Lotus World

The official newspaper of Club Team Lotus and Lotus Cars Limited



MANY HAPPY RETURNS!

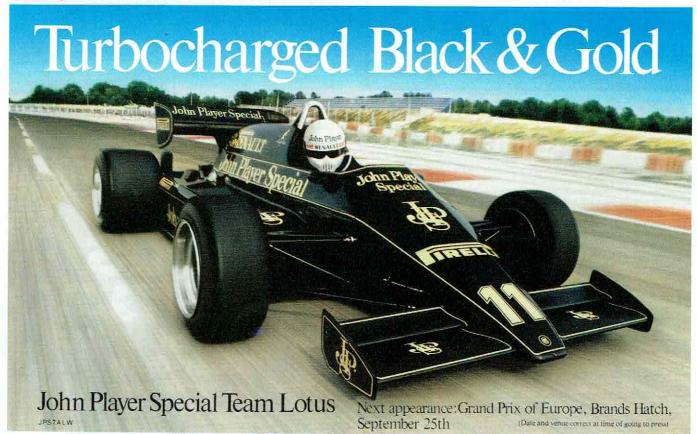
The past month has seen Lotus in the headlines the world over. The brand new JPS 94T, designed by our new Chief Engineer Gerard Ducarouge, backed to the hilt by both factory based and team crew working round the clock for well over a month, took pole position on three occasions in practice for the British Grand Prix straight "out of its box". Nigel's heart-warming and superb drive into 4th spot was the highlight of the race and he was loudly and deservedly applauded by all who saw it.

Our "Tribute to Colin" parade of 45 Lotus', old and new, on the same day was a great success thanks to our friends the entrants and Silverstone Circuit Ltd.

At home our Chairman, Fred Bushell, announced a re-financing package, involving both the British Car Auction Group PLC and Japan's Toyota totalling £4.5 million.



Nigel really hit the headlines in the all important British Grand Prix, by coming 4th with a car in which he had not completed a lap in practice! His drive from 18th spot on the grid (after two days of continual problems with his brand new JPS 94T) was the talk of the town. Heartiest congratulations Nigel!



DANGER: Government Health WARNING: CIGARETTES CAN SERIOUSLY DAMAGE YOUR HEALTH

John Player Special

LOVELY ONE NIGEL!

British Grand Prix 1983

If anyone ever harboured the impression our Team's record-breaking performances in producing new race cars was a thing of the past, the lead up to the British Grand Prix 1983, now well chronicled in dozens of magazines and newspapers, dispelled this once and for all. To produce one car, never mind two, in mere weeks from start to finish, capped by a pole position "straight from the box", is a rare performance; to have two such competitive cars running in the Grand Prix is surely going to be a difficult one for any Team to beat in the future.

Enthusiasm

When the build programme was first unfolded to our staff there were, no doubt, some who were slightly dubious about the possibility of successful completion one whole week prior to the Grand Prix - if there were, they certainly gave no indication of their feelings and everyone set to the tasks involved with enthusiasm maximum and effort, thereby putting the project together so well in its the initial stages; only failure of delivery outside suppliers promises could slow the project down. As usual our suppliers, with only one exception (and the offenders were new to John Player Team Lotus requirement demands) came up trumps and their continuing support in this be sufficiently way cannot praised.

Elsewhere in this issue you will have read of the time schedule and outline of the major events of this remarkable programme. Also there is a description of our race mechanics' final week of frenzied activity and long working hours which, coming after the weeks of building, would have spelt fini to lesser men. Through it all the figure of Gerard Ducarouge was never far from the action and this was the crucial ingredient for the success that eventually came – he, in turn, praised the organisation he had just joined, and stressed the fact there was no other team previously so well

set up to cope with such a programme; JPTL was suddenly a mutual admiration society that had the recipe and the chef, and delightful was the dish that emerged!

Xmas Party

The Team's "Christmas Party" postponed from December was the Team's brief period of relaxation together and this was held at Peter Warr's Norwich home on the eve of the final run-in to Silverstone. Like previous parties, this was a thoroughly enjoyable event with Peter and his wife Yvonne overseeing a similarly hectic production programme; unlike previous ones, there was no sign of anything or anyone getting out of hand - no doubt such enthusiasm was counteracted by exhaustion. Centre of attraction was the new car and around midnight it was carefully reloaded and returned to our race shop; the next morning Elio had his first outing in the car, doing a shakedown at Hethel. It needed slight body alterations made to it and Monday's Donington run was put back to Tuesday as a result, which ensured that Nigel's similar car, now nearing completion, could accompany chassis/1. Elio had had sufficient running to surmise "this one is a good one" and suitably refreshed by his opinion, the Team left for Donington.

Tuesday's running was interrupted by both cars suffering a misfire; the fuel system was



Our magnificent crew, weary from round the clock working, prod — uced their usual slick operation when Nigel stopped for tyres and fuel in the Grand Prix. Here they are mid-way through the 13 second

suspected so the Team made its to Silverstone on the VEW Tuesday evening to enable work to start first thing Wednesday morning on revising the pick up system. The whole of Wednesday saw the work completed on both cars - when started up Elio's car was found to be cured but Nigel's was just the same. By process of elimination the electrical layout was examined and eventually it was decided the correct message on the electronic system was failing to reach the injection system thereby making the mixture too lean. This, in turn would raise the temperature and the required increase in the squirts of fuel were not materialising.

The end result of all this was that Nigel went through the whole of the first practice day without completing a flying lap, which, compared to Elio's exuberating performance, put the dampener on Steve Hallam's crew. As the final test both cars were put back to back and Nigel's engine started up on Elio's electrical system – it ran perfectly clear of all maladies so it was obviously the electronic system at fault on Nigel's chassis.

Elio's Pole

Elio's car was one hundred per cent from the word go and Thursday passed by, remarkably without touching the car mechanically in chassis or power unit departments, and without altering suspension geometry, springs or balance. It was just reward for so much effort but how seldom just rewards are handed out in this game! A fuel pressure gauge had been fitted to the car and

watched over four laps as a precautionary measure but all was well. A front brake disc was found cracked after the morning session of practice and both front discs were replaced before the afternoon session. The brake pads were also changed to those with a different material at the same time.

That first session of practice fell to Elio in a big way when he took pole with a time over 8/10ths of a second quicker than second man Arnoux. Nigel ran Elio's "old" JPS 93T so as to get a time and was classified 27th with a 1.18.965 (to Elio's pole time of 1.11.632) so the overall picture for us was both bright and gloomy!

In the afternoon's qualifying period Elio slipped to third place, 6/10ths behind the pole man. Nigel meanwhile struggled up to record 25th place in the few flying laps he had time for in the "old" car while still trying to get his new car to run.

1st Day (official

1st Da	ay (official)	
1st.	Prost	1.10.170
2nd.	Arnoux	1.10.436
3rd.	ELIO	1.10.771
4th.	Tambay	1.10.874
5th.	Cheever	1.11.055
25th.	NIGEL	1.16.377

That evening, with Nigel's car scheduled for an engine change and yet more diligent searching for the cause of the misfiring, Elio's crew, under Tim Densham left their untroubled chassis and joined in the work on No. 12. Although they didn't know it at this stage both crews would slave together through many long hours in the search for the trouble – in fact right through to just before the race itself forty six hours distant.



Hethel Sunday July 10 and the new car is made ready for an initial run by Elio. Photo courtesy Clive Hicks our Tyre man.

"RACE REPORT

Depression

The decision was made to canabalise the electrical loom from Nigel's stopgap 93T and replace the suspect parts on his JPS 94T. This went on all through the night until 6 in the morning when a telephone call to Nigel brought him to the track to give final approval. He was now well versed with the signs and signals that heralded the misfiring but to the delight of every exhausted crew member he gave an exhilarating thumbs up! We were home and dry it appeared but then when unofficial practice commenced and the car started running under load conditions the misfiring was back with us – the word depressing hardly seems to sum up the situation. Suicidal would be better!

The hunt started once more with everything that could be scrutinised such as diodes, regulators etc., being closely inspected and vetted.

Meanwhile Elio's car was fuelled up and our young Italian streamed out onto the track and lo and behold was back on pole slot! Behind him, over a second behind was de Cesaris followed by Piquet.

Nigel hopped back into Elio's JPS 93T (chassis stroke 1) just to check it was ready for qualifying if the trouble with his race car persisted – luckily, he did this as the major check on his 94T was still going on nine hours later. Steve Hallam, Nigel's Race Engineer had recruited the Engineer had recruited the services of Colin Day from Cranfield Institute of Technology who has worked closely with Lotus for some time now and together they tirelessly checked every item in the electrical system. Eventually with a new engine loom fitted by Renault they turned to the two complex chassis looms made up by our usual suppliers Tony James and Chris Goodwin in Diss, Norfolk and the decision was made to have new ones made overnight in time for the morning warm up next day. Tony and Chris started work immediately in an endeavour to win their own race



All night work continues as Kenny Szymanski (left) and Clive Hicks prepare Nigel's wheels in readiness for the race next day.

Photo courtesy Clive Hicks our Tyre man.



Elio's car is returned to our pit, covered in foam after it's short lived fire. Photo courtesy Clive Hicks our Tyre man.

Colin's Parade



Hazel talks to Paul Kelly and Bill Allen (right) who were responsible for producing and preparing the Mark 3 for the parade. We much appreciated the help given by the Nigel Moore's Collection in allowing this car to appear.

Promise

Meanwhile qualifying came and went, Elio later admitting to choosing the wrong qualifying tyres and as a result slipped to 4th spot – it was still a cheering performance to us as there was every indication he and his car had a lot more to come.

Nigel who missed out morning running but was still determined to put up a good show if his older car was needed for the race went from 25th to 18th on the grid immediately returning to his pit to check progress on what would hopefully be his car for the race.

continued on page 1/



Hazel is passenger as Bill Allen prepares for the "off". Bill was wearing the same overalls he wore at Le Mans in 1961, when he won the 1200 cc category driving a Lotus Elite with Trevor Taylor! Hazel drove this car in 1951 at Silverstone and the thoughts going through her mind can be imagined as the car is started up thirty-two years later.



It looks like a more relaxed version of the start of the Mille Miglia! Cedric Selzer, ex-Team Lotus mechanic of the sixties, prepares to join the circuit in the Type 23, passengered by Jabby Crombac wearing his cap in Phi-Phi Etancelin style.

"" RACE REPORT

MISERABLE MONTREAL

Report of Canadian Grand Prix

From Detroit our crew drove through the tunnel connecting U.S.A. to Canada and made their way to Montreal. Only a week separated the two events and freighting schedules for cars and spares had to be slick to ensure no preparation time for the next race was lost and everything arrived in the garage" area on the Tuesday. Inverted commas surround the word garage as the pits from previous years had gone and work now takes place in what had been the Olympic Games storage area for rowing boats. Access roads to the circuit were narrow and long traffic jams built up with no apparent policing of hordes of onlookers' cars that greatly added to the chaos.

After the slick operation at Detroit and remembering the efficiency of the Canadians in previous years this year's event produced a great deal of muttering from the workers and got a thumb's down all round.

Renault had indicated we had a specially good engine unit in the pipeline and one of our Ketteringham van drivers rushed over to France when news came it was about to be finished – this he took to Heathrow for it to join the large pile of inter-race spares going out to all the teams.

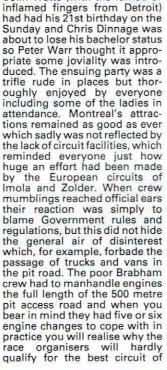
When the plane landed in Montreal the airport cargo staff and customs went through all the paperwork efficiently but missed out the important bit of ensuring all the cases and crates had actually been taken off the plane.

The result was that a group of puzzled cargo handlers in Toronto (the plane's next stop) found all the goodies for Montreal were still on board so there was some delay before cargo without its documentation found its way onto a plane heading back to Montreal.

Meanwhile Frank Seal gearbox man) was tucking into his third gearbox rebuild of the trip, watched over constantly by

a critical Nigel Mansell

Two events produced a rowdy party for our crew on one of the evenings leading up to practice; Colin Watts (with the famed or inflamed fingers from Detroit) had had his 21st birthday on the Sunday and Chris Dinnage was about to lose his bachelor status so Peter Warr thought it appropriate some joviality was introduced. The ensuing party was a trifle rude in places but thoroughly enjoyed by everyone including some of the ladies in attendance. Montreal's attractions remained as good as ever which sadly was not reflected by the lack of circuit facilities, which reminded everyone just how huge an effort had been made by the European circuits of Imola and Zolder. When crew mumblings reached official ears their reaction was simply to blame Government rules and regulations, but this did not hide the general air of disinterest which, for example, forbade the passage of trucks and vans in the pit road. The poor Brabham crew had to manhandle engines pit access road and when you bear in mind they had five or six engine changes to cope with in





Colourful background as the cars follow my leader.



"Up up and away" goes the song and in Montreal Elio no doubt wished he was.

Just nothing about the circuit suited our cars either – grip was lacking, the required formula of speed and circuit layout was not there and abrasion of the track surface in the corners was such that our "quallies", usually able to cope with two laps, were finished after one. The Ferrari's used their third hardest tyres to qualify and fuel consumption figures for everyone were the thirstiest of the year.

On the first day of practice both Ferraris were way out in front, both of them a whole second ahead of third man Prost the red cars remained streets ahead throughout the weekend and made the rest of the entry decidedly secondrate. Poor Elio had a really hard time, finishing back in 15th spot, Nigel being right behind him and separated by only 3/10th of a second which made him fifth of the non turbo Villeneuve's Gilles group. brother Jacques was also having a hard time with his March and was 9 seconds adrift on the Friday; Saturday saw no im-provement so he was regrettably out of the race which must have disappointed the crowd who had supported his brother so fervently in previous

Early into Saturday practice saw us continuing with Friday's tyres and our times were 11/2 seconds slower than previously but by the end of the 11/2 hours Elio was 7/10ths of a second quicker which took him to 11th place, this time just behind Nigel who was a 1/10th guicker than his team mate and 2nd non turbo only 4/100ths slower than

By the time final qualifying was over Elio had clipped nearly 11/2 seconds from his best time the grid with 1.31.822 but a whole 3 seconds behing Prost. Nigel had dropped to 18th in general classification (1.33.588) using his time from the first day which was now only 7th of the non turbos. Laffite and Tambay were the only other drivers in the field to similarly fall back on their Friday times.

Grid Times

Arnoux

1 28 729

2nd.	Prost	1.28.830
3rd.	Piquet	1.28.887
4th.	Tambay	1.28.992
11th.	ELIO	1.31.822
18th	NIGEL	1.33.588

That special engine from Renault was seemingly just what the doctor had ordered and the long job of fitting was under-taken. All went according to plan until the job was finished and the engine started up - it was then the ghastly revelation was made that an oil union in the bowels of the car was not tight and as it is impossible to reach this with the engine in place the engine had to come out and be refitted thereby making a late night for everyone. At the same time a carton containing 2 more crown wheels and pinions complete with planet gears arrived from home base – Nigel's gearbox had continued to play up and until the arrival of the spares we had none left for possible breakages on race day

No doubt when race day dawned shortly after our lads had gone to bed they felt the world could hold no new sur-prises but how wrong they were. In warm up Elio's metering unit expired just after he had passed the pits and the tow in had to be a slow drag round almost the whole circuit thereby cutting the remaining time available to the minimum. Once the unit was changed the engine tuning had to be checked and time was now ridiculously short and poor Elio was only 22nd when the chequered flag went out. Frank Seal was almost distraught by this time as Nigel's "new" box was found to be leaking oil. It was as attention focussed on car that Peter Warr oil emerging from Nigel's noticed oil emerging from where only air should be going into the breather and a rapid engine change was called for, our crew accomplishing this in 1 hour 15 minutes; remember they were out in the open with no garage facilities to help them.

As the pits road officially opened to allow race warm up laps to take place our refuelling crew were hurriedly trying to get their fireproof suits on. But they needn't have rushed! Canada is famed for its delayed starts over

RACE REPORT

the years and 1983 was no exception; this time it was a power cut and immediately T.V., radio, loudspeakers, telephones, and of course race start lights all died simultaneously and stayed inoperative for 45 minutes - a description that also applied to our refuelling crew as they waited and swelted in their hot suits in 80°F weather!

As the start lights turned green Elio got away in his race number position of 11 and held this for a lap full of confidence again after his warm-up laps had shown his car to be in good shape and well balanced. His spirits remained up for just two minutes - lap 2 and he dribbled slowly into the pits with the engine just managing to produce enough horsepower to push the car along. First suspect item as our crew examined the car were the turbos but these were functioning perfectly and the search spread all over the power unit until the heart-breaking discovery was made that an engine control link had snapped. The offending part is normally hidden away in a moulded plastic cover - it had been badly brazed and a crack that had gone unnoticed in manufacture finally put an end to our efforts.

Nigel's fortunes were no better. When stiffer suspension had been found to give him more grip it was decided this was the way to go for the race itself. He got away in 16th place, gained a place but reverted to 16th for three laps before he was forced to pit for new tyres after a monster off road excursion. This was on lap 6 and he restarted in last place after new tyres had been fitted and a large amount of grass had been extracted from the car's intakes and there he stayed until lap 19 when he got another set of boots. Still he got another set of boots. Still he persevered until lap 27 when another set went on, these lasting only for six laps, yet more stops coming on laps 37* and 42* until he had used up both his and Elio's allocation of rubber and was forced to give up completely. If World Championship points were awarded for spirit, determination, and sheer hard graft both our crew and drivers would be at the top of the

successfully catching the 'plane home to England.

Race

1st. Arnoux 4th. Rosberg 2nd Cheever 5th. Prost 3rd. Tambay 6th. Watson

Once back at base our plans centred on a test session in preparation for Silverstone. For this we prepared Elio's Montreal race car, gearbox ratios and tyre performance being top of the

No doubt this succession of stops helped give our pit stop crew plenty of experience - Nigel's stops were almost the quickest of the quick lads at 12,7., Patrese getting "pole pit stops" with 11.08, Rosberg getting away after 14.04 and Cheever after

Reduction in our Agentine Start Money!

Amidst some confusion and a two-day Bank Holiday Argentina abolished its thirteen year old currency back in June and introduced the "peso Argentino". The new currency has been achieved by dividing the old denominat-ions by 10,000. The change was made inevitable by the progress of inflation in recent years; the accumulation of noughts had reached the stage where accounting systems and computers could no longer cope!

NIGEL'S FAN CLUB

We are often asked for details of Nigel Mansell's fan club and since his performance at Silverstone these have increased dramatically!

The address to write to is: Mike Finlay Nigel Mansell Fan Club P.O. Box 12 Sutton Coldfield West Midlands



Elio gets everyone's attention during practice.



Remains of the Olympic Games dominate this shot of Elio in his turbo Renault engined JPS.

A Fortnight in the Life of .

Elsewhere in this issue you have read of the extraordinary work schedule of our factory based staff in building the two new JPS 94T's in time for the British Grand Prix. Our race crew, after a short break following their return from Montreal, joined in this programme culminating with what they usually term a "heavy" week in the final build up to the big day.

The record of this final week's working by Bob Dance our Chief

Mechanic, will give possible aspirants for race mechanic jobs some insight into the true background of this commonly classified

"glamour" job.

Saturday

Monday July 11 Tuesday July 12 16 hours working at factory.

Left factory for Donington. 10 hours working on arrival. Following completion drove onto Silverstone.

Wednesday July 13 Thursday July 14 Friday

Silverstone - 18 hours.

Silverstone practice - 18 hours. July 15) The investigation into Nigel's JPS 94T problems saw a few working 17 hours. The remainder did not only work the 17 hours through to midnight but continued straight through the night and race day itself, their July 16)

day being over when they returned to Ketter-ingham Hall at 11 p.m. Saturday night. Sunday July 17 07.30 departure for Hockenheim. Arrived Belgian/German border at 9 p.m.

(The week's "hours" totalled 120 for the majority)

Monday July 18

8 hours included journey and preparation of race cars for testing next day.

July 19 Tuesday 11 hours of testing and working on cars. Wednesday July 20

Spent 11 hours at Hockenheim preparing cars for Zandvoort test.

Thursday July 21

Travelled to Zandvoort. Arrived 1700 hrs and found hotel had bodged up their reservations and all rooms gone. Spent evening finding spare rooms - some finished up in a place they later termed as 'hostile' (propri-etor wanted payment of 4 nights for just one!) - the other lads stayed in private houses. (Remember Zandvoort is coastal

holiday resort). Friday July 22

Running all day - changed engine in evening as car had overheating problem. (16 hour

Saturday July 23

Ran short time - then changed whole water system. Running finished – truck loaded and left on night ferry (Hook to Harwich). 08.30 arrived Ketteringham Hall, Had

Sunday July 24

working hours).

remainder of day off. (This week totalled 78 hours not including ferry crossing. Two week total was 198 hours or nearly the equivalent of 5 weeks "normal"

Grid		
1st.	Arnoux	1.09.462
2nd.	Tambay	1.10.104
3rd.	Prost	1.10.170
4th.	ELIO	1.10.771
5th.	Patrese	1.10.881
18th.	NIGEL	1.15.133

As you will see from Bob Dance's programme elsewhere in this issue work continued throughout the night without respite, our Renault engineers fading a little as time wore on, one of them collapsing as a typical John Player Team Lotus effort to get things right continued.

Down in Diss, Tony and Chris were also hard at work, but by 5 a.m. on race morning Tony arrived at our pit with the new system. It was immediately draped over the new car for an initial check, connections linked up and the engine fired up immediately!

Then followed the process of fitting and this took from 5 a.m. through to half an hour before warm up, when it ran for the first time, so there was still no time to relax. Elio went back to pole in this session, Nigel driving his now perfect car for the very first time recording a reassuring 11th place. (As a bonus for his performance he was slotted into an open Lotus Seven in Colin's Parade which followed this session so as to cool down!).

The Race

When the lights turned green Elio hesitated an instant and in doing so lost three places, but Nigel catapulted away passing six cars in less than three miles ending lap 1 in 12th place! It was soon all over for poor Elio though; having passed a car to get into 6th place on lap one a piston was thought to have failed (which itself blew the turbo) and at Maggots on lap 2 he was out. A small fire ensued which caused the fire marshalls to dowse the whole car and a heartbroken Elio returned to the pits. He said later the car was so competitive he was having to back off coming up behind the car in front and immediately knew he could have picked the others off at leisure.

By lap 3 Nigel had stormed up to ninth behind Warwick, by lap 9 he was eighth. By laps 36 and 37 he was first fourth then third then second for two laps as others pit stopped, and was still third on lap 43 when he needed to stop as well. Forgetting their exhaustion our crew got him away in 13 seconds and he rejoined the race in 5th place behind Arnoux, who he soon saw in his mirrors disappearing out of sight as he set off after Tambay. What is even more Tambay. What is even more remarkable about Nigel's progress before his stop is the fact he had lost a balance weight from a rear wheel early on and this had seriously affected the car's handling, the situation only coming right again when he got his new wheels and tyres fitted.

So the race ran out, Nigel being undoubtably the man of the race, our Team's performance and work schedule in getting Nigel's car right taking the headlines everywhere, the TV coverage of the race appearing to be a Mansell benefit!

A very tired crew briefly but happily slumped into chairs as the flag fell on Nigel's fabulous fourth place – there was no time for celebration as they were soon to be en route to Hockenheim and Zandvoort testing and had to return to base the same evening in preparation for departure the following day.

Footnotes:
On arrival at Hockenheim and after an inspection of the pistons in Elio's engine, the unit fired up as normal. Later the toothed drive belt was found to be a problem — this had almost broken through and no trouble was experienced when a new one was fitted. An investigation into the Silverstone stoppage is still underway.

Renault's tremendous support of our effort was emphasised at Silverstone when they provided us with four complete engines to put in both our new and "old" cars. Normally we have engines in our race and spare cars with more in the Renault pipeline as back-ups but for this race Renault made the huge effort to ensure we were instantly ready to run at any time.

STOP PRESS

The fastest times from Hockenheim tests that took place after the British G.P. were: Nigel Mansell 1 minute 55.4 Alain Prost 1 minute 55.6 Elio de Angelis 1 minute 55.9

Only ourselves and Renault were testing. The track was very slow due to the preceding highmileage Mercedes Road Car Tests.

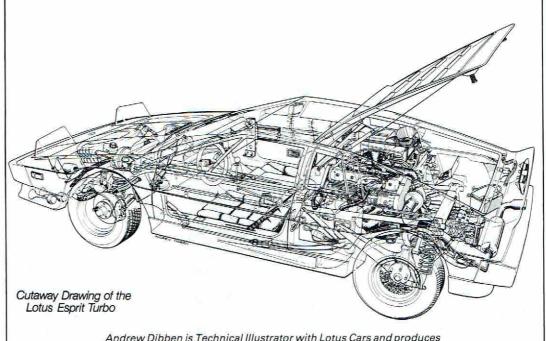
Nigel did 57 laps and Elio did

16 laps.

Elio's engine from Silverstone had not been blown up but had stopped with some obscure distribution fault, which was cured by fitting a new toothed belt on the distributor drive.

Grand Prix: British Grand Prix Race Results:			Date:	Date: July 16th 1983		
1st.	Prost Piquet		4th. 5th. 6th.	NIGEL Arnoux Lauda		
World	d Champio	nship Manufa	cturers			
1st. 2nd. 3rd.		53 50 35	4th. 5th. 6th.	Brabham McLaren Tyrrell	33 27 11	
World	d Champio	nship Drivers				
1st. 2nd. 3rd.	Prost Piquet Tambay	39 33 31	4th. 5th. 6th.	Rosberg Arnoux Watson	25 19 16	
1983 Races	World Char s: *15	mpionship	Even	ts to date: 9		
	Victories: JS: 72	Since 1960	FERR	ARI 57		
1983	Winners					
Cons	tructors		Drive	44 <u>5</u>	505	
1st. 2nd. 3rd.	Renault Ferrari McLaren Brabham Williams Tyrrell	3 2 1 1 1	1st. 2nd.	Prost Piquet Watson Tambay Rosberg Alboreto Arnoux	3 1 1 1 1	
Tyre	Battle:	PIRELLI:	GOOD	YEAR: 4	MICHELIN: 5	
Pole	Position:		Faste	est Laps:		
1st. 2nd. 3rd.	Arnoux Prost Rosberg Tambay	4 3 1	1st. 2nd.	Piquet Prost Lauda Patrese de Cesaris Watson Tambay	2 2 1 1 1 1 1 1 1 1	

*Las Vegas and New York Grand Prix's have been cancelled and John Player European Grand Prix at Brands Hatch on September 25th has been inserted in the 1983 programme thereby reducing the total of Grand Prix events to 15.



Andrew Dibben is Technical illustrator with Lotus Cars and produces the excellent cutaway drawings that appear in our handbooks, parts lists and workshop manuals. Here is his cutaway of the Federal Turbo as it appears in the owners handbook. We will have black and white prints on art paper available shortly – size $16\frac{1}{2}$ " x $23\frac{1}{2}$ " (41.0 cms. x 59.6 cms.) – and would-be purchasers should send us a stamped addressed envelope so we can let you know price and availability.