

Lotus World

The official newspaper of Club Team Lotus and Lotus Cars Limited



MOTORFAIR SUCCESS

As we go to press this month Motorfair has just closed its doors and first indications are that this one could well turn out to be our best ever. Our Sales team at Earls Court was backed by London dealers Bell and Colvill, Len Street of Chelsea Ltd. and London Lotus Centre and they will be working hard over the next few weeks following up the 420 firm enquiries received.

Just prior to Motorfair the announcement was made that Mr David Wickins had been elected Chairman of Group Lotus Car Company with Fred Bushell taking on a new post of Deputy Chairman whilst continuing as Chief Executive.

Six thousand miles away in the South African sunshine the 1983 World Championship season came to an end, Nigel taking third fastest race lap after both cars had suffered engine and tyre problems.



The visual transformation of our Excel was much admired at Motorfair, its new looks for 1984 making it even more distinctive and aggressive.

Reports on all these events in the world of Lotus are in this issue.

Flash Black

20 FILTER



John Player Special
KING SIZE

MIDDLE TAR
As defined by H. M. Government

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



John Player Special

SUNSHINE TRIP



Report from Kyalami

For departure to the last Grand Prix of the season our crew was split into two groups. The first left on Friday October 7th and comprised of Peter Warr, Gerard Ducarouge, Tim Densham, together with race mechanics Bob Dance, Duck and Clive Hicks, their primary task being to prepare the car that would take part in the testing scheduled for the Monday and Tuesday. The second group, led by Nigel Mansell's race engineer Steve Hallam who was accompanied by the remaining race mechanics, left the following day for the long haul down to Johannesburg. Their flight was delayed mid-route at their stop in Nairobi when the plane's crew was informed of another Jumbo stranded at Harare (Zimbabwe) and they took the required spares with them making an unscheduled stop to drop them off.

South Africa's weather greeted them with a temporary coolness but for the remainder of the week it improved steadily and became very warm by the time official practice opened. Track temperature for testing was in the 41/42° region but by the time of the race it had risen to 55°.

The first crew to arrive worked throughout Sunday preparing chassis 94/3 for Elio to drive in the first test session, running being scheduled for the whole of Monday October 10th. Elio spent the majority of the morning attempting to beat his 1982 lap time (in a ground effect car) and finished the day with second best time of 1.07.51 to Tambay's "pole" of 1.06.86. On race tyres he ran in the 9's bracket but could not get below 7's on quallies. The evening's work on the car preparing for the next day's running should have been relatively relaxed with an early night as a bonus but the senior Renault engineers only made their decision as to the specification to run late in the evening and as such work has to be carried out by the Team's Renault engineers in conjunction with our own crew garage activity carried on until quite late.

On the Tuesday Elio reported the engine in 94/3 was feeling tired and as if to emphasise this it was spilling quantities of oil, but it was not in a serious condition and it was confidently hoped it would last throughout the day. Nigel set off on a similar running programme in his race car but with a desire to keep

mileage on this vehicle at the very minimum it was planned he would get into the driving seat of 94/3 to finish off the day's running. However by the time the switch round was due to take place the condition of the engine had deteriorated considerably and so the car was withdrawn for the rest of the day's programme. This naturally meant both race cars continued to add undesirable mileage to their record but there was no other course open to us.

Customs Holdup

Importation documents covering our allocation of tyres were found to be incomplete by South African customs and at one stage it looked as if this would cause our test session to be held up. Eventually Tim Densham dispatched himself to

That evening the tired engine in the spare car was changed and the whole of Wednesday which was scheduled as a "rest" day was spent in preparing all three cars for the first practice session due to open on the Thursday morning.

Thursday

It was planned to use the first morning's unofficial session in order to collect sufficient data to help us choose the best tyre for the task ahead. Each car had different programmes and, after an hour of running had elapsed the best tyre appeared to be the 91/99 variety or the ones that had run so well for us at Silverstone and Brands Hatch previously. A peculiar incident in this session concerned the Y60 tyres which, when measured by the tyre technicians

Derek Bell at Motorfair he reported the same problem had cropped up in Sports Car races).

We had still not beaten the times we had registered in the test session at the beginning of the week and interruptions in our running forecast we would not be doing so before the day had run out.

Nigel reported that his engine (that had done Brands practice plus Kyalami testing) was down on power. In qualifying later on in the day a misfire affected the engine and when the spare car was readied this was found to have a similar problem. In fact Elio had discovered the misfire when trying the car in the morning and had immediately switched his attentions to both his race chassis and the spare. The engine in his race chassis encountered a problem when a weld in the intercooler split and so our mechanics had quite a



Evidence of Elio's lightning getaway at the start is well emphasised here as the field streams away.

the customs authorities and was able to extract some but not all of the shipment and although this helped a little, the end result was the tyre test was a non-event. Similarly the Pirelli fitting equipment had not arrived and the Michelin organisation generously came to our assistance.

All told Nigel covered forty laps during Tuesday with Elio close behind him in mileage total. This was at least thirty laps more per car than we would have liked.

during a brief stop at the pits, was found to have grown in size. It transpired that we were virtually running on a mixture of Goodyear, Michelin and Pirelli rubber as the heat generated in our tyres was actually picking up the deposits of rubber on the track and keeping this varied mixture on the surface of our tyres. The Pirelli tyre technicians immediately went off in search of a large paint oven so as to further cure the tyres that were left in an attempt to put this malady at rest. (When talking to

number of items on their evening job list, including changing the engines in both race cars. Investigation showed one unit had seized injectors and the other having a broken boost pipe. All these tasks were completed satisfactorily so it can be imagined how much disappointment was felt when one of the fresh engines installed was also found to have a misfire. It is interesting to note that the altitude at Kyalami so often referred to in the media as a

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bonus for turbo engines, was effecting the latter's performance as well.

It was very late as work continued in the search for the cause of the misfire and with the crew out on their feet it was decided to call it a day and get everyone off to bed so as to attack the problem afresh the next morning. It was not long on Saturday morning before the fitting of a brand new injection box got rid of the misfire problem.

Qualifying Times:

1st. Tambay	1.06.554
2nd. Piquet	1.06.792
3rd. Prost	1.07.186
4th. Arnoux	1.07.222
8th. ELIO	1.07.937
17th. NIGEL	1.09.443

Friday's Running

As usually programmed both cars set off for full fuel tank running in the first session. Nigel came back to the pits expressing satisfaction with his car and Elio trying the spare found that the misfire had gone. Later running saw us trying different tyres, Elio's mileage being brought to a halt when another intercooler was found to have split again. As we only had 2 cascade wings available this meant that each time the spare car was used the wings had to be changed over at the same time.

Nigel tried five sets of qualifiers but due to restrictions caused by the heavy traffic only two of the lap times were registered as "useful".

Elio's preference was for the "un-recured" rubber but as Nigel expressed the comment that he felt the track was going through a slow period, it was difficult to decide which tyres held the most advantage. In qualifying Nigel went out and did a blistering 7.6 on re-cured tyres which certainly brought Elio's period of relaxation to an end and put Nigel into 7th position on the grid. Our Italian driver immediately asked that his car be prepared but although he put up a highly commendable effort he could only get down to 7.9 registered on his second set of qualifiers as his first had not lasted the lap.

That night the mechanics job list was completed in a sensibly relaxed fashion but uppermost in everyone's minds was the problem of tyres. Both drivers had tried different wing settings as their engineers endeavoured to discover what would give minimum drag on the straight and yet maximum down force round the back of the circuit where it was needed so badly on this particular track. Virtually the whole of practice had seen us consistently quicker than the Renault works cars Prost putting all he had got into a real flyer in order to go a gnats quicker than us on one or two occasions.

Race grid positions

1st. Tambay	1.06.554
2nd. Piquet	1.06.792
3rd. Patrese	1.07.001
4th. Arnoux	1.07.105
7th. NIGEL	1.07.643
11th. ELIO	1.07.937



Nigel persevered all through the race, his reward being third fastest race lap of the day.

Warm Up

Gerard was still anxious to gain more straight line speed as he felt the long straight was the ideal place for our cars to pass others and so Elio's car had a conventional rear wing fitted for this half hour of running. Nigel tried three sets of tyres with his cascade rear wing set on minimum down force but his times were found to be slower than previously. However this did not worry him as he felt the circuit's condition was changing constantly and there was a lot of dust on the surface. Elio eventually decided to use the spare car in the race as this was 400 revs up on his race engine which no one could understand and which could have easily been due to a faulty rev counter but which could not be proved in the time available.

The Race

The weather was gloriously warm as the start time for the race drew near, the track surface registering 55°. Our team was confident of a good result in this race. The cars themselves had performed faultlessly throughout testing and practice and even though the weather had got a lot warmer we had not suffered a reoccurrence of the over heating problem that had effected us in the past. It was generally expected there would be a needle match between Prost, Piquet and Arnoux and that with mechanical fortune on our side we would be up in the leading positions when the flag fell.

Elio (as anyone will have seen who watched the television coverage) made a really fabulous start but almost immediately had his misfiring problem return and by the fourth lap was into the pits for the first of several stops. In fact these grew so numerous and so long that on one occasion he unstrapped himself from the car and walked over to the signalling wall to watch the race.

Nigel's start was not a good one and it was aggravating to find as the race progressed that it appeared quite an easy task for Warwick to leave him behind. Then came the first of his pit stops at which he complained that he could not find third and fifth gears. Almost before he had finished explaining the problem the mechanics found that a machined aluminium bracket

supporting the linkage had broken and Nigel's attempts with the gear stick must have been similar to stirring a large bowl of soup as he struggled to find a cog. Remedying this problem caused an 8 or 9 lap deficit in a stop that lasted over 10 minutes and so at the same time he was given a new set of tyres. While all this was going on Elio returned to the pits for more attention, our crew finding the task of satisfying both drivers quite taxing. Elio's misfire refused to be cured however and on lap 20 he called it a day.

Nigel had three stops in all; the first to repair his gear linkage bracket, the second for fuel and tyres and the third just for tyres. Nevertheless he kept plugging on so successfully that he recorded third fastest lap of the race, taking a thirteenth unclassified place after 68 laps of the 77 lap race.

The last race of the season was over. As our crew endeavoured to leave a packed circuit their thoughts were of the year to come. Roll on 1984!

The JPS organization in South Africa was out in force and as soon as our crew could get through the tremendous crowds that attended the race they made their way to our sponsor's hospitality unit in the main Grandstand. This was in fact the

best attended South African Grand Prix ever and while we had a huge problem getting into the track in the morning, it was obvious we would have an equally large problem getting out at night so this brief break for relaxation coupled with a few noggins was highly appreciated.

Our two race car engineers had been staying at the same hotel as the Brabham crew and reports filtering back of the huge celebration party going on there caused them to think it might be best if they departed elsewhere for entertainment! Their decision was made even easier when further reports came through that numerous visitors to the hotel were being thrown into the swimming pool. Steve and Tim eventually left the circuit quite late with our race mechanics en route to the mechanics' hotel and eventually more drinks and disco visits.

The return trip home for those who were not taking a short holiday out in South Africa went without a hitch, the British Airways jumbo arriving back in London ahead of schedule. Eventually the last members of our sun tanned race team trickled back to a Norfolk now showing increasing signs of approaching winter.

1983 was over!



Elio spent more time in the pits than on the track at Kyalami!