enlightened enough to take a driver without money, solely on merit.

However, it seems a great shame that, having come up through the ranks with Racing for Britain money, Jonathan Palmer has not been snapped up by a British team. But no, that isn't good business, and as a result Jonathan is 'Racing for Germany' . . .

I hope things go well and he can prove to some others in Grand Prix racing that they have missed a bargain.
BATH, AVON JAMES FRANKLIN

Jackie Stewart appeals . . .

Perhaps, like me this morning, most AUTOSPORT readers washed and dressed in a few minutes, jumped in their cars and drove — very easily — to work. May I, just for a moment, tell you about a group of people for whom even these simple tasks are a daily challenge?

They are the Disabled Drivers' Association and they run the only self-help organisation of its kind giving advice and assistance to all those with mobility problems, whether they drive or not, irrespective of their age or cause of disability.

His Royal Highness, the Duke of Edinburgh, launched an appeal to provide funds to extend their special holiday centre in Norfolk and to expand their welfare work. Some improvements to their holiday centre have already taken place, but more facilities (particularly for the very severely disabled) are urgently needed to meet demands.

We all receive approaches from charities for assistance, but I am lending my personal support to the Association's campaign to raise £400,000 because I believe it is not only deserving, but eminently suited by its nature to all of us with interests in motoring.

I do urge your readers to help this special cause, to

help finish the work in hand by sending a donation to me. They can be assured that not a penny of their gift will be wasted.

Thank you. JACKIE STEWART
Please send your donation to: Jackie Stewart, Disabled Drivers' Association, 18 Creekside, Deptford, London SE8 3DZ, or telephone: 01-692 7141 ext 204 quoting your credit card company and number, name, address, telephone number and the amount you wish to donate.

F1 rationalisation

Yet again, the annual Formula 1 silly season is extended, from changes in the teams, drivers, engines and tyres to the races themselves. I would like to propose a simple, yet potentially effective, system to dispel such uncertainty, and to re-establish a balance in the geographical location of Grands Prix.

The calendar would start with 20 planned races. For example: USA, Canada, Brazil, Argentina, Australia, Japan, South Africa, Great Britain, France, Germany, Italy, Belgium, Holland, Spain, Monaco, Portugal, Austria, Sweden and the GP of Europe. The latter would be on a four-yearly cycle between Britain, France, Germany and Italy.

In this way, the World Championship could truly live up to its name along with a more even distribution of Grands Prix, especially in Europe: that is, no so-called Swiss GP in France, or the second Italian GP disguised as San Marino.

Each of the planned 20 Grands Prix would be allocated a mutually agreed date. The race would be confirmed before a set deadline. If assurances of the race taking place could not be given by this time, it would be deleted from the schedule, with no replacement or reorganisation required.

Further organisational and travel stability would be gained if the races were grouped in continents and allocated particular times of the year for all future

seasons. For example: Australia/Asia (March), Africa (April), Europe (May-August), North America (September), South America (October).

I hope that Formula 1 can again prove itself to be the highly organised, professional sport it was 10 years ago (see *Then As Now?* January 10, 1985).
URMSTON, MANCHESTER N FOXALL

Gone fishing?

The article by Maurice Hamilton 'Old Mo's Almanac' (*Pit & Paddock*, January 5), was one of the funniest I have read in a long time. Unfortunately, it seems to sum up the state of Grand Prix motor racing at this time.

The day the Monaco GP is no longer, I will lose all interest in Formula 1. They might as well drive around the streets of Detroit with its concrete slabs and barbed wire, and replace the drivers with computers.

I thought that Monaco was part of the history of motor racing.

The World Endurance Championship is much more fun. Let's hope that Le Mans is still on — or I might as well take up fishing!

PYREFORDSURREY JEREMY THORNTON-SMITH

Lunge, parry, riposte?

I would like to highlight a few points raised in your excellent review (*December 20/27*) of the 1984 Grand Prix season.

The first relates to Nigel Roebuck's statement: "Throughout FOCA's existence, Tyrrell has been one of its leading disciples, but I wonder how he feels about his fellow members now. Certainly there was little sign of their erstwhile Masonic solidarity coming to his aid when he needed it."

I would be highly surprised if his fellow constructors did come to his assistance. Over the last four or five years, through his own protests, he has alienated them either individually or in groups. One would hardly expect the 'Grandee' manufacturers to support him after his

persistent attempts to have their turbo engines outlawed. Brabham and Williams no doubt remember his objection to water ballast in 1982. Arrows cannot forget how they were cold-shouldered by one and all in 1978 during their legal battle with Shadow, likewise the Lotus problems with the infamous 88. Need I go on?

By ignoring Tyrrell's plight, the other teams were in effect punishing Ken for complaining and protesting too often and for too long, instead of keeping pace with them technically. Hopefully Ken has learned a lesson and, with his new-found Systime backing, will quickly bounce back. I am sure most enthusiasts would wish to see Tyrrell back in the forefront of Formula 1.

From a purely cynical point of view, one cannot escape wondering if the attitude of the other constructors was influenced by the fact that Tyrrell's collapse through financial insecurity would have released two very talented young drivers onto the market. As Ken has understandably been reluctant to release either from their contracts, this would solve any such problem. What serious team could fail to be interested in an opportunity to sign up Stefan Bellof?

Finally, I would like to question the way in which Bernie Ecclestone runs his team. Unquestionably Bernie's tireless contributions to FOCA have made Formula 1 what it is today, but is it not about time Brabham put their package together earlier in the off-season, and then mounted a serious assault on the Constructors Cup?

During the drivers' strike at Kyalami in 1982, Bernie reportedly claimed that the drivers were unimportant and that it was the cars that mattered. Furthermore, he is reported to have said that he could put almost anyone in a Brabham and they would be competitive. In view of this attitude, it does seem strange that in recent years the 'insignificant' driver (Nelson Piquet) has been one of the most competitive and has won the World Championship twice, yet not since 1967 have the all-important cars won the manufacturers title...

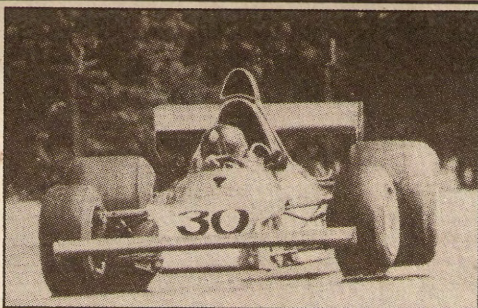
Why is it that Brabham leave the choice of their second driver until so late, thus leaving unsuccessful candidates with few alternatives in F3000, let alone F1 — for example John Watson and Pierluigi Martini last year?

When Bernie does finally settle the driver situation it is invariably a weak one, with the second driver either paying his way or being the sponsor's nominee, rather than an experienced and effective back-up to Piquet. Since he took over as team leader, Nelson's partners have included the distinctly second-rate Zunino and Rebaque, the unpredictable Patrese, and the Fabi brothers who were unable to commit themselves fully and lacked time in the car. It is high time that Bernie put together a team package worthy of the Piquet-Murray partnership, with strong sponsorship (with no strings attached), proven tyres (why Pirelli?), and experienced drivers.

Surely, for 1985 he should not have overlooked the largely untapped talents of four drivers who have also experienced the BMW turbo engine, namely Marc Surer, Thierry Boutsen, Corrado Fabi and the luckless Manfred Winkelhock.

COVENTRY, WARKS

CHRISPARRY



10 It was a time of new departures 10 years ago this week (AUTOSPORT, January 16, 1975). The new Grand Prix season was underway and the Shadows team seemed to have got the legs of the opposition, for there, heading the qualifying times in Buenos Aires was Jean-Pierre Jarier. Tony Southgate was wandering around the pits with a satisfied smile while everyone else scratched their heads—Jean-Pierre was on pole and there were rumours that Ronnie Peterson was 'incredibly close' to signing for the team. Jarier's new departure, however, came to nought. Departing the pits for the warm-up lap 'Jumper' accelerated off and a crown wheel let go. Exit the poleman! Whereupon Mario Andretti, 10th on the grid in the Parnelli, takes up the story. "Man, I never saw so many guys jump a start. That Peterson, he was by me before I started movin', I practically went backwards."

The most 'inspired' start belonged to Carlos Reutemann, he who could do no wrong in Argentina, who shot through to lead his team mate Carlos Pace. It was Big Carlos versus Little Carlos, a Battle of the Brabhams.

Another South American however made his mark. Wilson Fittipaldi (above) debuted the brand new Copersucar. Wilson, scraping onto the grid 6 secs off the pace — the calculators were out working out 110 per cent figures — went off in a big way in the early laps. The car plunged into the barriers and caught fire. A dazed Fittipaldi leapt out, took a swing at the nearest marshal and then had to watch as Brazil's first GP challenger burned. Fire extinguishers were rushed out, and a great cloud of extinguisher powder hung over the track. Into view, out of the cloud, popped Carlos Pace in the lead, only to exit the track in flamboyant style a couple of corners later. Big Carlos was back in front, but James Hunt was in hot pursuit. Then Reutemann's engine went, Hunt led, spun and handed victory to Emerson Fittipaldi — salvaging the family honour. Nothing new in that.

What was new was the news that Guy Ligier was coming into F1, with a young Matra designer Gerard Ducarouge working for him. Lella Lombardi, very much a hot property, was confirmed to drive an Alpine Renault in sports car racing, while also having time for some F1 and a bit of F5000. And a new formula was on its way — it was called FF2000, and no-one was sure if it would serve any useful purpose. Ten years on...

25 Bradnack for BRM was the cry 25 years ago this week (AUTOSPORT, January 15, 1960). The position of team manager at the Bourne concern was open, and Bertie Bradnack, who had started his racing career pre-War in sprints and sand-racing, was considered to be the most likely candidate. Of even more generous proportions than Neubauer of Mercedes, Bradnack was a popular choice and looked set to join the team for the Argentine GP.

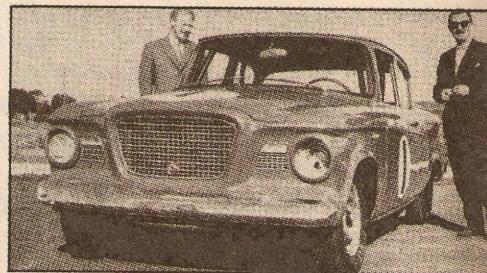
While BRM were deciding who to appoint as Team Manager, 345 crews around Europe were rushing through their final preparations for the forthcoming Monte Carlo Rally. One cause of squabbling that the entrants hoped would not reappear was the mystery secret control, which had previously been included at the request of the authorities as a means of preventing excessive speeds, but had been unpopular because of mysterious losses of marks.

Paul Frère emerged from retirement once again to win the South African GP held at the new East London circuit in a Cooper-Climax, beating Stirling Moss whose Cooper-Borgward was suffering from fuel starvation in the closing laps. One strange anomaly of the revived GP was that the European drivers were limited to cars of under 1500cc while the local competitors had no such restrictions... the fastest six cars in practice were still piloted by Europeans!

Anyone that had progressed from club racing to a seat in the Lotus Grand Prix team in just five years was surely worth talking to, so Chris Nixon cornered Alan Stacey.

In 1958, following an F2 race at Karlskoga, Alan was driving the team transporter to Roskilde with one car inside and the other on tow. Traffic was heavy, but a sporting policeman beckoned Alan to pull past the queue. In doing so, Alan put one wheel of the transporter over the edge of the road, eventually causing the whole bangshoot to topple over and down an embankment. The ensuing stories in the Scandinavian press commented that while British drivers were undoubtedly fast on the race track, their road control was not so good...

Gregor Grant travelled to the States to test one of the new range of 'small' cars — Studebaker-Packard Corporation's 4.2-litre Lark (below). Gregor found the car to be well built (doors shut with a 'plonk'), spacious and capable of rapid acceleration (0-60 mph in under 12 secs, or 9.5 secs when fitted with the 'Four barrel' carburettor).



CATCHPOLE

BY BARRY FOLEY

NOTHING SEEMS SACRED ANY MORE - FIRST WE LOST TYRRELL



... THEN WE'RE TOLD LE MANS IS BROKE AND NOW, WORST OF ALL ...



.... NO MORE VEGAS .



FOLEY



Zaniroli's Mitsubishi Pajero makes its way through the desert sand into the lead at the halfway stage, with team mate Cowan in second place.

Through the desert

Mitsubishi Pajeros lead at halfway stage after Colsoul loses time in the desert — Therier badly injured — Porsche prototypes all retire — Report & Photography: MARTIN HOLMES

After crossing the infamous sands of Niger's Tenere du Taffassasset, the Bridgestone-shod Mitsubishi Pajero four-wheel-drive vehicles of the Frenchman Patrick Zaniroli and Britain's Andrew Cowan held the two leading places at the halfway point in the 1985 Paris-Dakar rally-raid marathon. A last-minute navigational error denied the Belgian Guy Colsoul a week-long lead, held remarkably by his rear-wheel-drive Opel Manta 400, the only non-4WD car currently in a top 10 position. With the V6-engined Lada and the experimental 4WD Mazda 323 teams out of the event, Citroën were upset by a serious accident to their number one driver Jean-Luc Therier early in the event, and Porsche with the retirement of their three prototype cars. Mitsubishi's specially built vehicles have been the surprise of the rally, Cowan taking the treasured Santos-Cartier award for the sections across the Tenere where navigation was by dead-reckoning rather than landmarks.

With more competition than ever before, the 1985 event was soon proving to be tougher as well. Missing a passage control (as is alleged to have happened to Rene Metge's Porsche) costs a three hour time penalty; failing to complete a high speed time section before the controls closed (as when Darniche's second placed Audi Quattro had clutch failure) a 15hr imposition; and a newly enforced rule that only one engine block could be used meant that the rally was soon eliminating many competitors. And this year there were longer sections than before — like the two day Agadez-Gao marathon, the first ever night stage (the final section of the first half, where Colsoul was lost) and the treacherous 'cap sans balise' — compass, no markers' section. But celebrities were still attracted. Prince Albert of Monaco co-drove a private Pajero, while his sister Caroline was in a truck. Heroes from the circuit racing world were plentiful and the only obvious omissions were current superstars from the world's special stages.

Pre-rally tensions were created by extenuated difficulties agreeing terms for using the pistes in Algeria, tracks which are some of the most popular on the event, while the unpopular crowded roads in green Africa were avoided, so the event no longer went through Ivory Coast or Burkina (the country formerly

known as Upper Volta). Instead it went to Mauritania, where the deserts were as bleak as Niger and the sand softer. . .

Action started with a bang when cars left the up-country Algerian town of Ouragla for the 239km section to El Golea. There were troubles aplenty. All the Porsches suffered from bolts coming loose that held the bottom rear suspension arms to the uprights and Cowan lost an hour when his fuel kept vaporising. Leading was Gabreau's V8 Land Rover 110 with the prologue winner Darniche some 2½mins behind after a puncture. Princess Caroline (who flew by private jet across to Algiers, rather than suffer

the delays of the organisers' ferries) was out of the race after only 15kms, her 15 ton Astra truck ignominiously on its side. But if the Porsches were in miseries, the Ladas were in their death throes. All the Patis team cars had front suspension trouble and were withdrawn.

On the second day of action, the road to In Salah was shrouded by a sandstorm and in these conditions Therier's little Citroën rose to third place, but the next day he crashed after stopping to change a flat tyre. He suffered back and other injuries and was flown to France in an emergency aircraft, where he is in intensive care (see *Special Stage*).

On this section the rally lost its leader, Gabreau when the Land Rover's engine broke a connecting rod and the event gained a most surprising new leader — Guy Colsoul in a rear-drive Manta 400. It was also on this Sunday that Darniche had to stop and wait for his Malardeau service truck to arrive and change the Quattro's clutch, his maximum penalty meaning he would be re-seeded close to the end of the field from then on. The service vehicle then broke its gearbox and an urgent call was sent from mid-Sahara to Germany for a replacement. Cowan was in more trouble, this time losing 45mins with battery lead problems, while Mass again had a long delay with suspension failure on his Porsche.

At Tamanrasset the crews prepared to cross the border, escaping from the irritations of Algeria and entering peaceful Niger — by going flat-out past the frontier post on a special stage! Mass's chapter of misery ended when he went off the road and the German ADAC's tourist breakdown recovery service set out to locate and take the prototype back to Stuttgart. Weber lost a rear wheel (he



Above: The event attracted Monaco's royalty. This is Prince Albert. Below: Early leader Guy Colsoul lost out in the desert after a navigational error. Left: The three Rothmans-Porsche prototypes of Metge, Mass and Ickx are serviced. All were later to retire. Below left: Trucking through the dust.



seemed to suffer all of Opel's agonies while Consoul progressively increased his lead) but the hero of the day was Darniche.

In his drive to an 11mins lead over the next fastest time of the day, he reckoned he passed no fewer than 150 cars on the section. By driving along wide, parallel pistes over the desert he reduced the dust hazard. Ickx meanwhile was gradually climbing back and when the event reached the desert town of Agadez, which was to be a rally base for four days, he was fourth overall.

The two-day Santos-Cartier loop took place on the Thursday and Friday, with a rest day on Saturday for the first time. This was used more by the organisers to track down missing competitors than to ease the pressure on the surviving drivers. Competitors were still arriving at Agadez well into the Saturday morning even though they had been re-grouped at a halt on Thursday night at Dirkou on the far side of the loop.

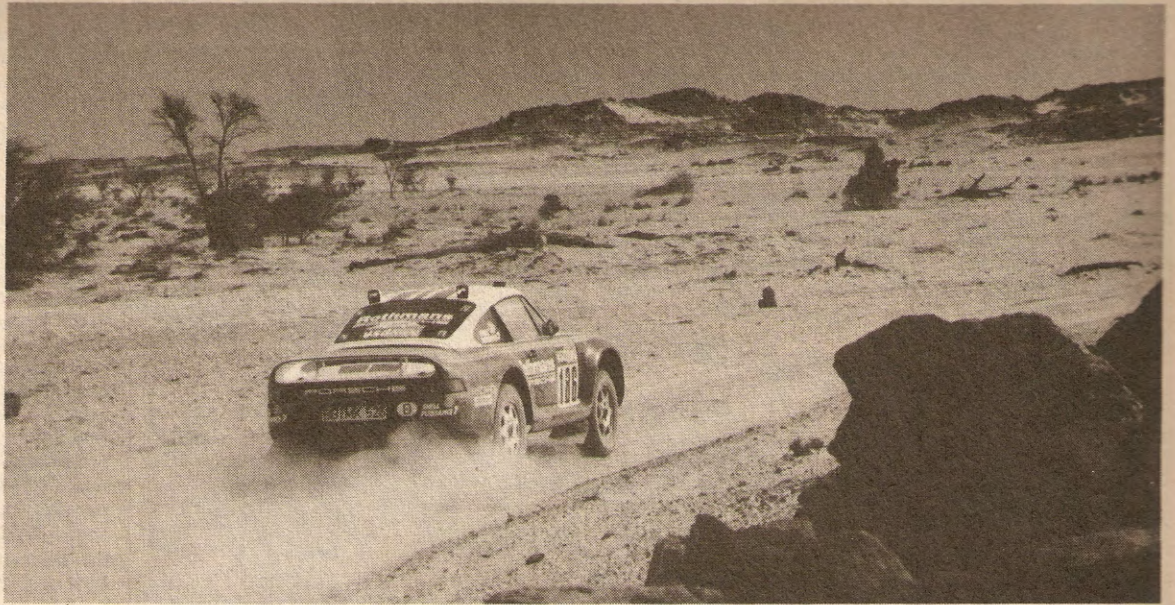
They were two days of adventure and drama. Darniche was to retire, electrical trouble having forced him to stop until his service truck arrived. When he was almost ready to leave he sent his truck on its way and finished the repair himself, but just after he restarted the rear differential broke. There was no chance to call the truck back by radio.

Pescarolo lost an hour on the Thursday with various troubles — including having his engine drown out in the middle of the Sahara. He picked the only spot of still water for hundreds of miles, by a salt well, for this to happen. Drivers who were already suffering visual illusions after several hours peering into the bright sunlight then rubbed their eyes as they crested a dune to see before them — an aeroplane bearing the stickers of the now depleted Pastis team. This had belly-landed on the dune when trying to gain an exciting shot of a competitor by flying alongside.

The road to Dirkou had been fast, and quickest time was put up by Metge who thundered in to the control in the middle of the desert at high speed. He had correctly found the quickest way from the piste to the control but well into the night other drivers arrived from every conceivable direction.

Ickx's drive on this section had put him up to second overall, 37mins behind Colsoul and ready for the dead-reckoning navigation of the Friday. His efforts would soon be over. Cresting a dune — one of the hundreds over which drivers can normally pass without worry — the Porsche destroyed its front on a rock. So the only Porsche driver left in the event was Rene Metge, and he was shortly to suffer his controversial three-hour penalty.

The Mitsubishi's were catching Col-



PARIS-DAKAR RALLY
Results on Monday night at Gao

1, Zanirolo.....	(Mitsubishi Pajero).....	25h57m54s;
2, Cowan.....	(Mitsubishi Pajero).....	26h11m00s;
3, Closoul.....	(Opel Manta 400).....	26h46m00s;
4, Fougousse.....	(Toyota FJ6).....	28h50m00s;
5, Raymondis.....	(Range Rover).....	29h50m00s;
6, Marreau.....	(Renault 18x4).....	30h06m00s.

Above: Typifying the spirit of the rally, Fougousse came to the aid of rival Zaniroli when the latter became stuck in the desert.

Top: Metge was the only Porsche driver left in the event until suffering an oil pump failure.

Right: Pescarolo becomes the attention of onlookers, while a helicopter hovers above with a cameraman aboard. Below: right: Lapeyre makes full use of the Quattro's four-wheel-drive. Below left: Framed by a gnarled and twisted branch, Raymondos continues on his way.



soul's Opel fast, but the Belgian was still ahead at the end of the marathon desert crossing at Iferouane with only the night stage — run in daylight over the same tracks two days earlier — before the rest day. It was here that Colsoul lost his way and Zaniroli got stuck, the latter finishing the section safely but only after receiving help from his rival Pierre Fougousse. Such help typifies the spirit of Paris-Dakar — an adventure of a most spectacular kind.





Cowan's speed in the Pajero varied according to the type of sand, reaching 190kph on the black variety.

The desert king

Marathon expert, Andrew Cowan, talks to MARTIN HOLMES during a break in the Paris-Dakar rally while he reflected on his success so far

"The only other rally car we saw during the 500 kms from Chifra to Iferouanne was Henri Pescarolo's Land Rover, and he was going in quite a different direction! We had previously seen a motorcycle which had overtaken us on a piece of rough and we also saw two DAF trucks just before the mountain at Chirfa, before we headed across the desert." Andrew Cowan was describing his crossing of the Tenere du Taffassasset in which cars were sent across the desert by dead reckoning rather than by reference to landmarks.

"We had to go about 125 kms to a chain of rocks where the course was changed further westwards, then we made for some ergs (sand dunes) which had to be circumvented, and finally it was straight for the black mountains, 200 kms away. As it appeared over the horizon my co-driver, Johnstone Syer said, 'Is that a mirage?'"

"And just as soon as I had said 'No, no, that's it alright,' it disappeared again!"

It is so flat on these deserts that you can only see three or four miles, even from the seat of a rally car, and between the horizon and the sky there is a patch of grey heat-haze. It was this haze which kept making the mountain disappear. Andrew and Johnstone used a fully corrected aircraft-type compass which was fitted to the car for their dash across the Tenere. It had been installed by a professional compass swinger who made a graph showing the deviations after it was fitted inside the car.

The difference between true and magnetic north in that region of the Sahara is only about five degrees which is not much in normal terms, but one degree means you are one mile in 60 out . . .

The organiser of the Paris-Dakar actually made things easier by always giving magnetic headings. "The reason it is better to give a magnetic heading is that you can't always go in a straight line all the way when you are in a car. It is not like a ship or an aeroplane. You have to go round bits of rocks, the dunes or the corrugations, and you constantly need to be checking the heading again."

Even though changes in direction may have been few and far between, it was not possible to keep a steady speed. "Our speed changed a lot, according to the

surface. There was some black sand which was just like liquid. When you looked at it on the wheels you could see it shoot away from the tyres at right angles, just like water. On this surface we would go through at about 5500 rpm in top, say 190kph. You have got to go hard over this to stop the car sinking in, and you must never let one side dig in or you can roll over before you know what is happening.

"This fear of the car rolling sideways creates strange psychological effects. Our car is left-hand drive, and I found I was always wanting to turn right. I think if I was by myself on a cloudy day I would end up driving round in circles. On red sand, which was much harder, I wanted to conserve fuel and we fell back to about 5200/5300 rpm. We must have averaged 180kph for three hours."

Team mate Zaniroli's vehicle broke a wheel on rocks, but was still leading at the half-way mark.



The dunes were very deceptive. "You felt you were always going up a wall of death, always approaching a huge hill, but when you get there you find it is dead flat. I kept on thinking the next dune was going to be steep and I would have to change down but it never was. The deceptions get so bad you cannot look ahead through the windscreen any more, you can't focus your eyes at all. You have to keep looking away."

"I remember we were coming up to some dunes, and it seemed we were going to cross them at right angles, straight across the middle of them. When we got close they were at a very slight angle, and in fact we kept our compass bearing and missed them altogether by passing on the right."

"It is also impossible to judge how to get back on course after a deviation. When you come up to some obstruction you think you can go round it and go back again on the same heading, but it is impossible to do this. I tried it and was aiming immediately 25 degrees out. One answer is to watch where the sun is from time to time. Johnstone suggested that I kept checking the position of the sun on my elbow as we were driving. It was a pretty accurate way. I was steering by looking at the position of the shadow of my arm rather than looking through the windscreen!"

"... we crested a dune and found an aircraft lying on its belly on the next one. The people were just getting out."

This was the first time people had rallied without *balises* — markers like an oil dump, an old tyre or a post that you can follow — but with or without markers the desert is a lonely place to be. Cowan must have passed Ickx's wrecked car but never saw it. "He apparently had his accident about 80 kms after Dirkou. I think he had been driving over a rather more undulating area than the route we used, but you can't tell if you are going into a valley or a dip — or into some rocks. It was just bad luck, and it could have happened to anyone."

"You never know what is going to be the other side of a dune. On the way from Agadez to Dirkou we crested one to find an aircraft lying on its belly on the next dune. The people were just getting out of it right in front of us! It had only just flown past us at about 15 metres up, and those people were dead lucky. Another 50 metres and they would have sailed into the next dune head-on. It is as deceptive to fly low over these dunes as it is to drive over them."

The only time the Pajero is used in two-wheel-drive



Andrew Cowan — crossed the Tenere by dead reckoning.

mode is on tarmac, the rest of the time it is run in permanent four-wheel-drive. There is a centre diff, a free front diff and a limited slip in the rear — a standard Pajero system. Permanent four-wheel-drive helps stop understeer, otherwise when you hit the sand, it's like going straight on in wet slush. This was Cowan's third Paris-Dakar, and he has always run Pajeros. In 1983 he won the standard car class but the problem was that the car did not have the power to get itself out of trouble. Last year Mitsubishi went to the modified class with a better engine but a standard body, and this year they went to the prototype class, only keeping the outline shape.

The main design change was to the rear suspension, to make the cars react better over the jumps. When leaf springs were used, they gave kick-back and the worst thing about Paris-Dakar is the risk of going end-over-end — although organiser Thierry Sabine makes his own speed roll-bar regulations. The coil springs give longer travel and the shock absorbers control the axle better. So in straight lines, the car is very stable, even if it looks high.

"It is nice that the Paris-Dakar is not dominated by either rally or utility cars, continued Cowan. If it was dominated like that it would lose its character completely. Sabine must be careful that he does not set a route that favours one or the other, and the way Colsoul gets through with his two-wheel-drive Opel is unbelievable. Experience in driving is everything, as I don't think two-wheel-drive can have any advantages on this event. The V8 Land Rovers looked good, Pescarolo's one was going especially well, and the main threat to Mitsubishi's objective of being the best four-wheel-drive utility vehicle.

"Engine torque is most important. This is where our units are brilliant, and we out-dragged the Quattros in soft sand on the road to Dirkou. Power does not mean a lot as those Audis must have been giving 330bhp while we had about 210. Bigger wheels also help, but nowadays this event is getting so competitive the cars have got to handle well. We are going through ordinary rough roads as if we were in rally cars, so a big American engined car with automatic would not be as quick even though the torque might be the best.

"It isn't a matter of just jacking up your suspension any more. We tested all sizes of tyres, wheels, brakes and springs to make the cars handle, using an area at a chateau near Perpignan run by a 4WD enthusiast. Bridgestone made special tyres as Paris-Dakar was too expensive for Yokohama, and the Michelin tyre was too big for us. We have used Uniroyal for the past two years but they are steel braced and too heavy, so we wanted a lighter tyre. Bridgestone were the only people prepared to do a kevlar protected sidewall and they themselves approached Sonauto. I was sceptical and tried hard in testing to puncture the tyres but couldn't do it. Our problem was that with their 195/16 cover the car was just

too low-g geared. We needed 700/16 and they made them for us, just like that."

Mitsubishi needed special tread patterns for sand, with grooves which run round the circumference in a straight line, but the most important thing for Paris-Dakar is to have a tyre that does not puncture. Cowan had a puncture on the first stage during the section where he also lost one hour with fuel trouble, but he still likes the event because it provides more competitive motoring than other marathons.

"I think that the final few sections in Mauritania will be the most difficult as that area has the worst desert in the world."

"What amazes me is just how well Sabine controls servicing. You can only take service from another competitor — while he is still running. Sonauto sent Beguin's car back home as soon as it retired (with cylinder head trouble after buying wrong grade petrol), in case someone thought it might still be servicing. Sabine can put you out of the rally there and then, and Lada discovered this last year when he personally saw them short-cutting. We had three rally cars — Zaniroli and us for the competition and Beguin who had a long wheelbase Pajero for high-speed service — and we had two trucks as well. We also had mechanics who travel on the organisers' aeroplanes to certain points, but they can only use tools and parts which are carried by us or in the service cars."

Was there any good luck about his Cartier desert drive? "We left Dirkou with 385 litres of fuel for the section. For the last 180kms we economised by driving

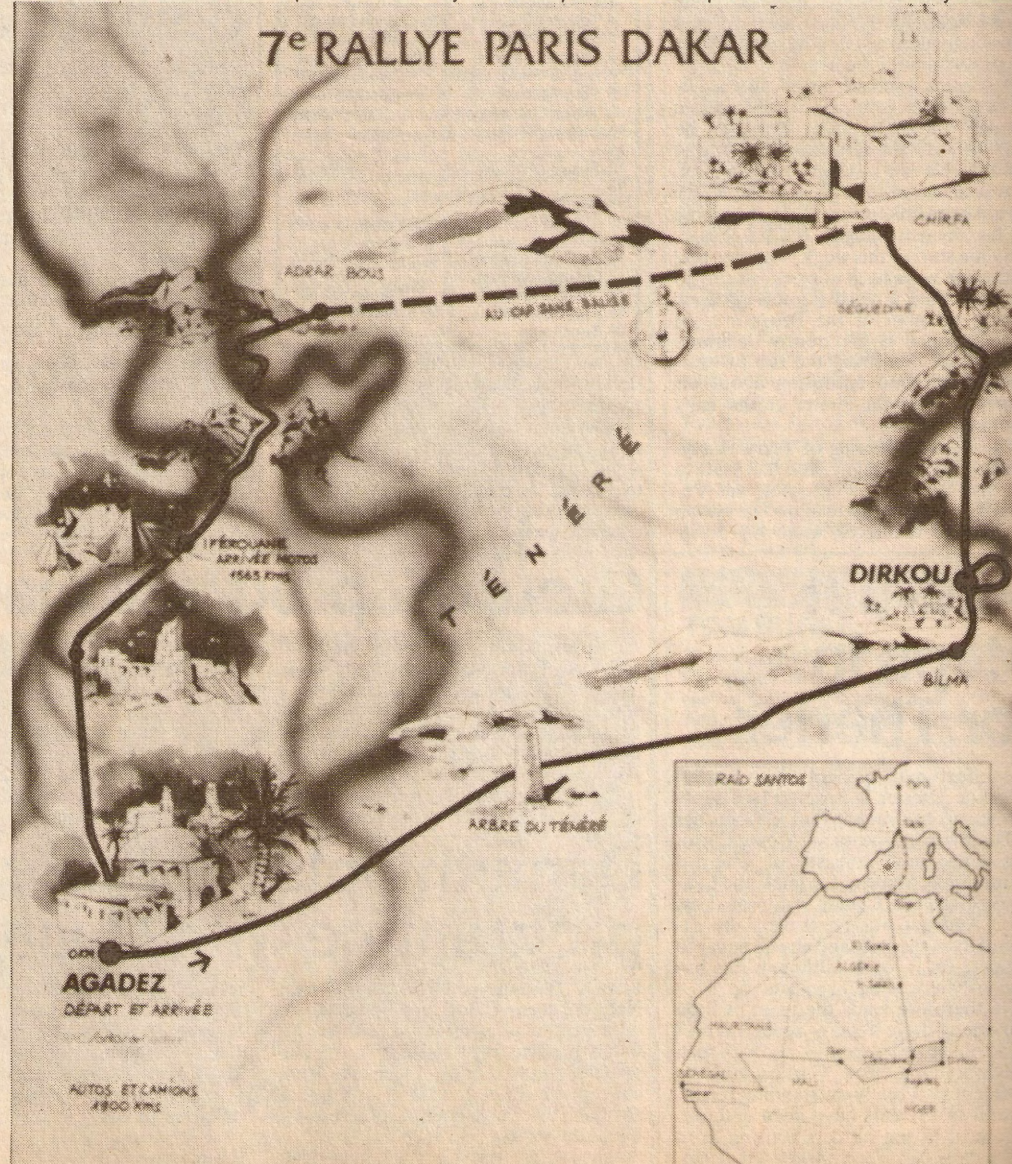
in low boost at 4000rpm to get to Iferouanne, where I think we only had 10 or 15 litres left. Then on the rest day when the car was being stripped we looked at the clutch, which had been so badly strained at one point getting out of soft sand that it had lost traction altogether. We found the lining was badly cracked and we had been very lucky not to have it collapse.

"The road from Iferouanne back to Agadez, which had been used two days earlier, was littered with cars and bikes which had broken down the first time through. It was on this part that Zaniroli clobbered the rocks and broke his wheel. This meant we were running with a 6min gap behind Metge and this was important as there was no wind, particularly in the narrow defiles. Even so we would stop and look out each side of the car as we went, but we knew it was essential to go through the whole desert section without trouble, as the service trucks had been sent on ahead. We do not think there was much sense in carrying spare parts in the car, particularly as it is already so heavy with fuel, water, safety equipment and so on. You do more damage by continuing to hammer away with a heavy car and have more chance of survival if it is lighter."

In 25 years of rallying, Tenere was a new experience in Andrew's career, but would it be the worst part of the event? No.

"In Tenere there was no danger of coming across deep sand. I think that the final few sections in Mauritania will be the most difficult as that area has the worst desert in the world. Where we went in the Tenere is nice sand — even though it is terrifying when you are out there waiting for 80 miles for the next land mark to come up. In Mauritania it is more hilly with villages and it is horrible." So far Cowan's Paris-Dakar is going well but there may be many unexpected adventures before the end.

The route of the Santos de Cartier 'special'. Cowan's Pajero was the quickest on this loop of the event but he was lucky to finish.



Therier hurt on Paris-Dakar

French star still in intensive care

Jean Luc Therier is currently in intensive care in a Paris hospital following a bad accident on the Paris-Dakar Raid. His condition is described as precarious but not alarming, but an operation on fractured bones is being delayed until his condition is stabilised.

It seems that the Frenchman was thrown out of his Citroën Visa Mille Pistes, and the car landed on top of him. The organiser's emergency jet was used to take him back to Paris, where Professor Saillant is now waiting until Therier is fit for surgery. The injuries include numerous fractures of the neck vertebrae, while he also has a badly cut arm. Despite all this, as he was being loaded onto the emergency jet, Therier was giving interviews to the French press...



Therier — desert accident

Back injury interrupts Vatanen's Monte practice

Ari Vatanen's first push in the 1985 World series looked under threat last week, with the Finn confined to bed for several days with a twisted spine. The injury happened when Ari and Terry Harryman were helping lift a Volkswagen out of a snow drift, although Ari did not discover the problem until the next day.

A jogging exercise lasted only a few paces before severe pains rendered him virtually immobile. Later in the day he was taken to Val les Bains hospital and he was only released last Saturday. Happily, he was declared fully fit, and the injury has not been linked with the back trouble Ari had some time ago.

By the start of this week, Vatanen and Harryman were back at work, aiming to complete their notes by tomorrow. New Finnish member of the Peugeot team Timo Salonen is apparently delighted with his car, enjoying the fun of four-wheel-drive, and enthusing about his efforts to find the limits of the car's handling.

The unlikely pairing of Terry Harryman and Fred Gallagher also had a tale to tell last Saturday. Gallagher was imported at short notice to allow Harryman to continue the recce while his driver

Monte Carlo Rally leading entries

- 1, Blomqvist/Cederberg B Audi Quattro Sport
- 2, Vatanen/Harryman B Peugeot 205 Turbo
- 3, Rohrl/Geistdorfer B Audi Quattro Sport
- 4, Toivonen/Piironen B Lancia Rally 037
- 5, Biasion/Siviero B Lancia Rally 037
- 6, Salonen/Harjanne B Peugeot 205 Turbo
- 7, Andruet/Peuveragne B Citroën Visa MP
- 8, Saby/Fauchille B Peugeot 205 Turbo
- 9, Tchine/Gandolfo A Opel Manta
- 10, Snobeck/Bechu B Renault 5 Turbo
- 11, —
- 12, Beauchef/Dubois A Ford Escort
- 13, —
- 14, Wambergue/
Martin B Citroën Visa MP
- 15, —
- 16, Gauthier/Lallemont B Lancia Rally 037
- 17, Chausseuil/Baron A VW Golf GTI
- 18, Chauche/Barjou B Citroën Visa MP
- 19, Feitler/Demuth N Audi 80 Quattro
- 20, Balas/Laine N Alfa Romeo GTV

rested. The two Ulstermen were driving slowly, and suddenly confronted by a spinning car.

Harryman took avoiding action, and ended up rolling down a snow covered slope. Apparently a crane was required to recover the car, but happily everyone escaped uninjured and the two continued the recce with just a slight interruption.

Andruet steps in for Therier

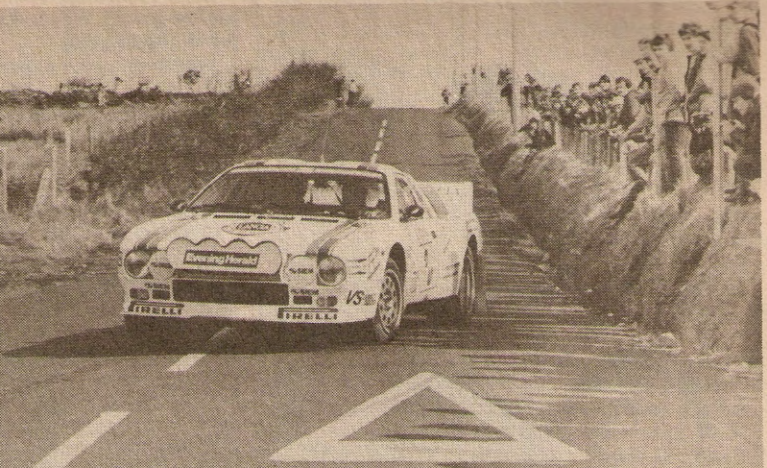
The unfortunate incident which has left Jean Luc Therier in hospital (see separate story) has meant that Citroën has had to revise its line up for Monte Carlo. The team now consists of Philippe Wambergue, Maurice Chomat, and Lancia regular Jean Claude Andruet. Last year, Andruet was controversially excluded from the rally and vowed never to compete on it again, although this has obviously now been forgotten.

He therefore leads the team of little four-wheel-drive Visas — seeded at no 7 ahead of Saby's Peugeot — and with such a disappointing entry, Citroën must be confident of a really outstanding result. A total of 131 cars have been entered, with most of the runners starting from either Paris or Monte Carlo itself.

Group N: progress made

At a press conference held at the RAC MSA in Belgrave Square last week, Technical Executive, Neil Eason-Gibson, explained that FISA are continuing to look into the problems faced by competitors in the Group N category of international rallying.

Critics of the category say that, while it is relatively cheap to prepare a car



Airikkala drove a Lancia on the 1983 Circuit. Regular appearances this year are likely.

Airikkala's Lancia deal

Pentti Airikkala hopes to tie up a deal by the end of this week to contest the Shell Oils Open Championship in a Lancia Rally 037, supplied by the Italian Volta concern.

For Airikkala, who has spent much of recent years driving on a one-off basis for various teams, the prospect of a full season is appealing and the presence of Airikkala in the Italian racer on the Open series would be a welcome boost to the

manufacturers contest.

It seems likely that the car will tackle the National Breakdown and circuit of Ireland rallies at first, the rest of the season depending on initial results.

Airikkala would not comment on the deal on Monday but did reveal that he is to tackle the Boucles de Spa Rally at the wheel of either the Lancia or a Nissan 240RS.

FIA Appeal Court to settle dispute over Monte Carlo

Although the Monte Carlo Rally is as scheduled, the problem over sporting control of future events to be run has still been resolved with the FFSA claiming that they still retain control of the "Monte". To make a judgment over which organisation ultimately takes charge the International Court of Appeal of the FIA was convened to sit last Thursday, January 10.

It had been intended that this would be the final judgment and that either the AC de Monaco or the French Federation

would be put in charge of authorisation for the event's period spent on French territory.

Michele Boeri of the AC de Monaco has however been involved in a car accident recently, leaving him with a broken arm, so the FIA judges decided to defer the study of this matter until January 24. It is their intention that the problems will be sorted — to the satisfaction of all parties — before this year's event gets under way.

Duez for Mazda and ARG

Marc Duez has finalised deals with both Mazda and Austin Rover for the coming season, and expects to contest both the Boucles de Spa and the Portuguese round of the world series for the Brussels based Mazda Rallye Team Europe.

Details of the Rover appearances will be announced next month but it was recently revealed that Duez's regular co-driver for the season will be Gilles Thimonier, son of Ragnotti's partner Pierre.

Demuth opts for European programme with Quattro

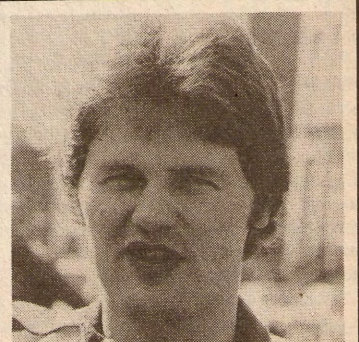
Harald Demuth is forsaking his own National scene this year to concentrate on a European programme with an A2 Quattro partnered by Willy Lux. The project is being run by an Austrian concern, and not the familiar Schmidt Brothers who have been responsible for Demuth's cars in recent years.

Essentially, the early calendar will

initially, the lack of allowance for strengthening makes the category expensive in the long term.

FISA have been asked to consider certain safety strengthening to prolong the life of such cars and Eason-Gibson seemed hopeful that a satisfactory solution could yet be found.

include high co-efficient events with Boucles de Spa, Costa Brava, the Spanish RACE Rally, and Zlatni Piasatzki in Bulgaria. Only the Hunsruck and Hessen rallies are included in Germany, although depending on Demuth's results on these rallies, the second half of the year may see some revisions to the programme.



More Brits

Britain will be well represented when Malcolm Wilson makes his first venture into Scandinavia next month. The Cumbrian driver will take his Audi Quattro to Sweden for the World Championship qualifying round. Wilson will have regular partner, Nigel Harris alongside as he joins several other British crews.



David Llewellyn with his Shell Oils Quattro for this year's championship.

David's chance

David Llewellyn will have his first taste of the Audi Quattro when he tackles the Wydean Rally on February 2. Partnered by Phil Short, the reigning Shell Oils/AUTOSPORT National Rally Champion will have Shell Oils backing for the season and his car has been repainted in its striking new livery.

In fact the car that goes to the Forest of Dean will not be the one for the National Breakdown Rally, that is still under

preparation.

Plans are still under way to take in the first British Junior Team event of the year, the Swedish Rally, but the proximity of the World Championship event to the National Breakdown may yet prove too great a stumbling block. However, Llewellyn is keen to get as many stage miles under his belt as possible before the young Welsh star joins Michele Mouton for the Audi Sport UK attack on the Shell Oils Open Championship.

National Breakdown moves into top gear

The plans for the National Breakdown Rally, opening event in the Shell Oils Open Championship, are continuing apace with the almost customary worries over the state of the forests. The Forestry Commission have regraded several parts of their Yorkshire area, following the passage of the RAC Rally, but have had their work hampered by the recent snowfalls. Nevertheless, Clerk of the Course Jon Sharpe is not worried and the traditional tough start to the series looks set to continue as planned.

Indeed, Sharpe is looking to the event with enthusiasm and can claim a real

coup in getting the use of Harwood House estate for the first time in many years. The grounds of the beautiful stately home will provide a twisty sting in the tail for the 260 miles event.

In addition to the main event, entries for the clubmans rally are also coming in well although Sharpe is keen to point out an error in the regulations. Entry to this event are open to all cars which comply with the RAC MSA vehicle regulations as applicable. The regulations as printed imply that only homologated cars are eligible.

Shell Oils expand team support programme

Bertie Fisher's Opel Manta 400 will carry the colours of Shell Oils into 1985, the Gold Card livery being changed to a bolder new design. Once more, Fisher will tackle the Shell Oils Open series as part of the General Motors team on the championship.

Shell's involvement with teams continues to the Peugeot Talbot camp where the two Group A 205 GTIs (for Louise Aitken-Walker and Mikael Sundstrom)

carry the company's colours.

Although the series will not actually carry the Shell name, the oil company will continue to lend support to the BTRDA championship. Having lost the support of Esso at the start of 1984, Shell's help enabled the series to go ahead as planned and, with no name yet linked with the series on a formal basis, the championship organisers are once more grateful for help.



RAC awards

In Pall Mall last week, the RAC MSA presented the 1984 champions with the spoils of victory. Clockwise from below: Per Eklund collected the Group A award from RAC MSA Chairman, Michael Southcombe, while the English team (represented by Mark Lovell, Chris Lord and Tim Brise) collect the Triple Crown trophy: Brian Wiggins with the Group N award: The biggest cheer went to Jimmy McRae and Mike Nicholson as they stepped forward to receive the Open Championship trophy.



Droogmans in typical pose.

Duel in Belgium

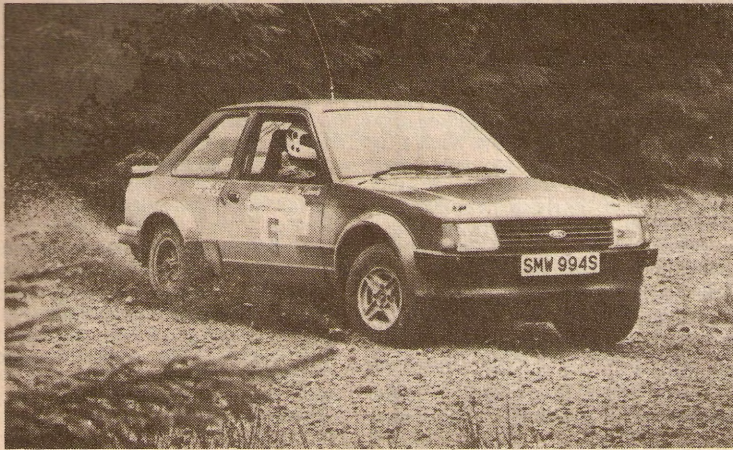
Most of the major runners in the Belgian scene are now settled for the 1985 season, with rival cigarette companies Bastos and Belga likely to dominate yet again. For Bastos, both Guy Colsoul (currently in the middle of the Sahara) and Patrick Snyers will lead the challenge with their Manta and Lancia Rally respectively. Opposition will come from the two Porsches of Robert Droogmans and Jean Louis Dumont.

TOM BURKE

Tom Burke of Cork died suddenly before Christmas. In the early sixties, Tom was one of Ireland's leading rally drivers, in NSU's and VW Beetles, with a string of class wins and other successes in all the major events, including the Circuit of Ireland. He also competed regularly in test trials, autocrosses and speed events in the Munster area. He later turned to rallying with a well prepared Escort, and only recently was a 'sweeper' on the Uniroyal Cork 20 International Rally. He also raced an Escort at Phoenix Park and would probably have done more racing but for the distance of Cork from Mondello and other racing venues.

In his late forties, Tom was always a most pleasant person as a competitor, organiser or socially, and was indeed an integral part of the sport in Cork City for many years. To his wife Eileen and family, AUTOSPORT extends our deepest sympathy.





Allan Edwards will be back with his 400bhp Escort to bring renewed excitement on the stages.

Edwards returns with stronger 4WD Escort

Extensive development work, carried out during the winter months, has given Allan Edwards renewed enthusiasm for rallying and he hopes to be a front runner with his immensely powerful 4WD Escort this season.

Hampered by gearbox failures on the 400bhp machine, Edwards turned to ZF for assistance and the company have come up with a five-speed gearbox to cope with the power generated by the F5000 engine. The true test for the work, however, will come at the beginning of February when Edwards will tackle the Wydean Rally.

"I was happy enough with the car itself,"

commented Edwards on Monday, "but clearly we needed a stronger 'box. Now we shall have another crack at the series and maybe I will be able to attract the attention of a works team. Ford have shown interest in the car but, obviously because of their involvement with the RS200, they could not get involved.

"If I had the budget, I would like to build another car, one with sleeker lines, but at the moment that is beyond our means."

Edwards' enterprise certainly deserves success and, hopefully the changes made recently will bring much needed reliability.

Sutherland joins Collins

Jamie Sutherland, brother of Alistair, is to return to the stages with Phil Collins' Escort RS. Having had a brief outing on the Quip at the end of last year, Sutherland is to contest the Shell Oils/AUTOSPORT series in the car.

And indeed, there is a strong challenge from the Pontilas based hire business on this season's championship. Alec Cannon will use the ex-Malcolm Patrick Ascona 400 for the season and will be seen on both the National and BTRDA Championships as

well as a shakedown outing on the National Breakdown. Collins is also building up an ex-Rothmans showcar into a Manta 400 in order that Glyn Jones can also attack the premier championship.

Roger Chilman, one of Phil's long standing customers, has also been spending money in Herefordshire, having his Escort reshelled and could be another favourite for the National title.

Hill's Astra project in doubt without sponsor

Rumours that George Hill has retired from the sport are apparently untrue, but his long standing presence on the national scene may yet fail to continue.

Having stayed loyal to the Vauxhall marque for 11 years, Hill is considerably annoyed at the lack of support from GM Dealer Sport for the Safety Devices rear-

wheel-drive Astra project.

After a fairly difficult first season, the car still cannot claim a rally finish, but GMDS are not prepared to assist in any way other than on a win bonus scheme basis. Without a major backer, therefore, the interesting project looks set to drift into history, as might the man who won the title in 1975...

Roger Evans (left) watches at Shell's prizegiving last Thursday as David Llewellyn receives his championship trophy from their General Manager Sales, Dennis Keeping (right).



Shell Oils

NATIONAL RALLY CHAMPIONSHIP

Champion's big boost

Champion have agreed to continue their support of the Shell Oils/AUTOSPORT National Rally Championship with a substantial cash boost for users of their products.

In the end of season awards, Champion will hand over cheques for £600, £475, £350, £150, £100 and £50 respectively for the first six places while the highest placed Champion user in each class will receive £220.

Full details of how to qualify for these awards are available from Andrew Haill, PO Box 200, Sutton Coldfield, West Midlands.

Louise to try again

Louise Aitken-Walker has asked Dave Campion of R-E-D to make the turbocharged Sierra available for another crack at the Shell Oils/AUTOSPORT National Rally Championship.

If the money can be found to run the car, the Scots girl who led last year's championship for most of the season until David Llewellyn's late charge, could take the title in 1985.

New sponsor for Granite City Rally

Having supported the Granite City Rally for four years, a change of advertising policy has forced John Clark to give up their sponsorship of Shell Oils/AUTOSPORT and Esso Scottish Rally Championship qualifying round. Therefore, this year's event will carry the name of Sonat, an Aberdeen based company in the oil industry.

Through their Teleco company, Sonat have already been involved in the sport, having supported James Ingleby's Triumph TR7 V8. The all-important sponsorship cheque was handed over to Clerk of the Course, George Robinson last Tuesday.

The event will once again offer around 80 miles of rallying in the Grampian forests and returns this year to the Skean Dhu Hotel at Altens having switched to the airport hotel last year. Regulations will be available shortly.

Lucas are back in '85

A Lucas parts voucher to the value of £150 will go to the highest placed Lucas user on this season's Shell Oils/AUTOSPORT National Rally Championship.

Long time supporters of the series, Lucas, are also continuing their assistance to the younger drivers with a similar award to the highest placed Lucas user under 25.

Full details of the award scheme are available from Bob Blurton, Lucas Motorsport Division, Great Hampton Street, Birmingham. Tel: 021-236 5050.

Goodyear to assist Nicolet

Goodyear are to support the Nicolet Welsh Stage Championship this year with a bonus scheme for their customers.

Points will be awarded to the first 10 finishers in each class using Goodyear products — irrespective of overall position and providing they have registered for the award scheme — and at the end of the year these points will be tallied. The highest placed user will receive £150 and the second placed driver £100.

Points can only be scored in one class and therefore drivers who change classes will lose any points scored already. Full details of the scheme are available from Harry Gee, Goodyear Tyre and Rubber Co. (Great Britain) Ltd, Bushbury, Wolverhampton, West Midlands WV10 6DH.

Nightmare

A ridiculous accident occurred during one of the rest halts on the Paris Dakar when an Italian drove his car through the campsite and left one competitor injured. Georges Groine was left with severe bruising to the legs and stomach, but his mechanic's bed was cut in half. The mechanic was working on the truck at the time.

Other tales of frightening incidents continue to come out of the desert, including several bike riders who have been forced to travel considerable distances with broken arms and legs...

BRIEFLY

■ Having failed to win the Safari Rally, despite numerous desperate attempts, Italian Sandro Munari seems to have abandoned his long time ambition and has recently been appointed Team Manager for the Alfa Romeo Formula 1 team.

■ Welsh Border CC have had to postpone their Milestone Stages Rally — due to run on April 20 — until an unspecified date in October. Finding a date is naturally important as they have no wish to lose their place in the Nicolet Welsh Stage series.

■ Andrew Bodman has replaced Russell Brookes as chairman of the IRDC. Brookes remains on the committee and is joined by Brian Rainbow, Cyril Bolton and Hugh Edwards.

■ Green Belt MC's Rally School begins next Wednesday (January 23) and will cover all aspects of the sport. Full details from Tony Strong on 01-236 1385 (daytime) or 01-888 0812 (evening).

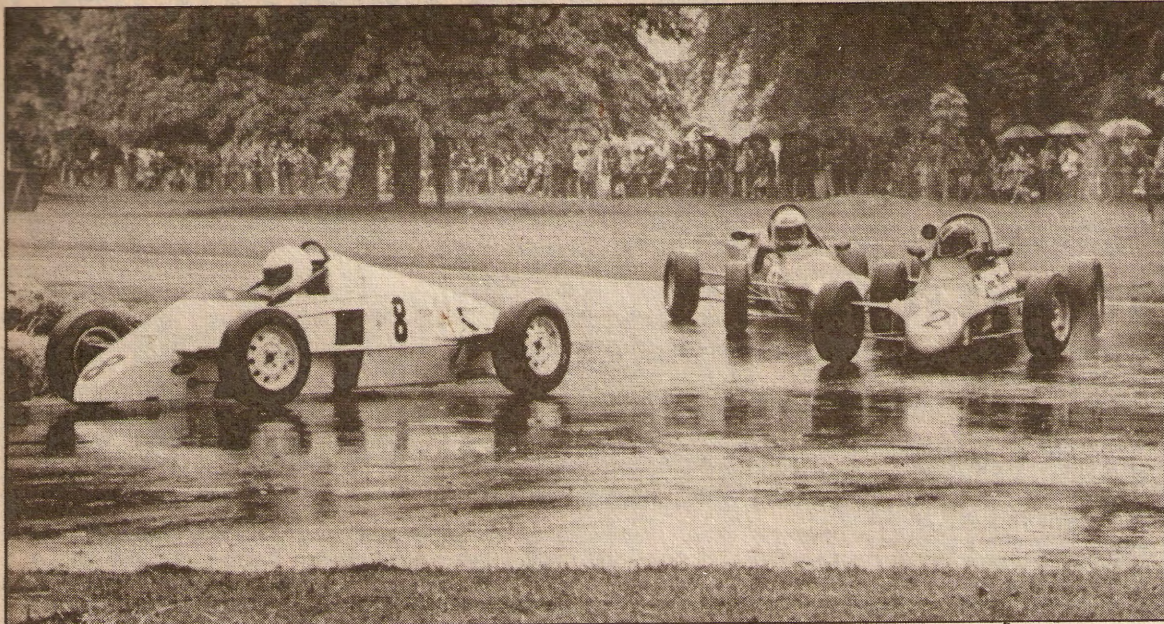
DIARY

Galway International Rally, February 9/10: Round 1 of the STP Tarmac Championship with pace notes and all the traditional hospitality of Irish rallying. Details from Brian Thornton, 12 Sylvan Avenue, Newcastle, Galway, Ireland.

TCS Tyneside Stages, February 17: Three laps of Otterburn are in store for crews on this Tynemouth Computer Services event. Entries at £50 are available from Barry Duell, 56 Broomfield Road, Gosforth, Newcastle upon Tyne NE3 4HH.

Duckhams Festival Rally, March 9/10: A demanding route through the lanes of North Devon and Exmoor are on offer in this, the second round of the *Motoring News* and BTRDA road championships. Voted as the best event of 1984, Bath MC are putting on a 190 mile route with a start in Minehead. Full details from Mrs Patricia Clipson, New Coach House, Lyncombe Vale Road, Bath, Avon. Tel: 0225 311444.

Spring Stages, March 31: Tony Watson has the details of this multi championship single venue event which has 40 stage miles for £27.50. Contact him at 58 Ridgeway, Pembury, Tunbridge Wells, Kent TN2 4ES.



Robert Lee Lewis won at Phoenix Park. Here he leads Irish champion Vivion Daly and Bob Scanlon. Below: FF2000 champion, John McCracken.

Vivion Daly scoops top Irish Awards

Vivion Daly, 28-year-old brother of former Formula 1 and current Indycar driver Derek Daly, has certainly scooped all the top awards in Irish racing this year, including the prestigious RIAC/Dunlop Sexton Trophy.

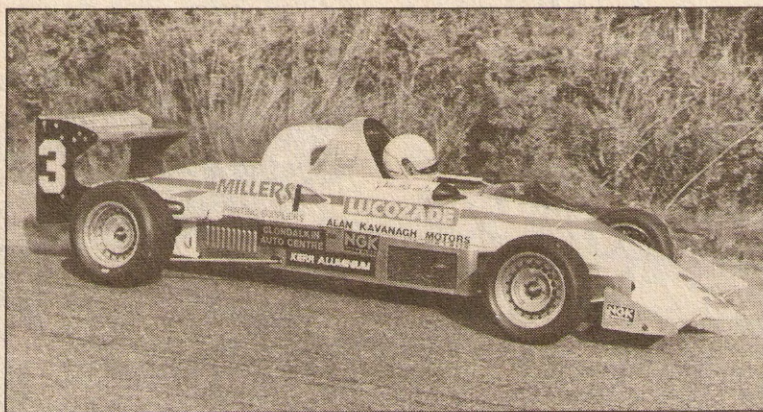
Daly really only came to prominence in Formula Ford 1600 in the last two seasons, having previously concentrated on karting with the odd foray into prodsaloon racing with a Fiat 128 3P. He campaigned a Van Diemen RF82 in 1982, finishing ninth in the Irish Nationwide Championship. In 1983 he raced a new Reynard FF83 and not only finished second in the championship (to Anthony Murray in the works Crosslé 55F and his own 40F) but also won the Champion Festival at Mondello Park and the televised race at the Leinster MC's Euro 2000 meeting.

Last year saw Vivion in a new Reynard FF84, but he started off the season by winning in a borrowed PRS of some six years vintage. During mid-season young Alan McGarrity emerged as the *coming man* and, although he won the STP Championship at Kirkistown in his Crosslé 55F, it all seemed to go rather wrong for the Ulsterman in the bigger end-of-season races. Anthony Murray too hit a bad patch, punted out of several races on the trot and, retiring the works 55F at Phoenix Park after some spins due to a puncture. The big challenge from the Van Diemen RF84 pair of Alan Kelly and Robert Lee Lewis failed to be as big as expected, and all the time Daly picked up those valuable points with the pristine and multi-sponsored Reynard FF84.

Daly was the clear cut winner of the Motovox Ford 1600 championship, 20 points in front of third man Murray and ten in front of the second-placed Lee Lewis. The points standings were: Daly 65, Lee Lewis 55, Murray 45, Mondiale driver Arnie Black 39, McGarrity 30 and veteran Tommy Reid (Crosslé 55F) 29.

The Ford of Ireland £20,000 5-race Championship was a lot closer run, and Daly nearly blew it by sliding off on the third last corner at Phoenix Park to present the race on a plate to Lee Lewis. The final scores were Daly 46 points, Lee Lewis 45, Cliff Dempsey was third in his Van Diemen RF83 on 33 points, Murray was next on 31, Mick Dillon (Van Diemen RF84) was fifth on 24, and Bob Scanlon (Crosslé 55F) sixth on 21.

For the first time in the long history of the Sexton Trophy Competition, the outcome was decided by a panel of



judges, rather than by the traditional points per event system. The buildup to the prizegiving was quite electric, and the RIAC's Dublin HQ was packed for the big night (on December 10). Well, it was close enough voting, but Daly came out best by four points to win the RIAC/Dunlop Sexton Trophy, with Alfasud prodsaloon driver John Burns second and James Tollerton, winner of the Ford 2000 class, nominated third.

Nine Dunlop Sexton class winners were in the running, and in all fairness Vivion Daly was the deserving winner, from the most competitive class of all in Irish racing. Next year he competes in the big Formula Ford 1600 race at the British Grand Prix meeting at Silverstone, part of his prize for winning the Ford of Ireland Championship. He also has his sights set on Ford 2000, and the usual budgetary problems will dictate if this is on or not.

Daly is unlikely to go the road paved by his brother Derek into Formula 3 and eventually into Formula 1 and/or Indycar racing. To Vivion, motor racing is more a hobby than a future career and even though he holds the Mondello record for Formula Ford 1600, it could hardly be said that he has the tiger quality of other Irish drivers who came out of this class to make their name on the international scene — notably Derek Daly, David Kennedy, Tommy Byrne and 1984 CanAm Champion Mickey Roe.

Lee Lewis is hoping to also go Ford 2000 in 1985, and Anthony Murray talks of having a season in the USA. Murray has been testing the new Crosslé 60F and expresses great confidence in the car's winning potential for next season. Of the 'A' class drivers, Cliff Dempsey and

Mick Merrigan should be very competitive next year. Dempsey has bought Arnie Black's Mondiale M84S and Merrigan (former Formula VW Champion) has bought Daly's Reynard FF84, having sold his immaculate Van Diemen RF81 to up and coming Michael Cullen, who has shown great promise in some prodsaloon races at the wheel of his father's Opel Kadett 1.3SR.

Of the other Formula Ford 1600 championships, the Shell Oils 'B' class was won by Colm Bermingham who had a good season with his Stillorgan Bowl Crosslé 32F, always in the hunt and finishing up with 43 points to win the title from last year's 'C' champion Philip Hughes (PRS) on 37 points. There was lots of good close racing in the 'B' class, but the unsponsored 'C' class didn't produce many notable performances and was easily won by Peter Egan in a Van Diemen RF80.

The Crosslé Challenge Cup, for pre-1980 cars, proved very successful in its first year, even if Dave Griffin did win by double points with his Van Diemen RF79. Pat Duffy was absolutely flying with a Crosslé 30F until a spectacular mid-season prang saw his car totalled, and an extremely lucky Duffy did not race afterwards.

Formula Ford 2000

Formula Ford 2000 somehow did not have the same sense of aggro and knife edge competitiveness of the 1600s. John McCracken mounted a most professional assault on the championship with a new Reynard SF84, and won by six points from James Tollerton in an SF83, on 126 and 120 points respectively. Third man Leslie Wright was not a real

challenge to the two Reynard drivers, and neither was Tommy Reid in fourth place in his similar Van Diemen RF83.

The new Mondiales of Denis McGall and Colin Lees enlivened the class from August on, culminating in a superb one-two (Lees and McGall) at Phoenix Park. By contrast, the interim Crosslé 56F campaigned by Gary Gibson was never in the chase. P.J. Fallon came on the scene with the ex-Gugelmin Van Diemen RF83 to make end of season impression, but not enough to make any major difference to the main championship contenders.

The Formula Ford 2000 Association changed its public relations and sponsorship liaison person, with the result that the class did not get anything like the publicity of previous sponsors Duckmans and Elf, and MacCormick and McNaughton. Now a major effort is being initiated to put Ford 2000 into the limelight, and get all the cars out racing, including the many pre-82 cars that are lying about and not being used.

Of course, the Euro Series race at Mondello has proved a big attraction in recent years, thanks to the razzamatazz put into its promotion by the Leinster Motor Club and Leinster Trophy sponsors, Benson & Hedges. The Dublin City parade of Formula Ford 2000 cars, driven with zest by Euro and Irish pilots, was a great promotion that looked even better on telly.

Now it looks as if the Euro race may not be on any more at Mondello, according to Dan Partel of EFDA, who was very critical of the place (and in particular of the track surface) in an RTE TV interview at the September meeting. Mr Partel should be reminded that Mondello isn't Hockenheim or Zandvoort, because the little Irish track does not have a Grand Prix or other major crowd pullers to swell the coffers and lay on all the facilities that the Partel party enjoys on the European circuit trail.

Knocking Mondello on a National TV interview was plain bad form on Partel's part. For sure, Mondello needs a major improvement scheme, from resurfacing to a whole facelift. But it's a *Catch 22* situation: the money just isn't there to modernise the place and lay on the big promotions that will bring in the paying punters, and as it is, the fans seem to be dwindling in numbers by the year, even though the local racing is generally excellent entertainment and entries continue to be good, despite Ireland's desperate economic recession.



Dick Smyth — 'Driver of the year'.

Other classes

Back on the championship scene, Liam O'Sullivan won the Motor Distributors/Grange Motors and Issac Agnew Kirkistown Formula VW Championships. It was not a vintage year from the VW 1600s, but the competition among the few quick drivers was pretty fierce. The class also made its mark at Kirkistown, thanks to the sterling efforts of Tom Wright, and indeed it was a great pity that Wright couldn't afford to race at Phoenix Park, where O'Sullivan clinched the main championship.

David Sheane is the man who started it all, and he finished second in the Southern series and fourth in Northern Ireland, running 27 races and hillclimbs without removing the engine from his Sheane chassis. Now, that is what low-cost motor racing, Formula VW 1600 Ireland, is all about.

No one, but no one, puts as much effort into his motor racing as Dick Smyth, and as a result he again dominated Mini 850 racing with his Arrow Chemicals car. All his meticulous preparation pays off in terms of reliability and, but for a one-off mechanical malady, he might have done even better than to finish third out of 46 starters in a Silver Jubilee race at the Mini 25th Birthday meeting at Donington in August — a broken steering anchorage being the trouble. In 1983, Dick won the RAC/Dunlop Sexton Trophy and, apart from his many wins this year, a nice tribute to him was receiving the Irish Motor Racing Club's 'Driver of the Year' Award for 1984.

Production saloon racing enjoyed its usual following, but I must confess that, after watching this type of tin-topping now for some years, I find it rather boring, and am personally more enthusiastic about the prospects of a revised GT/Special Saloons class next year. The Saloon Kings production series was devised to inject some extra crack for drivers and spectators alike, by starting the slowest cars from the front of the grid and the quickest from the back. Eddie Regan did wonders with his Escort RS2000 to win the series from the 3-litre Capri pair of Brian Tuite and Norman Williams.

John Burns in the TI Engineering Alfasad was unbeatable in 1300cc prodaloon racing, easily winning the XtraVision Championship from Ivan Thompson in a similar 'Sud. Pre-season fears that Bob Montgomery's DOTI Opel Corsa SR would blow the trusty Kadett SR into the boondocks were unfounded. Although Monty was quick around Kirkistown, the Kadett of Des Cullen was third in the championship thanks to its generally better stability around Mondello Park.

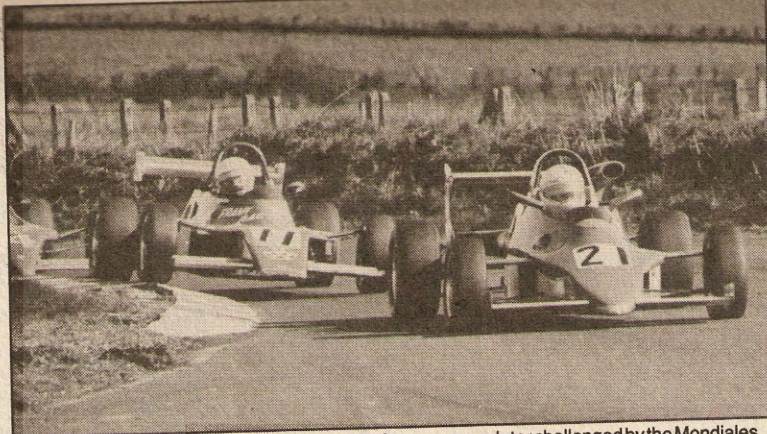
There was no GT Championship last season, but all the pointers indicate better things in 1985. John Keaney will have a new lightweight TMC Costin, and it is expected that up to five of the Frank Costin-designed and Wexford-built cars will be racing next year, including the rebodied car of David Dowling. Morgan Dempsey is building at least one or two replicas of his MG Midget-based, Ford twin-can powered ND-GT, and George Crozier and John Hayes will run their Maguire Minis. David Hall's new and as yet unraced, mid-engined and ultra-lightweight Imp has been bought by Eddie Regan, and the 'Hallspeed' is building another version for himself. If all the other prospects materialise, it should be quite a competitive class indeed.

BRIAN FOLEY

Jackie Cochrane (Sunbeam Tiger) and Simon Brien (Crosslé), front row historic racers.



AUTOSPORT, JANUARY 17, 1985



The Reynard and Van Diemen of Tollerton and Greenan were later challenged by the Mondiales.

The Mondiale emergence

It was another year of good racing and poor crowds at Kirkistown in 1984, few members of the Northern Ireland public taking the trouble to go down to the circuit and take a look.

In spite of one televised meeting, it seems that, while there is considerable interest in what's going on in the Formula 1 world, and such speculation as to what is going to happen to John Watson, the Ulster public has little interest in who is going to be the next John Watson. One is tempted to say that, unless the local sport gets a bit more support, then there never will be another Ulsterman on the F1 scene.

But, such gloomy thoughts aside, it must be said that the racing at Kirkistown was good last year, with the accent even more on the two main single-seater formulae than in the past. *Formule Libre* also made a reappearance, and that, at least, looks as though it might provide something a bit different in the future.

Saloon racing, however, has declined to the point where it has almost vanished, with just a handful of production cars appearing regularly, and the two one-make classes, which had been strong — Escorts and Sunbeams — withered over the winter. Was it the frost?

In order to get a full saloon grid — for the TV cameras in particular — the 500 Club had to combine all three saloon races, and throw in more than a few of the Mondello-based 1300cc brigade.

Formula Ford 1600

With two local manufacturers on the FF scene now, a battle was in prospect right from the start of the season and, while things eventually settled down, the early season races provided plenty of intermarque rivalry.

Indeed, in FF1600, it was never really resolved, Crosslé got the upper hand in terms of results, with Alan McGarrity and Anthony Murray doing most of the winning for the Hollywood marque, while Mondiale fortunes were in the hands of

young Edmund Irvine and Martin Boyle for much of the year after company bosses Colin Lees and Dennis McGall moved on to FF2000. Arnie Black was also Mondiale-mounted, and, indeed, did much of the initial testing of Leslie Drysdale's design; but towards the end of the year, he found young Irvine (who, after all, had youth on his side) a bit too quick to deal with.

Mondello regulars Alan Kelly (Van Diemen RF84) and Bob Scanlon (Crosslé 55F) both ran well at the northern circuit on occasion, as did the evergreen Tommy Reid, who ran a Crosslé for himself plus a 'rentacar' for Scottish visitor Campbell Chisholm. Indeed, the Reid Crosslés had a busy year and, in the case of Tommy's 32F which he ran in the pre-'80 series, an exciting one, as he was involved in a heavy shunt with two other cars at the June meeting. Lawrence Knox and his well prepared and driven Crosslé 40F was a regular midfield man, while Tom Graham, who had been one of the men to beat with his 40F, found that time had, at last, overtaken his steed.

On balance, though, the year probably went to Crosslé, even if Irvine and Mondiale have other ideas for the future.

Vivion Daly, on the occasion when he brought his Reynard north, proved capable of winning, too, while the Euroseries event, run in front of the BBC cameras, saw Dave Coyne win for Van Diemen, which did not really surprise anybody.

The larger Ford 2000 class went to Reynard, with John McCracken setting the pace and Lisburn's James Tollerton also going well in his 1983 car. The only driver to offer a consistent challenge was Leslie Wright, whose ex-Donnelly Van Diemen RF83 proved very rapid, while Niki Phillips returned home mid-season and did a series of hire deals to see him through the year, netting one win in Tommy Reid's RF83 at the final, rain-soaked meeting. However, Mondiale ended the season on a high note, Dennis McGall and Colin Lees (with occasional help from Jay Pollock), scoring a succession of wins. Crosslé started the year with a works 56F for former Atlantic man Gary Gibson, but the arrangement did not last, and the car was seen no more after mid-season.

A pre-1982 class saw Ronnie Maybin in his Delta T80/81 getting the gold as often as not, although, had Joey Greenan done a full season with his similar car, then the results might have been a bit different. Again the televised meeting provided a different winner, and again it was a Van Diemen driver who took the honours — Martin Donnelly this time, having his only outing on home soil, who set a new lap record with the Frank Nolan Racing RF84 while the rest trailed in his wake.

It must be said that, even though

2000 lays claim to being Ireland's premier class of racing these days, the grids at Kirkistown were all too often sparsely populated affairs, with a group of good front runners, but very little in the midfield. Expense is probably at the root of the problem, and it's difficult to see how this can be rectified. Maybe the pre-'82 class, started in 1984, will tempt some more machinery out.

Towards the end of the year, what had started out as a single-seater handicap race turned into a full-blooded *Libre* affair with the appearance of Tom O'Leary's ex-Guerrero Theodore, although it took him until the last meeting of the season to score a win. On his first appearance in September in pouring rain, he was beaten by several FF2000 cars, as well as Trevor Templeton's Atlantic Ralt RT4, but the last, dry day saw him get the big car moving properly, to equal Templeton's outright lap record on his way to the chequered flag. One or two other Atlantics were tempted out to do battle with the harder members of the FF2000 brigade, which made for some interesting racing.

The other single-seater class to appear at Kirkistown last season was Formula VW, imported from Mondello, and enjoying considerable support from Northern Ireland VW distributors, Isaac Agnew. The small band of dedicated VW enthusiasts did much to ensure that they always had good grids and, thanks to some sterling drives by Tom Wright and Dubliner Liam O'Sullivan in their Scarabs, there was some very close racing as well, not to mention a few lurid moments. David Sheane, inventor of the class, also participated in some of the latter with his latest creation, while John Hughes and his Project improved with every outing.

Saloon demise

As I mentioned earlier, saloon racing fell to an all-time low in 1984, in spite of the new Saloon Kings series which had rounds at both Kirkistown and Mondello Park. The idea of a 'back-to-front' grid, with the winner of the previous meeting starting from last place, seemed to work, and it certainly made for some interesting opening laps.

Stars of the class locally were Phil Sparkes with his Alfa Romeo GTV6, although he missed several races after an engine blow up, and Norman Aston with his trusty 3-litre Capri. Escort man Eddie Regan, who proved super-quick at Mondello, was not phased by Kirkistown's long straight, and proved more than a match for the heavier metal on occasion, particularly when the weather was less than perfect. Also quick in these conditions were the 'babies' in the 1300 class, which sometimes had a race to themselves. John Burns and his Alfasad were the stars of this particular show most of the time, although Bob Montgomery and the Dealer Opel Team Ireland Corsa also scored.

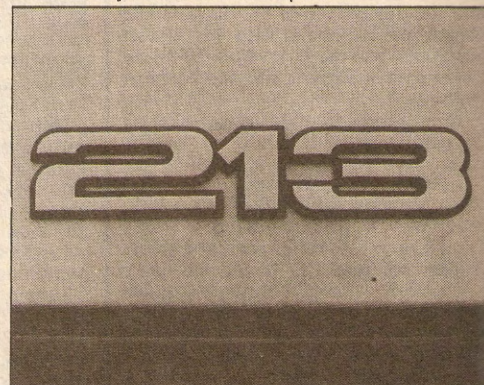
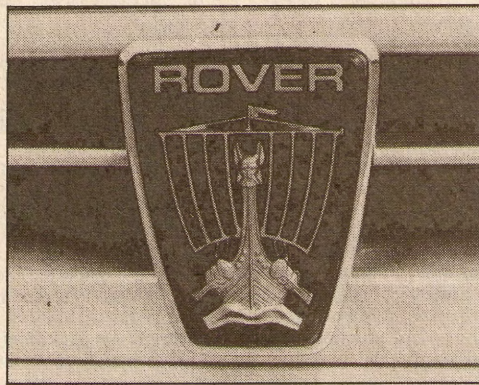
Among the Escorts and Sunbeams there was less going last year. Robert Barr and David Blair were the Sunbeam stars after Eric Holland destroyed his car in the season's worst accident. Among the diminishing number of Escorts, the Hutchinson brothers Herbie and Jim reigned supreme.

And that really, was that. There were two occasional Historic classes running throughout the year. One, for Thoroughbred cars, was well supported, catering, as it did, for sports cars built before 1976. The other, after a promising beginning in 1983, seemed to lose its way and its entries (not to mention its sponsor) half way through the year. For 1985, the two have been combined under a steering committee of drivers, who hopefully will show a bit more interest in actually appearing. The machinery is there: it just needs to be brought to the races.

RICHARD YOUNG



The Rover 213 Vanden Plas — a collaboration between Austin Rover and Honda — has the virtues and the vices of both manufacturers in an uneasy combination for the purist.



Rover's rising son

MIKE McCARTHY put the Rover 213 through its paces recently, and found the Acclaim replacement a paradoxical car

Cynics immediately dubbed it the 'Rhonda', and implied that it would be welcome in the valleys at least, probably because of its striking abilities: the puns seemed endless. This nickname, of course, is an amalgam of Rover and Honda, and is appropriate since the Rover 213 is a Honda Ballade mechanically, but with a face lift and Rover badging. It replaces the Triumph Acclaim, the stop-gap model that held the BL (or Austin-Rover) fort until the arrival of Maestro and Montego: like the Rover it too was a Honda Ballade, but the previous version. The Triumph name was — sadly, in my view — dropped for political reasons, but I suppose it makes sense if a company is called Austin-Rover to have one or the other name attached to their products — although, as others have pointed out, this makes a nonsense of the retention of the MG badge.

There is a problem facing anyone writing about this model which crops up automatically, and is difficult to overcome: do you treat it as a pure Rover or as a renamed Honda? There is a world of difference between the big, solid, heavy luxury Rover image and that of the Honda — small, light, compact, technically advanced. Just how well have Austin-Rover combined the two?

Mechanically, if they were going to buy from Japan, they couldn't have chosen better. Honda have always been the odd one out in Japan, pursuing a much more European approach than their counterparts, and combining both ingenuity and typical Japanese quality standards.

Take the engine, for example. An all-alloy unit, it features three valves per

cylinder, two inlet and one exhaust, driven by rockers from a single overhead camshaft. This layout, a half-way stage between the standard two-valve system and the Dolomite Sprint's ingenious four-valve arrangement, allows better breathing and thus better efficiency. At the bottom end there is a main bearing cage incorporating the caps which combines stiffness with low weight. With a capacity of 1342cc, it produces 70bhp (DIN) at 6000rpm, and 75lb ft (DIN) torque at 3500rpm, all on two star petrol and with a single, twin-choke carburettor. The five-speed gearbox is an all-indirect unit and gives 21.4mph/1000rpm.

The front suspension is unusual too in that, though of the strut type, springing is by a longitudinal torsion bar (shades of

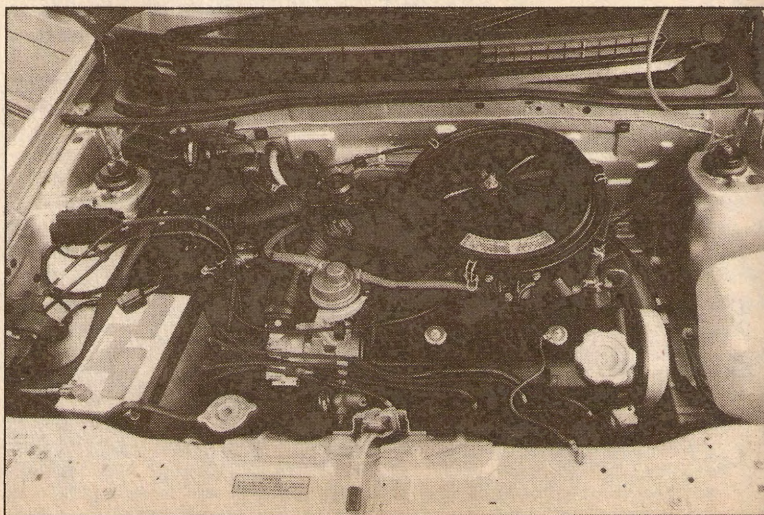
the Morris Minor!) and telescopic dampers plus an anti-roll bar, while geometry is set for both anti-dive and negative offset. Steering is by rack and pinion. At the rear there is a dead axle tube, located by trailing arms and a Panhard rod, with coils as the springing medium.

There are disc brakes at the front, drums at the rear, with servo assistance

and diagonally split dual circuits.

Externally, the Rover differs from the Ballade (which, incidentally, is not sold by Honda over here) in the nose treatment: homofocal headlamps, white indicator lights and colour coded bumpers set it apart from the Japanese variant and gives it a touch of the Austin-Rover image.

The Honda power unit — ingenious and reliable.



Tough competition

Selling as a compact, luxury saloon at £6923 for the top-of-the-range Vanden Plas model (as tested), the Rover is up against some stiff opposition. There is the in-house Montego 1.6HL selling at £7119, the Fiat Regata 70ES at £5480 (or the bigger-engined 100 Super at £6790). Ford's Orion 1.6 Ghia is £7317, Peugeot's 305GT is £6645 (the GTX is £7445), the Lancia Prisma 1500 is £5990 (and still only £6400 with the 1600cc engine), Vauxhall's Cavalier 1.6S GL is £7029, Volkswagen's Jetta GL is £6897, and the Volvo 360 GLE is £7209. Most of these have higher capacity engines or are physically bigger, though not all can match the Rover's levels of equipment. Still, a potential buyer in the £7000 region has a very wide choice . . .

What Car? achieved a top speed of 95mph in fourth (91mph in fifth) when they tested the Rover, and matched Austin-Rover's acceleration claims by reaching 60mph from a standstill in 11.6s. These figures are almost median for the class.

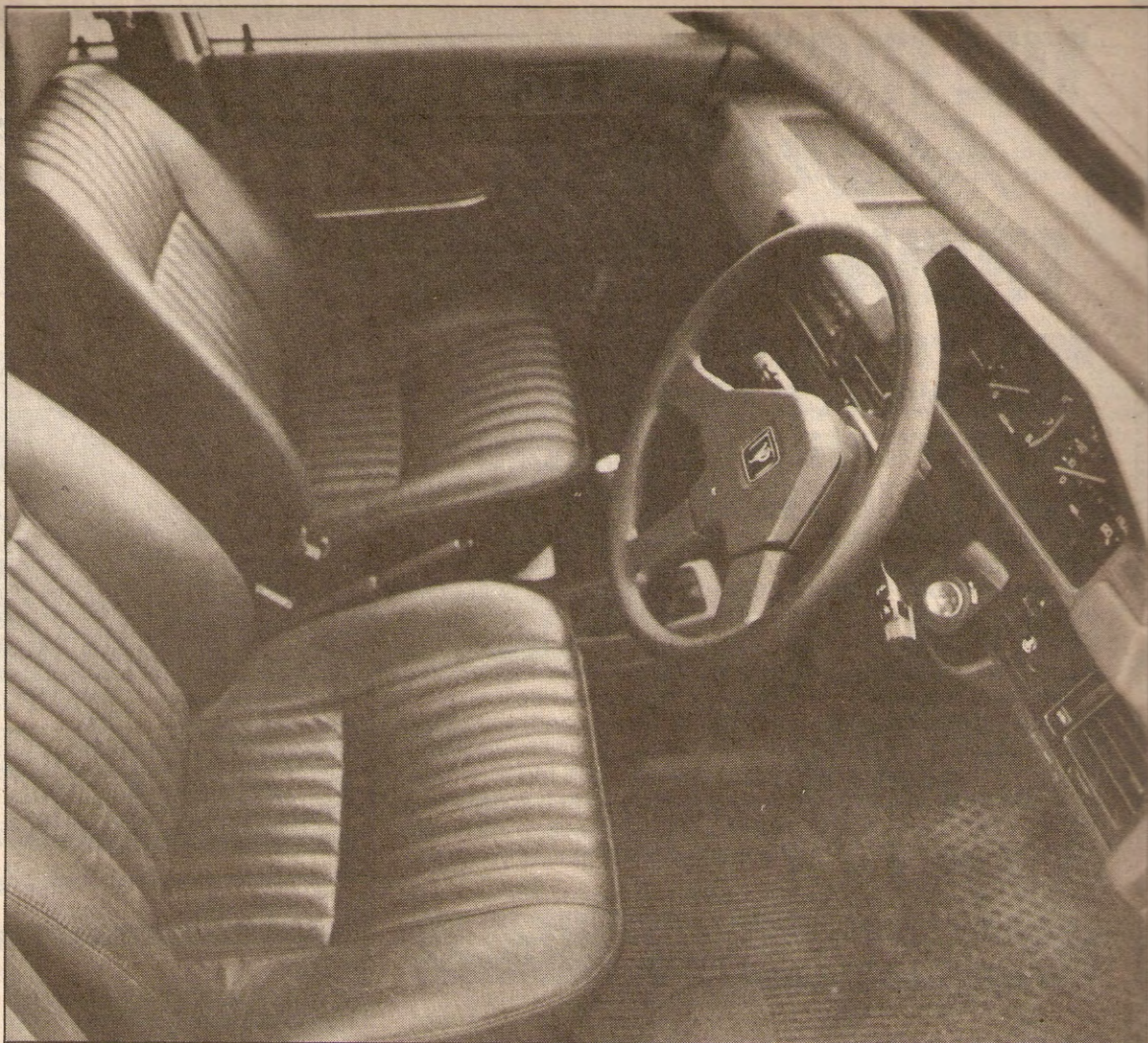
Starting, using the manual choke, was always instantaneous, and the engine idles remarkably smoothly. At high revs it pulls willingly enough, and without vibration, but becomes distinctly audible. So, generally for peace of mind, change-ups take place below roughly 4000rpm, and it is this which makes the Rover feel a bit gutless at first. However, if you're prepared to put up with the noise it becomes a brisk mover, particularly across country, and is pleasantly refined on motorways. We recorded 34.2mpg while the car was in our hands.

Slick gearchange

The Honda parentage shows up strongly in the transmission. The clutch is delightfully light, if a little sharp, but there are no complaints at all about the gearchange which is slick, quick and positive. The ratios are sensibly spaced, although above roughly 60mph, fifth feels decidedly long-legged, and if a spurt of acceleration is required a drop-down to fourth, or even third, is essential.

On the road, at medium to brisk speeds, the Rover acquires itself quite well, but doesn't seem to like hard cornering or bumpy surfaces: it lacks a certain crispness. The steering is reasonably weighted and direct, but initial turn-in shows some wallowy understeer when you're trying hard, and mid-corner bumps can have the car jumping and lurching rather unpleasantly. By the same token, the ride is not one of the car's better features: it seems to react adversely to both long wave, low frequency bumps and high frequency ripples, an unusual combination. These comments about the ride and handling only really apply to severe conditions, although with no obvious failings.

On the whole the car was a pleasure to drive. A refined, slick piece of machinery.



The interior of the car is a curious mixture of leather, wood and plastic — reflecting the mixed parentage of the Rover.

Behind the wheel

Behind the wheel, the seats are soft and supportively comfortable, and there is plenty of leg, head and elbow room: an added bonus is that the steering wheel is adjustable for rake, so most drivers should be able to find an ideal position. The rear offers more room than the Acclaim, but it is still only about average in this respect. Others, such as the Montego, offer more . . .

As far as luggage is concerned, the boot lid is small and the lip is high, while volume-wise the word average crops up again, although on the Vanden Plas model part of the rear seat back folds down for yet more space.

It is the finish of the interior which shows up most strongly the mixed

ancestry of the 213. From Rover and Vanden Plas comes leather upholstery, plush carpets and wooden trim: from Honda comes plastic, plastic and yet more plastic. So much so, in fact, that it rather makes the leather and wood look like plastic! Another example: the electric window switches look very much like a bolt-on goody, quite out of character for a Rover.

Emotion and aesthetics aside, however, the interior is functional. The controls are well placed and work smoothly and efficiently, while the instruments — what there are of them — are clear, readable and reflection free. One 'Rover' feature we applaud is the 2000-type tray on top of the fascia, useful when stationary at least.

As befitting its name and price tag, the Vanden Plas 213 comes well equipped. There are, for example, two door mirrors, adjustable from inside, colour-keyed seat belts with a two position upper mounting, that fascia shelf, a remote boot lid release, tinted glass, the rear seat boot hatch, central door locking, the wood trim, leather seats, headlamp washers, electric windows and an extensive radio/cassette system, not to mention the special coachline, wheel trims and badges.

The big question

So now, to answer the \$1 million question: is it good enough to satisfy the average Rover owner or enthusiast? The answer, is yes — and no. In terms of mechanical ability and refinement, it is 'yes'. Unless it is driven hard it is, on the whole, a pleasant machine with few vices and a number of virtues — ride and engine noise come under the former, low noise levels and comfort from the latter. What I personally didn't care for was the attempt at 'Roverisation', to coin a phrase — the leather and wood don't go

with trad Jap plastic, efficient though it may be. Somehow the combination of the two jarred. The 'Vanden Plas' badge on the boot said it all — the script was right, the plastic material wrong. ■

ROVER 213 VANDEN PLAS £6923

Specifications

Cylinders/capacity	Four in line, 1342cc
Bore x stroke	74 x 88mm
Valve gear	Single ohc, belt driven, three valves per cylinder
Fuel system	Single twin-choke carburettor
Power/rpm	70bhp (DIN) at 6000rpm
Torque/rpm	75 lb ft (DIN) at 3500rpm
Gear ratios	2.916, 1.764, 1.181, 0.846, 0.714:1
Final drive	4.428:1
Steering	Rack and pinion
Brakes	Discs front, drums rear, servo assisted
Wheels	4 1/2 x 13
Tyres	165SR13
Suspension (F)	Independent by struts, torsion bars, anti-roll bar
	(R) Beam axle located by trailing arms and Panhard rod, coil springs

Dimensions

Length	163.6ins
Width	54.2ins
Wheelbase	96.5ins
Track (F/R)	59.1/59.1ins
Weight	17.0cwt

Performance

<i>(What Car? figures)</i>	
Maximum	95mph (4th)
0-60mph	11.6s
50/70mph (4th/5th)	10.2/13.8s
Fuel (urban/56/75mph)	38.2/52.3/38.2mpg
Test consumption	34.2mpg

BRIEFLY

■ Hot on the heels of the announcement of Crayford Auto Development's conversion kit for the Ford 2.8i engine comes news that another company has a modification kit ready for the market... Swaymar. The Swaymar six port cylinder head conversion includes three into one manifolds, doubles the torque at 3000rpm, and reduces the 0-100mph time on the Sierra XR4i by 6.2secs. The cost of this very worthwhile kit is £1275 exchange plus VAT. It can either be fitted at home, or Swaymar can do it for you. For further information, contact Swaymar on (0372) 379495.

■ Following the construction of two purpose-built premises for their BMW and Mercedes franchises, Dick Lovett Specialist Cars are planning to build a new centre for Porsche sales, service and parts, to open in the winter of 1985, on the Great Western Way in Swindon.

■ BBS's extensive range of bodywork packages now extends to include the new model Volkswagen Golf GTi. The latest package consists of a deep front spoiler, wheel arch extensions, side sills, rear apron and RS three-piece modular racing wheels. The aerodynamic aids kit costs £354 excluding fitting, painting and VAT, while each wheel is £185.



Carlsson Motorsport's Mercedes 190E conversions (above and below) are as purposeful as they look. The C50S topping 164mph.

Stuttgart's Swedish fliers

Not long ago, conversion kits were primarily for run-of-the-mill cars, with the intention of setting them apart from the ordinary. Today, few cars are without a modification kit designed specifically for them and the Mercedes 190E is no exception. Carlsson Motorsport, a company belonging to former Mercedes rally star and 1984 Swedish Rally Champion, Ingvar Carlsson, have already come up with a range of accessories for the new 190E range.

Top of the Carlsson range is the C50 S, which sees the engine from the DB500SE mounted in the 190E body. The performance from this marriage is outstanding, with a top speed of 164mph and 0-100 kph covered in 6.1secs. Power output is

272bhp. Adjustable Koni shocks are fitted, with a suspension drop of 40mm. And the Goodyear Eagle VR ultra low-profile tyres are fitted on 16in Carlsson light alloy rims. Other alter-



tations include the use of Kevlar body panels, for example the bonnet, while the interior receives leather sports seats and door trims.

Carlsson also provide an automatic version of the same, the C50. Top speed for this model is 153mph with a 231bhp output, still faster than any of the standard production Mercedes models. Other conversions include the C24, (using the DB230E motor) with a 137.5mph maximum speed, and the C20, (using an adaption of the 190E's original unit) with a top speed of 131mph. For further information on these phenomenal conversions Carlsson Motorsport can be contacted at Rehlinger Strasse 14, D-6645 Beckingen, West Germany.



■ The Ford Fiesta completed 1984 by being the top selling car in Britain for both November and December, and was third overall in the sales charts for the whole year behind the top selling Ford Escort and the Vauxhall Cavalier. Annual car sales were 1,749,650 which was 2.35 per cent lower than in 1983, but the second highest total ever. While the importers share of the market rose from 56.96 to 57.57 per cent.



Spoilers, spotlight bars, alloy wheels. All that is missing is from the Caddy the 'roo bar...

GTi's multi-purpose Golf

The increased popularity of utility and multi-purpose vehicles, whether 'real' or merely dressed to kill, has led to the introduction of a highly stylised pick-up from Volkswagen. The German car company predicts that the craze for personalised pick-up trucks that has existed for so long in the United States is about to hit these shores, and that it will soon become a new motoring cult, especially as car tax is not payable on a pick-up!

The Volkswagen Golf Caddy is based on the Golf chassis and comes equipped with either petrol or diesel versions of the 1600cc engine and prices start at £4200.

However, the base pick-up will probably remain clad in standard trim for only a short time before the numerous conversion kits and desired parts are added. The first company to produce a kit specifically for the Caddy is GTi Engineering of Silverstone. Using mainly German BBS styling components (including the obligatory spotlight rail and roll-over bars), GTi Engineering have topped this all with the VW GTi engine that provides a top speed of 110mph. The full kit will cost you an extra £4000 while the simple body kit starts at £400. Don't venture down the Kings Road again until you've bought one!

1984 TOP 10

1, Ford Escort	157,340
2, Vauxhall Cavalier	132,149
3, Ford Fiesta	125,851
4, Ausin/MG Metro	117,442
5, Ford Sierra	113,071
6, Austin/MG Maestro	83,072
7, Vauxhall Astra	56,511
8, Vauxhall Nova	55,442
9, Ford Orion	51,026
10, Volvo 300 series	35,034

DECEMBER TOP 10

1 (1) Ford Fiesta	8226
2 (3) Vauxhall Cavalier	5161
3 (2) Ford Escort	3997
4 (-) Nissan Sunny	2870
5 (5) Ford Sierra	2832
6 (10) Vauxhall Astra	2566
7 (4) Austin/MG Metro	2282
8 (-) Nissan Cherry	2141
9 (9) Vauxhall Nova	2056
10 (7) Austin/MG Maestro	1508



The Ferrari 250LM is back

One of the most interesting looking replica kit cars on the market at the moment among the hordes of AC Cobra lookalikes is a Ferrari 250LM clone produced by K Sharmar Ltd of Dedham, Essex. Based on VW mechanicals and chassis the one piece body is longer than the 250LM, allowing enough space inside for 2+2 accommodation and is made from high lustre reinforced GRP, which is available in most colours although red is recommended. The basic kit costs £1795 and can take engines ranging from the 1300cc VW unit to the Rover V8. Fully completed versions start at £5500.



RAC FF1600 Champion Dave Coyne flanked by runners up John Pratt (left) and Mark Peters.



Sprint Champion — Roy Lane.

RfB's team shapes up

Racing for Britain's involvement in FF1600 this season looks to be gathering strength. Following the announcement that Ralph Firman had generously offered the organisation the loan of a new Van Diemen RF85, with gearbox, for the year, the Ford Motor Company has donated a new 'base' engine, which will be fettled by David Minister's concern.

The car will be insured for the year through the good offices of T.L. Clowes, the racing insurance specialists, while Shell Oils have agreed to provide all lubricants. Kevin Barrett of Manadient is to field the RfB FF1600 equipe, and thus the driver voted in by subscribers before February 28.

Top drivers rewarded at RAC ceremony

The RAC Motor Sports Association's annual championship prize giving took place at a reception at the splendid RAC Club in Pall Mall, London, last Friday evening. The occasion, attended by several hundred people, saw successful competitors from all branches of RAC recognised motor sport rewarded for their achievements during the 1984 championships.

Among the circuit racing stars to be honoured were RAC Trimoco British Saloon Car champion Andy Rouse and

RAC British FF1600 champion Dave Coyne, while the Ford Motor Company and Van Dieman (*sic*, see trophy) International won the respective manufacturers' titles. Richard Longman and Jon Dooley took the Trimoco saloon class spoils.

Martin Bolsover received a tremendous reception as he stepped forward to collect the Pace RAC British Hillclimb championship crown for the third successive year, while the ever-green Roy T. Lane was a delighted

recipient of the Warecrete RAC British Sprint title.

The Hillclimb and Sprint Leaders series fell to Ken Snailham and Jeremy Goodman respectively, while Tim Thomson bagged the Award of Merit, put up by his father's Guyson concern. The RAC British Rallycross and Sporting Trials honours were collected by John Welch and Roger Bricknell, while Bob Jarrett and Tony Merry won the national Drag Racing title with their 'Stripteaser'.



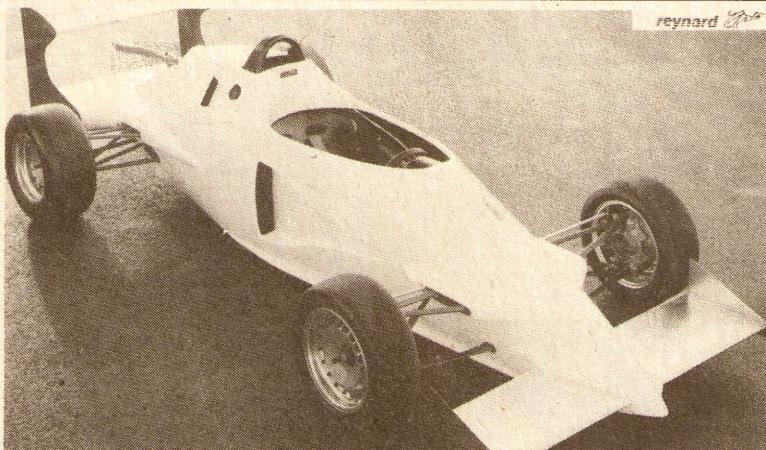
John Pratt — FF2000 hopes thwarted?

Floridian Fordsters

The new British FF1600 contenders from Reynard and Van Diemen both showed well on their race debuts in America last weekend, although both events at the Moroso Motorsports Park, West Palm Beach in Florida, went to the Californian-built Swift DB-1 machines, from the pen of David Bruns.

Local man Dennis Vitolo, teamed with Briton Calvin Fish in the Mike 'Motor-mouth' Galter-run Van Diemen RF85s, led the early part of Sunday's national counter from Saturday Pro race winner Bill Ademy, but an incident took them both out, leaving US champion Jackson 'Gator' Yonge ahead in one of two Reynard 85FFs present. When a rear wishbone pulled out of the chassis, Yonge spun out, leaving victory to Haward Katz. Fish finished third on Saturday, after a lot of engine problems.

Dennis Vitolo — Van Diemen on the pace.



Reynard's 85SF FF2000 design should be shaken down within the next fortnight.

Reynard 85SF unveiled

The first batch of Reynard 85SF FF2000 cars rolled off the busy production line at Bicester last week, and a total of seven were complete by Tuesday this week. Although weather conditions did not look favourable as we closed for press, Reynard Sales Director Rick Gorne was optimistic that shakedown tests could be carried out with the works development car before the weekend. A series of tests is scheduled to take place with the car at West Palm Beach, Florida, next month, with Adrian Reynard himself in attendance.

Based on the Wiet Huidekoper-designed chassis and running gear of the 85FF FF1600 model (albeit now with a revised rear suspension system), the Pinto-powered machine features substantially bigger nose fins than its ultra-successful, and prettier, predecessor. Wind tunnel tests at MIRA have determined the shape of the winged

device from Reynard.

Rushen Green Racing, Madgwick Motorsport and Penistone are among the teams to have ordered 85SFs to date.

Thruxton test days

Thruxton circuit will be open for unsilenced pre-season testing on Monday and Tuesday, February 18/19, with the following two days nominated as substitutes if weather conditions preclude running early in the week. In each case, the session will run from 9am until 1pm.

Bookings, price £36 (£38 for non-BARC members) should be made early, as demand is expected to be high. April 4 will be the next Thruxton test day...

BP blow for Britons

The withdrawal of BP Oil from motor sport sponsorship this week has left a number of promising young drivers in a quandary as to what to race in 1985. While all of last year's Team BP representatives in the Ford Formulae have actively sought independent racing budgets over the winter — with little success it seems — the senior members, Julian Bailey and John Pratt, had hoped to graduate into F3 and FF2000 respectively this season.

Pratt, runner-up in last season's RAC British FF1600 championship, is still looking towards FF2000, and should be the prime candidate for Racing for Britain's assistance in the category. Steve Sydenham is hoping to be able to negotiate a loaned chassis for the Systime-backed scheme to offer, alongside the existing FF1600 deal.

Bailey, however, should be aiming for F3 after two good years in FF2000. His financial problem may prove more difficult to solve...

Julian Bailey — needs F3 finance soon!



Talon FF1600 chassis progresses at ARC

Work on the first Talon FF-85 Formula Ford 1600 car is progressing well at the Advanced Racing Concepts factory in Lewes, East Sussex. The prototype FF1600 spaceframe is nearing completion and bodywork is due to be started at John Duff's Duroy concern this week, meanwhile a batch of production chassis will be laid down at base. Shakedown testing of the marque's inaugural model is expected to start in late February.

Designers Mick Penfold and Ken Taylor (partners, with Richard Martin, in ARC), have penned a small, narrow chassis with wide-track push-rod suspension at each end. The spaceframe is built to a high standard, utilising TIG welded joints wherever practicable. The driver safety cell incorporates twin one-piece roll hoops of T130 steel, affixed to the bottom chassis rails.

The footbox specification complies to the SCCA's 1986 proposals, with an additional aluminium deformable structure within the nose to absorb frontal impacts. The Talon's floor is fully

triangulated and the cockpit sides have internal bracing around the driver's pelvic region.

Intriguingly, the car's radiators are housed in small triangular pods just aft of the front wheels, for optimum cooling and weight distribution, 'tis claimed. Another interesting aspect of the Talon is

the standard fitment of the Stuart Wallace-designed Metso Type 36 'high tech' transaxle — a first in the Ford formulae.

ARC are at Unit 10, Cliffe Industrial Estate, South Street, Lewes, E. Sussex. Enquiries would be welcomed for British or US-spec Talons.



Fraught action throughout the fields was a hallmark of the 1984 Porsche series.

Porsche up production

Following the tremendously successful introduction of the Porsche Production Car Challenge Series last season, the Porsche Club Great Britain and the BRSCC are to promote a full 10-race championship for the marque sports cars this year. Regulations will, in essence, be as in 1984, although more specific rules should tighten up proceedings considerably. Four classes will be run again, determined by assessing suitable horsepower divisions.

Large turnouts of pristine Porsches were a feature of last year's series (won, by a scant point, by Bill Taylor in his Carrera) and such is the interest in the new championship that two grids of cars are confidently predicted at some cir-

cuits this year.

Regulations for this exciting series can be obtained from PCGB Competition Secretary John Farren, Crossbush House, Crossbush, Arundel, Sussex, BN18 9PQ. Tel: (0903) 883140, evenings. Seven circuits will be visited in the tough season long challenge.



Jones — Van Diemen or Reynard FF1600?

Which way for Jones?

Having made excellent progress in top level FF1600 competition throughout last season, it is no surprise to learn that Tim A. Jones (son of Brands Hatch commentator Brian) is on both Reynard and Van Diemen works team 'shopping lists' for 1985. What is more intriguing, however, is that both manufacturers were certain that they had secured Tim's services when they spoke to us earlier this week.

One reckons to have his signature on a contract; the other suggests that his engine and gearbox are awaiting installation in a new chassis. Which is it to be? Whatever the outcome, the young Kentishman is expected to be among the favourites for championship honours when the season opens in March!



Simon Kirkby — more Sports 2000 action.

Kirkby to stay in US

Lincolnshire's Simon Kirkby will continue to race in the American Sports 2000 category next season, although not in a works-supported Shrike P15 as has been advertised recently by the car's constructor, Richard Owen.

Simon has driven US Shrike importer Scott Livingstone's P15 until now, but plans for 1985 have yet to be finalised. Kirkby will, however, contest West Coast and Mid-West \$2000 events.

Penistone rehoused

Trevor Hegarty's Penistone Racing organisation, winners of the 1983 Racing Displays British FF2000 championship, has now moved into a new workshop unit at Silverstone, in preparation for the forthcoming season. Based since its inception at Sheffield, the concern should benefit from its new, central, location at the Northampton circuit.

Hegarty is currently overseeing preparation of the new workshop by mechanics Phil Truman and Alistair 'Mr Mould' Moate, prior to further involvement in the 2-litre Ford formula and, hopefully, an expansion of Penistone Racing's interests.

The team's FF2000 line-up has yet to be finalised, while rumours also link Trevor's team with F3 at present...

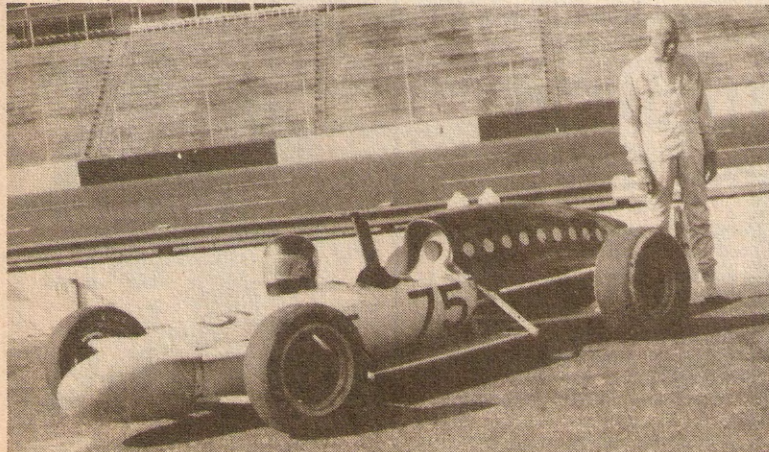
Unstinting Templeton

Veteran American Formula Fordster Harvey Templeton is still going strong on the slick-shod FF1600 scene at the age of 75! Templeton, from Chattanooga, continues to campaign his ingenious self-designed and built HR270 machine with great verve, regularly mixing in with boys of less than a quarter of his age... Harvey's car (which features unique

adjustable-camber suspension systems), remains one of the quickest in the USA, the pencil-like bolide showing prodigious straight line speed.

The grand old gentleman of FF1600 is still a mean competitor by any standards and will hopefully enjoy his racing for many a long year yet. We wish his team all the best for 1985.

Harvey Templeton with his remarkable home-made FF1600 HR270 chassis last year.



Autosport

Indycar Racing Review 1984





Wheel to wheel

Mario Andretti became the champion of a hotly competitive and sometimes explosively dangerous 1984 Indycar season, as GORDON KIRBY recounts

On the surface, the 1984 CART/PPG Indycar World Series was dominated by two things.

There was of course, Mario Andretti: trim, fit and aggressive as he won the American national driving championship for the first time in 15 years.

There was also a series of crashes on speedway tracks, some of them spectacularly benign, others instantly bone-breaking which left four drivers badly injured, including triple Indycar champion and 1984 Indy 500 winner, Rick Mears. All four seriously injured drivers — Mears, Derek Daly, Kevin Cogan and Michael Chandler — are well on the road to recovery as this is written. Nevertheless, the stupefying effects of theirs and other incidents generated a lot of 20th Century concern about the public and television acceptability of this type of incident, as well as a more direct discussion about improving crash safety by strengthening front bulkheads in a way which would offer more effective foot protection.

What this talk — meaningful as it may have been — tended to obscure was that Indycar racing has become hotly competitive over the past two years. Fuelled by CART's much improved overall package, and a subsequent appearance of stronger teams, the landscape has been ignited by a whole new generation of drivers from the likes of Bobby Rahal and Danny Sullivan to Al Unser Jr, Michael Andretti and others. Most Cosworth-powered Marches and Lolas were so similar in performance, and there was no tyre war to muddy the waters, so that last year's Indycar championship quickly blossomed into a delightfully unpredictable, feverishly competitive and deadly serious series of motor races.

To be sure, Andretti Sr came out on top. But it wasn't until the last four or five laps of the season that he was able to relax, enough points collected at that stage to be able to collapse on the track and still have race winner Tom Sneva's point tally beaten. Bobby Rahal finished third in the championship, a major contender in at least 10 races and a winner in two. Indy winner Mears missed the last five races of the year because of his broken feet and wound-up tied on points with Danny Sullivan, who joins the triple CART champion at Penske Racing for 1985. Sullivan won three races last year, including the Pocono 500, in his first full season of Indycar racing.

Two other names of note last year were Al Unser Jr and Michael Andretti. Unser, 22, won his first Indycar race in June and finished sixth in the championship, a mere single point ahead of 21-year-old Andretti. Both second generation drivers ran strongly in many races, and big futures apparently are in store for each of them.

Above: A new circuit for the Indycar regulars: Sanair in Quebec. Rahal leads Sullivan, Andrettis Sr and Jr, Holbert and the rest. Below: Pitstop for Rutherford. Photos: Paul Webb.



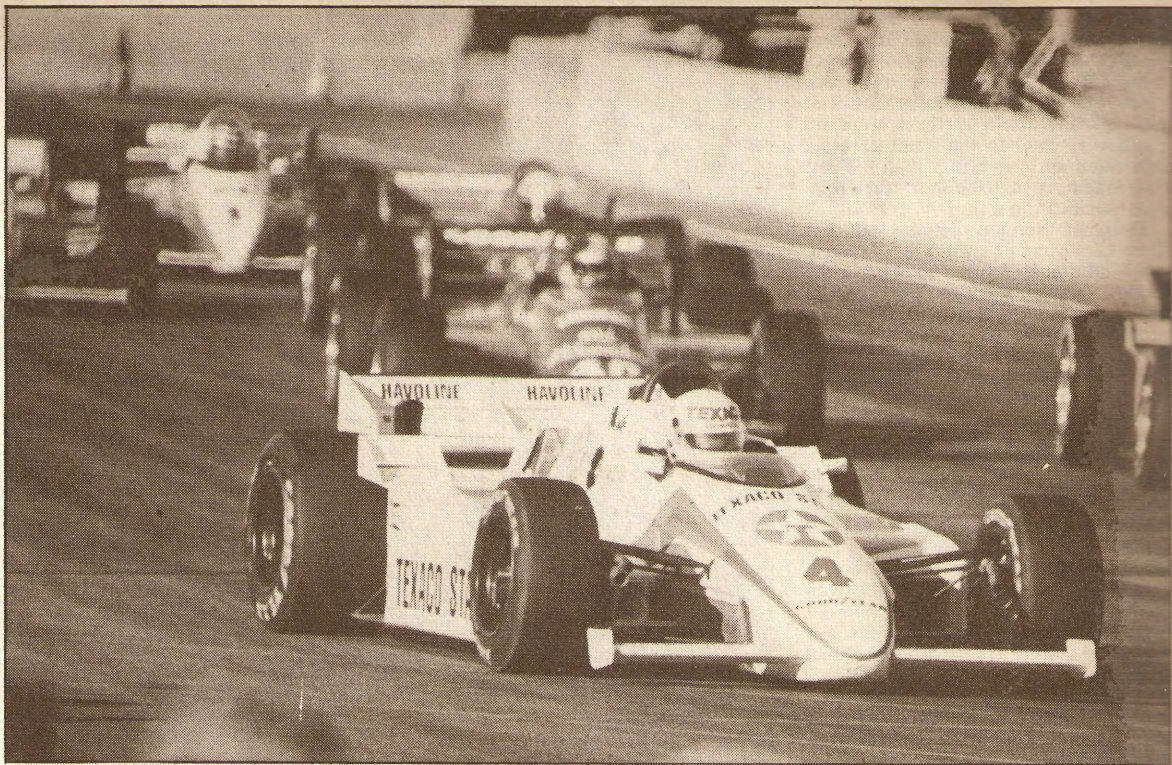
It was, of course, the 'new style' of Indycar racing which made Mario Andretti such a strong favourite to win last year's championship. In terms of race-for-race consistency on the wide variety of tracks visited by Indycars last year, Andretti was challenged only by Bobby Rahal. As far as results were concerned, his record was approached by no one.

Andretti had been getting himself into line for last year's successful championship assault since 1981. That was the year he left Team Lotus to drive for Alfa Romeo in what turned out to be his last year of F1. He also switched Indycar seats that year, moving to Patrick Racing after four years as an occasional, third driver for Penske Racing.

Driving one of Patrick's Wildcat Mk8 cars, Andretti finished second to Bobby Unser at Indianapolis in 1981. For a while, between protests and legal proceedings, he was declared a disputed winner of the race. Nevertheless that was Andretti's best overall showing at Indy in a long time, and the following year, as he concentrated exclusively on Indycars once again, he became a regular contender with Patrick's cars.

He was on the inside of the second row at Indianapolis in 1982 and was a favourite to win the race, only to collect Kevin Cogan's crashing car at the start. He was a contender in most other races that year and finished second four times. All year, however, Andretti was possessed with the search for another team, a place in which he could operate as an undisputed number one driver.

He found the combination in Carl Haas and Paul Newman. Chicago-based Haas is a seven-time Formula 5000/CanAm champion team owner. He is the American agent for Lola Cars and Newman bought one and had decided the



Tom Sneva and Mario Andretti fought over the title right up to the final round at Vegas. Sneva won the race, but it was not enough to win the title. Newman and Haas were persuaded by Andretti to forego the CanAm to go Indycar racing. By the time all parties were in agreement, the 1983 season was fast-approaching. The result was that Andretti's new Lola T700 was a mish-mash of off-the-shelf pieces. The first car arrived late and proved to be trouble-

some on many fronts. A crash in the race at Indy didn't help matters, but as the year wore on Andretti and the team made a lot of progress, eventually winning the mid-season road race at Road America and then winning convincingly in the season closing race at Las Vegas.

Safety

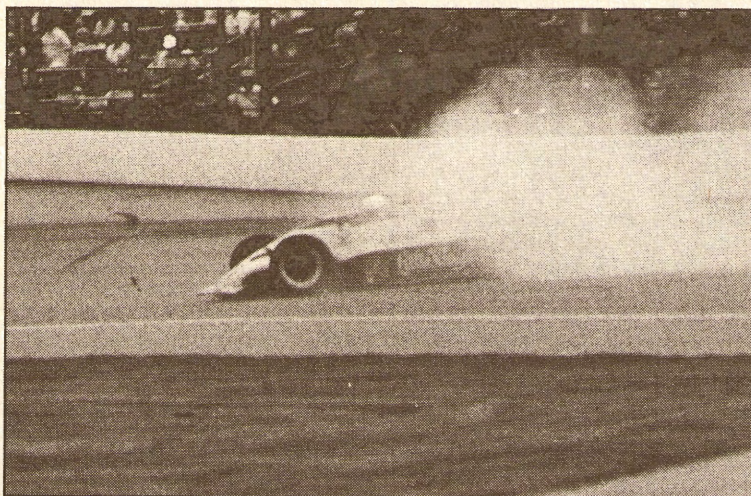
There is no question that safety was the most important issue of the year in CART Indycar racing. With lap speeds reaching and exceeding 200mph at both the Indianapolis and Michigan superspeedways, and a series of crashes during practice at Indy and in both summer and autumn races at Michigan, there was much discussion about reducing speeds and improving crash protection.

A heated debate sprang up between proponents of flat-bottomed cars, and those preferring to see the current 'tunnel car' concept remain in effect because of the extra aerodynamic stability and the energy-absorbing capability of side-podded, ground-effect single-seaters. Many drivers, champion Andretti among them, suggested that a primary culprit in the safety discussion was a lack of sufficient horsepower, which meant that a complete, fast lap at both Indianapolis and Michigan is driven with the pedal absolutely to the metal.

Nevertheless, CART has agreed to go along with USAC's 47ins Hg manifold pressure rule for superspeedway races in 1985, while retaining the existing 48ins Hg manifold pressure ruling for all other races. In an attempt to reduce downforce and slow lap times, sidepods will also be raised a further inch (to 2ins) for superspeedway races. Last year's 1in sidepod gap rule will remain in effect in all other races.

CART has also specified a new footbox rule; with clutch and brake master cylinders required to be mounted within the monocoque and a forward bulkhead required to be located at least 6ins ahead of the master cylinders. USAC will enforce a similar, more generalised rule at Indianapolis, while the old club is also considering a move to flat-bottomed cars for 1986 with the driver's feet located behind the front wheel centre-line. Again, there is much discussion about the wisdom of such a move, with Andretti campaigning vigorously in opposition to the flat-bottom initiative.

Whatever one's opinion, it remains that a



list of Indycar drivers injured in 1984 makes for sobering reading. Rick Mears broke both feet in a crash at Sanair, Quebec in September. Derek Daly broke both legs and a hand in a giant crash at Michigan in September. Kevin Cogan broke both heels at Pocono in August. At the Michigan 500 in July, Chip Ganassi was lucky to escape from a giant flip with nothing worse than a bad concussion and a broken hand, while Al Unser Jr and Pancho Carter climbed from wrecked cars with some bruising but no broken bones. Phil Krueger crashed and broke his thumb in the same race, while Jacques Villeneuve broke four toes during practice.

At the Indianapolis Motor Speedway, there was the usual rash of crashes during the month of practising and racing. By the end of the month, a total of 18 cars had been wrecked. Most seriously injured were Mike Chandler and Patrick Bedard. Chandler hit the wall and took a blow to the forehead from a piece of metal which pierced his visor and kept him out of action for the rest of the year. Part-time racer Bedard hit the infield wall in

turn three during the race and counts himself an extremely lucky man to still be walking, and writing.

Others to crash and hurt themselves at Indy included Gordon Johncock (broken left leg), Steve Krisloff (broken left leg in two places), Steve Chassey (hospitalised with badly bruised feet) and Jacques Villeneuve (hospitalised with a bad concussion). Later in the year, Villeneuve crashed again, while Johncock survived four more accidents during the year, breaking two toes in a crash with Andretti at Phoenix in October.

The clearest message from all this of course is that superspeedway racing in a single-seater racing car is a very dangerous business. The unyielding wall sharply defines the facts of Indycar life and it is hoped that the new front bulkhead rules will help offer more foot protection than last year's cars. That aside, it must be noted that the general survival rate from last year's big accidents only demonstrated that in terms of absorbing energy and protecting drivers from internal and other injuries, today's Indycars are very effective pieces of work.

Come the T800

At that stage of the game, Andretti's 1983 season was already drawn to the 1984 season. A new chief engineer and an all-new car were in the offing for the New Year. The engineer was Nigel Bennett, an Englishman who had worked with Andretti at Team Lotus in his F1 days. Bennett had spent three, recent years with the tightly budgeted Theodore F1 team and, in his new position at Lola Cars, he was turned loose to produce a no-holds-barred March-beater.

The new car turned out to be everything Andretti had hoped for. It was an excellent road racer — light, with good steering and throttle response — and the long-tailed superspeedway version of the T800 proved to be as good as any of the variations produced by the many March-equipped teams.

A non-result at Indy briefly sidetracked Andretti's run to the championship but, by mid-season, he was clearly the man to beat. With Andretti finally winning six races and Danny Sullivan scoring three wins in Doug Shierson's T800, Lola Cars could boast not only of winning the Indycar title but also beating March in the race winners stakes, with nine victories to March's seven.

The T800 was beautifully conceived and constructed, requiring Lola's craftsmen to learn some new techniques using honeycomb aluminium and carbonfibre. The monocoques were built almost entirely of honeycomb aluminium, with carbonfibre top pieces and body panels.

A completed T800 was roughly 100lbs lighter than a standard March 84C, which was a big reason for Andretti's early-season superiority in road races. A more generalised benefit came from the location of the turbocharger: half-in, half-out of the bellhousing between engine and gearbox. This not only lowered the centre of gravity, but also reduced the height of the rear bodywork and tail.

A special, long-tailed superspeedway

SEASONAL SURVEY

aerodynamic package required a completely different rear suspension layout. Geometrically, the superspeedway rear suspension was claimed to be identical, although mechanically there were no similarities even to the point of using fabricated uprights rather than the cast components used in the short track/road race specification set-up.

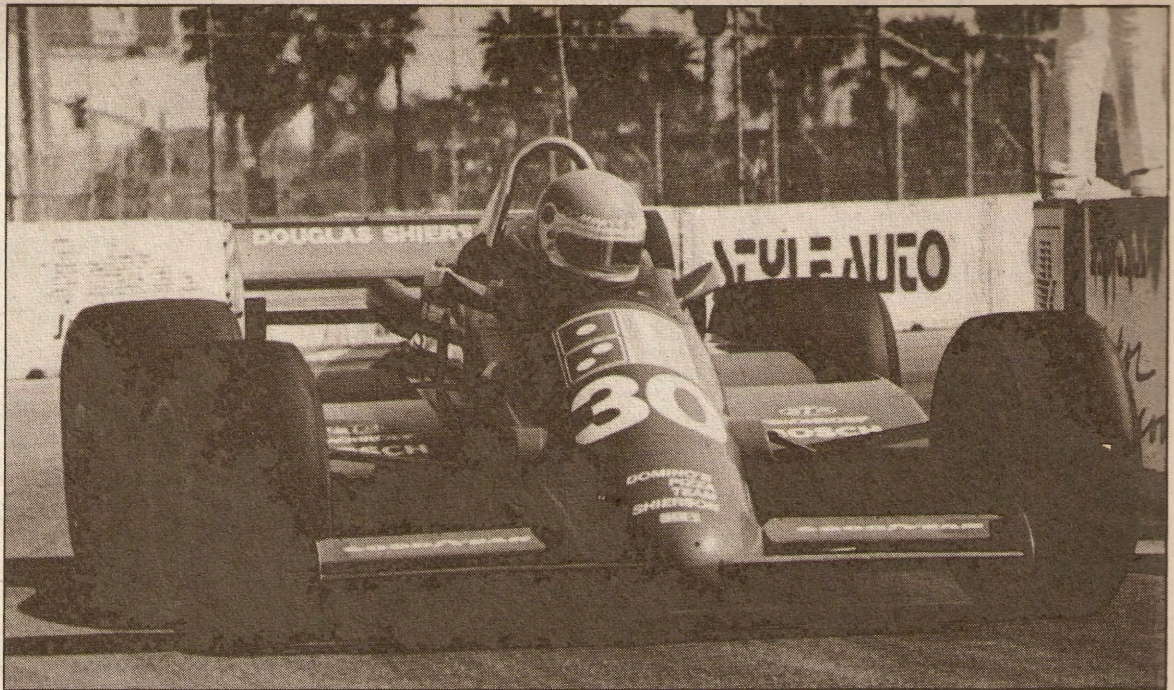
Designer Bennett emphasised that Tony Cicale and he spent a lot of time in the wind tunnel in order to achieve the kind of downforce generated by the March 83C. The result was a car that produced a hair less downforce than March's 84C, but which seemed aerodynamically less susceptible to changes in ride height than the 84C.

With three cars at his disposal and a steady development programme, Andretti clearly set the standard for 1984. He led 12 of the 16 races, won six and was on the pole eight times. A dominant winner in four road races — Long Beach, Meadowlands, Road America and Mid-Ohio — he also won both races on the superfast Michigan speedway. In both MIS races he beat Tom Sneva, doing so in July's 500-miler after a magnificent duel over the final dozen laps.

Andretti's victory at MIS was something of a highlight after losing a lap in the early going because of a faulty plug lead. It was but the second time in his career that Andretti has won an Indycar 500-miler, coming 15 years after his lone win to date at Indianapolis.

Second again

Most of Andretti's competitors were equipped with March's fifth generation Indycar — the 84C. The leading March-shoed teams were Mayer Motor Racing (Tom Sneva and Howdy Holmes), Truesports (Bobby Rahal) and Penske Racing (Rick Mears and Al Unser Sr, as



Danny Sullivan's Shierston at Long Beach. Later in the year Danny became the first Lola customer and by the end of the year had won three times.

well as Johnny Rutherford and Mike Thackwell). Mears won the Indy 500 aboard a Penske March, while between them Sneva and Rahal won five races and led 965 laps (42% of the season). There were also 29 Marches in the 33-car Indy 500 field. Twenty-seven were 84Cs!

The 84C appeared superficially to be a mere refinement of the successful 83C which had brought Robin Herd's company its first Indy 500 victory. In fact, the 84C was a completely different car built around a shorter (by 5ins) monocoque with a taller fuel cell and a longer

carbonfibre nose which theoretically improved crash protection. The bottom half of the 84C chassis was built from honeycomb aluminium and the top half was a carbonfibre shell.

The tail of the car was considerably tidied-up with March's own longitudinally-geared transmission, a much more reliable unit than the transverse 'box developed for the 83C. The rear spring/shock units of the 84C were designed to operate inside the transmission casing and the rear air jacks were also an integral part of the package.

In an effort to raise the height of the underbody at its tail, the engine of the 84C was tilted at two and a half degrees. There were also high- and low-downforce sections to suit. The biggest disability of the 84C was that it was overweight and didn't turn-in to slower corners anything like as well as a Lola T800.

One year wonders

Most successful March driver last year was of course Tom Sneva, who kept the pressure on Andretti down to the dying minutes of the season. Sneva, 36, was the 1977 and 1978 USAC champion with Penske Racing and has won at least one race in each of the past five years. After three years with George Bignotti, the

1983 Indy winner took his Texaco money to Teddy Mayer's and Tyler Alexander's returning Indycar team for the 1984 season.

It wasn't until the end of February that the Texaco/Mayer Motor Racing deal was finally and formally consummated, which meant the cars and equipment were barely built and organised in time to test at Willow Springs just one week before the Long Beach season-opener. In fact, Sneva and teammate Howdy Holmes were to test only one more time during the season, as Mayer maintained that the one million dollars from Texaco just didn't pay for a test programme.

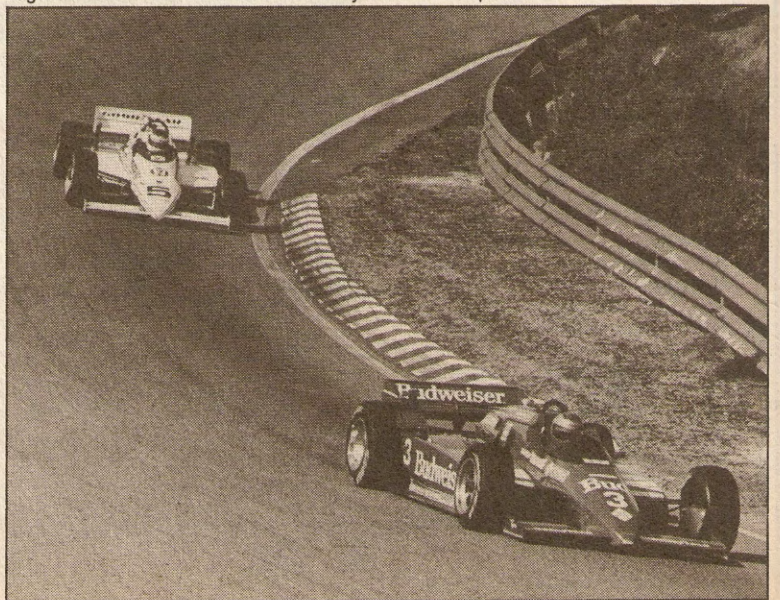
Employing a number of mechanics who had worked for them before in both F1 and Indycars, Mayer and Alexander ran their team out of suburban Detroit, down the road from the thriving McLaren Engines Ltd shop which naturally supplied engines to the outfit. Mayer commuted to each race from his home in Surrey, while Alexander ran the show in a tight, efficient manner. Back in England, John Baldwin and Phil Sharp ran the team's engineering and fabrication shop.

MMR had three 84Cs at most races and the cars were immaculately presented, although devoid of any gloss. The team built their own underbodies and took

Geoff Brabham's Kraco March leads a midfield bunch in the wet at Meadowlands, New York.



Laguna Seca — Mario Andretti leads Bobby Rahal's Truesports March. Rahal won the race.



some weight out of the cars and, at the second race of the season, they surprised everybody by qualifying first and fourth—and by finishing one-two after Andretti dropped out!

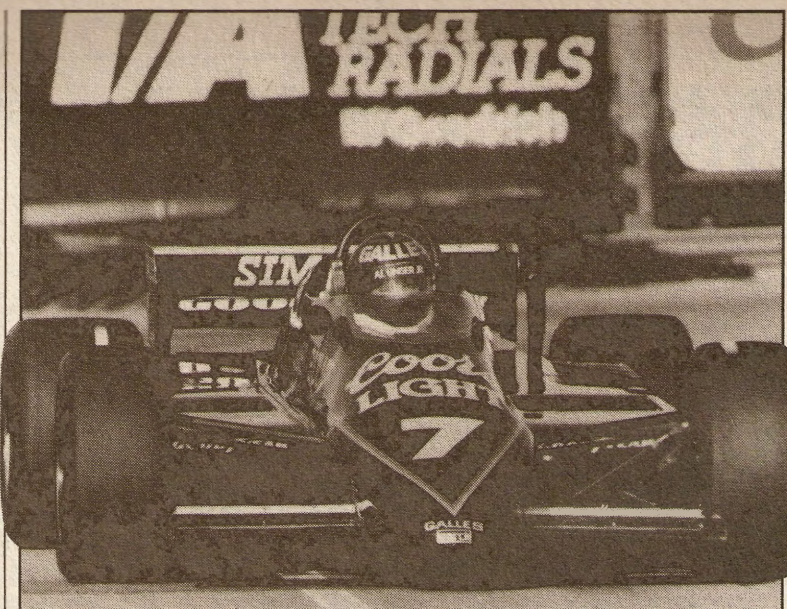
At Indianapolis, the team stuck with high-downforce underbodies and shook everyone again by qualifying one-two. The amazing Sneva was on the pole at 210mph, more than 2½secs and nearly 3mph faster than Teo Fabi's record from 1983. Holmes impressed everyone by outqualifying Mears and the rest of the field as even the stoic Mr Alexander permitted himself a few minutes to enjoy his success.

Unfortunately, the race was less enjoyable, as Holmes immediately ran into electrical and then handling problems, while Sneva fought for the lead all the way with Mears, only to drop out because of a broken CV joint with just 32 laps to go. Even so, he still led in the points after winning at Phoenix and finishing a dogged third at Long Beach.

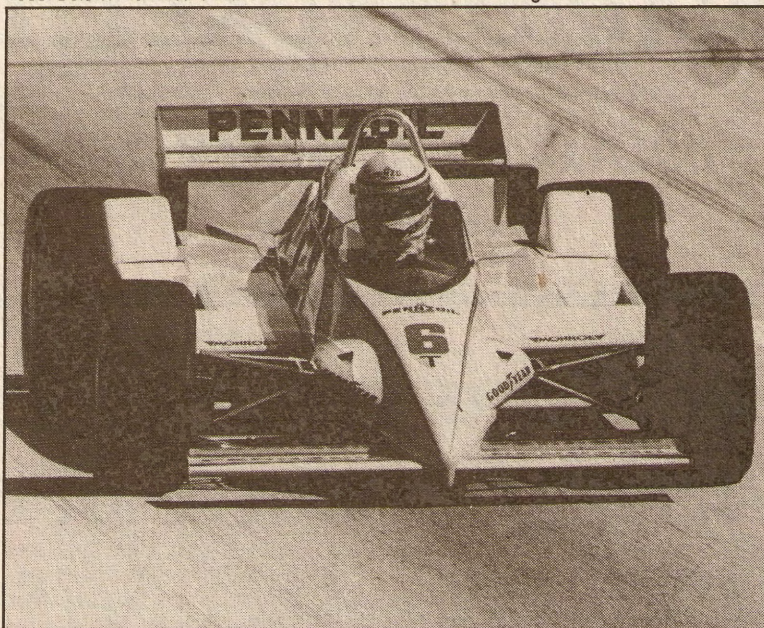
At Milwaukee the week following Indianapolis, Sneva qualified second to Mears and won the race when the Penske driver's engine blew up on the last lap! The victory put Sneva into an even stronger position at the top of the points table and, although he was not to win a race again until the season-closer in November, he remained a constant factor throughout the season. He was entirely unable to keep pace with Andretti in most road races, although with the tutelage and knowledge of Alexander and Mayer, he got steadily better at mixing lefts and rights.

On the ovals, Sneva continued to be a major force, although never again with the same style he had shown at Indianapolis. In the Michigan 500 he tried everything to pass winner Andretti in the final laps, and at Pocono he set the pace in company with Mears only to fade to fourth in the final stages because of a broken shocker. He was second again to Andretti in September's 200-mile sprint race at MIS and then surprised everyone with an ultra-aggressive performance in Las Vegas. Helped by a new, Baldwin-penned front suspension, Sneva just plain went for it in Vegas and came out of it with a forceful victory and a strong second in the championship.

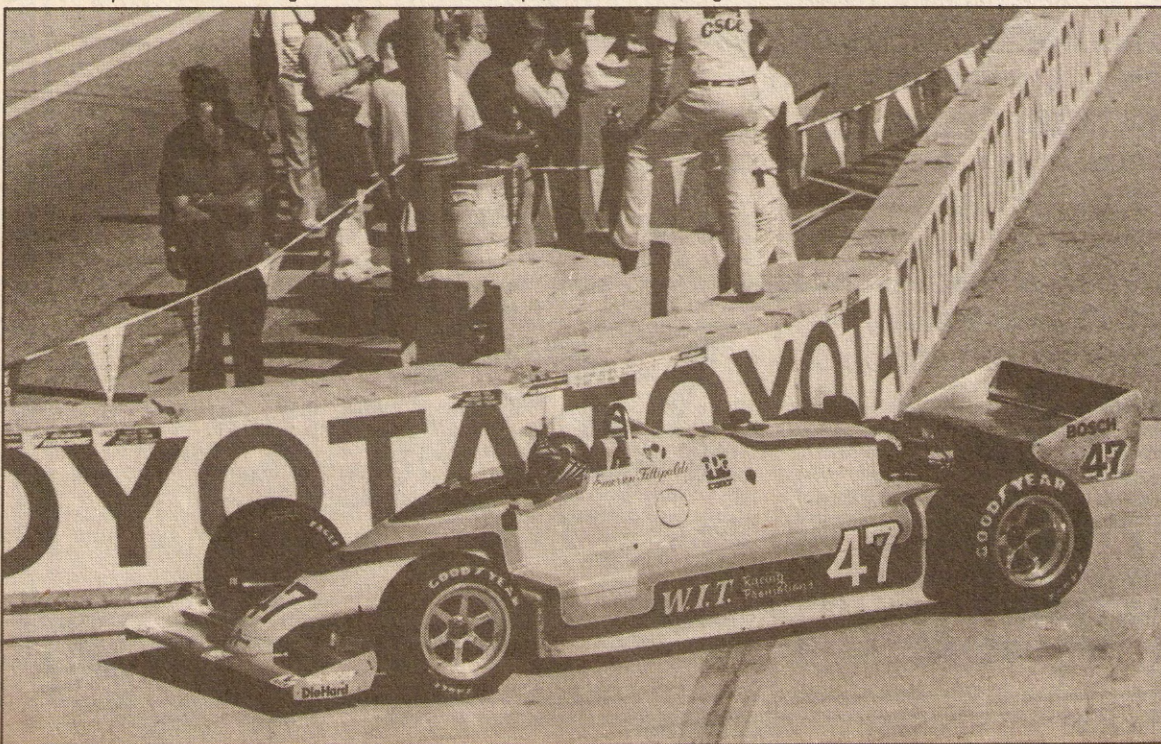
Towards the end of the year, Mayer got together with Carl Haas and agreed to run the latter's new Beatrice Foods-sponsored F1 team rather than remain in



Above: Al Unser Jr drove the Galles March into sixth place overall—he will drive for Winkelmann in 1985. Below: Rick Mears drove the Penske PC12 before switching to a March.



Emerson Fittipaldi in the WIT Racing March. An old hand in Europe, but still in the running for the 'Rookie of the Year' award . . .



Indycar racing. All year, Mayer had made it plain that he was not interested in continuing in Indycars unless he could find a big increase in sponsorship money, and the F1 deal is obviously much more lucrative as well as more suitable to his tastes. Sneva has meanwhile moved to Dan Gurney's team, so that for the first time in five years, he won't be driving a March in 1985.

The yardstick

Third in last year's Indycar championship was Bobby Rahal, who genuinely came of age in 1984. Continuing for the third year with motel chain owner Jim Trueman's team, Rahal scored more points than anyone in the second half of the season. He scored a couple of well-deserved end-of-season wins at Phoenix and Laguna Seca, finished second at Elkhart Lake, Mid-Ohio and Sanair, and was a very close third in the Pocono 500. He also led more laps than Sneva, rating second only to Andretti in that department.

Based near Trueman's corporate headquarters in Columbus, Ohio, the Truesports operation has been run since its inception by Kiwi-raised Englishman, Steve Horne. American Lee Dykstra was the team's race engineer through 1982 and 1983, but Trueman and Horne wanted a full-time engineer for 1984. When Dykstra (who also designed the Group 44 Jaguars) reluctantly rebuffed the suggestion, he was replaced by young Englishman Adrian Newhy.

After four years in March's drawing office, Newhy was ready to find his feet in the field and that he most certainly did. By the end of the year, Newhy had been promoted to chief engineer on March's Indycar project and the news was slowly filtering out that Truesports was, yes, the 'factory team' for 1985.

Last year's Truesports 84Cs were certainly the most developed Marches in the field. They were lightened substantially and profited from different rear suspension layouts, more rake to the engine (increased tunnel area), successful development of the Torsen-Gleason traction unit (as used in F1 by Marlboro-McLaren) and numerous other detail and aerodynamic changes.

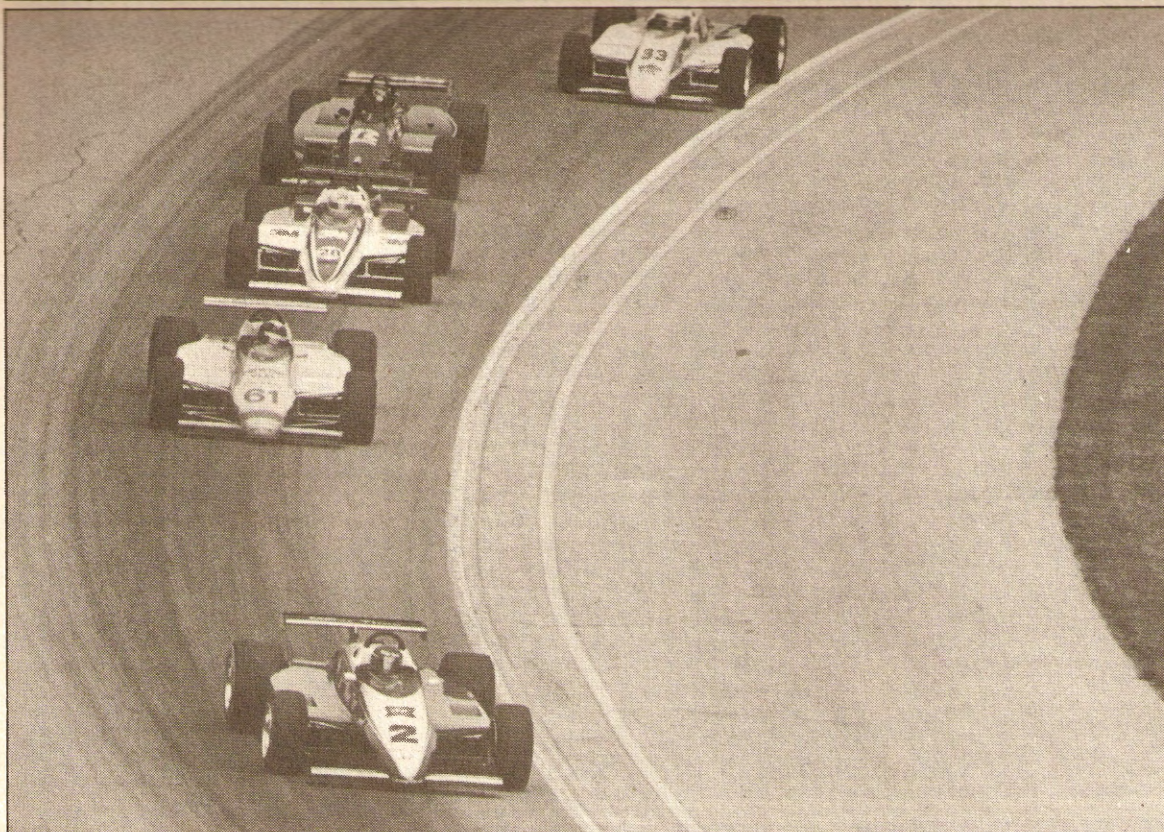
After a slow start to the season, the team began to get organised at Indianapolis and, from the fifth round at Portland in June through every other race of the year, Rahal was a major factor. At Cleveland in early July he looked like a convincing winner only to suffer a transmission failure with nine laps to go. At the Michigan 500 two weeks later he was leading and apparently controlling the race only to become the victim of a multiple accident with less than 80 miles to go.

Thereafter, Rahal's luck changed and he moved from nowhere in the points to being an outside threat for the championship as 1982 wound down. He led seven of the last 10 races and became in Mario Andretti's words, "my yardstick".

The big time, at last

Fourth in the championship went to Danny Sullivan who equalled the sidelined Rick Mears's tally and was placed ahead of Mears because he won three races compared to Mears's single victory. Sullivan drove for Michigan-based Doug Shierson last year, signing-on in the middle of the winter after Ken Tyrrell had failed in his turbo quest for his F1 team.

Sullivan started the year in Shierson's own, Ian Reed-designed DSR1, which was tidy and beautifully built, but lacked in the downforce-generating department. Sullivan struggled manfully with the car through the first two races and, when it became clear at Indianapolis that neither he nor 500-mile race team mate Johnny Rutherford were going to make



Al Unser Sr, Derek Daly, Herm Johnson, Chris Kneifel, and Teo Fabi at Indy, all March 84C mounted, except Kneifel in the Primus 84.

the field, Shierson aborted the project and bought the first privately-owned Lola T800.

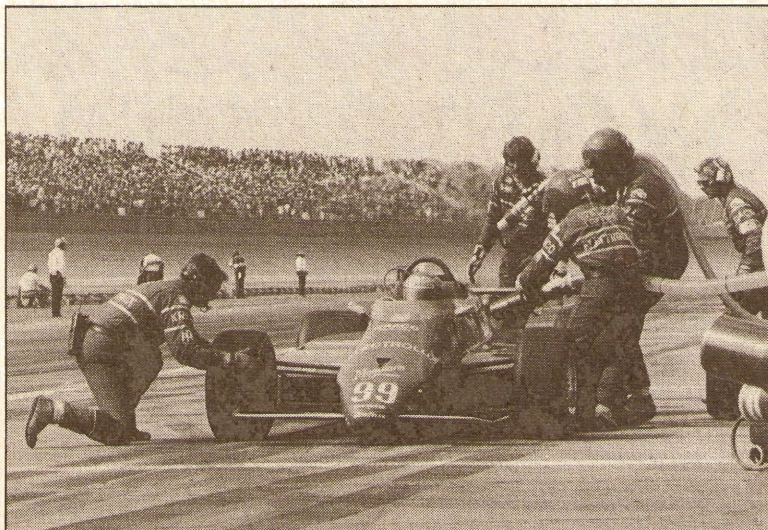
Shierson's team did a superb job to get the car ready in time for Sullivan to qualify and race the car at Indianapolis. There was another setback in the race, however, when Sullivan ran into the back of Roberto Guerrero as everyone was slowing down to avoid Patrick Bedard's crashing car. The damage to the Lola meant Sullivan had to drive the DSR1 just one more time at Milwaukee the following weekend, finishing a distant 16th.

At Portland two weeks later, Sullivan was back behind the wheel of the Lola. He showed his stuff by qualifying second to Andretti and leading the race until stopped by a transmission failure. At the Meadowlands he was less competitive, but this time car and driver made it to the finish, the best part of a lap behind winner Andretti but a solid second nevertheless.

The following weekend at Cleveland, the 34-year-old from Kentucky came through to score his first Indycar victory after a hard race in pursuit of Bobby Rahal and Mario Andretti. The latter dropped out because of an ignition fault midway through the race and, in the final stages, Rahal fought off Sullivan's last attack and seemed to have everything under control until trickling to a halt on the backside of the airport with no drive to the wheels. That left Sullivan to score a happy first win for himself, team owner Shierson and sponsor Domino's Pizza.

As an incidental note, Sullivan's win at Cleveland marked the 100th Indycar victory for a Cosworth DFX engine, this particular DFX built by Shierson's engine men Joe Grimaldi and Don Norton.

Thereafter, Sullivan was a front runner in most races with the distinct exception of both races at the high-banked Michigan. He battled for the lead with Andretti at Elkhart Lake before catching fire after a refuelling stop and then won again at the Pocono 500 in mid-August after a spectacular battle to the flag with Mears and Rahal. At Mid-Ohio he was a distant third behind Andretti and Rahal, and at the tiny



Michael Andretti drove in forceful fashion to finish the season seventh, finishing third five times.

Sanair trioval in southern Quebec he scored his third victory of the year after a long battle with Rahal.

Sullivan failed to produce any results from the last four races of the year, although he did run a good third at Laguna Seca before hitting brake troubles and was on the pole in Las Vegas. That was the first time he had been fastest qualifier in an Indycar, although the race itself came to nought when the Lola ran completely out of brakes midway through the race and Sullivan slid off into the barriers.

News broke that weekend that Sullivan was leaving Shierson's team to join Rick Mears at Penske Racing for 1985. After a dozen years of racing in all types of single-seaters on both sides of the Atlantic, Sullivan has made it in as good a way as any American driver can imagine. He has a fantastic opportunity in his hands.

New team mate Mears was having a typically fast but cagey season in Roger Penske's cars when he made an inexplicable error during practice at Sanair. The ensuing accident left him with a pair of badly smashed feet which kept him in hospital for more than three months. He

is now on the road to recovery and is expected to be ready to drive in February.

Until his crash at Sanair, Mears was chasing hard after Andretti in the championship stakes following a shaky start to the season. That was because Penske's own PC12s weren't up to the job of keeping pace with the Lolas and Marches. The PC12 also had some oil system problems which contributed to both Mears and team mate and defending champion Unser Sr failing to finish the first two races of the season.

Round three was Indianapolis and two weeks before the beginning of the month in Indiana, Penske made the decision to retire the PC12s in favour of a fleet of Marches. His ever-faithful and hard-working team did a magnificent job to build and prepare four 84Cs before and during the month, and Mears repaid them with a perfectly-judged performance from the outside of the front row, to score the second Indy 500 victory of his career. Challenged most seriously by Sneva and Al Unser Jr, he was left on his own at the end to win as he pleased, two laps clear of second-placed Roberto Guerrero.

Mears qualified on the pole at Milwaukee the following weekend and looked like a convincing winner until his engine began to sound ratty, the victim of a first lap over-rev. Unbelievably, Mears's engine gave out completely on the final lap and he lost the race to Sneva in the last moments, coasting home in second place.

A wing failure cost Mears third place in the Portland road race and at the Meadowlands he survived a spin and a couple of incidents to finish 10th. At the Cleveland airport race he moved up from the back of the field after spinning in qualifying to finish fourth, thereby moving into second place in the point standings behind Sneva and briefly ahead of Andretti.

Mears had trouble with his pop-off valve in the Michigan 500 but still finished only 5secs behind Andretti and Sneva in third place. He was a persistent fourth (on seven cylinders) at Elkhart Lake and then lost the Pocono 500 to Sullivan after being too conservative with his boost gauge in the closing laps.

At Mid-Ohio he qualified second and ran well only to stall during a pitstop and finish fifth. At that stage of the game he was only one point behind Sneva and six points behind Andretti, but his meeting with the guardrail in Quebec suddenly ended his championship hopes as well as those of seven-times Indycar champions Penske Racing.

Team mate Al Unser Sr had a difficult year, taking a long time to find what he wanted from the March chassis. He backed up Mears with third place at Indianapolis but ran into reliability problems during the mid-season which dropped him completely from the championship reckoning. In the second half of the year he began to make sense of his 84Cs, however, and was quick in a number of races.

He ran with the leaders at Sanair, led the sprint race at MIS and was on the pace at Phoenix before a multiple crash. At Las Vegas, with Penske offering him only a third car for the 500-milers in 1985, the 1983 champion pulled out all stops and was fighting Sneva for the lead, only to fall victim to Sneva's ultra-aggressive attitude on that day and get punted off.

1984 was not a happy year for Unser and, after some thought and a look at a few other offers from lesser teams, he has decided to stay with Penske for 1985 as strictly a third entry in the 500-mile races.

Following Mears's accident, Johnny Rutherford and Mike Thackwell were hired by Penske to drive the team's yellow, Pennzoil-sponsored car (Unser's car was painted red and sponsored by Miller Beer). Rutherford drove in the two remaining oval track races and took full advantage of the team's local knowledge on the Michigan International Speedway (owned by Roger Penske) to set a closed course qualifying record for a motor race at 215.189mph. In the race itself, he crashed near the end while running third and finished 11th at Phoenix after tyre trouble. Thackwell drove in the final two races of the season, qualifying 11th both times but dropping out of both races with mechanical trouble.

Finishing sixth in the points, behind Mears, was Unser's son, 22-year-old Al Unser Jr. He ran his second Indycar season last year, continuing with Albuquerque car dealer Rick Galles who brought the youngster up through Super Vee and the CanAm. Equipped with Marches after running Eagles in 1983, Galles's team was often competitive but there were some management problems and inconsistent results, all of which led young Unser to sign with Roy Winkelmann in September to drive for the latter's Lotus-equipped team in 1985.

In the early part of last year, Unser Jr was a serious contender in every race. Indianapolis included, and at Portland in

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June he was able to score his first Indycar victory after three or four faster cars had dropped by the wayside. In the middle of the season Unser became less of a factor, however, and after a series of DNFs and non-results, crew chief Huey Absalom was fired by Galles.

Reliability returned for the closing races and Unser was a very strong second to Rahal at Phoenix in October, but by then he had made his decision to move.

Galles also ran a second car in half a dozen races. Tom Gloy drove the car at Indianapolis and Pancho Carter finished the year in the second car, crashing on the last lap of the Michigan 500 while trying to pass Mears for third.

Finishing seventh, a mere point behind Unser Jr in the championship, was Michael Andretti. Six months younger than Unser, the older of Mario's two sons started three Indycar races in 1983 and combined with winning the Formula Atlantic title, these three races made him ineligible for CART's Rookie of the Year award. He was a rookie at Indianapolis, however, and was a co-winner alongside Roberto Guerrero of the 500's rookie award.

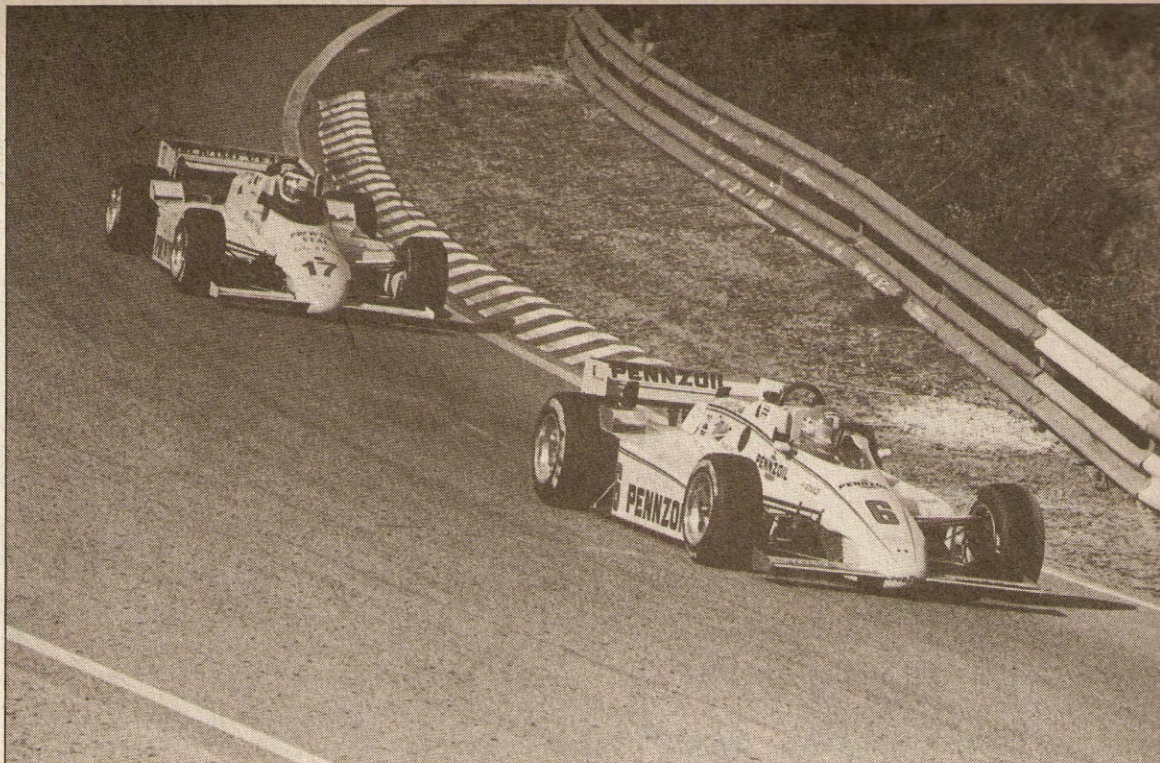
Andretti Jr drove for the well-financed Kraco Stereos team last year, as he will in 1985. Equipped with a fleet of Marches and with Geoff Brabham aboard the second car, the team had a good season as Michael showed himself to be a very talented and heady racing driver. He was on the second row at Indianapolis and ran with the leaders until a sidepod began to collapse so that he slipped back to fifth at the finish.

He raced for the lead with Unser Jr at Portland and, after a lack of results through the mid-season, came back with a series of strong end-of-season drives. He finished third in five races and was very fast at Phoenix in October. Aggressive and race-smart, Michael will be a serious threat in most races next year.

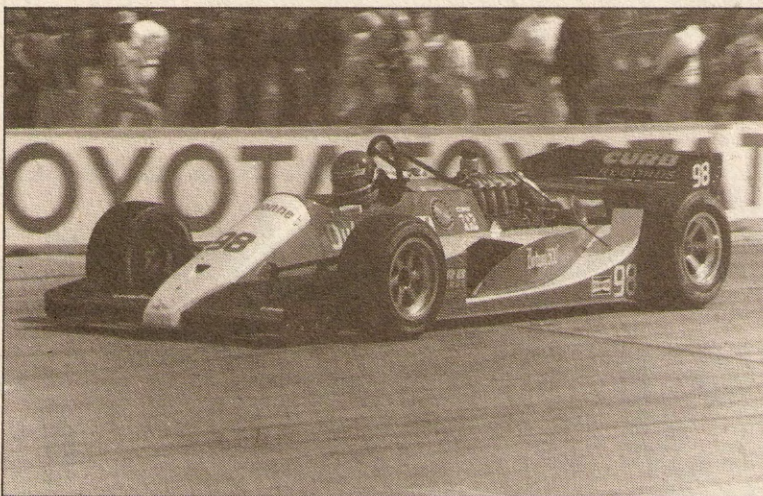
Team mate Geoff Brabham had a less happy year, getting a clear number two rating in the team. Nevertheless, he put in some good performances, finishing a distant second at both Long Beach and Portland and finishing directly behind Andretti Jr in eighth place in the championship. Brabham moves to Galles Racing for 1985 in place of Unser Jr, this being the first time in the four years he has been racing Indycars that he will be a number one driver.

Ninth place in the point table went to Al Unser Sr, with Danny Ongais making a quiet comeback of sorts to finish 10th. Ongais missed three races with his pair of Interscope March 84Cs and also underwent a substantial change of crewmen in mid-season. In the latter part of the year, Ongais was often quick and he finished a very strong third at MIS in September, his best result for five years. Ongais deliberately lost almost 40lbs last winter

Danny Ongais, quick as ever, finished third at MIS in September, his best result for five years.



Replacement drivers for the Penske and Provimi teams, Mike Thackwell in No 6 and John Paul Jr in No 17 at Laguna Seca.



Kevin Cogan debuted the ill-fated Ligier at Long Beach, lasting just three laps.

to help his repaired legs. Last season was the transplanted Hawaiian's first complete year since 1979.

Eleventh overall, and winner of Vandervell Bearings \$10,000 Rookie-of-the-Year bonus, was Roberto Guerrero. After two years of Formula 1 with the under-financed Theodore team, the young Columbian moved into Indycars

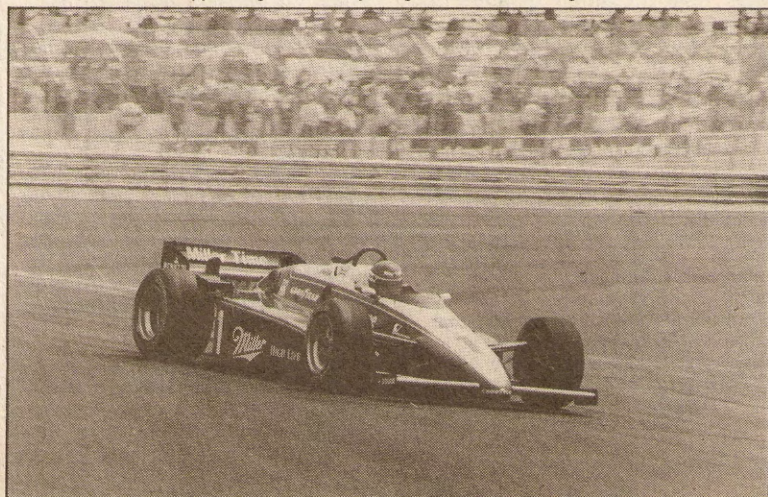
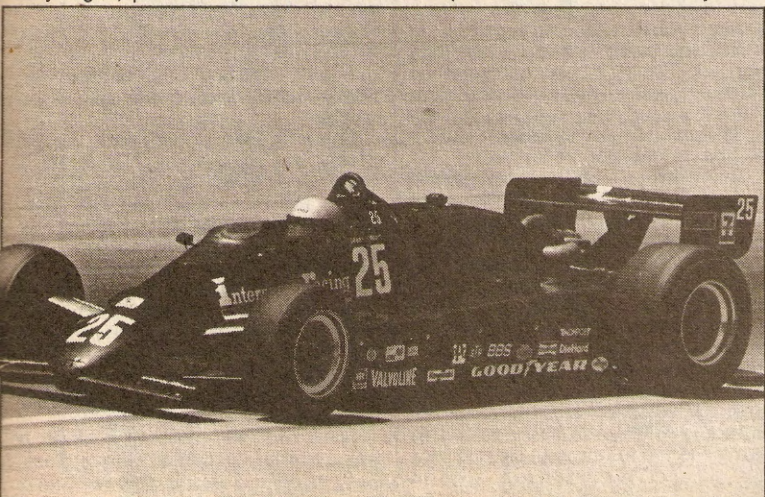
in company with Mo Nunn, the ex-Theodore man teaming up with Indianapolis-based Bignotti-Cotter Racing. Indy winners in 1983 with Tom Sneva, the Bignotti-Cotter team underwent a complete change of personnel between the end of the 1983 season and the middle of last year. Indianapolis 500 veteran crew chief George Bignotti, whose cars

have won 81 Indycar races over the years was no longer a functional part of the team and, by the end of September, team owner Dan Cotter had also come to a parting of the ways with Mo Nunn.

The instability of the team was reflected in the record book, as Guerrero finished only six races and was a lucky man to carry off CART's Rookie accolade. He finished an excellent second at Indianapolis, two laps down after a giant spin and, for that effort, he shared the race's own rookie award with Michael Andretti. In the Michigan 500, Guerrero survived another big spin but finished fifth, and at Elkhart Lake, he had his most competitive race of the year briefly challenging Andretti Sr before spinning twice!

Twelfth in the championship was Tom Sneva's MMR team-mate, Howdy Holmes, followed in 13th by Josele Garza. Last year was the young Mexican's fourth year in Indycars, continuing for a second season with the tightly budgeted Machinists Union team. He started the year in an old Penske PC10, but at Indianapolis the team bought a new March which Garza raced effectively for the rest of the year. With no testing and few spares, Garza was careful to transport his equipment and try to finish. In fact he was the only regular runner not to have an accident during the year. His

Al Unser Sr had a disappointing season, adjusting to the 84C, finishing in ninth overall.



best race came at Sanair where he chased the leaders all day, staying on the same lap until the 210th of 225 laps, and finished fourth.

Following Garza in the points table was **Gordon Johncock** who had a terrible year with crashes and broken bones. Indy 500 winner in 1982, Johncock broke both legs in the 1983 Michigan 500 and spent the second half of the year recuperating, only to do himself more damage in 1984. He broke a leg in a wild crash that finished in the pit lane at Indianapolis, although the dogged veteran (he is 48) was racing again at Milwaukee the following weekend. Later in the year, he survived three more crashes, although he broke two toes at Phoenix in October after an incident with race leader **Andretti Sr.** Johncock's only real result last year was fourth place in the Michigan 500.

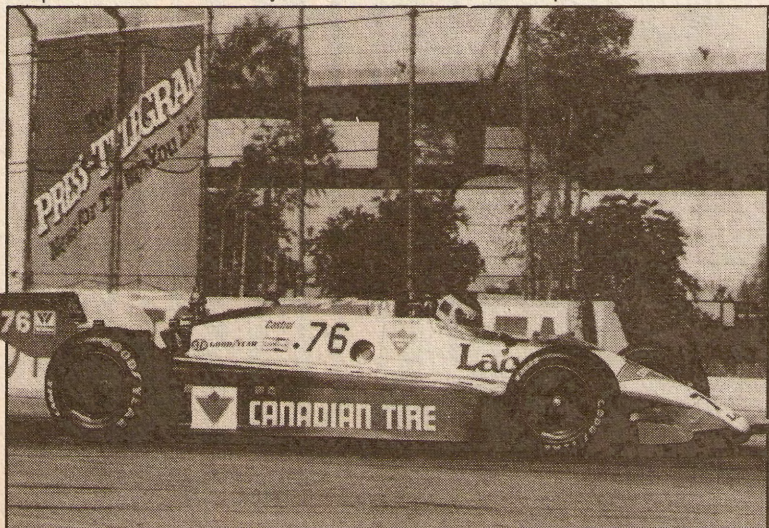
Johncock's team mate at Patrick Racing was **Chip Ganassi**, but a big crash in the Michigan 500 sidelined the promising Ganassi until October. That opened the door to **Emerson Fittipaldi**. Fittipaldi's move into the team leading to four end-of-season races for the team. **Bruno Giacomelli** also drove one race for Patrick. Racing last year, finishing eighth at Laguna Seca, and the pair of former Formula 1 drivers will be Patrick Racing team mates in 1985. After all the crashes of 1984 (in total eight cars were written-off!), the Patrick team is hoping for better luck next summer.

Fittipaldi finished 15th in the championship after running a total of nine races. He started the year in Pepe Romero's Wit Racing team, finishing fifth at Long Beach before the disorganised team came apart in the wake of the long month of May at Indianapolis. In the middle of the summer, Fittipaldi started two races for a small team in a new March, running well in both cars before dropping out. The Patrick team has a full fleet of new Marches for 1985 and Fittipaldi, now 38, should get the chance to demonstrate whether or not he can make it as an Indycar driver.

One driver who showed he does have those makings was **Jacques Villeneuve**. After winning the decimated CanAm series in 1983, Gilles's younger brother moved into Indycars with an all-new Canadian team sponsored by giant service station and highway store chain, Canadian Tire Corporation: The team started the year with one of last year's Marches, but quickly realised a new car would be necessary. Before that, however, Villeneuve crashed at Indianapolis after qualifying for the race and the blow to the head he took in the accident left him out of the 500.

He also crashed while practising for the Michigan 500, this time breaking three toes and sidelined himself for two

Jacques Villeneuve ran extremely well in the new Canadian Tire Corporation March 84C.



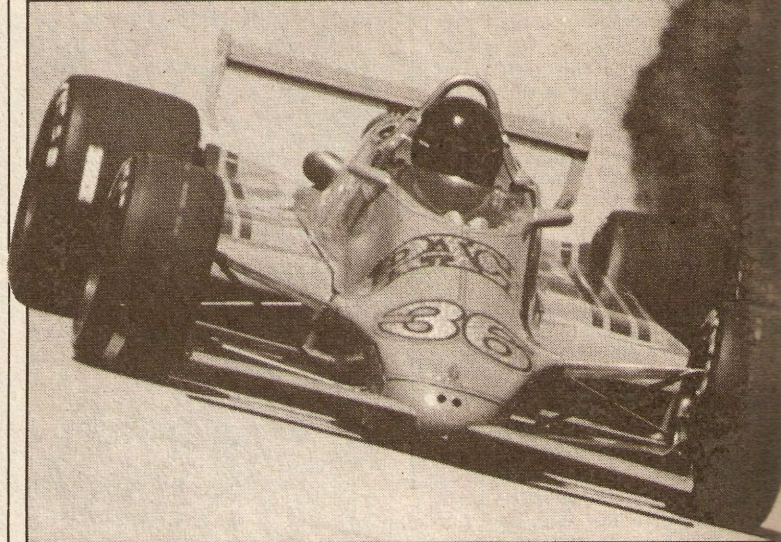
Teo Fabi, leading Tom Bigelow and Roger Mears, had a foreshortened Indycar season with the Forsythe team, eventually concentrating on F1.

months. He returned at the end of the year and appeared to have learned his oval track lesson well. He ran strongly at Sanair and surprised everyone by qualifying on pole for the October Phoenix race. He also ran well in Las Vegas, leading the race until running out of brakes. Villeneuve returns next year with the same team and two new Marches.

An up-and-coming driver to have a mixed year last season was **John Paul Jr.** He started the year with Team VDS, but the team's new car proved troublesome and, after failing to qualify at Indianapolis, Count van der Straten closed the doors on his race team.

Young Paul started five more races before the year was out, driving for three different teams. He was an excellent third at Las Vegas in a Provimi Veal March and earned himself a full-time seat for 1985 with Doug Shierson's team, replacing Danny Sullivan.

The Provimi operation had an otherwise rough year. Neither **Derek Daly** nor **Tony Bettenhausen** were able to run with the leaders at the start of the season and, after a change of personnel, Bettenhausen was released in mid-summer. Daly persevered, running well from time



Dennis Firestone had a troubled season in the Pace Electronics March 83C.

to time, only to have a massive accident at MIS in September, putting himself out of action for the rest of the year. Daly will continue with the team in 1985, partnered by Super Vee champion, **Arie Luyendyk**. The latter started one Indycar race for the team last summer.

A contender for the Rookie award for most of the year was 1983 IMSA champion, **Al Holbert**. He ran his first Indycar season with Alex Morales small team and had a disappointing year, finishing only four races. His best race of the year, in fact, was Indianapolis, where he ran well all the way and finished a good fourth.

A terrible year was had in 1984 by Forsythe Racing. After finishing second in the 1983 championship with **Teo Fabi**, the team had high hopes for the new season only for everything to go wrong. Fabi was a reluctant driver until July when he finally decided to concentrate on Formula 1 with the Brabham team. After a series of non-results he was replaced by **Kevin Cogan**, who ran well at the Michigan 500 but broke both feet while practising for the Pocono 500.

Cogan in turn was replaced by **Corrado Fabi** who showed promise but never got the opportunity to enjoy a trouble-free

race. At Sanair in September he was hit by Rick Mears as Mears crashed and broke his feet, and at Laguna Seca in October, after lapping right on the pace during testing, he had to miss the race because of the death of his father. The team started the year with Marches, but switched to a Lola in September and will continue with Lolas in 1985.

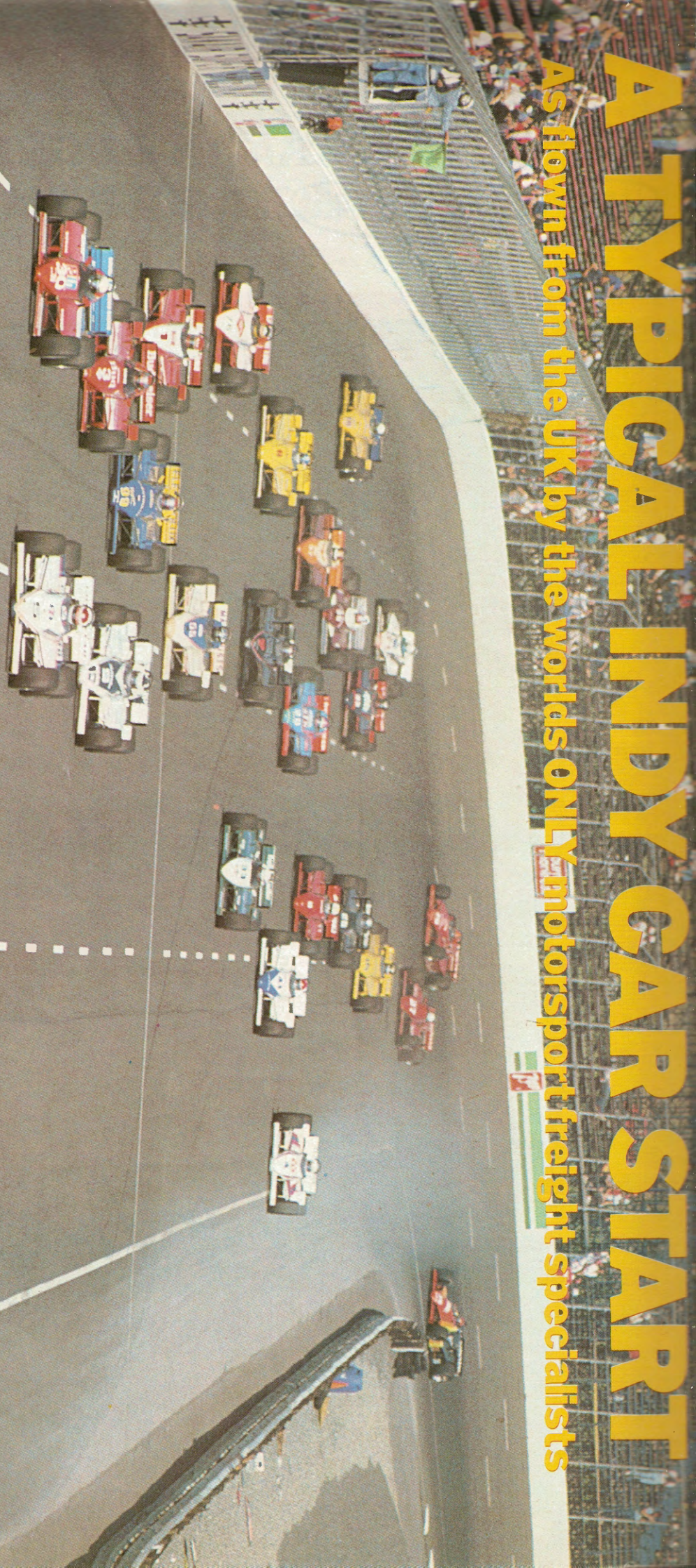
Another team to have a hard time of it last year was Arciero racing with **Pete Halsmer** doing the driving. The team started the year with a Penske PC10 before switching to a new March. Halsmer was then quick in the March but a series of crashes and mechanical failures kept him from obtaining any results.

Also out of luck in 1984 was **A.J. Foyt**. Foyt ran his usual schedule of occasional races, even running a car for **Johnny Rutherford** at Indianapolis and also in the Michigan 500. Testing and reliability longer. Meantime, Brayton reverted to Cosworth engines for the rest of the year, occasionally running well. His best result was a good sixth in the Pocono 500.

Veteran **Dick Simon** (50), bought a pair of new Marches and appeared at all races last year. Occasionally he was

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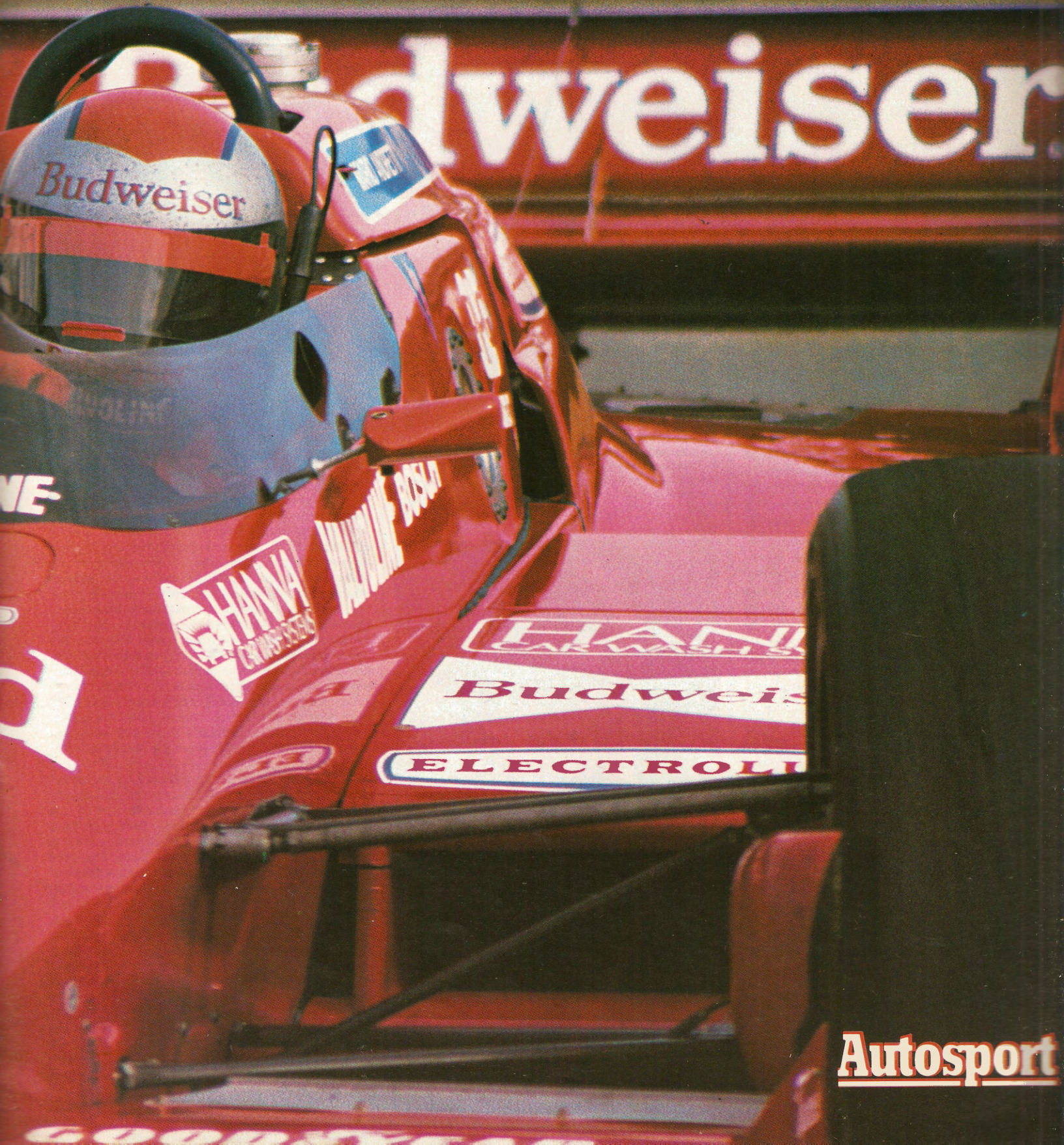
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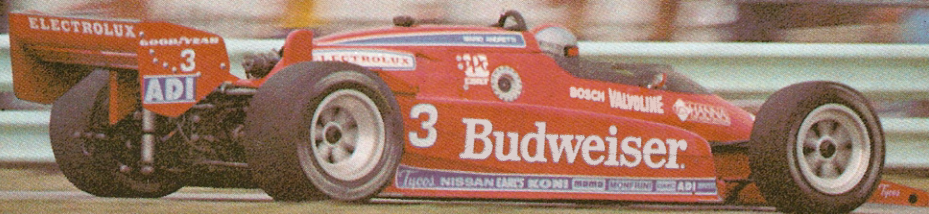


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Another crown for Mario

GORDON KIRBY in conversation with the 1984 Indycar champion, Mario Andretti

1984 was a kind of third-time-around, back-on-the-map year of revival for Mario Andretti. In 1965 and '66 and again in '69, Andretti enjoyed a meteoric early career as he won the Indycar championship three times. Ten years later at 38 years of age, he won the World Championship aboard Colin Chapman's Lotus 79 and now at 44, he is again in championship-winning form. Driving Carl Haas and Paul Newman's Budweiser Lola T800s, Andretti was the dominant man in last year's CART season. He carried off his fourth Indycar championship — his first in 15 years — in fine style by winning six races, starting from the pole eight times and leading 572 (25 per cent) of the season's 2,286 laps.

Never content to be merely a paid driver, Andretti is a leading force in the Newman/Haas team. After concentrating on Formula 1 for eight years he returned to Indycar racing on a full-time basis in 1982. Andretti spent two years (1981 and '82) with Patrick Racing before finding a combination that was brand new to Indycar racing but much more suitable to his demanding palate. The Newman/Haas/Lola/Andretti grouping has come good in remarkably rapid order and our conversation with the 1984 Indycar champion began with a question about how it all began.

You had a lot to do with getting the people together who comprise Newman/Haas Racing. You were instrumental at the beginning and throughout 1983 in determining the people to fill key positions in the team. Can you tell us how the team took shape?

Well, to start from the beginning . . . I somehow felt, and this goes way back to when I was in Formula 5000, I could get on with Carl (Haas). I kind of liked the way he did things. He's the type of owner that's 100 per cent there.

His business is definitely related to the sport. He makes a livelihood out of this just like I do. There's a lot

Above: Mario Andretti was in unstoppable form at Elkhart Lake, taking pole position, fastest lap and race victory itself in the Newman/Haas Lola T800. Photo: Paul Webb. Below: Indycar champion yet again . . . Andretti's list of achievements is impressive to say the least. Photo: David Hutson.



of good to come from that because I think the approach is different. I could name half a dozen others who have other business interests who have come into the sport from a totally unrelated area. They could take it or leave it, at any moment. They could think, 'Well, I'm just going against the grain here or, I just don't have the luck.' They could leave it tomorrow. But Carl is different.

I was looking for something like that. There was no other team I could see that would have that kind of commitment and would be content with one driver and run a really good, strong operation. The time was ripe. I was talking with Paul (Newman) and I had been talking to him for a while, since he was in CanAm. His propositions were interesting but I was involved with Formula 1 and I was involved with CART racing. There was no way I could take on CanAm — no way.

Yet, there was something that was appealing there, too. It seemed like Paul was more than just a superficial big star involved in the sport. There was more than shiny lights there. I think there was always a lot of substance.

The long and the short of it was since Carl and Paul were both coming into CART racing from the outside, the idea just came; why don't we join the two? I first proposed the idea to Carl and then to Paul. From both sides the reply was, 'Well, let's talk it'. Neither side was all that thrilled about the idea. I don't think there was any tremendous love between the two because they had been such bitter competitors over the years in CanAm. But somehow, it gelled.

So the way you tell it, Newman had shown specific interest in Indycars?

Oh yeah, I think he felt that he was going into a new area and to align himself with someone like Carl could maybe work as a compliment to each other. I think Carl thought the same. I think he felt Paul would add that other dimension to the team, a dimension that he felt comfortable and confident with. It seems as though Carl likes to have a partner. You know, he went in with Jim Hall in Formula 5000. In big ventures like this it

seems he likes to have someone else on his side rather than feel he's undertaking all the risks himself. And I think Paul was just that person.

With me being involved right from the outset, I think we all maintained that relationship and it was very beneficial to me. I felt that I wasn't going into something that was already established — an operation that already has basic policies so that there's no one that feels, 'Hey, I'm not going to let a driver tell me what to do' — that type of thing. All of us had equal input into the direction we were going to take.

By going with Carl, of course, we had to accept the fact that we didn't have much freedom to move about, as far as equipment was concerned. That was pretty much understood. Even if Carl said at some point when we were talking that if we had to we could get something else, I knew that was only talk. I mean, Carl has been very loyal to Lola . . .

There were times at the start, in '83, when I felt that maybe we should have done like Penske this year and gotten a March and navigated with that. But in retrospect, I think by keeping the team together and believing in our own resources that it brought about more strength on our side. The team kept building up and we kept solving the problems we had because we

"Cicale's diligence is immaculate in every respect. I really love to see that."

knew we had to face them. If we had something else to work with, the development of the Lola would have been secondary, but since we chose not to go with a different choice we knew we had to make the Lola work or we weren't gonna have a job. And that's what we did. *What about the team itself? How did all those people come together?*

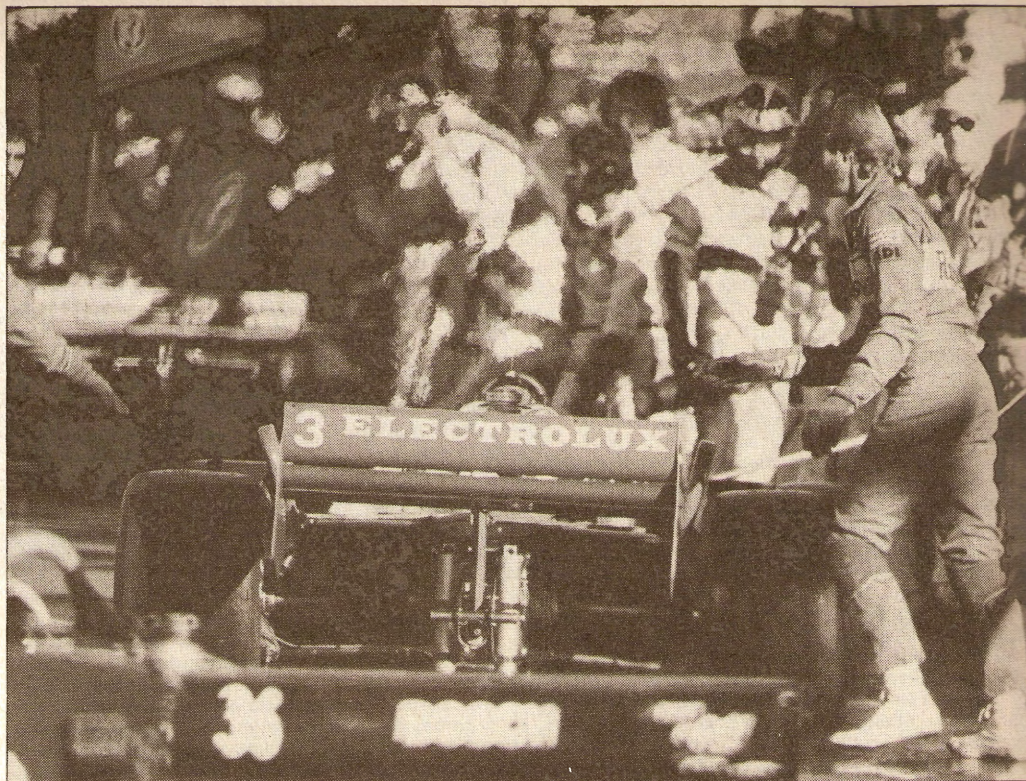
Well, for my part, I was going to suggest people that I had worked with and knew could do the job if they were available. Darrell (Soppe) of course, came to mind for the crew chief's job. It was pretty easy to make that choice because Carl knew him from him working with Chaparral and Jim Hall. Carl has a lot of respect for him so he felt that if Jim chose Darrell for his operation, he must be good. Paul really left it up to us in choosing the people, because he felt we knew the territory a little better. He just kept giving his blessing, so to speak.

The big shortcoming at the outset was the fact that we were all in Eric Broadley's hands. The deal didn't really go together until November of '82, so you can imagine the undertaking at Lola, just to start from scratch. That part I think was quite a trial for us. The thing that I think helped a lot was our being able to recruit Tony Cicale as our race engineer. This was initially Carl's suggestion because he knew Tony better than I did, from CanAm. Tony got my vote immediately. I didn't have anybody else in mind, not on this side of the pond anyway.

I drove out and met Tony at his home. We sort of outlined a lot of the things we wanted to do. We didn't know each other and all we did was say, 'Well, let's try it. Let's see how it goes'. And it's a relationship that has cemented with time. Tony's diligence is immaculate in every respect. I really love to see that. It gives you so much confidence.

Usually, Tony studies the problem ahead of time and when we discuss it he already has ideas of his own to interject. That's how we arrive at all our set-ups, and it's an optimum way to operate the team. We take suggestions from Darrell, of course, but basically the set-ups start with Tony and I. We maintain a simple, direct and to-the-point programme. I think Tony immediately struck up a good working relationship with Nigel (Bennett), last winter. When Nigel was hired towards the end of last season, he was instrumental in me making the decision to stay on. And although we didn't really discuss it — I think at that point, Tony was also borderline about staying.

We felt we needed someone back at Lola who would work strictly on this programme. Even though we felt that Eric Broadley gave this programme priority, it was still one of many at Lola. With as few cars as Broadley was selling for championship racing, he sure as hell couldn't run the factory on that. We knew there was no way we had Eric's undivided attention and we knew we couldn't expect it. The only way we were going to turn this thing around was to get someone really on it. I felt that all the development and the pieces



Mario's crew go into action during one of the all important pit stops in Indycar racing.

for the first Lola came way too late. We were always late with the T700 and you can't afford to do that. I don't even know how the hell we got going so well toward the end of that season. But I think the turnaround for the team and the project was Nigel. He completed the team.

Did Nigel suddenly become available with the demise of the Theodore Formula 1 team?

He was thought of and talked about earlier. I had known him and worked with him. By reputation the guy has always been a very loyal man. He's not a man who can be bought for any price on any given day. I don't think he really became available until the other team really dissolved. Everything worked simultaneously and I think Broadley, in his own way, had his eyes on Nigel. For my part, I thought Nigel had come a long way in being able to really take over such a project. He had struggled with the Theodore thing for a couple of years and I think that probably taught him a lot. I always considered him a very practical engineer. I think he was

"Nigel was different. He was a breath of fresh air. It seemed like he pretty much knew some of the basis on which to go on for the new car."

a very good balancing factor at Lotus when we were there. I remember making decisions between the Lotus 77, the 78 and the 79 and I always liked his logic. He was good at Lotus and he had the esteem of Chapman.

And to have Chapman's esteem was rare, correct?
Yes, very rare. But Nigel was there, solid. As I say, he was a good balancing factor there.

But I liked Nigel's approach. I felt we spoke the same language during that time together. I think we slowed a lot of things down for the good of the overall project.

The one good thing I immediately detected about Nigel was that I didn't have to stress certain points about what was important about a ground-effect car. At the beginning, for some reason or another, Broadley and I were not on the same wavelength at all. Not that I professed to be the engineer or anything like that, but I had enough experience with non-working ground-effect cars that I knew a lot of the shortcomings. I didn't want to make the same mistake again. Yet, Broadley just wasn't going to listen to me, which is typical. He's no different from any other project engineer. They have their own ideas and they have to prove themselves wrong first.

Nigel was different. He was a breath of fresh air. It seemed like he pretty much knew some of the basis on

which to go on for the new car. Obviously, there's no magic in this game. You can tell that his approach was pretty sound. I think he designed a car that was functional, good-looking and strong. A real credit to him as an engineer. He did it pretty much himself. Yet Eric would never be alienated from any of the projects at Lola, so the credit goes to him as well, but I think I can say from Eric's own standpoint that Nigel was very welcome there.

What about your engines? Was it a foregone conclusion that Franz Weis at VDS Engines in Texas was going to build your engines?

I think here again, it was a continuing relationship. Obviously, this was from Carl's side. But, here again, if I had anything to say about the engines it would have gone in that direction anyway. I always admired Franz's ability as a competitor. I lost two Formula 5000 championships to his reliability and I don't forget those things!

Franz is the type of guy that falls into the category of one rather being with him than racing against him. I think he has to go down as one of the best engine builders available today, and that's over a long period of time. He has an uncanny way of doing things that works. He's super conscientious. Every race the guy goes to, he's like an expectant father. And he's a racer — that's the other thing. He's not only a good engine builder but he's a racer as well. He sees things right through.

We have also developed a very good rapport over the last couple of years. We have a lot of dialogue back and forth and I think an engine man needs to have some input because there are things you can do and things he can do.

Often in qualifying last year, your engines had a particularly cammy, sharp sound. Whenever we joked with Weis about 'qualifying engines' however, he always declared you had nothing special under your tail. Is that true?

Well, whether we do or don't, obviously, I think everybody likes to think they have something going. Of course, Franz is an engine builder that works for a couple of teams so he has to play the middle road with me and Rahal. If Rahal's team presents him with or supports him for some development in some way, then I think Franz honours that confidence. At the same time I feel he honours our stuff versus Rahal's. So to avoid putting anybody on the spot, I never even asked what he does for Rahal. There's a fine line there that we play and it's understood between us.

Franz is another guy whom, like Lola, I wish was working only for us. Unfortunately we don't have that luxury.

Let's talk about last season and the last three races. You crashed while trying to lap Johncock at Phoenix in October and that seemed to put you right behind the eight ball for the last two races.

Yes, it did. I made a mistake, I think, by taking more of an unnecessary chance at Phoenix, and I paid for it. And I think that, against my grain, I buckled down and held back in the last two races. We'll never know and it will always be disputed, but I truly think I could've won both those races under any other circumstances. I think Rahal in Laguna and Sneva in Vegas were not properly challenged. I felt I had the car that could've done it at both places. We'll never know, as I say, but I know I wasn't driving more than about 70 per cent, at best.

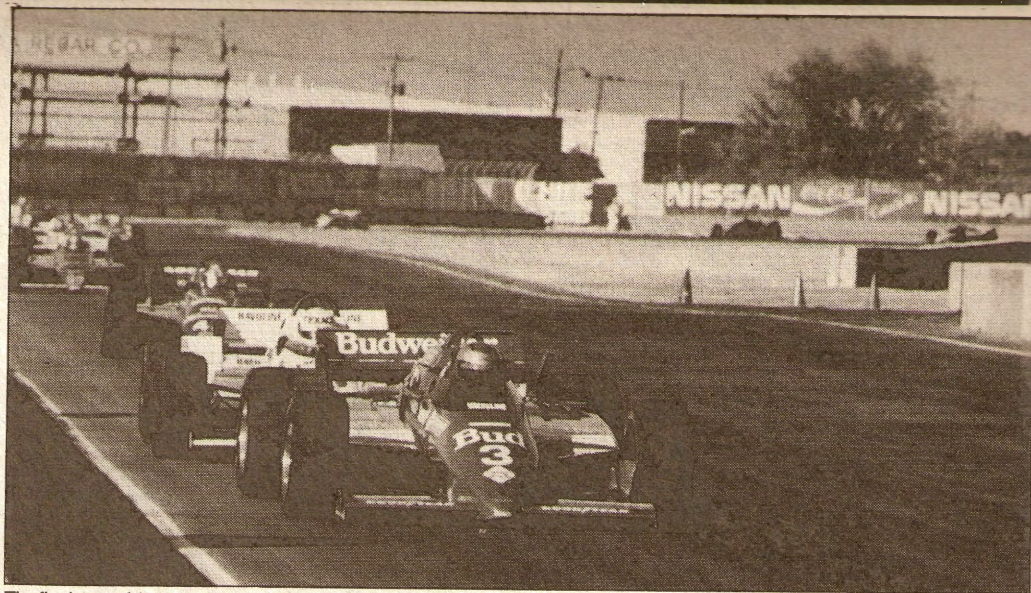
The track layout at Las Vegas seems to make for a very frantic race. It happened in 1983 and again last November. You were in traffic for much of the race at Caesars Palace and it was obviously a great relief to you to make it to the finish without tangling with somebody and suddenly losing the championship. Was it that way?

Yeah, I've been in pressure situations like that before, but this one really had me uptight because I've never dealt with the type of point system we have now. It seemed like I was at the mercy of fate—anyone's fate—right to the last four laps of the race. It just seemed that I was caught between a rock and a hard place all day. Even when I got messed-up on that first pitstop I knew I could have gone through traffic. I don't think I would've taken that much more out of the car, although I would've taken something out of it, for sure. Like in my braking I would've had to escalate across all three gears instead of one at a time, because that's how I do my passing. But I couldn't make myself do it. Finally, I found myself behind some guys I can take care of and I find myself behind them for two, three, four laps. So I said to myself, 'to hell with it'. And I went. Then I thought, 'should I continue like this?' So I backed-off. I was like a piano pedal or something. I never knew when to go for it and I'm not at all sure that's the safest way to go about things.

It was because I was hesitating a lot that I got into that trouble with John Paul. He saw the opportunity to pass there and it couldn't have been a worse spot for him to try due to the nature of the area and also because we had the sun right in our eyes. It's not so bad when you run into the sun there for two or three consecutive laps, but when it happens on a restart it's worse, because you have to readjust. So that was happening and also, for some reason, my blower pressure wasn't with me. I passed somebody at turn 2 and it took a while for my blower pressure to come up and John Paul took a shot at the guy I had passed and was right up on me.

I kind of sensed he was behind but due to the sun and everything I just tried to make sure I stayed on the road. I didn't want to have to pull out and slide into the damn sand, you know. I think he tried to do the same thing as I was coming down on him a little bit and he went up on the curb. That pushed him onto my wheel and that was heart-stopping, I tell you. I'm sure he felt as bad as I did at the time. I could not really have cared less about losing the position. If he was that aggressive he

Michael Andretti—a chip off the old block.



The final race of the year. Championship rivals Andretti and Sneva fight it out. Tom won the race, but Mario did enough for the title.

probably could have had me in the next corner. But it was his best performance of the year, and he could not care less about my championship either. I understand those things. It ended up no harm done, so, end of story. You can see, however, that no matter how careful you try to be, you're not immune from all the potential problems that you might have to face in a race. It was almost more dramatic the way it was, than if I had just gone for it. I love that place (Vegas). I was just dying to sink my teeth in and go.

At Laguna too, I was dying a thousand deaths. I wasn't working as well at Laguna as I was at Las Vegas, but I was working well enough to go a lot harder than I did. Laguna can be a strain on your gearbox and Vegas could be too, although we don't have much experience with that place. But at Laguna, there have been some ring and pinions flying over the years.

Was there any particular race from last season which stands out in your memory?

Ironically enough, a race that really felt good to me was the Meadowlands. Looking back at the drama of that event, I think it was a race that went our way strategy-wise because of the wet start. If there hadn't been that accident after eight or nine laps to bring out the full yellow and slow the field down, the advantage we would've had would've been incredible. While it was wet I was able (on slicks on a wet track) to lead Little Al (on wet tyres) and just go away from him. A lot of people said to me, 'it's a piece of cake, you've got a car that's superior'. Well, all I can say is they should've sat in my seat right at the start. They should've gone through that river in the braking area for the first turn on the slicks. I think at the time that I felt I did a pretty good job of keeping that car running that quick. I got a lot of satisfaction out of that race. I think in many ways it was also a turning point for the team as far as the season was concerned.

The other race that mattered to me of course as far as personal satisfaction was Mid-Ohio. I fought my own little problem at that race, as you know. I got a lot out of that race for myself.

Now and then you need such a test. You need one of those barnburner events where you just about make it physically, most of all when you least expect it. As far as the stamina standpoint, with my cracked ribs, Mid-Ohio was like that for me. Believe me it was a bear. What about the oval races? There were a lot of very competitive oval track races in 1984. Any of those stand out in your memory?

The 500 at Michigan, obviously. For us that had to be the highlight, because I think we went against some pretty good odds. You could say Rahal went out by accident and at the time he was strong, which is true. We'll never know. Not all the players were there at the end.

However, from the standpoint of the team working well, the strategy being correct and also taking advantage of every possible situation available to us—those are things that worked fully that day. It was a good day for us, and there was a fight right to the end.

The other oval race that was shaping into being really a good event for me was Phoenix, in October. First of all there was all hell letting loose in qualifying. Jesus, that was incredible! To me that was the most interesting and exciting qualifying session I've ever seen at Phoenix, in all my years.

I was not in the thick of things as well as I would have liked to have been, but in the back of my mind I always

had the race set-up. I knew the set-ups some of the other Lolas were running and they were set-ups we had tried. They might have been a little quicker for qualifying but I knew that set-up wasn't going to work for the race. So we stuck with our race set-up all along and it seemed like it was going to be another pay-off for us. As the race went on, it began to play right into our hands. All the superfast guys from qualifying were soon backing-up to me and all of a sudden there we were at the front. And that was it, until the incident.

Up to that point it was an extremely satisfying race. We were even ahead of Sneva, as heralded as he is about ovals and all. But people fail to realize that when he doesn't have the hot set-up, he doesn't look that fantastic either. We had him handled there, more or less on his own turf.

"I kind of sensed he was behind, but due to the sun and everything I just tried to make sure I stayed on the road. I didn't want to have to pull out and slide into the damn sand, you know."

Aside from the last two races and the frustration of not being able to drive the way you preferred, it is fair to say that Indianapolis, with engine troubles in both qualifying and the race, and finally your incident with Josele Garza in the pitlane, was the bottom of the pit for you last year?

Yeah, it was. You come away from that month of May either up here or down there. There's no middle ground from Indianapolis, at least there has never been for me.

It started out all peaches and cream. All through practice it was like that. I think it looked like we had the handle on the situation, but what took the wind out of our sails was the first problem we encountered in qualifying. And from there on, we just lost momentum.

In the race the car never worked right. However that situation I thought, was correctable. But I never got the chance to really do that, because just when I got to a point where I could lead and start flapping my wings properly, the engine went duff. We just didn't know what to do. Nobody had a clue. So we chose to leave it alone and just mess about, like we did. And when you mess about you always run into a backmarker or some other problem.

The way the accident with Garza happened was just a surprise. You know, just a move by Josele that I wasn't prepared for. Just a last minute—bang! You see, I was already committed for the pits behind Mears and Josele comes out from nowhere. All of a sudden he's there and boom, he's gonna pop into the pits. That was it. I had no place to go.

They say I tried to pass him on the inside. Well, I tried to pass him on the inside or else I would've rear-ended him bigger than hell, because I couldn't stop. I was hoping he would stay there, but instead he turned right in. So I had no choice and that was the end of the story for me at Indianapolis.

I went away from there with my chin buried in my socks and it shouldn't have been. It was another of those

'might have beens'. Indy was definitely the darkest point of the season for me.

If you have a bad month at Indy, for whatever reasons, and if you stumble at Milwaukee the following week, as you did, it usually means you are doomed to have a bad year, stuck behind the eight ball all the way. Yet that didn't happen to you.

Well, it normally does work that way. And that's what I was saying about the team. I think we really got kicked in the ass hard but we just didn't lay down and die. We were ready to fight the next day.

I don't know if that's clever or stupid — to be able to forget that easily. But it just seems like you gotta do it. I felt a brand new fighting spirit all around me once Indy was out of the way. It was like Bernie Ferri (one of the team's primary mechanics) said: "We're going to win the next nine in a row". You like that kind of attitude, that kind of spirit. That's what you need to function.

We got kicked again, immediately, at Milwaukee, which was just another reason to wake up even more. We had more problems at Portland, but then the next one was the Meadowlands which we won of course.

As I said it hasn't been a bed of roses by any means. But when it was time to rise to the occasion I think the team did exactly that. And that's what made the difference in the end. A lot of the early mistakes came back to haunt us I think and that's what made the championship go right to the end. Any one given event could've made all the difference. We probably could've and should've had more victories to our credit.

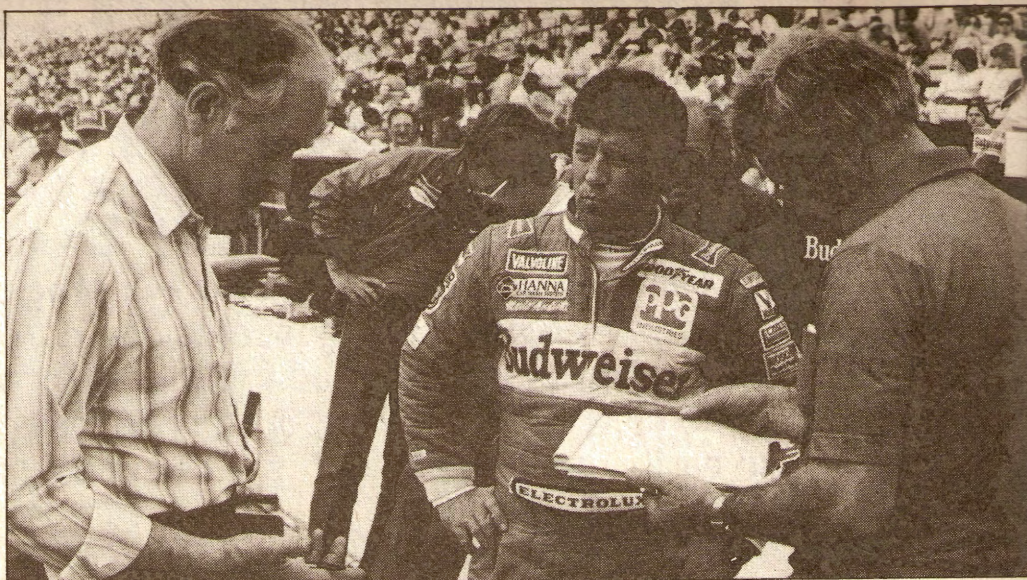
Back in February of 1984 Robin Herd told us that he thought you were going to be the man to beat for the championship. He said he didn't think he and March had done enough to take on the new Lola and you. Did you ever have that kind of pre-season confidence?

Well I had confidence in the team and I had a good feeling about the car after my first test. A lot of things were coming much easier and falling into place the way I had hoped. But, we didn't jump out of our skin or anything at the time because it's not until you go to the first confrontation of the season that you can start evaluating the situation properly. And you know, we were listening to all those horrible rumours about all the times being done at Laguna. Everybody was supposed to be doing Phoenix at 300mph and you never knew who was cheating, or under what conditions they were running.

So, we went to Long Beach and fine, it looked good, but I think we caught 'em all with their pants down. It never felt to me like we were going to be in that good shape until we went to Indy. That's when I started to think we were in good shape.

At the Phoenix race after Long Beach, except for the Teddy Mayer team, we had 'em all handled until the half-shaft went. I didn't have Sneva handled but I had Howdy and everybody else handled. So before Indy I thought there was still potential in the March. Our car was fine I figured, it would go with the best of them. But there was still something to be found from the March.

Obviously the guy that caught on to that was Mears. He demonstrated that at Indy and Milwaukee, and by then it was clear we had fallen behind at least two Marches. The thing that felt good to us was that even



A serious looking Mario talks with Lola designer Eric Broadley (left).

when the Marches were at their best, we were not far behind.

More than once we were able to demonstrate that we had the situation handled ourselves. More races than not I think we were the team to beat, not the other way around. And like I say, that's not a position you are going to be enjoying too often in this business.

"You know, it is mostly the young talent that drives so much safer than the old hands. I feel they have so much more awareness."

Before Mears crashed at Sanair, did you think he was your major competition for the championship?

I thought he was going to be my competition, yes. I thought the consistency factor was more in his favour than Sneva's or Sullivan's for that matter.

You're talking about the driver, team, everything?

Yeah, the whole package. I felt Mears had more going for him on an overall basis. So, obviously, it took something out of the championship with him disappearing as a strong competitor. It took some of the pressure off. The pressure just went somewhere else, taking a different shape.

But you know, the question will always linger. What would've happened if he had been in there all the way? And, of course, that will never be answered.

Is there any driver or team that surprised you this year?

The surprises really were just overwhelming displays of competitiveness all of a sudden from say, Villeneuve and Halsmer at Phoenix. Up to that point these were

people you hadn't really considered to be part of your problem. It was a big surprise, but only a momentary one.

As far as the overall surprise, I think it was Sullivan and Shierson's team. Dennis Swan should take a lot of credit for the preparation of that Lola. I think getting the car when they got it during the month at Indianapolis and then operating with one car the way they did, that team deserves a hell of a lot of credit for all of a sudden being a factor in the championship. And you know, Danny did a hell of a job himself, no question. *Were you surprised by Rahal's late-season form?*

I kind of expected it. In fact at the beginning the surprise was that he wasn't there. I expected him to be there earlier than it finally happened. I saw it at Mid-Ohio when we were testing radials in April.

It seemed like after the first couple of races he started getting his marbles all together. I think when he acquired that new engineer — Adrian Newby — you could feel the change. All of a sudden he became the yardstick I think, for us. But that was not a surprise. *What about racing with your son Michael? Any surprises there?*

Well, we had to wait and see, it was that type of thing. At the beginning it was something new and I was very anxious to see how the thing was going to shape up — to see how he was going to handle his own situation.

I think he sure as hell hung onto what he had. I started looking forward to having a little scrap between us, but it never materialised. There was a little bit of it at Sanair, but when he finally got around me I was a dead duck. My car was damaged and I couldn't come back at him. So we never really had a real go at it, but it's coming...

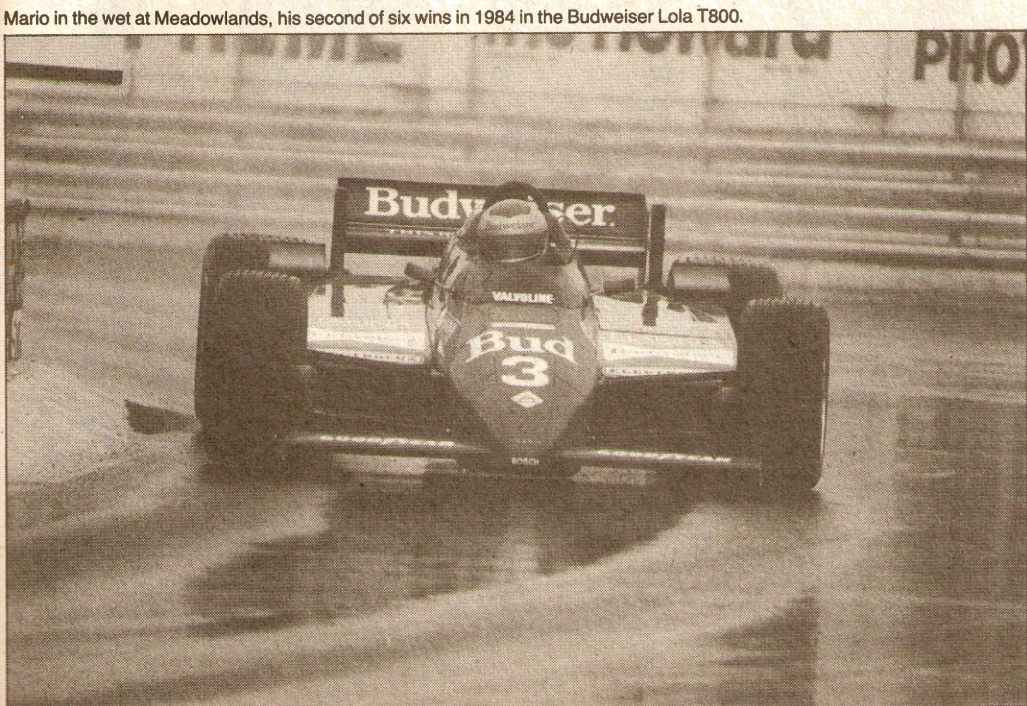
Whenever I was behind him I always thought he drove the hell out of that car and he had good awareness about it too. I think I put him in a hell of a position at Phoenix one time and he handled it beautifully. I was coming up to pass a whole group and he was fighting with Pimm coming through turns 3 and 4. All of a sudden, boom, I put my wheels there and he was going to pull out at just about the same time and he caught it. I thought that was pretty good.

I don't think too many of the 'old style' oval drivers would have had that awareness and that brings to mind a comment I would like to make. You know, it is mostly the young talent that drives so much safer than the old hands. I feel they have so much more awareness. They are so much more on the ball and that's only because of the training they've had through the ranks. The new talent, I think, is taught to have a little more respect for the other competitor. That's not the kind of training that we had, unfortunately, on the dirt tracks and stuff. You can see that if Johncock had been more aware, he wouldn't have had a couple of cracked toes. You know what I mean?

Next season there will be more Lola customers than last. At least six other teams, including Penske and Shierson, will have new T900s. You've talked a little about this but could you tell us more about your concerns about the number of Lola customers in 1985?

Oh, I'm concerned. Being, I think, a purist myself, I can hardly conceive that any team has the opportunity to have a Lola and a March in their stable. Yet for 1985 that's exactly the opportunity that some are exercising.

I can't imagine in my wildest dreams in Formula 1 to say that I'm going to drive for such and such a team and



they're going to have a McLaren and a Brabham. I didn't think this type of thing would ever happen on our level of racing, yet it is happening. Lola is in the business to sell cars. They don't run a factory team *per se*, so as far as they are concerned they couldn't care less who wins, as long as it's a Lola. It's the same with March.

Well, I sure as hell don't feel that way but by staying with this team I have to bite the bullet and accept it. The only thing is that, objectively, I am at a slight disadvantage because this team will never buy me a March. Even though last year's car wasn't in my hands until March, at least I kept what I had for a while. It was mine. Now, what I have, anybody can have.

I mean, Penske went out and bought last year's car while it was still warm from Las Vegas. Why did Penske buy it? He bought it to learn as much about the car as he could. He was going to do a suspension layout blueprint, check its torsional stiffness and give all of the information to Geoff Ferris. If I was Carl, Penske couldn't have touched that car for \$300,000. But that's not the way it is. This is the only part I dislike about CART racing right now — the fact that you can go in any store and just buy the quick car.

So you're giving away some of your experience. All of a sudden I feel like I have no advantage. Now and then I may be able to get a better set-up than the next guy, but there are some pretty competent people that are going to have these cars. They're going to be ready for the start of the season — believe me.

There's a lot of escalation going on in CART these days with new sponsors, Penske's new engine and so forth. What do you think this holds for the future?

Like I've said before, I think it's inevitable to see a big change coming in CART. I think this is probably going to be more by 1986 than '85. I think '85 is going to be a transitional year. A lot of people will be doing one thing, but preparing for something else — the *big change*.

"If the CART series was not as strong, I might be lured into Formula 1 again, but the way it is now I think I've got my hands totally full doing what I'm doing."

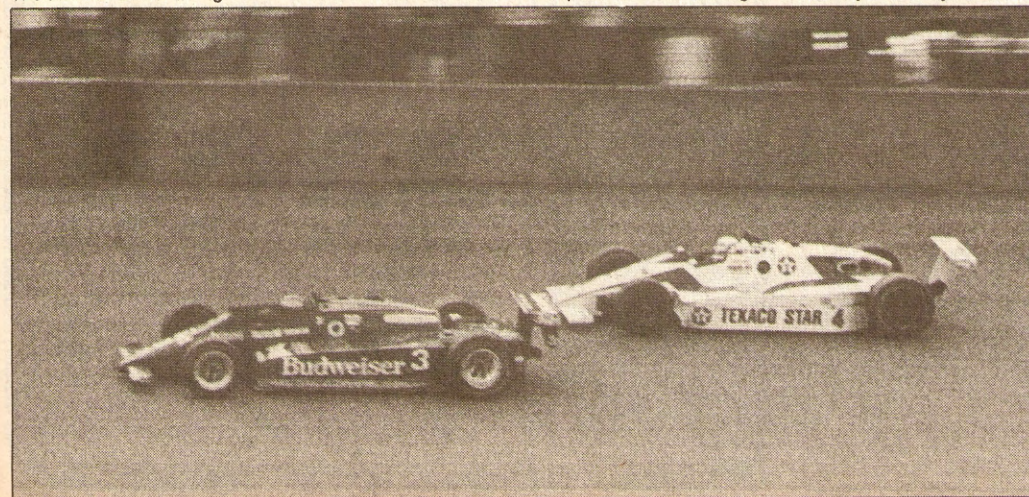
Penske, of course, is doing his thing with Chevrolet. Chevrolet is going to have a racing engine and there will be others. You hear rumblings that Renault may be in, wanting to sell engines. Based on how strong Lotus is going to be and the Don Nichols cars and the new Eagle, you're all of a sudden going to have a rethink.

March may have to field a real works car, for example, and I guess they're already coming more out in the open about doing that with Rahal. You are going to have to have more intense development on these customer cars.

It won't be so easy for Lola, for instance, to field a winning car and because of that it might make it more interesting for a guy in my position. If we start getting smoked off then we'll start doing some intense development work just on our car which may temporarily give me an advantage — until it's passed on.

The whole position is going to have to be revised in 1986 because Lotus, for example, is not going to be selling cars. They have no interest. And there are a couple of others that could develop like that. If Penske all of a sudden gets his stuff together and gets his cars working, it'll come around to requiring a more

The second race at Michigan saw Mario and Tom Sneva in close competition, Mario winning the rain-delayed race by 1.4 secs.



Mario chases Rahal and Paul Jr through the confines of Vegas. Brayton obviously swapped ends when he saw the speed limit!

individualised effort. Combined with the new engines it may make the field more diversified. In some ways that will be better, in others worse. It all depends on where you're sitting.

You have voiced some pretty strong criticisms this past year about the differences that still exist between CART and the Indianapolis Motor Speedway as far as rules. Can you explain your viewpoint?

Well, I think it's truly time for us to really look at the future of CART and The Speedway and look at where we are headed today rather than yesterday. If the future looks strong for CART, it can only be stronger if The Speedway aligns itself with CART, and tries to avoid any political differences rather than bringing in another body into the middle, like USAC — which is a lame duck.

The Speedway should remove themselves from being the major force in implementing regulations. The Speedway has to feel comfortable that we (the drivers) are the parties that have our own best interest at heart when it comes to safety. They don't have to go overboard by trying to do our thinking.

They also have to realise that we are approaching the year 1990. We're halfway through the '80s already. We're not operating back in the '50s or the '60s anymore when The Speedway was a major force in the series and everything else was totally secondary to Indy. Indianapolis can still maintain all of its lustre, all of its tradition and magnitude. But it is not the only gem in the bracelet anymore. The series itself is bigger than Indianapolis and it's going to grow still bigger.

I think there are some pretty reasonable people handling the running of CART. I don't care under whose umbrella it operates, it'll never be 100 per cent, but CART is as good as you could hope for in most ways.

I think when we drivers talk to CART officials about safety and so forth, I truly feel that we are heard. On the

other hand, I feel that every time I have spoken to Joe Cloutier he has shrugged it off as me going to him looking for something that gives me a particular advantage over everyone else. He never gave me the right time of day on that and I resent that about The Speedway's attitude.

The Speedway will never lose what it has. They will always be powerful. Nobody will try to over-run them or dictate policies to them, but they've got to get off the kick of trying to govern Indycar racing. They've got to realise they are just another racetrack, another event. The biggest one — no question. A very special race. But the rule making should be left to CART.

Some people still talk about you and Formula 1. Is that now completely in the past for you?

Yeah. I tell you what. I can say now that it's more unlikely that I would ever be interested in a full Formula 1 programme than ever, simply because of the strength of the CART series. If the CART series was not as strong, I might just be lured into Formula 1 again, but the way it is now I think I've got my hands totally full doing what I'm doing.

I'm also enjoying it so much because of the nature of the series. The way it is now, CART is offering me more in the way of satisfaction than Formula 1 and with a lot less pain because of less travel. I like both the ovals and the road courses and Formula 1 just doesn't have that to offer.

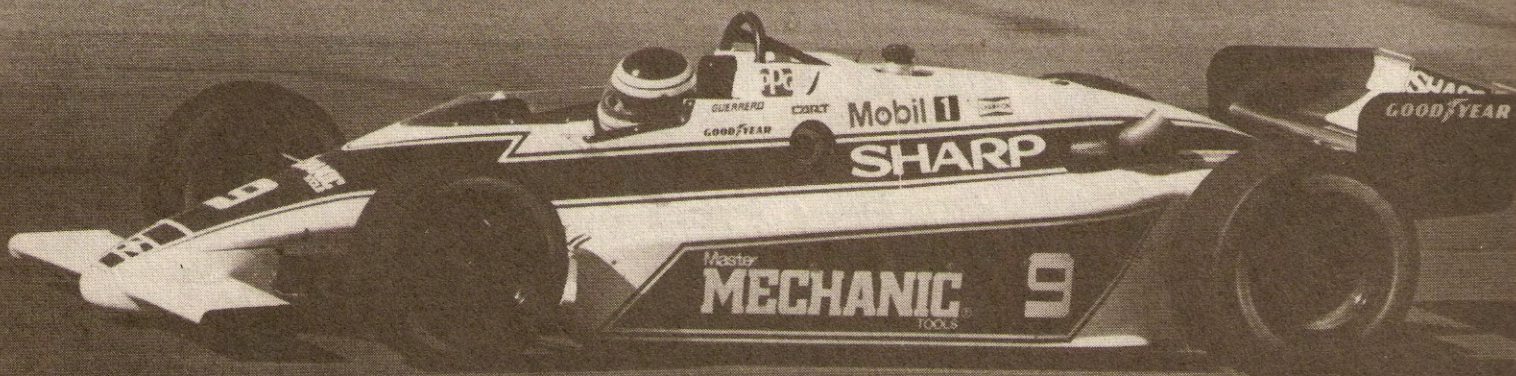
Another reason I prefer the CART series is because I think you've got much more of a chance of being competitive, because of the nature of the beast and the rules. In Formula 1 now, it's worse than it's ever been. It's a very unbalanced series. You have a tremendous imbalance between qualifying and the race, because of the engine and tyre regulations. There are no restrictions whatsoever on the engines. The only restrictions are on fuel capacity which is rather absurd because they're putting the restrictions on for safety reasons yet they qualify 9 secs faster than they race! They also have qualifying tyres which is an unsolvable problem as long as you have competition between tyre companies. I think everyone would like to solve that, but they can't see a fair way to do it.

So, you've got those two factors in there that make Formula 1 so unbalanced. Unless you're with the right team, you haven't got a chance in hell — not a prayer. Because of that I can see that I might be slightly involved with this other situation with Carl Haas and Teddy Mayer, assuming that it gells the way it's supposed to. But I just don't see me being in there with both feet. Not at all.

Finally, are there any gaps or regrets in your career?

The one thing that I will always regret is that I never really had a competitive car at the Nurburgring. I wish the German GP had been run at the Nurburgring for one more year, to when I was running the Lotus 79. I would've loved to have gone head-to-head with Ronnie Peterson in the 79 at the Nurburgring, because I knew he would've been my measure in that car on that track. That's one thing I think is remiss in my career. As far as other things — satisfactions — I've had plenty. I've had plenty.

Roberto Guerrero made the successful transition from Formula 1 to Indycar racing, claiming the Rookie of the Year award. JOHN ZIMMERMAN talked to the Colombian driver



Above: Roberto Guerrero. Top: In the Bignotti Cotter March.

Rookie Roberto

continue in F1 for his seat in the Bignotti-Cotter team. He stepped into Indycars for 1984 with just a brief test day in a then-current '83 Theodore chassis at Elkhart Lake for 'hands on' experience. The major difference in the cars, he notes now, is that the Indycar's greater weight means it reacts less directly than an F1 machine. "You feel it on the brakes, you feel it on the steering," he tells. "But once you get to it it's no problem."

When the season started he immediately established himself on the pace. After the first qualifying session for the season-opening Toyota Grand Prix of Long Beach his name headed the time sheets, but in the final timed period, efforts to improve put him into the ever-present concrete barriers that line the edge of the city street circuit. The accident left him unable to match the faster times of the second day, and he fell to fifth on the grid. In the race an oil leak caused an engine fire that removed him from the chain of cars battling for second place behind a fleeing Mario Andretti after only 10 laps.

Although no one could have known it then, that Howdy Holmes and Guerrero at Michigan. It was here that Roberto led his first Indycar race.

weekend was an indication of how much of the rest of his season would go: a good grid spot nullified by a problem in the race which produced a poor result. Over the course of the other 15 races he would qualify in the top 10 on all but three occasions, yet his efforts would yield only six finishes. "Of course I hoped to do a little better," he says to characterise his year, "but we had our up and down moments. The team had some problems, and I messed up a few times too. But we all learned a lot and hope to improve next year."

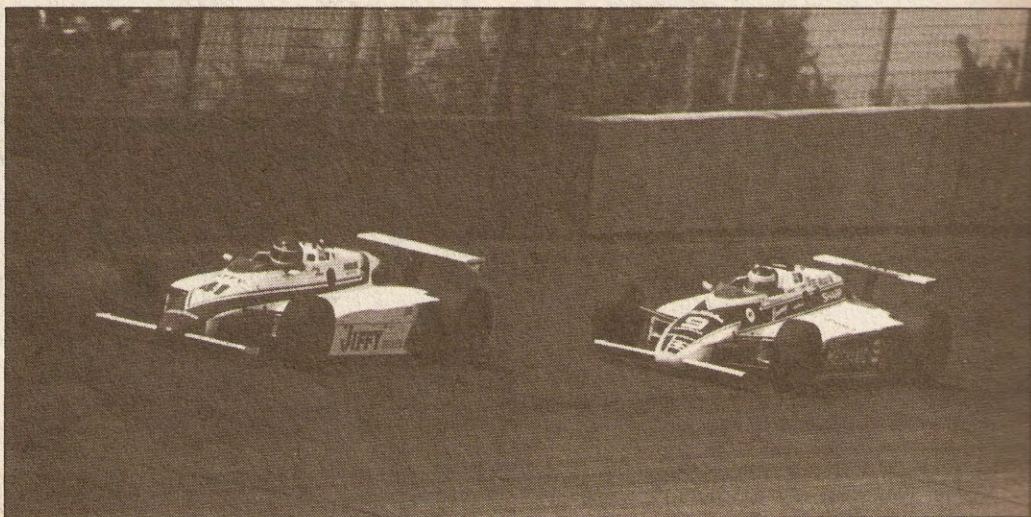
Statistics support this assessment, a comparison of average starting position, eighth, with average finishing position, 17th, showing that good qualifying efforts often came to naught in the race. Three times his races were cut short by engine fires, and at four others crashes took him out of competition, although at one of these, the Meadowlands, he was just an innocent bystander who got caught in the aftermath of a Dick Simon chop job on Danny Ongais.

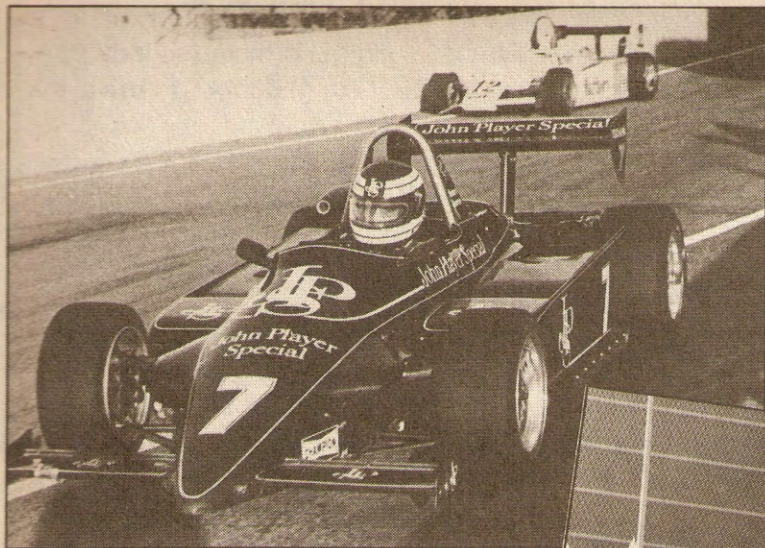
Even though his background had been primarily in

Because Roberto Guerrero believes he can win every race he starts, his first season of racing Indycars in America may at times have been disappointing for him. In realistic terms, however, it was certainly successful enough to win the 26-year-old Colombian the \$10,000 Vandervell Award as CART's Rookie of the Year.

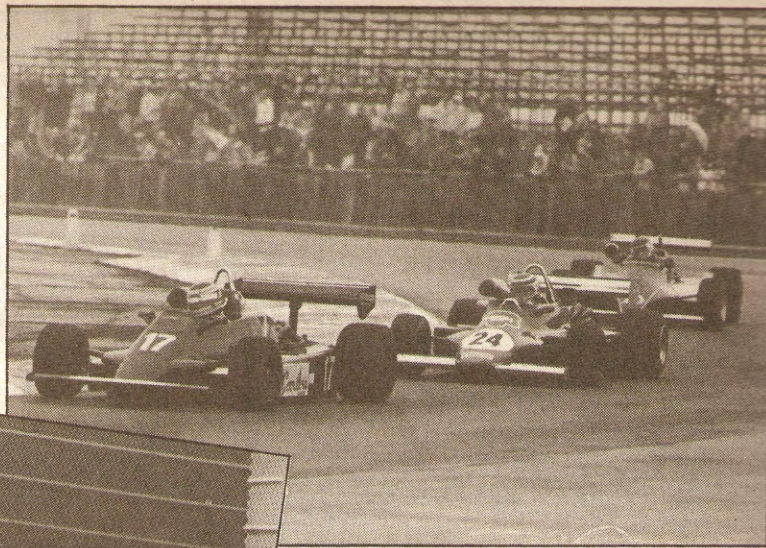
From his 16 starts in Bignotti-Cotter Racing's Master Mechanic March 84C, Guerrero earned five top 10 finishes — the highlight his splendid second place at Indianapolis — and scored 52 PPG Cup points to claim 11th spot in the final Indycar World Series standings. He was the highest placed rookie at five races, and over the season his closest rivals for the Vandervell prize were Emerson Fittipaldi and Jacques Villeneuve. Both the two-time former World Champion and the former CanAm and Atlantic champion amassed 30 points, but neither was able to start every race on the schedule.

After deciding that two years of hustling underfunded, underpowered cars onto the back half of Grand Prix grids was enough, Guerrero passed up a chance to





Back into Formula 3 for the Macau Grand Prix.



Formula 2 days, Guerrero driving for Maurer.

road racing, he seemed to adapt to the big ovals fairly well, and consequently represented himself well in the series' three 500-mile races. His month of May in Indianapolis went superbly. A 206mph qualifying run placed him seventh in the starting field and he survived two separate incidents on the track — the second an amazing triple spin out of turn 2 — and a touch of trouble in the pits to bring the Bignotti-Cotter entry home ahead of everyone but winner Rick Mears. By doing so he earned a share, with Michael Andretti, of the Speedway's Rookie of the Year honours.

He also showed well at the eventful Michigan 500, starting ninth and driving through a day full of crashes into fifth place at the end despite a big spin of his own (again with no damage) in the late stages of the race. The high banked two-mile oval was also the first track on which Roberto would lead an Indycar race, and remains the most impressive aspect of the game the young Colombian encountered during his first year of racing in America. "It really kind of scared me," he would say. "It was totally different than anywhere I had been before — with all the banking. At first I couldn't see anything, but I enjoyed it after I got used to it."

In the third race of the Triple Crown at Pocono,

"I'm very fond of Morris. He does a good job, but I think he'd had his own teams so long that it was hard to work for someone else."

Roberto had his first big accident in an Indycar. "And I hope it will be the last one," he said afterwards. "I didn't like that." After qualifying a fine sixth and running in the leading string of cars for 20 laps, he found himself escaping unharmed from a spin into the first turn wall.

Roberto took his first step along the pathway that would lead to Indy, Michigan and Pocono when he was only 12. In his hometown of Medellin, Colombia, he entered his first kart race and his five year karting career progressed he won both the Pan-American and Colombian National championships and placed third in the South American series.

His father insisted he attend college, and after studying briefly in New York he persuaded his parents to let him continue his education in England. For two years he took automotive engineering courses at North Worcestershire College, but during the second of these his desire to race led to a job in a garage which earned money for training at Snetterton's Jim Russell School. Moving into the school's championship series in 1977, he won five of six races and further formal matriculation was abandoned in favour of the on-the-job training provided by a career as a racing driver.

Following successful seasons in both the RAC and Townsend Thoreson FF1600 championships, the 21-year-old Guerrero hooked up with Argo to handle the works Formula 3 ride. In 1981, his second year with the Norfolk-based company, he fought a fierce battle



Vegas: Rookie title clinched.

for Britain's Marlboro F3 crown, winning five races and falling only two points shy of ultimate champion Stefan Johansson. From there it was into a season of Formula 2 with German Willy Maurer's team which saw him take a win at Thruxton but otherwise endure a season marked by crashes and mechanical failures that blunted his efforts and left him only seventh in the championship.

His F2 adventures did, however, catch the eye of Mo Nunn, who signed Roberto to drive one of his Ensigns in F1 for 1982. Although the move catapulted him into Grand Prix racing, the tenacious Ensign team — despite a merger with Teddy Yip's Theodore operation — was continually hurt by its lack of finance, and no matter how hard he tried, Guerrero could not make up for the lack of testing and development required for a team to stay competitive in the World Championship arena. After 12 years in F1 Nunn finally gave up and closed the Ensign operation down prior to the 1983 season's final race, putting both himself and Guerrero on the job market.

Nunn found work first, signing on as team manager

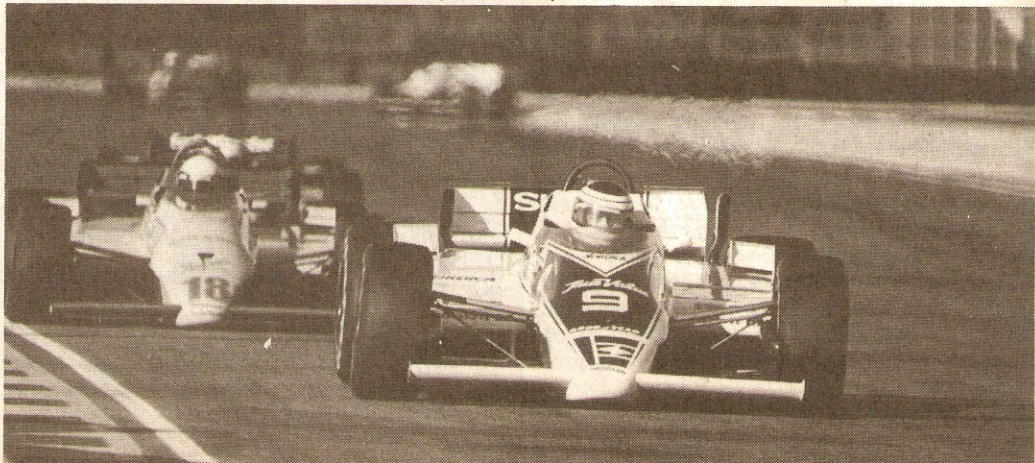
Guerrero took to Indycar racing quickly — "Once you get to it it's no problem . . ."

Guerrero will be doing his second Indycar season with the team for 1985, confident of better things, but Nunn will not. At Phoenix in October, he told team owner Dan Cotter of his intention to leave at the end of the season, and Cotter took the opportunity to release him from further duty on the spot. "I'm very fond of Morris," Guerrero admits about a man he's worked with for the past three years. "He does a good job, but I think he'd had his own teams for so long that it was hard to work for someone else." Nunn has since been connected to the apparently reconstituted Theodore Indycar team.

The other person who's been with Roberto constantly these past few years is his lovely wife Katie. The two met at Monte Carlo in 1982 ("Love at first sight," she says) and were married at her parents' home in Orange County, California that November. Now that Roberto's travels are generally restricted to the Western Hemisphere, save a recent trip to the Far East for the Macau Grand Prix ("Katie likes the shopping in Hong Kong," he says), he and the former Miss Boster also make their home in Orange County.

His parents still live in Medellin, and he says there is a lot of interest among his countrymen in his racing. He was the first Colombian to drive in F1, where they followed his every move, but finds that the same attention is not being paid to his Indycar career. "It's not publicised as much as Formula 1," he says. "They were happy about Indy, made a lot of noise, but didn't pay much attention to the other races. I think the big thing is results."

The confidence evident in that remark leaves no doubt about Roberto's intentions for 1985. "I am staying with the same team, and I hope to do some more testing and improve." By continuing as the driver of the blue and white Master Mechanic March, he feels that first Indycar victory will be only a matter of time.





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Gwyndaf Evans had a season-long struggle with Mike Pattison, eventually winning the *Motoring News*/BTRDA title at the last rally.

Significant season

Our club rallying correspondents round up the various club championships

Last season saw a healthy upsurge in the rally world at all levels. In recent weeks we have looked back at the European, British international and national scenes, casting a glance over the various regional championships along the way. Now our attention focuses on the various club level championships, each of which caters for a different market.

Castrol lent their support to a tarmac championship, also promoted by *Motoring News* who continued their involvement with the road scene in allegiance with the BTRDA. And there were three significant one-make series to ensure that those with limited budgets but high aspirations were not left out. Ford's Turbo series turned out to be the last, the emergence of the RS Turbo forcing premature closure, while the AC Delco Astra Challenge went from strength to strength, as did the Lada series for really low budget operations.

MOTING NEWS/BTRDA

Tyred and emotional

The *Motoring News*/BTRDA Championship, one of the closest ever, saw a titanic struggle between two men; Mike Pattison (EARS RS2000) and Gwyndaf Evans (Chevette) and the 12 qualifying rounds covered as far afield as Exmoor in the south west and the Isle of Mull in Scotland. In between were the best events of Wales and northern England, almost all the series rounds receiving full entries as local and regional competitors challenged the national name drivers who were contesting the full championship.

The year began in northern Cumbria with the Midac Illuminations, traditionally a tough event and made even harder by a generous covering of ice and occasional snow. There were the first stirrings of what was to become a six months series of disputes over tyre legality (only 185/60 'non racing' covers were allowed) but it was the route which decimated the entry. Steve Hill/Dave Kirkham came through to win after

Evans, co-driven by his cousin, Edwyn, picked up a puncture only 5 miles from the end of the last section and fell to third behind Peter Vaughan/Paul Watkins (RS2000). Local drivers Mike Tucker and Tony Ritson upheld northern honour with sixth and seventh places in Kadett GT/E and Escort, and Kim Kirk/Sarah Coldwell (Astra) began their year-long domination of the poorly supported BTRDA 1300cc Challenge.

Round 2 was the Duckhams Bath Festival, with international co-driver Dave Whittock at the organisational helm, and provided one of the closest finishes of the year as Pattison/Taylor defeated the Evans' Chevette by just 12

secs after a route of 180 miles. Yorkshireman Tony Saddington teamed up with Peter Forrester for the night and came home an excellent third, despite serious engine problems in the later stages, while winners of the Illuminations, Hill/Kirkham managed fourth and 1300cc leaders Kirk/Coldwell took maximum points to extend their advantage. The Festival was without doubt one of the most professionally organised MN events ever and this was reflected at year end with the BTRDA award for the "Best Rally of the Year".

By round 3 (the AGBO) the series had returned to its traditional 'home' in Wales for a 175 miles route based on Newtown and divided by halts in Bultth Wells and Ponterwyd. This event saw the highlight of the tyre scrutineering lunacy with the series, official Scrutineer (Terry Smith) having his decisions protested out even before the start. The trouble had centred around the use by competitors of the Pirelli P7 Corsa and the prolonged ill feeling caused by the AGBO's pre-event scrutiny eventually caused a statement from the RAC MSA intended to legalise the P7 Corsa until such time as a list of approved tyres or further rules clarification were forthcoming.

The event itself was won by Steve Davies/Nicky Grist (RS2000) from Pattison/Taylor and Roger Moran/Derek Fryer.

Yorkshire came next, with the Colman Tyres Rally providing round 4; the hills and dales being generously covered with fog for the occasion. After an excellent event, which seemed considerably longer than its actual 150 miles content, home favourites Ron Beecroft/John Millington took a narrow, 26secs win over local driver Richard Woodsworth in an Opel Kadett GT/E. Pattison finished third, and led the series, while Evans had an engine misfire for part of the night.

If Evans was to have a serious challenge to offer Pattison, the Welshman needed a win... and soon. Evans' answer was to storm to victory on Round 5, the Forge Garage/Audi Sport Rally; almost 2 mins ahead of Davies/Grist with Peter Vaughan in third and Tony Saddington fourth. Pattison (in common with Beecroft) picked up an unwanted penalty for a Passage Control infringement and dropped way down the leader board to 12th... Gwyndaf was back as Championship leader.

The Merion Motors Eagle Rally (round 6) marked the halfway point of

Second place in both the road and the stage championships was scant reward for the hard-trying EARS backed Pattison.



the series and was a curious rally in some respects, representing some of the rallying values and attitudes of the late sixties and early seventies although it had an excellent route, again based on Newtown. Another 'first time' winner of a *Motoring News* round appeared, **Kevin King** taking the honours in his RS2000 after a ding dong battle with **Pattison**. Cleanable sections contributed towards Pattison's defeat but then so did minor navigational problems and he was happy to salvage 14 points on a night when Evans made a rare error of judgement and planted the Chevette off the road and retired.

The series reconvened in August with the Hella/Atkinsons Devils Own Rally, based on Kendal and having its 150 miles of route go slightly further west than usual, although all the classic fell roads such as Tan Hill were still present. Back for a one-off drive (arranged by the event's sponsors) was **Ian Woolf** and he all but upset Evans' appellation by finishing second, just 14secs behind the Welshman. Pattison had led but lost time with a puncture and shock absorber troubles and fell to fifth. Kendal's **Mike Tucker** made another impression on the series with a fine third place and **Dave Scaife** pulled in his best result of the year with fifth in his pushrod Sunbeam. The 15 sections of the Devils' route tested competitors to the limit and the upmarket razzamataz which the sponsors brought to the pre-start formalities was a pleasant change from the garage forecourt sub-culture which is so common in road rallying.

As has become traditional the series stayed in the north for four consecutive events at this point in the season, the second of these being the R.L. Brown



Mike Pattison was the year's leading Ford Escort RS2000 driver, but he still couldn't beat Evans's Chevette overall.

Trophy, The R.L. Brown is unique in character as it runs only 20 miles east of the Devils yet the two events are totally disparate in presentation. The high Cumbrian fell roads and mazes of narrow lanes are more akin to Wales than the northwest moors, but Pattison/Taylor had their act together and, for the second successive year, took victory in their Escort. Having shown speed, but not always 'stayonability' in earlier rounds Tony Saddington was delighted to take the runner up spot, forcing the Evans' Chevette into third place. The event proved exceedingly tough with tight road timing adding to the problems of the demanding, and very slippery, competitive sections.

The Bolton Midnight Rally was to be

the cause of an end of season disagreement between *Motoring News* and the BTRDA over organisational standards but, with the Championship at a critical stage, that was for the future. After a predominantly moorland route (regrettably with several sections cleanable) Pattison/Taylor looked to have things in the bag until they clipped a rock outcrop, punctured two tyres and slid to third place; allowing Evans to scoop up the victory. Scotsman **John Easson** managed to pip Pattison too, robbing another point from the Cheshire driver's tally which could well prove critical by the end of the year. Although Pattison led the series on paper, once dropped scores had been taken into account it was dead level between him and the Evans as the circus

journeyed north for the Tour of Mull.

Actually a Lancashire event which just happens to have been moved north to Scotland (!) the Tour of Mull is an anachronistic mix of stages and selectives spread over two days. Mike Pattison has a considerable knowledge of the usually rain sodden island and duly took a well judged win, but there was to be no welcome points buffer between himself and the Evans as the Welsh crew quietly got on with the job and took second place, ahead of Open Championship stage contenders **John Sharples/Derek Scoular**; their RS2000 converted to road rally specification for this event.

The penultimate round of the year was the Cilwendeg, a byword in years gone by

ASTRA CHALLENGE

Nicholls's Challenge

For the second year running the AC Delco Astra Challengers made a major contribution to the success of the BTRDA Championship. With an average of 27 such cars on each round, an increased prize fund, a ride on the Ulster International to the top six at the mid-year stage, and a new Astra GTE to the outright winner, there was always close competition.

Stuart Nicholls from the West Midlands and still only 22 years old, driving the Steve Thompson car, quickly stamped his authority on the series with two maximum points scores from the Wyedean and the Dukeries, with **Brian Bazley**, **Mike Metcalfe**, **Terry Hill** and autotest specialist **Russ Swift** all showing well.

Newcomers to the series included **Chris Atkinson**, former winner of the Ford Championship and Fiesta driver, **John Burton** narrowly beaten into second place by **John**



Stuart Nicholls — two maximum scores to start with led to the AC Delco Astra Challenge.

Morton's Astra in 1983, **Simon Chapman**, and **Kingsley Ingram**, both with notable experience in their own regions.

It was on the third round Plains Rally that Atkinson demonstrated his familiarity with front-wheel-drive and the local stages. On

this and the Centurion he ousted Nicholls into second place. **Steve Bamber** and **Steve Fairlie** both among the scorers.

Sadly on these two rounds also was the highest retirement rate, several succumbing to drive shaft failure and others damaging their cars. **Mike Metcalfe** began a sequence of ill luck and poor **Robin Farrington** just continued with it!

It was significant that on the Plains Rally two drivers who finished in the top 20 — **Chris**

Atkinson and **Stuart Nicholls** — enjoyed their highest places in the series, and at a time when the events were enjoying the highest entries.

However, fate played a fickle game on the Severn Valley Stages. **Stuart Nicholls**, **John Thompson** and **Chris Atkinson** all failed to finish. It was **Fairlie's** turn for a win with **Swift** rediscovering his earlier form.

Although fewer Astras made the long journey to Scotland, **Kingsley Ingram** was the early pace setter only to finish on an ailing engine and allowing **John Thompson** and **Kim Kirk** through on the final stages. **Nicholls** again was a non-finisher along with **Fairlie**, **Hill**, **Metcalfe** and **Chris McAuliffe**.

Nicholls's comfortable lead had suddenly dwindled into a deficit — he was now third behind **Thompson** and **Swift** and the winning line seemed to be giving even the computer a headache.

Steve Fairlie was back on form in Telford, but **Nicholls** regained his lead in the Challenge and as six very nervous drivers went into the final round, **Quip**, still with a chance of winning, all **Nicholls** needed to do was finish in the top 15 to put himself in the driving seat of a new Astra for this year's National Championship.

This he did. **Swift** scored his first maximum points score and took the runners-up spot. He was the only driver to finish all eight rounds. All this in his first year of rallying!

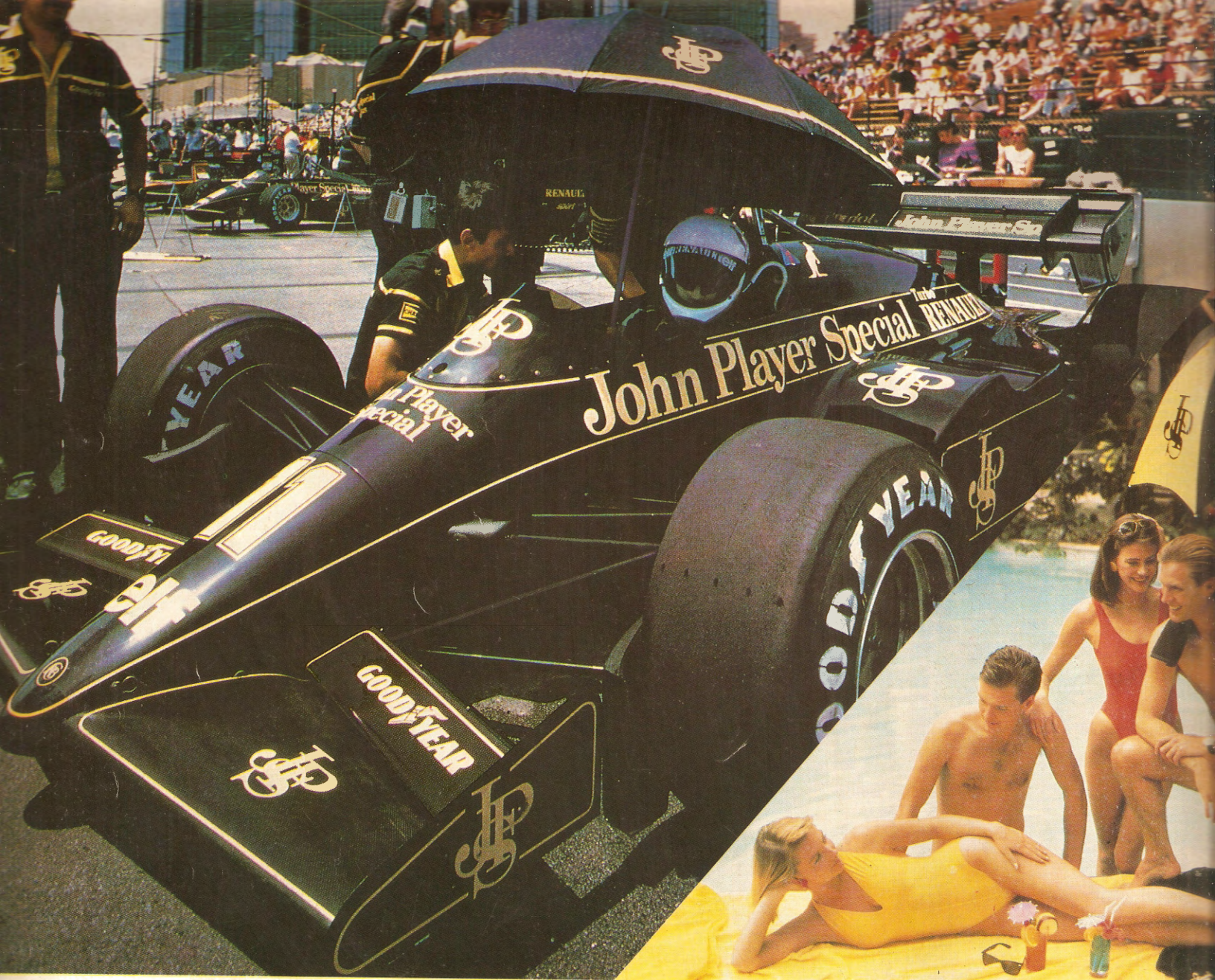
VAL SHENTON



	Feb 04 Wyedean	Mar 03 Dukeries	Apr 07 Plains	May 12 Centurion	Jun 16 Severn Valley	Aug 11 Border	Sept 01 Telford	Oct 27 Quip	Total Points
Stuart Nicholls.....	25	25	22	22	—	—	20	17	131
Russ Swift.....	8	20	19	7	22	19	17	25	122*
Stephen Fairlie.....	5	18	—	20	25	—	25	22	115
Kim Kirk.....	15	16	14	—	5	22	12	19	98*
John Thompson.....	18	17	18	18	—	25	—	—	96
Robert Evelt.....	16	7	—	15	19	17	16	10	93*
Chris McAuliffe.....	6	12	16	16	20	—	18	—	88
Stephen Bamber.....	—	—	20	—	18	8	22	18	86
Brian Furner.....	14	13	6	—	12	13	—	20	78
Chris Atkinson.....	10	—	25	25	—	14	—	—	74

AC DELCO ASTRA CHALLENGE 1984

*Best six scores to count.



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