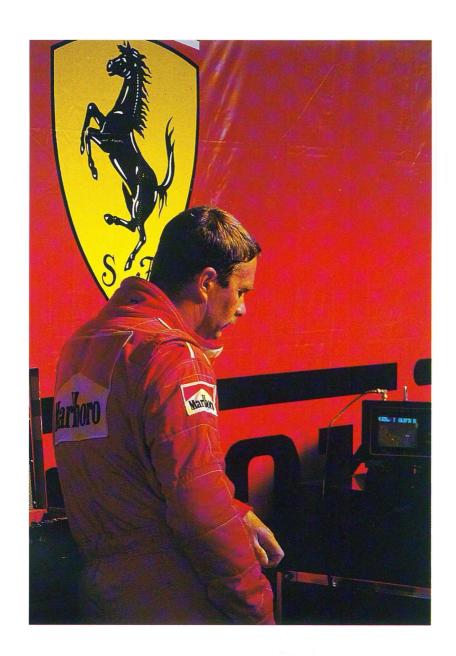
FORMULA 1 WORLD CHAMPIONSHIP







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foreword

Bernie Ecclestone

It's been another great year for Formula One. We seem to say it every year, but it is a fact that more people attended Formula One races this year, there was much more television coverage, the venues are also becoming bigger and better with everimproving facilities, and the public are getting better value for money than ever before. Having said that, there's still progress to be made. For

those of you watching at home I am sure that you have enjoyed this year's Championship. Although we've developed the on-board camera, which is now extremely reliable, boasts the same picture quality as the broadcast cameras and is mounted on four cars in each race, regretfully most host broadcasters seem reluctant to use it. However, when they



do, the results are quite sensational, as was witnessed in Suzuka - courtesy of Fuji Television, and in Adelaide - thanks to Channel Nine. I am pleased to see that corporate involvement is increasing and we must thank all those companies concerned, for without their commitment, Formula One could not continue to grow. 1990 is now behind us, so let's move forward to an even more successful 1991.



Entrant	Car/Chassis	Engine	Tyres	Fuel/ Oil	Plugs	Brakes	Dampers	200	The state of the s	Ser. A.	No. of the last	To San S	The state of the s	2	and the second	Zana a	To selling	a d	Spain and	AN A	A STATE OF THE PARTY OF THE PAR	O'ME O	S Carried Office of the Party o	Spenie Competer	Son Maria
McLaren International	McLaren MP4/5B	Honda VIO	Goodyear	Shell	NGK.	Bremba/SEP	Showa	9	10	6	13 1	2 4	6	4	13	5 12	13	9	-	- 1	3 1	21 3	6 1543.5		67
Scuderia Ferrari	Ferrari 641/2	Ferrari VI2	Goodyear	AGIP	Champion	Brembo/SEP	Koni	-	12		- 1	6 13	9	9	3 -	- 6	9	13	15	- 1	0 1	10 47	2 1673	103	3 110
Benetton Formula	Benetton B189/B190	Ford HB V8	Goodyear	Mobil	Champion	Bremba/SEP	Benetton	3†	11	6	- 1	6 4	1	2	6 4	5	-	3	4	15	7	1 13	7 229	4	3
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Tyrrell Racing Org.	Tyrreli 018/019	Ford DFR VB	Pirelli		NGK	AP/AP	Koni	71	-		6 -		15	-			1	-	-	1 .		6 28	88 572	23	14
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Leyton House Racing	Leyton House CG90	Judd V8	Goodyear	BP	Champion	AP/SEP	Koni	В	-	-			6	-		- 1	-	-	-		-	7 19	B 174.5	3	5
Team Lotus	Lotus 102	Lamborghini VI2	Goodyear	ВР	Champion	Bremba/SEP	Bilstein	-	-	E	-	-	-	-	- 1	2 -	1 =	-				3 47	7 1322	79	107
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Motor Racing Developments	Brabham BT58/BT59	Judd V8	Pirelli		Champion	AP/SEP	Penske	2†	-			- -	-	-	- 1-	- -	-	-	-			2 37	5 833	35	39
Ligier Sport	Ligier JS33B/JS33C	Ford DFR V8	Goodyear	EI	Champion	Brembo/SEP	Bilstein	-	-	~	-		1-			-	-	-			-	0 22	9 307	8	9
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AGS	AGS JH24/JH25	Ford DFR V8	Goodyear		Champion	Brembo/SEP	Koni	-	-		-		-			1-	-	-	-	_ -	-	0 4	6 2	0	0
Scuderia Italia	Dallara BMS 190	Ford DFR V8	Pirelli	AGIP	Champion	Brembo/SEP	Koni	-	-		-	-	-			-	-	-	-			0 4	6 8	0	0
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Eurobrun Racing	Eurobrun ER 189	Judd V8	Pirelli	AGIP	Champion	Bremba/SEP	Kani	-	-	_		- -	-		- 1 -	-	-	-	-			0 1	4 0	0	0
Coloni Racing	Coloni C38	Subaru Flat 12 Ford DFR VB	Goodyear	AGIP	Champion	Brembo/SEP	Koni	-	-	~	-	-	-	-	- -	-	-	-	-	- -		0 1	3 0	0	0
Life Racing Engines	Life L190	Life W12/Judd V8	Goodyear	AGIP	Champion	Bremba/SEP	Koni		-				-				1-	-				0 0	0	0	0

F = Organisers fuel. † = Points scored in earlier chassis.



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27	Ayrton Senna	BR	McLaren	1	3	R	1	1	R/20	3	3	1	2	1		2	R	R	R	78	110	395	26	52	
T	Alain Prost	F	Ferrari	R	1	4	R	5	1	ı	1	4	R	2	2	3	1	R	3	71	169	658.5	44	20	
20	Neison Piquet	BR	Benetton	4	6	5	DQ	2	6	4	5	R	3	5	7	5	R	1	ţ	43	188	456	22	24	
28	Gerhard Berger	A	McLaren	R	2	2	3	4	3	5	R/14	3	R/16	3	3	4	R	R	4	43	99	62	5	6	
2	Nigel Mansell	GB	Ferrari	R	4	R	R	3	2	R/18	R	R	R/17	R	4	1	2	R	2	27	149	289	16	15	
5	Thierry Boutsen	В	Williams	3	5	R	4	R	5	R	2	6		R	R	R	4	5	5	34	121	134	3	1	
6	Riccardo Patrese	1	Williams	9	R/13	1	R	R	9	6	R	5	4	R	5	7	5	4	6	23	208	152	3	3	
19	Alessandro Nannini	1	Benetton	-11	10	3	R	R	4	R/16	Ř	2	R	2	4	9	6	3		21	77	68	ī	0	
4	Jean Alesi	F	Tyrreli	2	7	6	2	R	7	R	8	R/II	R	8	R	8	R	DNS	8	13	23	21	0	0	
33 9	Roberto Moreno	BR	Eurobrun Benetton	13	DNPQ	R	DNQ	DNQ	DQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	2	7	6	90	7	0	0	
16	Ivan Capelli	1	Leyton House	R	DNQ	R	R	10	DNQ	2	R	7	R	7	R	R	R	R	R	6	64	27	0	0	
30	Aguri Suzuki	1	Larrousse	R	R	R	R	12	R	7	6	R	R	DNS	R	R/14	6	3	R	6	16	6	0	0	
29	Eric Bernard	F	Larrousse	8	R	R/13	6	9	R	8	4	Ř	6	9	R	R	R	R	R	5	18	7	0	0	
11	Derek Warwick	GB	Lotus	R	R	7	R	6	10	- 11	R	8	5	11	R	R	R	R	R	3	131	67	0	0	
3	Satoru Nakajima	J	Tyrrell	6	8	R	R	- 11	R	R	R	R	R	R	6	DNS	R	6	R	3	58	14	0	0	
10	Alex Caffl	1	Arrows		R	DNQ	5	8	DNQ	R	7	9	9	10	9	R/13		9	DNQ	2	54	6	0	0	
8	Stefano Modena	1	Brabham	5	R	R	R	7	- 13	13	R	R	R	R/17	R	R	R	R	12	2	42	6	0	0	
15	Mauricio Gugelmin	BR	Leyton House	14	DNQ	R	DNQ	DNQ	DNQ	R	DN5	R	8	6	R	12	8	R	R	1	42	10	0	0	
9	Michele Alboreto	1	Arrows	10	R	DNQ	DNQ	R	17	10	R	R	12	13	R/12	9	10	R	DNQ	0	144	179.5	5	2	
14	Ollvier Grouillard	F	Osella	R	R	R	DNQ	13	19	DNPQ	DNPQ	DNQ	DNPQ	16	R	DNQ	R	DNQ	13	0	21	1	0	0	
17	Gabrielle Tarquini	1	AG\$	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNQ	R	DNPQ	13	DNQ	DNQ	DNQ	R	DNQ	R	0	19	1	0	0	
18	Yannick Dalmas	F	AGS	DNPQ	R	DNPQ	DNPQ	DNPQ	DNPQ	17	DNPQ	DNQ	DNQ	DNQ	NC	R	9	DNQ	DNQ	0	22	2	0	0	
22	Andrea de Cesaris	1	Dallara	R	R	R	R	R	13	DQ	R	DNQ	R	R	10	R	R	R	R	0	150	38	0	1	
23	Pierluigi Martini	F	Minardi	7	9	DN5	R	R	12	R	R	R	R	15	R	11	R	3	9	0	54	6	0	0	
25	Nicola Larini	1	Ligier	R	11	10	R	R	16	14	10	10	- 11	14	11	10	7	7	10	0	35	0	0	0	
26	Philippe Alllot	F	Ligier	DQ	12	9	R	R	18	9	13	DQ	14	DNQ	13	R	R	10	11	0	93	5	0	0	
31	Betrand Gachot	1	Coloni		DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNQ	DNQ	DNQ	DNQ	DNQ	DNQ	0	5	0	0	0	
24	Paola Barilla	L	Minardi	R	R	- 11	R	DNQ	14	DNQ	12	DNQ	15	DNS	DNQ	DNQ	DNQ			0	8	0	0	0	
34	Claudio Langes	I	Eurobrun	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ			0	0	0	0	0	
12	Martin Donnelly	GB	Lotus	DNS	R	8	R	R	В	12	R	R	7	12	R	R	DNS			0	13	0	0	0	
21	Emanuelle Pirro	I	Dallara			R	R	R	R	R	11	R	10	R	R	15	R	R	R	0	24	2	0	0	
7	David Brabham	AUS	Brabham			DNQ	R	DNQ	R	DNQ	R	DNQ	R	R	DNQ	R	DNQ	R	R	0	8	0	0	0	
39	Bruno Glacomelli	1	Life			DNPQ	DNPQ	DNPQ	DNFQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ	DNPQ			0	69	14	٥	1	
36	J. J. Lehto	SF	Onyx	DNQ	DNQ	12	R	R	R	DNQ	DNQ	NC	DNQ							0	7	0	0	0	
7 35	Gregor Foitek	СН	Brabham Onyx	R	R	R	R/7	R	15	DNQ	DNQ	R	DNQ							0	7	0	0	0	
21 24	Glanni Morbidelli	1	Dallara Minardi	DNQ	14													R	R	0	3	0	0	0	
35	Stefan Johansson	S	Onyx	DNQ	DNQ															Q	78	78	0	0	
39	Gary Brabham	AUS	Life	DNPQ	DNPQ															0	0	0	0	0	
12	Johnny Herbert	GB	Lotus															R	R	0	8	5	0	0	
10	Bernd Schneider	D	Arrows	12													DNQ				9	0	0	0	

DQ = Disqualified
DNQ = Did not qualify
DNPQ = Did not pre-qualify
NC = Running - not classified
R/11 = Retired - but classified/position

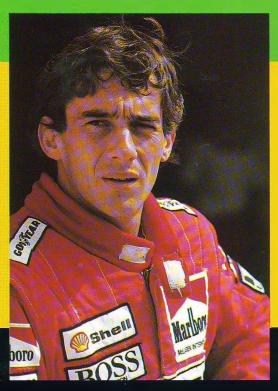
ayrton senna

1990 FIA World Drivers' Champion. Derek Allsop

AYRTON SENNA, 1990 WORLD CHAMPION, WAS FACING THE INTERNATIONAL INQUISITION.

PROST HAD AIRED HIS OPINION, SO WHAT WAS THE BRAZILIAN'S REPLY? 'AS USUAL,'

SAID SENNA, 'HE HAS SEVERAL POINTS OF



DESTROY ME AND HE WILL

NOT. I HAVE PROVED WHAT I

CAN DO. I DON'T GIVE A

DAMN WHAT HE SAYS. I AM

HAPPY INSIDE. I DON'T

OFTEN SMILE. THAT'S THE

WAY I AM. PEOPLE DON'T

KNOW ME. THEY DON'T

KNOW WHAT I FEEL INSIDE,

WHICH IS SATISFACTION AND

HAPPINESS.' MANY HAVE TRIED, OVER THE YEARS, AND

ESPECIALLY THIS PAST YEAR, TO KNOW AND UNDERSTAND SENNA. THE SENSE OF PROGRESS WAS REFLECTED IN THE CHANGING GENERAL OPINION OF THE MCLAREN DRIVER

THAT SUNDAY AT SUZUKA, IN THE VIOLENT OPENING MOMENTS OF THE FUJI TV JAPANESE GRAND PRIX, ALL THE DOUBTS AND QUESTIONS ABOUT SENNA RETURNED.

He may have sincerely believed he was entitled to go for the inside at the first corner. Certainly Prost's Ferrari appeared, however briefly, to pull out and give Senna a glimpse of the target. Significantly, however, Senna would later say: 'Prost was the one who could not afford to take a chance. He made the biggest mistake by closing the door.' In the event Prost did not yield and the predictable collision sent both cars plunging into the sand trap. Suzuka '89 remembered... and atoned.

None of us should have been too surprised, particularly in view of the build-up to the race. Senna had won pole - his 51st - in a qualifying session that was pure theatre. As the minutes went by, the two great protagonists sat in their cars, each aware the other was ready to embark upon his second run. Suddenly they emerged from the pit lane, Senna immediately ahead clocked one minute 36.996 seconds, Prost one minute 37.228. Senna said: 'I wanted to be out at the right time in terms of traffic, but also slightly ahead of Alain. It was just the psychological factor of being in front. I was playing with him. I heard his engine start, then switched on mine and went out just ahead of him. It was not a case of Prost deciding to come out behind me.'

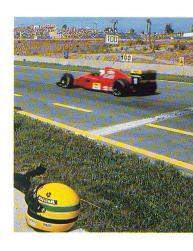
Between that moment and the race, Senna. gradually lost his hold on proceedings. He had requested pole position be switched to the left side of the track, which was cleaner and offered more grip. It seemed a justifiable request and Prost supported it. Elsewhere, similar requests had been granted - but not here,

Another setback awaited Senna at the Sunday morning drivers' briefing. Use of the pit lane entrance for overtaking would not be tolerated. Beyond the broken yellow line would be out of bounds. Senna, no doubt taking the edict as a personal affront, walked out before the end of the meeting. Deliberately or not, he felt he had been saddled with a double handicap. It might have suited others to take the Championship decider down to Adelaide, but he wanted to wrap up his second title here. In his mind the contest had been narrowed down to those first few hundred metres. He had to escape there, or not at all. The outcome was inevitable. Prost was livid and his audience was sympathetic. He described Senna's actions as 'disgusting.'

'We have seen him ready to take all the risks to win the Championship. I am not prepared to do this. If there are no changes in the regulations, it will not be a problem for me not to continue racing. I am not prepared to fight against irresponsible people who are not afraid to die.'

Senna, like his team boss Ron Dennis, was at pains to stress that the Championship had been won on the strength of his performances over the season, and not by virtue of one incident in the Fuji TV Japanese Grand Prix. 'I have six wins, more poles and have led for far more laps than anyone else,' said the champion.

I endorse his contention that he has been the outstanding driver of the 1990 season. His



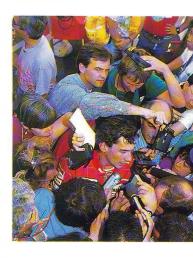


ability is awesome, his style beguiling. Some of his pole-winning displays, and they are displays, have been breath-taking, some of his race victories consummate.

But when we look back on this 1990 season, what are we likely to remember? Sadly, I venture to suggest it will be *that* incident. How can we celebrate the man's championship when we feel cheated out of the climax we all so eagerly anticipated; when we feel cheated, also, out of the opportunity to judge him alongside the absolute greats of all time? We frankly cannot know where to place him in the annals of the sport. That is the shame, that is the frustration.

I cannot help recalling the many times I have heard Senna talking of his family, his upbringing, and the virtues he adheres to. Even at Suzuka, his conviction was apparently unshaken.

Top: retirement in Spain prolonged the agony. Above: Senna takes up the gauntlet. Below: always the centre of attention.





'You have to stand by your own values, otherwise you have nothing,' he said. 'I only believe in actions, not words.'

At the time, those words were particularly difficult to swallow. He offered to expand: 'We all have seen the situation in Portugal, the strain inside Ferrari. Then we saw the pressure Mansell was under in Spain, having to lift off to let someone through.' We were back to Prost and the relationship that is inexorably entwined in the Senna story of 1990, just as it was in '88 and '89. The aftermath of '89 might have driven Senna from Formula One. He started '90 uneasily.

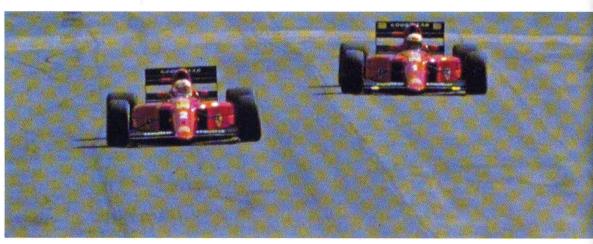
He said: 'After last year I was really low. I wish I could forget '89. I won the Championship but had it taken away by my disqualification. It was hard and I was hurt. I had no desire to race in Phoenix. I did so by instinct and I managed to

deal with McLaren. Dennis feels the conclusion of that delicate piece of business was a significant milestone in their season. The burden lifted, they were able to advance with fresh momentum.

The Coca-Cola Italian Grand Prix, maintains Dennis, was the significant milestone and the decisive race of the Championship. 'I think Monza was easily the best win of Ayrton's career,' he says. 'He displayed a different mental approach. He was far more mature and strategic.'

'It was the way he controlled the race from the front, held his pace and then, if slowed by traffic, reacted accordingly. If Alain closed the gap, Ayrton would immediately respond with a faster lap. He broke Alain psychologically. That is where I shall remember the Championship having been won.'

Senna says: 'Monza. was beautiful, yes. The



win. My recovery really began in Brazil. My home crowd enabled me to find my motivation again. When you see the effect you can have on people, it affects you also. Their reception, their warmth, gave me the help I needed. My heart was in racing again. I was able to fight back.'

He had a fight on his hands, too. The Ferrari was making rapid progress. While Senna. was being trapped in Satoru Nakajima's door at Interlagos, Prost was moving serenely through to victory. In San Marino a stone disabled a wheel of the McLaren. Senna was back in command in Monaco and Canada, but then Prost won three in a row to lead the Championship.

Senna took the German and an important second place after a controversial clash with Alessandro Nannini in Hungary. Belgium brought another success and agreement on a new one-year right tyre choice made victory possible there. But there were others, Belgium was also beautiful. There were three starts and I led every time. In Germany I had to be patient behind Nannini and judge the race carefully. In Hungary I lost places at the first corner because I did not take chances. That day I was racing for the Championship, not victory. So many things make up the Championship. You have to make critical decisions on tyre stops, you have to fight at the right time and be careful at the right time. All these things have won the Championship for us.

'It has been difficult because so many things have gone wrong for us: someone closing the door in Brazil, the stone at Imola, the tyre in Mexico, a stone again in Spain. And also our chassis has not been the best this year. We have won with our hard work and determination, our

belief that we could win again.'

'I tend to say too much about what I believe. I try to suppress as much as I can. This is my nature. But I have learned how to cope in such a way that I maintain the right balance, psychologically. Sometimes I would like to show myself, but it is not always easy. I have been badly hurt trying to reveal how I feel inside. I am always exposed, no matter how I try to protect myself. I am sure that, slowly, people are getting to know me better. They could admire me or criticise me, but I think more people are becoming positive about me. I think they see that I drive with my heart.' Up to Suzuka, Senna was undoubtedly winning his way through to more people. His detailed description of his strategy in qualifying sessions became compulsive listening. We will long remember his conduct and

very strong now and we have to work very hard on next year's chassis to give us a competitive position. But it's not such a bad thing at this time of year. When you are behind it gives people the motivation to work hard for the following year.

I now have experience to go with my motivation and I will use all I have learned over the last three years to make myself even better next year to win my third title. It is possible. I love winning races, winning championships and breaking records. I love finding new situations where I find myself getting better and better. Motor racing gives me this opportunity. While I have this feeling, this love, I will carry on racing. Over the years you learn to use your mind as well as your heart. The combination of driving with the heart, instincts and mind gives you the best results. I always have goals to aim for. This



Far left: a moster in the art of straight lining. Left: out of the pits,opportunism took him past Mansell to harry Prost. Below: Senna's aggression wasn't reserved just for the track.

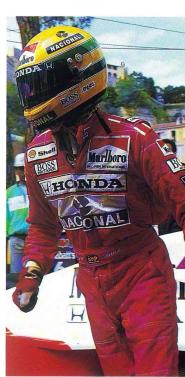
compassion at Jerez when Martin Donnelly was so seriously injured; how he went to the scene of the horrific accident and returned with tears in his eyes; how he wrestled with his conscience in the sanctuary of his motorhome; how he then went out and posted the fastest lap of the day.

He said he would never be able to fully express his emotions and his experience that day. He expressed it well enough to touch even the most hardened of hacks. Here was a Senna you could not fail to admire. But then came Suzuka. 'I would like to have won the race,' he said, 'though as I have told everyone, it is the best results all through the year that win the Championship. It has been much more competitive than '88 and '89. Different cars, engines and drivers have been winning. It has been a tremendous Championship, full of excitement. Ferrari are

season my main goal was the Championship, the other goal to get 50 poles. I achieved both. My next goal is the Championship next season and after that to go on winning, to be the best every time I get into a racing car.'

Senna said he tried to relieve himself of all the stress and strain of the previous 12 months as he walked back to the pits from the scene of his 1990 collision with Prost. He must see, however, that he has burdened himself with another weight, and that may take longer to shake off.

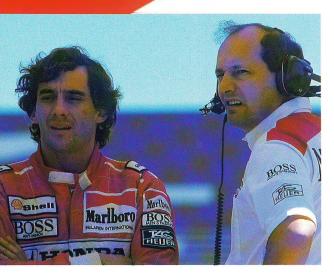
At the age of 30 this mercurial driver has a lot more winning in him. No record in the book seems beyond his range. Ron Dennis says he rates him the best of all time. For the good of the sport, as well as Ayrton Senna, let's hope we eventually find good reason to give that claim serious consideration.



mclaren-honda

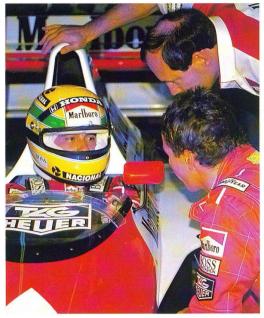
1990 FIA World Constructors' Champions. Derek Allsop

MCLAREN WERE PUSHED HARDER THAN EVER
IN 1990 - YET STILL WON THE CONSTRUCTORS
CHAMPIONSHIP WITH ONE ROUND TO GO,
AND EQUIPPED AYRTON SENNA WITH THE



WHEREWITHAL TO SECURE THE DRIVERS' TITLE BEFORE THE FINAL ROUND IN AUSTRALIA. THE HONDA MARLBORO MCLAREN TEAM - TO GIVE IT ITS CORRECT, 1990 TITLE IS THE TEAM TO BEAT IN FORMULA ONE, AND IF THEY ARE TO BE

BEATEN, THEN IT IS NOT SUFFICIENT JUST TO MATCH THEIR PROGRESS. A TEAM WOULD HAVE TO DO CONSIDERABLY MORE THAN THAT TO SERIOUSLY CHALLENGE THE MIGHT OF RON DENNIS AND HONDA! MCLAREN ARE NOT LIKELY TO REST ON THEIR LAURELS-STANDING STILL JUST TO BE OVERTAKEN. THE TEAM MAINTAINS AN INTENSIVE PROGRAMME OF DEVELOPMENT AND REFINEMENT, SETTING THE STANDARD WHICH SERVES AS THE BENCHMARK FOR ALL OTHERS.



Admittedly, the team in its campaign, has

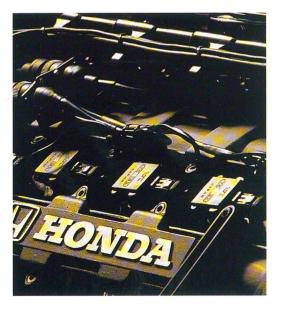
But there are two strong points of McLaren which we saw this year as one team, anyway, closed in on the championship standard-bearers. The first was the remarkable, certainly lucky way in which they managed to salvage nothing from a fairly poor situation thanks to phenomenal reliability which very rarely suffered from anything more than bad luck.

Indeed, things certainly didn't go all their own way in 1990. But pole position for Berger and victory for Senna in Phoenix was certainly a good start even so, they had been beaten on a fairly regular basis by Ferrari in testing - although it was clear from Ron Dennis's sarcastic 'winter World Champions' barb that the team didn't take Ferrari's testing times very seriously at that stage.

Left: team talk, Ayrton, Ron and Gerhard confer. Below: McLaren line-up for 1991 remains the same. Below left: the power behind the driver!



the phenomenal help of Honda, a company who probably know better than anyone now what is needed to win the World Championship on a constant basis. The Japanese company's commitment to the sport and to winning the series is considerable although few know just what they put into it in terms of manpower and money, and there are probably some engine rivals who would prefer not to know. How many, undertake constant redesigns of the same engine in the constant, unattainable quest for more and more horsepower? And how many could run two different development programmes and win the World Championship, because that is precisely what they have already done.



The front row went to McLaren again in Brazil, but Senna made a rare overtaking mistake - revealing some of his old impatience and the McLarens had to follow Prost's Ferrari home.

After everyone had spent some five weeks testing - just as McLaren had the previous year the Championship returned to Imola, and McLaren might have repeated past success in Italy, but for a stone or, a nut in the brake calliper machining through Senna's rear wheel and causing a spin and retirement.

Berger finished second in this race, and although it is unfair to say at this stage, McLaren's driver choice in 1990, while being



much more compatible, was less competitive than the previous year. Berger was a newcomer to the team, and he got on well with Senna. He was also suffering the severe handicap of being extremely uncomfortable in the car, but at later stages we will see that he is not a Prost beater. Senna may be able to do it, but whereas with the Senna-Prost combination McLaren were one-two, with Berger often losing against Prost, McLaren would have to be content to be one-three.

At Monaco, Senna duly won again, but with Berger desperately trying to get past Alesi in third place. Without doubt Berger's greatest moment was in Canada where he opted for a lower downforce setting than his teammate and when the track dried out he was considerably quicker. Out in front, this was a race that he should have won - but he had jumped the start, and even though he had gained no advantage, he was penalised, and what should have been a Berger victory luckily went to Senna.

In Mexico, the team made a rare mistake by not calling in Senna when he was clearly dropping back. An 18 second lead dropped to nothing, but it wasn't just tyres losing grip, it was a puncture, and of course a tyre change would have solved everything. As it was, the tyre exploded, and Senna didn't score at all. It was typical that Berger virtually out of it for most of the race after an earlier tyre stop, finished third.

Now McLaren realised they had a problem. The chassis wasn't good in quick corners and just a few days after Mexico they went to Silverstone with two drivers for three days. Just for good measure, they took along the new V12-engined car for its first shakedown tests. Ferrari turned up with two chassis, Mansell driving and even then they went home early. Benetton, running out of chassis, did some active testing and briefly ran Ford's new engine in an old chassis. Only Williams put in anything like the same effort as McLaren for the first major test in Europe for several months using both regular drivers, with Mark Blundell testing the active car.

Indeed, McLaren would now spend many days testing, trying to get something out of the chassis. Sadly, this Silverstone test was inconclusive. They may have spent many days trying to sort out the car, but they weren't terribly successful. Yet they still managed to salvage

points from races where they were in relatively desperate straits.

Ricard and Silverstone, soon after were typical of McLaren's luck enhanced by reliability. Ferrari may have won both, with Leyton House, Benetton and Williams providing a challenge, but McLaren and Senna in particular seemed to be out of luck. Berger led Senna at Ricard, with Mansell and Nannini close behind. At the tyre stops both McLarens had trouble with their left rears so that Senna was back in seventh with Berger eighth. Yet when the chequered flag came out Senna was on the rostrum in third place.

The same happened at Silverstone. The McLarens sandwiched an on form Mansell until he pulled ahead and then Senna had a spin followed by a tyre stop. The car was never quite the same again and the Brazilian was way back in tenth place after the stop. Berger was upholding McLaren honour, but then dropped back to third which became second when Mansell retired. But the Austrian suffered Honda's only mechanical problem of the year and he quit allowing Senna to finish third behind Prost and Boutsen.

Hockenheim with its straights and chicanes, was always going to be a McLaren race they said, and sure enough it was, although the nonstopping Nannini was a hindrance for many laps and finished between the two McLarens. That was a lesson that Senna would learn: when he saw Nannini through the armco in Belgium it was desperately important that he should come out ahead of him, and he tried very hard to succeed in doing just that, mindful that it had taken him many laps to get past the Benetton, even on the straights of Hockenheim just four weeks earlier.

Hungary was a lottery. The McLaren pair started third and fourth, having both had off-track incidents in qualifying, and then both had incidents at the same chicane during the race. Once again, Senna salvaged points, but Berger's shunt with Mansell was terminal. McLaren, once again, would use the Hungarian circuit as an important testing venue to try and solve their tight circuit problems.

Belgium went according to plan, except it was a one-three with Prost between the McLarens just as he was two weeks later in Italy, a race that everyone expected the team to win for the same reasons as Hockenheim. The Iberian double-

header was a worry, for this wasn't one of 'their' circuits and yet once again they salvaged a good placing with Senna only beaten by Mansell, and still ahead of Prost. When the Frenchman complained of Ferrari's tactics - or lack of them, you could almost hear him say 'this would never happen at McLaren.'

McLaren now went on to clinch its championships with neither driver finishing neither the race in Spain nor in Japan, accidents claiming Senna once and Berger twice which is scarcely the way that anyone wants to win championships. Oddly enough, the one possibility that Senna and Dennis didn't discuss was that Prost might leave the door open for Senna if he got ahead in Japan.

McLaren's other strong point is their organisation which is where some rivals fall down badly. Ron Dennis rules his team with an iron hand, and that includes the drivers whom he

Left: Gerhard's tight fit.

Below: Ricard: probably the teams most uncompetitive outing in 1990!



pays so well. He permanently talks about his team's performance as a team, not in terms of one driver more than another. He wishes success on one driver as much as he does the other, but a hierarchy exists until it is proven otherwise.

Although there were suggestions that the team missed Prost's technical talents in 1990, Senna's pole position feats saw them frequently make up for the disadvantage of the variations on one Barnard vintage in comparison to another. Even so Honda provided them with a vital edge and by the season's end, we were told that the factory, test team, V12 development team and race team were exhausted. That's what it takes, in 1990 to win the championship, and McLaren no doubt, will extend the barriers still further and continue to move the goalposts to make it that much harder for any pretenders to their throne.

the tops top ten

Three experienced views of who is really number one.

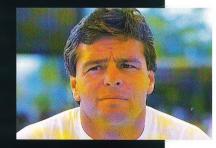
FOR THE FIRST TIME A DRIVERS TOP TEN HAS BEEN INCLUDED IN THE FIA FORMULA 1 WORLD CHAMPIONSHIP YEARBOOK. TO MAKE IT AS CREDIBLE AS POSSIBLE THREE DIFFERENT PERSONALITIES WERE CHOSEN, EACH WITH A DIFFERENT PERSPECTIVE ON WHY ONE DRIVER MIGHT BE BETTER THAN ANOTHER. FIRSTLY THE JOURNALISTIC ANGLE, ONE DESIGNED TO TAKE



A MORE ROUNDED,
OVERALL ASSESSMENT OF
THE SEASON, WITH NO
FAVOURITES! NEXT THE
TEAM MANAGER'S VIEW,
WHO WOULD BE THE TOP

TEN DRIVERS ON HIS SHOPPING LIST GIVEN AN OPEN CHEQUE BOOK? HERE THE EMPHASIS

IS SLIGHTLY DIFFERENT. FEW TEAM MANAGERS EVER GET OUT OF THE PIT LANE TO SEE A DRIVER IN ACTION, YET THEY INSTINCTIVELY KNOW HOW THEY'VE HANDLED THEMSELVES



POLITICALLY. FINALLY WE COULDN'T REALLY LEAVE OUT A DRIVER'S EYE VIEW, THAT OF A MAN WHO HAS SEEN HIS COLLEAGUES PERFORM AT CLOSE QUARTERS, WHO CAN ANALYSE JUST HOW GOOD EACH ONE REALLY IS.

What is so fascinating and gratifying is that each of our three contributors has compiled a different Top Ten. While Allievi went for the more established names, it was interesting to see both Tyrrell and Warwick included newcomers, and all three mentioned the Larrousse duo. Please remember that Ken Tyrrell was unwilling to judge his own drivers, past, present and future.

PINO ALLIEVI'S TOP TEN

Pino Allievi is chief Formula One correspondent for the famous Gazzetta della Sport, Italy's pink, daily sporting paper.

My view is an overall one, I've considered

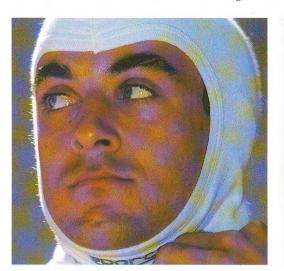


the psychology of the drivers, the situation in which they worked (which is why Mansell is third, it's been very difficult for him because of the team environment) and their on-track behaviour as well.

First is Prost. I thought a lot whether to put Senna first instead, but Prost has never been so committed. He might have been when he was at Renault, but I saw Prost taking many risks which was unusual for him and putting other distractions aside in order to work with the team. I think he has taught a lot to many of Ferrari's newer engineers. For example, his own engineer Luigi Mazzola was totally new to Grand Prix racing, fresh from University and he had no experience. But he told me that working with Prost has been a very good education. Everyone in Ferrari speaks well of Prost. The reason Ferrari weren't first was because they've made too many managerial mistakes, but I place Prost first because with his ability, he has brought Ferrari back up to number one and introduced the 'Prost system' in the team.

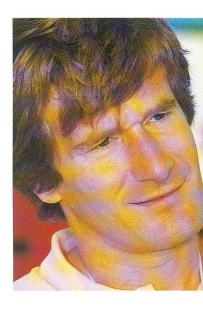
I place Ayrton Senna second. He's set a numerous pole positions and wins. This has been his best ever season, particularly because he's won the Championship without having the best car. For example, in the British Grand Prix he drove his best race of the year; he had a puncture and pitted and was then able to risk his all to take third. Then he had very clever races like Belgium and Italy and even Germany. Here he made the best compromise with the car in practice in order to start from pole, to have the biggest advantage possible at the beginning of the race, and to use pole as a part of his race strategy. I only put him second because Prost has been able to 'rebuild' a machiavellian team like Ferrari. On driving ability alone, he would be first.

Mansell is third. He's not one of the strongest drivers in psychological terms but he had been placed in a very difficult psychological situation by his team. They refused to help in the same way as they had previously. The best season, according to him, had been last year when he was the king of the team, and he was delighted to be considered so. This year he lost that position. Ferrari did not understand that if Mansell had their commitment and enthusiasm, he would have been the ideal support for Prost to win the championship. From a technical point of view, I remember his fantastic race at Silverstone. If we forget the start in Portugal that was a great race too. His manoeuvre to overtake Berger in



Mexico is something that we will long remember and marvel. But on many other occasions his car lacked that winning streak.

I place Alesi fourth because first of all, he



Above: Boutsen, nominated by all three but unable to hold his Williams-Renault drive. Left: 'top three'? Below: Alesiwhere would Ken have placed him?

ALLIEVI'S 10 1.A PROST

2. A SENNA 3. N MANSELL

4. J ALESI

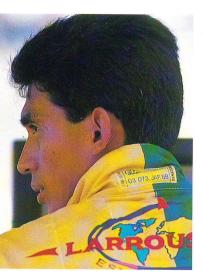
5. N PIQUET

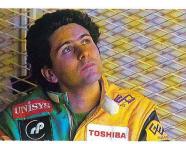
6. G BERGER7. T BOUTSEN

8. R PATRESE

9. A NANNINI

10. D WARWICK





Above: the Larrousse duo - most promising newcomers.

drove his car very well in the first part of the season when, considering his experience, he produced miracles. He was lucky enough to drive a beautiful car. In my opinion there are two cars which are vastly superior to the others, the Ferrari and the Tyrrell, a very easy car to drive and control. Then he suffered in the driver market, the Ferrari situation and so-on. I hope that he will bounce back next year, as in the middle third of this he was not at his best.

Piquet I place fifth. He hasn't been spectacular but I'm sure that his experience has improved the team's competitiveness. He had a low number of retirements and was clever enough to realise his car's limits and strong points. When possible, he grabbed the chance to win.

Berger comes sixth. When you see a driver with bloody elbows and knees after every race you understand a lot of things, more than times or points. The car was too small and yet he had the courage not to complain too much. He wasn't the kind of driver to make excuses and was clever to understand the situation inside the team, and also perfectly understand Senna's character. He had much less this year than he deserved. I'll be happy if he gets what he deserves next season. Having said that, Gerhard made too many mistakes, like the Spanish start and even more importantly, the start of the second lap at Suzuka when he was leading and spun off.

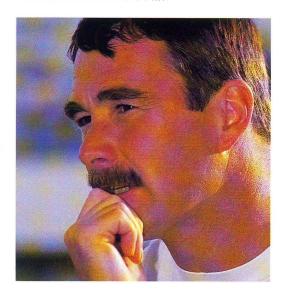
Seventh is Boutsen. Without having the best car, he drove a miraculous race in Hungary where he started from pole, controlling the situation without taking the risks that everyone else had to in trying to catch him.

Patrese is eighth. He drove a great race at Imola, his home track, and then came a lot of retirements for technical reasons and we rarely saw him in ideal conditions. He is on a similar level to Boutsen but with fewer World Championship points.

Ninth is Nannini, because he had the courage to say no to Ferrari when plenty of drivers would go there for free. He also had the courage to go back to Benetton and re-start his season. I don't think he's made the mistakes that he's made in the past, but wasn't very lucky in races either, Hungary was a prime example. Sadly, but for his helicopter accident he probably would have won in Japan again.

Warwick comes next in tenth place. He deserved a better placing, for courage alone he would have been first, partially because of Monza, but also because he convinced Lotus to come back to race in Jerez after Donnelly's appalling accident, the cause of which was still a mystery. He's the kind of driver who gives heart to his team, and even to Lamborghini. He doesn't try to separate team and engine manufacturer like many other drivers. I'm very sorry that one of the big teams, one of the top three, doesn't have the courage or inclination to offer him a proper drive. He surely deserves it!

Suzuki, Bernard, Donnelly and Capelli came close to being included. We saw Capelli in only one and a half races really, Ricard and Silverstone, so we don't have the possibility of an overall evaluation. Donnelly was close too because he was as competitive as Warwick in an equal car. Suzuki has been very quick to understand the European mentality of Grand Prix racing. He has made big progress and scored that great third place at Suzuka. I'm sure that he's one of the drivers of tomorrow. Bernard was clever enough to realise that he didn't have the best car, but tried to finish all the time.



KEN TYRRELL'S TOP TEN

Ken Tyrrell, is of course, the owner of the Tyrrell Racing Organisation, entrants in Formula One since 1968 with four World Championship titles to their credit.

I want to make it clear that in naming my top ten for 1990, that this excludes my current and future drivers, because I don't think it would

TYRRELL'S 10

1. A SENNA

2. A PROST

3. G BERGER

4. T BOUTSEN

5. A NANNINI

6. N PIQUET

7. R PATRESE

8. I CAPELLI

9. A SUZUKI

10. M DONNELLY

be prudent to include them. The criteria for my choice, I suppose, is that these drivers are those that I would most like to employ. But in naming the top ten, I've tried to make allowances for equipment, and that's proved very difficult.

Senna, of course, is number one. He was the quickest driver in 1990 although I don't think his car was as good as Prost's. He was missing out a bit in chassis development, although his engine may have been better. He's grown enormously in stature this year and I think he's now the complete racing driver. The difference as far as I'm concerned is that he's stopped making stupid mistakes, like crashing at Jerez last year, his desperate need to overtake when it's unnecessary. However, he did make that mistake once in 1990 when overtaking Nakajima in Brazil. I think a great attribute of a driver is not to be impatient.

My number two is Prost, of course. I thought Mansell would blow him off and he didn't. In fact, the opposite is true, not just as a



driver but mentally too. I've said that in my time the great drivers have been Fangio, Moss, Clark, Jackie and then a huge gap to Prost. Senna will almost certainly join that club.

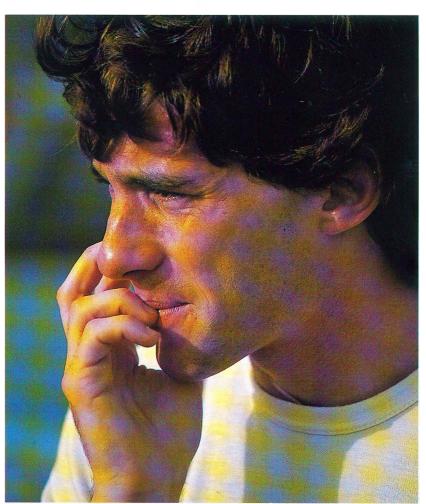
Third is Berger. He's been an excellent driver to have in a team as he's shown this year. He does tend to drive too hard and it is very, very difficult for him being in the same team as one of the truly great drivers like Senna or Prost. I think he has performed extremely well. If only he wasn't so tall I'd have him in my team. On reflection I'd like to have him anyway!

Number four is Boutsen, which might be a

surprise to you. I think he's very under-rated. Williams might well regret replacing him. He very rarely makes a mistake. He's quick, qualifies well and races well in the rain. If he was in a McLaren or a Ferrari he'd surely win more races.

My next choice is Nannini at number five. Part of my respect for him is not just for his driving, but the fact that he said 'No' to the team for whom it must be a great joy to drive for if you are an Italian, Ferrari. To say 'No', when he

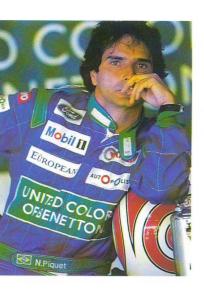
Below: 2:1 decision in favour of Ayrton.Left: Alain-the 'professor'-one of the all time greats. Far left: indecision left Mansell out of Ken's top ten. Bottom: Gerhard's too big for Formula 1.



said 'No', well, he went up in my estimation considerably because he had the guts to do it. I'm not saying he made the right decision..... I think he's still improving as a driver.

Next, you see, is Piquet, who I think has regained his old sparkle. I expect that this probably has a great deal to do with the fact that he's being paid on a \$/points basis. If you want to make him race you have to tempt him, and not with big retainers. He's a much improved driver this year. I thought he was over the hill a year ago, in retirement. Piquet's placing is in support of Nannini. If I rate Piquet highly and Nannini





Above: a late charge saw
Piquet figure prominently.
Right: Capelli's only rostrum
finish in 1990, France. Below:
Nigel lobbies Derek for support.

higher then that's good for Nannini.

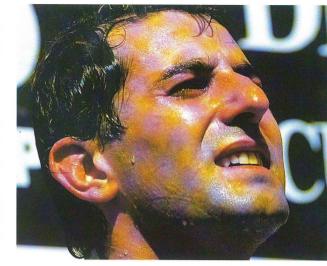
Patrese is seventh, the driver who goes on forever. He's done more GPs than any other, still has the determination and he looks right to me. I can understand Williams wanting to keep him. He's honest and his attitude is right.

Capelli is rated eighth, a much better driver than he has been able to prove this year. Leyton House have taken a bit of a dip this year for some reason, but I really expected him to get the drive in the Ferrari. He was very high on my list as a replacement for Jean. I told him I was interested in talking to him and he told me he wasn't making a decision until Ferrari had made theirs, but in fact we didn't speak again.

My next choice is perhaps the most improved racing driver of the year, Suzuki. He's got a great future ahead of him, he's been something of a revelation this year. It's nice to see that there's another Japanese driver coming on, particularly given their involvement in Formula 1 and someone who could be contesting the Championship in a year's time. He's kept the car on the road and is quick. Bernard is no slouch either. They're two very good drivers, I'm sure that Bernard will go places. But Suzuki has come from virtually nowhere, with very poor performances in the Zakspeed in '89, without Bernard's reputation in F3000; we didn't know about Suzuki....

My final choice is Donnelly, another driver who was high on our list to replace Jean. In his first full year of Formula One, racing against Warwick who I'm sure has helped him, he has performed as well as Derek, and that proves to me that he has the potential to do better.

Nigel, of course, certainly should be in the top ten, but there's a reason why I've left him out. I can't bring myself to put in my top ten a driver who can't decide whether he wants to race or not. If, as Stirling Moss says, he has been enticed by a fat cheque, that's not a good enough reason to go Grand Prix racing. I can't believe his heart is in it. I believed him when he said he was going to retire and he didn't. The problem with Derek, is trying to place him when there are so many other contenders. It's difficult to evaluate him until we see him in a competitive car. The reason Donnelly is there because he's been racing against Derek who's damn good, but as it's Donnelly's first year I have to rate him higher than Warwick.



DEREK WARWICK'S TOP TEN

Derek Warwick, one of motor racing's most popular figures, sadly departs the Grand Prix scene after 10 seasons. He leaves us his top ten from the track.

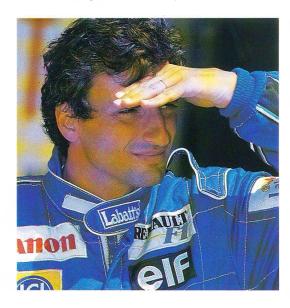
I have based my selection on what I have seen out there, going round the various circuits of the world this season. I have taken into account my feelings and observations as a fellow driver, and the qualities I would want to have in my team. It's a bit of a mixture, really.

- 1. Ayrton Senna. There is absolutely no question in my mind that Senna is No.1. He is No.1 in terms of his speed, his pole positions, his professionalism, his finishing record and his ability to get the most out of a team. A lot of people pointed the finger at him after Suzuka, but I honestly think all of us, as drivers, would have gone for the hole Alain left.
- 2. Alain Prost. Much of what I've said about Senna can be said of Prost. His record speaks for itself and he's still quick. To run against Nigel Mansell as he has, he's had to be quick. Confidence has been regained after the year before alongside Ayrton, when he didn't perform quite so well, he's always strong, always there and gets the best out of a team. I just feel it's shame he has been whingeing so much. I, like many others have always looked up to him, but recently he's lost a bit of credibility.
- 3. Nigel Mansell. Senna, Prost and Mansell are the obvious first three, all drivers I admire. While I have no doubt Ayrton is No.1, you could argue between Alain and Nigel as No.2. There's very little in it. Nigel seems to get stronger and



stronger. He's a good race driver, always gives 110 per cent. He has the ability to lead a team, and that's important.

- 4. Nelson Piquet. Nelson has driven with a lot of courage. Though not amazingly quick, he's been quick enough, also showing his experience and ability to lead the team. He can be well pleased with his season's work.
- 5. Martin Donnelly. Having worked with Martin this season I have been very, very impressed. It's not just because he's my teammate but because I've been able to see from close quarters just how good he is. And don't forget what he did against Alesi the year before. He was



often the quicker and I feel the guy deserves the credit. I hope we soon see him back on the track.

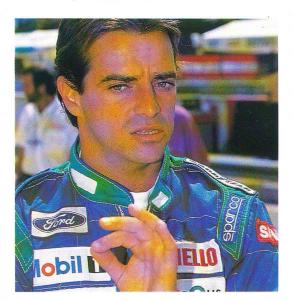
- 6. Alessandro Nannini. I think there's very little between four drivers for No. 6 but on balance I go for Sandro. He was getting stronger and stronger before that terrible helicopter crash. I think he learned a lot from his team-mate Piquet and was developing into something special.
- 7. Gerhard Berger. He's been rather disappointing but I think he's also had a lot of bad luck. His size, for a start, has literally been a big handicap in that cockpit and he's been a little psyched out by Ayrton. I think you'll see a much different Gerhard next season.
- 8. Riccardo Patrese. I've got a lot of time for Riccardo. He's a good, strong runner, not what I'd call a strong No.1, but he is a excellent No.2. A nice guy who always motivates the team, gets the maximum from the car and he's lost that chip he had on his shoulder. A really good team-man.

9. Thierry Boutsen. I think Thierry is underrated. He's been a bit left on the wire, as I have. He's won some good races, Budapest being a perfect example. Like Riccardo, a good No.2. He's fast, always brings the car home and a good guy to have on board PR-wise.

10. Jean Alesi. He's had an erratic sort of season, rather disappointing in the latter half. He's had a lot on his mind of course, and that is bound to affect a young driver. I have to say, though, that I don't think he's ever been as good as Donnelly. He's good, but I don't think he's exceptional. I think the Tyrrell is exceptionally quick, Modena proved this the first time he got in the car. I think Alesi's just got on the train which has carried him to the right station.

I think there have been other young drivers who have shown up well - Bernard and Suzuki in particular. There has been a lot of good driving as well as controversy. You have to remember that Grand Prix cars are difficult to drive. They're fast and you have only a split second to make a decision, so there are bound to be tight moments and there's bound to be controversy.

On a personal note I obviously feel low about being out of Formula 1 next year. Somehow my face didn't fit at the right time, but that's just the way the cards fell. Equally I'm very happy to be leading the Jaguar Sportscar team in '91 and hopefully, I'll be back for '92.



The editor would like to take this opportunity to express his gratitude and appreciation for the time and enthusiasm given by all three contributors.

WARWICK'S 10

1. A SENNA

2. A PROST

3. N MANSELL

4. N PIQUET

5. M DONNELLY

6. A NANNINI

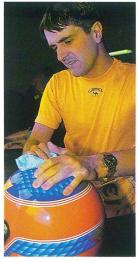
7. G BERGER

8. R PATRESE

9. T BOUTSEN

10. J ALESI

Left: an excellent No.2
Riccardo now has to play
second fiddle to Mansell.
Below: Nannini and Donnelly
ended their seasons in tragic
circumstances.



far eastern promise

The Japanese presence in Formula 1 for love or money....Kunihiko Akai

THE PAST THREE OR FOUR YEARS HAVE SEEN AN ENORMOUS INFLUX OF JAPANESE INTEREST IN MOTOR RACING AS A WHOLE, FORMULA ONE RACING AND PARTICULAR. THIS INTEREST IS ACROSS MANY DIFFERENT SPHERES OF THE SPORT: TECHNICAL, COMMERCIAL AND EVEN PROPRIETARY. MORE THAN HALF THE GRID ITALIANS BEING NOTABLE EXCEPTIONS) HAS SOME **JAPANESE**



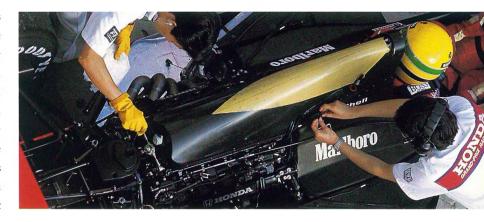
CONNECTION. FOR THE REAL REASON WHY THERE'S BEEN THIS EXPLOSION OF INTEREST WE HAVE TO GO BACK INTO JAPAN'S MOTOR SPORTING HISTORY. IT

IS WRONG TO THINK THAT JAPAN'S FIRST INVOLVEMENT IN FORMULA ONE CAME ABOUT BECAUSE OF MONEY. JAPAN WANTED TO GET INVOLVED IN FORMULA ONE BECAUSE THERE WAS A PASSIONATE INTEREST IN THE SPORT, QUITE SIMPLY FOR THE SAME REASONS AS MOST OTHER PEOPLE BECOME INTERESTED IN GRAND PRIX MOTOR RACING.

Honda's Formula One debut in 1964 was almost certainly Japan's first introduction to the top echelon of the sport. They probably didn't expect to be as successful then as they are now. However, they did enjoy sporting success, and their enthusiasm for success hasn't diminished. Japan's interest in motor sport was slowly growing when Honda first entered Formula One in the early sixties. Suzuka Circuit was constructed as an international race track, and in 1962 Japan held its first Japanese Grand Prix. It wasn't a Formula One, FIA World Championship Grand Prix but a race mainly for sports cars, like the Lotus 23. Coincidentally, Lotus's future team manager, Peter Warr, was the first Japanese Grand Prix winner.

In those days, Honda was becoming wellknown as a motorcycle manufacturer, while also trying to make the transition from two wheels to four wheels, manufacturing road cars. Honda, the company, was a very different company to the one we all know today. So why did Honda decide to go straight into Formula One? The simple fact is that they had made their challenge in the world of international motor cycle racing. The company enjoyed a considerable measure of success and became internationally known as Honda from Japan! Quite simply, they dreamt of the same kind of success in the four wheel world. Honda was fully aware of just how their sporting success had established and enhanced their status in the automotive industry throughout the world. So Honda went Grand Prix racing in 1964, having had experience in Europe in Formula Two racing. For the record, former Honda president, Mr Tadashi Kume, and current president Mr Nobuhiko Kawamoto were both team engineers at that time. Honda won the Mexican Grand Prix, the final round of the 1.5 litre World Championship formula and in 1967 they won the Italian Grand Prix, when the championship was run to a three litre formula. They had just those two victories to their credit when they quit Grand Prix racing a year later.

After Honda's withdrawal from Formula One, information about the Grand Prix scene virtually dried up in Japan. It became very remote. So it was clear that it was Honda who formed the link between Japan and Formula One. Without that courageous (outrageous?) initial



decision to go Grand Prix racing, we could not enjoy the extensive involvement that we have currently. In reality it's Souichiro Honda, founder of the company, whom we should thank. Honda went into Formula One without any background knowledge; simply confidence in their own engine technology. The first World Championship Japanese Grand Prix was held in 1976, nearly ten years after Honda withdrew from Formula One. It was the race in which James Hunt clinched the championship. Sadly, a fatal accident the following year resulted in the deaths of two spectators when Ronnie Peterson and Gilles Villeneuve crashed and spelt the end of the Japanese Grand Prix in only its second year. This was an enormous setback to Japanese motor sport at a time when it was booming.

As a result of the accident Japan and Formula One were thrown apart again, we would require about five years before thinking about involvement again. Once again, it was Honda who brought the Japanese spirit back into F1. When they withdrew back in the sixties, development began on environmentally friendly engines which were low on pollution and saved energy. But in the early eighties they began developing a Formula Two engine. They were working up to a Formula One comeback. Honda took on established Formula Two winners BMW and won. Nigel Mansell and Geoff Lees were the early drivers of the Ralt-Hondas. Honda established the Spirit Formula Two team and with Ralt enjoyed considerable success. They graduated into Formula One with Spirit, and returned to Grand Prix racing at Silverstone in 1983. This was the third time that Japan and Formula One would come together. It was also proof that Japan's economic status and industry

Above: Honda fine tuning keeps McLaren at the top. Below: Nakajima and Goto, a very honourable relationship.



were capable, once more, of facing up to the challenge of Formula One.

Once Honda was back in Formula One again, interest in the sport boomed. Honda went on to supply Williams, Lotus and McLaren after their toe-dipping exercise with Spirit. Piquet and Williams-Honda, Senna and McLaren-Honda and Prost with the same team would win both the World Championship and the Constructors Championship three years running. There's little doubt that Honda has dominated Grand Prix racing for several years. Of course, the 15 victories out of 16 races in 1988 constituted a fantastic record. There's every reason to suspect that the Honda/Formula One liaison will continue for many years. The former president of Honda R&D department, now president of the company, Mr Nobuhiko Kawamato, has said 'there is no reason for Honda to stop competing in Formula One.' When Honda started in F1, no one was interested in it in Japan, but Honda are just as active as ever before. Their influence is similar to that of Marlboro.



Japan's first regular Formula One driver, Satoru Nakajima, made his debut Grand Prix drive in 1987. This is how it came about. He has always been a favourite of Honda, and the company approached Lotus saying that they would supply the team with engines if they gave Nakajima a seat. The deal was done, and he became Japan's first regular Grand Prix driver. It

made Japan's drivers realise that it was important, not only to be quick on the track, but also to have support in the right places. Even if he wasn't World Champion material, he could join a top team and have Ayrton Senna as a teammate, all in his first year in Formula One. Honda was interested in Senna and Nakajima was their link. While Nakajima was making his debut, plans were under way to revive the Japanese Grand Prix at Suzuka, ten years after the Fuji race. It was like Christmas and New Year's Day rolled into one and from this point Formula One boomed again in Japan.

Not surprisingly there was another reason for the new-found enthusiasm: Fuji Television had begun to cover all 16 races in the championship. The power of the media, is of course, considerable and in spite of the fact that the race would be screened late at night because of the time difference, it soon became one of the most popular televised sports in Japan. It's probably hard for a European to comprehend just how powerful the media of television is in Japan. Fuji proudly announces that it has five per cent audience coverage of its Grand Prix programmes which go on at one or two in the morning. If Japan's current population is 120 million, then that means that the TV audience is six million per Grand Prix. You could probably call this a phenomenon in Japanese society and Japanese business has taken notice of this. A wide variety of companies from various fields are booking commercial time to coincide with Fuji's Grand Prix coverage, with little regard to the late night screening. There has been a kind of snowball effect, audiences have steadily increased since the programmes first went out and the programmes have attracted more commercial business, which in turn has become interested in Grand Prix racing, as has the power of the Yen.

The paradox comes, of course, when you think that Honda has been involved for so many years. Yet 1987 seems to have been the starting point of the latest craze: the year that Nakajima started, the Grand Prix returned and extensive TV coverage began. It might seem a little strange that all this has happened in four years. How can there suddenly be so many more fans? Or were they always there? Yet when I hear the names of Senna and Prost coming up in young



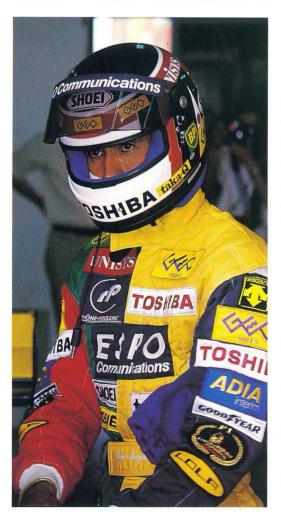


Above and right: Honda's Mr.

Goto and his engineers'
attention to detail and use of
high technology has ensured
incredible success.

girls' casual conversations, I wonder if this just might be a temporary short-lived fad.

Even if it is a fad, there's a powerful undercurrent that maintains the momentum of its popularity. It is economical, not political... Akira Akagi and his Leyton House company became the first Japanese company which actually moved into Formula One team ownership. That was back in 1987, and it was a completely different approach to Honda's involvement. Mr Akagi is a land developer based in Tokyo, and he has made his fortune with abruptly rising property prices. He's put his money into Formula One. However, he treats it as a business. He sees this investment



as helping him in future real estate dealings in Europe, and helping his relationships with European banks. 'It has been very useful,' he says. Other companies have taken his lead for other reasons. Espo, one of the biggest video rental companies, bought into the Larrousse team at the end of last year. Also Footwork, a transport company, bought the Arrows team and

have since gone on to pay the development costs of the Porsche engine that they will use in 1991.

There are a number of people who doubt the real commercial benefits of buying a Formula One team. Yet so far this view is only thought of as being sour grapes from those not wealthy enough to indulge. In 1989 however, Yamaha did join in, following Honda's example as an engine supplier. But their first year with Zakspeed was a total failure. However, they are now in agreement to supply Brabham in '91 with an engine developed after a year's sabattical. Those who know Yamaha's level of technical know-how will have been surprised by the company's failure in 1989. They have technology comparable to Honda, so 1991 should see a complete turnaround in fortunes, particularly now that they are associated with an experienced team.

Aguri Suzuki, like Yamaha, entered Grand Prix racing in 1989, becoming the second driver with a regular F1 seat but it was scarcely a success. However, 1990 has seen him show his true colours with the Espo Larrousse team and he's scored his first World Championship points. He is a very cheerful, frank guy, who has a smile for everyone. He has shown a very different side of the Japanese character to Western journalists in comparison with Nakajima who is thought of as being very shy. Japan and Formula One have edged a little bit closer again with Aguri's arrival.

Japan's economy will be strong for some years, of that there is little doubt. Many more F1 teams will come to Japan seeking sponsorship and many will be successful in finding Japanese companies that will wish to be involved.

Once again, I would like to emphasise that Japan isn't in Formula One just for the money. It is because of the passionate interest in the sport itself, just as Honda, Yamaha and Aguri have that same passion to compete in a very special sport.





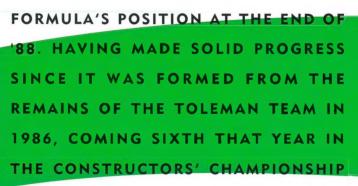
Above: Footwork's Chairman, Wataru Ohashi discusses the team with one of its previous owners, Jackie Oliver. Left: Suzuki has endeared himself to the western media. Below: Japanese passionate interest comes in all shapes and sizes!



the right formula?

A tale of two theories...Joe Saward of Autosport

IN MOTOR RACING THERE'S A THEORY THAT
IN ORDER TO BECOME COMPETITIVE, A
TEAM MUST IMPROVE FASTER THAN THE
OPPOSITION. THE QUESTION IS: HOW FAST
IS TOO FAST? THERE HAVE BEEN MANY
FLASHY ORGANISATIONS WHICH HAVE
COME AND GONE IN F1 AND OFTEN IT IS
THE LONG-TERM, CAREFULLY CONSTRUCTED
TEAMS WHICH HAVE PROVED TO BE THE
MOST RESILIENT. THIS WAS BENETTON



AND FIFTH IN '87 THEY BROKE THROUGH INTO THE BIG LEAGUE IN '88, FINISHING THIRD BEHIND MCLAREN AND FERRARI. SITTING IN BOARDROOMS, LOOKING AT FITHROUGH BALANCE SHEETS, THE POWERS THAT BE IN THE BENETTON GROUP HAD TO ACCEPT THE STARK FACT THAT THE TEAM HAD WON ONLY ONE GRAND PRIX, THE 1986 MEXICAN GP, WHEN GERHARD BERGER TOOK HIS B186-BMW TO VICTORY.

Thus it was that during 1989 a new attitude was obvious from Italy. More money could be found, more success was demanded and at a faster pace. Flavio Briatore, a laconic, silverhaired Italian was brought in. He had been active in Benetton's marketing push into the USA, but he knew little of racing. His brief from Benetton HQ in Treviso, Italy, was to turn the team around, put the organisation into hyper-drive and move rapidly into the top rank of the 'corporate' Grand Prix teams, alongside McLaren, Ferrari and Williams. Briatore received the backing to achieve the leap forward, something which had not always been the case in the early years. However, the old regime fought to protect the foundations that had been laid, they wanted a policy of constant rather than dramatic development and did not agree with the changes.

Briatore arrived at Benetton Formula in January 1989 in the role of Commercial Director. As an outsider he had a different perspective to the general way of thinking in F1. From the outside it is easy to see the reasons for Benetton's lack of success. The team had been forced to constantly change its engines which meant that a chassis/engine combination was never allowed sufficient development before it had to be thrown away and a new combination tried.

The team had been aware of this failing and in 1987 began a special relationship with Ford which should have solved the engine switching problems. It did not work out that way. Delays in development and rule changes meant that the team had to use three different Ford engines in

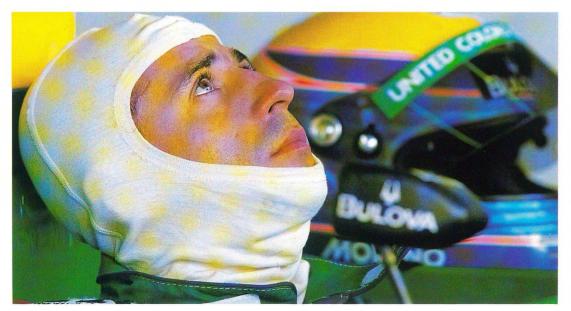
three seasons. Ford would play a major role in developing the team and Briatore, found an ally in Ford's motorsport supremo Michael Kranefuss, a company politician and a longtime survivor in the corridors of power at Dearborn. He wanted action - and fast.

1989 began with the new Ford HB engine being delayed and the B188 being used in the early races of the year. In Brazil, however, there was much celebrating for Johnny Herbert, the team's new boy, finished fourth in his GP debut. Johnny was still recovering from injuries he had received the previous summer in a huge F3000 accident at Brands Hatch but the then Benetton team manager Peter Collins had fought hard for his inclusion. Herbert's continued place in the team would become a very public battle, but it was symptomatic of a much deeper battle for control of Benetton.

Briatore's arrival had threatened to transform the team from British-based control to a system of more direct input from Italy. Collins, a brusque, no-nonsense Australian with years of Fl experience gained with Lotus and Williams, was convinced that sudden change was wrong. As the 1989 season progressed it became clear that Herbert's injuries were not fully healed. In Canada he failed to qualify and alarm bells began to sound. Collins continued to fight for Herbert but he came under increasing pressure from Briatore and Kranefuss to replace the youngster.

'What I am seeing at the moment at Benetton doesn't really convince me,' said Kranefuss openly. His message was clear. Herbert









Previous pages: Barnard and
Kranefuss-prime players in
Benetton strategy. Moreno's
prayers were answered. Team
spirit in Japan.
Above: Ford are key in the
teams plans. Below: Briatore at
the helm.

was dropped before the French GP and Emanuele Pirro was drafted in. At the end of August Collins left the team and then, from the shadows, Briatore emerged to take up the reins.

Meanwhile, over at Ferrari there had been similar political battles - once again triggered by the phenomenal successes of McLaren in 1988. This was accentuated by the death of Enzo Ferrari and Fiat taking control. In the middle of this fighting was John Barnard the originator of the McLaren MP4 series, a man considered by many as the top designer in Formula 1 and an undoubted innovator. When joining the team he managed to convince Enzo Ferrari to fund a British research and development facility. Thus was born Ferrari's Guildford Technical Office (GTO) where Barnard and his engineers designed the Ferrari 639 and 640 models, which were to lay the groundwork for the successful 641/2.

In June '89 Ferrari announced that Barnard would not be staying for 1990. Barnard and Prost began talks to form a team, to be run by Hugues de Chaunac using Renault engines. When these talks fell through rumours began that Barnard would join Benetton. In this respect Kranefuss was vital and he was soon expressing his interest in a GTO-like operation. 'I want to see an outside development design area that supplies a very small racing team with fully developed products.'

The departure of Collins ended the major opposition to the new regime. One philosophy was replaced by another and, backed by substantial finance there followed a string of announcements: three-time World Champion Nelson Piquet signed for the team in 1990, thus ensuring that Benetton had a 'top name' driver. Finally, in October there came the expected news, Barnard would join the Benetton Group of

Companies as Technical Director.

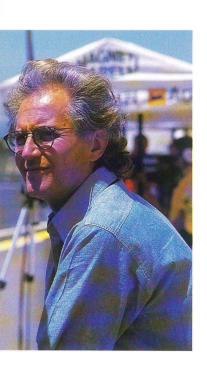
Thus was formed what the pitlane jokers began to call 'BBK Racing.' Briatore, Barnard and Kranefuss: a powerful combination keen to rebuild the Benetton team in their image, an image of cold, calculating professionalism, an image to rival that of McLaren. Quietly, away from the tracks, the trio began to recruit. A steady stream of people began to arrive at Benetton - many of the technical staff having worked with Barnard before: Peter Rheinhardt came in from GTO and Onyx: Giorgio Ascanelli from Ferrari and Mike Coughlan from Lotus, these were just the tip of the iceberg.

The existing Benetton design team, which had been together from the Toleman days, was led by Rory Byrne and Pat Symonds. They remained at Benetton's base at Witney, while the new men set up shop in Godalming. The project was shrouded in extreme secrecy. The theory was that the old regime would concentrate on the design of the B190, while Barnard and his crew would be looking further ahead to 1991, while keeping an eye on the progress of the B190.

Generally speaking, trying to have two top designers in the same team is unlikely to succeed, it's a bit like trying to fit two Supermen into a telephone box. It seemed only a matter of time before the old faithful would feel the wind of change and move elsewhere. Meantime the team had stumbled into a second win, Sandro Nannini being awarded victory in Japan after Ayrton Senna was disqualified. No-one, even within the team, really considered that to be a victory.

Over the winter, Briatore, Barnard and Kranefuss set their minds to forming a whole new support structure, backed up with the money necessary - to create a racing corporation similar to that which had made McLaren so successful in 1988. There were marketing men galore and it quickly became clear that this aggressive approach was bearing fruit: firstly with the Nippon Autopolis company, followed by a deal with the 'European' newspaper and, by mid-1990, a two-year deal with Camel.

What happened at Benetton is perhaps an indication of the general change which F1 has been undergoing since 1988, with the move towards a more corporate structure being necessary to compete at the sharp end. Detractors



will tell you that it has little to do with sport, but few can deny that it isn't necessary to progress.

Meanwhile, at the tracks, the B190 had been producing some useful performances. The reliance on a V8 engine was clearly a handicap in comparison to the outright power of the V10s and V12s, but the car handled well and the results began to flow. At the same time Barnard's research team was hard at work on the B191, designing a semi-automatic gearbox and testing other developments in secret, utilising the services of Brazilian driver Roberto Moreno, who had worked with Barnard when he was at Ferrari.

It was no surprise when, in October Byrne and Symonds decided to leave, heading off to join Adrian Reynard's new FI team, scheduled to enter FI in '92. The season was not over however. Sadly, just before the Japanese Grand Prix Nannini's impressive season was halted when he was seriously injured in a helicopter crash. Moreno was drafted in to replace him. The Japanese GP was a triumph, Piquet and Moreno scored the teams first one-two. They admitted later that victory might not have been possible if the McLarens and Ferraris had remained. In Adelaide it was a different story. While Senna drove into the distance, Piquet fought and passed



the other challengers. When Senna crashed, having pushed his gearbox too hard, Nelson took the lead and held it from a charging Mansell. It was a real victory - not an inherited one.

There is no question that Benetton Formula did well in 1990 but '91 will be a crunch year. Reputations in F1 are hard to make as the original management argued and they are quick to break as they found out. Next year Briatore, Barnard and Kranefuss will discover if they are right...and Collins will find out if he was wrong!

Above: Piquet has brought the team better things. Below: after an excellent season
Nannini ended his year early and sadly.



the big time

The rebuilding of one of Grand Prix's great names. Timothy Collings

IN 1990 TYRRELL RECLAIMED THEIR ONCE CUSTOMARY PLACE AMONG THE LEADING TEAMS AND OFFERED AN INSPIRING EXAMPLE TO MANY OTHER SMALLER-BUDGET OUTFITS.

AFTER SEVERAL YEARS IN THE DOLDRUMS THERE WAS NO SWEETER SIGHT THAN THAT OF



ICEBERG USA GRAND PRIX
FOR 30 LAPS. THE YOUNG
FRENCHMAN, WHO FINALLY
FINISHED SECOND BEHIND
SENNA'S MCLAREN, MADE
HIS REPUTATION THAT DAY
IN ARIZONA SETTING A

MARK FOR BOTH SELF AND TEAM. THERE IS NO DOUBT THAT ALESI'S WAS A SUPERB PERFORMANCE WHICH WON ACCLAIM, BUT HIS DRIVE ON THAT UNFORGIVING STREET CIRCUIT IN THE 018 AND SUBSEQUENT EFFORTS AT IMOLA AND MONACO IN THE NEW 019 ALSO INDICATED THAT THE TEAM AS A WHOLE WERE TRULY COMPETITIVE AGAIN, 22 YEARS AFTER THEIR FIRST ENTRY TO THE FIA FORMULA ONE WORLD CHAMPIONSHIP AND WITH AN ENGINE, THE FORD COSWORTH DFR, OF THE SAME VENERABLE VINTAGE.

No wonder 'Uncle' Ken was to be seen grinning so broadly throughout 1990. Not only had he managed to revive his team, but he had also pulled off something of a coup in securing a supply of Honda V10 engines 1991. It all pointed to a very promising future for the team from Tyrrell's Woodyard. How had Ken achieved the dramatic turnaround from struggling also-rans to front-line challengers in such a short space of time, and what were the leading components in the team's resurgence? Alesi, yes, but what else?

'It really goes back to the '87-88 season,' recalled Ken. 'We were at the end of the turbo era and at that time we entered the 3.5 normally aspirated Iim Clark competition. We were expected to win it, of course, as we were the most experienced team, and we duly did. At about this time we approached Harvey (Postlethwaite), who was then working for Ferrari; he wanted to come back to England from Italy and he agreed to join us. He gathered a team around him and began work on a new car. In '89, after extensive wind tunnel testing we produced a very good car. This was Harvey's work and for 1990 he went back to the wind tunnel and did another six months work which resulted in what everyone called our revolutionary 'droop-snoop'. It was a great job. It was one and a half seconds quicker in the wind tunnel and the same on the track.'

'At the start of the year we had a chance to take Pirelli tyres too. We knew they were very good qualifying tyres, but I must admit I was doubtful beyond that. I left it to Harvey and Jean-Claude Migeot to go and see if they were going to produce racing tyres as well. They went over and returned satisfied. I'm sure they were right. We have qualified well all year and the performances of Nakajima show how consistently good our chassis and tyres have been.'

'Jean Alesi, of course, is another factor. We signed him as a reserve for the '89 French Grand Prix and he ended up driving, ran second at one stage, and proved he had the strength and endurance to run a full Grand Prix. I had never met him before and only knew he was leading the International Formula 3000 Championship. Nothing else at all. Originally, I was thinking of Martin Donnelly, but he had an option at Lotus so I thought there was no point in giving him experience. Alesi proved an up-and-coming

driver. He gained experience with us and by the end of that year he was starting to learn from his mistakes, like all good young drivers.'

'Next year, we have the Honda V10. I am told it has more development in it for '91 and this is going be very good for us. If we get increased horsepower and improve another half a second with our chassis I think we can break into the top teams. Alesi will not be around then, he is leaving to join Ferrari, which I feel is a mistake as he does not yet have the experience. Stefano Modena will do a good job as his replacement, he has great potential and the ability to win races.'





Ken's outline description of the team's resurgence, inevitably the result of a combination of several positive factors working together, modestly failed to include his own involvement. His energy and enthusiasm, both remarkable in a man of 66 who has been in Formula One so long, provided the impetus. Born in West Horsley, Surrey, on 3 May, 1924, as Robert Kenneth Tyrrell, Ken joined the RAF in 1941, flew bombers in World War II, and established his timber business in 1946 with his brother Bert in Ockham, where his F1 cars are now produced. In the 50's, he fell in love with motor racing, drove a single seater 500cc Cooper and then moved into team management with the Cooper Formula Two

Top: a fantastic start in the
018 Tyrrell gave Alesi the lead
and surprised the rest of the
Grand Prix world. Above:
Tyrrell's heydays about ta
return?



team. A year later in 1960, he formed his own team and graduated towards Formula One. Jackie Stewart had joined him in 1964 and their partnership proved fruitful, inspiring a string of world titles between '69-'73, after which the team's fortunes waned. In 22 years' racing, he has enjoyed 23 Grand Prix wins.

Ken's decision to restructure the team by employing Spaniard Joan Villadelprat as manager and appointing his son Bob managing director relieved him of the day-to-day responsibilities and allowed him to plan long-term in his new role as chairman. It changed the team from an almost feudal family-style business into a modern company, full of ambition and fresh young blood. The timely and long-awaited arrival of planning



Top: 'Uncle' Ken back to the wall as Chairman. Above: revolutionary onhedral nose.

permission to rebuild the factory came at the same time as the recruitment of engineering director, Postlethwaite, and enabled the company to expand dramatically from 60 to more than 90 staff, all working in air-conditioned splendour.

Many eyebrows were raised in April when Tyrrell unveiled the 019, as created by Postlethwaite and Migeot. The car had a unique aerodynamic profile, thanks to the work in the wind tunnel, as Migeot explained. 'Aerodynamically, it is noticeably different from the 018. The underside of the nose section has been rounded and an anhedral wing concept introduced to give us a step forward in increased aerodynamic efficiency and handling.'

While these advances improved the handling and the lap-times, they posed some problems, as Postlethwaite admitted. 'The design is an exercise in improving the overall aerodynamics. The unusual layout of the front of the car posed a number of design challenges requiring a totally new front suspension, but still incorporating the proven mono-shock arrangement first introduced on the Tyrrell 018. The 019 chassis was developed from an idea which had been hanging around a long time, but which had been neglected through lack of opportunity. Until then what the team needed was a modern chassis which was relatively cheap to run and easy to set up and would bring the team back from the Stone Age.'

It was a different story for 1990. 'We already had last year's car and we had the Honda engine coming for '91 so it was a chance to put our ideas into practice. When you do something like this, there is always a chance something is going to turn around and bite you, something that is unforeseen. But I think we were pretty confident it was going to work and I think the performance has been just about what I expected. It is not really revolutionary, but it is a fair percentage better than the old car. Since I think the old car was state-of-the-art, I think this one puts us in a very strong position.... The trouble is now that everyone else will rush around doing similar things and our advantage will evaporate.'

Interestingly, Postlethwaite admitted that the 019 chassis would have been an unlikely proposition had he suggested building it at Ferrari, where the vast budgets ruled out inspired engineering risks! 'At Tyrrell one is much less hidebound by politics and opinions here so that one is able to take bigger risks. On the other hand, we don't have Ferrari's budget and there is no doubt in F1 that if you can throw enough money at a problem you can usually solve it.'

'Lack of money, however, does make you concentrate your resources so we only do things here which we know will pay us dividends. I would not dream of building an automatic gearbox. The risk-reward ratio for us would be totally negative, we would continually do a new aerodynamic layout because with that the potential reward is great. In the end, it just depends how you organise your resources.'

Postlethwaite explained the key elements in the team's return to the podium. 'To make something work in motor racing, you need a combination of ingredients which make up the whole.... That's how it has been with Tyrrell in 1990. We have had a good group of people and we have produced a good car which is easy to set up and we have run on Pirelli tyres, which have had their ups and downs..., but, we have generally been happy with them. Of course, we've had very good drivers. Alesi has been very quick, although sometimes the feedback has been lacking, but Nakajima has always given us very good information so I think the combination has worked very well. We have made a big step forward this year.'

Postlethwaite's overall satisfaction with the progress of the team, has not been equalled by his satisfaction with the race results. 'I couldn't have expected much more from qualifying, but our race performances this year have generally been pretty mediocre due to a number of factors. One was that problems with the Pirelli race tyre in the middle of the year and we had a few problems with reliability when, if the car had kept going, we would probably have got a point or two. We also suffered through Jean's lack of experience making a few errors when he would probably have been in strong points-scoring situations.'

As with Ken, there is an innate modesty about Postlethwaite and his work when he is interviewed. He is warm in his praise for the contribution made to the ream's recovery by Migeot. 'He is obviously a first-class aerodynamicist, very experienced and a fine theoretician; and nowadays in F1, teams need such people as the technical load on one person is too much. Producing a good car is very much about putting together the right team to design and build it and he has been very much part of this. We have a very good relationship, I tend to let Jean-Claude get on with what he can do and he does not worry about what I am doing.'

Migeot's assessment of the resurgence of Tyrrell is much like Postlethwaite's. He stressed the importance of the team's commitment to a development programme for the chassis and the wind tunnel work. 'It all started a long way back really. We were studying the basic shape and the basic way of achieving certain characteristics; we have been doing this over the last two years, first with the 018, then with 019 and again for next year. We knew a long time before that we would be racing a Cosworth engine this year so we put all our effort into chassis development. We chose maximum options, concentrating on the chassis

itself and not on the wings or the undertray. The aerodynamics of the car are really conditioned by its shape and that is why we studied this shape at the front end of the monocoque. It has given a good improvement in overall characteristics.'

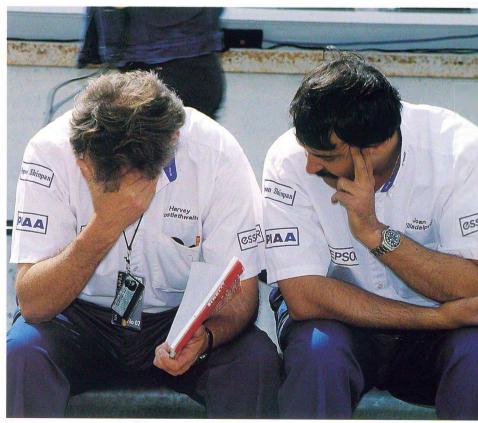
Migeot, looking ahead to next year is anticipating a great challenge with the Honda engine, but also sees certain problems. 'Obviously it will be more demanding on the engine, cooling side and the weight of the unit, the bigger it is the harder it is to achieve the optimum.

Asked if the departure of Alesi, with whom he had a special Gallic relationship, would be a major blow to the overall success, he replied: 'You know, the way I see it, F1 today is a refined cocktail of many things and Jean is just part of our cocktail. Certainly he has been a terrific boost, for not only his speed on the track, but also the way we worked. We have learned a lot from Jean, although is difficult to assess his contribution exactly. The only objective thing we know is what happened to our car last year with Michele Alboreto and Jonathan Palmer in it and where we are now with Satoru and Jean.'

Tyrrell now look forward to the new season with Stefano Modena joining from Brabham and Honda engines as used by McLaren this year. They are ready to compete in the top echelon.

Below: Nakajima holds the key to Honda power. Bottom: Postlethwaite and Villadelprat reminisce their Ferrari days.

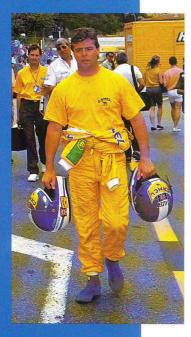




this is the man who...

Warwick's decade in Formula 1. Derek Allsop

ARRIVING IN SUZUKA THE NEWS INEVITABLY BECAME PUBLIC: DEREK WARWICK WAS JOINING JAGUAR FOR THE '91 SPORTSCAR WORLD CHAMPIONSHIP, SUFFICE TO SAY HE WAS OUT OF F1. DEREK, LEANED AGAINST THE GARAGE WALL, THE SLEEVES OF HIS OVERALLS



ABOUT TO START PRACTICE, THE PENULTIMATE ACT OF A DRAMA THAT HAD RUN FOR A DECADE. THE REALISATION GNAWED AT HIM AND HE COULD NOT HIDE THE PAIN. 'IT'S AN AWFUL FEELING,' HE SAID. 'I AM GOING ABOUT MY WORK IN THE NORMAL WAY AND YET IT'S DIFFERENT. IT'S SUCH A STRANGE, AWFUL FEELING, KNOWING YOU HAVE ONLY TWO RACES LEFT. THEN

IT'S OVER, FINISHED. I DON'T WANT TO BE BITTER, IT'S NOT LIKE ME TO BE LOW. BUT RIGHT NOW I FEEL... CHEATED. I'M CONFUSED AND SICK OF THE WHOLE SITUATION. I HAVE TO BE THANKFUL THAT I'VE HAD A GOOD INNINGS. IN MY MIND I'M NOT ACCEPTING IT'S THE ABSOLUTE END OF FORMULA ONE FOR ME, THINGS HAPPEN AND CHANGE SO QUICKLY IN THIS GAME YOU NEVER CAN TELL...'

'For the time being, though, it looks as though it's over and that leaves me feeling professionally unfulfilled. Racing isn't everything to me and I know that in many ways I'm a very lucky guy. I have a lovely family, nice home, other business interests and a good standard of living. And yet there's a gap, I've not had the success I wanted and know I could have achieved.'

Such a lament is not uncommon, of course, in what is the top and toughest class of motor racing. At the very pinnacle there is only room for one or two, yet he is not alone in believing he could have been there. There is always a danger, whether discussing or writing about Warwick, the heart could rule the head. The sport, certainly the modern sport, can have known few more popular individuals. The swagger, the smile, the exaggerated gestures and the sheer ebullience of Delboy will be sorely missed. But so, too, will his bullish enthusiasm on the track.

The early days were the Toleman days, the days of the 'Flying Pig,' the character-building days. It took Warwick the whole of 1981, his first season in Formula One, to make his Grand Prix debut, in Las Vegas. It took him until late August, 1983, to get his first points. That breakthrough came in the Dutch Grand Prix, at the seaside circuit of Zandvoort. Warwick brought the Toleman home in fourth and there wasn't a dry eye in the house. The little team that had been able to laugh at itself had won the admiration of the pit lane. So had Warwick. He recalls: 'When I got out of the car everyone was crying. It was amazing. It just showed how everybody felt about us. We all have moments that we will always want to re-live. That was one of mine.'

Warwick completed the season with a run of four consecutive points-scoring drives. The word was spreading that here was a star in the making. Renault were willing to listen and when they converted their interest into a firm offer, Warwick felt it was an opportunity he had to accept.

Although the team and their driver, Alain Prost had missed the Championship in '83, Warwick had every reason to believe the turbo pioneers would provide the passage to glory. Rio suggested he was safely on course. He led for part of the race and glimpsed the prospect of victory until he had to retire his broken car. Little could he have suspected it was as close as he would ever

get to a Grand Prix win.

He was second in Belgium and again in Britain, behind Lauda and the all-conquering McLaren TAG. Under pressure to sign a lucrative new contract with Renault, he succumbed amid the euphoria of his home race. Alas for Warwick, his F1 career had already peaked. Renault spent 1985 sliding into oblivion and Warwick almost went with them. He lined up a 1986 deal with

Below: Derek certainly not over the hill. Bottom three: Toleman days, Renault stardom and Brabham recall.



Lotus, only to have it blocked by Ayrton Senna, who argued that the team did not have the resources to sustain two frontline drivers.

It says much of Warwick that he came to accept the Brazilian's reasoning. 'I felt a lot of malice towards Ayrton at the time because I had nowhere else to go,' he said. 'I'd put all my eggs in one basket and Senna smashed them. Yes, I was very angry. As time went by, I began to see his point and even developed some admiration for him. He took a lot of stick over his stance and yet stuck to his guns, believing he was right. Perhaps that is what makes him so special. He's so single-minded he doesn't care what anybody thinks.'

Warwick was back in Formula One in June '86, with Brabham, following Elio de Angelis' fatal accident. In 1987 he moved to Arrows, where he spent three generally unspectacular seasons. Surely, he felt, his luck would change in 1990. He was finally going to Lotus. With Camel's continued backing and Lamborghini's VI2 power, the Norfolk camp were talking about the dawn of a new era. Warwick did nothing to









dampen the optimism. No, they wouldn't instantly win races and threaten the big boys, but they would make their presence felt and compete for the podium. They were even thinking in terms of a 40-point target. Warwick said: 'This move has come at just the right time for me. I've won in every form of racing I've done, go-karts, stock cars, Formula Ford, Formula Three, Formula Two and sportscars. The only exception is Formula One, and my career won't be complete if I don't win at this level. Had I made different decisions in my career, such as going to Williams in '85 instead of staying at Renault, I'm sure I would have been winning Grands Prix and would



Top: as always 110%
commitment from 'Delboy'.
Above: three years at Arrows
brought little reward.

have been a World Championship winner by now. But that's gone, it's history. I'm looking ahead.'

'Apart from wanting that first win I keep going because I love motor racing. If there are drivers out there who don't enjoy it and I think there are - I just feel sorry for them. I still get a buzz every time I sit in a racing car, every time I start up the engine. After well over 100 Grands Prix I still give 110 per cent commitment. People don't realise how easy it is to win in a good car, but it's bloody difficult to finish 10th in a bad car. Hopefully I can get that good car and get that first win. Obviously time is running out, but I'm younger than several other drivers and I still have plenty left in me yet.'

Time was running out more quickly than he realised. Lotus managed only a limited winter test programme and simply never made up the lost ground. Far from chasing success, the team were

scrambling for survival. Warwick salvaged a point in Canada and two in Hungary. The struggle was no reflection on his driving, or indeed, that of rookie team-mate Martin Donnelly. That, however, was of little consequence or consolation. Another dream was in ruins and as Warwick reached his 36th birthday he made it clear he was looking elsewhere for his future.

Warwick's rounds took him to Williams, and for a while there seemed a slight hope. The Didcot team, engine suppliers Renault and a batch of sponsors, were anxious to return to the mainstream. They demanded a star, but Senna had decided to stay with McLaren, Alesi had his sights on Ferrari and Mansell was still insisting he would retire at the end of the season. If Boutsen was departing, there had to be a chance. After the Italian Grand Prix, the chance was gone. Warwick and another hopeful Briton, Martin Brundle, were told their services would not be required. Mansell was on his way back. Ligier had been a distinct possibility but now Boutsen was being confirmed and soon Erik Comas would be named as his partner. A return to Arrows, perhaps? It wasn't to be. Brabham? No, they were bringing back Brundle from his second stint with Jaguar. Warwick was resigned to his fate. 'I'm out,' he said solemnly.

It seemed all the more cruel in light of events the previous few weeks. At Monza. Warwick had plunged into the barrier at the Parabolica. The Lotus was launched back on to the track and slid, upside down, for more than 200 metres, other cars flashing by either side. Had it been a narrower track... Warwick, satisfied the road was clear, extricated himself, and then broke into a run. He was unhurt, so his only concern was to get the spare and bring it round for the re-start. All around this great circuit they cheered and roared their approval.

Warwick's courage would be examined again at Jerez. Eight minutes from the end of the first qualifying session, Donnelly's Lotus smashed into a barrier. The front of the car exploded and the Ulsterman was thrown onto the track. The pictures of the motionless, gruesomely twisted figure will stay with us forever. Warwick was soon on the scene. He called his team on the radio, imploring them to send all the help they

could muster and to take care of Martin's fiancee. Later Warwick personally comforted her, all the time trying to hide his deepest fears. 'It wasn't easy to tell Diane he was all right when I was really thinking the worst,' he admitted.

The show would go on. It always does. But would Lotus and would Warwick? Driver error had been ruled out and there was Donnelly, seriously injured. A couple of suspect areas of the car were strengthened and Warwick was burdened with the choice of driving or not. 'It was the most difficult decision I've ever had to make,' he said. 'They told me what they'd done and I felt that if I didn't have faith in my engineers I shouldn't be racing.' Warwick not only drove on that Saturday, he qualified 10th on the grid, his highest position all season. He was again taming the reluctant beast in the race when the gearbox gave in. Among the Lotus rank and file, admiration for the man reached new heights.

Outside the team, some felt it was folly to allow him out in such circumstances. The problem was, of course, judgments were clouded by severe pressures. Here was a team, and a driver, desperately attempting to cling onto Formula One status. Whatever the rights or wrongs of that issue, no-one could dispute the character of the driver involved.

Mansell announced that the Williams Renault package provided him with a Championship chance he could not turn down, and all the other slots were duly filled. Warwick spoke to Mercedes and Peugeot, but elected to renew his association with Jaguar. He had already signed a one-year deal when Sandro Nannini had his helicopter accident. It appeared Warwick was one of the candidates to replace him and although he maintained a deliberately low profile, he naturally thought he might be considered. To his obvious dismay the Jaguar team announced his signing as he set out for Japan. He had no get-out clause, so there was no point tormenting himself with lingering dreams. It was time to put on a bold face. 'The Jaguar looks really good for next year and I'm sure we'll be competing for the World Championship.'

Saying goodbye to this was a wrench and he couldn't disguise it. I invited him to glance up and down the pit lane and attempt to explain some of the driver selections. His facial

expression provided a perfectly eloquent response. Yet he said: 'Unfortunately it's not always about sheer ability. There are so many other considerations in Formula One these days. Certain sponsors will demand drivers of certain nationalities and teams anxious to put together their budgets have to comply. Logic doesn't necessarily come into it. I still believe in my ability, in fact I reckon I've been driving as well as ever this season. The problem is your face has to fit, you have to be in the right place at the right time and so on. British drivers find it tough because of the sponsorship situation.'

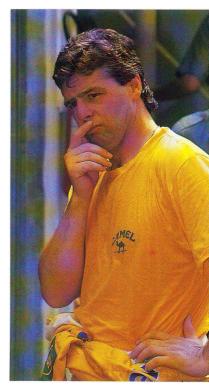
'I'll pick myself up again. I'll be positive.

Below: Camel Lotus promised much, but finishes were few and far between.



Besides, I can look back on a lot of good times and memorable moments in my career. You know, when I was a boy all I wanted was to win the Super-stocks World Championship. That was my ambition. I had no thoughts of Formula One in those days. You always remember your first wins in every formula, and I've won in every formula but F1. Those first Grand Prix points at Zandvoort were very special. I did actually lead races in Brazil and in Canada, last year. And I tell you, the sensation of driving the Brabham BMW turbo with 1300 bhp was something else. Yes, there's lots to look back on and hopefully plenty to look forward to. I'm going to have a real go in that Sportscar World Championship and who knows... if I've learned anything from this game it's that anything is possible.'

Whatever you tackle in the future, Derek, good luck and thanks.

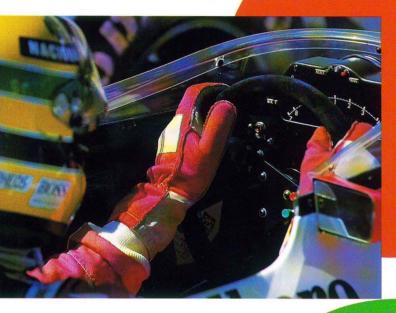


in the cockpit

Behind the wheel with Ayrton. Wagner Gonzalez & Bob Constanduros

DRIVING A FORMULA ONE CAR IS NOT JUST WORKING ON SET-UPS AND CHOOSING TYRES.

TALKING TO AYRTON SENNA, 1990 FIA FORMULA ONE WORLD CHAMPION, YOU FIND



THAT IT'S A MIXTURE OF BASIC PRACTICAL ELEMENTS, SUCH AS NOISES, REACTIONS AND VIBRATIONS AND WHAT COULD BE TERMED AS 'BRAIN SPEED', THE TIME IT TAKES TO REACT TO THOSE SENSATIONS.

HE'S FASCINATED BY THE BRAIN'S POWER, AND HIS CONSTANT SELF-ANALYSIS KEEPS HIM ON HIS TOES AND COMPETITIVE. THERE ARE, HE SAYS, A BILLION PIECES OF INFORMATION TO BE ABSORBED AND PROCESSED BY THE BRAIN. HE NEEDS TO BE COMFORTABLE, AND TO BE ABLE TO WORK IN THE BEST POSSIBLE ENVIRONMENT, AND HE WORKS ALMOST SELFISHLY TO CREATE THAT ENVIRONMENT, EITHER IN THE COCKPIT OR OUTSIDE IT. BUT WHAT ABOUT THAT COCKPIT, HOW CRAMPED IS IT REALLY?

'I think there are some that are very cramped,' says Senna, 'but the cars I've driven in F1 fortunately have not been. There's enough room to move the legs around and not get the wrong pedals. It's a compromise, between the performance engineers must get from the car and a driver's comfort. You have to be comfortable so that you can be consistent and the McLaren's particularly good in that area. The seat is specially moulded in carbon fibre to the driver's body. Contact between the rigid carbon fibre and the body is softened by fireproof overalls. 'I've been driving what is basically the same car for two years, and that has helped to improve my driving position considerably,' says Senna.

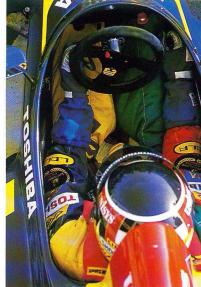
He is strapped into his car by a six point harness which attaches to a heavy buckle, contact and someone is shifting down behind you, then you may notice that.

A modern helmet limits a driver's vision quite a lot, but if Ayrton is relaxed, he's able to identify marshals or even spectators during a lap, 'vision you have from the helmet varies from track to track, and also according to your mind. Actually you can identify so many things, yet sometimes you see the track and nothing else.'

Ayrton remembers one particular experience in a Monaco qualifying session. 'I was running on race tyres in that qualifying session so that I could do a lot of laps. Everything was so well adjusted that I managed to keep improving my times, lap after lap. Car and man became completely integrated, a fantastic experience and quite novel. The quicker I went, the narrower the







with the body now softened by a large pad. 'Once you have six points attaching you to the car, you must make sure that it's comfortable. That's why I prefer to stay in my car on the grid because it's not easy to find the best adjustment. When you first sit in the car it hurts a bit, so once I've made myself comfortable in the cockpit it's better not to start again just before the race.'

Ayrton considers ear plugs essential: 'Otherwise you couldn't cope with the engine's noise. You can still hear your own engine all the time and you can sometimes hear the engine ahead of you. Depending on how close you are, you can also hear the gearchanges, missed gears and any misfires. You can't hear anything behind you, only under braking-if you're shifting down,

track became because of the increase in speed.'

Monaco is one circuit where a driver gets an impression of speed. 'It's all relative to reference points,' explains Ayrton. 'At Monza, for instance, the straight is wide, your reference points are further away from you even though you may be doing 320 kph. At Monaco, when you come out of the tunnel, you're probably doing 40 kph less, but your points of reference are that much closer. Of course, you still feel the speed at Monza when you go at 330 kph at the end of the straight, particularly when you have to slow the car so much from its maximum speed.'

Apart from the speed, the G Force has a large impact on the driver. 'There are some corners that can be extremely stressful after a few



Previous page: Ferrari cockpit
incorporates optional extras:
suede seat and automatic
gearbox! Variations upon a
theme, all three 'affices'
conform to the same
regulations.

laps, the corner before the pit straight in Portugal for instance. You have so much grip from the tyres throughout a race that it becomes hard. You have to keep your head level and your body correct. If you have a peak, that's OK, but the problem is when the load goes up and up, and remains there for two, maybe three seconds maximum, but it's a lot and it seems forever sometimes. The Parabolica at Monza, where you are accelerating in the corner, is another example. But you also get quite good G-Forces in slow corners if they are long. It doesn't matter if they



Above: all that glitters is not gold, Dalmas seated in the AGS. Left: the ominous interior of a McLaren-Honda. Far left:
Boutsen concentrates on the TV signal while the front suspension is adjusted.

are slow but if they are tight and still long, and you have grip, you keep feeding in the power, accelerating and that's when you get G-Forces.'

'Changing gear is an extra problem. You have to be precise with the gearchange of course, in the right place with the right amount of revs and when you change the cars situation and position and you have only one hand on the steering wheel to control the load. Your body is up with one hand going away and back, and you are having to unload your tightness and that is an extra effort. During a race, you have to relax as much as you can because you can't cope with too much tightness for a long time. It can compromise your performance late in the race so you have to find a compromise for the performance being good enough for a good pace, and make sure that you have the ability to go throughout the race in the same way. Actually you have to have something extra left in case you need to give it late in the race.' Tension rises especially during qualifying Senna admits to holding his breath, particularly in fast corners: 'Holding your breath on some occasions gives you that little extra sensitivity when the car is on the edge and when you must predict what might happen to the car almost before it reacts and you have to correct it. But you can only hold your breath spasmodically for a few laps because you get tired, you're not putting the right amount of oxygen through your body. It makes your heart pump more and your heart rate goes up. It's not something you can cope with for very long.'

The car provides its driver with several sensations, but vibration, curiously, is not a major problem. 'We don't have much vibration when the tyres are new and well balanced.' They sometimes get out of balance because of wear and then you start to have vibration on the steering wheel and on your body and sometimes that can disturb your visibility. Turbulence is more often a problem at high speed circuits. Cross winds and even tail winds cause turbulence inside the cockpit and the driver's head tends to move around a lot. It makes it difficult for him to maintain concentration, accuracy and precision.

Drivers suffer through the seat of their pants too. They can feel the car bottoming every time it sends up one of those spectacular showers of sparks from the titanium undertray. 'We run low to the ground because of aerodynamic effects and when running low the suspension travel must be limited to the absolute minimum. The ideal is just to shave the ground because you are able to make the best of the aerodynamics. Sometimes you can cope with the bumps and sometimes you have to raise the car because it's just too much and it really has a negative effect.'

On some occasions the drivers step from their cars looking fresh; on others, when the race is very stressful, they sweat a lot. Senna reckons to lose maybe two or three kilos per race, and he doesn't have a lot to lose, yet it is not brute strength that is required of a racing driver. 'You don't need a lot of power. You need durability and endurance, because of the heat, the vibrations, the turbulence and the stress in order to maintain accuracy and consistency. You need endurance in the whole body, but particularly in the upper body, the arms and the neck.'

'I have learned over the years that not so much power is necessary providing you have got a car that is properly designed and built without abnormal loads on the steering. Everything is designed to work together. There's special geometry with the steering rack and so on, designed in order to give us drivers not too heavy a steering wheel. It's not light, but not heavy, so that we can drive precisely and consistently.'

For Senna, however, it is what is going on in his head that holds the most fascination in racing and what might be called 'brain speed' in computer parlance. 'A million things go through your mind in a very short time.' It is the brain's capacity to look, sense things visually, smell



things, absorb things through the body, vibrations and movements, and process them alltogether with the technical things that are happening and all the information from before the race about engine, temperature, tyre performance, brakes, gearbox, circuit conditions. There are the people ahead of you, people behind you, things that are relative to those cars, the gaps, which stage you're at in the race, a billion things to process, and you have to come up with the right answers, the right actions and reactions. It's a tremendous challenge to get it right, time after time.

'That's what motivation is all about. Feelings of speed, emotion, challenge, unknown situations: they come, you process them and you have to get them right. That's what makes me race. Only when I am driving does my body and brain work in such a way, so intensely.'



milestones

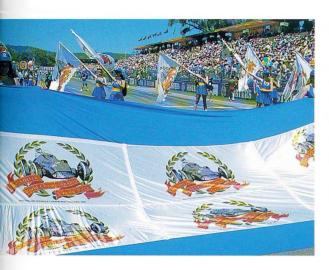
Broken records, broken hearts. Joe Saward of Autosport

MOST RACING DRIVERS TELL YOU THAT
THEY DO NOT CARE FOR RECORDS. THE SPORT
IS ALL ABOUT WINNING AND THE IMMEDIATE
THRILL WHICH THIS PRODUCES. TO BEAT
SOME CRUSTY OLD RECORD IS NOT
SOMETHING THEY CHASE. IT IS NOT VERY
FASHIONABLE. DRIVERS, GENERALLY, LIVE
FOR THE MOMENT AND KNOW LITTLE OF THE
PAST. YET TO WATCH PROST STRIVING
TOWARDS THE MAGICAL TOTAL OF 50 GRAND



PRIX VICTORIES AND TO SEE SENNA IN SPAIN AFTER SECURING HIS 50TH POLE POSITION TURNED THAT THEORY ON ITS HEAD. MCLAREN'S RONDENNIS TALKS WISTFULLY ABOUT WINNING EVERY

RACE IN A SEASON. IT'S A VIRTUALLY IMPOSSIBLE AMBITION, GIVEN THE COMPETITIVENESS OF MODERN F1, AND YET IN 1988 MCLAREN CAME WITHIN A COUPLE OF LAPS OF DOING THAT. IF SENNA HAD NOT STUMBLED OVER A BACKMARKER AND GONE OFF INTO A SAND TRAP AT THE ITALIAN GP THAT WOULD BE HIS HISTORY NOW.



Like as not 1990 will be remembered as another season in which Senna and Prost battled for the World Championship; as a year in which McLaren domination was challenged not only by Ferrari, but also by Williams and Benetton. It will be recalled as a year when landmarks were passed and anniversaries were marked.

The 1990 season was the 40th year of the FIA Formula 1 World Championship, and the year in which we celebrated the 500th World Championship, The first World Championship race took place on 13 May 1950 at Silverstone. The anniversary coincided with the 1990 San Marino GP, but it passed almost unnoticed. In the 40 year history of the World Championship only two Grands Prix have taken place every year; the British and Italian. France missed just one race in 1955 in the wake of the disastrous Le Mans accident. But if the World Championship's 40th birthday passed without much comment, the 500th World Championship event, the 1990 Foster's Australian Grand Prix, was celebrated in Adelaide in November. It was a good excuse for a big celebration and, as it coincided with the final race of the year, it was cause for much partying.

If you read through the list of 500 World Championship race winners you will potter through the Prosts, Clarks, Stewarts, Sennas, Laudas, Fangios, Mosses, Piquets, Mansells, Fittipaldis and so on, but way down at the bottom of the list you will begin to become confused - who on earth was the Mad Russian Bill Vukovich, and for which Grand Prix team did Pat Flaherty drive? Sam Hanks, Troy Ruttman, Bob Sweikert, Johnny Parsons and Lee Ward. Who were those guys? The answer is simple.

They were not Grand Prix winners, but they did win rounds of the World Championship. For the purists, you see, the 500th World Championship race does not coincide with the 500th Grand Prix. The 500th GP will not actually take place until the 1991 Belgian event in August. Why? Because, for some reason best known to the organising bodies of the sport, between 1950 and 1960 the Indianapolis 500 was counted as a round of the World Championship. These 11 Indy 500s were not contested by the Grand Prix regulars, but rather by the heroes of Indianapolis. Yet they were included in the World Championship simply because of the standing of the Indianapolis 500. It is a most curious statistic.

So also is the strange notion that a driver can end his career with half a Grand Prix victory to his name. In the 40 years of the World Championship this has happened twice: in 1951 when Luigi Fagioli (the oldest GP winner of them Left: celebrations for the 500th GP were thrown over the track in Adelaide. Below: Silverstone was not quite the facility it is now when it hosted the first ever GP in 1950.



all at 53 years of age) shared a car to victory in the French GP. Such peculiarities are still possible, as happened to German Jochen Mass who had the misfortune to win half a Spanish Grand Prix in 1975 when the race was stopped after an accident. Half points were awarded.

In passing only two drivers managed to win their first World Championship event: Giuseppe Farina, who won the very first race in the 1950 season and Italian Giancarlo Baghetti who won the 1961 French GP.

Going back to the old days is fun, but it is also instructive. Nigel Mansell this year equalled Stirling Moss's record as the most successful English Formula 1 driver holding 16 wins apiece.

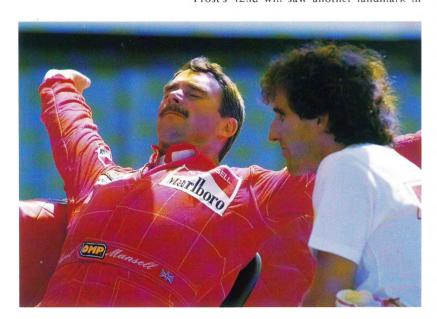
Mansell's win in Portugal was also significant for another reason. It marked the



Right: Riccardo is now the oldest and longest serving F1 pilot. Below: Ferrari winners, Prost and Mansell can each claim other milestones: Alain the prolific Grand Prix winner, Nigel equalled Stirling's record for GP wins.

132nd victory for a British driver, meaning that the British have won over a quarter of all the World Championship races contested. Much of this incredible total was due not to Englishmen, but to two extraordinary Scottish talents: Jim Clark and Jackie Stewart who notched up 25 and 27 wins respectively. Until Senna's score engulfed these two only one man had done better, Alain Prost, winner of a record 44 Grands Prix.

Prost's 42nd win saw another landmark in



F1 history, for it marked Ferrari's 100th Grand Prix victory. When people outside racing ask what is so special about the Ferrari name? The answer is the success which the team has enjoyed since its first World Championship victory at the British GP of 1951 when Argentinian Froilan Gonzalez defeated his fellow countryman Juan-Manuel Fangio in an Alfa Romeo. After the early battles with Alfa, Ferrari began to dominate racing to such an extent that from the Belgian GP of 1952 Alberto Ascari was undefeated until the French GP the following year, a winning streak of nine races. It is a record which no-one has approached since. Before his death in 1955 Ascari had scored 13 World Championship wins for Ferrari. Other great drivers added to the Ferrari total: Mike Hawthorn (three) Peter Collins (three), Fangio (three) and Tony Brooks (two). If the Fifties were glorious years for Ferrari, the sixties started well with Phil Hill, Baghetti and Taffy Von Trips taking the famous shark-nose 156s to five wins in 1961. The rest of the decade was less successful, but Ferrari continued to add to its total of wins with the great names of the day: John Surtees (four), Jacky Ickx (six).

At the 1974 Spanish GP a young bucktoothed Austrian scored Ferrari's 50th World Championship win. His name was Niki Lauda and for the next four seasons he was the powerhouse behind a string of Ferrari victories. By the time Lauda left Ferrari at the end of 1977 he had scored 15 wins while Clay Ragazzoni, Lauda's teammate for much of the time had notched up four. Ferrari remained the team for which the best drivers wanted to drive and the roll of honour grew: Carlos Reutemann (five), Gilles Villeneuve (six), Jody Scheckter, Michele Alboreto and Rene Arnoux (three a piece), Didier Pironi and Patrick Tambay (two each), Gerhard Berger (four) and Nigel Mansell (three). Then came Prost, his third Ferrari win taking the team to an unprecedented century.

Although in recent years McLaren's rate of scoring has been dramatic, the British team still has a long way to go before Ferrari is toppled from the top of the GP winners list.

Thirty-nine years after the first Ferrari World Championship race win, Riccardo Patrese celebrated the passing of another incredible landmark when he started his 200th Grand Prix at the 1990 Foster's British Grand Prix. Patrese began in F1 racing in 1977, a bright young charger with the Shadow team. His career to date has taken him to the Arrows, Brabham, Alfa Romeo and Williams teams and yet he has won just three races, the most recent being the 1990 San Marino GP; his 195th start . A statistician will tell you that Riccardo will only need to compete in another 84 races before he reaches the most remarkable achievement of having competed in exactly half the World Championship events in history. In these modern times the F1 calendar has been pegged at 16 races a year, so Riccardo will need to race for another five seasons and four races before he reaches that goal, midway through 1996. By then Riccardo will be 42 years old. It may seem a long way in the future but it is not a statistic which is out of the question.

In F1 racing achieving a 50% record in anything, be it competing or winning, is virtually impossible, but it is not unattainable. At the 1990 Tio Pepe Spanish Grand Prix Ayrton Senna recorded his 50th pole position. This in itself is remarkable for the Brazilian's brilliance in qualifying has eclipsed everything that has one before. The previous pole position record stood to the great Jim Clark, who won 33 poles in 72 GPs. Senna's 50th pole came in just his 108th race and with him taking pole as many as 13 times in one season, as he did in 1988 - he is likely to attain the magical 50% record within a couple of seasons.

The 50% record is something which has been achieved this year by the Champion Spark

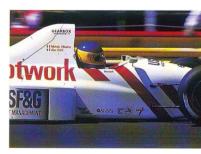
Plug company which celebrated its 250th Grand Prix win at the French GP in July. Two hundred and fifty wins in 491 races is not a record to be sniffed at. Champion has been supplying spark plugs to F1 racers since 1948, two years before the World Championship even began. Strangely, the company's first official FIA World Championship victory went to Johnny Parsons in the 1950 Indianapolis 500.

Not all landmarks are glowing successes. Some are a measure of lack of achievement. This year saw Italian Andrea de Cesaris reach a spectacular landmark after 10 seasons in GP racing. He had the misfortune to break a record which has stood since 1983, when Jean-Pierre Jarier quit F1 after failing to win a race in 136 attempts. De Cesaris broke that record at the Brazilian GP where, he spun his Dallara out of the action at the first corner. Andrea is still only 30 years of age, so his record can be expected to increase in the coming years, if he continues to find drives and continues to lose races.

Another astonishing landmark to a lack of success is shortly to be reached by the Arrows team. At the end of the season the team had started cars in 198 GPs without winning a single one. This makes the Milton Keynes outfit quite the least successful team in the history of F1, yet it remains one of the more stable in the modern F1 paddock. With Porsche engines for the 1991 season, Arrows might finally chalk up a first win. The celebrating, should this occur, will probably be far greater than that at the 500th World Championship race...

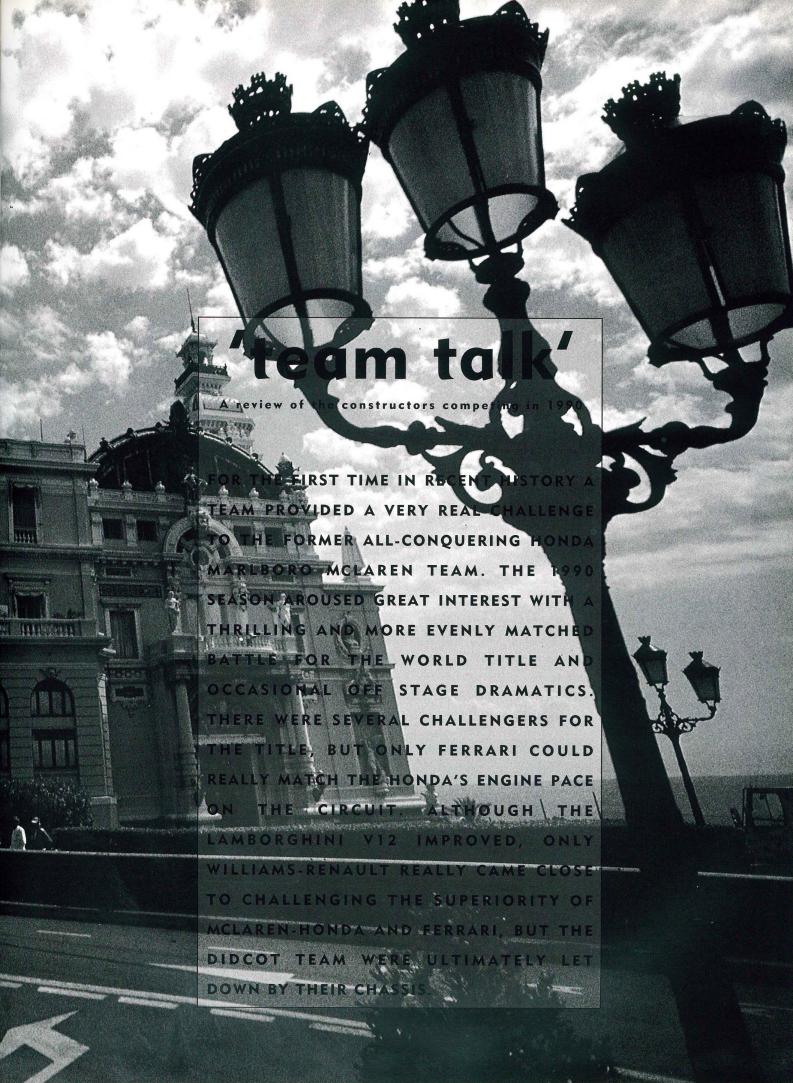
Below: currently the most unsuccessful driver in Formula 1, Andrea is driven by instinct and enthusiasm. Arrows have grand plans for '91 which should see them break their 'duck'! Bottom: a good year for Ferrari as Ritchie Ginther thrashes the 156 shark nose along in 1961.











8's finished in the top six in every race except Italy where the multicylinders reigned supreme. Benetton led the V8 charge, completed by a fine one-two for Piquet and Nannini's replacement Moreno in Japan, Alesi finished second in both Phoenix and Monaco, and Capelli was second to Prost in France. It was these wild card results that kept the championship alive with interest. The Senna versus Prost, McLaren versus Ferrari battle was the major attraction, but the possibilities of Benetton victory in Germany, Boutsen's superb drive in Hungary, the combination of Alesi and Tyrrell plus the Leyton House performance in France meant that nothing was ever cut and dried.

Even the tyre situation provided surprises. Goodyear's products were marginal in their wear rates for some teams, so that tyre stops weren't required by Benetton in Germany and Japan. Whereas Ferrari and McLaren both stopped on the occasions that they got that far. Pirelli were also more competitive, particularly with Alesi in the remarkable Tyrrell for whom Brian Hart worked such wonders with the customer Cosworth V8. They provided evidence that the tyre gap is closing and for some of Goodyear's smaller customers, the Pirelli option might seem more favourable.

There were some exceptional races, with Alesi providing the fireworks in Phoenix and Monaco. Mexico saw Prost drive a great race, and win with difficulty in France. Benetton were so close in Germany, while Hungary saw a five or six car group virtually throughout. Spain and

COS. ORTH

HLHOMSON

Portugal were fascinating, which is why it was such a shame that the championship battle went completely flat when the first lap accident in Japan took out the two top contenders. Senna and McLaren were unbeatable in their championships with one round to go.

F1 has always been dangerous and 1990 saw two horrendous accidents, one of which badly injured. Martin Donnelly. The drivers warned that G-forces were becoming excessive so the governing body as well as team's engineers worked together to produce rules that would once again limit downforce and the extremely



high level of grip. There were even the beginnings of an initiative to show that those in motor sport are conscious of the environment, with a move to make lead-free fuel compulsory.

Generally speaking, however, it was a better year of competition than of late. Even more exciting than the 1990 season were the prospects for 1991, with Mansell and Williams expecting to make the championship battle three way, and multi-cylinders coming from Yamaha (for Brabham), Porsche (for Arrows), Judd (for Dallara) and Ilmor (for Leyton House) while both Honda and Ferrari will expand their engine supply to two teams.



SCUDERIA FERRARI

errari gave McLaren quite a fright in 1990. Except for the Japanese incident, they may have taken the fight to the very end of the season. 1990 began with Ferrari relying on a similar mix to the previous year with a development of John Barnard's 640, even though the English engineer had now gone to Benetton. In his place came a combination of Argentinian Enrique Scalabroni from Williams, and American Steve Nicholls from McLaren. The latter move sparked off a little McLaren-Ferrari squabble. This was soon

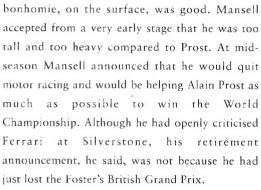




seemed to get on, had common interests and the just lost the Foster's British Grand Prix.

The year started disastrously with a brace of transmission related failures in Phoenix. Prost put all that to rights with victory in Brazil, an important victory for the Frenchman and his team. San Marino and Monaco were no better however, although the Ferrari team did a great job setting up the spare car for Prost when he was involved in a first lap accident with Berger. After the tricky Canadian race they were a lowly fourth (Mansell) and fifth (Prost), trailing McLaren 50-21 in the Constructors series, Prost the better placed of the drivers with 14 points to Senna's 31 and Berger's 19. However there came a turning point: three victories in a row for Prost, a great second place for Mansell backing him up in Mexico, who looked good in France and Britain but failed to finish.

Prost was now two points in the lead of the drivers' series, while McLaren were only ten points ahead of Ferrari in the Constructors series. The general view was that McLaren's chassis wasn't as good as Ferrari's, but Honda produced more power. Hockenheim would be to the Woking team's favour as would Monza. The more specialised circuits, like Hungary, Estoril and





smoothed over although Scalabroni then left before mid-season, along with talented aerodynamicist Henri Durand. (The effect of these moves though will probably be felt more in 1991 than 1990). Also joining from McLaren was Alain Prost, and it was the information that this already competitive combination could supply which perhaps most frightened McLaren. After all, Prost and Nicholls knew just how McLaren worked, although trying to impose such tactics on the Italian team proved a difficult task.

Prost teamed up with Mansell, who had to climb down from his number one position to accept the World Champion in the team. They



Suzuka, would be to Ferrari's. Nigel Mansell's victory in Estoril focused attention on the direction of the team under Cesare Fiorio. One could not imagine that such a situation would ever have existed at McLaren, and the way team orders went at the next race was clear indication that they had learned a valuable lesson, if a little late. The final race in Japan promised so much and delivered so little.

The 641 was an updated version of Barnard's 640 with different suspension geometry, ongoing development to the gearbox and revised aerodynamics. The chassis was modified to accept more of Agip's fuel and the Italian company made strides in their field as did Shell and Elf with their teams. The gearbox appeared to be the team's Achilles heel until well into the second half of the season, but suggesting a change to a manual box should the problems continue spurred the gearbox department into simplifying the software and making it behave more as a driver would. This seemed to work until Prost lost sixth gear at Estoril, the first gearbox failure for several races.

It took a little while, but the engine department improved vastly under Paolo Masai. The original engine was the 036 which was then substituted by the 037B and then the 037 (the 037B was a smaller development than the 037!). Ferrari's tendency was to use an engine modification for qualifying until they were sure that it was race-ready which made a heavy workload. As in Spain, in the 90 minutes between practice and qualifying they changed two engines and two gearboxes on three cars.

Mansell's finishing record would suggest that he is hard on the car, although Ferrari say his gearbox internals are better than Prost's after a race. Although he may be physically hard on a car he does not abuse it.

The team made a great effort, particularly at the end of the season, and one was left to



wonder that if the same effort had been made right from the start whether the Championship could have been theirs.

TYRRELL-COSWORTH

one of the 'customer V8' users were able to touch the Tyrrell team in 1990. The previous year's car showed that it was good and the latest package proved to be even better. Rarely were they headed by other V8s, and they were frequently giving the multi-cylinders a hard time.

There were several new elements in the Tyrrell team for 1990. Ken Tyrrell had handed over the managerial reins to son Bob. The team's sponsor seeking side was being handled by TAG/McLaren Marketing Services, part of TAG/McLaren Holdings Ltd, and joining the team was Satoru Nakajima, complete with various sponsors (Epson, PIAA) under his arm, and the promise of Honda engines in 1991.

The final surprise broke just days before the first race of the year: the team would be using Pirelli tyres for the year rather than Goodyears. There was one other change, but it was only short-lived. Sergio Rinland, fearful of Brabham's future, joined the team, only to return almost immediately. There were more static facets to the team. Harvey Postlethwaite would again be in charge of the design team and 'wunderkind' Jean Alesi would remain, although even before the new season had started he had signed a contract with Williams for 1991. Also on board was Brian Hart building Cosworth's V8 DFR.

Tyrrell used its previous year's chassis to start the season and it went out in a blaze of glory. Alesi finished second in Phoenix, with teammate Nakajima sixth. When Tyrrell's new car appeared in testing prior to Imola, it sent all the other designers rushing back to their drawing boards. The aerodynamic package included an innovative anhedral front wing design which was extremely efficient. Although Alesi originally singled out just a few slow circuits where he would be competitive due to the 60 bhp discrepancy between the Cosworth and the multicylinders, there were some quick circuits where he shone just as promisingly.

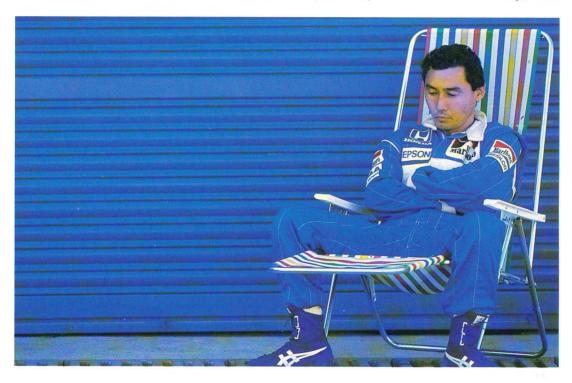
There were several elements that made this team so competitive. Firstly Alesi, a very

competitive driver. His style is very nervous which suited the nimble Tyrrell well. In a race, he was like a terrier with a rat; he wouldn't let go. He could only give 100 per cent effort and didn't care whether he was battling with a World Champion or a pre-qualifier. Ken Tyrrell had hired him to race, not to finish behind superstars so he became one in his own right.

However it all came a little early to him. He was affected by his new-found status from the beginning of the season. It was a different Alesi to the previous year and it did affect his driving.

compound/construction was just right. While the qualifiers were very good, and the team did lots of testing and development for Pirelli, they did feel that they lacked a 'lean-on-able' race tyre.

Last, but certainly not least, came the chassis. It had been designed for Goodyear tyres but there was enough adjustment in it to adapt it to Pirelli's. Postlethwaite might have changed the weight distribution if he had known earlier that he would be on Pirellis, but otherwise the late change wasn't a problem. The 019 proved to be tough, the engineers knew how to set it up, it was



The team cited France, Hungary, Italy and Spain as being disappointing races, when their number one driver was affected by his stardom.

The team were full of praise for Brian Hart and his engines. He exceeded even Cosworth in his development, and after half a season, was able to supply qualifying engines at some races. But even as Hart would find more power, so would the multi-cylinders and the gap remained static.

Then there were the tyres. Pirelli's qualifiers proved to be at least a match for Goodyear's until the Americans pulled away again just before half season. Thanks to their excellent results, Tyrrell became Pirelli's top team, and after a while, started getting tyres that the others didn't. There was a very fair exchange of information, and progress was made, with Monza being cited by the team as a race where the mix of

quick in a straightline and it handled well, both aerodynamically and mechanically. What more could one want?

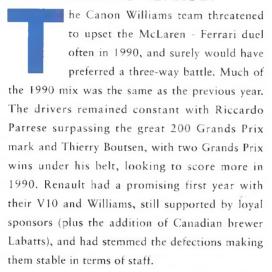
Perhaps the only disadvantage was the lack of resources. Those ahead had bigger budgets, and so did some of those behind. Flexibility in development was limited to one area at a time, and stopped altogether after Silverstone when Postlethwaite began work on the 1991 car.

Monaco, of course, was the high point of the season while Nakajima's sixth place in Italy proved that Alesi might also have been in the points but for his early mistake. The team probably exceeded their own expectations, given that this was meant to be a year of conciliation and preparation for the Tyrrell-Honda package. After such results and obvious promise, it must have been a disappointment that having put



together a superb package for the following year, their star driver should leave and in such complicated circumstances.

WILLIAMS-RENAULT



The team even had the same chassis to use in 1990 as it had for the last few races of the previous year. The FW13 had been modified in as many as 100 different areas, and testing ensured the team had experience with the chassis before the new season began. The problems they experienced with the car proved a great disappointment, with the team dropping away from being the McLaren and Ferrari challenger. In spite of an enormous amount of testing it was only towards the end of the season that the problem neared resolution.

The basic problem was that the team had to run the car stiff if it was to be quick. This made it particularly hard on tyres, and bad in slow corners. If the circuit was slow as a whole, then the team could run a lot of wing which would compensate for lack of performance in slow corners. This hard set-up also meant that the car was very unstable under braking. At Monza, for instance, the car would hop over the bumps under braking, so the drivers had to brake earlier

than they should. This was combined with an inherent brake knock-off problem which necessitated large anti-knock-off springs causing the brake pad and disc to rub and therefore glaze. On heavy braking circuits such as Imola, cooling was critical and only towards the end of the season was a cure on the horizon.

It was on one of these critical circuits that Williams scored one of their most remarkable victories. Thierry Boutsen had set his first Grand Prix fastest lap at Hockenheim two weeks before, when he started the Hungarian Grand Prix from pole for the first time. On this very tricky circuit, he put in a faultless display to lead from lights to flag, constantly under pressure and struggling with the brakes throughout, to such an extent that you could actually see through a brake disc at the end of the race. In his efforts to get the car stopped, he even hung 15,000 rpm on Renault's V10 when heeling and toeing and yet it all held together for Boutsen's third Grand Prix victory.

The Belgian however, was out of favour. Even though he was usually better placed than his





teammate, he was castigated for an overtaking manoeuvre in Canada ending the barrier. Perhaps also he wanted to be a number one driver and Williams had pitched its standards higher.

It was Patrese who scored a popular win on what he regards as his home track at Imola. Senna went out early followed by Boutsen and later Mansell. With Berger in trouble, Patrese was able to catch him and score a five second victory. On the faster circuits later in the year, however, the Williams' only had a top six placing.

Renault, did rather better with their development than the team. The RS2 engine had virtually become an RS3 by the end of the year, with constant changes such as the fuel pump system, shortening the crank, making the engine smaller and even trimming a couple of kilos off the engine to weigh in at 139 kilos. The inlet system was also revised. There were two major changes during the year. Evolution One came at Imola with further developments on the fuel system and camshaft, and a new fuel too, for economy purposes on this circuit which is critical on fuel consumption. In Spain came Evolution Two which included a number of developments to the bottom end, camshaft and exhaust, and included an increase of 200 revs. The process continued with further developments even in Australia. Elf worked hard on the fuel and there were nearly 20 different mixes. The whole team worked hard on its fuel and its engine settings to accommodate the changes. Generally Renault



were happy with their performance, although there were some breakages caused by poor quality from suppliers, and gear selection difficulties accounted for a couple of engines.

BRABHAM-JUDD

Phoenix a week before the World Championship opener. That they then completed the whole Championship was therefore quite amazing, and they finished it with a manufacturers deal to run works Yamaha V12 engines on an exclusive basis in 1991. Herbie Blash had managed to keep his team just above water and did well to come out of it as he did, ever charming, ever smiling.

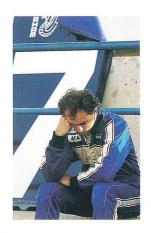
Along the way was an ownership change, a driver change, and default on payments which caused a brief lock-out. There never was much money which cost the team dearly in terms of testing and development, but they produced a lot of cars, stuck together and scored points, which, must be something to be proud of.

The previous season had ended with the team owner in jail, and over the winter, the McKeever Group headed by Mike Earle, ex-of Onyx was called in to try and negotiate the legal release of the team in order for it to be sold. This was not a success and although work had already begun to design and build a new car, there was absolutely no guarantee that the team would be racing. Not a penny was banked from Nippon Shinpan's vital contributions the previous year until after the second race of the 1990 season.

Designer Sergio Rinland left the team for Tyrrell, in the hope that he might have something to do in 1990. When Brabham did go racing, he swiftly returned, but his absence meant that much of the first half season was spent catching up.

Herbie Blash was working behind the scenes on a deal which saw the Japanese-based Middlebridge Group buy Brabham just days before the first Grand Prix of the year. So late was the deal done that the cars had to be trucked by road from Los Angeles to Phoenix.

Stefano Modena had been retained as number one driver while McKeever had signed Gregor Foitek. The Swiss didn't fit in with Middlebridge plans, who had intended to run David Brabham in Formula 3000, so they





thought that they might axe the F3000 team until they remembered that they also had Damon Hill under contract. In the end Hill remained with Middlebridge F3000 joined by Gary Brabham once his 'Life' expectancy had dissolved.

The team's intentions had always been modest: use the 1989 BT58s until San Marino when the BT59 would take over, all of them powered by John Judd's V8 on Pirelli tyres. Happily Modena promptly went out and finished fifth at Phoenix scoring valuable points which would keep them relatively safe for a year. He wouldn't finish a race again until Canada, but then finished well for the next four events. Thereafter saw a string of retirements.

David Brabham suffered from a lack of testing due to the team's low finances. He needed as many miles in the car as possible, having jumped straight from Formula Three to Formula One, now thought too big a jump to make.

The team did little development work, except on the transverse gearbox that first appeared, along with a V8 Yamaha-powered BT58, at the Silverstone test. The Yamaha deal had been signed, and wind tunnel work, design on the first V12-powered car, plus a new car for 1991 was more important than trying to get points with their V8 Judd-powered machine against the multicylinders.

In the middle of all this was a brief panic when Middlebridge failed to make a payment and the team was locked out of its Chessington home. It didn't last long, and as ever, the team stuck together no matter what was happening back at home. The fact that they finally found the engine deal they deserved, never let standards slip and



scored those vital two points in Phoenix was typical of Brabham. They survived and regrouped to hit 1991 with a vengeance.

ARROWS-COSWORTH

990 saw various changes for Arrows, and some ambitious plans taking shape. But overall it was a difficult year, being in amongst the customer V8s and prey to outside influences such as tyre form. The one thing that remained constant was the team's ability to provide a reliable car, and this would earn Arrows its points and put it firmly beyond the threat of anything as embarrassing as prequalifying. The team was taken over by the Footwork Corporation at the end of the previous year, although the management structure remained very much the same, with Jackie Oliver and Alan Rees at the helm. Footwork's ambitious plans saw the team win the contract race to run Porsche's new V12 engine in 1991. There were plans to run the engine in the final two races of the current season, but these never came to fruition and apart from a loss of wind tunnel time, the Alan Jenkins's Porsche programme never affected the 1990 race programme.

With a new car needed for the Porsche engine, Arrows again elected to run a B version of the previous year's car, as they had with the A10. James Robinson was in charge of the engineering side and the A11B was very much his baby even though the original design was that of his predecessor, Ross Brawn. Jenkins joined from Monteverdi/Onyx to work on the Porsche project, a task he had fulfilled during the early days of the McLaren/TAG-Porsche liaison.

It was all change on the driving front, however. After three years together, Eddie Cheever and Derek Warwick opted for a change, and in their place came the experienced Michele Alboreto from Ferrari, and relative new boy Alex Caffi from Dallara. The latter, however, would be replaced by Bernd Schneider in Phoenix after breaking his collarbone pre-season, and by the German again at Jerez after Caffi damaged an ankle in an accident with Suzuki at Estoril.

The main problem throughout the year was qualifying. The car was too soft on its tyres which in turn would never get up to temperature. Arrows were always running one compound



softer than others when Goodyear allowed them to, an arrangement which ended just after half season. Their best race was where qualifying tyres failed to work for everyone else and all cars were on race tyres: in Montreal Alboreto qualified 14th but collided with Pirro early in the race.

Then Goodyear's front runners complained that the tyres weren't lasting a lap, so the qualifiers were made harder, and taken further away from Arrows's ideal. In Mexico and Estoril, the team set the car up specially for qualifying and did two warm-up laps on the tyres. But working on a qualifying set-up detracted from the race set-up, so important for its consistency.

Complicating the matter was that Caffi's previous experience was limited to Pirelli's tyres, and the fact that he and and Alboreto preferred slightly different set-ups. After missing Phoenix, Caffi still not fit, returned for Brazil and consequently felt his first Grand Prix of the year was San Marino, but didn't qualify. Two weeks later, he qualified 22nd at Monaco and soldiered on magnificently to finish fifth and score valuable points. He was a very resilient driver in fact, and Arrows's legendary reliability saw him frequently in the top ten, driving to the best of his and the car's abilities, and pleased with the race tyres' consistency of balance. Alboreto was a little less successful, no doubt finding the change from Ferrari to Arrows somewhat difficult although when things went well he came into his own again, confidence restored. Canada was an example of this, pre-race. Despite the lack of wind tunnel time, developments were seen on the car during the year, including a more efficient cooling system, rear floor and front wing at Monza, plus transmission changes. But the

budget was not huge in spite of continued support from USF&G and much of the emphasis was towards the following season.

LOTUS-LAMBORGHINI

here were many reasons why Lotus might have been hopeful in 1990. After using John Judd's V8 in 1989, they joined the multi-cylinder club the following year with a public relations fanfare claiming that all was well for the future. Camel remained as major sponsors, Lamborghini and Chrysler made encouraging noises about joining one of motor racing's most experienced teams and a pair of new, affable and well-matched drivers joined the team: the elder, more experienced Derek Warwick accompanied by the young and very promising Martin Donnelly.

Yet by the end of the season the team morale was at a low ebb. Poor Donnelly was in hospital after the most horrific accident Formula One had seen for many years. The team had lost their Lamborghini engine contract, and Camel had also gone off in search of greater success. In between the pre-season euphoria and the end-ofseason depression were a number of disappointments, but several gritty performances did not warrant the final outcome. That the team spirit was low, with new commercial partners coming in and rumours of take-overs was not just unfortunate but perhaps reflected on the upper management. People in motor racing still ask 'what happened to Peter Warr?' Lotus's team manager for so many years. He left in the summer of 1989 and that's when Tony Rudd took over the team's reins, and Rupert Manwaring was promoted to team manager. Yet the spirit of Warr lived on in the team, and provided some impetus. By mid-summer, it no longer came from the top, but from the gregarious designer Frank Dernie and the ever optimistic Derek Warwick. Things had been allowed to lapse back into the doldrums of 1989 again and there was no one there to inject some much-needed spirit.

Any car that bears one colour looks wellsponsored. This isn't always the case. Although the Lotus was all-yellow, Camel did not provide a full budget, but as the principal sponsor they did control any further colours on the car and this put off associate sponsors. Noel Stanbury left this











































difficult selling job to Clive Chapman. Frank Dernie had to make at least four compromises in his design due to budget reasons, and at first his new car proved to be nervous and difficult to drive. Far from being able to exploit the high speed qualities of the 101 with the increase in horse power from Lamborghini, the team spent much of the year trying to make it handle on fast tracks, whereas it wasn't unhappy on low speed circuits. Indeed, there was a lot of work done on the car during the year, including a new diffuser for Montreal and a lot of structural work, which saw a stiffer chassis used, and crashed, at Monza. Gradually, the car lost its unpredictable characteristics and became more consistent. The car wasn't too unreliable either, and with Donnelly constantly trying to show up his more experienced teammate, there were some great laps. Warwick, typically, was thoroughly open

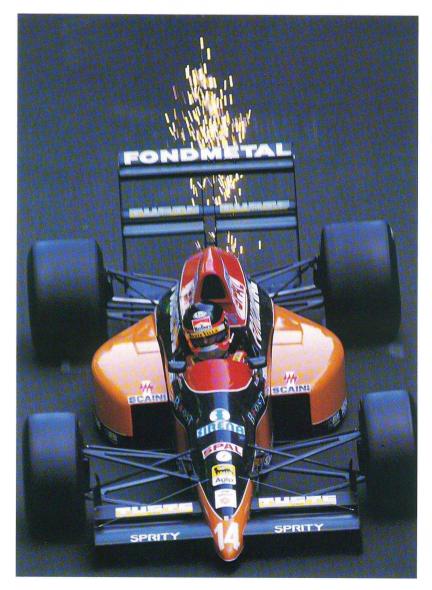
and helpful to his new teammate, and Donnelly was an eager, willing and talented pupil. Their range of qualifying extended from just outside the top ten to the early twenties, particularly on the quick circuits, and it wasn't always Warwick who was faster. The pair raced to seventh and eighth in their third race, and Warwick scored an encouraging point in Canada followed by two more in Hungary after Camel had announced that they were taking their money elsewhere in 1991, Reliability was essential in 1990 if the team was to pick up points left by the likes of Ferrari, McLaren, Williams or Benetton. The Lotus Lamborghini combination wasn't the least reliable but the cars ran in the points more times than they scored them. Warwick, for instance, should have scored in Monaco, even Spain. After the optimism at the end of the previous year, it was a shame that this was not capitalised upon in 1990. The team had been rebuilt in 1989, and it requires the same for 1991.

OSELLA-COSWORTH

ike Coloni, Osella slimmed down its effort to just one car and along came the determined Olivier Grouillard to drive it. With a Cosworth engine and starting early most Friday mornings running on Pirelli tyres there was only the hope that they might eventually get into the race. One's ambitions might be great but the chances of success, realistically, are pretty limited.

Having said that, the combination of Grouillard and Osella, which one should call an experienced team, wasn't bad at all. Only in France and Hungary did they fail to pre-qualify (by a tenth of a second on each occasion) and having done that, two thirds of the time they then made it into the race as well. Phoenix, the first race of the year, saw Grouillard start an amazing eighth on the grid, unheard of for an Osella.

However there were certain drawbacks to the team's performance, and they were only too aware of them. Designed by Alessandro Tomaini, formerly of Ferrari, the car's aerodynamics weren't good which made it slow in a straightline and it had little downforce. No doubt a lack of finance meant that wind tunnel time was limited. It was also hard to work on, particularly the suspension. The very thing that made it



competitive on the streets of Phoenix, its lack of rigidity, probably cost it dearly elsewhere and that was cured within a few races.

Unfortunately, the team also had a recurring problem with wheelbearings which caused retirements at San Marino, Italy and Spain. The team has never really grown into a big Formula One team, and has continued to stagger on from race to race for a decade now without actually promoting their status.

However, they enjoyed support from Fondmetal and usually worked well with Pirelli, although the Italian tyre company was blamed for the team's non-qualification in Portugal. Grouillard and Osella did what they could with what they had, Enzo Osella's sights don't seem to have changed for many years, and newcomers would not find it difficult to overtake his enthusiastic little team.

LEYTON HOUSE-JUDD

hen the Leyton House drivers announced to their counterparts at Lotus on Sunday morning at Ricard they were going to go all through the race on the same set of tyres, the men in yellow laughed openly. Yet that afternoon the stars of the show were the two Miami blue cars, and although they didn't win, Capelli was a fine second. A week later at Silverstone, he was catching the leading Ferraris when he retired.

Yet these two races were brief flashes for Leyton House, a team that has engendered just this sort of excitement in the past, and did so again for a couple of races. The team had a new aerodynamic package and on two quick circuits it worked perfectly. But then the magic disappeared and although Gugelmin finished a fine sixth in Belgium, not an easy circuit for a V8, performances thereafter occasionally promised points but never produced them.

The year began with Leyton House keen to get a multi-cylinder engine which they certainly deserved. They lost out badly in the curious Porsche deal and had to revert to using John Judd's V8s for 1990. But the engine wasn't the problem. The car seemed incredibly nervous and very sensitive in its adjustments. Furthermore right from the start, it didn't like dirty or bumpy circuits: the Leyton House pair, unchanged again,



started on the back row at Phoenix and didn't qualify at all at Interlagos! Qualifying on the smooth, well-used Imola however, Gugelmin was 12th and Capelli 18th.

However, a test session was planned post-Brazil at what was considered to be a suitable circuit, where the cars had been sorted out to good effect the previous year. On his way back from Brazil, the team's managing director Ian Phillips contracted viral meningitis and was out of action until Hungary.

There then followed some behind-the-scenes manoeuvring which eventually saw the departure of Adrian Newey and at one time it was even thought that Phillips wouldn't be welcomed back until the entire team signed a sheet requiring exactly that. By this time however, the recovery from non-qualifications in Monaco, Canada and Mexico had been made. Newey, considered by some to be one of the few true innovators in F1 had built up a new floor section and made other aerodynamic modifications which transformed the car, blaming some rogue wind tunnel readings for the cars' previous difficulties.

He was also being blamed and made the scapegoat for the team's lack of performance, and before his modifications had borne fruit, the situation within the team had become so intolerable that he left. He was soon snapped up by Williams and quickly reproduced a very similar floorpan layout for his new team.

In the meantime Leyton House made a deal



to run the promising Ilmor V10 1991 and great effort went into that from the word 'go', with the engine running for the first time just before Japan. Clearly the 1990 Season was a disaster, but points had been salvaged and the future looked rosier. It wasn't a happy year for the team, but Phillips was still there, as was Gustav Brunner, joined mid season by Chris Murphy from Lola. Phillips persuaded Capelli to stay and greater things could be expected from the team once it was back on its feet and developing new ventures. Whether Newey will ever be replaced as the innovator remains to be seen.

AGS

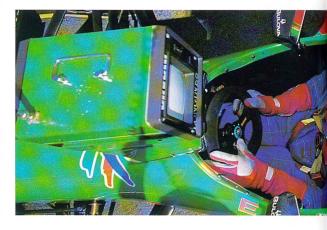
mall was beautiful for AGS for many years. Formula One's cottage industry team, however, was under new management in 1989 and was very much growing up in 1990. In theory, this should have been to the team's advantage, yet such considerable changes rarely run smoothly. The team had moved into its new factory at Le Luc, yet the increase of staff from under 20 to nearly 60 already threatened to make the premises look insufficient by the end of the year. Furthermore, it took a couple of months before the new team structure settled down.

Returning to design the new car which appeared at Imola was Michel Costa who designed AGS's JH23 a couple of years previously, and then went off to draw Coloni's challengers. His latest machine benefited from greater ground effect and a slimmer monocoque

for improved straight line speed. After the initial interest in the fascinating MGN W12, this project was put on ice, and AGS went the conventional route with Cosworth DFR engine and Goodyear tyres. The team was also able to rely on the competitive and talented services of the two drivers that they had picked up the previous year, Gabriele Tarquini and Yannick Dalmas.

The team had a good sponsorship deal with fashion house Ted Lapidus only for this to turn sour on them when the company's business fortunes took a dive. AGS continued to wear the colours and sought funds that were rightfully theirs through the courts. The difficult situation was resolved when Lapidus was taken over.

On top of this was Pirelli's initial superiority in pre-qualifying. Until the Championship reached round seven at home in



France, the AGS team had made one solitary foray through pre-qualifying and into the race when Dalmas was right on the limit both in pre-qualifying (4th) and qualifying (26th) in Brazil. He crashed the new car in testing at Imola, and was unfit to drive at the San Marino Grand Prix, and Tarquini didn't do a single lap either due to a mechanical problem. In the next three races the pair were constantly fifth and sixth, before finally making inroads into the top four in France.

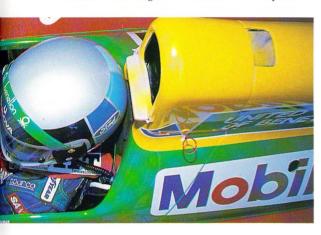
The problem was quite simple: there was an aerodynamic imbalance within the nose section which was causing excessive understeer. A mechanical problem is easier to fix than an aerodynamic one, and this was only partially resolved with a resculpturing of the underside of the nose. Goodyear were the tyres to have as they made progress, and the team found their treatment excellent and the products consistent.

From then on, the pair usually got through prequalifying and often made the race, making AGS history when they both raced for the first time in the Tio Pepe Spanish Grand Prix. Indeed, Dalmas had two race finishes before the team travelled east for the final two rounds of the series.

This was the year that AGS left behind its 'small' image and grew up into one of the bigger teams. Further progress will always be difficult but the right steps have been made.

BENETTON-FORD

enetton, with Williams were the chief supporting cast to the Ferrari versus McLaren show, frequently nipping in and pinching vital points from the two star teams. Both Nelson Piquet and Alessandro Nannini were regular visitors to the top six. It



was a year that the team firmly left behind any reputation of 'finger trouble', and when things went perfectly, they could be relied upon to fight for the lead and take advantage of others misfortune as they did in the last two races where they scored much deserved wins. The team had a new line-up, with two important newcomers. Nelson Piquet joined the driving strength from Lotus, lending his experience and impetus to Nannini in his third year with the team. Piquet had an interesting financial deal for payment based on points scored which ultimately saw him rather well off! The other newcomer was John Barnard, who joined from Ferrari. He had some input into the 1990 car, but it was mainly the work of the team's faithful designer Rory Byrne who, by the end of the year had returned to the men with whom he had forged his craft, Reynard and Hawkridge to lead Reynard's F1 design team.



Having said that however, the team was relatively stable in comparison to years past when new engines were introduced either at the start of the season or during the season, and new drivers also appeared. At least the engine was the same throughout and from the previous year, and the chassis that appeared after two races was not a great deal different.

It featured one or two changes in materials, and the main change was the use of an overhead air intake. The original plan was to race an active car which would not have had springs and dampers, but when this idea was dropped, there wasn't a great deal of room for the conventional suspension, which made changes difficult. Slight geometry changes were in evidence and John Barnard's front wing system was used.

However, the new Benetton team was very much a grown-up version of what had gone before. Admittedly, it was now somewhat fragmented with commercial and R&D departments in Godalming, Surrey and the factory still nearly 100 miles away at Witney. Having said that, there were some clever commercial dealings taking place which saw Benetton achieve nearly every sponsor's dream: use of the name with the financial burden being largely shouldered by other sponsors.

Ford, of course, are one of the major suppliers and once again the team would rely on the latest version of their V8, the HB engine first seen midway through the previous year. After winter development, the higher revving Series IV































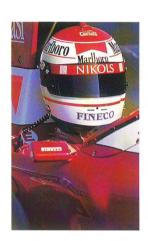












version made its debut at the Foster's British Grand Prix. Indeed, when Piquet was quickest in the warm-up there were those who said that he would change the face of the second half of the year. His finishing record was remarkable, and he was frequently in the points, proving that most of the touch was still there. Apart from the disqualification from Monaco for a push start, he finished every race in the first half of the season in the points, including second in Canada. His first actual retirement from a race was in Germany where the engine failed but he was third at the time. Nannini went on to salvage glory with second place splitting the McLarens.

Knowing that they have little chance rivalling those with qualifying engines and fuel, the team is happy to be fifth and sixth at best, or eighth and ninth at the lower limit. It allows them to spend more time on setting up for race conditions. The extension of this was that if they managed to find the ideal balance, they could very often run on the same tyres throughout the race, whereas others would come in to change. Hockenheim was a classic example of this. On lap 15 the leaders began to pit. Nannini and Piquet stayed out and found themselves first and third, each with a McLaren behind them. Piquet's engine blew, but Senna spent 14 laps behind Nannini and had a very tough job overtaking, Nannini salvaging a fine second place.

No doubt this performance was in Senna's mind at the next two Grands Prix. Nannini was lying second to Boutsen in Hungary when the Brazilian bundled him off the track in his frustration to pass. Nannini was sure that he could have won. Two weeks later in Belgium, Senna was convinced that he had to get out of the pits ahead of the Italian if he was to win. As it was, teammate Berger found it very difficult to get past the Benetton, and only did so when Nannini got a little sideways at the Raidillon and slipped to fourth. They thoroughly deserved to pick up the pieces again after another controversial Grand Prix in Japan, particularly after the sad helicopter accident which Nannini suffered in Italy. Moreno's second place was vindication to many observers of the driver's talent, and it was to Benetton's credit that he was allowed the opportunity. Their result was vital in their battle for third in the Constructors series with Williams.

SCUDERIA ITALIA-COSWORTH

t's easy to forget that 1990 was only Scuderia Italia's third Formula One season. After all, they were on the rostrum in 1989. But in 1990 they never came close. Indeed, pre-qualifying threatened as the season drew to a close. So what went wrong? What had changed? Of course, the whole situation for Beppe Lucchini's team had worsened with the increase in multi-cylinder teams, as it had for any team running customer V8s, in this team's case, Ford's DFR. Although Scuderia Italia would never complain of the fact, they were now just one of Pirelli's teams, second at least to Tyrrell, and perhaps behind Minardi as well. But what else had changed? Replacing Alex Caffi was Emanuele Pirro with just 10 Grands Prix to his name. This was hard to pinpoint, particularly as few other elements had changed. The team suppliers were mainly the same so quite why things went wrong was a mystery. However, wrong they went and not always for the obvious reasons. In Phoenix, for instance, the team suffered a brake problem in the race, but that was due to engine problems during the morning warm-up which cost them time. It was just one of many retirements set-up, De Cesaris' disqualification from 15th place in France for being underweight was carelessness.

The red Scuderia Italia cars looked familiar when comparing them to their predecessors, also from Dallara's design studio. But initially they lacked straight line speed and aerodynamic efficiency, particularly on quick circuits. Nigel

Cowperthwaite was hired from Minardi, and he went some way to improving performance, making the cars even better on slow circuits, and better still on the faster tracks. De Cesaris didn't even qualify in Germany, for instance, but he started tenth at the Hungaroring two weeks later. On the streets of Phoenix he qualified third and was ninth two weeks later in Brazil.

Pirro didn't begin his campaign until Imola, suffering from hepatitis prior to that and Morbidelli replaced him.

Pirro wasn't entirely fit until Montreal but still managed to qualify ninth at the previous race in Monaco. However, that was just one of the races where he didn't go-beyond the first lap. There were four races in all where he didn't cover a lap, and three others were he got no further

MINARDI-COSWORTH

fter some sparkling qualifying performances in 1989 and even a couple at the start of 1990, the Minardi team then slipped back into the doldrums. This was largely due to a built-in understeering problem which was never traced and therefore never cured.

The team began the season with a touch of the old and some of the new. Luiz Perez Sala left the team at the end of 1989 having secured a vital point at Silverstone but Martini would stay on. He had scored points three times during the last nine races of 1989. The team would continue to use Cosworth DFR engine, and Pirelli tyres. Replacing Sala was Paolo Barilla, a good friend of Martini's who isn't the easiest driver to have as



than lap ten. De Cesaris had a couple of races where he never covered a lap as well, and jammed throttle slides were responsible for no fewer than four retirements! Pirro's and De Cesaris' similar low finishing positions in Italy had to be improved upon if the team was to escape prequalifying in 1991, negotiations were already under way for the use of Judd's new V10 engine.

The team never lacked anything in engineering terms. Finance wasn't short and the team's plans were ambitious. If anything, the problem was that they lacked top management to co-ordinate and organise, the Italian malaise if you ask Italians themselves.

a teammate. With SCM as a major sponsor, Barilla brought a useful budget of S3m. Although the car was as usual covered with the names of other companies, most of these were better described as donors rather than proper sponsors.

The team started with the '89 car and in Phoenix Martini qualified a superb second, a personal and team record.

While the first two races were underway, the new car was being completed back in Faenza and this proved to understeer drastically, even more than its predecessor. It was probably a combination of aerodynamic and mechanical complications, but the man who had designed the



































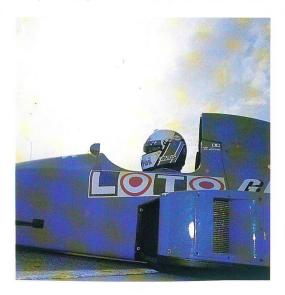




old car, Nigel Cowperthwaite, had already been tempted away to Scuderia Italia, and was not on hand to provide a cure.

It was, however, better on slow circuits, and after Martini had a nasty accident at Imola which cost him a race, he qualified eighth at Monaco and Barilla was in to the top 20 as well. Apart from Mexico, where Martini was a good seventh on the grid, but slipped back to 12th in the race, there was little to encourage the team, drivers or mechanics. They lost their motivation, impetus, and their psychological drive.

Only in Spain did Martini look remotely competitive again, and that was a slower circuit



where the understeer was less pronounced. Unfortunately what might have been a points finish ended in a sandtrap when a wheel came off after a pit stop. Martini always did his best and usually qualified in the top 20, proving that even with the inherent handling problems, he has the instinct, talent and drive to overcome them. With Ferrari power beckoning in '91 he elected to stay with Minardi, who recognise more than most Italian teams that organisation and method are a very important in the overall battle plan.

Barilla, however, was less instinctive, and in his first season in F1 needed a car that he could trust. He was also tall where Martini is small, but perfectly proportioned for a Grand Prix driver, he didn't have knowledge of some circuits, and certainly didn't have any experience with Pirelli's qualifiers. He did, however, do a good job testing, and was a solid member of the team, he occasionally failed to qualify, sometimes he did



well to get into the race at all.

All in all, it was a year of disappointment for Minardi, but one in which they prepared to muster their forces for a full-scale assault on the top six in 1991 when they would have the power and perhaps two impulsive drivers capable of overcoming any chassis vagaries.

LIGIER

rance's National team had a miserable season, so bad that by mid-season they were pre-qualifying. They were lucky that it only lasted two races, thanks to Monteverdi's withdrawal, but it did highlight just what a trough the team was in.

The main mix of the team was as before with Richard Divila designing the JS33B where the major development centred around a transverse gearbox due early in the season. Regrettably that came on stream rather later than planned, and by that time ambitious plans for the future meant that it wouldn't be developed.

There was also a change of drivers, Olivier Grouillard had become persona non grata midseason the previous year and would go to Osella, while Rene Arnoux announced his retirement from Formula One, so that there were two seats available in the team. They were filled by Philippe Alliot and Nicola Larini, and by the end of the year they too, would be on their way with a fresh pair (Boutsen and Comas) taking over for 1991.

The year didn't start well with Alliot being disqualified in Phoenix when his engineer offered outside assistance to the wrecker crew recovering





Alliot's crashed car. His main problem was his inability to keep the car on the prepared surface, and frequent visits to the scenery sometimes had a more serious effect.

As well as the obvious problem of repairing crashed cars, the cars' ride height is taken off the steering box, yet on occasions this could vary by as much as 4mm. Just lmm difference might cause a 10 per cent loss of ground effect, so this sometimes had a dramatic effect.

The new transverse gearbox finally came on stream at mid-season when it should have appeared at Monaco and then maybe in France. but by the time it did appear it was too late to save the team from the perils of prequalifying. Furthermore, the team was committed to two new engine programmes over the next two years (Lamborghini and Renault) so development was dropped altogether while the team concentrated on their future. What they did manage to do was provide their drivers with a reliable car. The problem was that the much-improved Italian had experience of only Pirelli's qualifiers when he joined the Goodyear-equipped French team and it took him a while to get used to the new rubber.

Alliot also finished some races - many of his mistakes were in practice and qualifying, and he was unlucky to be disqualified again in Germany when he found his piece of track blocked by the crashed Pirro. He failed to qualify altogether in Belgium while he was lucky to be unhurt when he didn't see the approaching Mansell in Portugal and was booted firmly into touch by the Ferrari.

By this stage Ligier were already marking

time and working hard on the future. It constantly amazes outsiders how they can attract engines deals and sponsorship without results, but that's the ambition of every struggling team.

MCLAREN-HONDA

cLaren were obviously the team to beat in 1990, having won both World Championships in the previous two years. Soon Ferrari, led by the man McLaren had been proud to call their own, Alain Prost, emerged as the number one threat, and the World Championships were still in doubt as the teams headed east for the



final two rounds.

McLaren, it must be said, perhaps started the year with propaganda weighing against them. Ron Dennis would talk about Ferrari having won 'the winter World Championship' after testing performances. It took Senna most of the winter, and the win at Phoenix to revive his motivation from the post-1989 winter political hassles.

Senna's Suzuka exclusion, the Australian allegations of political manocuvring and McLaren's determination to establish what was fair play were finally put on the backburner as the new season approached. Even so, Senna spent much of the time in relative seclusion in Brazil, and didn't take much part in preparations for the new season. That responsibility lay fairly and









squarely on a new man to the team, Gerhard Berger, for after six years with McLaren, Prost had moved on following a 'difficult' season with Senna. The Austrian impressed the team with his open approach and wasn't unhappy to shoulder the pre-season responsibilities as he got to know his new environment.

The MP4 design trend continued with Neil Oatley's version of the team's championshipwinning model, but he had lost the support of ideas man Steve Nicholls who was recruited by partly cured that 'fundamental chassis problem.' New frontal aerodynamics and a rear diffuser went some way to curing an imbalance in fast corners which particularly affected performance at Ricard and Silverstone.

Honda's contribution was enormous. At the end of the previous year, Honda's Formula One project leader Osamu Goto felt that the V10 had come to the end of its development but they redesigned the engine's internals: bore/stroke, cooling ways, induction, and found a





Ferrari. Prost and Nicholls would take a valuable commodity to McLaren's chief rivals: the working systems and strategy that were such a successful part of the English team's battle plan.

There were two main problems during the year. The first was that Berger's size was underestimated, it was several races before the poor chap was comfortable in the car. The second was what Senna would describe as 'a fundamental problem with the chassis,' which still persisted late in the year. That wasn't because McLaren hadn't tried to solve the problem. They tackled four days of testing between each Grand Prix, with at least two drivers and sometimes with either Ionathan Palmer or Allan McNish in the V12-engined car destined for 1991. The guys at the factory, the team and the test team were all worn out before the end of the year. There was a huge turnover in terms of parts drawn, manufactured, developed, tested and often discarded as McLaren desperately tried to maintain their advantage.

It took some time before the team even

considerable 30 bhp. During the year there would be no less than six versions of the RA100E.

The first was simply the standard version from the winter development programme, intended to be reliable for the first race with top end power about the same as that in 1989. The second version, used from Brazil through to Mexico had improved combustion. Version three was used during the French/British doubleheader and with internal friction reduced, boasted an extra ten bhp. For Germany, Hungary and later races there was an increase in revs by 300 rpm which gave another five bhp, while for Belgium and Italy, version five featured revised induction and a further five bhp. Another five came with more work on the induction side with version six.

Just one problem manifested itself during a race: Gerhard Berger's broken throttle linkage at Silverstone. Apart from that the engines couldn't be faulted, although Berger suffered a loss of power at Imola when unleaded fuel and manufacturing tolerances combined to give a valve seating problem.



Interestingly Goto would admit that the V10 suffered in some ways because of the development of Honda's V12, in that parts supply was restricted from some sources.

McLaren did a great job race by race. Senna cited reasons why he should have won most of them, and some were a product of bad luck. Berger proved the ideal back-up for Senna, although sometimes he was unable to prevent another driver sneaking up and slotting in between himself and his teammate. If he had aspirations that he might one day beat Senna, the closest he came to that was at Montreal where he gambled on a lower downforce set-up in case it dried out, and it did. He was quicker than his



teammate and no doubt would have beaten him but he'd jumped the start (to no advantage), and was eventually classified fourth. He could be as quick as Prost, particularly in qualifying, but similar race performances were rare.

McLaren worked hard, their rivals have much to learn from them - and there are few signs that they are. However much McLaren may have suffered from the much maligned chassis, there was rarely a great deficiency in performance and the team deserved all their wins, and more.

LARROUSSE-LAMBORGHINI

t was cruel injustice that the Larrousse team lost its Lamborghini engine deal at the end of the 1990 season. Quite simply, this relatively new team hadn't simply fought its way successfully out of pre-qualifying, but with two inexperienced drivers, they had scored points as well and both drivers had proved to have grown in maturity with the team.

Larrousse had had a difficult 1989 season, with the incarceration of one of the team partners, but after a very reasonable year, a Japanese partner had appeared in the form of Espo. The team had remained faithful to Lola and Lamborghini in the off-season, but two new drivers were taken on. Aguri Suzuki, after a year not qualifying with Zakspeed Yamaha, returned to the team with whom he had made his Grand Prix debut, and Eric Bernard, a former sparring partner of Jean Alesi's, graduated from F3000.

The team has a very solid base, with the experience of the two Gerards, Larrousse and Ducarouge, plus Lola as the manufacturing arm. In 1990 they would share their engine supplier with Lotus - with whom, of course, Ducarouge had worked in the past. Indeed, this in itself was an advantage rather than a disadvantage.

But Larrousse's team was stuck down in the realms of pre-qualifying in spite of a World Championship point from Spain the previous year. The way in which they tackled pre-qualifying is perhaps indicative of the professionalism that exists within the team.

The previous year we had seen how they had a fleet of scooters ready to bring drivers back to the pits should there be a mechanical problem out on the circuit. This time, the team decided that they would regularly run the cars prior to each pre-qualifying session. That, for instance, meant trucking the cars out of the Mexico City paddock to find some remote track up in the mountains to make sure that they would be perfect the next morning. One time they discovered a faulty gearbox. Another time they had to change an engine, but it did mean that the cars were perfect next day.

Even though Bernard and Suzuki scarcely knew Formula One or the circuits, they never failed to pre-qualify and never failed to get into the race. Even when Suzuki crashed heavily on a

































damp track in Mexico the spare was ready and waiting for him to pre-qualify.

The cars were part designed by Ducarouge and colleagues at Larrousse, and partially by Chris Murphy when he was still at Lola. The fact that he went to Leyton House just before midseason was not thought of as a problem by the team. The car was, however, made by Lola and it was envisaged that Lola would make the following year's car as well following the 57-strong team's move to new factory premises near Ricard towards the end of the 1990 season.

There was no doubt that there was immense admiration for the team and its drivers. They had benefited from two year's use of the Lamborghini engine, which, in itself, proved reliable even though ancilliaries sometimes let it down. The chassis followed various developments aerodynamically and necessary improvements in terms of reliability, but basically it performed well and had a sound engineering basis.

The team considered its rightful position just outside the top ten and in Britain the drivers were eighth (Bernard) and ninth (Suzuki) in qualifying, both going on to finish in the top six and confirming the end of team's pre-qualifying. Bernard had already scored a point from 24th on the grid in Monaco, taking advantage of a door left open by Foitek in the closing stages.

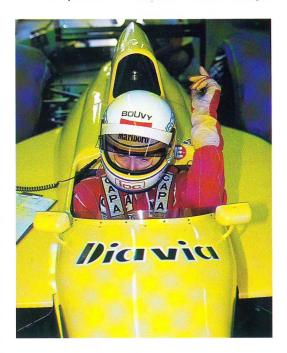
However, while Bernard, with the advantage of the language, was the better in practice and qualifying, Suzuki proved to be the stronger and more aggressive racer. He was running seventh in his first race of the year at Phoenix.

This was a team that matured during the year and so did its drivers. It respects the importance of organisation and doing the job properly. It deserved every point that it won, and merited the support of an engine manufacturer. It has the right to the title of France's top team.

COLONI

ven though they stepped down to a one car effort with a Japanese engine and backing for 1990, the Coloni team continued to struggle. Carlo Chiti's overweight flat 12 Subaru engine was no saviour, and it was only when Subaru pulled out that the downhill trend was reversed and some kind of progress was made.

The year started with Enzo Coloni selling a



half share of his team to Subaru in preparation for the current year. Motori Moderni were subcontracted to build the engine and this would power an adaptation of the previous year's Coloni which in turn was a development of the original car, designed by Michel Costa and Christian van der Pleyn back in 1988. This would drive through a Minardi gearbox.

The problem, quite simply, was that the engine and its accessories were around 112 kilos overweight. Not only did it make the ensemble heavy, but it was all in the back end, making the handling unpredictable, as Bertrand Gachot politely put it. Not surprisingly, the unfortunate

driver rarely got close to pre-qualifying; the best position being fifth at Imola, but over five seconds off the pace.

While finances weren't too bad during the early stages, the Coloni/Subaru relationship sourcd and after a few races Subaru decided that they were going to buy out Coloni. But even as this was happening, so the Japanese company changed its mind: far from buy Coloni, they decided to withdraw altogether at mid-season.

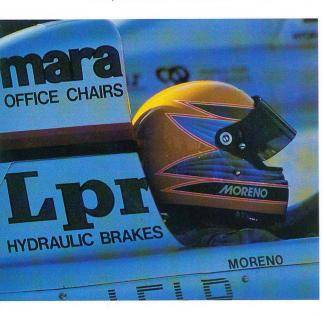
So after Silverstone, Coloni had his team back, plus some money, but no engine. The obvious course was to fit a DFR and that duly went into the back of the Coloni for Hockenheim where Gachot unfortunately crashed. The lack of pre-qualifiers went some way to helping him into the official sessions thereafter, although he still did well to defeat others on a regular basis in what was still a very difficult car.

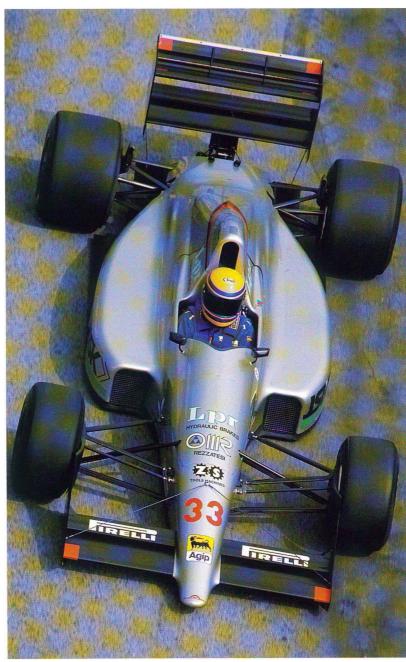
By now, however, finances were very tight. The team tried hard, but there was neither the management structure nor the finances to do much. Once again, this was an Italian team struggling for survival.

EUROBRUN-JUDD

oor EuroBrun stagger on from season to season with the hopes and aspirations of kings and champions and the resources and results of paupers. The 1990 season was little different to the previous years, except this time they had two cars to worry about rather than one.

They did have the services of one of the





better drivers to get involved in pre-qualifying, Roberto Moreno and during the first half of the season he usually made it through Friday morning into the next two day's activities if not Sunday, but then it all stagnated.

The basic problem was that age-old lack of money. While Brun could find sponsorship for as many as three Porsche 962s in the World Sportscar championship, he couldn't find the funds for Formula One. At one time this meant that number two driver newcomer Claudio Langes was only allowed to do a couple of laps in pre-qualifying, simply avoiding the possibilities of a FISA fine. There was a brief respite when the



Italian found some money around half season, and thereafter he managed a few more laps on Friday mornings and even got to within a second or two of actually getting through pre-qualifying, but the chances of making the top four became more and more remote during the season for both drivers. The team began their year with an updated version of the previous year's car, introduced midway through 1989. The problem with this car was that designer George Ryton had

races. Moreno promptly proved his ability in a competitive car for Benetton.

MONTEVERDI ONYX

ithout doubt one of the saddest sights of 1990 was the decline and eventual disappearance of the Onyx team. The only saving grace was that by the time of its eventual demise after Hungary it had been renamed Monteverdi.





been forced to use the old gearbox and therefore rear suspension pick-up points which made the car nervous to drive.

Even before the start of the season the team was short of funds. But the car was relatively new and it looked presentable in its new colour scheme and EuroRacing's mechanics were well used to the machinery. But lack of funds restricted what they could do with it anyway. Pirelli's qualifying tyres helped Moreno through pre-qualifying in Phoenix, Imola, Monaco, Canada and Mexico and he got to race in the first two, finishing 13th in the season opener.

Lack of development and testing meant that the EuroBrun stayed still while the rest caught up and the team was overtaken, particularly by the Coloni and the two AGS. With no money to play with, Ryton left after a couple of races and Brun's development centre at Basingstoke concentrated on the new Group C car.

Moreno might have made it through prequalifying in Portugal and Spain, but bad luck put an end to both efforts. The team finally gave up the struggle and withdrew from the last two Now it was a shadow of its former self, and was fortunately wound up. However, the financial disaster left in its wake may have more long-term and far-reaching effects.

The team ended 1989 with points, cars, engines and ambitious plans. There was both the possibility of Honda and Porsche engines at one time, but the rather strange situation regarding the latter's engine 'auction' left the option with the Arrows. Oddly enough though, the Footwork Corporation were "one of those who had considered buying Onyx.

The idiosyncratic Jean-Pierre van Rossem had had enough of Formula One after only a year and was now eager to sell. He thought he had an engine deal with Porsche who decided otherwise. As the season got nearer the team was rudderless. Team founders, Chamberlain and Earle had long gone elsewhere, and designer Alan Jenkins was left holding the team together. The Belgian so-called investment analyst would eventually be incarcerated for his financial largesse.

With Phoenix just days away, there seemed no one to take over the team, or at least, not from van Rossem. A complicated deal via Middlebridge, who would buy Brabham, saw Onyx sold to Switzerland's Peter Monteverdi who raced back in the fifties. However, it soon became clear that he had little idea of what was involved, and while he might have cleared some of the debts, he was not prepared for what was required to run the team.

Although Stefan Johansson and JJ Lehto were on hand at the beginning of the season, they didn't get into the first two races and Johansson soon found himself out of a job in favour of Monteverdi's compatriot, Gregor Foitek. The Swiss driver nearly scored a point in Monaco but for leaving the door open and allowing Eric Bernard the initiative.

With no money, there was no development, and the engineering team quietly dissolved, Monteverdi decided that he wanted the team to be based in a corner of his museum in Basle and although initially there were mechanics who were interested, the second half of the season began with virtually no one from the first.

The farce persisted, preparation was haphazard, with Lehto actually having gears fitted back to front for instance and there were few spares. When a welded suspension arm broke on Foitek's car at Hungary even the brave Swiss and his father ran out of confidence and left the team. Citing Goodyear's reluctance to provide tyres (untrue), Monteverdi withdrew his team from the World Championship just before the Belgian Grand Prix and what was once a smart, well-run and ambitious team had died in poverty and near disgrace. The final irony was that Peter Monteverdi then turned up at the creditors' meeting to claim the lion's share of whatever was left!

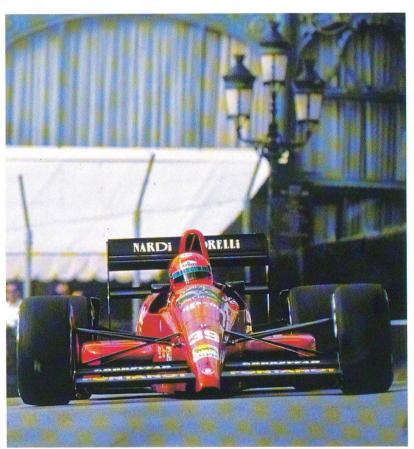
LIFE

990's new entry into Formula One was the Life team, Ferrari's only rival in the 'total in-house package' stakes. The car's rare track appearances made any assessment difficult but the team's second driver, Bruno Giacomelli, was happy to drive for the team and believed in them.

The team was founded by Ernesto Vita who procured a chassis of dubious parentage (said to be the original First chassis designed by Richard

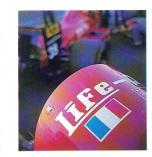
Divila, now with Ligier) and then equipped it with a W12 engine developed and built by former Ferrari engineer Franco Rocchi with a couple of draughtsmen and another engineer. There were two such engines, but while the W12 concept is admired by engine builders, this one proved to be both low on power and strength. Indeed, a lack of parts contributed to the fragility. The engines were never developed, the job underestimated and under-financed - the story of the entire effort.

Gary Brabham was the first driver to attempt to coax the thing along. Neither he nor



his successor from the San Marino Grand Prix onwards, Giacomelli, came close to working any longer than one Friday every two weeks and the team didn't even test. Ernesto Vita's Modenese team eventually abandoned the W12 engines after extensive rumours that they should do so, and the little team of three swapped the W12 for a Judd V8 overnight prior to the Portuguese Grand Prix. That they then lost the engine cover because it didn't fit over the Judd was rather typical, and it didn't run much further than the W12 anyway. Not surprisingly, the team didn't go east for the final two races.





























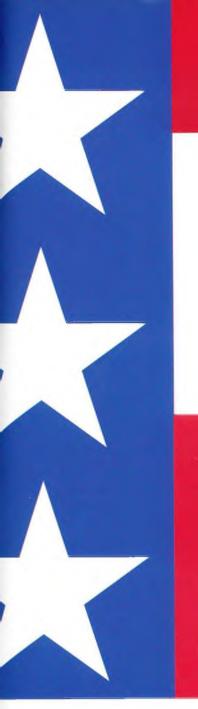












phoenix

Iceberg USA Grand Prix, 9-11 March

PHOENIX IS A TOWN BUILT FOR THE CAR.

THE CENTRE IS WHERE FOLKS WORK

BEFORE DRIVING MANY MILES TO THEIR

PLUSH HOUSES OUT IN
THE SUBURBS. IT'S IN
THE MIDDLE OF THE
ARIZONA DESERT, BUT
THERE'S PLENTY OF
LUSH GREEN LAWN,
PLENTY OF MONEY. IT



NOT WARM THE HEART, IT LACKS SOUL AND EXCITEMENT. IN SHORT, IT LACKS A PARTISAN CROWD AND THAT EXPECTANT ATMOSPHERE OF SOME OF ITS PEERS. IT'S THE START OF THE YEAR AND THE GRAND PRIX FRATERNITY ARE KEEN TO GET STARTED, KEEN TO HEAR THE RASPING SOUND OF ENGINES AND EXCITED TO SEE THE FORM FOR 1990. SOMEHOW, DESPITE A TOPSY-TURVY GRID AND A GREAT BATTLE

IN THE RACE, IT WASN'T EXCITING...



Clockwise from above:
The number 28 route:
Gerhard set pole position for
his new team. AGS's droop
snoot didn't get Tarquini
beyond pre-qualifying. Alesi
got the jump on everyone at
the start.

IMPRESSIONS

his race provided me with the motivation that I needed, admitted Ayrton Senna after winning the 72 lap Phoenix Grand Prix. I lost it over the past two or three months, so it's good to have won and got this motivation back. This was surely bad news for the opposition; Senna had nine points in the championship. Most insiders expected the first two Grand Prix to be a lottery of unknowns, but neither a Senna nor a McLaren victory is ever by chance.

Scnna was surprised to have won, quite simply because testing hadn't been fantastic. For the first time in 24 races he hadn't even started from the front row, partly due to an engine problem and partly because the weather washing out the second day of qualifying.

However, it had hit his rivals harder. Ferrari, 'the winter World Champions,' as Ron Dennis had described them after their winter testing, were only seventh (Prost) and 17th (Mansell) after gearbox problems. Berger, was on pole in his first outing for McLaren, leaving his new teammate Senna in fifth after an engine problem.

The Pirelli-shod Martini, de Cesaris and Alesi were taken a little more seriously, filling the gap between the two McLarens. Alesi, running the Tyrrell for the first time on the Italian rubber, was consistently competitive in all conditions. When he led the first 34 laps, we knew that here, at least, Pirelli were a force to be reckoned with. The way Alesi fought back at Senna was simply confirmation of his ability.

The expected opposition was falling by the wayside. Berger, beaten off the line by Alesi, had slid into the tyres when his foot slipped off the brake and onto the throttle. The Ferraris were puffing smoke which was a precursor of retirement. Patrese had already been forced to pit for accident damage on lap one, de Cesaris and Martini were slipping back. Only Boutsen and Piquet looked remotely able to keep in touch with the two out front.

Alesi kept up the chase, and when Senna slowed on laps 50 and 51 on hearing something amiss in the engine, it seemed that there just might be a chink in the armour.

However, the pace picked up again, and Senna duly took the 21st victory of his career. Alesi, the star of the show, took second, but admitted that he would have trouble keeping up that form on more conventional circuits. Boutsen, third, stated that his engine had been cutting out, and that he was relieved to have finished.

Senna, at least, was where you would expect him to be. Teammate Berger did what McLaren drivers rarely do; he crashed. Ferrari were retirements in a race where they expected to pick up points, if not maximum. Boutsen was pleased with his four and had reason to expect more in future, Tyrrell proved Pirelli a threat, Modena brought joy to the troubled Brabham team, and Nakajima simply pleased Tyrrell even more.

BRIGHT SPARKS

he surprises in Phoenix were mostly pleasant, apart from the weather of course. It was the downers that were disappointing. However, then chance or opportunity gave Martini (and Minardi), Alesi, Barilla, Grouillard and Suzuki their best ever grid positions, and of course, Alesi his best ever finishing position. No one should forget Gerhard Berger taking his first ever pole position for McLaren, the fifth in his career.

The weekend started well. Roberto Moreno, it could be said, was the surprise of prequalifying, topping the time lists and even preceding both Lola-Lamborghinis and Grouillard's Osella. The AGS team missed out, and it was no shock to see Langes, Brabham and Gachot join them.

It was Alesi who led the Pirelli charge, setting fastest time on Friday morning in the Tyrrell team's first ever outing on the tyres. That was followed up by fourth time in qualifying that afternoon, although Alesi hit the wall and required running repairs during the session.

In the rain the next day, Grouillard and Alesi behind Nannini proved that Pirelli's wet tyres had improved. Alesi's second quickest time to Senna in the warm-up, on admittedly medium/soft race tyres, made Pirelli appear



competitive for the race.

Alesi himself admitted that his pace in the early stages of the race was more like qualifying, but he fought back magnificently when Senna came diving down the inside on the 33rd of the 72 lap race. Senna outbraked the Tyrrell driver into a righthander, but Alesi stayed on the left side of the track going into the following lefthander, and Senna knew that he had no choice but to let Alesi through. It wasn't until two laps later that Senna finally got past the Tyrrell driver. Alesi second, Modena fifth and Nakajima sixth even on this street circuit, gave Pirelli a half share of the top six. Martini's chances were ruined by too little rear wing while de Cesaris slipped back



with brake problems and when the clutch went, he damaged the engine.

Behind Martini, though, came Bernard. Both he and teammate Suzuki had a great race. They battled together only for the cars to suffer brake problems which saw Bernard twice have a moment, and finally Suzuki spun and could not restart. The Lola-Lamborghinis at least performed reliably whereas poor Lotus had a miserable weekend, the only consolation being Donnelly's excellent fastest time in the wet on Saturday afternoon, ahead of Moreno, Senna and Mansell.

This was a weekend for the underdog, however, and Moreno did well to finish in the EuroBrun with help from engineer Kees van der Grint in what was already an overweight car. Modena's points with the Brabham to some extent made up for Foitek's dramatic accident. He cut back in front of Grouillard too quickly when overtaking, and spun himself into the wall at high speed, wrecking a Brabham chassis at a time when they hardly needed such problems.

The establishment didn't really excel, they never had a chance to, although Piquet was pleased with points for Benetton on his first outing. In general the good times were reserved for the underdogs; Phoenix once again showing its true colours.

RACE DEBRIEF

t was a strange way to start the season. There was none of the glamour of Rio with its usual feeling that everyone had been there for months already. Everyone came out cold to Phoenix, one of the least favourite circuits in what certainly isn't a bad location. The temperatures were lower, not that anyone seemed to care and the prices were higher.

The dismally small crowd throughout the three days was a subject that would be discussed for months. Apparently there had been no preceding razzamatazz, nothing to tell the locals to go and watch the race. So they didn't.

There was a good deal of doubt as to whether Onyx and Brabham would even turn up, following financial machinations over their future owners. In the end, however, they both appeared with their own cars. There were 35 runners, so pre-qualifying for nine drivers would take place.





On this dusty street circuit, it was no surprise to see Pirelli's runners come to the fore, represented by Grouillard's Osella and Moreno's EuroBrun. They joined the Lola-Lamborghinis as the successful pre-qualifiers and set the pattern for the first part of the year. AGS were two seconds off the pace, Langes was a further two away. The Coloni's gear linkage fell apart as Gachot accelerated out of the pits and the Life lasted four laps. At least the pre-qualifiers were better behaved than the rest of the field. The morning session was stopped three times: Larini and Alliot put their Ligiers into the wall. The Italian Morbidelli, replacing an unwell Pirro, did the job properly and wrecked his Dallara. Johansson also went off into the tyres twice at the final corner, and savagely baptised his new car.

That afternoon, Alliot had another shunt and when the wrecker crew attempted to remove the car, an engineer rushed onto the track to supervise the removal. This resulted in Alliot's exclusion from the meeting.

Morbidelli's accident that morning came at exactly the wrong time, just when teams were contemplating their first run on qualifiers. When they lost this opportunity most decided to take a set of race tyres and only one set of qualifiers for the official session. There would always be tomorrow to improve.

Except there wasn't. Phoenix decided to use up one of its annual allowance of 17 days of rain that Saturday, and Grand Prix practice and qualifying were washed out.

So the times were set on Friday afternoon amidst the calm belief that the track would be cleaner and quicker the next day. Berger as a result, was able to set what he called a nice, clean lap which turned out to be quickest and of course, his first pole for his new team.

The streets of Phoenix were ideally suited to Pirellis, and the Italian company supplied the next three on the grid: Martini tried lots of different combinations of tyre, de Cesaris was in tears over third slot on the grid, and Alesi did a great job with the Tyrrell team on their first outing on the new rubber, although Harvey Postlethwaite admitted that they'd messed up the settings and Jean had hit the wall.

Senna was only fifth, his first time off the front row of the grid since Silverstone 1988 after a misfire in the morning and more engine trouble in the afternoon. Compatriot Piquet was remarkably confident, while both Ferrari drivers (Prost 7th, Mansell 17th) were in trouble with a new version of the semi-automatic gearbox which



lost oil pressure.

Behind Grouillard, whose Osella was hopping unhappily over the bumps, Boutsen was the leading Williams. Then came Modena with a time to encourage his temporarily unstable team.

Sunday's warm-up was dry and both Senna and Alesi confirmed their competitiveness with the top two times from Berger, an on-form Bernard and Prost with clutch problems. Teammate Mansell had a puncture and hit the barrier. The start of the race saw Alesi make space for himself into the first corner and take







the lead from Berger while de Cesaris and Martini followed. Senna had overtaken the Minardi driver, running too little wing, by the end of the lap. It took another three laps before Senna had passed de Cesaris and moved into third place. Berger was 2.5s ahead, with Alesi still pulling away another four seconds in front.

Both Ferraris were making up ground but Mansell's was smoking very early on and Prost would do likewise from the 15 lap mark. For the moment, however, Prost had overtaken Modena, and on lap eight he passed Martini as well, who

was holding seventh place.

That became sixth a lap later when Berger's foot slipped off the brake pedal and he went sliding into a tyre barrier. He stayed in the car and drove it back to the pits for repair, but after setting fastest lap of the race, he retired with a failed clutch bearing. This conveniently left a clear road between Senna and Alesi, now 8.2s apart. Behind, a big gap had opened up to de Cesaris who had Piquet and Boutsen looking for a way past, all three being caught by Prost who had left Martini to cope with Modena and Nakajima.

The gap between Alesi and Senna actually went up to 9.3s before it came down again. The French driver admitted that he had been driving each lap like a qualifying lap and that it couldn't last. By lap 20 Senna had closed to within five seconds, and traffic cut the gap to 1.3s a lap later. Even so, Alesi managed to maintain the lead.

De Cesaris's reign in third had come to its inevitable end when Piquet and a smokey Prost passed on lap 17, and Boutsen followed through a lap later. However, Prost was in trouble, and on lap 22, he was in the pits out of gearbox oil and out of the race. De Cesaris disappeared a few laps later when his engine expired.

Senna was now shadowing Alesi and they were still well clear of any opposition. Piquet had dropped back with understeer, then pitting for new tyres which left Boutsen in a lonely third. On Clockwise from above:
Saturday's rain was typical
Belgian weather for Boutsen,
but it left him only ninth on
the grid. Martini made a
bigger splash in the dry,
qualifying second. Gregor
Foitek and the Brabham team
were just glad to be there.

Clockwise from right: The new
Lola duo were a perfectly
matched pair. Left: Capelli's
oil light wasn't the only
warning Leyton House had this
weekend. The new car was far
from competitive. Alesi's sights
were already elsewhere...







resuming, the Benetton driver had to cope with Modena who had Martini, Nakajima and Mansell close behind.

As we approached half distance, the lead battle intensified. On lap 33, Senna came charging down the inside of Alesi into the right hander at the end of the straight and Alesi let him through. He promptly fought back, taking the inside line (on the dust) into the next corner, and Senna, suspecting that Alesi had very little grip, had to give best and hand the lead back.

Two laps later, Senna tried again at the same spot, but this time it was he who kept the tight line, and retained his lead which steadily increased until the last couple of laps, in spite of a noise from the engine.

Boutsen was third, glad to see the chequered flag after his engine kept cutting out. Piquet came under pressure from Mansell just before 50 laps, but then the Ferrari's clutch exploded dramatically and that elevated Modena to fifth place, briefly challenging Piquet ahead. The rest were lapped, led by a deaf and uncomfortable Nakajima who had lost an ear plug. Patrese, after a collision with Grouillard at the start, fought

back to challenge the Japanese driver only for his Renault engine to start cutting out, losing positions to both Martini and Bernard by the end.

MILESTONES

- Barilla and Foitek: first Grand Prix
- Schneider replaces Caffi
- Morbidelli replaces Pirro
- Boutsen's 100th World Championship point
- Alesi's best ever result: 2nd
- Alliot excluded following team member's intervention after practice crash
- Grouillard's and Martini's best grid position



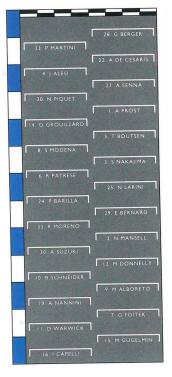


phoenix

round

Iceberg USA Grand Prix, 9-11 March

Pos	Driver/Nationality		No.	Car/Engine	P.Q. (cool, cloudy)	Practice I (warm, cloud)	Practice 2 ()(wet)	Warm-up (pos) (cool, cloudy)		Time/Retirement ly, cool)
_	A. Senna	BR	27	McLaren MP4/5B Honda VIO		1:29.431	1:52.015	1:30.458 (1)	72	lhr52m32.829
2	I. Alesi	F	4	Tyrrell 108 Ford DFR V8		1:29.408	1:54.738	1:30.985 (2)	72	1hr52m41.514
3	T. Boutsen	В	5	Williams FW13B Renault V10	_	1:30.059	1:52.771	1:34.364 (18)	72	Ihr53m26.909
4	N. Piquet	BR	20	Benetton B189 Ford HBV8	_	1:29.862	1:55.449	1:34.911 (21)	72	1hr53m41.187
5	S. Modena		8	Brabham BT58 Judd V8	-	1:30.127	no time	1:32.818 (8)	72	Ihr53m42.332
6	S. Nakajima	1	3	Tyrrell 018 Ford DFR V8	-	1:30.130	no time	1:32.977 (9)	71	1hr52m34.584
7	P. Martini	i i	23	Minardi M189 Ford DFR V8	-	1:28.731	2:33.083	1:32.520 (7)	71	Ihr52m45.045
8	E. Bernard	F	29	Larrousse LC90 Lamborghini VI2	1:32.711	1:31.226	no time	1:32.072 (4)	71	1hr52m59.865
9	R. Patrese	1	6	Williams FW13B Renault V10	-	1:30.213	1:53.530	1:32.245 (6)	71	Ihr53m20.989
10	M. Alboreto	1	9	Arrows AIIB Ford DFR V8	-	1:31.948	1:54.499	1:34.289 (16)	70	1hr53m24.589
11	A. Nannini	1	19	Benetton B189 Ford HB V8	-	1:31.984	no time	1:34.318 (17)	70	Ihr53m27.469
12	B. Schneider	F	10	Arrows AIIB Ford DFR V8	_	1:31.892	no time	1:34.460 (20)	70	Ihr54m03.640
13	R. Moreno	BR	33	Eurobrun ER90 Judd V8	1:32.292	1:31.247	1:51.538	1:38.440 (25)	67	1hr52m39.868
14	M. Gugelmin	BR	15	Leyton House CG891 Judd V8	-	1:32.904	no time	1:35.628 (22)	66	Ihr53m41.512
			24	Minardi M189 Ford DFR V8		1:31.194	no time	1:34.424 (19)	54	weak left arm
15	P. Barilla		30	Larrousse LC90 Lamborghini VI2	1:33.331	1:31.414	no time	1:33.900 (15)	53	brakes
16	A. Suzuki	J GB	2	Ferrari 641 Ferrari VI2	-	1:31.363	1:52,405	1:33.624 (12)	49	clutch
17	N. Mansell	A	28	McLaren MP4/5B Honda V10		1:28.664	1:53,486	1:31.295 (3)	44	clutch bearing
18	G. Berger	CH	7	Brabham BT58 Judd V8	-	1:32.398	no time	1:33.837 (14)	39	collision Grouillard
19	G. Foitek	F	14	Osella FAIM Ford DFR V8	1:33.181	1:29.947	no time	1:33.512 (11)	39	collision Foitek
20	O, Grouillard		22	Dallara BMS 190 Ford DFR VB	-	1.29.019	1:57.435	1:37.433 (24)	25	engine
21	A. De Cesaris	F	1	Ferrari 641 Ferrari VI2	2 7 4	1:29.910	1:56.661	1:32.116 (5)	21	gearbox oil leak
22	A. Prost		16	Leyton House CG 891 Judd V8		1:33.044	no time	1:38.503 (26)	20	oil light
23	I. Capelli	CD	11	Lotus 102 Lamborghini V12		1:32.400	2:05.974	1:33.315 (10)	6	rear suspension
24	D. Warwick	GB	25	Ligier IS33 Ford DFR V8		1:30.424	no time	1:33.764 (13)	4	sticking throttle
25	N. Larini	GB	12	Lotus 102 Lamborghini VI2		1:31.650	1:49.942	1:36.070 (23)	0	gearbox output shaft
26	M. Donnelly					1:33.468	no time	DNQ		
27	S. Johansson	S	35	Onyx ORE2 Ford DFR V8	-	1:33.400	no time	DNQ		
28	G. Morbidelli		21	Dallara BMS 190 Ford DFR V8	-	Disqualifie		DNQ		
29	P. Alliott	F	26	Ligier JS33 Ford DFR V8	_		no time	DNQ		
30	J. J. Lehto	SF	35	Onyx ORE2 Ford DFR V8		no time		DINQ	_	
-	G. Tarquini	1	17	AGS IM24 Ford DFR V8	1:35.420	DNPQ	DNPQ			
	Y. Dalmas	F	18	AGS IM24 Ford DFR V8	1:35.481	DNPQ	DNPQ			
	C. Langes	1	34	Eurobrun ER90 Judd V8	1:37.399	DNPQ	DNPQ			
	G. Brabham	AUS		Life F190 W10	2:07.147	DNPQ	DNPQ			
	B. Gachot	B	31	Coloni C3B Subaru F12	5:15.010	DNPQ	DNPQ			





	LAP CHART
Grid Order	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 77
28 G. Berger	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
23 P.Martini	28 28 28 28 28 28 28 27 27 27 27 27 27 27 27 27 27 27 27 27
22 A. de Cesaris	222227777777722212222222222222222222222
4 J. Alesi	27 77 72 72 72 72 72 72 72 72 72 72 72 7
27 A. Senna	23 23 23 23 20 20 20 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
20 N. Piquet	20 20 20 20 20 5 5 5 5 5 522 22 22 23 23 23 23 8 8 8 8 23 2 2 2 2 2 2 2 2
I A. Prost	5 5 5 5 5 5 5 23 23 1 23 23 23 23 23 23 23 23 23 23 23 23 23
14 O. Grouillard	8 8 8
5 T.Boutsen	1
8 S. Modena	14 3 3 3 3 3 3 29 29 29 29 29 29 29 29 29 29 29 29 29
3 S. Nakajima	3 4 4 29 29 29 29 14 2 2 2 2 2 2 2 2 2
6 R. Patrese	29 29 29 14 14 14 14 14 14 14 14 14 14 14 14 14
25 N. Larini	24 24 25 24 2 2 2 2 30 30 30 30 30 30 30 30 30 30 30 7 7 7 7
24 P. Alliot	25 25 24 2 24 24 30 30 9 9 9 7 7 7 7 7 1 4 1 4 1 4 1 4 9 24 24 24 6 24 19 19 19 19 19 19 19 19 19 19 19 19 19
29 E.Bernard	30 30 30 30 30 9 9 7 7 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9
33 R. Moreno	2 2 2 9 9 9 924 7242424242424242424242419 6 6 6 14 14 14 14 14 14 14 14 24 24 24 24 24 14 10 15 15 15 15 15 15 15 15 15 15 15 15 15
2 N. Mansell	9 9 9 7 7 7 724 16 16 16 16 16 16 16 16 16 16 16 16 16
30 A. Suzuki	
12 M. Donnelly	33 7 11 16 16 16 15 15 19 19 19 19 19 15 15 15 15 6 6 6 15 10 10 10 10 33 33 33 33 33 33 33 33 33 33 33 33
10 B.Schneider	7 6 5 5 5 9 9 6 6 6 6 6 6 6 6
9 M. Alboreto	16 16 15 19 19 19 6 6 10 10 10 10 10 10 10 10 10 10 10 10 10
19 A. Nannini	15 15 19 25 6 6 10 10 33 33 33 33 33 33 33 33 33 33 33 33 32 28
7 G. Foitek	19 19 6 6 10 10 33 33 28 28 28 28 28 28 28 28 28 28 28 28 28
II D. Warwick	10 6 10 10 33 33
15 M. Gugelmin	6 10 33 33
16 I. Capelli	

		FASTEST LAP	S
Pos.	Car	No./Driver/Team	Time
ī	28	G. Berger/McLaren	(N.R.) 1:31.050
2	23	P. Martini/Minardi	1:31.568
3	27	A. Senna/McLaren	1:32.178
4	4	J. Alesi/Tyrrell	1:32.221
5	6	R. Patrese/Williams	1:32.222
6	29	E. Bernard/Larrousse	1:32.681
7	19	A. Nannini/Benetton	1:32.694
8	3	S. Nakajima/Tyrrell	1:32.707
9	2	N. Mansell/Ferrari	1:32.814
10	20	N. Piquet/Benetton	1:32.865
11	5	T. Boutsen/Williams	1:32.915
12	8	S. Modena/Brabham	1:33.147
13	1	A. Prost/Ferrari	1:33.170
14	10	B. Schneider/Arrows	1:33.573
15	30	A. Suzuki/Larrousse	1:33.819
16	22	A. de Cesaris/Dallara	1:34.067
17	7	G. Foitek/Brabham	1:34.156
18	24	P. Barilla/Minardi	1:34.265
19	9	M. Alboreto/Arrows	1:34.517
20	14	O. Grouillard/Osella	1:35.350
21	1.1	D. Warwick/Lotus	1:35,396
22	33	R. Moreno/Eurobrun	1:35.446
23	16	I. Capelli/Leyton House	1:35.598
24	25	N. Larini/Ligier	1:36.971
25	15	M. Gugelmin/Leyton House	1:37.058

N.R.	=	New	lap	record
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L	CHA	CHAMPIONSHIP POINTS						
	Drivers			Constructors				
T	A. Senna	9 pts	T	McLaren Honda	9 pts			
2	J. Alesi	6 pts	2	Tyrrell Ford	7 pts			
3	T. Boutsen	4 pts	3	Williams Renault	4 pts			
4	N. Piquet	3 pts	4	Benetton Ford	3 pts			
5	S. Modena	2 pts	5	Brabham Judd	2 pts			
6	S. Nakajima	pt		•				

Existing qualifying lap record-1989:
Ayrton Senna, McLaren MP4/5 Honda V10
1m30.180s = 151.737kmh/94.284mph

Existing lap record -1989:
Ayrton Senna, McLaren MP4/5 Honda V10

1m33.969s = 145.502 kmh/90.410 mph

PAST WINNERS									
Year	Driver	Nat.	Car	Circuit					
1982	John Watson	GB	3.0 McLaren MP4B Ford	Detroit					
1983	Michele Alboreto	1	3.0 Tyrrell 01 Ford	Detroit					
1984	Nelson Piquet	BR	1.5 Brabham BT53 BMW t/c	Detroit					
1985	Keke Rosberg	SF	1.5 Williams FW10 Honda t/c	Detroit					
1986	Ayrton Senna	BR	1.5 Lotus 98T Renault t/c	Detroit					
1987	Ayrton Senna	BR	1.5 Lotus 99T Honda t/c	Detroit					
1988	Ayrton Senna	BR	1.5 McLaren MP4/4 Honda t/c	Detroit					
1989	Alain Prost	F	3.5 McLaren MP4/5 Honda VIO	Phoenix					



são paulo

Grand Prêmio do Brasil, 23-25 Março

IT IS SAID THAT SÃO PAULO IS JUST ABOUT AS CLOSE TO HELL AS YOU CAN GET ON EARTH. IT IS HORRIBLY OVER CROWDED, NASTILY-POLLUTED AND UTTERLY CHAOTIC IN THAT MOST CHARMING LATIN WAY. WHEN

THEY WINGED THEIR WAY
IN, THEY FOUND A PLACE
IN THE GRIP OF
ECONOMIC CRISIS, THE
BANKS ALL CLOSED AND
THE TRUSTY DOLLAR A
USELESS COMMODITY.
ULTIMATELY IT BEGAN
TO BE FUN. WHEN



THE CHIPS ARE DOWN, THERE IS ALSO AN AMAZING RACE TRACK - INTERLAGOS - A CROWD OF MASSIVE PROPORTIONS, CHEERING, SWEARING AND WAVING FLAGS. THIS IS AYRTON'S TOWN AND FORMULA 1 WAS BEING TOLD NOT TO FORGET IT.



Clockwise from above: With parts of the new Interlagos circuit still resembling a building site, Mansell's bright red Ferrari was a nice contrast.

Osella blends into scenery...

Piquet earned valuable Cruzados at home snatching sixth on the last lap.

IMPRESSIONS

otor racing knows never to under-estimate Alain Prost. He was relieved to have won this Brazilian Grand Prix, taken his 40th Grand Prix victory and his first for Ferrari. However, he still managed to create further paranoia. 'We're still trying to find the best compromise, but it should come after two or three races.'

It's ironic that one of his most successful circuits in the world should happen to be the home of his greatest rival. While Prost has now won six times in Brazil, Senna still has to score his maiden victory at home.

It is just one of the ironies of a funny old Brazilian Grand Prix, back on an almost totally rebuilt Interlagos circuit, in a country undergoing a major financial revolution, in dull yet quite civilised São Paulo, far from the glamour and excitement of Rio. There was such major pro-Senna and anti-FISA public feeling that it felt that the revolution had locally become more than financial.

Yet at the end of the weekend, the disappointment was total and anarchy prevailed. No one presented the trophies, no joy overflowed on the rostrum. Prost was booed, Senna ignored him and Berger was exhausted. It was not a happy affair.

However once away from the rostrum, Prost was pleased, delighted, and sounding off warning shots. 'On qualifiers, the car doesn't work,' he explained, 'but every time we are on race tyres with a little bit of fuel in the car, I can fight with Ayrton.'



'But this is a fantastic day for us, for me especially, because it's 40 victories and the sixth victory in Brazil which is also a record. We are very pleased with this victory, because we had a hard time in Phoenix and after Phoenix. I feel that McLaren still have a small advantage, because they know the car and chassis and engine very well since last year, so they can be a bit more precise.'

Senna got his pole position and looked to be on course for a win. It seemed to be going so well for him, and he lost his greatest rival, Thierry Boutsen, when the Belgian ran out of brakes and thumped a waiting tyre in a pit stop. Replacing his damaged nose section took nearly a minute, and Senna had a 12 second lead over Prost and there was little the Ferrari driver could do about it, or so it seemed.

Then Senna tripped over Nakajima, his former Lotus teammate. You couldn't accuse Senna of being impetuous. He waited four or five corners before trying to lap the Japanese Tyrrell driver. Then Nakajima left the door open and Senna duly went for the gap. Nakajima claimed that he had gone so wide that he got on the marbles, slid wide and his car just came back across the track. Senna tried to brake but he just hit Nakajima amidships, quite slowly, but enough to damage the nose section.

The resulting pit stop gave Prost the lead and the race that he so desired. Berger was exhausted, uncomfortable in the car and suffering, unable to do anything about anyone. Senna, once attempting a charge, gave up when he realised that his new nose section had 'too much front which made the back end loose and nervous.'





BRIGHT SPARKS

ne of the more remarkable factors was that this race happened at all. Indeed, there was every chance that it wouldn't take place for two reasons. The financial crisis, which saw Brazil making yet another even more drastic attempt to get the country on a solid financial footing, left fuel and tyres stranded in customs. And the circuit was still being finished as cars went out on Thursday for the opening of hostilities. It had taken less than six months to plan and build what was virtually a new Interlagos. Although the feeling was that 'it'll be great when it's finished,' it was still touch-and-go whether the circuit was sufficiently ready. Rain revealed one or two short-comings which would cause consternation, but in the end, the race was given FISA's blessing and it duly went ahead.

Most drivers found the track interesting, with a lot of long hard corners which would be physically tiring. The bad news, as far as much of the field was concerned, was that it was also a circuit for the multi-cylinders, and they duly took the honours in qualifying.

Senna was particularly pleased with his 43rd pole position. 'There are some qualifying laps which have been more satisfying,' he would explain, 'but it's very satisfying to plan a quick lap as we had to today, then go quicker and keep pole position.'

Less happy, behind him, was Thierry



Boutsen, frustrated not to have had a crack at the McLarens ahead, with Patrese, pleased to have demoted the Ferraris to row three. On this still dusty circuit, with pollution increasing the dust level, the Pirelli-tyred V8 runners were to the fore, with Alesi in seventh ahead of Martini and de Cesaris, although Alliot was first of the V8 Goodyear runners.

Further back, Bernard was in eleventh, three

places ahead of Donnelly the next Lamborghinipowered runner Morbidelli, having his last race with Dallara, was in a promising 16th spot, while Caffi bravely soldiered on in spite of pain from his damaged shoulder. Dalmas was to give the AGS JH24 its first, and probably last race after successfully getting through pre-qualifying.

The first half of the race saw Boutsen finally having revenge for his practice disappointment. He soon picked off Berger who suffered understeer, and from lap eight to lap 30, sat no more than seven seconds behind Senna, although the gap steadily increased as the Williams suffered brake trouble which eventually lost him his place.

Mansell spent much of the race battling with either Patrese or Alesi, having had trouble with a loose anti-roll bar, while Alesi got involved in a great, last ditch battle with Piquet which saw the Benetton driver pick up the final point on the very last lap. Piquet had twice changed tyres whereas Alesi's were finished by the end, and he had no reply when the Benetton came charging through. Team mate Nakajima was eighth ahead of a more promising Martini and both the Ligiers finished as well.



Clockwise from above:

Donnelly gets another chance
to look at Formula One. Alesi
started seventh, finished
seventh - but with a little more
luck would have been sixth.
Martini qualified well again,
but Alex Caffi made a cautious
return after his cycle accident.





RACE DEBRIEF

n spite of the fact that only eight cars improved on the second day, qualifying actually held few surprises. The multicylinders were dominant on this circuit with its long straight where speeds reached up to 300 kph. But oil did tend to hold things up on Saturday which caused a rather unexciting final qualifying session.

Another factor which caused disappointment and frustration was the number of red flags. Capelli went off, Bernard hit a wall, so did Foitek; a red flag each time. Next day, same again: Mansell pulled off, Senna had a spin and so did Gugelmin; a red flag every time. The main problem was that the Brazilian marshals tended to do what the drivers told them (don't push me off, either push start me or get the session stopped) and not what the officials told them. Furthermore, the soggy nature of recently reworked ground contributed to the problems.

Pre-qualifying was a disappointment for Roberto Moreno, for he twice stopped out on the



Clockwise from above:
Tarquini would have to wait
until France before he would
run in such exalted company
again. Alliot made the race
this time. Senna practised his
overtaking manoeuvres - but
didn't perfect them.

circuit once in his own car (electrics), once in Langes's car (no fuel) and didn't make the first four, his place being taken by Dalmas. Grouillard was quickest on Pirellis, the Larrousse Lolas next, Tarquini missed ousting his teammate by 0.2s.

Oil from Riccardo Patrese's Williams-Renault kept down the times for most of Saturday afternoon, and it was only at the end that Senna improved. He hadn't been happy with either of his runs the previous day, even though he was still the quickest. However he improved by half a second on Saturday even though he had gone a little wide through one corner. He'd even had a spin, and cricked his neck during qualifying.

Teammate Berger never improved on the second day but wasn't unhappy with his performance, although he was still not comfortable in the car. He preceded the Williamses on row two, both drivers improving during the final minutes of the second session.

The Ferraris weren't happy in qualifying trim, Prost pointing out later that 'on qualifiers, the car doesn't work. If we are to be competitive all year, we're going to have to improve our qualifying performance.'

Alesi was another to improve on Saturday, after trying to be a little too clever the day before, whilst Martini lost a wheel during practice fortunately without major damage. Continuing the Pirelli trend was de Cesaris, although Modena was three places further back, 0.3s slower. The Benettons were disappointing, in trouble with balance, while neither Onyxes nor Leyton Houses made the race at all, the latter suffering a curious lack of grip which nothing seemed to solve.



With that little bit of fuel in the car, Alain Prost was quickest in the warm-up from Senna while Mansell confirmed the Ferrari form with third followed by Berger, Boutsen and Patrese. No doubt about the multi-cylindered engines, while Alesi preceded Piquet in the V8 class, shades of things to come.

As well as being the main overtaking place, the first corner was also thought to be the most crucial corner in the race. Sure enough it claimed de Cesaris who tangled with Alesi, although the Frenchman didn't suffer. By this time, Senna was in front, pushed by Berger from Boutsen and then the Ferrari of Prost.

Berger gave his teammate a hard time for the first four laps but it proved fatal; his tyres began to give him understeer, and he was soon fading into the clutches of Boutsen. Prost, Mansell, Patrese and Alesi followed. Boutsen quickly passed Berger by lap eight, leaving him to be caught by Prost who was being shadowed by Mansell and Patrese. Then came a gap out to Alesi, Martini and Modena, although Piquet was coming through to join them, having already overtaken Donnelly, Bernard and Alliot.

Boutsen managed to keep Senna's lead down to just over three seconds until lap 15, but then it started to go out. He had a 'long' brake pedal and was having to pump it which began to cause him to drop back. But behind him, Berger was temporarily holding Prost at bay, although it wouldn't last much longer. On lap 18, Prost moved up into third place and began to look at the two second gap to Boutsen, although he would make little real attempt to get on terms with the Belgian. Further back, Piquet had overtaken Modena and was now closing on eighth placed Martini.

Then came the pit stops: first to stop for tyres was Mansell who also had a loose anti-roll bar adjustment which needed tightening. Taking off the steering wheel and doing the job took 16 seconds longer than Prost's routine pit stop a few laps later.

Next to come in was Boutsen, his Williams Renault in brake trouble. 'When I came into the pits I misjudged the speed,' he explained. 'It was too fast. I had no brakes, so I had to pump once and press again, but it was already too late. I couldn't steer the car so I hit a tyre and broke the nosecone.' A mechanic was also thrown up in the



Clockwise from right: Andrea de Cesaris did not return from directions supplied by Alesi at the first corner. Nannini made two pit stops on his way to ninth place.Prost snatched the glary in Senna-town.





air, but was fortunately uninjured.

Boutsen's stop was a long one, and there was more bad news with Patrese having a spin when he got off line. When the Goodyear pit stops were over (Piquet was one of the last to go in, losing out to the Pirelli men who didn't stop), Senna had a 12.2s lead over Prost in second. Patrese still had to stop but would slip to sixth, promoting Berger to third. Then came a gap to Mansell who had just overtaken Alesi.

But on lap 40 came the incident which changed the face of the race. Senna was lapping Nakajima when the Japanese driver pulled across in front of him. Senna wasn't the slightest bit accusing, while Nakajima was immensely apologetic. Senna pitted for a new nose section, and it dropped him back to a distant third.

Instantly out of the pits he set a quick lap: would we see a Senna climb now? There were 30 laps to go and a gap of 27 seconds. It was on, surely. But then his rate of progress slowed. 'The new nose was meant to have the same settings on it,' said Senna later, but 'I lost the balance, because it wasn't exactly the same somehow. The car then got nervous over the bumps and it was too dangerous. I decided to ease up, otherwise I

would have had to take risks which would have compromised my third place.'

Prost was left with a 4.5s lead which he simply extended, for Berger was not only in pain from his braking foot, but heard noises from the clutch and had one or two problems with the gearbox.

Behind the first three, Patrese had led Mansell but was struggling with his gearbox, then wisps of smoke gave notice of an oil leak. While Mansell got past, Patrese pulled off six laps from the end. Behind the recovered Boutsen, Piquet and Alesi had a great battle. The victorious Brazilian had stopped for another set of tyres to replace the previously out of balance set. Behind Nakajima, Nannini had a puncture which gave ninth place back to Martini who was suffering brake troubles. Modena retired his Brabham with a spin.

MILESTONES

- Prost's 40th career victory
- Morbidelli's first Grand Prix, replacing Pirro
- Caffi's return for Arrows
- Senna's 43rd Pole
- Alliot's 80th Grand Prix
- Boutsen's equal best ever grid position





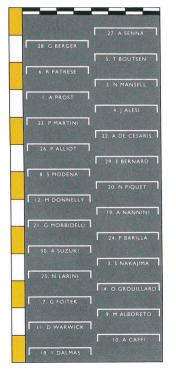


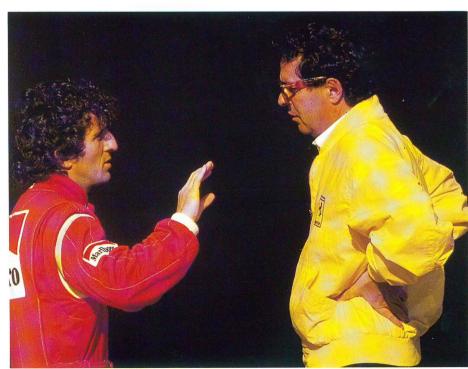
são paulo

round

Grand Prêmio do Brasil, 23-25 Março

Pos	Driver/Nationality		No.	Car/Engine		Practice I (warm, sunny)		Warm-up (pos) (overcast, warm)	Laps (warm,	Time/Retirement sunny)
1	A. Prost	F	133	Ferrari 641 Ferrari VI2		1:18.631	1:18.884	1:20.589 (1)		Ihr37m21.258
2	G. Berger	Α	28	McLaren MP4/5B Honda V10		1:17.888	1:18.504	1:21.436 (4)		Ihr37m34.822
3	A. Senna	BR	27	McLaren MP4/5B Honda V10	- 100	1:17.769	1:17.277	1:20.990 (2)		Ihr37m58.980
4	N. Mansell	GB	2	Ferrari 641 Ferrari V12	- 1	1:18.509	1:19.475	1:21.229 (3)		Ihr38m08.524
5	T. Boutsen	В	5	Williams FW13B Renault V10	-	1:18.375	1:18.150	1:21.539 (5)		Ihr37m33.877
6	N. Piquet	BR	20	Benetton B189 Ford HBV8		1:19.629	1:20.317	1:22.705 (8)		Ihr37m59.861
7	J. Alesi	F	4	Tyrrell 018 Ford DFR V8		1:19.230	1:18.923	1:21.782 (7)		Ihr38m00.860
8	S. Nakajima		3	Tyrrell 018 Ford DFR V8		1:20.568	1:21.086	1:23.477 (15)		1hr38m27.693
9	P. Martini	í	23	Minardi M189 Ford DFR V8		1:19.039	1:19.688	1:22.931 (12)	69	Ihr38m31.426
10	A. Nannini	T	19	Benetton B189 Ford HB V8		1:20.055	1:20.3.17	1:23.574 (16)	68	Ihr36m30.323
11	N. Larini	1	25	Ligier S33 Ford DFR V8		1:20.650	1:20.794	1:24.352 (22)	68	Ihr37m24.265
12	P. Alliot	F	26	Ligier S33 Ford DFR V8		1:19.309	no time	1:22.899 (11)	68	Ihr38m19.147
13	R. Patrese	100	6	Williams FW13B Renault V10		1:18.465	1:18.288	1:21.638 (6)	65	oil leak
14	G. Morbidelli	1	21	Dallara BMS 190 Ford DFR V8	- 3	1:20.164	1:20.229	1:24.112 (19)	64	Ihr37m24.574
15	A. Caffi	1	10	Arrows A112B Ford DFR V8	THE.	1:21.065	1:22.057	1:24.464 (24)		exhaustion
16	M. Donnelly	GB	12	Lotus 102 Lamborghini V12		1:20.032	no time	1:22.897 (10)		spun/stalled
17	S. Modena	1	8	Brabham BT58 Judd V8		1:19.425	1:20.126	1:23.121 (14)		spun
18	P. Barilla		24	Minardi M189 Ford DFR V8		1.:20.282	1:21.121	1:24.308 (21)		valve
19	Y. Dalmas	F	18	AGS JH24 Ford DFR V8	1:24.015	1:22.426	1:21.087	1:26.446 (26)		suspension mounting
20	D. Warwick	GB	-11	Lotus 102 Lamborghini V12		1:21.244	1:20.998	1:22.806 (9)	25	electrics
21	A. Suzuki	1	30	Larrousse LC89 Lamborghini V12	1:23.982	1:20.557	1:21.086	1:24.213 (20)		accident damage
22	M. Alboreto	i i	9	Arrows AIIB Ford DFR V8	- 10	1:20.920	1:21.002	1:23.586 (18)	24	rear damper unscrewe
23	G. Foitek	CH	7	Brabham BT58 Judd V8	_	1:20.965	1:20.902	1:23.580 (17)	14	clutch
24	E. Bernard	F	29	Larrousse LC89 Lamborghini V12	1:23.763	1:19.406	1:21.024	1:22.980 (7)	13	gearbox
25	O. Grouillard	F	14	Osella FAIM Ford DFR V8	1:23.987	1:21.292	1:20.884	1:24.751 (25)	8	accident Alboreto
26	A. de Cesaris	1	22	Dallara BMS 190 Ford DFR V8		1:19.125	1:19.964	1:24.374 (23)	0	accident Alesi
27	S. Johansson	S	35	Onyx ORE2 Ford DFR V8		1:21.241	1:22.184	DNQ		
28	J. J. Lehto	F	36	Onyx ORE2 Ford DFR V8		1:21.323	1:21.417	DNQ		
29	I. Capelli		16	Leyton House CG891 Judd V8		1:21.383	1:21.422	DNQ		
30	M. Gugelmin	В	15	Leyton House CG891 Judd V8		1:21.616	1:22.862	DNQ		
	G. Tarquini	7	17	AGS JM24 Ford DFR V8	1:24.265	DNPQ	DNPQ			
MALE:	R. Moreno	BR	33	Eurobrun ER90 Judd V8	1:25.763	DNPQ	DNPQ			
_ /	B. Gachot	В	31	Coloni C3B Subaru F12	1:34.046	DNPQ	DNPQ			
_	C. Langes		34	Eurobrun ER 189 Judd V8	1:39.188	DNPO	DNPO			





Grid Order 27 A. Senna	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 27 27 27 27 27 27 27 27 27 27 27 27 27
27 A. Senna	
	28 28 28 28 28 28 28 28 5 5 5 5 5 5 5 5
28 G. Berger	
5 T. Boutsen	5 5 5 5 5 5 5 8 28 28 28 28 28 28 28 28 28 28 28 28 2
6 R. Patrese	1
2 N. Mansell	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
I A. Prost	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
4 J. Alesi	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
23 P. Martini	23 23 23 23 23 23 23 23 23 23 23 23 23 2
22 A. de Cesaris	829 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
26 P. Alliot	29 826262626262620000000000000000000000000
29 E. Bernard	26 26 29 29 20 20 20 20 20 26 26 26 26 26 26 26 26 26 26 12 12 12 12 13 3 3 3 3 3 5 5 5 5 3 3 3 3 19 19 19 19 19 19 19 19 19 19 20 20 20 20 20 23 23 23 23 23 23 23 23 23 23 23 23 23
8 S. Modena	12 12 12 12 12 12 12 12 12 12 12 12 12 1
20 N. Piquet	20 20 20 12 30 30 30 30 30 30 30 30 30 30 30 30 30
12 M. Dannelly	30 30 30 30 29 29 29 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
19 A. Nannini	24 24 24 3 3 3 3 29 29 29 29 29 24 9 9 9 9 9 24 10 10 10 10 24 19 24 24 24 24 24 12 12 12 12 12 12 12 12 12 12 12 12 12
21 E. Pirro	14 3 32474242424242499742424102424241918182518182626262626262626262626262521212121
24 P. Barilla	3 4
30 A. Suzuki	9
3 S. Nakajima	11 9 9 9 9 9 7 7 7 7 7 18 7 25 25 25 25 25 25 25 25 25 25 25 25 25
25 N. Larini	10 7 7 7 7 7 7 10 10 10 10 10 7 11 19 19 19 26 26 11 11 11 11 26 21
14 O. Grouillard	7 0 0 0 0 0 0 8 8 8 8
7 G. Foitek	18 18 18 18 18 18 18 25 25 25 25 25 25 19 19 21 21 21 21 21 21 21 21 21
9 M. Alboreto	25 25 25 25 25 25 19 19 19 19 19 29 21
II D. Warwick	19 19 19 19 19 19 14 21 21 21 21 21
10 A.Caffi	21 21 21 21 21 21 21
18 Y. Dalmas	

		FASTEST LAP	S
Pos.	Car	No./Driver/Team	Time
1	28	G. Berger/McLaren	1:19.899
2	1	A. Prost/Ferrari	1:20.010
3	27	A. Senna/McLaren	1:20.067
4	5	T. Boutsen/Williams	1:20.089
5	6	R. Patrese/Williams	1:20.132
6	2	N. Mansell/Ferrari	1:20.389
7	20	N. Piquet/Benetton	1:20.650
8	23	P. Martini/Minardi	1:21.799
9	19	A. Nannini/Benetton	1:21.820
10	3	S. Nakajima/Tyrrell	1:22.398
11	4	J. Alesi/Tyrrell	1:22.536
12	25	N. Larini/Ligier	1:22.649
13	12	M. Donnelly/Lotus	1:22.899
14	18	Y. Dalmas(AGS	1:22.948
15	21	G. Morbidelli/Dallara	1:22.987
16	26	P. Alliot/Ligier	1:23.115
17	8	S. Modena/Brabham	1:23.255
18	9	M. Alboreto/Arrows	1:23.292
19	11	D. Warwick/Lotus	1:23.390
20	30	A. Suzuki/Larrousse	1:23.491
21	10	A. Caffi/Arrows	1:23.671
22	24	P. Barilla/Minardi	1:24.177
23	29	E. Bernard/Larrousse	1:24.308
24	7	G. Foitek/Brabham	I:24.922
25	14	O. Grouillard/Osella	1:25.308

Ī	CHAMPIONSHIP POINTS									
	Drivers Constructors									
ī	A. Senna	13 pts	ī	McLaren Honda	19 pts					
2	A. Prost	9 pts	2	Fer <i>r</i> ari	12 pts					
3	G. Berger	6 pts	3	Tyrrell Ford	7 pts					
	J. Alesi	6 pts	4	Williams Renault	6 pts					
5	T. Boutsen	6 pts	5	Benetton Ford	4 pts					
6	N. Piquet	4 pts	6	Brabham Judd	2 pts					
7	N. Mansell	3 pts		-	•					
8	\$. Modena	2 pts								
9	S. Nakajima	l pt								

	P.	ΔST	WINNERS	
			WITTERS	
Year	Driver	Nat.	Car	Circuit
1979	Jacques Laffite	F	3.0 Ligier STI Ford	Interlagos
1980	René Arnoux	F	1.5 Renault RS t/c	Interlagos
1981	Carlos Reutemann	RA	3.0 Williams FW07C Ford	Rio de Janeiro
1982	Alain Prost	F	1.5 Renault RS t/c	Rio de Janeiro
1983	Nelson Piquet	BR	1.5 Brabham BT52 BMW t/c	Rio de Janeiro
1984	Alain Prost	F	1.5 McLaren MP4/2 TAG t/c	Rio de Janeiro
1985	Alain Prost	F	1.5 McLaren MP4/2B TAG t/c	Rio de Janeiro
1986	Nelson Piquet	BR	1.5 Williams FW11 Honda t/c	Rio de Janeiro
1987	Alain Prost	F	1.5 McLaren MP4/3 TAG t/c	Rio de Janeiro
1988	Alain Prost	F	1.5 McLaren MP4/4 Honda t/c	Rio de aneiro
1989	Nigel Mansell	GB	3.5 Ferrari 640/Ferrari VI2	Rio de Janeiro

No existing lap records - new circuit

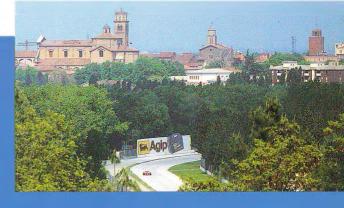


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Gran Premio di San Marino, 11-13 Maggio

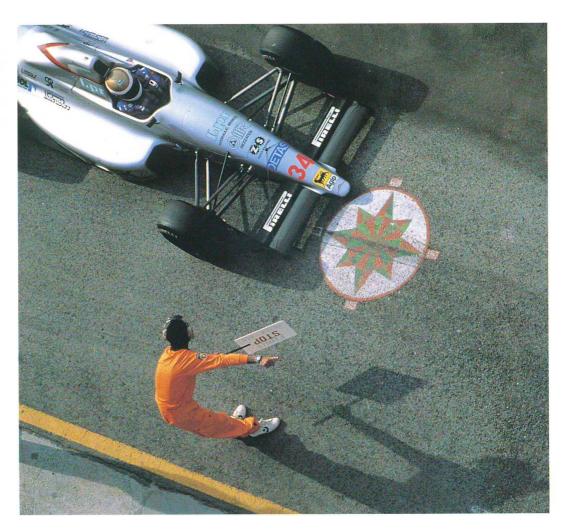
IMOLA IS A LITTLE TOWN, ON THE PLAINS TO THE EAST OF THE APENNINE MOUNTAINS-THE BACKBONE OF ITALY. UP IN THE HILLS IS WHERE THE LEGENDS WERE MADE, IN THE FUTA AND RATICOSA PASSES -THE ROUTE OF THE OLD MILLE MIGLIA RACE. IMOLA'S

RACING TRACK WAS AROUND
IN THE FIFTIES, BUT IT DID
NOT AMOUNT TO MUCH
UNTIL ENZO FERRARI TOOK
AN INTEREST. THE OLD MAN
OF MARANELLO GAVE HIS
PATRONAGE: THE PLACE WAS



UPGRADED AND NAMED THE AUTODROMO DINO FERRARI AFTER ENZO'S TRAGIC SON. IT FINALLY TOOK ITS PLACE IN FORMULA 1. IN MAY IT IS TO IMOLA THAT THE TIFOSI FLOCK TO WATCH THEIR BELOVED FERRARIS. THEY PLAY SYMPHONIES WITH TIN CANS. BUT REALLY THESE ARE ONLY THE OVERTURE AS THEY WAIT FOR ENZO'S CARS TO APPEAR. HOPE SPRINGS ETERNAL THAT FERRARI WILL WIN AT HOME...

Clockwise from right: Langes confined his stardom to early Friday morning. Catherine puts her Nelson in the shade. Gugelmin's BP backed Leyton House going for the 'green' image.



IMPRESSIONS

id Gerhard Berger's post-race demeanour say it all? Nigel Mansell had caught and all but overtaken the McLaren. Riccardo Patrese had succeeded and won. McLaren had been beaten on a circuit where a year earlier they had first stamped their domination on the 1989 Grand Prix season.

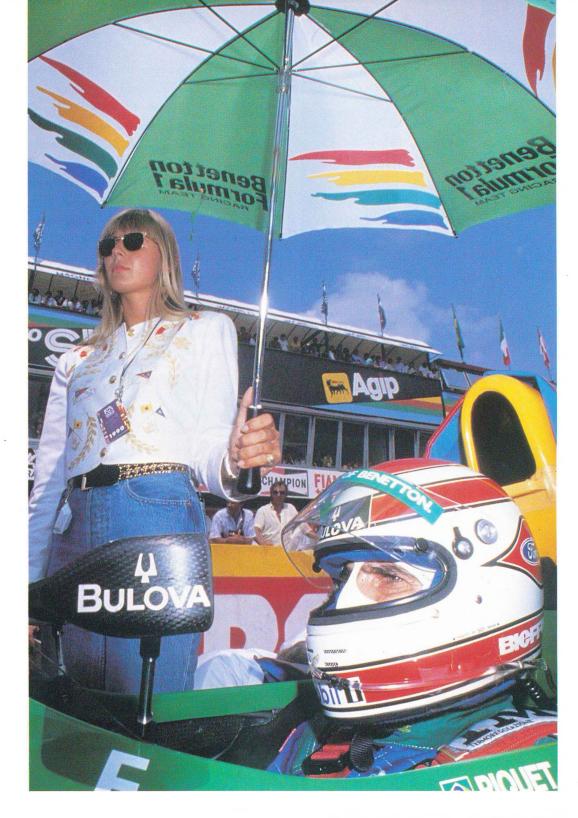
This time it was different. Pre-race testing, so vital in 1989, had been emulated by the other big teams, and severely interrupted by inclement weather. Senna was out within four laps with a broken wheel rim. Berger still seeking extra centimetres of space within the car, was left to uphold McLaren's honour.

It was he who feared Williams more than Ferrari anyway. Boutsen led him for the next 14 laps but the Belgian had a gearbox problem, and ultimately wrong-slotted and blew the engine. Berger now came under pressure from Mansell, the Ferrari already smoking within the first ten

laps. Twice Mansell lost three seconds during incidents in his impatient charge but after 16 laps in the lead, the Ferrari's engine blew.

Then it was Patrese's turn to challenge Berger, and the Austrian had no reply. Was he really hanging out the white flag or not telling the whole story when he said? 'I made no mistakes except braking a little late on one lap at Rivazza and went a little bit wide. That was all. I couldn't do better. I had no chance against Riccardo. I saw that he was quicker, so it was better to be second than lose points.'







He seemed tired, serious and dispirited. Had he been discouraged too, that if this was a McLaren-Honda, then it wasn't the same dominant package which he hoped would easily give him second in the World Championship, if not first?

Gerhard admitted to having made the wrong tyre choice of the front runners, and only Prost and Alesi actually changed tyres, so once having made the choice of Goodyear's softer Cs



on the left and harder Bs on the right, Berger was stuck with them.

Later he also suggested that the engine was down on power which Osamu Goto of Honda didn't see on his telemetry system, and there were rumours of fuel shortages. However, it was confirmed later that Honda had used unleaded fuel but hadn't told the engine, and that the valve seats had burnt out, hence the loss of power. So for the moment, Berger was dispirited. Williams led with Boutsen, and won with Patrese. Williams and Renault certainly looked a greater danger than Ferrari, who had still not shone in qualifying on this power circuit (new '710 bhp' engines weren't reliable). Come to that, Mansell's car had been smoking since lap four, and Prost's was





emitting puffs by the end.

In the short term, one savoured a great Grand Prix win for Riccardo Patrese in his 195th Grand Prix, and a sparkling 'no holes barred' drive from Nigel Mansell. In the long term, we would have to wait a race or two yet for any true pattern to emerge - if it was going to.

Three drivers were now covered by just one point in the World Championship after three races. A year ago, at the same stage, Prost and Senna on 18 points had twice as many as their nearest challengers.

BRIGHT SPARKS

his was a positive Grand Prix. There are races where everyone goes home with their tails between their legs, everyone miserable but the winner.

Not this one. From the word 'go' there were encouraging signs, teams delighted that, although qualifying hadn't gone too well, race testing and set-up seemed great. Not everyone came away with points at the end, of course, but there was encouragement in several areas.

After he had claimed his 44th pole, it was nice to hear Ayrton Senna acknowledging the battle for pole that he had with teammate Berger, and how well they got on together. 'Gerhard is very competitive. He's working harder than any other teammate I've ever had: very determined, very motivated. We play a lot however. We joke a lot and this is good, it helps to keep a good atmosphere. On Friday, we played a little together when he was quicker and I recognise that he'd done a fantastic lap. We respect each other. We both have a big commitment to our driving. He's very aggressive, he's very fast and that gives me extra commitment. Today's pole came from that commitment.'

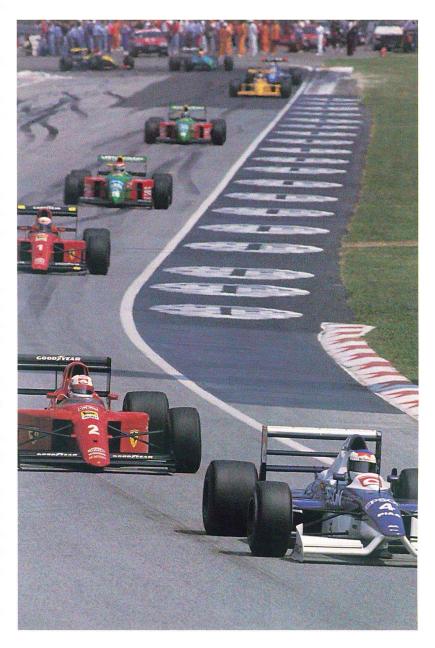
The two by two nature of the grid told its own stories: Williams appreciated that they couldn't be on terms with McLaren. Benetton, in spite of Nannini's crash, were already showing promise. Lotus had certainly made progress. It was good to see Gugelmin on row six after the Brazilian disappointment. The Lola drivers were nicely matched, and Modena was getting the new Brabham sorted out.

The race itself was positive for most. For Renault, Patrese's third Grand Prix victory was

confirmation of their winter and spring testing. He was delighted to have cast off the scourge of 1983 when he went off into the barrier after Acqua Minerale when leading. Tears clouded his eyes in the final laps, but his race had been intelligent and careful, and the undiluted philosophical determination was still on tap when it was required, in spite of his long service in Grand Prix racing.

Behind Berger, Benetton had much to be pleased about, with Nannini narrowly salvaging third and Piquet fighting back up to fifth after his brush with Alesi. In his successful fight with Prost, the Italian had underlined some interesting comparisons between Ford V8 and Ferrari V12 power, and had claimed fastest lap on the

Clockwise from below: Fifth placed Alesi survived earlier antics to lead the Ferraris on lap one. Donnelly causes fright number two on lap one. Berger put memories of '89 from his head and finished second. Martini cracked an ankle when he crashed in practice.



Bight: Patrese and Mansell
fought for third place and
Italian honour. The Williams
driver triumphed.
Below: the tifosi were blue that
Ferrari red could only manage
fourth place.

penultimate tour.

Both Alesi and Mansell had shown aggression of the kind likely to gladden the hearts of the tifosi although perhaps not fellow drivers. Mansell had proved what Prost had not: that Ferrari does have the power to challenge the best, although it might prove unreliable.

Out of the points were the Lotuses, Warwick leading home Donnelly by 0.6s in spite of annointing his teammate and his car with most of his oil. At least they saw the chequered flag, as did the Ligiers, while the closely-matched Lolas should have done and Lehto was lucky to have done. Points scoring for the lesser teams looked as though it would be harder than ever in 1990.

RACE DEBRIEF

here was rarely a dull moment during the San Marino Grand Prix. A huge crowd and sunny weather contributed to a great weekend and that feeling that Grand Prix racing is after all a great sport.

Admittedly pre-qualifying lost most of its interest when Yannick Dalmas pulled out having damaged his wrist in testing, and Gabriele Tarquini suffered fuel problems in the other AGS. It meant that the Lolas, Grouillard's Osella and Moreno's EuroBrun were five seconds quicker than the rest. Gachot's Coloni wouldn't handle, Langes didn't have the pace and the Life did a single lap, now in Bruno Giacomelli's hands.

Senna was quickest that morning, Berger in qualifying that afternoon, and Patrese in the unofficial session next morning. But that afternoon Senna was wound up like a taut string







and unleashed a great lap for his 44th pole position. It was a superb battle with Berger. Senna initially failed to improve, feeling that he scrubbed off too much speed. 'But the second lap was a good, forward lap.'

Berger couldn't reply, suffering gearbox trouble and having to freewheel around one corner when he missed third. There would be more such battles to relish as the Grand Prix progressed, Patrese felt he was on the limit in the Williams, but teammate Boutsen was catching up after being delayed with a seized shocker during day one. Mansell was well wound up: he went off

the track once at 180 mph at Tamburello. He was badly blocked by Grouillard and then narrowly avoided being collected by a spinning Barilla which brought day one to an end.

Next morning Mansell suffered a blown engine and then in the afternoon he and Boutsen touched which sent the Ferrari onto the grass. Later his foot slipped at the Acqua Minerale and he straightlined the chicane - just as he had in testing. Prost wasn't happy with his car on qualifiers and opted for older style bodywork.

Alesi was next in the fascinating new Tyrrell ahead of the promising new Benettons, although

Nannini crashed heavily at Villeneuve when knocked off by de Cesaris. Martini should have been next, but he hit a kerb at Acqua Minerale when his throttle stuck open during Friday's qualifying, the new Minardi plunged into the tyres, alarmingly ripping off the front of the car and eliminating the very shaken driver with a cracked heel.

Also in trouble was Larini who crashed his Ligier at the same place as Martini as he did in testing. Bernard also had a nudge with the barrier, Moreno had a huge shunt at Villeneuve but jumped into the other car and qualified. Barilla got in when Martini was withdrawn but neither Arrows made it thanks to handling and power problems. David Brabham got further than brother Gary but didn't make the race as the 1990 Brabham's new front end didn't match the old back end of the 1989 car which still lacked testing as the driver lacked Formula One miles.

The start, with Pirro at the back and Alesi in his spare car, was a bit of a mess. Berger anticipated the lights and shot off, and everyone went with him. At Tamburello Mansell took to the dirt, sending up a cloud of dust on the right so that everyone charged left, pushing Capelli into a spin and Nakajima into the wall at high speed. The Tyrrell was wrecked, but the Japanese driver was thankfully unhurt, while the Leyton House was unscathed.

At Tosa, this action-packed lap saw Senna take the lead when Berger missed a gear. Alesi barged inside the two Ferraris, Mansell leading Prost, while Donnelly had a spin causing Suzuki to take evasive action.

By the end of the lap, Berger had lost out to Boutsen, so Senna led the Belgian and the Austrian. Then came Patrese from Alesi, Mansell, Prost seventh followed by the two Benettons.

Boutsen wasn't letting Senna get away, but

the Brazilian felt that he was in trouble. 'On the first corner of the first lap I knew something was wrong,' he said. 'I felt something flexing at the right rear. Then when I got to the top chicane on lap four the car got rather sideways and I slowed right down. I was soon on the radio to the pits, thinking that I had a deflating tyre, but as I came down the hill to Rivazza, I realised that I was losing my braking.'

The right rear tyre had no air in it, the wheel machined in half by a stone so that the front left wasn't braking. Senna slid off the road into the sand and out of the race.

Boutsen led from a closely following Berger, as a smokey Mansell began to challenge Patrese. Further back, Piquet tangled with Alesi and went from sixth to 12th and then Alesi had a spin on his own but remained seventh.

As Berger challenged Boutsen on lap 17, the Belgian knew that he would have trouble trying





to keep his position. 'I had a gearbox problem even as we went out to the grid,'he said. 'The team tried to put it right but weren't able to and I was having problems getting the gears. When Berger challenged me, I got the wrong gear and the engine went.'

Boutsen headed for the Williams pit on lap 18, Berger found himself narrowly leading the Patrese & Mansell duo, with the Briton getting ahead on lap 22. Prost was fourth, close behind, from Nannini and then a big gap to Piquet who had fought back to take Alesi successfully this time. However, the Frenchman was soon in the pits for new Pirellis, the tyres working less well than in testing. That dropped him behind Warwick and Bernard.

Mansell fought hard to catch Berger and was within 3.5s when he dived down the inside of de Cesaris at Rivazza. This was a bit soon for de Cesaris and he hadn't yet realised that Mansell



was there. He took his usual line and bumped Mansell back to 6.3s behind Berger again and into the clutches of Patrese. Prost had a brief stop for tyres which put him behind Nannini.

Mansell fought back to within half a second of Berger and on lap 35 slipstreamed up behind the McLaren and tried to overtake on the left hand side going toward the right handed Villeneuve. However, Berger was already lining



himself up for the corner, and Mansell found himself with all four wheels on the grass. He had an incredible 360 degree spin and rejoined, losing three seconds. Mansell was upset with Berger afterwards and the Austrian was contrite and repentant.

Mansell, however, lasted just three more laps before his engine blew, leaving Berger 5.6s ahead of Patrese. The Italian quickly caught Berger, but then went wide onto dirt and took another eight laps to catch the Austrian again. This time there were no such problems as Berger also got dirt on his tyres, and Patrese was through to lead. Berger could do nothing. Behind these two, Nannini had got caught up in the Warwick & Donnelly scrap, getting some of the oil that coated Donnelly and losing all the advantage he had over Nannini.

Try as he might, Prost could never really get on terms, and Nannini was a delighted third from Prost, then Piquet ahead of Alesi. The Lotuses were next. Clockwise from above: F for Fosters could be O for Osella as Grouillard successfully prequalifies for a long weekends business on Friday morning. Ligier won this round of the French civil war. Both Larrousses failed. Early lead and an early bath for Senna.

MILESTONES

- Senna's sixth successive pole at Imola
- Foitek replaces Johansson at Onyx
- David Brabham replaces Foitek at Brabham
- Pirro returns for Dallara
- Martini withdraws after practice accident
- Gary Brabham replaced by Bruno Giacomelli at Life
- Donnelly best grid and best result

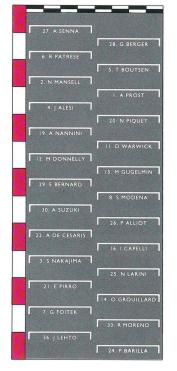


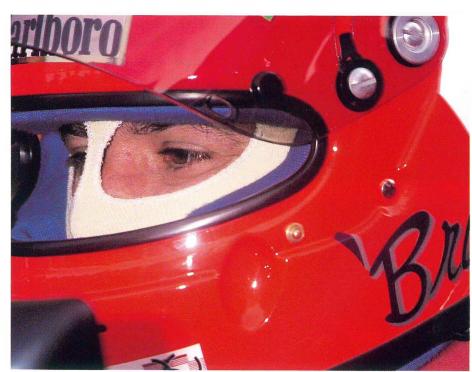
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Gran Premio di San Marino, 11-13 Maggio

Pos	Driver/Nationality		No.	Car/Engine	P.Q. (sunny, cool)	Practice I (warm, sunny)	Practice 2 (overcast)	Warm-up (pos) (warm)	Laps (dry/s	Time/Retirement
	R. Patrese	1	6	Williams FW13B Renault 13B	_	1:24.486	1:24.444	1:28.255 (7)	61	1hr30m55.478
	G. Berger	Α	28	McLaren MP4/5B Honda V10	_	1:24.027	1:23.781	1:27.587 (3)	61	1hr31m00.595
	A. Nannini	- 1	19	Benetton B190 Ford HB V8	_	1:26.889	1:26.042	1:29.008 (9)	61	1hr31m01.781
	A. Prost	F	- 1	Ferrari 641 Ferrari V12	_	1:26.080	1:25.179	1:27.853 (5)	61	1hr31m48.590
	N. Piquet	BR	20	Benetton B190 Ford HB V8	_	1:26.316	1:25.761	1:28.485 (8)	61	Ihr31m48.590
	J. Alesi	F	4	Tyrrell 019 Ford DFR V8	_	1:26.138	1:25.230	1:28.186 (6)	60	Ihr31m16.937
	D. Warwick	GB	H	Lotus 102 Lamborghini V12	_	1:28.055	1:26.682	1:29.615 (11)	60	1hr31m23.848
	M. Donnelly	GB	12	Lotus 102 Lamborghini VI2	_	1:27,151	1:26.714	1:30.074 (12)	60	1hr31m24.419
	P. Alliot	F	26	Ligier JS33B Ford DFR V8	_	1:27.533	1:27.214	1:29.191 (10)	60	1hr32m22,699
0	N. Larini	1	25	Ligier JS33B Ford DFR V8	_	1:27.642	1:27.564	1:31.101 (21)	59	1hr31m35.027
1	P. Barilla	1	24	Minardi M I 90 Ford DFR V8	_	1:29.566	1:28.667	1:33.964 (24)	59	1hr31m35.519
2	J. J. Lehto	SF	36	Onyx ORE2 Ford DFR V8	_	1:28.625	1:28.684	1:30,192 (14)	59	1hr32m05.649
3	E. Bernard	F	29	Larrousse LC90 Lamborghini VI2	1:26.475	1:26.988	1:26.838	1:30.453 (17)	56	oil leak gearbox
4	O. Grouillard	F	14	Osella FAIM Ford DFR V8	1:28.155	1:28.590	1:28.009	1:31.889 (24)	52	rear hub bearing
5	N. Mansell	GB	2	Ferrari 641 Ferrari VI2		1:25.539	1:25.095	1:27.521 (2)	38	oil leak engine
6	G. Foitek	CH	7	Onyx ORE2 Ford DFR V8	_	1:28.111	1:28.435	1:31.868 (23)	35	over revved
7	S. Modena	-1	8	Brabham BT59 Judd V8	_	1:28.763	1:27.008	1:30.884 (20)	31	brakes
8	A. de Cesaris	- 1	22	Dallara BMS190 Ford DFR V8	200	1:27.570	1:27.217	1:30.501 (18)	29	wheel hub
9	M. Gugelmin	BR	15	Leyton House CG901 Judd V8		1:29.339	1:26.836	1:30.383 (16)	24	elec box overheated
0	T. Boutsen	В	5	Williams FW13B Renault V10		1:25.832	1:25.039	1:27.754 (4)	17	engine, gears
1	A. Suzuki		30	Larrousse LC90 Lamborghini V12	1:27.344	1:27.211	1:27.068	3:11.417 (26)	17	clutch
2	A. Senna	BR	27	McLaren MP4/5B Honda V10	_	1.24.079	1:23.220	1:27.497 (1)	3	broken wheel
3	E. Pirro		21	Dallara BMS190 Ford DFR V8		1:27.849	1:27.613	1:30.659 (19)	2	electrics
4	I. Capelli	- 1	16	Leyton House CG901 Judd V8		1:29.904	1:27.521	1:29.968 (12)	0	accident Nakajima
5	S. Nakajima		3	Tyrrell 019 Ford DFR V8		1:27.746	1:27.532	1:30.278 (15)	0	accident Capelli
6	R. Moreno	BR	33	Eurobrun ER 189 Judd V8	1:28.178	1:28.603	1:31.653	1:31.788 (22)	0	throttle jammed
7	A. Caffi	1	10	Arrows ATTB Ford DFR V8	_	1:29.242	1:28.699	DNQ		
3	M. Alboreto	1	9	Arrows AIIB Ford DFR V8	_	1:29.615	1:28.797	DNQ		
9	D. Brabham	AUS	7	Brabham BT59 Judd VB	-	1:31.282	1:28.927	DNQ		
	B. Gachot	В	31	Coloni C3B Subaru F12	1:33.554	DNPQ	DNPQ			
	C. Langes	1	34	Eurobrun ER 189 Judd V8	1:34.272	DNPQ	DNPO			
	B. Giacomelli	1	39	Life F190 W10	7:16,212	DNPQ	DNPO			
	P. Martini		23	Minardi M190 Ford DFR V8	officially reti					





	LAP CHART
Grid Order	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 6
27 A. Senna	27 27 27 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
28 G. Berger	5 5 5 28 28 28 28 28 28 28 28 28 28 28 28 28
6 R Patrese	28 28 28 6 6 6 6 6 6 6 6 6 6 6 6 6 6 2 2 2 2
5 T. Boutsen	6 6 6 2 2 2 2 2 2 2 2 2 2 2 2 2 1 1 1 1
2 N. Mansell	4 4 4 4 1
I A. Prost	2 2 2 20 4 4 4 19 19 19 19 19 19 19 19 19 19 19 20 20 20 20 20 20 20 20 20 20 20 20 20
4 J.Alesi	1 1 20 1 19 19 4 4 4 4 4 4 4 4 4
20 N. Piquet	20 20 1 9 1 1 1 1 1 1 1 1
19 A. Nannini	19 19 19 11 29 29 29 20 20 20 11 11 11 11 11 29 29 29 29 29 29 29 29 29 29 29 29 29
II D. Warwick	11 11 12 6 30 30 30 30 20 29 29 29 29 29 29 29 29 29 12 12 12 12 12 12 12 12 12 12 29 29 29 29 29 29 29 29 29 29 29 29 26 26 26 26 26 26 26 26 26 26 26 26 26
12 M. Donnelly	26 26 26 29 26 20 20 30 30 30 30 30 30 30 30 30 30 30 30 30
15 M. Gugelmin	15 15 29 30 20 20 26 12 12 12 12 12 12 12 12 12 12 12 12 2 5 25 25 25 25 25 25 25 25 25 25 25 2
29 E.Bernard	29 29 30 12 12 12 12 26 26 26 26 26 26 26 26 26 26 26 26 26
8 S. Modena	30 30 15 15 15 15 15 15 15 8 8 8 8 8 25 25 25 22 8 36 36 36 36 36 36 36 36 36 36 36 36 36
30 A.Suzuki	22 22 12 22 22 28 8 8 8 15 25 25 25 25 8 8 8 36 36 8 8 8 8 8 8 8 8 8 8 8 8 8 8
26 P. Alliot	12 12 22 8 8 8 25 25 25 25 15 22 22 22 22 22 22 22 35 35 35 35 35 35 35 35 35 35 35 35 35
22 A. de Cesaris	8 8 8 25 25 22 22 22 22 22 15 36 36 36 36 14 14 14 14 14 14 14 14 14 14 14 24 24 24
16 I. Capelli	25 25 25 14 14 14 14 36 36 36 36 15 15 35 35 35 24 24 24 24 24 24 24 24 24 24 22 22
3 S. Nakajima	21 21 14 36 36 36 36 36 35 35 35 35 35 14 14 14 15 15 15 15 15 15
25 N. Larini	14 14 36 35 35 35 35 14 14 14 14 14 14 24 24 24
21 E.Pirro	36 36 35 24 24 24 24 24 24 24 24 24 24 15 15 15
14 O. Grouillard	35 35 24
35 G. Foitek	24 24
33 R. Moreno	
36 J. J. Lehto	
24 P. Barilla	

Pos.	Car	No./Driver/Team	Time
I	19	A. Nannini/Benetton	1:27,156
2	1	A. Prost/Ferrari	1:27.164
3	6	R. Patrese/Williams	1:27.475
4	2	N. Mansell/Ferrari	1:27.626
5	28	G. Berger/McLaren	1:27.636
6	20	N. Piquet/Benetton	1:28.558
7	5	T. Boutsen/Williams	1:28.840
8	4	J. Alesi/Tyrrell	1:29.144
9	12	M. Donnelly/Lotus	1;29,527
10	29	E. Bernard/Larrousse	1:29.731
11	26	P. Alliot/Ligier	1:29.813
12	11	D. Warwick/Lotus	1:29.829
13	25	N. Larini/Ligier	1:30.461
14	27	A. Senna/McLaren	1:30.615
15	24	P. Barilla/Minardi	1:30.848
16	30	A. Suzuki/Larrousse	1:31.136
17	36	J. J. Lehto/Onyx	1:31.374
18	8	S. Modena/Brabham	1:31.661
19	35	G. Foitek/Onyx	1:31.964
20	14	O. Grouillard/Osella	1:32.011
21	22	A. de Cesaris/Dallara	1:32,125
22	21	E. Pirro/Dallara	1:33.716

	Drivers			Constructors	
Ī	A. Senna	13 pts	- 1	McLaren Honda	25 pts
2	A. Prost	12 pts	2	Williams Renault	15 pts
3	G. Berger	12 pts		Ferrari	15 pts
4	R. Patrese	9 pts	4	Benetton Ford	10 pts
5	J. Alesi	7 pts	5	Tyrrell Ford	8 pts
6	T. Boutsen	6 pts	6	Brabham Judd	2 pts
7	N. Piquet	6 pts			
8	A. Nannini	4 pts			
9	N. Mansell	3 pts			
10	S. Modena	2 pts			
П	S. Nakajima	l pt			

Existing qualifying lap record -1986:

Ayrton Senna, Lotus Renault 1.5 V6 turbo
1m25.050s = 213.333kmh/132.559mph

Existing lap record -1989:

Alain Prost, McLaren MP4/5 Honda V10-1m26.795s = 209.044 kmh/126.786mph

PAST WINNERS						
Year	Driver	Nat.	Car	Circuit		
1981	Nelson Piquet	BR	3.0 Brabham BT 49C Ford	Imola		
1982	Didier Pironi	F	1.5 Ferrari 126C2 t/c V6	lmola		
1983	Patrick Tambay	F	1.5 Ferrari 126 C2/B/ t/c V6	Imola		
1984	Alain Prost	F	1.5 McLaren MP4/4/ TAG t/c	Imola		
1985	Elio de Angelis	1	1.5 Lotus 97T Renault t/c V6	Imola		
1986	Alain Prost	F	1.5 McLaren MP4/2C TAG t/c V6	lmola		
1987	Nigel Mansell	GB	1.5 Williams FWIIB Honda t/c V6	Imola		
1988	Ayrton Senna	BR	1.5 McLaren MP4/4 Honda t/c V6	Imola		
1989	Ayrton Senna	BR	3.5 McLaren MP4/5 Honda VIO	Imola		

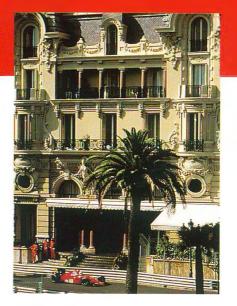


monte carlo

Grand Prix de Monaco, 24-27 Mai

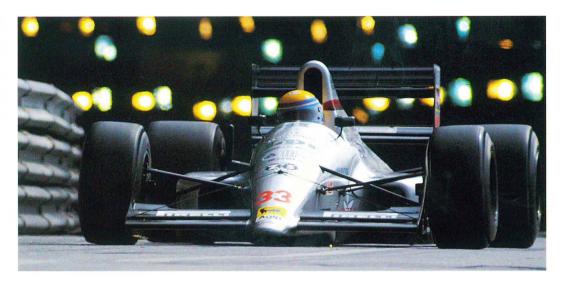
MONACO IS THE BIG ONE. THE MOST IMPORTANT GRAND PRIX OF THEM ALL. IN THE EYES OF THE WORLD MONACO IS FORMULA 1. IT'S THE GLAMOUR, THE WEALTH

PEOPLE POSE ON THEIR OPULENT YACHTS WHICH BOB AT ANCHOR IN THE HARBOUR BENEATH THE CASTLE OF THE GRIMALDI. THE FORMULA 1 DRIVERS WRESTLE WITH THEIR CARS THROUGH THE STREETS AT TERRIFYING SPEEDS LIKE JOUSTING KNIGHTS. THEY ARE INCHES FROM THE WALLS. A SMALL



MISTAKE, A LAPSE IN CONCENTRATION OR WORSE STILL, MECHANICAL FAILURE WILL SURELY SPELL THE END. HERE YOU CAN SEE THE TRUE MASTERY OF ACES CLOSE AT HAND. HERE THE QUALIFYING LAPS ARE THE MOST DARING AND THE RACES THE MOST HAIR-RAISING. OVERTAKING IS TOUGH AND MONACO DOES NOT SUFFER FOOLS...

Previous pages: Grand Prix
racing's Jewel in the Crown.
Clockwise from right: there
was light at the end of the
pre-qualifying tunnel for
Moreno. Local resident leads
Monegasque traffic jam.
Donnelly outqualified
teammate Warwick.



IMPRESSIONS

great finale doesn't make a great race, but Ayrton Senna firmly stamped his authority on the 1990. World Championship with one glorious victory, his third at Monaco. His winning margin of just 2.5s hides the fact that at one time he led this race by 26s, but then there was a great battle for second place.

It was almost as though there was no one else in the race for quite some while. Senna actually had a 2.5s lead at the end of the first lap, as Prost got used to his spare car while attempting to hold Alesi and Berger at bay.

That 2.5s was 6.6s on lap ten, 9.7s on lap 20 and two seconds more than that on lap 30. When Prost retired, it was Alesi who took over second place, and still the gap widened. By lap 60 it was out to 26s.

However, it then shrank drastically, seconds literally dropping away as Berger pushed Alesi harder and harder during the closing stages. Sure, that battle ensured a hot pace behind, but Senna was also in trouble. Later he would talk of a down-on-power engine at one third distance. He dropped the revs after hearing a noise in the engine that alarmed him.

As much a scare as anything was when he almost hit Warwick's spun Lotus, partially because a marshal was holding an arrow telling him which side of the stationary car to go. However it was pointing at the car. After that, Senna slowed right up eager to finish. It mattered not by how much he was ahead, he pointed out, only that he was ahead.

The star of the show, or co-star perhaps, was Alesi. This race, he knew, was one where he could show his mettle, where the little Tyrrell and its V8 could still do unmentionable things to the powerful multi-cylinders. It had been his intention from the word go to be the number one V8-powered runner, preferably number one overall.

To be heading the practice times on Thursday morning was more than most expected. 'It was a great boost to my confidence,' he admitted. That afternoon, the amazing Tyrrell flicked and weaved its way through the streets in a series of jerks, looking like the kart that its driver had so recently driven. He was third that afternoon and that's where he remained on Saturday, behind Senna and Prost.

No illusions this lad: on Sunday afternoon he overtook Prost down into Mirabeau and psyched the Frenchman out of second.



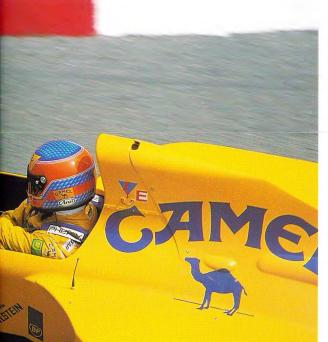
Unfortunately opportunist Berger made a rash mistake and wrecked it all, causing the race to be stopped. At the restart, Alesi was unable to repeat his move on Prost and so had to wait until the Ferrari dropped out before regaining his second place. Berger tried all he could to get by, but Alesi and the Tyrrell proved more than up to the job.

Monaco was once again the car wrecker it so often is, and there were only six cars running at the end. Senna, Alesi, Berger and Boutsen could be expected to be in the points, but Caffi's Arrows might be hard-pushed to win points elsewhere, and these could be vital for the team. Bernard, in the multi-cylinder Larrousse Lola, could wave pre-qualifying goodbye, although it did take a nerf with Foitek's Onyx to secure his sixth place.

BRIGHT SPARKS

hat is it about traffic? Some drivers seem to be able to make holes in it. They rarely complain and when they do, the traffic has so blatantly delayed them that there's no doubt about it.

Other drivers seem to attract traffic, constantly moaning about it. They can't seem to shake it free, and don't know how to avoid it. There must be a knack to both avoiding it and attracting it: shame people can't exchange information. The most honest racing driver in the paddock, Patrese, however, would put it all into perspective. 'Traffic is bullshit,' he said, 'when you are not quick enough it is a good excuse. This is Monaco. There is always traffic.'











So Monaco is all about traffic, particularly in qualifying and yet Senna shattered his own circuit record several times on his way to setting his 45th pole position. He set several laps in the lm 21s, and a lm 20s lap seemed highly likely until, quite obviously, he came on Gregor Foitek at the swimming pool, and yet the time was still lm 21.5s.

The next day, by all accounts he nursed his car home, complaining of that down-on-power engine from a third distance, and hearing a noise from the engine. Interestingly, Honda would call the loss of power 'acceptable.' As for the noise, they couldn't trace that. Senna would stick to his guns on all counts; what's more, he had nine



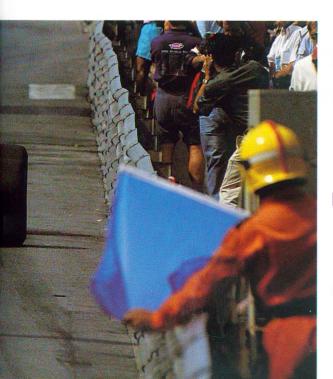
points to show for it.

It was remarkable to see Alesi, just 11 Grands Prix old, challenging the McLarens, utterly unflustered and unfazed by his elders. As he would say, 'Ken Tyrrell wants a racing driver to overtake and beat these drivers, not hang back and be afraid of overtaking them because of who they are.' He had the measure of Williamses and Ferraris, of everyone but his Phoenix sparring partner, Senna.

Furthermore he proved that Pirelli tyres could do the job here in the streets. Martini was well up during the early stages, even ahead of Mansell although it didn't last. Pirro had outqualified de Cesaris but a vapour lock prevented him starting. However, de Cesaris got into the top six only to retire immediately with broken throttle linkage.

The position was inherited by Warwick, also outqualified by his teammate, but who had come charging up through the field. He was overtaken by an attacking Mansell, delayed by the need of a new nosecone after damaging it on Boutsen's car. Both Britons were heading for points, the Ferrari driver particularly impressive and on one of his underdog charges.

Neither was destined to finish however. Mansell successfully overtook Boutsen on the second attempt, but then retired from fourth place when his battery flattened, causing the loss of electronic gearchange. Warwick moved up to fifth but he had been in brake trouble since lap 45, and when the pedal went to the floor at the swimming pool he spun.





Caffi was there, grateful and ready to pick up points having started 22nd. The men fore and aft of him were battling over sixth, reliable cars again reaping rewards on the streets of Monaco. They, too, were winners but none more so than Senna on what many regard as the most difficult and challenging circuit in motor racing.

RACE DEBRIEF

wo days of practice and qualifying at
Monaco usually produces a fair
amount of stoppages, damage and
retribution. As it happened, there was
very little. Mansell damaged his Ferrari with a
fairly large accident in Casino Square, but he got

Clockwise from above:
consider Monteverdi's future
had Foitek finished sixth...
Beware leader, sixth placed
Warwick wishes to unlap
himself ... Monaco's two way.
traffic, Tabac and Ste Devote.
Prost, Alesi and Fiorio don't
discuss first lap overtaking
manoeuvres - but Berger
manoeuvres.







the car back to the pits and the session continued unabated.

Even pre-qualifying was fairly undramatic. Admittedly Tarquini dinged his AGS and so did Dalmas. Without the AGS competition, the way was clear for the two Lola-Lamborghini drivers, Bernard and Suzuki, to be joined by their usual partners Grouillard and Moreno.

Tarquini was within 0.4s of Moreno but no one else was close. Although Gachot only did three laps, Giacomelli did a remarkable eight laps in the Life, although they were scarcely quick with a best 13s off the pace.

Senna spent much of practice and qualifying in his spare car on his way to setting fastest time;

cost him time.

Instead, the front row was shared by Senna with that other Monaco specialist, four time winner Alain Prost. A clear lap saw the Frenchman improve by 1.7s on Saturday, although the whole weekend seemed to be taking its toll and he was somewhat weary. Teammate Mansell also had a clear lap and was so surprised that he didn't really make best use of it, ending up seventh.

Alesi really did want to be on the front row but he was less than a tenth down on Prost and with a 40 bhp deficiency, that was already an achievement. Completing four manufacturers in the first four places was Patrese's Williams-



a new surface from the tunnel exit to Rascasse helped establish a new qualifying record, even though Foitek held him up for a couple of corners on his quickest lap.

The constant use of the spare was perhaps part of his friendly rivalry with Berger, although when the Austrian stormed out of his car after qualifying fifth, and Senna then explained that 'there was a problem within the team which has existed since the beginning of the year,' no one was very sure what was being said. As it happened, Berger's problem was simply that his tyre pressures were constantly wrong during the final qualifying session, causing little puffs of tyre smoke at some braking points which naturally

Renault, the driver celebrating his 13th anniversary in Grand Prix racing at the circuit. As far as he was concerned, handling and engine pick-up needed sharpening while teammate Boutsen, behind him, also felt handling could be improved.

Pierluigi Martini showed that he was virtually completely fit after his Imola accident with eighth on the grid, while Pirro's ninth time was equal his best. The Benettons were a little disappointing. Piquet touched a wall on one quick lap and was later stranded out on the circuit when his engine cut. Nannini damaged his car on Saturday morning and had to use the spare which he quite liked but never got a clear lap.

Clockwise from above: Prost shows the ideal route around Loews Hotel to local resident Modena. Less success for Patrese in 'second' home Grand Prix. Caffi in the points for the second year running. Starring role for second-placed Alesi.

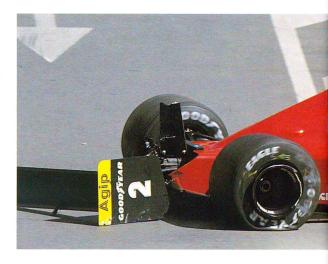
Clockwise from right:
Bernard's sixth place in the armco tunnel suggested the end of Larrousse's prequalifying. Mansell's typical low downforce set-up on high downforce circuit. Even kerbhopping couldn't get Gugelmin into the roce.



Donnelly was quickest of the Lotus men on his first Formula One visit to Monaco, while both Modena and Brabham had engine trouble, but the latter became the first son of a World Champion to race in Formula One.

Senna and Prost were comfortably the quickest during the morning warm-up, just a tenth apart, while Berger was just ahead of Mansell. Bernard was an impressive fifth. Alesi crashed his car but it was repairable. On the grid, Nannini had an engine problem and had to take his spare, so did Suzuki.

Then the lights turned green, Senna made a









great start with Prost shutting the door firmly on Alesi, but he didn't do the same at Mirabeau where the Tyrrell driver nipped in to second. Prost was still wide, and for some reason Berger just shot down into the back of him, pleading 'cold tyres and full tanks' as his excuse. The McLaren was then assaulted by Modena as well, and a massive traffic jam developed so the race had to be stopped and restarted.

Back on the grid, Ferrari and McLaren wheeled out their spare cars, both set up for the other drivers, not such a problem for Berger as for Prost, who is a completely different size to the burly frame of Mansell.

At the second start, Senna again made a good start from Prost, then Alesi once again looked to go inside Prost at Mirabeau, but this time the Ferrari driver was on the right line and closed the door. Berger watched, Patrese and Boutsen were next from Martini ahead of Mansell and Piquet.

Senna literally disappeared from their view, Prost led Alesi and Berger, the Ferrari driver slowly adapting to the untried spare. Behind them the Williams pair battled, while Mansell finally got by Martini after five laps, the Minardi retiring two laps later.

By lap 15, Senna had an 8.7s lead while the trio behind were finally beginning to space out a little. Patrese had drawn away from Boutsen, who had a sticking throttle, which allowed Mansell to close in on him. Then came a gap to Piquet, pulling away from de Cesaris. Warwick and Nannini came next.

On lap 21, Mansell was close enough to Boutsen to attempt to overtake, but the result was the Ferrari hit the Williams at the chicane and suffered a damaged front nose section. Mansell promptly headed for the pits and repairs which dropped him to 15th and second last - such had been the rate of retirement. We had only just passed a quarter distance!

The situation was now very stable with Senna ten seconds in front. The gap to Prost now began to drop a little as Senna experienced his engine problem and was learning to drive round it. On lap 26, the gap was down to 6.9s but then it started to rise again. Alesi was close behind the Ferrari, then came a five second gap to Berger.

On lap 31, however, Prost disappeared.

Clockwise from right: The Benettons retired: Nannini fell, Piquet was pushed. Berger was third in McLaren's spare car. Warwick swoops as de Cesaris retires.



Fitting the Frenchman's seat in the spare had damaged the battery which had disintegrated, leaving the gearbox useless. Senna now had an even more useful 19 second lead over Alesi who was free of Berger, now without first gear.

One man who had been on the move was Piquet, and the Benetton had now caught Boutsen's Williams. Piquet tried to take Boutsen on the inside at Loews, but hit the kerb and spun, damaging a front wing. He needed a push start, but new rules forbade this and after a couple of laps, he was blackflagged.

Next to disappear was Patrese on lap 41 when his valve gear failed and that put both Warwick and Mansell into the top ten. The Ferrari swept past the Lotus on lap 44 and as Berger began to renew his challenge on Alesi, so Mansell closed on Boutsen again. On lap 55, Mansell succeeded in overtaking the Williams driver and moved up into fourth place, but eight laps later, the Ferrari slowed, its battery flattened and its gearbox consequently useless, after a fighting drive.

That elevated Boutsen to fourth, Warwick to fifth, but four laps later the brakeless Lotus driver spun at the swimming pool, and his race was over. Senna, soon on the scene, had such a fright that he eased up right away, and his lead began to plummet, so that he crossed the line, eleven laps later, just 2.5s ahead of the still battling Alesi and Berger duo. Boutsen was fourth, Caffi fifth, while Foitek's blocking manoeuvres, acceptable at this late stage of the race, weren't quite efficient enough, and when he left the door open at the chicane on lap 73, Bernard went for it. The pair collided, and Foitek was nerfed out. The final point went to Bernard.



MILESTONES

- Brabham's first Grand Prix, joins Stuck & Parnell in World Champonship father/son combinations
- Senna's record 45th pole
- Piquet disqualified from race under new push start regulations
- Eric Bernard's first World Championship point
- Alesi's best ever grid position





monte carlo

round

Grand Prix de Monaco, 24-27 Mai

os	Driver/Nationality		No.	Car/Engine	P.Q. (warm, cloudy	Practice I (cloud, sun)	Practice 2 (sunny)	Warm-up (pos) (warm, cloudy)		Time/Retirement , cloudy)
	A. Senna	BR	27	McLaren MP4/5B Honda V10		1:21.797	1:21.314	1:24.814 (1)	78	Ihr52m46.982
	J. Alesi	F	4	Tyrrell 109 Ford DFR V8	. -	1:23.372	1:21.801	1:26.908 (8)	78	1hr52m48.069
	G. Berger	Α	28	McLaren MP4/5B Honda V10		1:23.001	1:22.682	1:25.858 (3)	78	1hr52m49.055
4	T. Boutsen	В	5	Williams FW13B Renault V10	9 - 900	1:23.936	1:22.691	1:28.057 (16)	77	1hr54m08.057
5	A. Caffi		10	Arrows AIIB Ford DFR V8		1:26.520	1:25.000	1:29.109 (23)	76	1hr53m02.183
6	E. Bernard	F	29	Larrousse LC90 Lamborghini V12	1:27.134	1:25.398	1:25.541	1:26.725 (5)	76	Ihr53m08.740
7	G. Foitek	S	35	Onyx OREI Ford DFR V8		1:26.183	1:24.367	1:28.295 (17)	72	collision Bernard
3	D. Warwick	GB	- 11	Lotus 102 Lamborghini V12		1:24.070	1:23.656	1:27.027 (9)	66	spun brakes
9	N. Mansell	GB	2	Ferrari 641 Ferrari VI2		1:24.433	1:22.733	1:26.082 (4)	63	flat battery
10	P. Barilla	- 1	24	Minardi M190 Ford DFR V8		1:26.352	1:24.334	1:28.698 (20)	52	no 2nd gear
11	J. J. Lehto	SF	36	Onyx OREI Ford DFR V8		1:27.923	1:25.508	1:29.007 (21)	52	gear linkage
12	P. Alliot	F	26	Ligier JS33B Ford DFR V8		1:25.387	1:24.294	1:27.795 (14)	47	gearbox
13	R. Patrese	- 1	6	Williams FW13B Renault V10		1:24.179	1:22.026	1:27.135 (10)	41	valves
14	A. de Cesaris	1	22	Dallara BMS 190 Ford DFR V8		1:25.849	1:23.613	1:26.739 (6)	38	accelerator linkage
15	S. Nakajima	- 1	3	Tyrrell 109 Ford DFR V8	4-1774	1:25.679	1:24.371	1:28.535 (18)	36	spun
16	A. Prost	F	- 1	Ferrari 641 Ferrari VI2	1	1:23.449	1:21.776	1:24.936 (2)	30	battery
17	A. Nannini	1	19	Benetton B190 Ford HB V8		1:25.926	1:24.139	1:29.046 (22)	20	engine
18	D. Brabham	AUS	7	Brabham BT59 Judd V8		1:28.339	1:25.420	1:32.131 (25)	16	CV joint
19	I. Capelli	1100	16	Leyton House CG901 Judd V8		1:26.969	1:25.020	1:30.329 (24)	13	brakes
20	N. Larini	- L	25	Ligier JS33B Ford DFR V8	4-111114	1:24.206	1:24.270	1:28.692 (19)	12	gearbox
21	A. Suzuki	J	30	Larrousse LC90 Lamborghini V12	1:27.548	1:27.193	1:24.023	no time	11	electrics
22	P. Martini	- 1	23	Minardi M190 Ford DFR V8		1:24.012	1:23.149	1:27.723 (12)	7	electrics
23	M. Donnelly	GB	12	Lotus 102 Lamborghini V12	7-4-17	1:24.724	1:23.600	1:27.261 (11)	6	CV joint
24	S. Modena		8	Brabham BT59 Judd V8		1:25.485	1:23.920	1:27.749 (13)	3	no 2nd gear
25	E. Pirro	- 1	21	Dallara BMS 190 Ford DFR V8		1:24.766	1:23.494	1:27.871 (15)	0	vapour lock
26	N. Piquet	BR	20	Benetton B190 Ford HB V8		1:25.273	1:23.566	1:26.779 (7)	disqua	alified 33 laps
27	M. Alboreto	- 1	9	Arrows AIIB Ford DFR V8	_	1:27.282	1:25.622	DNQ		
28	O. Grouillard	F	14	Osella FAIM Ford DFR V8	1:27.938	1:25.785	1:26.781	DNQ		
29	M. Gugelmin	BR	15	Leyton House CG901 Judd V8	<u> </u>	1:26.943	1:26.192	DNQ		
30	R. Moreno	BR	33	Eurobrun ER 190 Judd V8	1:28.295	1:26.604	1:27.265	DNQ		
_	G. Tarquini	1	17	AGS JH25 Ford DFR V8	1:28.677	DNPQ	DNPQ			
_	Y. Dalmas	F	18	AGS JF25 Ford DFR V8	1:30.511	DNPO	DNPO			
-	C. Langes	- 1	34	Eurobrun ER 190 Judd V8	1:33.195	DNPO	DNPO			
_	B. Gachot	В	31	Coloni C3B Subaru F12	1:39.295	DNPQ	DNPQ			
_	B. Giacomelli	- 1	39	Life F190 W10	1:41.187	DNPO	DNPQ			

27 A SENNA

1 A PROST

4 JALESI

6 R PATRESE

28 G BERGER

2 N MANSELL

23 P MARTINI

21 E PIRRO

20 N PIQUET

12 M DONNELLY

22 A DE CESARIS

11 D WARWICK

8 S MODENA

30 A SUZUKI

19 A NANNINI

25 N LARINI

26 P ALLIOT

24 P BARILLA

35 G POITEK

3 S NAKAJIMA

10 A CAFFI

16 I CAPELLI

29 E BERNARD

7 D BRABHAM

36 J LEHTO



LAP CHART Grid Order | 2 3 4 5 6 7 8 9 10 11 | 2 | 3 | 4 | 5 16 7 | 8 9 10 11 | 12 | 3 | 4 | 5 16 | 17 | 18 | 19 20 2 | 22 22 3 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 27 A.Senna A.Prost 4 J. Alesi 6 R.Pacrese 28 G.Berger 5 T. Boutsen 2 N Marsel 23 P. Martini 21 E.Pirro 20 N Piquet 12 M Donnelly 22 A. de Cesaris 8 8 19 19 19 30 30 26 26 26 26 24 24 24 24 24 24 24 24 24 10 10 10 10 10 3 3 3 2 2 10 3 35 35 35 35 35 29 29 29 29 36 36 36 36 36 36 36 36 II D. Warwick 8 S. Modena 19 19 26 26 26 24 24 25 25 25 25 16 16 10 10 10 10 10 10 10 29 29 29 29 29 2 23 35 35 35 35 35 36 36 36 36 36 36 22 22 30 A.Suzuki 26 26 24 24 24 12 25 3 3 3 3 10 10 35 35 35 35 35 35 2 2 2 2 2 29 29 29 29 36 22 22 22 22 22 19 A.Nannini 24 24 25 25 25 25 3 16 16 16 16 35 35 29 29 29 29 29 29 36 36 36 36 36 36 36 36 36 36 36 25 A. Larini 25 25 3 3 3 16 10 10 10 10 29 29 36 36 36 36 36 36 36 36 26 P. Alliot 3 3 16 16 16 16 10 35 35 35 35 25 36 7 7 7 24 P. Barilla 16 16 10 10 10 10 35 29 29 29 29 36 7 35 G.Foitek 10 10 35 35 35 35 29 36 36 36 36 7 3 S. Nakajima 35 35 29 29 29 29 36 7 7 7 7 10 A. Caffi 29 29 36 36 36 36 7 36 36 7 7 7 7 29 E.Bernard 7 7 8 7 D. Brabham 36 J.J. Lehto

Pos.	Car	No./Driver/Team	Time
1	27	A. Senna/McLaren	(N.R.) 1:24.468
2	2	N. Mansell/Ferrari	1:24.971
3	28	G. Berger/McLaren	1:25.021
4	4	J. Alesi/Tyrrell	1:25,353
5	- 1	A. Prost/Ferrari	1:25.888
6	6	R. Patrese/Williams	1:26.255
7	5	T. Boutsen/Williams	1:26.366
8	10	A. Caffi/Arrows	1:26.421
9	29	E. Bernard/Larrousse	1:26.635
10	22	A. de Cesaris/BMS Dallara	1:26.931
H	35	G. Foitek/Onyx	1:27.296
12	1.1	D. Warwick/Lotus	1:27.339
13	24	P. Barilla/Minardi	1:27.539
14	19	A. Nannini/Benetton	1:27.542
15	3	S. Nakajima/Tyrrell	1:27.557
16	26	P. Alliot/Ligier	1:28.265
17	23	P. Martini/Minardi	1:28,700
18	30	A. Suzuki/Larrousse	1:28.872
19	25	N. Larini/Ligier	1:29.165
20	16	I. Capelli/Leyton House	1:29.374
21	7	D. Brabham/Brabham	1:31.639
22	8	S. Modena/Brabham	1:32.072

	Drivers			Constructors	
1	A. Senna	22 pts		McLaren Honda	38 pts
2	G. Berger	16 pts	2	Williams Renault	18 pts
3	. Alesi	13 pts	3	Ferrari	15 pts
4	A. Prost	2 pts	4	Tyrrell Ford	14 pts
5	R. Patrese	9 pts	5	Benetton Ford	10 pts
6	T. Boutsen	9 pts	6	Arrows Ford	2 pts
7	N. Piquet	6 pts		Brabham Judd	2 pts
8	A. Nannini	4 pts	8	Larrousse	l pt
9	N. Mansell	3 pts			•
10	A. Caffi	2 pts			
	S. Modena	2 pts			
12	E. Bernard	l pt			
	S. Nakajima	l pt			

CHAMPIONSHIP POINTS

Existing qualifying lap record -1989:

Ayrton Senna, McLaren MP4/5 Honda V10

1m22.308s = 145.561kmh/90.447mph

Existing lap record - 1989:

Alain Prost, McLaren MP4/5 Honda V10

1m25.501s = 140.125 kmh/87.069mph

	PAST WINNERS							
Year	Driver	Nat.	Car	Circuit				
1979	Jody Scheckter	ZA	3.0 Ferrari 312T-4	Monte Carlo				
1980	Carlos Reutemann	RA	3.0 Williams-Ford FW07B	Monte Carlo				
1981	Gilies Villeneuve	CDN	1.5 Ferrari 126CK	Monte Carlo				
1982	Riccardo Patrese	1	3.0 Brabham-Ford BT49D	Monte Carlo				
1983	Keke Rosberg	SF	3.0 Williams-Ford FW08C	Monte Carlo				
1984	Alain Prost	F	1.5 McLaren-TAG MP4/2 t/c	Monte Carlo				
1985	Alain Prost	F	1.5 Mclaren-TAG MP4/2B t/c	Monte Carlo				
1986	Alain Prost	F	1.5 McLaren-TAG MP4/2C t/c	Monte Carlo				
1987	Ayrton Senna	BR	1.5 Lotus-Honda 99T t/c	Monte Carlo				
1988	Alain Prost	F	1.5 McLaren-Honda MP4/4 t/c	Monte Carlo				
1989	Ayrton Senna	BR	3.5 McLaren MP4/5 Honda VIO	Monte Carlo				



montréal

Grand Prix Molson du Canada, 8-10 Juin

THE CIRCUIT GILLES VILLENEUVE CAN BE FOUND ON THE ILE DE NOTRE DAME, A MANMADE ISLAND IN THE MIDDLE OF THE ST. LAWRENCE SEAWAY. IT WINDS ITS RAPID PATH IN AMONG THE BIZARRE BUILDINGS ERECTED FOR EXPO 67. THESE TOPSY-TURVY DESIGNS GIVE THE TRACK A STRANGE DISNEYLAND FEEL TO THEM. THE FORMULA 1 FOLK LIKE VISITING MONTREAL. IT'S UNUSUAL AND THE LIYELY CITY IS A FUN

PLACE TO BE. THE TRACK ITSELF IS FAST AND THE WALLS ARE CLOSE. AND THEN THERE IS THE WEATHER, UNPREDICTABLE AT BEST. WHEN THE WIND WHIPS ACROSS THE WATERWAY IT CHILLS THE BONES. COME RACE



DAY THE HARDY CANADIANS COME IN THEIR THOUSANDS. WHEN FI FIRST VISITED MONTREAL THEY HAD GILLES VILLENEUVE TO CHEER. TODAY THEY WAIT FOR ANOTHER.



IMPRESSIONS

e felt cheated after the Canadian Grand Prix. Could Gerhard Berger have beaten Ayrton Senna, his teammate? The Austrian beat the Brazilian on the road, and was a much happier person than recently after the race. However, an over-eager start saw him penalised a minute, and Senna never really had to worry about him again. Just as well, because the winner was in trouble.

The Canadian Grand Prix was a lottery in 1989, and it maintained its reputation in 1990. The Circuit Gilles Villeneuve presented dust, heavy rain and a damp track yet Senna was master of all. He started from pole and scored a lights to flag win, including a pit stop to change from wet to slick tyres after an action-packed opening ten laps. Yet if he had been seriously challenged, there was little he could have done. He admitted that his set-up had never been so confused: 'the wings were not set up for the dry, but I had a more conservative set-up than Gerhard. The car's mechanical set-up was also very difficult because when we put on slicks, it was almost undriveable, bottoming everywhere and I think the tyre pressures were too low.'

Sure, Berger had his problems too, with





fading brakes in the closing stages, but by then he'd overtaken Senna on the road during the pit stops, and set fastest lap. He was much more comfortable in the car than he had been of late, and that seemed to add to his confidence. There was every indication that he could have won this race, but for the penalty. 'I didn't gain any advantage from my over eager start, he pointed out, 'I simply anticipated the green light.'

It was a curious rostrum, as it turned out, scarcely a trio you'd pick for a dinner party. The survivors of the opening 10 to 15 laps included Prost, Piquet and Mansell, battling together for much of the time.

But Prost was another in brake troubles and dropped behind the other two. Piquet was on great form, really charging in a rejuvenated Benetton and was able to master the two Ferraris and claim a fine second place, which made one wonder as to the future. The Ferrari men themselves were simply pleased to have found the

reliability to finish. Prost's brake trouble was made worse when he had to brake suddenly on the dry when Boutsen attempted to overtake him on the wet, spun suddenly, and thumped into Larini and out of the race. Prost was just pipped by Berger for fourth on the last lap.

It wasn't the ideal Grand Prix, but as Senna pointed out, 'I've never had such a lead in the championship at this stage of the season. But it's really too early to think of the championship.' He had won three out of the first five races, and

Clockwise from above: your line or mine? Nannini looks inquiringly, Lehto concentrates. Modena mastered Montreal and finished seventh, but it didn't help teammate
Brabham. Capelli found his way into the race where
Gugelmin didn't. Alliot giving his all - and more - as usual.





Clockwise from above: Prost
needed better brakes to
improve on fifth. But for his
over-eager start, Berger might
have given his own Expo to
teammate Senna. Safari
settings might have saved
Gachot from his Friday
morning fate.

some people were beginning not to think in terms of if he would win the series, but when...

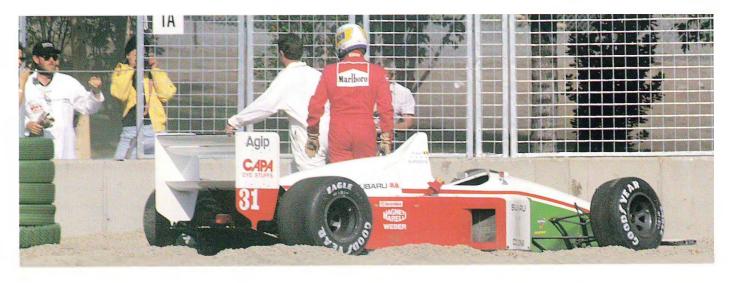
BRIGHT SPARKS

Nannini fifth; the Italian fourth that afternoon from his teammate fifth.

What was happening at Benetton; what had made the two drivers so competitive? It was the talking point of the paddock in Montreal.

'It's a bit of everything,' explained Dick Scammell of Cosworth. 'We haven't made any major changes. It's just that everyone has been





able to pull together on the new car for the first time. It was still too new at Imola and it was hard to make any progress at Monaco, so here we've been able to improve the chassis, plus a little bit on the engine as well.' And there was a revised undertray to help.

Even in the damp on Saturday afternoon Piquet was quickest and was still well up in the damp warm-up on Sunday. In the race itself, Nannini and Piquet were both in the top four, once we knew of Berger's penalty. During the pit stops, Nannini even held the lead for a while, but then everything turned sour. After changing to slick tyres, he promptly hit a ground hog which necessitated a long stop for repairs. He rejoined, but went onto the wet a few laps later overtaking another car and spun into the barrier, only for his car to be assaulted by Alesi's Tyrrell a few laps later.

Piquet lost out to both Boutsen and Prost at

the tyre stops but felt much more confident as the track dried. Boutsen spun out, leaving Piquet to challenge Prost, and with the Ferrari in brake trouble, Piquet had no trouble getting by, even though he also came under pressure from Mansell. Many saw Piquet's progress as a reflection of the Piquet of old which resulted in his second place.

After the disappointment of Monaco, both Lotus and Ferrari needed the reliable performances in Canada to bolster confidence. Mansell's third place came in spite of the odd 'dog meets dog' gearbox problem; his car, as he admitted, being a complete compromise for the conditions. And with Prost finishing as well, albeit a brake-troubled fifth, this was just the sort of reliability that the team was seeking.

Derek Warwick was also pleased. His eleventh place on the grid, with teammate Donnelly close behind, still had that hint of unreliability but Warwick was soon challenging Patrese's Williams-Renault and he overtook the Italian, although he was demoted again after the pit stops.

Warwick fought back - it went on for 16

of a sudden, the handling of the car deteriorated. After lap 50, the brake pedal was rather long, so I eased off.' But a well-earned sixth place was the much-needed result, and Warwick was delighted.

RACE DEBRIEF

of Montreal qualifying because of a strange wind. This time it was straightforward rain that scuppered everyone, if they hadn't already fallen foul of the dust. They were building a beach on one of the lakes within the Ile de Notre Dame, using the track to deliver the sand. Consequently, there was sand all over the track and people began to talk of Safari settings.

'Unacceptable,' said the mild-mannered Prost. Just as well he wasn't out on Friday morning with the pre-qualifiers. They could have quite happily used a handbrake for turning around the hairpin. It meant everyone waited for the end of the session, hoping that someone else's dusty rooster-tail would clear the track. Gachot went sliding off on the stuff, Langes was only allowed a few laps due to lack of budget, and the Life was way out in its seven laps. Pirellis were

Below: first lap, first corner, first shunt: two Italians, Pirro and Albareto.



laps or so - and under pressure, the Williamses glazed brakes (a cooling problem) saw Patrese slip behind the Lotus again. Donnelly then shadowed his teammate, as usual, until his engine cried enough.

But Warwick came home to claim his single point, pleased for the team. 'The engine was perfect and the car was really good during the first part of the race,' explained the English driver, 'I was pulling away from Patrese when all ideally suited, so Moreno and Grouillard led the best of the Goodyears, Suzuki and Bernard, with the AGS out of it again, although Tarquini missed it by 0.011s.

Qualifying that afternoon also had a laissezfaire feeling to it: 'It'll be quicker tomorrow,' as the drivers never tire of saying, but that reckons without such natural phenomenon as rain. To be honest, there were a few who did listen to and take notice of the weather forecast.



Above: Patrese and Warwick
fight for survival and ninth
place on a damp track.
Centre: lights on Lola, Bernard
finished ninth. Below: Alesi
made his mark on the track and off it with a spectacular
26th lap accident.

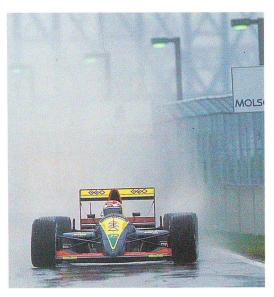
Even so, most people would chose a set of race tyres and a set of qualifiers for the first qualifying session. Quite a number suffered on the qualifiers and set their best times on race tyres. Senna was one of those but he started from pole for the 46th time.

Both he and teammate Berger had gearbox problems as they battled over pole, with Berger also having a spin, but it would be an all-McLaren front row for the race.

Prost was third, timing his run just right on Friday afternoon and later taking the wet conditions very seriously. Teammate Mansell wasn't so happy, puncturing one of his race tyres in qualifying, and therefore being left with just the qualifiers on which to set a time. He would start seventh.

Benetton's performance was certainly something to behold and they were constantly competitive, and might have even started from higher on the grid, but for Prost's perfect timing. It was to the Williamses disadvantage, with Boutsen sixth and Patrese back in ninth. Boutsen found a new differential transformed his handling while Patrese made the rash move of chosing two sets of qualifiers.

Alesi didn't have a lot of dry track time in the Tyrrell after engine problems, while Modena completed the top ten, pleased with his car's performance although teammate Brabham had mechanical problems and didn't make the cut. Those who had problems on Friday afternoon found themselves joining Brabham: Moreno with a loose floor, Gugelmin and newcomer Barilla.It was still damp for the warm-up when Berger was



quickest from Boutsen, Senna and Prost. The Brazilian already had gearbox trouble while Alesi set seventh fastest time on hand-cut slicks. In fact the on-off nature of the weather had everyone jumping about until the lights turned green. Berger had a 'dry' rear wing fitted on the grid. It was obviously going to dry, but wets had to be right for starters, probably changing to slicks



after a few laps.

As they waited for the lights to turn green, Berger inched forwards and then stopped again. When the lights did turn green, he was stationary, but he still got the penalty anyway. As they shot off, it was Senna, Berger, Nannini, Alesi, Piquet, Prost and Boutsen.

The first four pulled away rapidly, but Berger stuck to the rear end of Senna until the penalty was announced, and then Senna was able to pull away. Second on the road was Berger from Nannini who in turn had pulled away from Alesi, and then a gap had built up to Piquet from Boutsen having overtaken Prost. Mansell was next from Patrese dealing with Warwick as everyone waited for the right moment to pit for dry tyres.

Further back, there was the extraordinary sight of everyone backed up behind Grouillard's Osella, which had completely lost grip. The Frenchman was all over the track, and slow at the same time, so that four or five cars were dodging this way and that, all trying to find a way past the wide Italian car.

But then came the pit stops for slick tyres: Patrese and Berger on lap ten, Senna and Piquet on lap 12, Prost and Alesi on lap 13, Mansell on lap 14 and Nannini a lap later.

Nannini, however, promptly hit a ground hog, a large, furry creature which stalks about the Ile. For the moment, he needed a new front tyre and nose section, but was later presented with a furry hat as a reminder. Alesi also made a second stop after making contact with de Cesaris, but neither the Italian nor the Frenchman were destined to finish.

For the moment, it was third placed Boutsen who would depart the scene, trying on a wet track to overtake Prost on a dry bit. The Williams

slewed sideways and slammed into the unsuspecting Larini, taking them both out. Prost braked hard to avoid the accident, so that his brakes only worked at 40 per cent efficiency thereafter.

Three laps later, Nannini did the same thing and slammed into a tyre barrier followed by Alesi who had a repeat of the altercatiom with de Cesaris and slammed into Nannini's car and parked on top of it. All were very fortunate to avoid injury.

All this left Berger leading on the road, nearly half a minute ahead of teammate Senna who was in first place. Prost, Piquet and Mansell were next, having their own battle. Berger was in reality next up in fifth place, having overtaken Warwick leaving him to battle with Patrese who got the better of the Englishman on lap 27. Donnelly inherited eighth place and the first lapped runner when Alesi went off.

Prost briefly shook off Piquet thanks to backmarkers and Piquet lost Mansell too, but by lap 38 they'd all tightened back up again and so the battle continued for lap after lap.

After his pit stop, Senna had used first gear to get out of the pits and then again at the hairpin, but hearing a worrying noise on each occasion, he eased up and took second instead, but it meant that Berger opened up his lead on the road to nearly 50 seconds.

Meanwhile the second place battle came to a head on lap 49 when Piquet moved ahead of Prost and a few laps later, Prost had to let Mansell go. The Englishman tried to close on the Benetton ahead, but never quite got to challenge the Brazilian. Although Mansell had Prost come back at him when he had the odd gearbox problem, he pulled away to a safe third place, and Prost was pipped by Berger on the very last lap to claim fourth.

Not a great race after it's action-packed opening, but still one to retain interest over 70 laps. Senna now had a 12 point lead in the World Championship over his own teammate.

MILESTONES

- Senna's fourth succesive pole, his record breaking 46th
- Derek Warwick's first point for Lotus
- Aguri Suzuki's best ever result

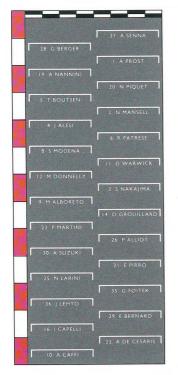


montréal

5

Grand Prix Molson du Canada, 8-10 Juin

Pos	Driver/Nationality		No.	Car/Engine	P.Q. (sunny, dusty)	Practice I (warm, overcast)	Practice 2 (wet track, drying)	Warm-up (pos) (cloudy, damp)		Time/Retirement ack, drying)	
ī	A. Senna	BR	27	McLaren MP4/5 Honda V10	iniak. Sul	1:20.399	1:30.514	1:37.394 (3)	70	lhr42m56.400	
2	N. Piquet	BR	20	Benetton B190 Ford HB V8		1:21.568	1:27.124	1:37.631 (5)	70	1hr43m06.897	
3	N. Mansell	GB	2	Ferrari 641 Ferrari VI2	跨巨岛	1:21.641	1:27.647	1:38.036 (6)	70	1hr43m09.785	
4	G. Berger	AUS	28	McLaren MP4/5 Honda V10		1:20.465	1:33.240	1:35.571 (1)	70	Ihr43m11.254	
5	A. Prost	F	1	Ferrari 641 Ferrari V12	5年2000年	1:20.826	1:31.514	1:37.595 (4)	70	Ihr43m12.220	
6	D. Warwick	GB	-11	Lotus 102 Lamborghini V12		1:22.673	no time	1:39.932 (16)	68	1hr42m38.811	
7	S. Modena	1.0	8	Brabham BT59 Judd V8		1:22.660	1:29.062	1:41.599 (24)	68	Thr43m19.049	
8	A. Caffi	1	10	Arrows ATTB Ford DFR V8		1:25.113	1:39.209	1:42.823 (25)	68	Ihr43m34.876	
9	E. Bernard	F	29	Lola 90 Lamborghini VI2	1:29.844	1:24.451	1:32.750	1:40.410 (19)	67	1hr42m56.941	
10	1. Capelli	1	16	Leyton House CG901 Judd V8	THE PARTY	1:24.554	7:00.728	1:44.280 (26)	67	1hr43m02.454	
П	S. Nakajima		3	Tyrrell 019 Ford DFR V8	-	1:23.605	no time	1:40.150 (17)	67	Thr43m35.154	
12	A. Suzuki	í	30	Lola 90 Lamborghini V12	1:29.372	1:23.915	1:32.777	1:38.859 (8)	66	1hr42m44.179	
13	O. Grouillard	F	14	Osella FAIM Ford DFR V8	1:28.589	1:23.779	1:30.872	1:40.694 (23)	65	1hr42m24.873	
14	M. Donnelly	GB	12	Lotus 102 Lamborghini VI2		1:22,703	1:35.198	1:40.539 (21)	57	engine	
15	G. Foitek	S	35	Onyx OREIB Ford DFR V8		1:24.397	1:42.487	1:38.996 (11)	53	valve	
16	A. de Cesaris	1	22	Dallara BMS 190 Ford DFR V8	_	1:24.621	1:36.629	1:39.362 (14)	50	input shaft	
17	J. J. Lehto	SF	36	Onyx OREIB Ford DFR V8	_	1:24,425	1:40.607	1:40.461 (20)	46	misfire	
18	R. Patrese	ı,	6	Williams FW13B Renault V10	_	1:22.018	44:52.525	1:3B.940 (10)	44	brakes	
19	P. Alliot	F	26	Ligier IS33B Ford DFR V8	<u> </u>	1:23.899	1:31.797	1:39.733 (15)	34	engine	
20	J. Alesi	F	4	Tyrrell 109 Ford DFR V8	-	1:21.748	no time	1:38.716 (7)	26	accident	
21	A. Nannini		19	Benetton B190 Ford HB V8	112221111	1:21.302	1:30.575	1:38.925 (9)	21	accident	
22	T. Boutsen	В	5	Williams FW13B Renault V10	_	1:21.599	no time	1:37.268 (2)	19	collision Larini	
23	N. Larini	1	25	Ligier S33B Ford DFR V8		1:24.285	1:30.091	1:40.608 (22)	18	collision Boutsen	
24	E. Pirro	- 1	21	Dallara BMS 190 Ford DFR V8	_	1:24.269	1:38.775	1:39.081 (12)	-11	collision Alboreto	
25	M. Alboreto		9	Arrows A I IB Ford DFR V8		1:23.744	no time	1:40,311 (18)	11	accident damage	
26	P. Martini		23	Minardi M 190 Ford DFR V8		1:23.795	1:40.047	1:39.257 (13)	0	spun stalled	
27	R. Moreno	BR	33	Eurobrun ER 189 Judd V8	1:28.268	1:25.172	1:31.097	DNO			
28	M. Gugelmin	BR	15	Leyton House CG90 Judd V8	_	1:25.712	1:45.435	DNQ			
26 29	P. Barilla	l l	24	Minardi M 90 Ford DFR V8		1:25.951	1:51.583	DNO			
30	D. Brabham	AUS	7	Brabham BT59 judd V8	_	1:26.771	1:36.453	DNQ			
_	G. Tarquini	- 1	17	AGS H25 Ford DFR V8	1:29.855	DNPQ	DNPO				
_	Y. Dalmas	F	18	AGS IH25 Ford DFR V8	1:30.460	DNPO	DNPO				
_	B. Gachot	В	31	Coloni C3B Subaru Flat 12	1:44,185	DNPQ	DNPO				
	C. Langes	ı	34	Eurobrun ER I 89 Judd V8	1:47.118	DNPQ	DNPQ				
_	B. Giacomelli		39	Life F190 Life W12	1:50.253	DNPO	DNPQ				





	LAP CHART
Grid Order	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70
27 A. Senna	27 27 27 27 27 27 27 27 27 27 27 27 27 2
28 G. Berger	28 28 28 28 28 28 28 28 28 28 28 29 9 4 27 28 27 בדב דבר דבר דבר דבר דבר דבר דבר דבר דבר
I A. Prost	19 19 19 19 19 19 19 19 4 4 5 28 27 19 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
19 A.Nannini	4 4 4 4 4 4 4 4 20 20 2 5 5 5 5 20 20 20 20 20 20 20 20 20 20 20 20 20
20 N. Piquet	20 20 20 20 20 20 20 20 20 5 5 27 4 4 4 20 20 20 20 2 2 2 2 2 2 2 2 2 2 2
5 T. Boutsen	1
2 N. Mansell	5 5 5 1 2 228 520 20 6 6 6 6 6 6 6
4 J. Alesi	2 2 2 2 2 2 2 2 2 2 28 28 12 20 2 2 6 6 6 6 6 12 12 12 12 12 14 4 4 12 12 12 12 12 12 12 12 12 12 12 12 12
6 R. Patrese	6 6 6 6 6 6 6 6 11 1 20 11 11 11 25 12 12 12 4 4 4 4 12 12 12 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
8 S. Modena	11 11 11 11 11 11 11 11 11 12 12 11 25 6 6 12 25 4 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
II D. Warwick	8 8 8 8 8 8 12 12 12 8 8 25 6 25 25 4 4 8 8 10 10 10 10 10 10 10 10 10 10 16 16 16 16 16 16 16 16 16 16 16 16 16
12 M. Donnelly	12 12 12 12 12 18 8 8 21 21 6 12 12 12 8 8 8 21 21 6 12 12 12 8 8 10 10 26 26 26 26 26 26 26 26 16 16 16 16 35 35 35 35 35 35 35 35 35 35 35 35 35
3 S. Nakajima	14 14 14 14 21 21 21 21 21 21 9 9 3 35 29 29 10 10 25 26 16 16 16 16 16 16 16 16 16 16 16 35 35 35 35 29 29 29 29 29 29 29 29 29 29 29 29 29
9 M. Alboreto	21 21 21 14 9 9 9 9 25 25 35 10 26 36 29 26 26 16 35 35 35 35 35 35 35 35 29 29 29 29 3 3 3 3 3 3 3 3 3 22 22 22 22 22 22 14 30 30 14 14 14 14
14 O. Grouillard	9 9 9 9 9 1 4 25 25 25 6 6 22 3 36 8 26 16 16 35 29 29 29 29 29 29 29 29 3 3 3 3 26 26 26 26 36 36 36 22 22 22 22 14 14 14 14 14 14 14 14 14 30 14 14
23 P. Martini	3 3 3 3 14 3 3 3 10 29 3 10 16 35 35 29 3 3 3 3 3 3 6 36 36 22 22 36 36 22 22 23 6 36 36 36 14 14 6 30 30 30 30 30 30 30
26 P. Alliot	26 26 26 26 26 26 32 22 22 22 22 29 26 8 26 35 29 29 3 19 19 14 14 36 36 36 22 22 22 22 36 36 22 22 14 14 14 14 14 14 14 36 36 36 36 36
30 A. Suzuki	35 35 35 35 35 25 22 35 35 35 26 36 10 16 36 3 3 14 14 14 36 36 22 22 22 14 14 14 14 14 14 30 30 30 30 30 30 30 30 30 30
21 E.Pirro	30 30 25 25 25 35 26 0 0 0 0 36 8 35 35 3 4 4 9 36 36 22 22 4 4 4 30 30 30 30 30 30 30 30
25 N. Larini	36 25 30 30 22 22 35 14 26 26 26 16 16 16 3 14 36 36 36 22 22 30 30 30 30
35 G. Foitek	25 36 22 22 36 36 36 26 29 29 29 8 22 72 14 19 19 19 22 30 30
36 J. J. Lehto	10 22 36 36 10 10 10 29 14 36 36 14 14 14 22 22 22 22 23 30
29 E.Bernard	22 0 0 0 29 29 16 36 16 6 30 30 30 30 30 30
16 I. Capelli	29 29 29 16 16 16 36 16 14 4
22 A. de Cesaris	16 16 16 16 30 30 30 30 30 30 30
10 A. Caffi	

Nr. 28 G. Berger: I min. of penalty

		FASTEST LAPS	S					
Pos.	Car	Car No./Driver/Team						
ī	28	G. Berger/McLaren	1:22.077					
2	2	N. Mansell/Ferrari	1:22.839					
3	20	N. Piquet/Benetton	1:22.854					
4	- 1	A. Prost/Ferrari	1:23.078					
5	27	A. Senna/McLaren	1:23.375					
6	30	A. Suzuki/Lola	1:24.678					
7	10	A. Caffi/Arrows	1:24.770					
8	4	J. Alesi/Tyrrell	1:24.781					
9	11	D. Warwick/Lotus	1:24.948					
10	12	M. Donnelly/Latus	1:25.430					
11	19	A. Nannini/Benetton	1:25.545					
12	6	R. Patrese/Williams	1:25.566					
13	29	E. Bernard/Lola	1:25.571					
14	8	S. Modena/Brabham	1:25.693					
15	16	I. Capelli/Leyton House	1:25.846					
16	22	A. de Cesaris/Dallara	1:26.158					
17	35	G. Foitek/Onyx	1:26.177					
18	5	T. Boutsen/Williams	1:26.486					
19	3	S. Nakajima/Tyrrell	1:26.703					
20	26	P. Alliot/Ligier	1:27.373					
21	14	O. Grouillard/Osella	1:28.108					
22	36	J.J. Lehto/Onyx	1:29.032					
23	25	N. Larini/Ligier	1:34.545					
24	9	M. Alboreto/Arrows	1:39.464					
25	21	E. Pirro/Dallara	1:40.699					

	CHAMPIONSHIP POINTS									
	Drivers	·		Constructors						
ī	А. Ѕеппа	31 pts	T	McLaren Honda	50 pts					
2	G. Berger	19 pts	2	Ferrari	21 pts					
3	A. Prost	14 pts	3	Williams Renault	18 pts					
4	J. Alesi	13 pts	4	Benetton Ford	16 pts					
5	N. Piquet	12 pts	5	Tyrrell Ford	14 pts					
6	R. Patrese	9 pts	6	Arrows Ford	2 pts					
7	T. Boutsen	9 pts		Brabham Judd	2 pts					
8	N. Mansell	7 pts	8	Larrousse	l pt					
9	A. Nannini	4 pts		Lotus Lamborghini	l pt					
10	A. Caffi	2 pts		· ·						
	S. Modena	2 pts								
12	E. Bernard	l pt								
	D. Warwick	lpt								
	S. Nakajima	lpt								

Existing qualifying lap record - 1989:
Alain Prost, McLaren MP4/5 Honda V10
1m20.973s = 195.374kmh/121.374mph

Existing lap record -1988:

Ayrton Senna, McLaren MP4/4 Honda V6 turbo 1m24.973s = 185.988kmh/113.184mph

	PAST WINNERS								
Year	Driver	Nat.	Car	Circuit					
1979	Alan Jones	AUS	3.0 Williams FW07 Ford	lle Notre-Dame					
1980	Alan Jones	AUS	3.0 Williams FW07B Ford	lle Notre-Dame					
1981	Jacques Lafitte	F	3.0 Ligier JS17 Matra	lle Notre-Dame					
1982	Nelson Piquet	BR	1.5 Brabham BT50 BMW t/c	lle Notre-Dame					
1983	René Arnoux	F	1.5 Ferrari 126C2/B t/c	lle Notre-Dame					
1984	Nelson Piquet	BR	1.5 Brabham BT53 BMW t/c	lle Notre-Dame					
1985	Michele Alboreto	1	1.5 Ferrari 156/85 t/c	lle Notre-Dame					
1986	Nigel Mansell	GB	1.5 Williams FW11 Honda t/c	lle Notre-Dame					
1988	Ayrton Senna	BR	1.5 McLaren MP4/4 Honda t/c	lle Notre-Dame					
1989	Thierry Boutsen	В	3.5 Williams FW12C Renault V10	lle Notre-Dame					



mexico city

Gran Premio de Mexico, 22-24 Junio

WHEN RACING FOLK TALK OF THE AUTODROMO HERMANOS RODRIGUEZ, THEY TALK OF THE PERALTA CORNER, THE BANKED, 180-DEGREE SWEEPER ONTO THE PIT

STRAIGHT. IT IS HERE, MORE THAN ANYWHERE ELSE IN THE WORLD, WHERE YOU CAN PICK THE MEN FROM THE BOYS. A CORNER WHERE MACHISMO IS STILL THE MOST IMPORTANT THING. THE MEXICANS LOVE MACHISMO AND THEY TURN OUT IN THEIR THOUSANDS TO CATCH A GLIMPSE OF THE F1 STARS. THE MEXICANS LOVE MOTOR RACING. TODAY THE OVER ENTHUSIASTIC CROWDS ARE PROTECTED FROM

THEMSELVES BY FENCES WHICH ARE IMPOSSIBLE TO SCALE, WHERE ONCE THEY WERE HAPPY TO STAND BESIDE THE TRACK. THE AUTODROMO HERMANOS RODRIGUEZ, ALTHOUGH SUBSTANTIALLY REBUILT, HARKS BACK TO A PAST AGE-WHEN MEXICO HAD TOP FORMULA 1 DRIVERS.

Clockwise from right: spot the winner: he's 14th! Diverging fortunes for Arrows and Williams. Warwick and designer conscious marshal search for Lotus cure.

Below: Mortini and seat seek spare Minardi.

IMPRESSIONS

t wasn't a race that Ferrari expected to win, and certainly not with Alain Prost starting from 13th on the grid. Tyres once again held the answer. Prost, driving a Ferrari on in 1990, on relatively soft Goodyears achieved what he couldn't do in '89 on relatively hard Goodyears in a McLaren. It was the ultimate Professor's race with him even vanquishing his own teammate. He may not have been able to make his qualifiers work, but he made his race tyres last magnificently.

It was a race where McLaren were the average, Benetton were promising, Ferrari were the charging underdogs, and Williams were going backwards. As Boutsen and Patrese faded, so the McLarens were left up front until Berger pitted







for new tyres after 13 laps. That was McLaren's warning signal but they ignored it. 'We called it wrong', admitted Ron Dennis later.

Senna held the lead from lap two through to lap 61, eight laps from home. At one stage he was just over eighteen seconds ahead, at the precise moment that Piquet had been demoted by both Ferraris, as Mansell went second ahead of Prost.

As Senna's lead was whittled away, so the Brazilian and his team were faced with the dilemma, should he pit or not? Eight laps later, the tyres were readied. Senna still had a lead of 12 seconds and it had stabilised briefly. The pit crew was told to stand easy again. In hindsight, any stop, any time, would have been right, for Senna had a deflating tyre.

First there was the Ferrari battle to settle.





While Mansell had been whittling away Senna's lead, so Prost had been catching his teammate. In amongst traffic, Prost settled that score rapidly and fairly cleanly, although not to Mansell's satisfaction.

The gap between Senna and Prost fell even quicker now and the Brazilian had no resistance when first Prost and then Mansell swooped past. There was still more drama to come. Senna had reported that he felt the car becoming unstable but McLaren thought that it was merely a tyre wear problem. Instead it revealed itself in a huge demonstration of flailing rubber when the tyre finally exploded, and Senna's race was run.

At the same time, Mansell made an



elementary mistake and spun when he got off line, resuming just a couple of seconds ahead of Berger. The pair fought a great battle in the closing laps, Berger muscled past the Englishman then Mansell made the ultimate commitment and swooped past the Austrian into the very quick final corner in a tremendous display of courage and talent.

Yet this day belonged to Alain Prost; a supreme demonstration of race-driving and how to win. It was a Ferrari one-two on a remarkable day when there were 20 classified finishers and in Formula One, only the 1952 British Grand Prix has seen more.

BRIGHT SPARKS

knew that I was the quickest driver on the track so I wasn't too worried starting 13th.' There's confidence for you. Alain Prost didn't even 'make a very good start, because I was 15th in the first corner. But I soon saw all the other cars were going slower and I knew that I could pass them given time.'

So while the rest of us watched Senna, Patrese, Piquet, Berger and even Mansell supposedly fighting out this Grand Prix, there was someone much more confident way out of the frame at this stage.

Prost wasn't even looking competitive. 'I didn't want to push too hard during the opening stages because when you're trying to overtake you can destroy the front tyres with understeer



when you lose downforce behind slower cars,' continued Prost. 'I had less wing in order to be quicker on the straight and overtake. The car was getting better all the time. As grip increased, so my set-up was better.'

This came at a good time, particularly for the team. It was one of the best races. We have a new engine coming and we can hope that this will be the start of a series of wins.'

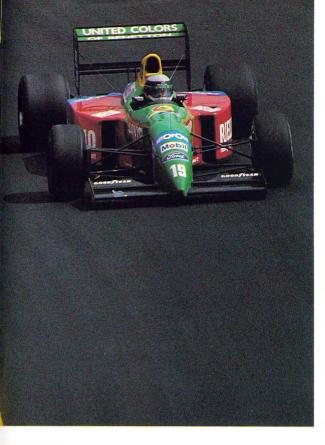
Prost reigned supreme in Mexico. His teammate made a mistake in the closing stages. Berger needed an early stop with a blistered front left tyre and Senna, whilst leading for so much of the race, paid the ultimate price for not coming in to change tyres, as one was badly deflating.

Although no one else was seriously in











contention, there were good performances from several teams. Alesi, for instance, finished seventh with an electrical misfire. He was just pipped for sixth at the end by Piquet on newer tyres. The Frenchman had qualified a fine sixth against the multi-cylinders with teammate Nakajima ninth. The Japanese driver even overtook Prost on the straight when he was timed at 311 kph/193 mph. Proof again that the Tyrrell works well in Mexico came when they added more downforce and went quicker. Pirelli's second man was Martini, with a time, good for seventh, set on the first day.

Meanwhile the Lotus pair qualified close

together, and sandwiched Patrese at the end. Donnelly had actually lost chunks of rubber from his tyres on the way to eighth, Warwick dropped away with poor straight line speed.

The predictable conditions at least meant a straight forward Grand Prix, and the best man certainly won.

RACE DEBRIEF

onditions frequently change at the Autodromo Hermanos Rodriguez, and they did just that over the weekend. The pre-qualifiers weren't prepared for their wet track, and a sobering lesson was learned by Suzuki who hit a wet patch when on slicks and spun into the barrier. Jumping into the spare, he eventually qualified fourth behind Grouillard, Bernard and Moreno. The Pirellis were better on this still dirty track than the Goodyears. Qualifying was all about tyres that worked on this low grip surface, with bumps (apart from the final corner which had been resurfaced) and straightline speed down the shute. Finally, you had to be out on the circuit at the right time: just at the end of Saturday's prequalifying the wind got up, the clouds rolled in and the temperature dropped. This was the catalyst for many of the quick times.

Gerhard Berger, however, set his pole position time on Friday, charged with determination after the Canadian Grand Prix disqualification and a 40 minute wait for an electrical problem to be cured. Low tyre pressures combined with hitting a kerb prevented any improvement the next day, and Berger was worried. Patrese came closest. Williams might have been even quicker if they had fitted softer springs to cope with the bumps, but Patrese did a good job on Saturday afternoon. Teammate Boutsen went out too early in the session and ended up fifth. Senna wasn't fastest in a single session. He used his qualifiers rather too conservatively on Friday and then was unhappy with the car's balance on Saturday which left him third on the grid.

Mansell was the quicker of the Ferrari drivers but the red cars were once again having trouble getting their qualifying tyres up to temperature. Mansell was second fastest on Friday on race tyres that were 20 laps old, but he



was held up by Barilla the next day and that cost him time and he slipped to fourth. Prost was in an even worse state with a down-on-power engine which left him 13th.

Alesi was first of the V8 and Pirelli runners, using the spare car after an electrical failure on Saturday morning prevented the use of his race car, Martini was one of those not to improve on his fifth fastest time on Friday which put him two places further back on the grid.

The Benettons didn't really show the promise expected but Piquet improved on a single set of qualifiers after a fuel system problem on Friday. Nannini had similar problems and a spin left him slightly worse off than Prost, but like so many teams, they were at least optimistic of their race set-up.

The cool warm-up saw Berger and Senna quickest from Piquet, Mansell and the Williamses. Mansell had an altercation with a dog(!) and later had a spin, emulated by teammate Prost.

Patrese made a hesistant start from the grid but had the lead into the first corner from Berger. The Austrian was soon demoted by his teammate Senna, who pushed Patrese back to second as they started lap two with Berger getting past as well at the end of the second lap, and the Williams driver then lost two more places, (to Boutsen and Piquet) by the end of the third lap, his harder B compound Goodyears not giving him sufficient grip.

For the first few laps, Senna didn't get away from Berger but together they were pulling away from the chief pursuer Piquet who had overtaken Boutsen by lap six. Then Berger began to drop away dramatically from Senna and Piquet began to close. On lap 13 Berger ducked out of second for new tyres. 'I had a big blister on the front left and it was graining,' explained Berger, who rejoined in eleventh place.

That left Senna with a comfortable lead around 14 seconds, and there it remained while Piquet attempted to pull away from the Williams duo behind him. They now had their mirrors full of Ferrari red, with Mansell leading the way from Prost. However, Piquet's progress was limited due to a blistered front left tyre, which allowed Senna to stretch his lead to seventeen seconds.

The real progress was amongst the Ferraris. The Williamses were on Goodyear's B compound and not happy with it, so Mansell got by Patrese on lap 22 and quickly closed on Boutsen and overtook the Belgian three laps later. Prost passed Patrese a lap later. He took Boutsen as well on lap 31, by which time Mansell was beginning to challenge Piquet.

It wasn't until lap 37 that Mansell took the second placed Benetton and Prost promptly repeated the exercise, overtaking Piquet on lap 42. Yet the gap between second and first had never been bigger, and now it was up to the



Ferrari drivers to do what they could about the McLaren 18 seconds ahead. Prost closed on second placed Mansell as they rapidly cut the gap in front of them.

Now Senna and McLaren had to decide whether new tyres would be the answer, and if the delay in changing rubber could be made up by the additional grip. New tyres were readied for Senna as he discussed the pros and cons with his pit. On lap 50, Senna was expected in, but the gap seemed to have stabilised at around 12 seconds, and the Brazilian stayed out.

Sure the gap stabilised, but only for a lap or two. Then it plumetted again, Senna finding that his car wasn't handling well. The Ferraris closed inexorably. However it was no longer Mansell the pursuer but Prost. The Frenchman had overtaken his teammate in amongst backmarkers, much to Mansell's annoyance.

By lap 59, the Frenchman was on the Brazilian's tail, and two laps later he swooped past. The Brazilian had no answer to Mansell either, when he challenged a couple of laps later. On lap 63, the Brazilian's doubts were answered when suddenly the deflating right rear tyre let go altogether and exploded. Senna tried to get the car back to the pits, but with rubber flailing, and

a lot of time lost, the car was withdrawn, and with it went Senna's hopes.

At the same time Mansell got off line and onto the marbles, picked up dust and spun, rejoining just ahead of Berger. The Austrian squeezed up into second place on lap 67, but a lap later Mansell 'closed my eyes' and took an amazing outside line into the final corner to retake second and hang on to the flag. Both drivers were exhilarated by this late race battle, almost as much as everyone else.

Nannini suffered a blistered tyre but salvaged fourth. Boutsen had brake troubles yet finished fifth from a hard-charging Piquet who had stopped for new tyres and had relieved Alesi of sixth two laps before. However these performances were sadly lost in comparison to Prost's and the late race battle. It was a great Grand Prix.

MILESTONES

- Equal greatest number of classified finishers (with Canada '76 and France '72) since
 British GP 1952
- Senna's 100th Grand Prix
- Prost's 41st victory
- Donnelly's equal best ever result





Clockwise from above: no Loto for Ligier - both finished. Prost's 41st was magic! 'we called it wrong,' said McLaren's Ron Dennis.



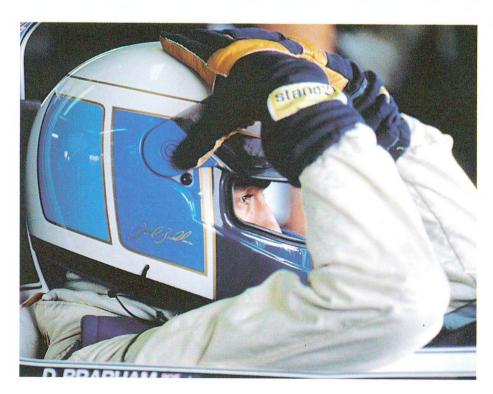
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Gran Premio de Mexico, 22-24 Junio

Pos	Driver/Nationality		No.	Car/Engine	P.Q. (damp. cool)	Practice I (hazy, warm)	Practice 2 (sunny, warm)	Warm-up (pos) (overcast)		Time/Retirement and overcast)
	A. Prost	F	Light	Ferrari 641 Ferrari VI2	S- 32	1:19.378	1:19.026	1:21.012 (8)	69	Ihr32m35,783
	N. Mansell	GB	2	Ferrari 641 Ferrari V12	9 -	1:17.938	1:17.732	1:20.398 (4)	69	Ihr33m01.134
3	G. Berger	AUS	28	McLaren MP4/5B Honda V10	-	1:17.227	1:17.850	1:19.823 (1)	69	1hr33m01.313
4	A. Nannini	364	19	Benetton BI 90 Ford HB V8	-	1:19.909	1:19.227	1:20.928 (7)	69	1hr33m16.882
5	T. Boutsen	В	5	Williams FW13B Renault V10		1:19.062	1:17.883	1:20.462 (5)	69	Ihr33m22.452
6	N. Piquet	BR	20	Benetton B190 Ford HB V8	-	1:19.022	1:18.561	1:20.242 (3)	69	1hr33m22.726
7	J. Alesi	F	4	Tyrrell 019 Ford DFR V8		1:18.723	1:18.282	1:21.056 (9)	69	1hr33m24.860
8	M. Donnelly	GB	12	Lotus 102 Lamborghini V12	_	1:19.769	1:18.994	1:21.253 (10)	69	1hr33m41.925
9	R. Patrese	(A)	6	Williams FW13B Renault V10	M-	1:18.215	1:17.498	1:20.579 (6)	69	1hr33m45.701
10	D. Warwick	GB	e II.	Lotus 102 Lamborghini V12	45	1:19.557	1:18.951	1:21.964 (16)	68	1hr32m45.653
П	S. Modena	1	8	Brabham BT59 Judd V8	= -	1:18.592	1:19.817	1:21.594 (12)	68	Ihr33m09.845
12	P. Martini	1 - 1	23	Minardi M190 Ford DFR V8	M =	1:18.526	1:18.590	1:21.759 (13)	68	Ihr33m18.079
13	A. de Cesaris	-1.75	22	Dallara BMS190 Ford DFR V8	4	1:21.635	1:19.865	1:22.110 (18)	68	Ihr33m37.067
14	P. Barilla		24	Minardi M190 Ford DFR V8		1:19.897	1:21,242	1:22.923 (22)	67	Ihr32m49.606
15	G. Foitek	CH	35	Onyx ORE Ford DFR V8		1:21.012	1:21,400	1:22.602 (20)	67	Ihr33m32,176
16	N. Larini	- 1	25	Ligier JS33B Ford DFR V8	15 T W 1	1:21.584	1:21,116	1:24.459 (26)	67	Ihr33m33.326
17	M. Alboreto	1	9	Arrows AIIB Ford DFR V8	0-10	1:21.212	1:19.941	1:22.122 (19)	66	Ihr32m49.479
18	P. Alliot	F	26	Ligier JS33B Ford DFR V8	12 370 3	1:21.445	1:20.657	1:22.901 (21)	66	Ihr33m28.647
19	O. Grouillard	F	14	Osella FAIME Ford DFR V8	1:25.281	1:20.274	1:21.167	1:23.595 (24)	65	Ihr33m04.236
20	A. Senna	BR	27	McLaren MP4/5B Honda VIO		1:18.417	1:17.670	1:19.930 (2)	63	puncture
21	J. J. Lehto	SF	36	Onyx OREI Ford DFR V8	_	1:21.519	1:21.687	1:22.901 (21)	26	engine
22	E. Bernard	F	29	Lola 90 Lamborghini V12	1:25.456	1:21.273	1:21.677	1:21.796 (14)	12	rear wheel bearing
23	A. Suzuki	J	30	Lola 90 Lamborghini VI2	1:27.511	1:21.077	1:20.268	1:21.308 (11)	11	collision Nakajima
24	S. Nakajima	1	3	Tyrrell 019 Ford DFR V8		1:19.551	1:18.575	1:21.904 (15)	11	collision Suzuki
25	D. Brabham	AUS	7	Brabham BT59 Judd V8	_	1:20.447	1:20.636	1:23.282 (23)	11	electrics
26	E. Pirro	1	21	Dallara BMS 190 Ford DFR V8	-	1:21.067	1:20.044	1:22.025 (17)	10	engine
27	I. Capelli	I	16	Leyton House CG901 Judd V8	_	1:23.639	1:21.544	DNQ		
28	M. Gugelmin	BR	15	Leyton House CG901 Judd V8	_	1:22.612	1:21.665	DNQ		
29	A. Caffi	I	10	Arrows AliB Ford DFR V8	-	1:22.278	1:22.154	DNQ		
30	R. Moreno	BR	33	Eurobrun ER 189 Judd V8	1:26.724	disqualified				
-	Y. Dalmas	F	18	AGS JH25 Ford DFR V8	1:27.830	DNPQ	DNPQ			
-	G. Tarquini	1	17	AGS JS25 Ford DFR V8	1:28.499	DNPQ	DNPQ			
-	B. Gachot	В	31	Coloni C3B Subaru flat 12	1:28.805	DNPQ	DNPQ			
-	C. Langes	I	34	Eurobrun ER 189 Judd V8	1:40.414	DNPQ	DNPQ			
	B. Giacomelli	- 1	39	Life L190 Life W12	4:07.475	DNPQ	DNPO			

		28. G BERGER
	6. R PATRESE	
		27. A SENNA
	2 N MANSELL	5 T BOUTSEN
	4. J ALESI	· · · · · · · · · · · · · · · · · · ·
		23 P MARTINI
	20 N PIQUET	
	8. S MODENA	3. S NAKAJIMA
	1 8.5 MODENA	II D WARWICK
	12 M DONNELLY	
		I. A PROST
	19 A NANNINI	
	24 P BARILLA	12. A DE CESARIS
		9. M ALBORETO
	21 E PIRRO	
		30. A SUZUKI
	i4 O GROUILLARD	7 D BRABHAM
A	26 P ALLIOT	1 / D BRABHAM 1
		35 G FOITEK
	25 N LARINI	Mark Commence
		29 E BERNARD
	36 J LEHTO	



	LAP CHART
Grid Order	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 6
28 G.Berger	ווווווווווועטעמעמעמעמעמעמעמעמעמעמעמעמעמע
6 R. Patrese	6 28 28 28 28 28 28 28 28 28 28 28 28 20 20 20 20 20 20 20 20 20 20 20 20 20
27 A.Senna	28 6 5 5 20 20 20 20 20 20 20 20 20 5 5 5 5
2 N. Mansell	5 520 20 5 5 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6
5 T. Boutsen	20 20 6 6 6 6 6 6 6 6 6 2 2 2 2 2 2 2 2
4 J. Alesi	2 4 4 4 4 4 4 2 2 2 2 2 1 1 1 1 1 1 1 1
23 P. Martini	4 2 2 2 2 2 4 4 4 4 1 4 4 9 9 9 9 9 9 9 9 9 9 9 9 9
20 N. Piquet	11 11 11 12 12 12 12 1 1 1 1 4 19 19 4 4 4 4 4 4 4 4 4 4 4 4
3 S. Nakajima	23 23 12 12 11 11 1 1 1 1 2 19 19 19 12 12 12 12 12 12 12 12 12 12 12 12 12
8 S. Modena	12 12 23 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
II D. Warwick	22 22 1 23 19 19 19 11 11 11 11 128 8 8 8 8 8 8 8 8 8 8 8 8
12 M. Donnelly	19 19 923 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
I A. Prost	1922 8 82323 30 30 30 30 23 23 23 23 23 23 23 23 23 23 23 23 23
19 A. Nannini	8 8 8 22 22 30 30 23 23 23 23 21 21 21 21 21 21 21 21 21 21 21 21 21
22 A. de Cesaris	9 9 9 30 30 22 22 22 22 26 29 9 9 9 9 9 9 9 9 9 9 9
24 P. Barilla	30 30 30 9 9 26 26 26 26 29 9 25 24 24 24 24 24 24 24 24 24 24 24 24 24
9 M. Alboreto	24 24 24 26 26 9 9 9 29 29 22 25 24 35 35 35 35 35 35 35 35 35 35 35 35 35
21 E. Pirro	26 26 26 24 29 29 29 29 3 3 3 24 35 4 4 4 4 4 4 4 4 4
30 A. Suzuki	25 25 25 25 25 25 25 3 3 9 9 9 35 14 36 36 36 36 36 36 36 26 26 14 14 14 14 14 14 14 14 14 14 14 14 14
14 O.Grouillard	14 14 29 29 24 3 25 25 25 25 25 14 36 26 26 26 26 26 26 26 36 36 36 36 36 36 36 36 25 25 25 25 25 14 14 14 14 14 14 14 14 14 14 14 14 14
7 D. Brabham	7 29 3 3 3 24 24 24 24 24 24 36 26 25 25 25 25 25 25 25 25 25 25 25 25 25
26 P. Alliot	36 36 14 35 35 35 35 35 35 35 35 26
35 G. Foitek	29 3 36 14 14 21 21 21 21 21 14
25 N. Larini	3 35 35 36 21 4 4 4 4 36
29 E. Bernard	35 21 21 21 36 36 36 36 36 36 7
36 J.J. Lehto	21 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7

		FASTEST LAPS	S		
Pos.	Car	Car No./Driver/Team			
1	1	A. Prost/Ferrari	1:17.958		
2	28	G. Berger/McLaren	1:18.223		
3	20	N. Piquet/Benetton	1:18.365		
4	2	N. Mansell/Ferrari	1:18.487		
5	6	R. Patrese/Williams	1:18.653		
6	27	A. Senna/McLaren	1:19.062		
7	19	A. Nannini/Benetton	1;19.378		
8	4	J. Alesi/Tyrrell	1;19,474		
9	12	M. Donnelly/Lotus	1:19.508		
10	5	T. Boutsen/Williams	1:19.525		
11	1.1	D. Warwick/Lotus	1:19.932		
12	23	P. Martini/Minardi	1:20,230		
13	8	S. Modena/Brabham	1:20,355		
14	22	A. de Cesaris/Dallara	1:20.601		
15	24	P. Barilla/Minardi	1:20.789		
16	25	N. Larini/Ligier	1:21.235		
17	35	G. Foitek/Onyx	1:21.408		
18	26	P. Alliot/Ligier	1:21.467		
19	3	S. Nakajima/Tyrrell	1:21.736		
20	9	M. Alboreto/Arrows	1:22.082		
21	29	E. Bernard/Lola	1:22.636		
22	14	O. Grouillard/Osella	1:22.779		
23	30	A. Suzuki/Lola	1:22.936		
24	21	E. Pirro/Dallara	1:23.476		
25	36	J.J. Lehto/Onyx	1:23.816		
26	7	D. Brabham/Brabham	1:26.487		

_	Drivers			Constructors	
1	A. Senna	31 pts	ı	McLaren Honda	54 pts
2	A. Prost	23 pts	2	Ferrari	36 pts
3	G. Berger	23 pts	3	Benetton Ford	20 pts
4	J. Alesi	13 pts		Williams Renault	20 pts
5	N. Manseli	13 pts	5	Tyrrell Ford	14 pts
6	N. Piquet	13 pts	6	Arrows Ford	2 pts
7	T. Boutsen	I I pts		Brabham Judd	2 pts
8	R. Patrese	9 pts	8	Larrousse	l pt
9	A. Nannini	7 pts		Lotus Lamborghini	l pt
10	A. Caffi	2 pts		•	
	S. Modena	2 pts			
12	E. Bernard	l pt			
	D. Warwick	l pt			
	S. Nakajima	l pt			

Existing qualifying lap record - 1986:

Ayrton Senna, Lotus Renault 98T turbo V6

1m16.990s = 206.723kmh/128.452mph

Existing lap record - 1988:

Alain Prost, McLaren MP4/4 Honda V6 turbo

1m18.608s = 202.468kmh/125.808mph

PAST WINNERS								
Year	Driver	Nat.	Car	Circuit				
1966	John Surtees	GB	3.0 Cooper T81 Maserati	Mexico City				
1967	Jim Clark	GB	3.0 Lotus 49 Ford	Mexico City				
1968	Graham Hill	GB	3.0 Lotus 49B Ford	Mexico City				
1969	Denny Hulme	NZ	3.0 McLaren M7A Ford	Mexico City				
1970	jacky lckx	В	3.0 Ferrari 312B	Mexico City				
1986	Gerhard Berger	Α	1.5 Benetton B 86 BMW t/c	Mexico City				
1987	Nigel Mansell	GB	1.5 Williams FWI B Honda t/c	Mexico City				
1988	Alain Prost	F	1.5 McLaren MP4/4 Honda t/c	Mexico City				
1989	Ayrton Senna	BR	3.5 McLaren MP4/5 Honda V10	Mexico City				



paul ricard

Rhône-Poulenc Grand Prix de France, 6-8 Juillet

THE CIRCUIT PAUL RICARD CAN BE FOUND ON A ROCKY PINE COVERED PLATEAU ABOVE THE HOLIDAY BEACHES - IT IS ALWAYS AN INVIGORATING PLACE TO BE. YOU FEEL THE SUN AND THE MISTRAL WIND BLOWING GENTLY. IN THE EVENINGS YOU DESCEND TO THE QUAINT FISHING PORTS ALONG THE

COAST FOR MEDICINAL DOSES OF BANDOL ROSÉ AND PROVENCAL COOKING. AT RICARD YOU MUST EXPECT THE UNEXPECTED FOR THE TRACK IS A STRANGE MIXTURE OF A LONG STRAIGHT AND TIGHT

CURVES. TO MASTER SUCH A DESIGN, THE DRIVERS MUST COMPROMISE, YET THEIR JOB IS MADE MORE DIFFICULT AS IT IS A CIRCUIT WHICH CHANGES FROM DAY TO DAY: THE HEAT AND THE WIND DICTATING WHETHER THE CARS WILL BE QUICK OR SLOW. YOU CAN NEVER BE SURE WHAT WILL HAPPEN. THE 1990 RHONE-POULENC FRENCH GP WAS NO EXCEPTION. THE UNEXPECTED HAPPENED...

Previous pages: Suzuki and teammate Bernard delighted locals at the Larrousse teams future adopted home. Capelli led 44 laps but Prost threatened.

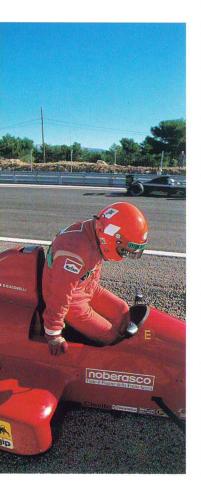
IMPRESSIONS

here can scarcely have been a more popular result for many years. The French had Alain Prost's 42nd victory and his hat-trick at Ricard to celebrate. The Italians had Ferrari's historic 100th Grand Prix victory to crow about, and in the paddock, everyone was pleased that Leyton House had bounced back with Ivan Capelli's great race to second place.

The winner, in the end, was the sport of motor racing as a whole. This was another great race, and once again there were few retirements, with 19 classified finishers, until de Cesaris was

car in front he suffered a lack of grip from the front tyres. The Ferrari was obviously the quickest car on the track, overtaking however, proved to be an altogether different proposition.

In fact he only ever overtook two cars, and they were both Leyton House-Judds performing beautifully for the first time this year. Designer Adrian Newey had recently left the team, his legacy was a new floor and underbody, a development aimed at correcting a possible aerodynamic deficiency in the initial design. It had taken over three months to produce, during which time he had become the scapegoat for the team's poor performances which had culminated





excluded for being underweight.

They said it would be a tyre race, and it was. McLaren went for a conservative solution, but really it was the process of changing the tyres that lost the race for them: there was a 12.7s stop for Berger, leader of the first 27 laps and a 16.6s stop for Senna who overtook him on lap 28.

Ferrari went for the softer C compound tyres and their pit stops were rather more impressive. Even so, whenever Prost got close to a in a failure to qualify two weeks earlier in Mexico.

However when everyone else pitted for new tyres, the Leyton House-Judds sailed on, only Prost was able to catch, and with difficulty pass them again, before the chequered flag.

Prost's win and Senna's lucky third place (Gugelmin retired 21 laps from the end) tightened up the championship considerably. As the trucks and motorhomes headed for Silverstone, Senna's 12 point lead over Berger and 17 point lead over Prost, two races earlier, had been whittled away to just three points. Alain was now second.

McLaren, one felt, were rattled. The best they managed in either of the last two races was third place. They were on the defensive. Using Goodyear's B compound tyre was a conservative choice and this only after Senna had sacrificed one qualifying session and the front row of the grid to grab another hour of race tuning.

Ferrari's new engine was still not raceworthy, yet it certainly showed speed. The presence of interlopers such as Leyton House (however welcome for the rest of us) meant less points for the championship leaders.

of pole positions.

Here in France, Ferrari had a new, stronger V12 engine on hand. Testing the previous week at Silverstone in Mansell's car revealed it to be more powerful but fragile. The engine blew after only 15 laps.

Ferrari fitted two of these engines into spare cars, and gave their drivers one each, with instruction not to do too many laps. On Friday afternoon, when the track was at its best, despite an unhelpful mistral, Mansell claimed his first ever pole for Ferrari. Later that afternoon, he explained how Ferrari always kept their best engines for the race. However, just before half





Senna put a brave face on it, welcoming his four points and reckoning that they could be significant at the end of the day. We would see.

BRIGHT SPARKS

igel Mansell claimed another milestone for Ferrari before their fantastic historic 100th win. For nearly two years the Italian team and Lotus had been tied at 107 for the record number

distance on Sunday, having run in the leading quartet, the power began to drop off. He battled on, causing heavy wear to his tyres, but still Senna came past, after a tyre stop, the engine finally cried enough.

There were no such problems for Prost who suffered opposite fortunes. A misfire with the latest specification engine saw him use the normal engine, this was still good enough for second quickest time in the final qualifying session but it

From left to right: c'est la vie, Bruno! Warwick on the limit, trying to escape a constant shadow his teammate. Piquet had yet to retire from a GP in 1990.



Below: Pirro prays that never again will a brake disc explode.





left him fourth on the grid.

Prost lost out to both Nannini and Patrese at the start, and he remained behind the Williams-Renault driver until a good 7.4s stop for tyres. He was the quickest of the front runners as he closed on the Leyton House duo, ignoring a blistered rear tyre and an electrical cut out which stopped the engine every time he changed gear. Prost is used to overcoming such difficulties, and he managed to get by Gugelmin and Capelli, although he had to take two runs at the latter before the chequered flag was his.

This was a great race for Leyton House. In testing, the new floor gave the car some feel, improving its grip considerably. Qualifying on the newly resurfaced and billiard-table smooth Ricard surface saw immediate improvements: Capelli was seventh and Gugelmin tenth. More importantly, they already knew that they were the only team not planning to stop for tyres; they would make Goodyear's C compound tyres last the full 80 laps. When Capelli told the Lotus drivers this news on race morning, the boys in yellow didn't believe him!





Sure enough, when the tyre changes began as early as lap 20 (Piquet) through to lap 33 (Patrese), the others peeled off into the pits but not the Leyton House-Judds. They kept tramping on, and although Prost managed to catch them, he found overtaking a different matter. He succeeded in both cases, but on this track Ferrari's V12 couldn't just walk over Judd's V8.

When Capelli's oil light flashed on however, Prost nipped through to take the lead. Gugelmin's engine failed 21 laps from the end but Capelli sailed on, and although he suffered low fuel pressure just a few laps from the end, he crossed the line to finish a most popular second. Even the stewards were pleased, it seemed, for Gustav Brunner's jubilant leap onto the track might have earned them a stiff penalty!

RACE DEBRIEF

fter the unpredictable surfaces in at least four out of the first six races, it was a relief to be back in Europe at a permanent circuit with new, supersmooth bitumen. Ricard was supposedly hosting its last Rhône-Poulenc French Grand Prix for a time, but it was making every effort to show that Formula One was welcome to return any time to one of its 'second' homes.

It was perhaps poetic justice that the two local teams got through pre-qualifying to have a crack at getting onto the grid. There was no surprise that Bernard and Suzuki made it, but AGS did a great job, the Goodyear qualifying tyres working better than the Pirellis on the



Clockwise from left: Irish eyes try to smile as Senna blasts past. Brabham were lone survivors in Pirelli drought.

Differing fortunes for Martini who retired and seventh placed Suzuki. This Grand Prix is well known for its traffic jams. Gugelmin's points went with his scavange pump.





EuroBruns, the Osclla and the Coloni.

Qualifying itself was slightly affected by the mistral, so that only 13 cars improved their times after the first day. Nigel Mansell wasn't one of them, but he was delighted to set his first ever Ferrari pole on Friday. He was also pleased to see the rather defensive McLaren team working on race set-up with Senna on Saturday afternoon, rather than attempting to knock him off pole.

Ferrari had a 'qualifying chassis' with a new, stronger engine, fitted for each of its drivers and for once Mansell had a clear and virtually perfect lap. However, his next three rivals, including his teammate, were within 0.3s of his time. After being slowed by traffic on Friday

Prost set his fastest time (fourth) on Saturday despite having to take the less powerful car when the qualifying engine developed a misfire.Berger improved on Saturday and knocked teammate Senna back to third. Indeed, he thought he might have got pole position, except for missing a shift to third gear once on his quick lap.

Fifth was not a Williams but birthday boy Nannini's Benetton, 0.3s behind Prost. He and teammate Piquet were running low downforce for straightline speed, Piquet however would start only ninth after suffering oversteer and traffic on the qualifiers.

Williams-Renault had a disappointing couple of days. They were trying a new, monoshock suspension system which had been tested at Silverstone. Although it was retained for practice and qualifying, it was discarded for the race. Eighth placed Boutsen wasn't happy after a puncture and high speed spin on Friday, eventually setting his time with three flat-spotted tyres. The next day his engine blew within yards of the pits and he had to use the unsorted spare.

Between the two Williams-Renaults, to



everyone's delight came the Leyton House-Judd of Ivan Capelli, he and tenth placed teammate Mauricio Gugelmin benefiting from a new floor pan, exhaust system and bodywork. Gugelmin might have been even further up but for traffic and clutch trouble.

Bernard might have been quicker too, except for traffic and Suzuki wasn't far behind. Alliot was keen to start well as pre-qualifying threatened Ligier while Alesi wasn't happy in 13th place. The Lotuses were stuck together, but disappointingly far back while Modena tried Brabham's new transverse gearbox which still had teething problems.

Raceday's warm-up in sunny, bright conditions like those before, saw Prost and Mansell first and second ahead of Bernard's Lola, then Patrese and Senna who damaged the underside of his McLaren on a kerb. Leyton House, however, already had a card up their sleeve while everyone else was thinking of tyre conservation and potential pit stops, they knew that they wouldn't be stopping for fresh rubber.

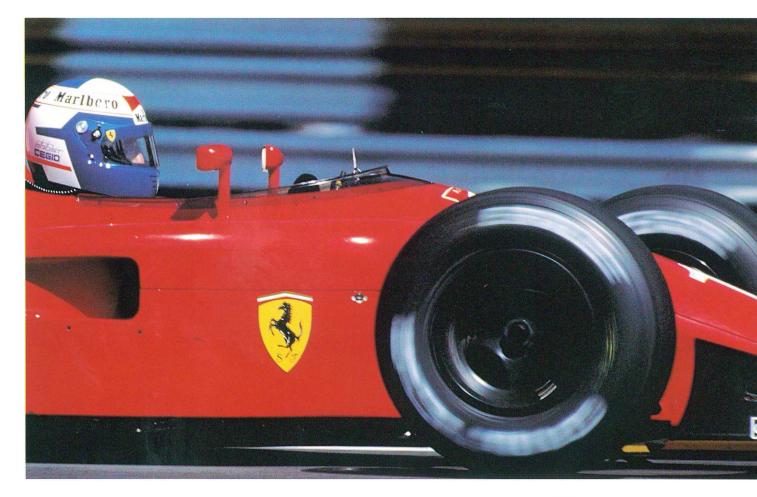
Although Mansell led early on, Berger and



then Senna soon demoted him, in spite of the need to look after tyres during the early stages. Very soon the leaders had split into groups: Berger, Senna, Mansell and Nannini, then a couple of seconds to Patrese, Prost, Boutsen, Piquet, Alesi and Capelli before a bigger gap to Bernard. Boutsen disappeared on lap eight, however, when his engine failed again, his absence creating a gap between sixth placed Prost and seventh placed Piquet.

Although the gaps varied, this was the general pattern up to lap 20 when Piquet was the first to pit for tyres, followed by Alesi four laps later. On lap 27 the leaders began to make their

Clockwise from below: French fortunes: Prost scored his first hat-trick of home wins and Ferrari's 100th victory. Dalmas prequalified, qualified and finished 18th for locals AGS. But no joy at home for Alesi. Meanwhile, pre-qualifying loomed for Alliot and Ligier.



stops. Prost was the first in for a 7.4s stop, but when Nannini and Berger came in next time round, Berger's left rear wheel stuck and he was stationary for 12.7s. Two laps later, Senna's stop was even longer. Patrese was the last in on lap 33.

The Leyton Houses sailed on serenely, on lap 34, they were first and second, with Capelli 7.4s ahead of Gugelmin. However the Brazilian had the flying Prost closing on him. Then came Nannini, Mansell and Piquet ahead of the two McLarens, although Senna soon overtook his compatriot.

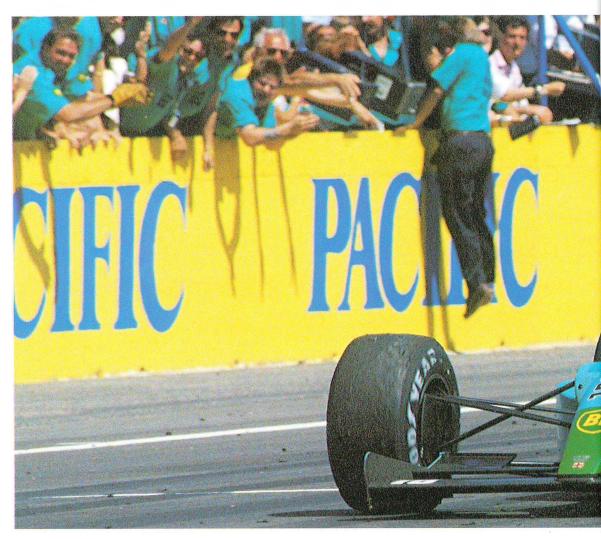
It took ten laps for Prost to overtake Gugelmin. He was right behind the Leyton House but 'every time I got close to him, I couldn't get close enough to overtake. The front tyres wouldn't grip and I got a blister on the rear.

Gugelmin had his own problems, for during a first corner altercation between teammate Capelli and Boutsen, he had been forced to go off-line to prevent a repetition of 1989. In so doing, he had bounced over a kerb and loosened the engine cover, which now acted as an air brake. All this allowed Nannini to draw in the pair ahead of him, although leader Capelli was around eight second ahead.

Mansell was fifth but felt his engine losing power which meant that Senna was closing. Prost finally got past Gugelmin on lap 54 and quickly drew away and began to reel in Capelli, leaving Gugelmin to struggle with Nannini.

On lap 58, that battle ended when Gugelmin's oil scavenge pump failed and the number two Leyton House was out. Senna managed to overtake Mansell who headed for the pits two laps later which dropped him to eighth. At the same time, Prost suceeded in bringing his Ferrari up to Capelli but now found exactly the same problems as he had experienced behind Gugelmin when he tried to overtake.

After 15 laps behind the Italian, Prost made an attempt to get by at Beausset, only to drop back because Capelli hadn't seen him. Two laps later, three from the end, he tried again, and this



time got by. Capelli's engine was cutting out, (he claimed) and that had allowed Prost to dive down the inside to lead. Indeed, Capelli's engine was very sick on the last lap.

Nannini had rebuffed a challenge from Senna and was heading for the rostrum only for the engine to cut out because of a faulty master switch just five laps from home. Senna now was a happy third with Piquet fourth just holding off Berger who had lost first gear. Patrese, losing power, was the final unlapped runner after Mansell's engine failed eight laps from home, no change in the Ferrari drivers luck.

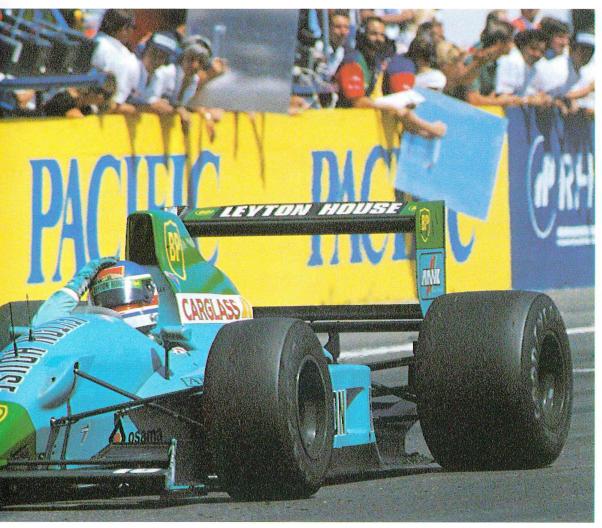
MILESTONES

- Ferrari first to 100 Grand Prix victorys
- Capelli's equal best ever result
- Nakajima's 50th Grand Prix
- Mansell's 140th Grand Prix
- Mansell's pole position gives Ferrari a record 108, one ahead of Team Lotus



Left: adieu Ricard, salut

Magny Cours. Below: Capelli
second; "mama mia, Gustav's
ruined it now."



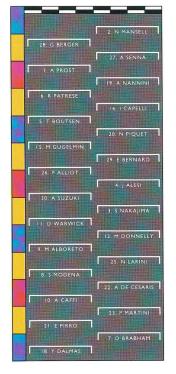


paul ricard

round

Rhône-Poulenc Grand Prix de France, 6-8 Juillet

Pos	Driver/Nationality		No.	Car/Engine	P.Q. (sunny, cool)	Practice I (windy, sun)	Practice 2 (windy, sun)	Warm-up (pos) (sunny)	Laps	Time/Retirement (dry, hot)
1	A. Prost	F	. 1	Ferrari 641 Ferrari VI2	华传 李 1	1:04.792	1:04.781	1:07.779 (1)	80	Ihr33m29.606
2	I. Capelli	- 1	16	Leyton House CG901 Judd V8	4-2-4-1	1:06.384	1:05.369	1:09.168 (10)	80	1hr33m38.232
3	A. Senna	BR	27	McLaren MP4/5B Honda V10	_	1:04.549	1:08.886	1:08.711 (5)	80	1hr33m41.212
4	N. Piquet	BR	20	Benetton B190 Ford HB V8		1:05.640	1:05.744	1:09.007 (8)	80	Ihr34m10.813
5	G. Berger	Α	28	McLaren MP4/5B Honda V10		1:05.350	1:04.512	1:09.419 (17)	80	1hr34m11.825
6	R. Patrese		6	Williams FW13B Renault V10		1:05.059	1:05.394	1:08.629 (4)	80	1hr34m38.957
7	A. Suzuki	001706	30	Lola 90 Lamborghini VI2	1:06.505	1:06.100	1:06.158	1:09.242 (12)	79	1hr33m45.780
8	E. Bernard	F	29	Lola 90 Lamborghini VI2	1:05.165	1:05.910	1:05.852	1:08.364 (3)	79	Ihr34m06.463
9	P. Alliot	F	26	Ligier S33B Ford DFR V8		1:05.986	1:06.866	1:09.271 (13)	79	Ihr34m08.940
10	M. Alboreto	41	9	Arrows AIIB Ford DFR V8	_	1:06.847	1:07.239	1:09.410 (16)	79	Ihr34m10.196
11	D. Warwick	GB	-11	Lotus 102 Lamborghini V12	***	1:06.624	1:07.031	1:09.629 (18)	79	Ihr34m15.268
12	M. Donnelly	GB	12	Lotus 102 Lamborghini V12		1:06.647	1:07.248	1:09.229 (11)	79	Ihr34m16.000
13	S. Modena		8	Brabham BT59 Judd V8		1:06.937	1:06.943	1:10.433 (24)	78	Ihr33m47.998
14	N. Larini		25	Ligier JS33B Ford DFR V8		1:07.224	1:06.856	1:10.282 (22)	78	Ihr34m07.525
15	D. Brabham	AUS	7	Brabham BT59 Judd V8	- A -	1:07.733	1:08.532	1:10.950 (26)	77	Ihr33m47.696
16	A. Nannini	1	19	Benetton B190 Ford HB V8		1:05.670	1:05.009	1:08.972 (7)	75	master switch
17	Y. Dalmas	F	18	AGS JH 25 Ford DFR V8	1:08.151	1:08.630	1:07.926	1:10.384 (23)	75	Ihr33m51,969
18	N. Mansell	GB	2	Ferrari 641 Ferrari VI2	4-6-6-4	1:04.402	1:04.871	1:08.039 (2)	72	engine
19	S. Nakajima	1	3	Tyrrell 019 Ford DFR V8		1:06.999	1:06.563	1:09.900 (20)	63	gear linkage
20	M. Gugelmin	BR	15	Leyton House CG901 Judd V8		1:05.318	1:06.446	1:09.306 (14)	58	scavange pump
21	P. Martini	1	23	Minardi M190 Ford DFR V8		1:07.315	1:07.333	1:10.080 (21)	40	electrics
22	J. Alesi	F	4	Tyrrell 019 Ford DFR V8		1:06.084	1:06.200	1:09.062 (9)	23	driveshaft
23	A. Caffi		10	Arrows ATTB Ford DFR V8		1:07.496	1:07.207	1:09.315 (15)	22	rear suspension
24	T. Boutsen	В	5	Williams FW13B Renault V10		1:05.446	1:06.394	1:08.747 (6)	8	engine
25	E. Pirro		21	Dallara BMS 190 Ford DFR V8		1:07.687	1:07.692	1:09.845 (19)	7	brake disc
26	A. de Cesaris	- 1	22	Dallara BMS 190 Ford DFR V8	8 - 186	1:09.727	1:07.137	1:10.572 (25)		excluded car underweig
27	P. Barilla	ı	24	Minardi M190 Ford DFR V8		1:08.008	1:08.592	DNQ		
28	G. Tarquini	- 1	17	AGS JH25 Ford DFR V8	1:07.232	1:09.176	1:08.147	DNQ		
29	G. Foitek	CH	35	Onyx OREI Ford DFR V8	_	1:08.794	1:08.232	DNQ		
30	J. J. Lehto	SF	36	Onyx OREI Ford DFR V8	-	1:08.954	1:08.487	DNQ		
_	O. Grouillard	F	14	Osella FAIME Ford DFR V8	1:08.329	DNPQ	DNPQ			
-	R. Moreno	BR	33	Eurobrun ER 189 Judd V8	1:09.885	DNPQ	DNPQ			
-	C. Langes	- 1	34	Eurobrun ER 189 Judd V8	1:10.368	DNPQ	DNPQ			
_	B. Gachot	В	31	Coloni C3B Subaru Flat 12	14:02.465	DNPQ	DNPQ			





LAP CHART Grid Order 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 78 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 65 7 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 2 N. Mansell 28 G.Berger 27 A Senna A Prost 1919 19 16 I.Capelli 5 T. Boutsen 20 N. Piquet 15 M. Gugelmin 29 F. Bernard 26 P. Alliot 4 J. Alesi 721 21 21 21 21 21 25 25 25 25 25 25 25 25 25 25 23 23 23 23 23 23 23 25 25 25 25 25 27 7 7 7 7 7 7 18 18 18 18 18 21 25 25 25 25 25 25 7 23 23 23 23 23 23 23 18 18 18 18 18 18 25 23 P. Martini 21 E.Pirro 25 7 7 7 7 7 723 18 18 18 18 18 18 18 18 25 25 25 25 25 25 7 D. Brabham 2323232323232318 18 Y. Dalmas 18 18 18 18 18 18 18

FASTEST LAPS					
Pos.	Car	· No./Driver/Team	Time		
T	2	N. Mansell/Ferrari	1:08.012		
2	12	M. Donnelly/Lotus	1:08.023		
3		A. Prost/Ferrari	1:08.212		
4	19	A. Nannini/Benetton	1:08.214		
5	16	I. Capelli/Leyton House	1:08.373		
6	27	A. Senna/McLaren	1:08.573		
7	1.1	D. Warwick/Lotus	1:08.882		
8	3	S. Nakajima/Tyrrell	1:08.916		
9	6	R. Patrese/Williams	1:08.922		
10	15	M. Gugelmin/Leyton House	1:08.983		
11	20	N. Piquet/Benetton	1:09.135		
12	28	G. Berger/McLaren	1:09.206		
13	9	M. Alboreto/Arrows	1:09.314		
14	30	A. Suzuki/Lola	1:09.720		
15	26	P. Alliot/Ligier	1:09.752		
16	18	Y. Dalmas/AGS	1:09.877		
17	29	E. Bernard/Lola	1:09.895		
18	8	S. Modena/Brabham	1:09.934		
19	4	J. Alesi/Tyrrell	1:10.265		
20	25	N. Larini/Ligier	1:10.374		
21	5	T. Boutsen/Williams	1:10.837		
22	7	D. Brabham/Brabham	1:11.110		
23	10	A. Caffi/Arrows	1:11.242		
24	23	P. Martini/Minardi	1:11.406		
25	21	E. Pirro/Dallara	1:12.275		

	Drivers			Constructors	
1	A. Senna	35 pts	I	McLaren Honda	60 pts
2	A. Prost	32 pts	2	Ferrari	45 pts
3	G. Berger	25 pts	3	Benetton Ford	23 pts
4	N. Piquet	16 pts	4	Williams Renault	21 pts
5	J. Alesi	13 pts	5	Tyrrell Ford	14 pts
6	N. Mansell	13 pts	6	Leyton House Judd	6 pts
7	T. Boutsen	pts	7	Arrows Ford	2 pts
8	R. Patrese	10 pts		Brabham Judd	2 pts
9	A. Nannini	7 pts	9	Larrousse Lamborghini	1 pt
10	I. Capelli	6 pts		Lotus Lamborghini	l pt
11	A. Caffi	2 pts		· ·	
	S. Modena	2 pts			
13	E. Bernard	l pt			
	D. Warwick	l pt			
	S. Nakajima	l pt			

CHAMPIONSHIP POINTS

Existing qualifying lap record - 1987:
Nigel Mansell, Williams Honda FW11B V6 turbo
1m06.454s = 206.561kmh/128.351mph

Existing lap record -1987:
Nelson Piquet, Williams Honda FW11B V6 turbo
1m09.548s = 197.372kmh/122.641mph

	PAST WINNERS										
Year	Driver	Nat.	Car	Circuit							
1979	Jean-Pierre Jabouille	F	1.5 Renault RS t/c	Dijon-Prenois							
1980	Alan Jones	AUS	3.0 Williams FW07B Ford	Paul Ricard							
1981	Alain Pros	F	1.5 Renault RE t/c	Dijon-Prenois							
1982	René Arnoux	F	1.5 Renault RE t/c	Paul Ricard							
1983	Alain Prost	F	1.5 Renault RE t-c	Paul Ricard							
1984	Niki Lauda	Α	1.5 McLaren MP4/2 TAG t/c	Dijon-Prenois							
1985	Nelson Piquet	BR	1.5 Brabham BT54 BMW t/c	Paul Ricard							
1986	Nigel Mansell	GB	1.5 Williams FWII Honda t/c	Paul Ricard							
1987	Nigel Mansel	GB	1.5 Williams FWIIB Honda t/c	Paul Ricard							
1988	Alain Prost	F	1.5 McLaren MP4/4 Honda t/c	Paul Ricard							
1989	Alain Prost	F	3.5 McLaren MP4/5 Honda VI 0	Paul Ricard							



silverstone

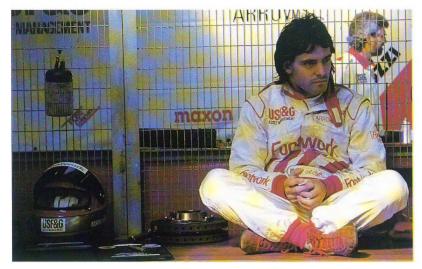
Foster's British Grand Prix, 13-15 July

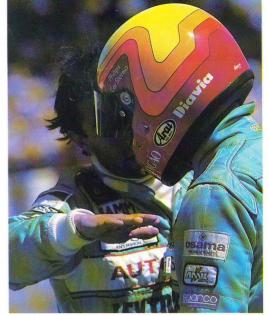
AT FIRST SIGHT SILVERSTONE SEEMS A LONELY, SOUL-LESS PLACE WITH VERY LITTLE MAGIC. IT'S AN OLD AIRFIELD, SET ON A GENTLE, ROLLING PLAIN. AND YET IT HAS AN ATMOSPHERE ALL OF ITS OWN. IF, AT GRAND PRIX TIME, YOU STAND IN THE PADDOCK AND LISTEN, SILVERSTONE COMES

ALIVE. THE AIR IS FILLED WITH THE THUMP OF HELICOPTER ROTOR BLADES. YOU CAN HEAR THE RACING ENGINES, FULLY EXTENDED, SCREAMING AT THE TOP OF THEIR REV RANGES



THE GENTLE BUZZ OF GENERATORS AND THE HISS OF COMPRESSED AIR BEHIND THE PITS. AND OUT THERE SOMEWHERE YOU CAN HEAR THE BUSTLE OF THE CROWD, SETTING UP CHAIRS, CHOMPING ON SANDWICHES AND RIGGING UP BANNERS IN PRAISE OF NIGEL MANSELL...





Previous pages: Alesi's future looked great - as Mansell considered his.

Clockwise from above: Caffi gambled and took seventh. Leyton House's promising weekend reaped little reward. Mansell prepares for McLaren assault, and retirement



IMPRESSIONS

lain Prost admitted that he was prepared to run second to teammate Nigel Mansell in the Foster's British Grand Prix, but instead he ended up winning the race. It meant that he completed a hat trick for the first time in his career, and he now took the World Championship lead. This was vintage Prost, perfecting his Ferrari and then coaxing it on to record a performance where everyone else was in a different class.

Prost didn't test at Silverstone prior to the

Grand Prix. He left that to Mansell, but while the settings proved good enough for the British hero's second pole position in eight days, they left Prost back in fifth place and still toiling away to find the ultimate set-up.

He was in good company, as McLaren feared Prost more than Mansell, and they had their own problems. They had spent all three days of the test working on set-up, and then continued to try and perfect the cars during the qualifying days. A low downforce set-up on Saturday didn't help, but they would still start second and third.

It was a classic Prost race. Senna led until a spin, Mansell took over until gear problems intervened, and Berger led briefly as well. Prost watched each and every one of them strike trouble, and he then just quietly came along and scooped top honours. 'I can't say that it was easy in the cockpit as it looked from outside, but it was a good race,' the little Frenchman admitted.

His performance didn't exactly please Mansell. 'I was miles quicker than anyone else today,' he exclaimed. 'This was my race. Even with the gearbox playing up I was able to stay in front. I've never been so bloody disappointed in my life. There's no explanation that I can see where one car behaves beautifully and wins three races running, and the other has these problems.' Mansell's retirement from the race was just one sting in the tail, another was his announcement that he would retire from Formula 1, citing 'that this has nothing to do with today's race.'

There were others who were immensely unlucky. Berger was heading for second place when his throttle linkage broke up just five laps from home. Senna had a spin when the rear end got loose and he went up on a kerb. His four, flat-spotted tyres needed changing, so his lead was lost. Patrese and Nannini collided. Capelli was scything through the field, overtaking third placed Berger and catching Mansell when a fuel rail cracked. Piquet showed a turn of speed too, running the Series IV Ford-engined Benetton, but lost fourth place to the deserving Lola team on the last lap, although it was Bernard rather than Suzuki who took more points.

Yet this was Prost's race and deservedly so. McLaren were right to fear him, for on this day the opposition fell apart at the sight of the World Champion's Ferrari.

BRIGHT SPARKS

here were plenty of delightful performances in this Foster's British Grand Prix. Few were as pleased with the outcome as Prost, but the Larrousse Lola duo looked at least as happy, by their arithmetic they had got themselves into qualifying quite successfully with first and second places, Bernard ahead of Suzuki.

After the first day of qualifying, Suzuki was in a remarkable eighth place. However, he was

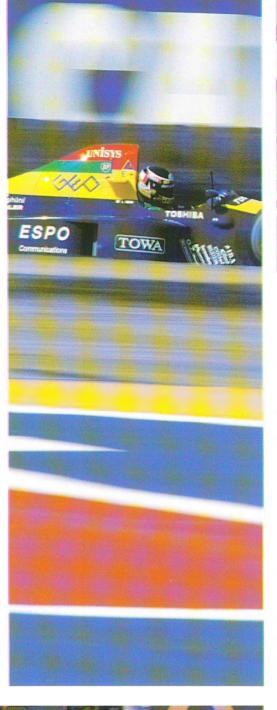


Left: who's that with
Brabham's Herbie Blash?
Below: Marshals kindly match
AGS sponsor colours.
Bottom: Piquet lost his
engine cover - and fourth
place after a great run.





replaced by teammate Bernard the next day, although both achieved their best ever qualifying positions. Bernard had mechanical problems the first day and it was Suzuki's turn the next day, the increasingly competitive Japanese driver using the spare car to set his ninth fastest time. Suzuki actually got the better start and although overtaken by Capelli, and then Nannini he was in a steady sixth place after 18 laps. A resurging Senna pushed him back to seventh but then he suffered a puncture, and his pit stop dropped him



Clockwise from right: bye-bye
pre-qualifying, said Suzuki and
teammate Bernard. Prost
showed star quality. Despite
blistered tyres, Boutsen
netted second place, Dannelly
wasn't so fortunate. Capelli
pushed Berger back to third.
Could he have won?





behind teammate Bernard. The Frenchman demoted Piquet on the last lap to claim a fine fourth, so that the pair were able to wave goodbye to pre-qualifying.

Piquet and Capelli both deserved better results. The Brazilian was only eleventh after qualifying which was partly due to a lack of testing during the pre-race session. Teammate Nannini actually set his 13th time on race tyres.

On race day morning Nannini and Piquet had Ford's very latest Series IV engine bolted into their Benettons, and Piquet set second fastest time to Mansell. Sadly, it all fell apart on the grid when Piquet stalled due to a throttle response problem and had to start at the back of the grid. Piquet showed the cars true form with a magnificent charge to hold seventh by lap 21. He was well inside the top six when more trouble struck: the engine was cutting out and loose bodywork acted as an air brake. When the latter flew off on the last lap, Bernard pipped the deserving Brazilian for fourth place.

Capelli too, deserved better. Tenth on the grid after both he and Gugelmin qualified in the same spare car. He overtook Suzuki and was right behind Nannini and Patrese when they came together on lap 16. He was briefly overtaken by Suzuki again, but was fifth on lap 18, suffering a broken exhaust three laps later. Even so, he rapidly gained on Boutsen to move up to fourth on lap 33 and caught Berger at the rate of a second a lap, to move up to third on lap 44. He was catching Mansell at a similar rate until a



Theoretically, this would be the final time that Lola would have to pre-qualify, and although Bernard had a spin and problems late in the session when his engine kept stalling, he and Suzuki led the top four followed by Tarquini and Grouillard. Moreno was half a second out and unable to improve when his engine cut out on the quick lap, the Coloni-Subaru's flat 12 used copious amounts of oil on its final appearance, and the Life parked out on the circuit. Qualifying saw many improve on Saturday as opposed to Friday, apart from the McLarens, Patrese in his 200th Grand Prix, Suzuki in the spare car, Modena and Brabham in the Brabhams.

Mansell was third quickest on the first day and livid. He had a lot less wing, he claimed, and,



cracked fuel rail slowed and then stopped him. Who knows where he might have finished but for that unfortunate breakage.

For sheer endurance, Alex Caffi's seventh place from 17th on the grid was a good effort, the little Italian plugging away to become the best non-works V8 runner, ahead of Alesi.

RACE DEBRIEF

here was one pleasant surprise that lasted throughout the weekend: this Foster's British Grand Prix on Silverstone's current race track remained mainly dry, sunny and warm for all four days.

not for the last time, he complained of a lack of straightline speed in comparison to Prost. The next day, however, he suggested that he 'might have over-reacted.' Once again he and Prost had their own qualifying cars with the latest 037 engine. The Briton used it to maximum effect to record his quick lap, 0.8s ahead of anybody else on the day, a lap that left him emotionally rather than physically drained.

Neither McLaren driver improved on Saturday. Berger twice had gears jump out in the qualifying sessions, and both drivers tried a low downforce setting on Saturday which saw the cars sliding to the extent that Senna called his 'dangerously nervous.'





Thierry Boutsen ended up fourth on the grid despite an aborted lap because of poor balance, traffic and then an out of balance tyre. Teammate Patrese was back in seventh suffering oversteer and traffic.

Fifth was Alain Prost, constantly reverting to, but unhappy with, Mansell's settings which had been worked out in testing. Turn-in seemed to be the greatest problem and in spite of a 0.8s improvement, he remained fifth.

Jean Alesi was sixth, first of those with a customer V8 Ford DFR engine and the 60bhp handicap that goes with it. The Pirellis seemed competitive here, and teammate Nakajima might have improved more but for an engine problem which left him 12th.

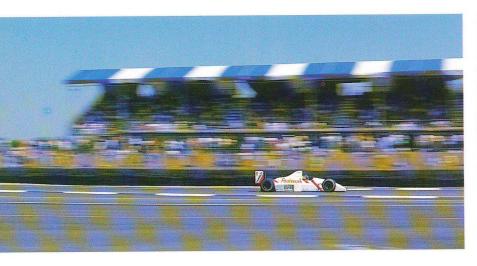
The Larrousse drivers, who had tested prior to the Grand Prix, were eighth and ninth and looked promising. Capelli was tenth although both he and teammate Gugelmin had to share the spare car in the final qualifying session. Piquet was only eleventh, suffering from a lack of testing like his 13th placed teammate Nannini. The Lotus drivers also had trouble with their handling while Caffi might have been higher but for running over a kerb and losing time.

Sunday morning's warm-up, in misty, cool conditions saw Mansell quickest with Prost only managing third. Piquet, with the latest version of Ford's HB engine was second and attracting some favourable comment from loyal supporters. Nannini was quick in a straightline. The main worry was which tyres to take, but in the end nearly all the Goodyear runners went for the hard B compound, not intending to change tyres.

Piquet's hopes took a dive on the startline when he stalled the car and had to have a push-start, as did Barilla in the Minardi. Gugelmin was wheeled off with a sheered fuel pump drive, an early end to his weekend.

Senna, as usual, made the best start when the lights turned green, and although Mansell tried to discourage him with a small jink, the Brazilian took the lead into the first corner ahead of the Ferrari. Prost tried to follow his teammate, but both Berger and Boutsen discouraged his move. By the end of lap one, Alesi was also in touch, before a small gap to Patrese, Suzuki, Capelli, Nannini, Bernard and the Lotuses.

The opening laps saw Mansell sandwiched





by the McLarens, attacking Senna and watched by Berger. A second or two behind, Prost was looking for a way past Boutsen. Then came a bigger gap to Alesi, who was soon overtaken by Patrese after which he pitted for hard-used tyres to be replaced.

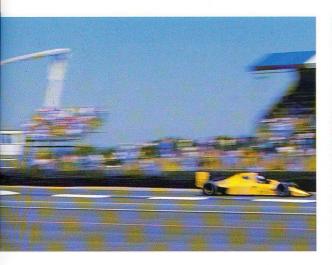
By now Mansell had briefly tasted the lead, overtaking Senna at Bridge only to run too deep and lose the lead again. However, three laps later he perfected the move and quickly left Senna to cope with the aggressive Berger, the Brazilian spun almost immediately. 'I tried to stay with Mansell but I couldn't,' he confessed. 'I had a problem with the rear end which was very loose. I touched a kerb at the first corner and the car just spun. It was my mistake. Then I came into the pits for new tyres because mine were a bit...square!'

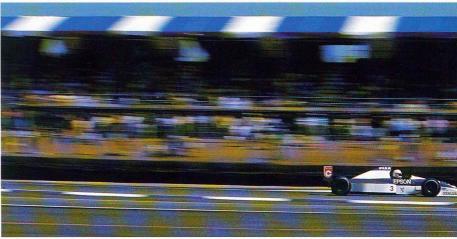
There were two other simultaneous developments. The Nannini-Capelli duo, having overtaken Suzuki, came up on Patrese. According to Nannini 'Patrese braked early at Bridge corner and I hit him. Unfortunately my car stalled and I was out of the race.' Patrese called in at the pits for an inspection, rejoined on new tyres but later retired with a damaged undertray.

The other development was that Prost overtook Boutsen and now began to reduce the 3.3s gap to Berger ahead of him. Suddenly Berger was also a lot closer to Mansell. The leading Ferrari driver was having trouble with his gearbox, which had decided to change gear on its own. Lap 22: Berger sweeps past, leaving Mansell to struggle with teammate Prost and a misbehaving car. Boutsen had dropped out of the picture with low tyre pressures which caused

Previous page: Mansell's weekend - power problems, pole, people power, the lead, retirement and retirement









him to slide excessively.

Mansell meanwhile, quickly recovering from his gearbox maladies, was able to catch Berger again and he took Prost with him. For several laps the three were covered by only a couple of seconds at the most, and on lap 28 Mansell retook the lead. Prost also passed the McLaren driver who was increasingly unhappy with his car's handling.

Prost was in confident mood, and little by little closed on Mansell. As they came up to lap Caffi, the World Champion made his move, overtook his teammate and quickly pulled away. The lead battle was settled.

There were place changes further back, however. Berger was eight seconds behind Mansell and being closed on by the remarkable Capelli who swooped past on lap 44 only to retire when gaining on Mansell five laps later. Then Mansell suddenly slowed and parked on lap 56, his gearbox having finally broken. Cruel fate struck Berger when his throttle linkage broke three laps from home.

So Boutsen finished a lonely and fortunate second, with his good friend Senna, after a long tussle with Piquet, third. The Benetton driver's new engine was cutting out, but worse still was loose bodywork enabling Bernard to overtake and claim fourth in his Larrousse. Teammate Suzuki was sixth after a punctured tyre necessitated a pit stop.

MILESTONES

- Riccardo Patrese's record 200th Grand Prix
- Mansell announces Formula 1 retirement
- Suzuki's first World Championship point

Flat chat (left to right):
Silverstone's pace spelled
retirement for Alboreto, both
Lotuses, and Nakajima's
Tyrrell. Centre: 200 Grands
Prix young today - Riccardo's
milestone was not a race to
remember.

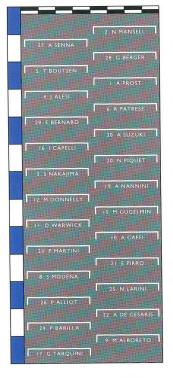


silverstone

round

Foster's British Grand Prix, 13-15 July

os	Driver/Nationality		No.	Car/Engine	P.Q. (sunny, cool)	Practice I (humid, hot)	Practice 2 (sunny, hot)	Warm-up (pos) (sunny, cool)	Laps Time/Retirement (hazy sun, heavy)
	A. Prost	F	1	Ferrari 641 Ferrari V12		1:09.110	1:08.336	1:11.272 (3)	64 Ihrl8m30.999
2	T. Boutsen	В	5	Williams FW13B Renault V10		1:09.102	1:08.291	1:12.364 (10)	64 1hr19m10.091
3	A. Senna	BR	27	McLaren MP4/5 Honda V10		1:08.071	1:09.055	1:11.840 (5)	64 Ihrl9m14.087
4	E. Bernard	F	29	Lola 90 Lamborghini V12	1:10.254	1:09.560	1:09.003	1:12.843 (12)	64 Ihr19m46.301
5	N. Piquet	BR	20	Benetton B190 Ford HB V8		1:09.684	1:09.407	1:11.247 (2)	64 Ihrl9m55.002
5	A. Suzuki	1	30	Lola 90 Lamborghini V12	1:11.128	1:09.243	1:09.865	1:12.621 (11)	63 1hr18m43.482
7	A. Caffi	1	10	Arrows AIIB Ford DFR V8		1:10.480	1:10.110	1:13.741 (20)	63 Ihrl9m01.035
8	I. Alesi	F	4	Tyrrell 019 Ford DFR V8		1:09.147	1:08.370	1:12.303 (9)	63 Ihr19m04.028
9	S. Modena		8	Brabham BT59 Judd V8		1:11.070	1:11.600	1:13.309 (18)	62 Ihr18m31.505
10	N. Larini	1	25	Ligier IS33B Ford DFR V8	医上颌 医黄	1:11.942	1:11.180	1:14.719 (24)	62 Ihr18m59.276
11	E. Pirro		21	Dallara BMS 190 Ford DFR V8	1. <u>2.7 (1.4</u> 17	1:11.413	1:10.847	1:15.193 (25)	62 Ihr19m07.057
12	P. Barilla		24	Minardi M190 Ford DFR V8		1:11.498	1:11.387	1:14.522 (23)	62 1hr19m30.456
13	P. Alliot	F P	26	Ligier S33B Ford DFR V8		1:12.483	1:11.215	1:14.294 (22)	61 Ihr18m42.572
14	G. Berger	Α	28	McLaren MP4/5 Honda VIO		1:08.246	1:08.674	1:11.647 (4)	60 throttle linkage
Ext yes				Ferrari 641 Ferrari V12		1:08.336	1:07.428	1:10.880 (1)	55 gearbox
15	N. Mansell	GB	2			1:10.691	1:09.308	1:12.188 (7)	48 cracked fuel rail
16	I. Capelli	1	16	Leyton House CG901 Judd V8	A Ethiological	1:10.786	1:09.741	1:12.935 (14)	48 engine
17	M. Donnelly	GB	12	Lotus 102 Lamborghini V12	eo⊑artino	1:10.552	1:10.092	1:12.988 (15)	46 engine
18	D. Warwick	GB	11	Lotus 102 Lamborghini V12	1:11.516	1:10.552	1:11.681	1:15.485 (26)	41 engine
19	G. Tarquini		17	AGS JH25 Ford DFR V8	-	1:11.562	1:12.644	1:12.843 (13)	37 electrics
20	M. Alboreto		9	Arrows ATTB Ford DFR V8		1:08.677	1:08.864	1:12.023 (6)	26 accident damage
21	R. Patrese		6	Williams FW13B Renault V10	7 - T	1:09.937	1:09.608	1:13.209 (16)	20 electrical
22	S. Nakajima		3	Tyrrell 019 Ford DFR V8		1:09.737	1:09.641	1:12.231 (8)	15 spin/Patrese
23	A. Nannini		19	Benetton B190 Ford HB V8			1:11.234	1:14.028 (21)	12 gearbox
24	A. de Cesaris		22	Dallara BMS 190 Ford DFR V8	-	1:11.705	1:11.234	1:13.273 (17)	31 alternator
25	P. Martini		23	Minardi M190 Ford DFR V8		1:10.568	1:10.303	1:13.599 (19)	0 DNS fuel pump drive
26	M. Gugelmin	BR	15	Leyton House CG901 Judd V8					0 DIAS idei punip di ive
27	O. Grouillard	F	14	Osella FAIME Ford DFR V8	1:11.953	1:12.179	1:11.710	DNQ	
28	D. Brabham	AUS	7	Brabham BT59 Judd V8		1:11.741	1:13.016	DNQ	
29	I. J. Lehto	SF	36	Onyx ORE I Ford DFR V8		1:12.712	1:12.631	DNQ	
30	G. Foitek	CH	35	Onyx ORE I Ford DFR V8		1:13.413	1:13.271	DNQ	Carlotte Control Control
_	R. Moreno	BR	33	Eurobrun ER 189 Judd V8	1:12.554	DNPQ	DNPQ		
	Y. Dalmas	F	18	AGS JH25 Ford DFR V8	1:12.653	DNPQ	DNPQ		
	C. Langes		34	Eurobrun ER I 89 Judd V8	1:15.059	DNPQ	DNPQ		
	B. Gachot	В	31	Coloni C3B Subaru Flat 12	1:19.230	DNPQ	DNPQ		
	B. Giacomelli	- 1	39	Life F190 Life W12	1:25.947	DNPQ	DNPQ		





LAP CHART 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 Grid Order 2 N. Mansell 28 G.Berger 16 I.Capelli 19 A. Nannini 29 F. Bernard 10 A.Caffi 8 S. Modena 21 21 20 3 3 3 3 3 4 21 21 4 4 4 21 25 9 9 6 24 24 24 11 11 24 24 24 24 24 24 24 24 24 24 24 2 17 17 21 21 21 21 21 21 21 26 28 20 N. Piquet 25 N. Larini 24 P. Barilla 24 24 26 26 26 9 9 9 9 9 26 26 26 26 26 | 7 | 7 | 7 2 | 2 | 17 26 9 9 9 26 26 26 26 26 17 17 17 17 17 17 G. Tarquin 26 9 17 17 17 17 17 17 17 17 17 22 22 9 M.Alboreto 9 17 23

	FASTEST LAPS				
Pos.	Car	No./Driver/Team	Time		
1	2	N. Mansell/Ferrari	1:11.291		
2	- 1	A. Prost/Ferrari	1:11.526		
3	16	1. Capelli/Leyton House	1:11.712		
4	30	A. Suzuki/Lola	1:12.227		
5	27	A. Senna/McLaren	1:12.250		
6	28	G. Berger/McLaren	1:12.393		
7	4	J. Alesi/Tyrrell	1:12.639		
8	20	N. Piquet/Benetton	1:12,723		
9	5	T. Boutsen/Williams	1:12.879		
10	29	E. Bernard/Lola	1:13.088		
11	12	M. Donnelly/Lotus	1:13.204		
12	8	S. Modena/Brabham	1:13.338		
13	19	A. Nannini/Benetton	1:13.405		
14	10	A. Caffi/Arrows	1:13.573		
15	21	E. Pirro/BMS Dallara	1:13.731		
16	9	M. Alboreto/Arrows	1:13.932		
17	6	R. Patrese/Williams	1:14.130		
18	- 11	D. Warwick/Lotus	1:14.416		
19	26	P. Alliot/Ligier	1:14.848		
20	25	N. Larini/Ligier	1:14,953		
21	3	S. Nakajima/Tyrrell	1:15.192		
22	24	P. Barilla/Minardi	1:15.607		
23	17	G. Tarquini/AGS	1:15.889		
24	22	A. de Cesaris/BMS Dallara	1:16.039		
25	23	P. Martini/Minardi	1:17.827		

	Drivers			Constructors	
ī	A. Prost	41 pts	1	McLaren Honda	64 pts
2	A. Senna	39 pts	2	Ferrari	54 pts
3	G. Berger	25 pts	3	Williams Renault	27 pts
4	N. Piquet	18 pts	4	Benetton Ford	25 pts
5	T. Boutsen	17 pts	5	Tyrrell Ford	14 pts
6	J. Alesi	13 pts	6	Leyton House Judd	6 pts
7	N. Mansell	13 pts	7	Larrousse Lamborghini	5 pts
8	R. Patrese	10 pts	8	Arrows Ford	2 pts
9	A. Nannini	7 pts		Brabham Judd	2 pts
10	I. Capelli	6 pts	10	Lotus Lamborghini	l pt
П	E. Bernard	4 pts			•
12	A. Caffi	2 pts			
	S. Modena	2 pts			
14	A. Suzuki	l pt			
	D. Warwick	l pt			
	S. Nakajima	l pt			

Existing qualifying lap record - 1987:
Nelson Piquet Williams Honda FW11B V6 turbo
1m07.110s 256.308kmh/159.262mph

Existing lap record - 1987:

Nigel Mansell Williams Honda FW11B V6 turbo 1m09.832s 246.317kmh/153.059mph

		PAST	WINNERS	
Year	Driver	Nat.	Car	Circuit
1979	Clay Regazzoni	CH	3.0 Williams FW07 Ford	Silverstone
1980	Alan Jones	AUS	3.0 Williams FW07B Ford	Brands Hatch
1981	John Watson	GB	3.0 McLaren MP4 Ford	Silverstone
1982	Niki Lauda	Α	3.0 McLaren MP4B Ford	Brands Hatch
1983	Alain Prost	F	1.5 Renault RE40 t/c	Silverstone
1984	Niki Lauda	Α	1.5 McLaren MP4/2 TAG t/c	Brands Hatch
1985	Alain Prost	F	1.5 McLaren MP4/2B TAG t/c	Silverstone
1986	Nigel Mansell	GB	1.5 Williams FW11 Honda t/c	Brands Hatch
1987	Nigel Mansell	GB	1.5 Williams FW I IB Honda t/c	Silverstone
1988	Ayrton Senna	BR	1.5 McLaren MP4/4 Honda t/c	Silverstone
1989	Alain Prost	F	3.5 McLaren MP4/5 Honda VIO	Silverstone



hockenheim

Grosser Mobil 1 Preis von Deutschland, 27-29 Juli

HOCKENHEIM IS OFTEN THOUGHT OF AS A SOMBRE PLACE. IT ISN'T THAT THERE'S NO ATMOSPHERE, BUT RATHER BECAUSE EVERYTHING SEEMS SOMEHOW ENCLOSED.

AFTER THE SWEEPING OPENNESS OF SILVERSTONE, HOCKENHEIM IS MUCH MORE CLAUSTROPHOBIC. PERHAPS IT IS THE HUGE, TOWERING MULTI-COLOURED GRANDSTANDS

IN THE STADIUM AREA AROUND THE PITS: PERHAPS IT IS THE DENSE PINE FORESTS WHICH SURROUND THE TRACK OR



HUMIDITY OF THE RHINE PLAIN IN HIGH SUMMER. CLAUSTROPHOBIC OR NOT HOCKENEHEIM IS A CIRCUIT WHERE PURE SPEED IS VITAL. IT IS A TRACK WHERE TECHNICAL EXCELLENCE OFTEN ECLIPSES DRIVING TALENT-WHERE TEAMS TEND TO LINE UP IN ECHELON ON THE GRID. IT IS NOT A PLACE FAMOUS FOR CLOSE RACING.



Above & right: it all looks so orderly until the lights turn green. Pirro is sideways and heading for the armco and one of many premature retirements. Far right: never mind the Footwork, what about cramped armwork?

IMPRESSIONS

lain Prost predicted that McLaren would win the Mobil 1 German Grand Prix. It was their sort of circuit, he said, where a gutsy engine with lots of top end power mattered more than a perfect chassis, even if there was still a question mark over tyre wear. What he didn't predict was just how competitive Benetton would be, how they would make one set of tyres last where



others came in for a change, and how Nannini would finish a fine second, splitting the McLarens, and pushing Prost himself down to fourth place.

It wasn't a great race, but then the Hockenheimring rarely produces memorable races. Even so, one of the larger crowds in recent Hockenheim history came to watch, in spite of a real lack of German interest for the first time in many years. But it was an event of tactical interest: McLaren once again sacrificed a qualifying session to work on race set-up, which was particularly tough on Gerhard Berger as he had to give up any chance of pinching pole position off his teammate. But neither McLarens' time was bettered during the second session.

The varying and usually considerable heat contributed to the difficulties of chosing the right tyres for the ideal balance. It was a race in which the competitive participants thought that they wouldn't stop for tyres and yet ultimately most of them did. However, Leyton House once again took the gamble of not stopping, this time using the harder B compound Goodyear tyre, and Benetton decided to try the same.

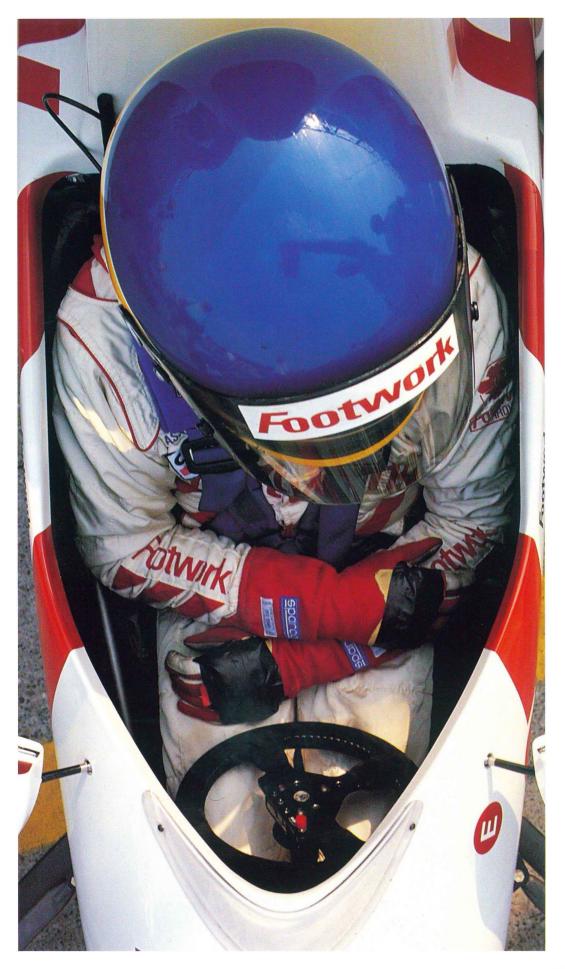
The latter had suffered a hard blow when Nannini crashed in practice, yet they revealed their improving resourcefulness by sending a replacement tub from England on Friday. It arrived midday Saturday, and the team built up a new car in the next 15 hours. Its driver not only set fifth fastest time within nine laps of the warmup, but then raced to second place.

As all those about him pitted for new tyres, Nannini found himself leading, chased hard by Senna. Once again, the competitive nature of Grand Prix racing was superbly portrayed, as Senna tried everything he could to overtake, and yet failed to do so. The Benetton/McLaren pattern was re-enacted three seconds (and the gap was increasing) behind where Piquet was holding off Berger. In neither case would the following car be able to overtake its opponent.

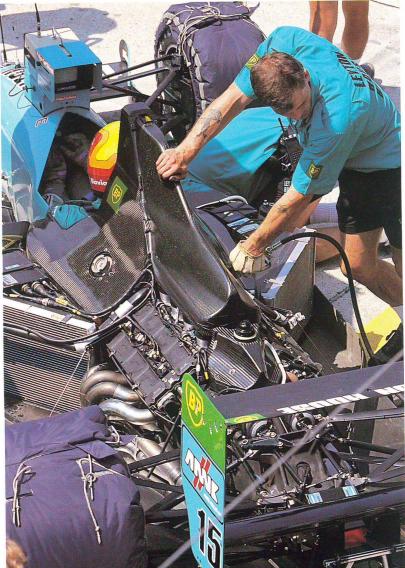
It required all Senna's guile to plan an overtaking manoeuvre as he succeeded in winning his third successive Mobil 1 German Grand Prix, which returned him into the lead of the World Championship battle. That his championship rival was down in fourth place was almost par for the course: neither he nor Senna had yet



Previous pages:
Ligier had to re-set their alarm
clocks for Friday mornings.
The shadows were still lang
for poleman Senna, however.







finished second in 1990, and yet both had suggested that it would be the seconds and thirds that would be crucial in deciding the championship.

BRIGHT SPARKS

yrton Senna obliterated Keke Rosberg's 1986 turbo lap record of 1m 42.013 by 1.2s in qualifying, and teammate Gerhard Berger wasn't far behind. Indeed, Senna thought it was possible to have gone even quicker but for losing 'the car in the middle of the third chicane on a bump, and I had a big moment. To avoid spinning, I let the car go almost straight there, and had all four wheels on the dust.'

Admittedly the circuit was fractionally changed, but the first of the opposition (Prost) was still 1.3s further back, and most were nearly two seconds behind.

Senna had certainly done his bit, but he also paid tribute to Honda who had produced a higher revving engine for the McLarens which had given them more top end power. 'I could notice the difference with this engine,' admitted Senna. 'It is a better engine. We tested here last

week and it proved to be good, reliable and they decided to bring it over with some small changes, and we've been using it for the past two days. Honda is confident of this engine.'

The chassis was still not perfect however, as Senna explained. 'We had some problems at Silverstone, so we decided to go back there and test with two cars. We made some changes and they seemed to have worked well here, but nevertheless, the problems are not fixed. The cars have some fundamental problems which I think the engineers are starting to understand, and hopefully then we will be able to improve our chassis for the next few races.'

Senna's main problem during the early stages of the race was that Berger was pushing him hard and he wasn't, as he said, 'able to pace myself in a controlled way, to keep the tyres good.' That resulted in a pit stop where he lost the lead to Nannini's Benetton.

This was a fairytale placing for Benetton, finally losing the tag of 'finger-troubled'. This season they were showing all the signs of improved maturity and at this race they showed that they had what was required to win races, particularly with a healthy stock of Ford's Cosworth-built Series IV engines.

On Friday, however, Nannini was on his second set of qualifiers when 'the car hit the kerb at the third chicane, flew up in the air and crashed into the guardrail on the outside of the corner. I will use the spare car tomorrow.'

While Piquet improved to seventh, Nannini failed to go quicker, saying that 'it doesn't feel quite so well balanced as my race car, and I think track conditions were a bit slower.'

By the end of lap one Piquet and Nannini were running seventh and eighth respectively on Goodyear's harder B tyres and they picked up a place when Boutsen, troubled by his gearbox, dropped two places with a spin, and then Piquet dropped back with a spin. So it was Nannini who overtook Patresc as those on Cs began to come in to change them. When Senna pitted on lap 17, the Italian found himself in the lead, although only with a precarious 1.7s lead over the Brazilian's



Clockwise from left: Nannini was a match for nearly everyone at Hockenheim. It was Boutsen's left rear which cost him time and relegated him to sixth place. Engine problems put paid to Gugelmin's efforts. Any place in the top ten is rewarding for a 'customer' V8, as Caffi will tell you.



Clockwise from right: Advertise
anything so long as it isn't...
Panting V8s, Martini was one
of five engine retirements.
More lonely for Prost than
1989. Seeing double, the
Brabhams were even closer on
the first lap.

McLaren running with fresh tyres.

The Brazilian challenged from lap 21 to 25, then dropped back to think about it. He eased up again for laps 29 and 30, then dropped away again. But when they were lapping Lehto on lap 33, Senna was able to take a run at Nannini, and nipped through to win. By this stage Nannini's tyres were shot and in the closing stages he had a serious engine problem. With Piquet holding off fourth placed Berger until the Brazilian's engine blew, this was a fine race for Benetton and Ford.

RACE DEBRIEF

igier put the new-found horrors of prequalifying firmly behind them with fastest times in the hour-long morning session, followed by Grouillard and Dalmas, while Tarquini and a spinning Moreno were next. Gachot, with a Cosworth DFR replacing the previous Subaru, crashed heavily. The two days of practice and qualifying were almost identical in terms of weather, with temperatures approaching 38 degrees. Consequently some drivers improved and some didn't. McLaren, after annihilating the opposition on day one, chose to devote day two to working





on an elusive race set-up.

However they were safe. After their poles in France and Britain, Ferrari were back to the old qualifying problem, eating up their qualifying tyres and Williams and Lotus had the same problem. Prost didn't improve on day two but stayed third, while Mansell did improve but was once again worried by straightline speed, had a wild spin at the entry to the stadium, and was held up on his final, quick lap by Berger. Then





came the Williamses, at least having improved since Friday. Boutsen was behind teammate Patrese, having lost time in the morning with a broken engine and was then slowed by Barilla on a vital lap in the afternoon. Piquet was seventh in the Benetton, surprised on day two when part of the on-board camera equipment fell on his legs, while Nannini failed to qualify in the spare car after his Friday accident, so he would start ninth. Between the Benettons came Alesi, the Frenchman

calling a press conference to tell journalists to get off his back and stop trying to predict his future. His time was set on his first run on the first day. A broken engine, then a spin preventing any further improvement for the rest of qualifying. Teammate Nakajima wasn't far behind.

The Leyton Houses and Larrousses were next with Capelli coming out best in spite of a succession of dramas for both he and teammate Gugelmin, who got through five fuel pumps in two days. Both drivers used the same spare car in which to set their times. The Larrousse men, thankful for the Friday morning lie-in that accompanies the escape from pre-qualifying, both set their times on the second day. However both thought they could have gone quicker but for traffic, tyres and mistakes.

Qualifying was almost outshone by a thrilling warm-up session as a healthy crowd filled the huge stands in threatening but ultimately settled weather. Prost was quickest during the final five minutes, but then Senna whittled that away, and Mansell suddenly went second right at the end. By the end of the session, though, all Goodyear runners had decided on Cs apart from Benetton and Leyton House who had





Right: kerb-hop for a quick time, Naka-san, but not in the race. It caused Mansell's retirement (below). gone for the harder Bs, although no one was expecting to stop for tyres.

The start of the race itself was dramatic. At the front, Berger made a great start, but Senna came swooping round the outside to take the lead into the first corner. Further back, however, Modena's clutch broke at the start, teammate Brabham tried to avoid him only to be clipped by a following Pirro, who was spun around into the barrier by Alliot. A wheel came off and hit the driver's head and it was several laps before doctors and marshals, protected by course cars, extracted the driver, loaded him into an ambulance and took him to the medical centre, for the second time in as many years. Thankfully, he was not seriously hurt.

The top seven order remained as the grid for two laps until Boutsen had a problem with

the gearbox and dropped to tenth. Senna was hard-pushed by Berger who was shadowed by the Ferraris, then came a gap to Patrese, Piquet and Nannini, before another gap to Alesi, Capelli and the recovering Boutsen.

As Mansell pushed third placed Prost, so Senna eased away from Berger, and the Austrian eased away from the Ferraris. On lap eleven Piquet was replaced by his teammate as chief Patrese challenger when the Brazilian went straight on at a chicane. Nannini was trying very hard to get by Patrese, but it was several laps before he was able to do so.

As early as lap 15 came doubts for the C compound Goodyear runners. Berger and Prost pitted for new tyres on that lap but while the Frenchman was still in the pits, his English teammate suddenly appeared after running over a



kerb which had damaged the nose section. Mansell felt the damage was terminal and climbed out before anyone else had any input.

On lap 17, Senna made a rapid 6.2s stop for new tyres, and Patrese was the final front runner for new tyres on lap 19, all of which left Nannini narrowly leading Senna, and Piquet in third place, 2.9s behind, just leading Berger. Boutsen was next, another driver trying not to stop for tyres, ahead of Prost, Patrese and Capelli before the two Lolas.

It was lapping Lehto that finally decided the outcome. Senna got a good tow up to the Italian and nipped past on lap 34. The positions were now settled for Nannini couldn't fight back. Indeed, he was losing out to Berger, and falling oil pressure at the end cost him vital seconds on the last lap but the Austrian still had to settle for third.

Berger had drawn away from Prost, who was troubled by too short a sixth gear which had allowed a charging Patrese to catch up but never



Piquet didn't last long, however, his Benetton pulling off in a cloud of smoke on lap 24. A lap later, it was Prost who was now Berger's chief rival as he overtook Boutsen who was rapidly running out of grip.

Scnna launched several attacks on Nannini. 'After I had some trouble with my tyre pressures,' said the Brazilian, 'I tried to push but I had trouble with the engine. It seemed to lose power as though it wasn't getting enough air, and what I was gaining in the slipstream behind Nannini, I was losing with the engine. I thought his tyres would go off because he hadn't changed them.'

by enough. Capelli looked like the final pointscorer until Boutsen, who had a long stop for tyres on lap 29, came roaring back and Capelli, with no fourth gear and metallic noises from the engine, had no reply.

MILESTONES

- Coloni now fitted with Ford DFR engine
- Onyx becomes Monteverdi
- Ligier replaced Larrousse in pre-qualifiying
- Boutsen's first Grand Prix fastest lap
- Senna's third succesive German GP win, his 47th pole

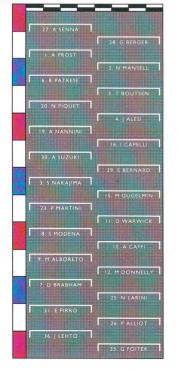


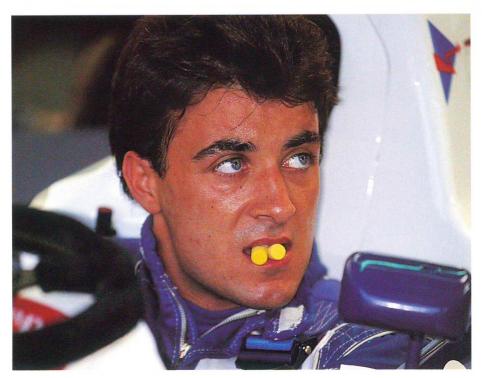
hockenheim



Grosser Mobil 1 Preis von Deutschland, 27-29 Juli

05	Driver/Nationality		No.	Car/Engine	P.Q. (sunny, warm)	Practice I (sunny, hot)	Practice 2 (sunny, hot)	Warm-up (pos) (overcast, warm)	Laps	Time/Retirement (hot, hazy sun)
	A. Senna	BR	27	McLaren MP4/5B Honda V10	T-0 6 6	1:40.198	1:46.843	1:44.734 (1)	45	Ihr20m47.164
	A, Nannini	1 1	19	Benetton B 190 Ford HB V8		1:43.594	1:44.559	1:46.433 (5)	45	Ihr20m53.684
	G. Berger	Α	28	McLaren MP4/5B Honda V10	_	1:40.434	1:46.628	1:45.514 (3)	45	1hr20m55.717
	A. Prost	F	-1	Ferrari 641 Ferrari V12		1:41.732	1:42,590	1:45.688 (4)	45	1hr21m32.434
	R. Patrese	- 1	6	Williams FW I 3B Honda V I 0		1:43.736	1:42.195	1:46.892 (7)	45	Ihr21m35.192
	T. Boutsen	В	5	Williams FW13B Honda V10	_	1:43.620	1:42.380	1:47.471 (8)	45	Ihr22m08.655
	I. Capelli	1	16	Leyton House CG901 Judd V8		1:45.025	1:44.349	1:48.063 (12)	44	Ihr20m51.141
	D. Warwick	GB	- 11	Lotus 102 Lamborghini V12		1:45.364	1:45.244	1:49.573 (20)	44	Ihr21m08.416
	A. Caffi	1 .	10	Arrows AIIB Ford DFR V8		1:46.201	1:45.604	1:48.207 (14)	44	Ihr21m43.374
0	N. Larini	1	25	Ligier JS33B Ford DFR V8	1:46.186	1:47.068	1:46.187	1:49.044 (17)	43	Ihr20m58.247
1	J. Alesi	F	4	Tyrrell 019 Ford DFR V8		1:43.255	1:44.652	1:47.994 (11)	40	C.V. joint
2	J. J. Lehto	SF	36	Onyx OREI Ford DFR V8		1:48.856	1:46.857	1:49.509 (19)	39	Ihr21m48.866
3	E. Bernard	F	29	Lola 90 Lamborghini V12	_	1:44.998	1:44.496	1:47.796 (10)	35	electrics
4	A. Suzuki	1	30	Lola 90 Lamborghini VI2	_	1:45.382	1:44.363	1:47.647 (9)	33	clutch
5	S. Nakajima	j	3	Tyrrell 019 Ford DFR V8	_	1:44.873	1:44.650	1:48.459 (15)	24	electrics
6	N. Piquet	BR	20	Benetton B190 Ford HB V8	-	1:42.926	1:42.872	1:46.585 (6)	23	engine
7	P. Martini	1	23	Minardi M 190 Ford DFR V8	_	1:45.736	1:45.237	1:50.060 (24)	20	engine
8	G. Foitek	CH	35	Onyx OREI Ford DFR V8	-	1:47.209	1:47.726	1:49.850 (23)	19	spin
9	N. Mansell	GB	2	Ferrari 641 Ferrari V12	-	1:42.313	1:42.057	1:44.810 (2)	15	undertray damage
0	M. Gugelmin	BR	15	Leyton House CG901 Judd V8	-	no time	1:45,193	1:48.186 (13)	12	stone in engine
1	D. Brabham	AUS	7	Brabham BT59 Judd V8	-	1:46.110	1:46.518	1:51.060 (25)	12	engine valve
2	M. Alboreto	1	9	Arrows A11B Ford DFR V8	_	1:45.871	1:45.755	1:51.555 (26)	10	engine failure
3	M. Donnelly	GB	12	Lotus 102 Lamborghini V12	-	1:47.723	1:45.790	1:49.047 (18)	1	clutch
4	E. Pirro	1	21	Dallara BMS 190 Ford DFR V8	_	1:46.904	1:46.506	1:49.800 (22)	0	accident
5	S. Modena	1	8	Brabham BT59 Judd V8	-	1:45.547	1:47.269	1:49.704 (21)	0	clutch
6	P. Alliot	F	26	Ligier JS33B Ford DFR V8	1:45.513	1:46.596	1:57.287	1:48.889 (16)		disqualified push sta
7	O. Grouillard	F	14	Osella FA I ME Ford DFR V8	1:46.828	1:47.429	1:48.172	DNQ		
8	P. Barilla	1	24	Minardi M190 Ford DFR V8	-	1:47.747	1:47.958	DNQ		
9	Y. Dalmas	F	18	AGS JG25 Ford DFR V8	1:47.125	1:47.789	1:47.874	DNQ		
0	A. de Cesaris	1	22	Dallara BMS 190 Ford DFR V8		1:48.118	1:48.032	DNQ		
	G. Tarquini	1	17	AGS JS25 Ford DFR V8	1:48.127	DNPQ	DNPQ			
	R. Moreno	BR	33	Eurobrun ER189 Judd V8	1:48.983	DNPQ	DNPQ			
	B. Gachot	В	31	Coloni C3B Ford DFR V8	1;50.460	DNPQ	DNPQ			
	C. Langes	1	34	Eurobrun ER189 Judd V8	1:50.897	DNPQ	DNPQ			
	B. Giacomelli	1	39	Life F190 Life W12	2:10.786	DNPQ	DNPQ			





	LAP CHART
Grid Order	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45
27 A. Senna	27 27 27 27 27 27 27 27 27 27 27 27 27 2
28 G. Berger	28 28 28 28 28 28 28 28 28 28 28 28 28 2
A. Prost	
2 N. Mansell	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3 1 2 2 2 2
6 R. Patrese	6 6 6 6 6 6 6 6 6 6 6 6 6 6 9 28 28 28 6 5 5 5 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6
5 T. Boutsen	5 5 20 20 20 20 20 20 20 20 19 19 19 19 20 5 5 5 5 1 1 1 1 6 6 6 6 6 5 16 16 16 16 16 16 16 16 5 5 5 5
20 N. Piquet	20 20 19 19 19 19 19 19 19 19 20 20 20 20 5 1 1 1 1 16 6 6 6 16 16 16 16 16 16 30 30 30 5 5 5 5 16 16 16 16 16 16 16 16
4 J. Alesi	19 19 4 4 5 5 5 5 5 5 5 5 5 5 5 5 2 16 16 16 16 16 16 16 16 30 30 30 30 30 29 29 29 29 29 29 11 11 11 11 11 11 11 11
19 A. Nannini	4 4 16 16 16 16 16 16 16 16 16 16 16 16 16
16 I.Capelli	16 16 5 5 4 4 4 4 4 4 4 4 4 4 30 30 30 30 29 29 29 11 11 11 11 11 11 11 1 4 4 4 10 10 10 10 4 25 25 25
30 A. Suzuki	30 30 30 30 11 11 11 11 11 11 11 11 11 129 29 29 29 29 3 3 3 11 4 4 4 4 4 4 4 4 4 30 10 10 25 25 25 25 25
3 S. Nakajima	3 1 29 29 29 29 29 29 29 29 29 29 29 29 29
15 M.Gugelmin	11 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
23 P. Martini	23 23 10 10 10 10 10 10 10 10 10 10 10 10 10
II D. Warwick	10 10 23 23 15 15 15 15 15 15 25 25 25 25 25 23 23 23 25 25 36 36 36
8 S. Modena	9 9 15 15 23 23 25 25 25 25 23 23 23 23 35 35 36
10 A.Caffi	15 15 9 25 25 25 23 23 23 23 23 35 35 35 36 36 36 36
9 M. Alboreto	25 25 25 9 9 9 9 9 35 35 15 36 36 36
12 M.Donnelly	12 35 35 35 35 35 35 35 7 7 7
7 D. Brabham	35 36 36 36 36 36 36 36 36 36 36 36 36
25 N.Larini	36 7 7 7 7 7 7 7 9
21 E. Pirro	7
26 P. Alliot	
36 J. J. Lehto	
35 G. Foitek	

	FASTEST LAPS				
Pos.	Car	No./Driver/Team	Time		
I	5	T. Boutsen/Williams	1:45.602		
2	27	A. Senna/McLaren	1:45.711		
3	28	G. Berger/McLaren	1:46.098		
4	19	A. Nannini/Benetton	1:46.146		
5	1	A. Prost/Ferrari	1:46.839		
6	6	R. Patrese/Williams	1:46.891		
7	20	N. Piquet/Benetton	1:46.949		
8	2	N. Mansell/Ferrari	1:47.268		
9	4	J. Alesi/Tyrrell	1:48.421		
10	25	N. Larini/Ligier	1:48.502		
11	1.1	D. Warwick/Lotus	1:48.547		
12	16	I. Capelli/Leyton House	1:48.799		
13	10	A. Caffi/Arrows	1:49.054		
14	29	E. Bernard/Lola	1:49.071		
15	30	A. Suzuki/Lola	1:49.128		
16	3	S. Nakajima/Tyrrell	1:49.896		
17	36	J. J. Lehto/Onyx	1:50.173		
18	15	M. Gugelmin/Leyton House	1:50.255		
19	23	P. Martini/Minardi	1:51.326		
20	35	G. Foitek/Onyx	1:51.456		
21	7	D. Brabham/Brabham	1:52.018		
22	9	M. Alboreto/Arrows	1:52.041		
23	12	M. Donnelly/Lotus	2:07.152		

	Drivers			Constructors	
ī	A. Senna	48 pts	(McLaren Honda	77 pt:
2	A. Prost	44 pts	2	Ferrari	57 pc
3	G. Berger	29 pts	3	Benetton Ford	31 pts
4	T. Boutsen	18 pts	4	Williams Renault	30 pts
5	N. Piquet	18 pts	5	Tyrrell Ford	14 pts
6	J. Alesi	13 pts	6	Leyton House Judd	6 pts
7	A. Nannini	13 pts	7	Larrousse Lamborghini	5 pts
	N. Mansell	13 pts	8	Arrows Ford	2 pts
9	R. Patrese	12 pts		Brabham Judd	2 pt
10	I. Capelli	6 pts	10	Lotus Lamborghini	l pt
П	E. Bernard	4 pts		_	
12	A. Caffi	2 pts			
	S. Modena	2 pts			
14	A. Suzuki	l pt			
	D. Warwick	l pt			
	S. Nakajima	l pt			

Existing qualifying lap record - 1986: Keke Rosberg, McLaren TagMP4/2 V6 turbo 1m42.013s = 239.864kmh/149.045mph

Existing lap record -1987:

Nigel Mansell, Williams Honda FW11B V6 turbo

PAST WINNERS				
Year	Driver	Nat.	Car	Circuit
1979	Alan Jones	AUS	3.0 Williams FW07 Ford	Hockenheim
1980	acques Laffite	F	3.0 Ligier JS 11/15 Ford	Hockenheim
1981	Nelson Piquet	BR	3.0 Brabham BT49C Ford	Hockenheim
1982	Patrick Tambay	F	1.5 Ferrari 126C2 t/c	Hockenheim
1983	René Arnoux	F	1.5 Ferrari 126C3 t/c	Hockenheim
1984	Alain Prost	F	1.5 McLaren MP4/2 TAG t/c	Hockenheim
1985	Michele Alboreto	1	1.5 Ferrari 56/85 t/c	New Nürburgring
1986	Nelson Piquet	BR	1.5 Williams FWI Honda t/c	Hockenheim
1987	Nelson Piquet	BR	1.5 Williams FWIIB Honda t/c	Hockenheim
1988	Ayrton Senna	BR	1.5 McLaren MP4/4 Honda t/c	Hockenheim
1989	Ayrton Senna	BR	3.5 McLaren MP4/5 Honda V10	Hockenheim



budapest

Magyar Nagydíj, 10-12 Augusztus

BUDAPEST IS A LIVELY CITY MADE FRANTIC WHEN THE 3000 MEMBERS OF THE FORMULA I CIRCUS COME TO TOWN. IN HUNGARY THE WEALTH AND GLAMOUR OF THE GRAND PRIX WORLD IS SOMETHING TO MARVEL AT. THE LOCALS STAND AND STARE AT THE F1 FOLK, AS IF THEY COME FROM ANOTHER PLANET. ON RACE DAY HUNDREDS OF THOUSANDS OF FANS, FROM ALL OVER EASTERN EUROPE MAKE THEIR WAY TO SEE THE RACERS. JAMS ARE SOMETHING WHICH GRAND PRIX REGULARS ARE USED TO, AT MANY VENUES AROUND THE WORLD THEY

HAVE TO FIGHT THEIR
WAY THROUGH STREAMS
OF QUEUEING FANS. BUT
WHAT'S UNUSUAL IS THAT
THE MAJOR TRAFFIC



PROBLEM IN HUNGARY IS TO BE FOUND ON THE TRACK ITSELF, WHERE THERE ARE ONLY 26 CARS. HE WHO STARTS FIRST OFTEN FINISHES FIRST...

IMPRESSIONS

here were rarely less than four cars in the leading group of the Hungarian Grand Prix, and Thierry Boutsen did a magnificent job of leading them lights to flag. His tyres were going off and others behind had newer rubber. Yet in spite of running wide on several occasions, he beat the best, in the person of Ayrton Senna, across the line by just 0.288s after a magnificent race. Who could ask for more?

The close race may have been the side-effect of a tight and twisty circuit, but there was rarely a dull moment in this 77 laps, 109 minute Grand Prix. Some resent the nature of the Hungaroring, saying that there is only one real overtaking place (although two others were tried with varying rates of success). However it does tend to make close racing and everyone loves that.

Boutsen had everything to prove, and he rose to the challenge admirably. He wanted to stay at Williams, but the rumours had it that after his mistake in Canada he had no chance. His attempt to reverse those thoughts was magnificent.

Yet in some ways it was the negative aspect of this race that dominated, another by-product of a tight circuit where overtaking is so difficult. It results in high speed convoys where the frustration of being quicker, but unable to overtake, accumulates. Ultimately something has to snap. An optimistic overtaking opportunity ends in tears, or worse, blatant blocking which is so obviously dangerous, and unnecessary.

We had all that in Hungary, and more besides. The McLaren men resorted to

opportunist overtaking manoeuvres, perhaps the frustration of no longer having an advantage. Senna suffered at the hands of Mansell and Alesi in the first two corners of the first lap, and then had his revenge on Nannini at the chicane late in the race. He got away with it, scoring points at a circuit where he scarcely expected to. He was a happy man; Nannini was miserable.

Berger had tried to overtake Mansell, even managed it once at the first corner, only for Mansell to fight back and overtake the Austrian magnificently at the second. But late in the race the Briton was in serious trouble with his tyres, having unwisely asked too much of them. He took to blocking the Austrian who countered with a repeat manoeuvre of Senna's at the chicane, to the detriment of both Ferrari and McLaren: a no-win situation.

The words and recriminations flew thereafter, products of the frustration of a limited few at a circuit where the tight racing brought pleasure to millions. There was no doubt: it was a superb race, but spoiled too. Could it ever be otherwise, though?

BRIGHT SPARKS

o drive for 1 hr 49m under almost constant pressure, with deteriorating tyres and not make a single mistake is remarkable. But then Thierry Boutsen seems to thrive on such drives. His debut Grand Prix win in a damp Canadian Grand Prix was similar, so was his second victory in the soaking 1989 Australian Grand Prix. Rather like former manager Keke Rosberg, he seems to pick the

Previous pages: Hungary's new freedom didn't help David Brabham in qualifying but Eric Bernard scored a point on his first visit.

Below: Gachot was now more
in evidence with power by
Cosworth DFR rather than
the Subaru flat 12.





Clockwise from left: No danger to Life. Dalmas in the dust; qualifying obscured. Ferrari's Cesare Fiorio explains Grand Prix facts to Fiat president Gianni Agnelli.





most difficult races to win.

Just two weeks earlier, he had set fastest lap in a Grand Prix for the first time. Using Renault's latest engine set-up, Boutsen put his car on pole for the first time in a Grand Prix in Hungary. In spite of a mediocre start, which saw teammate Patrese and rival Berger both challenging, he set the leading pace for all 77 laps, preventing McLaren from leading a Grand Prix for the first time since Portugal the previous year.

This was a supreme victory and even Boutsen's critics agreed, for it was a win in very

difficult conditions. Although Senna whispered that he wouldn't have blocked Boutsen the way he had been blocked in his one overtaking manoeuvre, there was doubt that Boutsen blocked him anyway. In a race where there was a fair amount of frustrated dirty driving, Boutsen could not be accused of it.

As in Hockenheim, Nannini was once again the stronger of the Benetton drivers, in spite of the Nelson Piquet comeback. The Italian had put together a near perfect drive, quietly coming through the order in the way that he had



calculated, to be in the right place at the right time. He knew that, and when he was knocked off by Senna, when lying second, he had every reason to be bitter.

This race represented the logical progression of an excellent season which was constantly improving. Although there was the disappointment of some poor driving, and there was the debate as to whether some of the incidents should have resulted in warnings or more serious action from FISA, the general attitude at the end of the day was 'that's racing'. At least on this relatively slow circuit, it couldn't result in anything more serious than retirement.

Further down the order, there were welcome points for Britain's perennial hard-trier, Derek Warwick, and that consistently improving and promising driver, Eric Bernard. Even though they could thank the McLaren men for shoving others off the road to get them into the points, they were always there. They were unlapped at the end of 77 laps, and ten minutes shy of two hours racing,

and that is certainly no mean feat.

RACE DEBRIEF

he Hungarian Grand Prix was fascinating right from the start. Even pre-qualifying was more interesting than usual, with Ligiers, AGS, Osella, Coloni and Moreno's EuroBrun all having a chance of getting in. However, it was an all-French-team affair in the end but Grouillard,

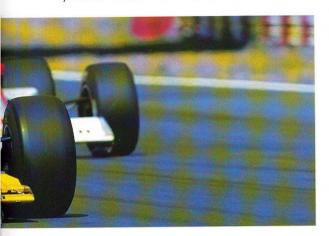




Gachot and Moreno were all within a second of deposing the third and fourth placed AGS drivers.

While Goodyears were better than Pirellis in pre-qualifying, official qualifying was somewhat complicated by new Goodyear tyres which seemed not to work on some cars. Consequently, Goodyear shipped in other versions for everyone to try on Saturday, ready for the final session.

Friday had seen Berger and Mansell quickest in the two sessions, but by Saturday



things were very different. Thanks to cooler conditions, slightly revised aerodynamics ('our car works better on high downforce circuits,' enthused Patrick Head), new engine settings and Elf's 19th mix of fuel since the start of the year, the Williams drivers found their cars giving much increased power. Both used it to maximum effect to record laps some 1.8s less than Patrese's qualifying record from the previous year. That put them on the front row, with Boutsen claiming his first Formula One pole.

So Berger was demoted to row two but Senna went up from eighth to third in Saturday's session, both McLarens having identical handling and brake problems when they tried to bump the Williamses off the front row. In a downhill righthander they suffered understeer and then lost the tail end. Then they straightlined the chicane which put an end to their laps. Both cars were running re-designed undertrays.

Mansell upheld honour for Ferrari with fifth on the grid, happy to be further up the grid than the previous year, although he had an oil pump failure and an 'off' during the two days. Teammate Prost was three places further back, unable to get the best out of his qualifiers again.

Alesi was between them, although he had

been third on Friday he slipped back, preferring to concentrate on a race set-up. Nannini was next, two places ahead of Piquet, both drivers, working on a race set-up.

Dallara were looking better than of late, repeating the previous year's Hungaroring form. Pirro performed well on Friday but the car was jumping out of gear, and he was overtaken by teammate de Cesaris who would start tenth. Warwick and Bernard were well placed where their teammates were less competitive. Ligier made it into the race, but brought up the back end of the grid with Arrows, again unable to make the best use of their qualifiers.

There weren't so many East Europeans as in previous years, but still a good crowd was pouring into the circuit on Sunday morning. The warm weather continued, and in the morning warm-up Prost was quickest from Berger, with Senna third and then the two Williamses. Gugelmin looked good in seventh from the Benettons, but Alesi had two spins, allegedly due

Clackwise from top left: Alesi and Martini discuss territorial differences. Teammate Barilla is easier to pass. Ferrari fortunes faltered, Prost, had a jammed gearbox while Mansell fell foul of a McLaren steam roller. While Boutsen gets away, Patrese holds up Mansell and the rest with help from Gugelmin.





to a lack of brakes!

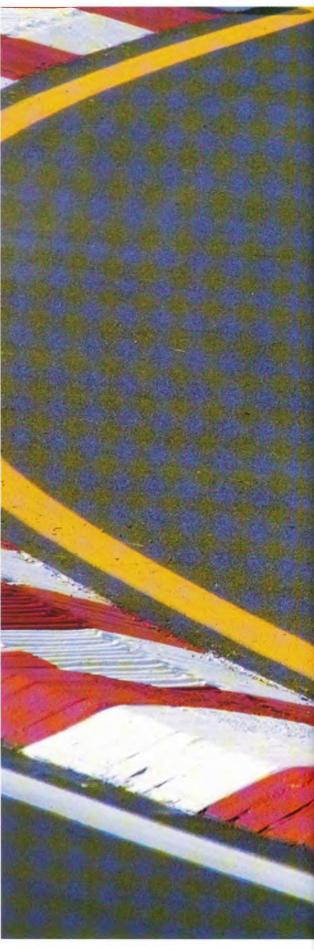
Prost reckoned that but for his grid position he had this race won. Boutsen later reflected that pole position gave him a 50% chance of victory. His start wasn't the best, Patrese trying to get past him down the inside, and Berger round the outside, he was lucky to retain his lead into the first corner. Senna suffered however: Mansell took him on the outside at the first corner while Alesi bolted down the inside into the second.

The race then settled down very quickly into a high speed procession. Boutsen led Berger, Patrese and Mansell, then a gap to Alesi, Senna and Nannini, and then another gap to de Cesaris,



Piquet and Prost. De Cesaris had lost out to Piquet, Prost and Warwick by lap nine, but otherwise the leaders stayed more or less in their places. However, the battles were excellent: in amongst backmarkers, lap 18 Berger closed right up on Boutsen and Mansell was really challenging Patrese for third.

The first order change took place on lap 21 when Senna finally got past Alesi. He moved up to fifth place, 7.3s behind the leading four who were now running in clean air. As they closed up Senna headed for the pits. As in Imola, a jammed stone had machined through a wheel, and Senna





came in for a new set of wheels and tyres, which he got in 10s but it dropped him to tenth.

Three laps later, the Benettons both flew by Alesi who now came under pressure from Prost. The leading four were still in unison but Nannini was intent on cutting the 10s gap between himself and those ahead. Piquet was trying to pull away from Alesi and Prost behind.

Nannini was successful in his pursuit. Thanks to backmarkers he was able to join the leading quartet by half distance. At the same time, Senna had managed to get by Warwick. He was just getting on terms with eighth placed Alesi when the Frenchman tangled with Martini who he'd been trying to overtake for several laps. The Tyrrell went out, and at the same time, at the next corner, Prost spun out with a seized gearbox. This suddenly put Senna sixth, twenty seconds behind the leading quintet.

It was still a game of cat and mouse, with the gaps varying every now and then. However, on lap 48, Berger decided that new tyres would help his cause and pitted for an 8.7s stop. Patrese was now second and Mansell was briefly third,



right behind the Williams. Indeed, he was so close that he had to back off at the end of lap 52, this allowed Nannini to take a run at him as they started lap 53. He managed to overtake and Mansell got such a big twitch coming out of turn one that Senna slipped through too, leaving the Ferrari fourth, soon to be challenged by a recovering Berger. Patrese actually wanted to come in for fresh tyres, but stayed out impeding the rhythm of the chasers and allowing teammate Boutsen a little breathing space, so that when Patrese finally pitted for a rapid 7.7s tyre change, Boutsen's lead had risen to seven seconds.

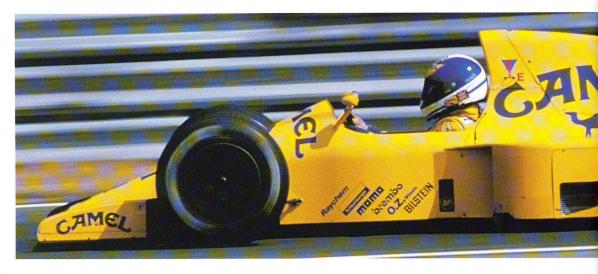
It didn't stay there of course, on lap 61 there was a great queue for the lead: Boutsen, Nannini, Senna, Mansell and Berger before a sizeable gap to Piquet who was being reeled in by a revitalised Patrese on new tyres.

Lap 64, the aggravation started. Senna took a run at Nannini going into the chicane which McLarens had already found troublesome.



Previous pages: Nannini thought he could have won -Boutsen did so, brilliantly.

Above: just reward for playing silly Bergers. Right: Warwick headed a Lamborghini trio.





Left: Donnelly's seventh was his best of the year.

Below: Senna practices for further off-road wark.

Bottom: end of a great Grand Prix - but later FISA demanded changes to the circuit to create more passing places.

Nannini held his line. Senna, now on the kerb, hooked Nannini's rear wheel with his front, the Benetton was vaulted into the air, crashing down and out of the race. Nannini's fury was justified. I don't think he saw me, said Senna lamely.

Battle rejoined: Boutsen, Senna, Mansell and Berger. Berger got past Mansell once at the first corner, but the Ferrari driver did a remarkable job to go round the outside of the McLaren at the next. Less remarkable was the way that Mansell blocked Berger on pit straight a few laps later and on lap 72, Berger did a repeat of the Senna/Nannini incident on Mansell which put them both out.

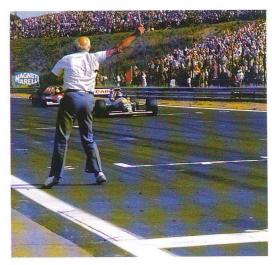
Senna attempted to get past Boutsen just once, feinting to the left and then diving to the right. The Belgian simply held his line and as there was no way past victory was his. Piquet was third, Patrese's challenge having faded with his brakes. Warwick was a deserving fifth from Bernard, the rest lapped.





MILESTONES

- Boutsen's first Grand Prix pole
- Caffi's 50th Grand Prix
- Donnelly's best Grand Prix result
- McLaren fail to lead a Grand Prix for the first time in 1990
- Camel announce their support for Benetton and Williams in 1991
- Benetton confirm Piquet and Nannini



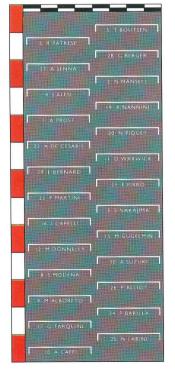


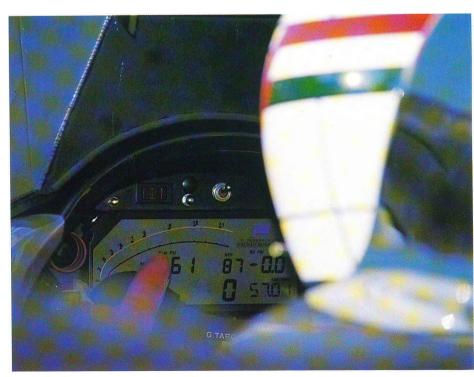
budapest

10

Magyar Nagydíj, 10-12 Augusztus

os	Driver/Nationality		No.	Car/Engine	P.Q. (sunny, cool)	Practice I (sunny, warm)		Warm-up (pos) n)(warm, sunny)	Laps	Time/Retirement (warm, sunny)
1	T. Boutsen	В	5	Williams FW13B Renault V10	7-27-39	1:19.619	1:17.919	1:22.698 (5)	77	1hr49m30.597
2	A. Senna	BR	27	McLaren MP4/5B Honda V10	5-26000	1:20.389	1:18.162	1:22.618 (3)	77	1hr49m30.885
3	N. Piquet	BR	20	Benetton B190 Ford HB V8	_	1:21.109	1:19.453	1:23.348 (9)	77	1hr49m58.490
1	R. Patrese	1	6	Williams FW13B Renault V10		1:19.419	1:17.955	1:22.659 (4)	77	1hr50m02.430
5	D. Warwick	GB	-11	Lotus 109 Lamborghini V12		1:21.154	1:19.839	1:23.728 (11)	77	1hr50m44.841
5	E. Bernard	F	29	Lola 90 Lamborghini V12		1:21.692	1:19.963	1:25.178 (21)	77	1hr50m54.905
7	M. Donnelly	GB	12	Lotus 109 Lamborghini V12		1:21.324	1:20.602	1:23.511 (10)	76	1hr49m56.675
3	M. Gugelmin	BR	15	Leyton House CG901 Judd V8		1:22.198	1:20.397	1:22.898 (7)	76	1hr50m13.198
9	A. Caffi	1	10	Arrows AIIB Ford DFR V8		1:22.986	1:22.126	1:24.952 (19)	76	1hr50m25.889
10	E. Pirro		21	Dallara BMS 190 Ford DFR V8		1:21.070	1:19.970	1:24.377 (15)	76	1hr50m39.407
11	N. Larini	1	25	Ligier JS33B Ford DFR V8	1:21.518	1:22.584	1:22.078	1:25.249 (22)	76	1hr50m49.488
12	M. Alboreto	1	9	Arrows AIIB Ford DFR V8	在上层 有1000	1:22.909	1:21.758	1:24.698 (17)	75	1hr49m33.039
13	G. Tarquini	1	17	AGS IS25 Ford DFR V8	1:23.406	1:23.827	1:21.964	1:27.218 (25)	74	1hr49m34.520
14	P. Alliot	F	26	Ligier IS33B Ford DFR V8	1:21.710	1:22.701	1:21.003	1:24.105 (12)	74	Ihr49m48.938
15	P. Barilla	1	24	Minardi M190 Ford DFR V8		1:22.784	1:21.849	1:27.345 (26)	74	1hr50m05.163
16	G. Berger	Α	28	McLaren MP4/5B Honda VIO	6 4 1 1 1 1 K	1:18.127	1:18.703	1:22.496 (2)	72	accident/Mansell
17	N. Mansell	GB	2	Ferrari 641 Ferrari VI2		1:18.739	1:18.719	1:22.824 (6)	71	accident/Berger
18	A. Nannini		19	Benetton B190 Ford HB V8		1:19.300	1:18.901	1:22.927 (8)	64	accident/Senna
19	I. Capelli		16	Leyton House CG901 Judd V8		1:21.512	1:20.385	1:24.316 (13)	56	gearbox
20	A. Suzuki	1	30	Lola 90 Lamborghini VI2		1:21.577	1:20.619	1:24.320 (14)	37	oil filter
21	A. Prost	F	1	Ferrari 641 Ferrari VI2		1:20.309	1:19.029	1:21.332(1)	36	gearbox/spin
22	J. Alesi	F	4	Tyrrell 019 Ford DFR V8		1:19.042	1:18.726	1:24.519 (16)	36	collision/Martini
23	S. Modena	1	8	Brabham BT59 Judd V8		1:22.024	1:20.715	1:25.136 (20)	35	engine
24	P. Martini		23	Minardi M190 Ford DFR V8		1:21.242	1:20.197	1:27.096 (24)	35	collision/Alesi
25	A. de Cesaris	1	22	Dallara BMS 190 Ford DFR V8		1:21.675	1:19.675	1:24.907 (18)	22	engine
26	S. Nakajima		3	Tyrrell 109 Ford DFR V8		1:21.449	1:20.202	1:26.021 (23)	9	spin
27	Y. Dalmas	É	18	AGS IH25 Ford DFR V8	1:23.227	1:23.116	1:22.263	DNQ		
28	D. Brabham	AUS	7	Brabham BT59 Judd V8		1:23.923	1:22.488	DNQ		
29	I. I. Lehto	SF	36	Onyx OREI Ford DFR V8		no time	1:22.647	DNQ		
30	G. Foitek	CH	35	Onyx OREI Ford DFR V8		1:24.361	1:24.863	DNQ		
	O. Grouillard	F	14	Osella FAIME Ford DFR V8	1:23.582	DNPQ	DNPQ			
	B. Gachot	В	31	Coloni C3B Ford DFR V8	1:23.670	DNPQ	DNPQ			
	R. Moreno	BR	33	Eurobrun ER 189 Judd V8	1:24.386	DNPQ	DNPQ			
	C. Langes	1	34	Eurobrun ER 189 Judd V8	1:26.514	DNPQ	DNPQ			
	B. Giacomelli		39	Life F190 Life W12	1:41.431	DNPO	DNPO			





	LAP CHART
Grid Order	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77
5 T. Boutsen	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
6 R. Patrese	28 28 28 28 28 28 28 28 28 28 28 28 28 2
28 G.Berger	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
27 A. Senna	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
2 N. Mansell	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
4 J. Alesi	21 27 27 27 27 27 27 27 27 27 27 27 27 27
19 A. Nannini	22 9 9 9 9 9 9 9 9 9
A. Prost	19 22 22 22 22 20 20 20 20 20 20 20 20 20
20 N. Piquet	20 20 20 20 20 20 22
22 A. de Cesaris	1 1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1
II D. Warwick	11 1 1 1 1 1 1 1 22 22 22 22 22 22 22 22 22 22 22 22 2
29 E.Bernard	29 29 29 29 29 29 29 29 29 29 29 29 29 2
21 E. Pirro	23 23 23 23 23 23 23 23 23 23 23 23 23 2
23 P. Martini	21 21 21 21 21 21 21 21 21 21 21 21 21 2
3 S. Nakajima	3 3 3 3 3 3 16 16 16 16 16 16 16 12 21 15 23 21 21 12 12 12 12 12 12 12 12 12 12 12
16 I. Capelli	16 16 16 16 16 16 16 16 16 16 15 15 15 15 15 15 15 15 15 15 15 15 15
15 M. Gugelmin	12 12 12 12 12 12 12 12 12 12 12 12 12 1
12 M. Donnelly	8 8 8 8 8 8 15 15 30 30 30 30 30 30 30 30 30 30 30 30 30
30 A. Suzuki	15 15 15 15 15 15 15 8 30 8 8 8 8 8 8 10 10 10 10 10 9 925 25 25 25 25 25 25 25 25 25 25 25 25 2
8 S. Modena	30 30 30 30 30 30 30 8 10 10 10 10 10 10 10 9 9 9 9 25 25 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
26 P.Alliot	10 10 10 10 10 10 10 10 10 9 9 9 9 9 9 25 25 25 25 28 23 23 23 23 23 23 23 23 23 23 23 23 23
9 M. Alboreto	24 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
24 P.Barlla	9 24 24 25 25 25 25 25 17 17 17 17 17 17 17 17 17 17 17 17 17
7 G Tarquini	25 25 25 17 17 17 17 17 17 17 17 24 24 24 24 24 24 24 24 24 24 24 24 24
25 N. Larini	17 17 17 24 24 24 24 24 26 26 26 26 26 26 26 26 26 26 26 26 26
10 A.Caffi	26 26 26 26 26 26 26 26 26

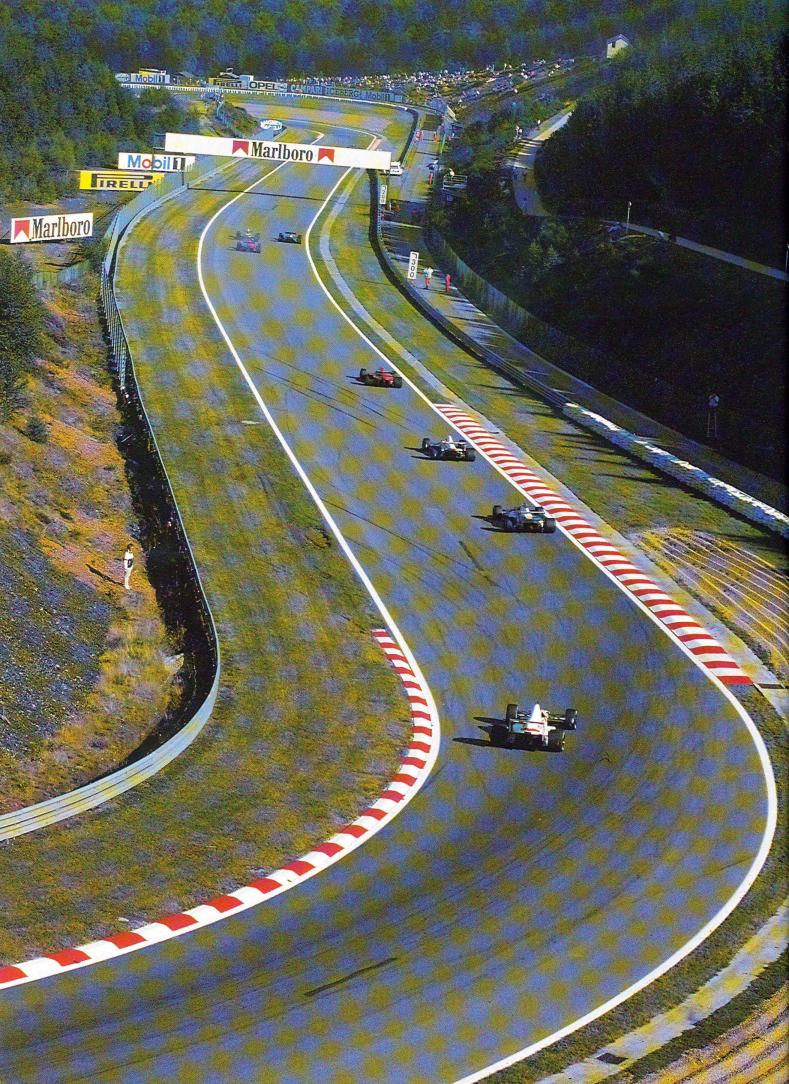
		FASTEST LAPS	
Pos.	Car	No./Driver/Team	Time
ī	6	R. Patrese/Williams	1:22.058
2	28	G. Berger/McLaren	1:22.122
3	2	N. Mansell/Ferrari	1:22.235
4	12	M. Donnelly/Lotus	1:22.561
5	27	A. Senna/McLaren	1:22.577
6	19	A. Nannini/Benetton	1:22.639
7	25	N. Larini/Ligier	1;23.147
8	20	N. Piquet/Benetton	1:23.164
9	29	E. Bernard/Lola	1:23.864
10	5	T. Boutsen/Williams	1:23.934
11	15	M. Gugelmin/Leyton House	1:24.062
12	26	P. Alliot/Ligier	1:24.073
13	11	D. Warwick/Lotus	1:24.140
14	1	A. Prost/Ferrari	1:24.214
15	16	I. Capelli/Leyton House	1:24.245
16	10	A. Caffi/Arrows	1:24.388
17	4	J. Alesi/Tyrrell	1:24.414
18	9	M. Alboreto/Arrows	1:24.418
19	2	E, Pirro/Dallara	1:24.765
20	17	G. Tarquini/AGS	1:24.921
21	30	A. Suzuki/Lola	1:25.209
22	22	A. de Cesaris/Dallara	1:25.523
23	24	P. Barilla/Minardi	1:25.710
24	23	P. Martini/Minardi	1:25.930
25	8	S. Modena/Brabham	1:26.474
26	3	S. Nakajima/Tyrrell	1:27.900

	Drivers			Constructors	
ı	A. Senna	54 pts	i i	McLaren Honda	B3 pt:
2	A. Prost	44 pts	2	Ferrari	57 pt:
3	G. Berger	29 pts	3	Williams Renault	42 pt
4	T. Boutsen	27 pcs	4	Benetton Ford	35 pt
5	N. Piquet	22 pts	5	Tyrrell Ford	14 pt
6	R. Patrese	15 pts	6	Larrousse Lamborghini	6 pt
7	I. Alesi	13 pts		Leyton House Judd	6 pt
8	A. Nannini	13 pts	8	Lotus Lamborghini	3 pt
	N, Mansell	13 pts	9	Arrows Ford	2 pt
10	I. Capelli	6 pts		Brabham Judd	2 pt
11	E. Bernard	5 pts		•	
12	D. Warwick	3 pts			
13	A. Caffi	2 pts			
	S. Modena	2 pts			
15	A. Suzuki	l pt			
	S. Nakajima	l pt			

Existing qualifying lap record - 1989:
Riccardo Patrese Williams Renault 3.5 V10
1m19.726s 179.174kmh/111.133mph

Existing lap record - 1989:
Nigel Mansell Ferrari 640 Ferrari 3.5 V12
1m22.637s 172.862kmh/107.411mph

PAST WINNERS								
Year	Driver	Nat.	Car	Circuit				
1986	Nelson Piquet	BR	1.5 Williams FWI I Honda t/c	Hungaroring				
1987	Nelson Piquet	BR	1.5 Williams FW11B Honda t/c	Hungaroring				
1988	Ayrton Senna	BR	1.5 McLaren MP4/4 Honda t/c	Hungaroring				
1989	Nigel Mansell	GB	3.5 Ferrari 640 Ferrari VI2	Hungaroring				



spa

Belgian Grand Prix, 24-26 August

SPA-FRANCORCHAMPS IS A NAME ETCHED INTO THE MINDS OF RACING FANS ACROSS THE WORLD. THE IMAGE IS ONE OF DRIZZLY DAYS IN THE ARDENNES HILLS AND OF ROOSTER-TAILS OF SPRAY THROWN UP BY

THE CARS. THE TRACK IS LARGELY MADE UP OF CLOSED PUBLIC ROADS AND EACH CORNER IS LOADED WITH ITS OWN HISTORY. THE OLD FOLK WILL TELL YOU



THAT IT IS NOT AS FEARSOME AS IT WAS ONCE, AND SUCH DAUNTING PLACES AS BURNENVILLE, THE MASTA KINK AND STAVELOT CORNER HAVE FADED INTO HISTORY. SPA HOWEVER, REMAINS THE DRIVERS GREATEST CHALLENGE. PRIMARILY THIS REPUTATION IS BASED ON JUST ONE CORNER — EAU ROUGE, A TERRIFYING LEFT-RIGHT-LEFT, DIVING DOWN THEN SOARING UPWARDS. TO WATCH GP CARS HERE IN QUALIFYING IS TO SEE SOMETHING UNIQUE...

IMPRESSIONS

cLarens performed rather better than some thought (or hoped) they would in Spa. The front row of the grid more than proved that, and yet Alain Prost was almost relieved to have finished second for the first time this season. Ayrton Senna's hat-trick at Spa gave him a 13 point lead in the World Championship, and Prost knew that there was nothing that he could do for a couple of races yet.

It might have been different, of course. Senna admitted that it had taken most of the weekend to get a good balance to the car, and the McLaren chassis wasn't thought to be the best around the sweeps and curves of the magnificent Spa-Francorchamps circuit, particularly in the remarkably dry but humid weather of the Belgian

Grand Prix weekend.

Honda however had come up with more top-end power for this race and although overtaking is not too difficult at this circuit, overtaking as a whole is getting very tricky in Formula One, even for the normally dominant McLaren-Honda team.

Tyre stops became almost mandatory after the race distance was increased by around ten laps due to two lots of red flags. Both leader Senna and second placed Prost coincidentally pitted at exactly half distance. The McLaren stop was quicker, but as he drove down the pit lane, the eagle-eyed Senna saw the flash of green through the barrier.

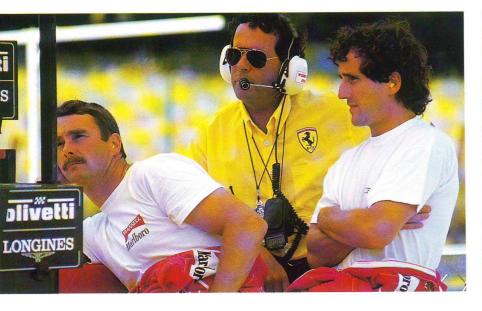
'I knew that it was a Benetton,' he said later, 'and I knew that I would have to get back out onto the track ahead of it, otherwise it would

Previous pages: the undulating sweepers of the Spa-Francorchamps circuit where on this weekend Moet was more plentiful than rain.

Clockwise from right:

Alesi's Tyrrell was somewhat
breathless on this 'power'
circuit. Only Bernard started
after Suzuki ran out of cars.
Qualifying made great
viewing - but not for Ferrari.







be very difficult to overtake. I even overrevved slightly as I accelerated down the hill, but I just managed to get ahead of Nannini, even though he came back at me going up the hill and my tyres still weren't up to pressure.'

For Senna, this was the turning point of the race. If beaten by Nannini out of the pits, he would have lost valuable time trying to overtake. As it was, Senna was able to open up a seven

experiencing an inability to adjust the brake balance, however by then his race was won.

At this stage of the championship Prost said that he was neither optimistic nor pessimistic, nor was the pressure on him. I'm the challenger, he said, a great deal happier than Berger back in third place whose battle with Nannini provided the greatest excitement in a race that lost much of its impetus after two accidents and three starts.





BRIGHT SPARKS

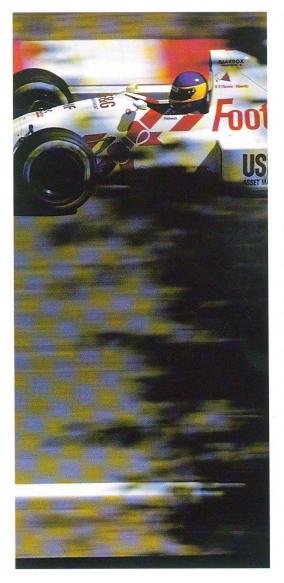
uch was the work-load in Formula One entering the final stages of the 1990 World Championship season, that Thierry Boutsen had estimated that he'd spent some 80 days out of the previous 235 in a race car prior to the Belgian Grand Prix. After new versions of Ferrari and Ford engines, it was the turn of the Honda and Renault engineers to come up with their contribution to the incredible

Above left: Warwick and teammate Donnelly didn't escape the carnage during three starts but both finished. Brabham (above) bails out having survived both re-starts, however, Barilla (below) didn't have time to pick up the pieces for the second one.

second lead over Nannini before Prost overtook the Benetton and even then it continued to rise to over eight.

The Frenchman whittled away that lead to just over six seconds, but then his turning point came. 'I had very bad luck with traffic today, and I lost around four seconds behind Alboreto,' he claimed. That put Senna's lead at over ten seconds, and it continued to rise until seven laps from the end when the Brazilian began



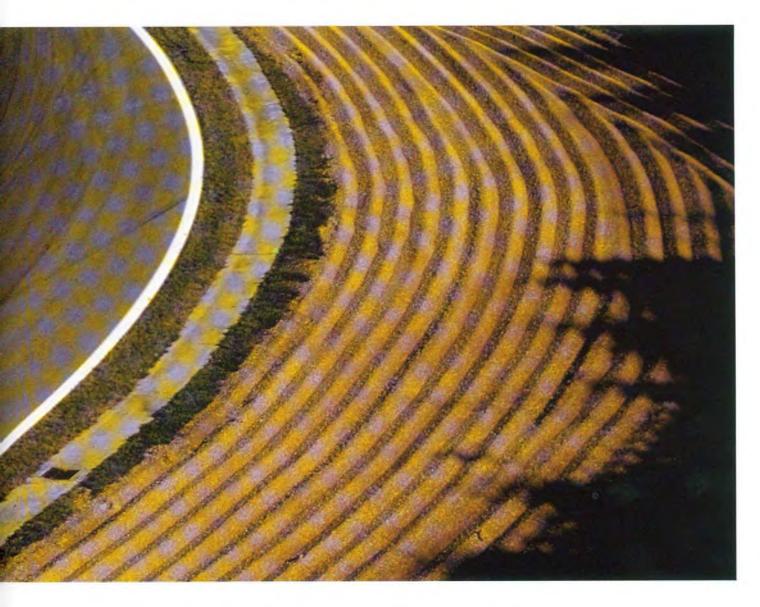




on-going development. The everlasting quest is for that tiny advantage, no longer the leaps and bounds seen in the past. Honda's engine, the version 5 of the RA100E featured a revised induction system to give more top end power for the super fast, long straight up to Les Combes, and the quick section back through Blanchimont. Although it didn't work perfectly at first due to lack of testing, Honda were pleased with the engine's reaction by Saturday, as witnessed by Ayrton Senna's 48th pole position. It had given Senna satisfication to work away at his chassis and get it handling the way he wanted, and as he said after the race, 'if we can get it right here, we can get it right in Monza too'. Renault's Evolution 2 version of the RS2 engine featured new conrod assembly and camshafts and had been tested in an endurance run by Riccardo Patrese at Monza. Williams needed all the help

that they could get, this being a low downforce circuit and therefore not ideal for the chassis. Boutsen was therefore pleased with fourth on the grid behind the two McLarens and Prost's Ferrari. The Japanese drivers in tenth and eleventh places were also delighted. Nakajima was just over half a second slower than teammate Alesi on a long lap, although Alesi would say it wasn't a good day, Nakajima was all smiles. Compatriot Aguri Suzuki was next, four places ahead of teammate Bernard. The time was set on Suzuki's third lap on the same tyres after suffering traffic.

There were many blows for drivers the next day and Suzuki suffered more than most, with an off in the warm-up. which meant he had to use the spare, and that, in turn, was damaged beyond repair when Piquet collided with him as he steered his Benetton out of the race having already punted Mansell into the barriers.



Similarly Nakajima had an incident with Modena and had to use the spare, and that car's engine later failed.

Mention should be made about Gachot's first foray of the year into qualifying. It was tinged with bad luck, for after vanquishing Tarquini and Moreno to set third fastest time in pre-qualifying, his engine blew. The team had one replacement, and at first that didn't run cleanly, but eventually the Belgian managed a time in qualifying which was at least respectable, given that he had only managed 11 laps in free practice and qualifying. Unfortunately this was still not good enough to get him onto the grid.

There was little good news in the race, apart from Senna's win and Prost's satisfaction with second place. Gugelmin's first World Championship point came after a dogged race with a dodgy clutch, and he was followed home

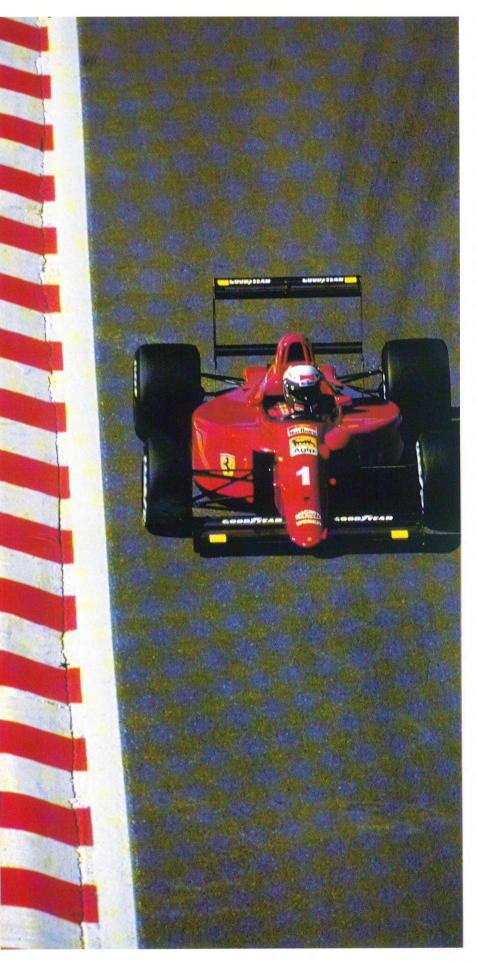
by Leyton House teammate Capelli who had let him by, the Italian suffering tyre problems as neither driver stopped for fresh tyres.

RACE DEBRIEF

erhaps the biggest shock of the weekend was the weather which remained dry throughout apart from a few drops of rain on Saturday night. Not only was the dry weather greeted with relief by the competitors, but with enthusiasm by a large crowd, a vast improvement on recent years.

With the withdrawal of Monteverdi from the 1990 World Championship, there were just seven pre-qualifiers spread around the 6.9 kms/4.3 miles circuit. Actually for most of the session there were only six until Life managed to coax their engine into life! The surprises were two-fold: Gachot got in, only to blow his engine,

Above left: little chance for Alboreto from the back row of the grid. Above: Shock DNQ in 1989, fifth place this year for evergreen Nelson Piquet.



and Moreno didn't, suffering handling problems.

The next two days were all about making qualifying tyres last. After all, here you had to make them last 13.8s kms/8.6 miles, whereas at Monaco for instance, they only had to last less than half that. 'It's all a matter of how they use the tyres,' said Lee Gaug of Goodyear.

McLaren usually found that they were running out of grip by the end of the lap, but Berger's quick time on Friday came in spite of hitting the chicane kerb and jumping high in the air, landing sideways and then doing the best he could thereafter. Piquet found he had lost grip at the end of a lap on Saturday, going high on a kerb out of the chicane, and spinning into the end of the pit lane barrier, with damage to the side pods. The subsequent red flag meant even more trouble for those on qualifiers at the time.

But the McLarens were on the front row, and although Prost found his qualifiers working spasmodically, he was only a tenth behind Berger, with Boutsen making a 2.1s improvement when finding mechanical grip to go fourth.

Mansell was a little surprised not to be quicker, finding his engine down-on-power while Nannini was the best of the Benettons in spite of a timid approach with just one set of qualifiers. Patrese suffered an extraordinary rear suspension failure on Saturday morning and had to use the spare which left him seventh ahead of Piquet.

Alesi was ninth, closely followed by teammate Nakajima, the Tyrrell pair suffering differing fortunes while Suzuki was also encouraged in eleventh place. Leyton House were reasonably well placed, as was Modena. Minardis and Dallaras were less competitive, and Arrows frustrated, while Lotus weren't at all happy. Sunday morning's warm-up saw Prost well and truly ahead of second man Nannini by 0.8s in what was more like a qualifying session. Senna was next, but Berger, surprisingly could only manage tenth place. Suzuki damaged his car's monocoque and had to take the spare when he understeered off the track.

In front of a fine crowd, the first start proved chaotic when Suzuki nudged Piquet who shoved Mansell into the barrier. Donnelly ran into the back of Warwick taking avoiding action. The stricken Piquet was then hit by Suzuki again as he tried to park his car round La Source.

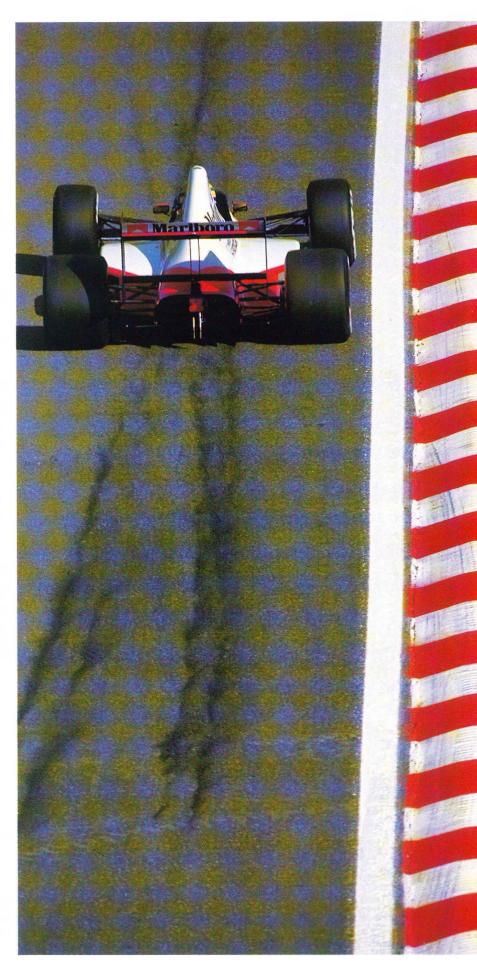
Larini had a broken differential, while Pirro had started in the spare anyway due to a broken water pipe. Before the red flag came out, Martini spun at Les Combes and collected de Cesaris, and Nakajima and Modena tangled.

For the restart, Mansell took the spare Ferrari (set up by Prost, with an older specification engine), Nakajima was in the spare, so were Larini and Piquet. Suzuki was out for the weekend, and Donnelly looked to be as well.

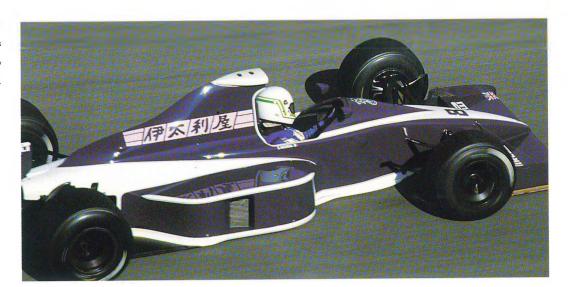
At the restart Berger lagged somewhat, and moved to block Prost on the inside. Boutsen went round the outside to take second place, but as they started lap two Barilla went off in a big way at the top of the Raidillon and out came the red flags to stop the race again. Barilla was thankfully unhurt but his badly damaged Minardi was partially on the track and the marshalls required assistance to move it. Another restart and the usual thirty minute delay allowed Donnelly to take Warwick's repaired Lotus, making up 24 starters, Barilla and Suzuki being the absentees. Start number three saw everyone holding their positions at the front, so it was Senna from Berger, then Prost and Boutsen. Patrese got ahead of Nannini by the end of the lap, but Mansell dropped back to eighth and was soon demoted to ninth by Alesi.

This was pretty much the way the order remained, and after five laps Senna began to draw away, leaving Berger to cope with Prost, Boutsen and Patrese. Prost overtook the Austrian on lap 14, by which time Senna was 4.7s ahead, and Boutsen thought that he might follow the Ferrari through as well but lacked the pace. At the same time Patrese's Williams dropped back with gearbox trouble, ultimately to retire with only third gear remaining.

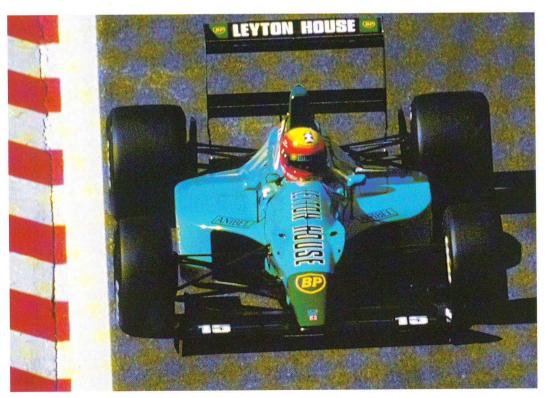
Prost was cutting the gap between himself and Senna as they approached the 20 lap mark, but it was clear that the Goodyear runners' intention not to stop and change their B compound tyres was going to have to be revised after the wear of three starts. Mansell had already stopped to try and cure a drastically oversteering Ferrari which he would eventually retire claiming it to be impossible to drive. Berger pitted on lap 18 and rejoined with Piquet behind whom he was stuck for four laps. That left Boutsen third, but on lap 21 he pulled off opposite the pits with a



Previous pages:
Senna and Prost, the views
they saw of one another: no
contest.









broken CV joint, elevating Nannini to third. That might have become first on lap 22 when, coincidentally, both Senna and Prost pitted from first and second. However Senna just got out of the pits ahead of the Benetton whose tyres Nannini was not intending to change. Prost caught the Italian a few laps later but by the time he passed, Senna's lead had risen to 7.5s and was to reach 8.2s before Prost regained his rhythm and began to reel him in again.

That would only last for two laps. The gap was down to 6.5s when the number one Ferrari caught Alboreto's Arrows, however the former Ferrari driver stubbornly held his line and Prost was unable to find any way past for nearly a lap, by which time Senna had drawn away to hold a lead of 10.4s. Effectively that was the end of the race for the lead. It grew to just over 12.0s before Senna eased up with a small braking problem, and it had dropped to just 3.5s at the flag, although Senna was never threatened.

Nannini, on tyres that were losing their grip, was caught by Berger and on lap 37 the McLaren passed the Benetton going up to Les Combes. Under braking, and with the added complications of a back marker, Nannini dived down the inside of a hesitant Berger, the pair took the Pif-Paf side by side, touching wheels, Nannini had the better line on the exit and barged the McLaren aside. Berger dropped back to have a think about it, and when Nannini had a moment at Raidillon on lap 42, Berger flashed through to take third. Piquet was running a lonely fifth having stopped for tyres. A late tyre stop allowed the Leyton House pair past Alesi to net sixth and seventh place, a tyre-troubled Capelli giving best to the clutch-hampered Gugelmin who scored his first World Championship point of the year.

MILESTONES

- Monteverdi withdraw from the 1990
 World Championship
- Senna and Prost confirmed for 1991
 McLaren and Ferrari teams
- Senna's 25th Grand Prix victory

Clockwise from above Berger and Nannini, great tussle, honours to the McLaren driver. Gugelmin scored his first point of the year. Alliot didn't even qualify his Ligier while Modena faired only slightly betterraced but didn't finish.

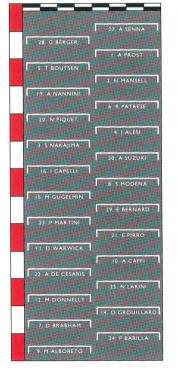


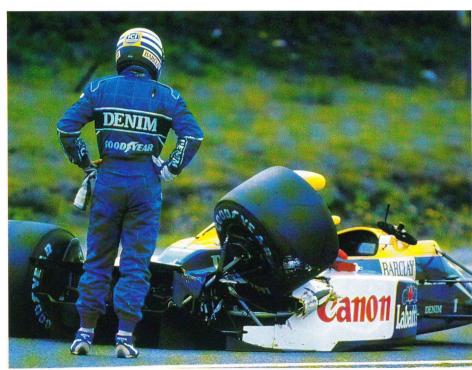
spa

round

Belgian Grand Prix, 24-26 August

S	Driver/Nationality		No.	Car/Engine	P.Q. (sunny, cool)	Practice I (sunny, warm)	Practice 2 (hazy, warm)	Warm-up (pos) (warm)	Laps	Time/Retirement (hot, overcast)
	A. Senna	BR	27	McLaren MP4/5B Honda VI0	Father W	1:52.278	1:50.365	1:56.401 (3)	44	1hr26,31.997
	A. Prost	F	1	Ferrari 641 Ferrari V12		1:51.841	1:51.043	1:55.290 (1)	44	1hr26m35.547
	G. Berger	Α	28	McLaren MP4/5B Honda V10		1:51.211	1:50.948	1:58.183 (10)	44	1hr27m00.459
	A. Nannini		19	Benetton B190 Ford HB V8		1:55.800	1:52.648	1:56.015 (19)	44	1hr27m21.334
	N. Piquet	BR	20	Benetton B190 Ford HB V8	等等等的	1:53.689	1:52.853	1:57.369 (5)	44	1hr28m01.647
	M. Gugelmin	BR	15	Leyton House CG901 Judd V8		1:54.497	1:54.120	1:58.412 (12)	44	1hr28m20.848
	I. Capelli	1	16	Leyton House CG901 Judd V8	_	1:55.012	1:53.783	1:59.462 (19)	43	1hr26m35.033
	I. Alesi	F	4	Tyrrell 019 Ford DFR V8		1:54.116	1:52.885	1:59.038 (14)	43	1hr26m35.033
	E. Bernard	F	29	Lola 90 Lamborghini V12		1:56.213	1:54.251	1:57.875 (8)	43	1hr27m15.819
	A. Caffi	i i	10	Arrows ATTB Ford DFR V8		1:56.562	1:55.199	1:59.334 (18)	43	1hr27m41.268
	D. Warwick	GB	11	Lotus 102 Lamborghini V12		1:56.246	1:55.068	1:59.534 (20)	43	Ihr27m49.536
	M. Donnelly	GB	12	Lotus 102 Lamborghini V12	第三条。在	1:56.666	1:55.304	2:00.179 (22)	43	1hr27m49.897
	M. Alboreto		9	Arrows AIIB Ford DFR V8		1:57.255	1:56.055	1:58.049 (9)	43	1hr28m18.870
	N. Larini	1	25	Ligier IS33B Ford DFR V8		1:57.471	1:55.278	1:59.088 (15)	42	Ihr26m47.077
	P. Martini	1	23	Minardi M190 Ford DFR V8		1:56.074	1:54.312	1:59.257 (16)	42	Ihr26m48.344
	O. Grouillard	F	14	Osella FA I ME Ford DFR V8	1:57.941	1:57.770	1:55.334	2:00.463 (23)	42	1hr27m13.739
	S. Modena	1	8	Brabham BT59 Judd V8		1:57.014	1:53.916	1:59.326 (17)	39	engine
	D. Brabham	AUS	7	Brabham BT59 Judd V8	15 <u>2</u> 4005	1:58.034	1:55.668	no time	36	electric short
	A. de Cesaris	1	22	Dallara BMS 190 Ford DFR V8		1:56.923	1:55.261	2:00.027 (21)	27	engine water leak
	T. Boutsen	F	5	Williams FW13B Renault V10		1:54.024	1:51.902	1:57.721 (7)	21	transmission
	N. Mansell	GB	2	Ferrari 641 Ferrari VI2		1:52.601	1:52.267	1:57.249 (4)	19	handling
	R. Patrese		6	Williams FW13B Renault V10		1:54.260	1:52.703	1:57.369 (6)	18	gearbox
	E. Pirro	1	21	Dallara BMS 190 Ford DFR V8		1:56.239	1:54.595	1:58.992 (13)	5	split water pipe
	S. Nakajima	1	3	Tyrrell 019 Ford DFR V8		1:55.798	1:53.468	2:00.940 (24)	4	engine
	A. Suzuki	1	30	Lola 90 Lamborghini VI2		1:55.294	1:53.523	1:58.403 (11)	0	did not start
	P. Barilla	- i -	24	Minardi M 190 Ford DFR V8		1:57.221	1:55.859	2:01.031 (25)	0	did not start
	P. Alliot	F	26	Ligier JS33B Ford DFR V8		no time	1:56.118	DNQ		
	G. Tarquini		17	AGS JS25 Ford DFR V8	1:59.910	1:58.293	1:57.566	DNQ		
	Y. Dalmas	F	18	AGS S25 Ford DFR V8	1:58.339	1:58.995	1:57.704	DNQ		
	B. Gachot	В	31	Coloni C3B Ford DFR V8	1:59.130	no time	1:58.520	DNQ		有量工作
	R. Moreno	BR	33	Eurobrun ER 189 Judd V8	2:00.270	DNPQ	DNPQ			
	C. Langes	1	34	Eurobrun ER 189 Judd V8	2:01.405	DNPQ	DNPQ			
	B. Giacomelli	1	39	Life F190 Life W12	2:19.445	DNPO	DNPQ			





	LAP CHART
GridOrder	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44
27 A. Senna	ינב רב
28 G Berger	28 28 28 28 28 28 28 28 28 28 28 28 28 2
I A. Prost	
5 T. Boutsen	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
2 N. Mansell	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 19 19 19 28 20 20 20 28 20 20 20 15 15 15 20 20 20 20 20 20 20 20 20 20 20 20 20
19 A. Nannini	19 19 19 19 19 19 19 19 19 19 19 19 19 1
6 R. Patrese	20 20 20 20 20 20 20 20 20 20 20 20 20 2
20 N. Piquet	2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
4 J. Alesi	4 2 2 2 2 2 2 2 16 16 16 16 16 16 16 16 16 16 16 16 14 29 4 4 4 4 4 4 4 4 29 29 29 29 29 29 29 29 29 29 29 29 29
3 S. Nakajima	16 16 16 16 16 16 16 16 2 29 15 15 15 15 15 15 16 29 29 4 8 8 8 8 8 8 10 10 10 10 10 10 10 10 10 10 10 10 10
30 A. Suzuki	29 29 29 29 29 29 29 29 29 15 29 29 29 29 29 29 29 29 29 29 29 11 1 1 1
16 I. Capelli	8 8 8 15 15 15 15 15 15 2 8 8 8 8 8 8 8 8 9 9 9 9 9 9 9 9 9 8 8 8 8 8 8 9 9 9 11 12 12 12
8 S. Modena	3 5 5 8 8 8 8 8 8 8 8
15 M. Gugelmin	15 21 21 21 21 11 11 11 11 11 10 10 10 10 10 10 2 2 23 23 11 11 11 11 23 12 12 12 12 12 12 12 12 12 12 12 12 12
29 E.Bernard	21 23 11 11 11 10 10 10 10 10 10 22 22 2 2 2
23 P. Martini	23 11 10 10 10 22 22 22 22 22 22 22 2 2 2
21 E. Pirro	11 10 22 22 22 23 23 23 23 23 23 9 9 9 9 77 23 73 73 17 11 7 17 22 22 22 22 25 25 25 25 25 25 25 25 25
I D. Warwick	10 22 23 23 23 14 14 14 14 9 23 23 23 23 23 14 14 14 11 7 22 22 14 14 14 14 14 14 14 14 14 14 14 14 14
10 A. Caffi	22 4 4 4 4 25 25 9 9 4 4 4 4 4 4 2 2 2 7 22 2 25 25 25 25 25 25 25
22 A. de Cesaris	14 25 25 25 25 9 9 12 12 12 12 12 12 12 7 7 7 22 25 25
25 N. Larini	25 9 9 9 9 12 12 7 7 7 7 7 7 7 22 22 22 25
12 M. Donnelly	9 7 12 12 12 7 7 25 25 25 25 25 25 25 25 25 25 25 25
14 O. Grouillard	7 12 7 7 7
7 D. Brabham	12 3 3 3
24 P. Barilla	
9 M. Alboreta	

K.		FASTEST LAPS	
Pos.	Car	No./Driver/Team	Time
ī	- 1	A. Prost/Ferrari	1:55.087
2	27	A. Senna/McLaren	1:55.132
3	28	G. Berger/McLaren	1:55.531
4	19	A. Nannini/Benetton	1:55.650
5	29	E. Bernard/Lola	1:56.531
6	20	N. Piquet/Benetton	1:57.036
7	15	M. Gugelmin/Leyton House	1:58.163
8	5	T. Boutsen/Williams	1:58.199
9	12	M. Donnelly/Lotus	1:58.330
10	16	I. Capelli/Leyton House	1:58.351
11	4	J. Alesi/Tyrrell	1:58.531
12	6	R. Patrese/Williams	1:58.666
13	1.1	D. Warwick/Lotus	1:59.081
14	8	S. Modena/Brabham	1:59.415
15	2	N. Mansell/Ferrari	1:59.767
16	25	N. Larini/Ligier	1:59.956
17	15	P. Martini/Minardi	2:00.157
18	10	A. Caffi/Arrows	2:00.610
19	9	M. Alboreto/Arrows	2:00.671
20	14	O. Grouillard/Osella	2:00.886
21	7	D. Brabham/Brabham	2:01.959
22	22	A. de Cesaris/Dallara	2:02.225
23	21	E. Pirro/Dallara	2:03.152
24	3	S. Nakajima/Tyrrell	2:14.599

	Drivers			Constructors	
1	A. Senna	63 pts	1	McLaren Honda	96 pts
2	A. Prost	50 pts	2	Ferrari	63 pts
3	G. Berger	33 pts	3	Williams Renault	42 pts
4	T. Boutsen	27 pts	4	Benetton Ford	40 pts
5	N. Piquet	24 pts	5	Tyrrell Ford	14 pts
6	A. Nannini	16 pts	6	Leyton House Judd	7 pts
7	R. Patrese	15 pts	7	Larrousse	6 pts
8	. Alesi	13 pts	8	Lotus Lamborghini	3 pts
9	N. Mansell	13 pts	9	Arrows Ford	2 pts
10	I. Capelli	6 pts		Brabham Judd	2 pts
П	E. Bernard	5 pts			
12	D. Warwick	3 pts			
13	A. Caffi	2 pts			
	S. Modena	2 pts			
15	A. Suzuki	l pt			
	M. Gugelmin	l pt			
	S. Nakajima	l pt			

Existing qualifying lap record - 1989:
Ayrton Senna McLaren MP4/4 Honda V10
1m50.867s 225.351kmh/140.027mph
Existing lap record - 1987:

Alain Prost McLaren Tag MP4/3 V6 turbo 1m57.153s 213.000kmh/132.514mph

	PAST WINNERS								
Year	Driver	Nat.	Car	Circuit					
1979	Jody Scheckter	ZA	3.0 Ferrari 312T 4	Zolder					
1980	Didier Pironi	F	3.0 Ligier JSI 1/15 Ford	Zolder					
1981	Carlos Reutemann	RA	3.0 Williams FW07C Ford	Zolder					
1982	John Watson	GB	3.0 McLaren MP4B Ford	Zolder					
1983	Alain Prost	F	1.5 Renault RE40 t/c	Francorchamps					
1984	Michele Alboreto	1	1.5 Ferrari 126C4 t/c	Zolder					
1985	Ayrton Senna	BR	1.5 Lotus 97T Renault t/c	Francorchamps					
1986	Nigel Mansell	GB	1.5 Williams FW11 Honda t/c	Francorchamps					
1987	Alain Prost	F	1.5 McLaren MP4/3 TAG t/c	Francorchamps					
1988	Ayrton Senna	BR	1.5 McLaren MP4/4 Honda t/c	Francorchamps					
1989	Ayrton Senna	BR	3.5 McLaren MP4/4 Honda V10						



monza

Coca Cola Gran Premio d'Italia, 7-9 Settembre

MONZA. EVEN THE NAME SENDS TINGLES DOWN THE SPINE. IT IS A PLACE OF LEGEND, A TRACK WHERE THE GHOSTS HAUNT THE PARKLAND. IF THERE IS A HEAVEN FOR MOTOR RACING FANS, MONZA WILL BE THERE. WHEN THE FERRARI FANS, THE TIFOSI, PACK INTO THE GRANDSTANDS AND CLIMB THE TREES, IT BUZZES WITH EXCITEMENT. AN EXCITEMENT SUGGESTING

THAT NOTHING IS
IMPOSSIBLE. ANYTHING
CAN HAPPEN. HAVING
SAID THAT MONZA CAN
BE A REAL PAIN IN THE
NECK. THE ITALIANS
HAVE THEIR OWN WAY



OF DEALING WITH THE WORLD. THE LATIN TEMPERAMENT IS NOT ALWAYS EASY TO UNDERSTAND. SOME FOREIGN VISITORS LOVE MONZA, SOME HATE IT - AND SOME DO BOTH AT THE SAME TIME. EVERYBODY REACTS TO IT...

Previous pages: the tifosi adore lion' Nigel – at least while he still drives one of the red cars. Senna pops another winner's bottle of champagne.

IMPRESSIONS

he race itself wasn't the best. Ayrton
Senna started from a remarkable 49th
pole position and took a lights to flag
win, to record his 26th victory, his
first at Monza. There were two other equally
newsworthy items: Derek Warwick's massive
accident and the much-acclaimed reconciliation
between Prost and Senna at the post-race
press conference.

Warwick started twelfth, and had overtaken teammate Donnelly to run eleventh behind Gugelmin through the 150mph Parabolica at the end of lap one. 'I was too close to him,' said Warwick. 'I lost frontal downforce and couldn't lift off. The car started to understeer and as soon as I touched the grass the car went into the barriers.'

Derek was a passenger as the car hit the barrier, which although protected by polystyrene, did little to lessen an incredible but angled impact. The car was then launched back onto the track, crashing upside where it slid for around 200 yards. Almost immediately, the blue and white crash helmet of Warwick emerged and within seconds he was running down the pitlane, the spare car and to a lesser extent his now damaged new helmet the only things on his mind.

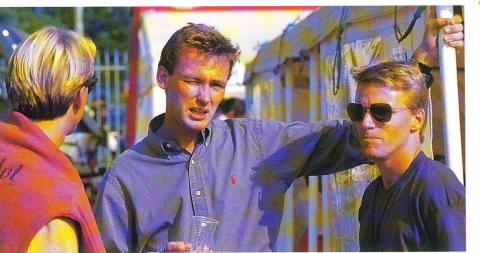
Few people realised that the new fuel tank legislation following Berger's accident at Imola had been instrumental in preventing Warwick's car from bursting into flames. Now flexible fuel tanks have to be twice as thick as those used last season.

Warwick's determination to get back into a race car was commendable. Here was a real racer.

Below: Onyx refugees, Lehto,

Gachot and Johanson

compare notes.



How many other drivers, after such an accident, would have shown such insistence to race? Quite whether he was in the right mental state was up to the medical team, but no one could have anything but admiration for the driver's eagerness to do his job.

At the end of a relatively orderly race, the post-race press conference saw Senna and Prost appreciate one another's presence and talents for the first time in 18 months, to the great delight of those present.

The reconciliation had come via a question from journalist Carlo Marincovich who asked why they didn't talk to one another, why they didn't 'make up'. Senna began the reply by saying that 'we share the same passion. I don't want to think about what happened last year. When he (Prost) is able to say that this is the true wish of his heart, I won't have any problem. I will accept his hand shake.'

Alain agreed that Ayrton was right. 'Let's forget whatever happened. I think it would be very very nice if from today, for the last four races, we shake hands. We are professionals, and if I am on the front row with Ayrton I know that I won't have a problem on the track. I think it's a shame for us, because our image is not the one that we deserve. So if he agrees...'

At this point, Prost stood up and they shook hands and clapped one another on the shoulder to considerable applause.

BRIGHT SPARKS

Grand Prix in Italy is always an emotional event. Drivers are hailed as heros, provided they and their teams don't threaten Ferrari. Berger was cheered as a hero at Ferrari, and booed as a threat at McLaren. Anyone stepping from a wreck is applauded; Mansell was cheered as the Lion of England, in spite of the controversy that had surrounded his retirement from the Belgian Grand Prix.

Senna was variously booed and cheered. No one could but admire the way that he took pole position. He had a lousy day on Saturday. He was worried about his Honda engine on Friday, the unit had been changed overnight but then refused to run cleanly the next day. Finally, it was decided to change the engine back to the original



unit as it was the only one available. Meanwhile Senna used the spare car, which was set up for Berger both mechanically and physically.

Pole, said Senna afterwards, was important because of the hype that surrounded it. He scarcely considered sacrificing this second qualifying session to run on race tyres. They had tested here and it was just a matter of fine tuning, although after the race Senna still confessed that neither he nor Berger were able to get their cars right, until perhaps just before the race.

Senna took two sets of qualifiers, using his first set for two separate half laps as the car still wasn't right, the first time because of a set-up problem. Finally, at the end of the session, after waiting for traffic to die down, he went out for a quick, remarkable lap which saw him beat Prost and his own teammate by 0.4s.

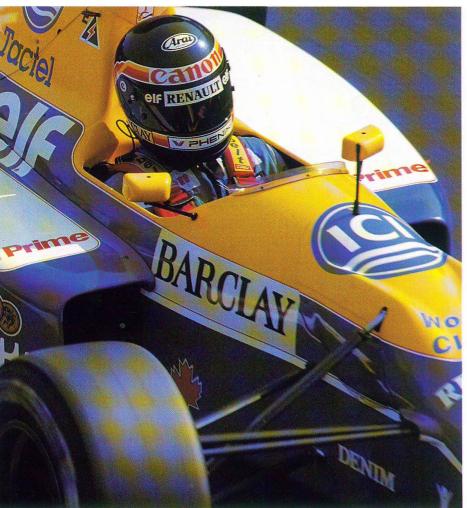
In the race, he made the right choice of Goodyear's softer B compound tyre, after putting together a set-up that, as he said, put some pace and equilibrium into the car. The brakes were also on the limit. He raced on the limit of his car's performance: 'lap after lap, corner after corner, using to the maximum the performance from brakes, tyres, engines.'

Prost pushed as hard as he could, very much aware that this was a race that he had to win and

Clockwise from above: the trouble was a misbehaving throttle return spring. A lonely race for Mansell. Another McLaren hoarding!







he maintained constant pressure, in spite of two mediocre starts. He felt originally that Goodyear's A was the right compound, yet by the race he found that the track conditions were completely different, and that he now had severe understeer.

In both starts he was overtaken by Alesi who had qualified an amazing fifth on this power

circuit and was pressuring the McLarens for the first four laps. The fact that he then fell off didn't do his current political situation a great deal of good.

Teammate Nakajima, however, scooped the final World Championship point although both Leyton Houses had been in the reckoning for that honour after Gugelmin had qualified a more than promising tenth. However, his engine went in a big way and after teammate Capelli replaced him he was sixth for five laps until his engine cut out.

So Nakajima took the final point, with team designer Harvey Postlethwaite pleased at the progress made between Pirelli's tyres and the Tyrrell chassis.

RACE DEBRIEF

t wasn't only the new pit complex that brought Monza into the 20th century, but also a general tidying up of all the facilities. Even the ageing main grandstand had a paint job for the first time in years. The very smart new pit complex, with its huge garages and extremely comfortable, well-equipped media centre above and hospitality suites was much-appreciated.

Pre-qualifying went the predictable way, even though fastest man Olivier Grouillard set his time in the spare Osella after a suspension failure. Bertrand Gachot was an extremely competitive second quickest with a time that would have put him into the race, but he was never that quick again. The AGS drivers joined these two, but Moreno again missed out, this time by 0.6s.

The weather wasn't nearly as hot as usual, although the cool mornings under hazy sun



Clockwise from left: Gugelmin spoils the symmetry. A missed gear shift ended Pirro's race. An upside down moment could not deter Warwick. Unsettled Williams driver - DNF.

eventually gave way to warmer afternoons. Even so, 12 drivers never improved on the second day of qualifying. Senna, Mansell and Berger all beat the previous qualifying record on the first day, and Prost beat it on the second day. Both teams were using their 'top end power' engine, with Ferrari's rev limit slightly raised, but two broken engines in the first session didn't bode well. Fortunately Ferrari had a spare car for both its drivers and Mansell's time from that afternoon would stand for the two days, traffic and a run over the kerbs ensured that he wouldn't improve. Prost did go quicker even though the performance

of his Goodyear qualifying tyres varied from session to session.

Alesi was a remarkable fifth, the Hart-tuned V8 Cosworth managing to power Tyrrell's 019 better than both Williams-Renaults and the Benetton-Fords. However, Alesi had a couple of scary runs over the kerbs which left the car running on its belly and the driver not in control.

Both Williams and Benetton had one driver improve on Saturday. Boutsen went quicker even though he was in the spare Williams after his own suffered an electrical failure in the morning. Benetton's drivers did their usual trick of taking soft race tyres and Nannini went quicker in both Saturday sessions in spite of traffic. Piquet had a couple of niggling problems and ended up ninth.

Best of the rest was Gugelmin in spite of blowing an engine on Saturday morning. Lotus looked better than of late, although Donnelly was happier with his car's balance than Warwick.







Bernard was disappointed not to be quicker, while Suzuki had a dramatic two days with a brace of spectacular spins into sand traps, one of which resulted in a damaged monocoque.

The McLaren-versus-Ferrari pattern was continued in the warm-up as a huge crowd began to pack the circuit. Senna was fine tuning his McLaren and second to Prost by just hundredths of a second. Nannini and Boutsen in third and fourth suggested the battle could go four ways.

Tyre choice was going to be critical, it was said. Prost, Mansell, Berger and Boutsen were all on the harder As, Senna, Patrese and the Benettons were on the softer Bs. When they got away for the first time Prost made a poor start and was passed by Berger into the first chicane, and then Alesi by the second. At the end of the first lap however, Warwick had his horrific accident causing the race to be stopped.

Although Prost made a better getaway next time round, the result was the same, although to

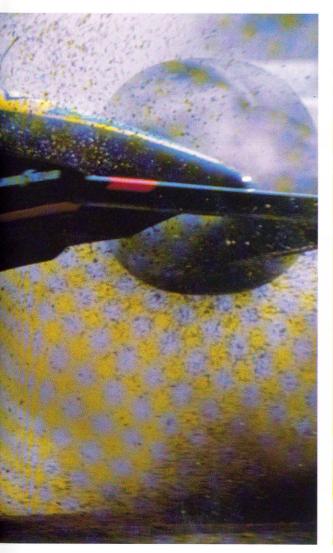
overtake him, Alesi had to brake 'very, very, very, very late' according to the Ferrari driver. Alesi then proceeded to put a lot of pressure on the McLarens but only for four laps. On the fifth 'I braked too late into the first chicane, hit the kerb, slid sideways and that was it.'

Prost, with Mansell in his wake, then left his teammate behind and caught up the McLarens ahead, where Senna was maintaining a pace that was soon too much for Berger. 'I was having to pump the brakes at each braking point,' explained the Austrian.

Behind Mansell came Nannini who had managed to overtake Patrese and had left the Williams driver to cope with his own teammate and Piquet. Boutsen was somewhat frustrated not to be able to overtake his teammate, as they were running different set-ups, but the Belgian stopped anyway on lap 19 with a rear suspension failure.

One lap later, Berger had managed to pull out a 14 second gap to Prost. Then mysteriously,

Clockwise from below: Caffi banking on fancy footwork for next year. The great flying Suzuki. Flag to flag victory for number 27.







Above: reflections in Monza's
fantastic new pit complex.
Right: Alain's attempts to
impress his new 'home' fans
ended early - although at the
end the tifosi cheered for
their number one.
Far left: Prost's Ferrari didn't
miss a beat despite a flash
from the exhaust.

the Frenchman came round in second place ahead of the Austrian. 'I didn't pump the brake enough one time,' said the Austrian, 'and when I started to brake the pedal just went straight to the floor. I was able to turn in very late, but I was slow through the corner, and Alain just came past me on my way out again.'

They hadn't yet reached half distance, but the finishing positions were effectively decided. For the rest of the race, Senna would also cope with a brake problem but would be able to maintain a healthy gap over Prost. For most of the race it varied from 8.5s to 5.1s, the pair trading fastest race laps throughout. Late in the race, Prost came on de Cesaris trying to overtake Alboreto, and while the Arrows driver had a healthy respect for the front runners, the BMS Dallara employee ran to form and held up Prost to such an extent that he lost 3.2s in one lap. Even so, Senna eased up sufficiently for the gap

to run out at six seconds at the end. Berger got fairly close to Prost when he was delayed, but he was never really on terms with the Ferrari driver again. He was sure that his teammate's tyre choice was better than his anyway.

After a fastest race lap on lap 12, Mansell had to ease up with a throttle return problem,





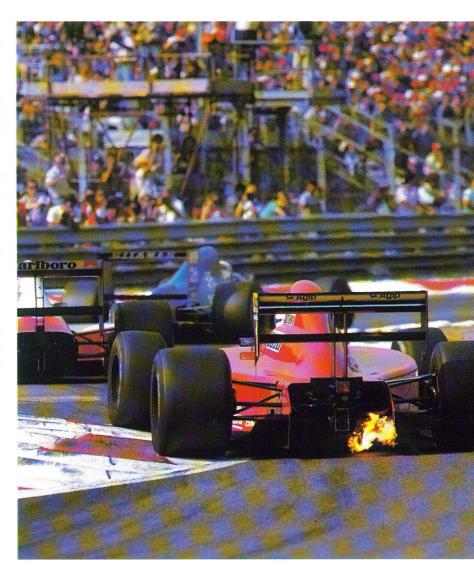
bringing the accelerator back with his foot on each occasion and not really wanting to race flat out, he ran to a lacklustre fourth, but was at least happy to finish for the first time in six races.

The Benettons of Nannini and Piquet sandwiched Patrese's Williams until lap 30, but then Nannini suffered tyre trouble and slowed dramatically, allowing even Piquet to overtake. The Brazilian promptly had a puncture, and as he eased off to head for the pits, so Nannini drove past, also heading for the pits. The Italian had a clutch problem and had to stop the engine and start it again, while Piquet had to wait for all this to finish before he got his tyres. Consequently they were well back and never able to recover, leaving Patrese to finish fifth.

Either of the Leyton Houses might have been next but instead it was Nakajima who picked up the final point, thankfully missing a spinning Alboreto on the last lap.

MILESTONES

- Alesi's 20th Grand Prix
- Martini's 50th Grand Prix
- Capelli's 60th Grand Prix
- Donnelly's equal best grid position
- Honda's 150th start
- Senna's 26th win, 49th pole and first Italian GP win







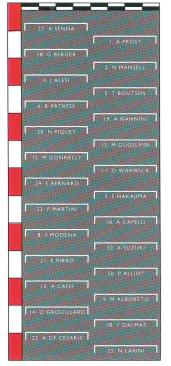


monza

12

Coca Cola Gran Premio d'Italia, 7-9 Settembre

os	Driver/Nationality		No.	Car/Engine	P.Q. (cloudy, cool)	Practice I (warm, hazy)	Practice 2 (warmer, haz,		Laps	Time/Retirement (warm, sunny)
	A. Senna	BR	27	McLaren MP4/5B Honda V10	TENAT M	1:22.972	1:22.533	1:27.396 (2)	53	1hr17m57.878
2	A. Prost	F	1	Ferrari 641 Ferrari V12		1:23.497	1:22.935	1:27.320 (1)	53	Ihr18m03.932
3	G. Berger	Α	28	McLaren MP4/5B Honda V10		1:23.239	1:22.936	1:28.458 (5)	53	1hr18m05.282
4	N. Mansell	GB	2	Ferrari 641 Ferrari V12		1:23.141	1:23.720	1:28.896 (7)	53	1hr18m54.097
5	R. Patrese	1	6	Williams FW13B Renault V10		1:24.253	1:24.555	1:29.892 (12)	53	Ihr19m23.152
6	S. Nakajima		3	Tyrrell 019 Ford DFR V8		1:26.449	1:26.081	1:30.521 (13)	52	Ihr18m29.399
7	N. Piquet	BR	20	Benetton B190 Ford HB V8		1:24.699	1:24.987	1:28.727 (6)	52	Ihr18m47.214
8	A. Nannini	1	19	Benetton B190 Ford HB V8		1:25.567	1:24.583	1:28.225 (3)	52	Ihr19m17.059
9	A. Caffi	1	10	Arrows AIIB Ford DFR V8	在宣言的任任	1:27.828	1:27.410	1:32.178 (25)	51	Ihr18m02.417
10	A. de Cesaris	1	22	Dallara BMS 190 Ford DFR V8		1:27.772	1:27.749	1:32.024 (24)	51	Ihr18m13.845
11	N. Larini	- 1	25	Ligier S33B Ford DFR V8		1:28.626	1:27.937	1:32.513 (26)	51	1hr18m45.345
12	M. Alboreto	1	9	Arrows AIIB Ford DFR V8		1:27.784	1:27.448	1:30.752 (18)	50	spun stalled
13	P. Alliot	F	26	Ligier JS33B Ford DFR V8		1:27.153	1:27.043	1:31.368 (20)	50	Ihr19m22.064
14	Y. Dalmas	F	18	AGS Ford DFR V8	1:28.132	1:28.565	1:27.673	1:30.683 (16)	45	Ihr18m19.325
15	I. Capelli	1	16	Leyton House CG901 Judd V8		1:26.712	1:26.735	1:30.663 (15)	35	fuel pump
16	A. Suzuki	1	30	Lola 90 Lamborghini V12		1:27.074	1:26.962	1:30.551 (14)	36	electrics
17	O. Grouillard	F	14	Osella FAIME Ford DFR V8	1:26.947	1:27.541	1:28.228	1:31.395 (22)	27	rear wheel bearing
18	M. Gugelmin	BR	15	Leyton House CG901 Judd V8		1:26.170	1:25.556	1:29.616 (10)	24	engine
19	S. Modena	1	8	Brabham BT59 Judd V8		1:26.950	1:27.997	1:31,116 (19)	21	valve
20	T. Boutsen	В	5	Williams FW13B Renault V10		1:24.042	1:23.984	1:28.361 (5)	18	rear suspension
21	D. Warwick	GB	- 11	Lotus 102 Lamborghini V12		1:25.728	1:25.677	1:29.780 (11)	15	clutch
22	E. Pirro	1	21	Dallara BMS 190 Ford DFR V8		1:27.790	1:26.964	1:31.526 (23)	14	geárbox/spin
23	M. Donnelly	GB	12	Lotus 102 Lamborghini V12		1:26.110	1:25.629	1:29.503 (9)	13	engine
24	E. Bernard	F	29	Lola 90 Lamborghini V12		1:25.927	1:26.154	1:32.513 (26)	10	gearbox
25	P. Martini	1	23	Minardi M190 Ford DFR V8		1:26.330	1:26.516	1:30.735 (17)	7	rear suspension
26	J. Alesi	F	4	Tyrrell 019 Ford DFR V8	. 4. J. 9. J	1:24.159	1:23.526	1:29.137 (8)	4	spun stalled
27	G. Tarquini		17	AGS S25 Ford DFR V8	1:27.773	1:28.107	1:28.256	DNQ		
28	P. Barilla		24	Minardi M190 Ford DFR V8		1:28.258	1:28.521	DNO		
29	D. Brabham	AUS	7	Brabham BT59 Judd V8		1:28.382	1:30.446	DNO		
30	B. Gachot	В	31	Coloni C3B Ford DFR V8	1:27:594	1:28.952	1:30.140	DNQ		
	R. Moreno	BR	33	Eurobrun ER 189 Judd V8	1:28.703	DNPQ	DNPQ			at 180 at 1805
	C. Langes	1	34	Eurobrun ER 189 Judd V8	1:35.061	DNPQ	DNPQ			
_	B. Giacomelli	1	39	Life F190 Life W12	1:55.244	DNPO	DNPO			





	LAP CHART
	LAF CHART
Grid Order	1 2 3 4 5 6 7 8 9 10 11 '2 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 5
27 A. Senna	ב זב עב זב
A. Prost	28 28 28 28 28 28 28 28 28 28 28 28 28 2
28 G.Berger	4 4 4 4 1
2 N. Mansell	1 1 1 1 1 1 1 1
4 J. Alesi	2 2 2 2 19 19 19 19 19 19 19 19 19 19 19 19 19
5 T. Boutsen	6 6 6 19 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
6 R Patrese	5 9 9 6 5 5 5 5 5 5 5 5 5
19 A. Nannini	19 5 5 5 20 20 20 20 20 20 20 20 20 20 20 20 20
20 N. Piquet	20 20 20 20 15 15 15 15 15 15 15 15 15 15 15 15 15
IS M. Gugelmin	15 5 5 5 12 12 12 12 12
12 M. Donnelly	12 12 12 12 29 29 29 29 29 11 11 16 3 3 3 3 30 30 30 30 30 10 10 10 10 10 10 10 10 10 10 10 22 22 22 22 22 22 22 22 22 22 22 22 22
II D. Warwick	29 29 29 11 11 11 11 11 11 16 16 11 30 30 30 30 30 10 10 10 10 10 9 9 9 9 9 9 9 9 9 9 9 9
29 E. Bernard	11 11 11 3 3 3 16 16 16 3 3 3 11 11 10 10 10 9 9 9 9 9 9 22 22 22 22 22 22 22 22 22
3 S. Nakajima	23 3 3 16 16 16 3 3 3 30 30 30 21 10 9 9 9 22 22 22 22 22 22 25 25 25 25 25 25 25
23 P. Martini	3 23 16 16 30 30 30 30 30 30 21 21 21 10 9 22 22 22 14 8 8 25 25 25 26 14 14 26 26 26 26 26 26 26 26 26 26
16 I. Capelli	16 16 30 30 23 23 23 21 21 21 10 10 10 9 14 14 14 14 8 14 25 14 14 26 14 26 26 18 18 18 18 18 18 18 18 18 18
8 S. Modena	30 30 23 23 21 21 21 10 10 10 9 9 9 14 22 8 8 8 25 25 14 26 26 14 18 18 18
30 A. Suzuki	21 21 21 10 10 10 9 9 9 14 14 14 22 8 25 25 25 26 26 18 18 18
2 E. Pirro	10 10 10 10 9 9 9 14 14 14 22 22 22 8 25 26 26 18 18 18
26 P. Alliot	9 9 9 18 14 14 22 22 22 8 8 8 25 26 18 18 18
10 A. Caffi	14 14 14 14 22 22 8 8 8 25 25 26 18
9 M. Alboreto	18 18 18 12 25 8 25 25 26 26 26 18
14 O. Grouillard	26 22 22 22 25 8 25 26 26 26 18 18 18
18 Y. Dalmas	22 25 25 25 8 26 26 8 8 8
22 A. de Cesaris	25 26 8 8 26 18 18
25 N. Larini	8 8 26 26

FASTEST LAPS						
Pos.	Car	No./Driver/Team	Time			
I	27	A. Senna/McLaren	1:26.254			
2	1	A. Prost/Ferrari	1:26.376			
3	28	G. Berger/McLaren	1:26.650			
4	2	N. Mansell/Ferrari	1:27.776			
5	20	N. Piquet/Benetton	1:27.882			
6	19	A. Nannini/Benetton	1:28.483			
7	6	R. Patrese/Williams	1:28.608			
8	5	T. Boutsen/Williams	1:28.672			
9	3	S. Nakajima/Tyrrell	1:28.777			
10	16	I. Capelli/Leyton House	1:29.112			
11	30	A. Suzuki/Lola	1:29.138			
12	15	M. Gugelmin/Leyton House	1:29.298			
13	4	. Alesi/Tyrrell	1:29.386			
14	22	A. de Cesaris/Dallara	1:29.750			
15	10	A. Caffi/Arrows	1:29.820			
16	14	Y. Dalmas/AGS	1:29.868			
17	12	M. Donnelly/Lotus	1:29.876			
18	29	E. Bernard/Lola	1:29.949			
19	9	M. Alboreto/Arrows	1:30.348			
20	11	D. Warwick/Lotus	1:30.521			
21	25	N. Larini/Ligier	1:30.640			
22	14	O. Grouillard/Osella	1:31.523			
23	21	E. Pirro/Dallara	1:31.668			
24	23	P. Martini/Minardi	1:31.740			
25	8	S. Modena/Brabham	1:32.025			
26	26	P. Alliot/Ligier	1:32.881			

	Drivers			Constructors	
Π	A. Senna	72 pts	- 1	McLaren Honda	109 pts
2	A. Prost	56 pts	2	Ferrari	72 pts
3	G. Berger	37 pts	3	Williams Renault	44 pt:
4	T. Boutsen	27 pts	4	Benetton Ford	40 pt:
5	N. Piquet	24 pts	5	Tyrrell Ford	15 pt:
6	R. Patrese	17 pts	6	Leyton House Judd	7 pts
7	A. Nannini	l6 pts	7	Larrousse	6 pts
	N. Mansell	16 pts	8	Lotus Lamborghini	3 pts
9	J. Alesi	13 pts	9	Arrows Ford	2 pt
10	l. Capelli	6 pts		Brabham Judd	2 pt
11	E. Bernard	5 pts			
12	D. Warwick	3 pts			
13	A. Caffi	2 pts			
	S. Modena	2 pts			
15	S. Nakajima	2 pts			
16	A. Suzuki	l pt			
	M. Gugelmin	l pt			

CHAMPIONSHIP POINTS

Existing qualifying lap record - 1987:

Nelson Piquet Williams Honda FW11B V6 turbo

1m23,460s 250.180kmh/155.455mph

Existing lap record -1987:
Ayrton Senna Lotus Honda 99T V6 turbo
1m26.769s 240.564kmh/149.480mph

PAST WINNERS								
Year	Driver	Nat.	Car	Circuit				
1979	Jody Scheckter	ZA	3.0 Ferrari 312T-4	Monza				
1980	Nelson Piquet	BR	3.0 Brabham BT49 Ford	Imola				
1981	Alain Prost	F	1.5 Renault RE30 t/c	Monza				
1982	René Arnoux	F	1.5 Renault RE30B t/c	Monza				
1983	Nelson Piquet	BR	1.5 Brabham BT52B BMW t/c	Monza				
1984	Niki Lauda	Α	1.5 McLaren MP4/2 TAG t/c	Monza				
1985	Alain Prost	F	1.5 McLaren MP4/2B TAG t/c	Monza				
1986	Nelson Piquet	BR	1.5 Williams FWII Honda t/c	Monza				
1987	Nelson Piquet	BR	1.5 Williams FW11B Honda t/c	Monza				
1988	Gerhard Berger	Α	1.5 Ferrari F1/87/88C t/c	Monza				
1989	Alain Prost	F	3.5 McLaren MP4/5 Honda VIO	Monza				



estoril

Grande Prémio de Portugal, 21-23 Setembro

REACHES ESTORIL, THE RIGOURS OF THE SEASON ARE BEGINNING TO AFFECT EVEN THE MOST HARDENED F1 OBSERVERS. THEY HAVE BEEN TRAVELLING VIRTUALLY NON-

STOP FOR THREE TIRING MONTHS.
ESTORIL IS A PLEASANT REFUGE, A
PLACE TO HAVE A FEW DAYS REST IN
THE HOLIDAY TOWNS OF CASCAIS
AND ESTORIL. AWAY FROM THE COAST,
UP IN THE ROCKY, BARREN HILLS ON
THE ROAD TO SINTRA IS THE
AUTODROME, CRAMMED INTO THE
SMALLEST POSSIBLE SPACE, A STRIP
OF ROAD TURNING BACK AND
FORWARD ON ITSELF. IT IS A TRACK

WHICH NEEDS A GOOD COMPROMISE OF SETTINGS; WHICH PROMOTES CLOSE RACING AND YET IT IS A PLACE WHERE OVERTAKING IS NOT TOO GREAT A PROBLEM. THE RACES AT ESTORIL ARE OFTEN JUST THAT — PURE RACES.

FOS'

Marlboro

Previous pages: the Osella team's usual earlier start proved fruitful this time. Rustic buildings line the undulating Estoril track.

IMPRESSIONS

errari won a battle but lost a war at Estoril, according to Alain Prost. The reigning World Champion was deeply upset by Nigel Mansell's extraordinary start when the Englishman veered across the track, effectively blocking his teammate as the McLarens swooped past on the left. It took front row men Mansell and Prost the rest of the race to re-establish themselves, which was fine for Mansell who led, but not so good for Prost back in third place.

The start, said the Frenchman, was crucial. He had worked on the Ferrari's acceleration and his start for two days at Fiorano prior to the race. For qualifying Ferrari had provided their drivers with what Mansell called the best engine he'd ever had from them, and they both started from the front row, Mansell ahead of Prost. However, Mansell's car had shot across the track at the start, blocking Prost and allowing Senna and Berger into the lead. Mansell was third, Piquet up to fourth and Prost back to fifth from second on the grid, even before they reached the first corner.

It then took virtually the whole race for the Ferrari men to fight back. Senna led, but never by much, acknowledging that the Ferraris and teammate Berger were quicker in the final corner. It was there that Mansell found the speed to get into the McLaren's slipstream on lap 49 and went down the inside of Senna into the first corner. The Brazilian was careful not to compromise himself in any way, given his championship standing, and allowed the Ferrari through. Prost overtook Piquet, and after a slow tyre stop found himself behind Nannini, passed him and caught the leading trio. Everything was going wrong, he said later, but he was delighted with his car, and even when it lost sixth gear he was still able to overtake Berger. He was right behind Senna on lap 59 when Alex Caffi and Aguri Suzuki collided, sending the Footwork Arrows canoning into the barrier. The little Italian suffered whiplash and an injured ankle and was proving difficult to extract from his car. This, combined with a limited run-off gave the clerk of the course no option but to stop the race.

Some said that we were robbed of the best



ten laps of Grand Prix racing for years. The first four were covered by 5.9s when the red flag came out. Could Prost have caught and passed Senna, 0.9s ahead? He didn't think so. It was a very depressed Prost in the press conference afterwards, not even wanting to discuss the championship. Mansell said he apologised to the Frenchman, but privately the World Champion wasn't impressed by anyone who not only blocked his own teammate but also let his chief rivals past. He criticised Ferrari for its lack of management in allowing the situation to arise in the first place. Senna was happy to finish second, even though he would have to drop scores so that only a second place would count from now on. For him the championship was still alive, he didn't feel that he'd won yet, even if Prost seemed to have virtually given up hope.

BRIGHT SPARKS

his thirteenth round of the World
Championship was very much Ferrari
versus McLaren from the start.
Williams, Benetton and Alesi would









Clockwise from top: successful pre-qualifier Dalmas. Nakajima before the flu attacked. Capelli checks disappointing times and resorts to the T car. Moreno foiled by Life in the fast lane.





only play supporting roles in an intensified fight for the championship. Later, Prost suggested that McLaren were tactically better prepared for this championship shoot-out than Ferrari. However, initially Ferrari showed the upper hand, almost as expected. With their stronger engines, they rapidly established themselves as strong challengers and then pole winners in qualifying. For while Senna and McLaren claimed Friday's overnight pole, Mansell came from behind in a fascinating and exciting tussle to claim his third pole position of the year, depriving Senna of his 50th. At times, the first three were covered by

Clockwise from top: Bernard impressed in qualifying - but retired on Sunday, while teammate Suzuki finished his race by colliding with Caffi. The crowd does not seem to support Alain. Mansell was typically bullish.



just hundredths of a second. There was no doubt that this was considered a vital race and would thus be extremely closely fought.

Ferrari, of course, effectively shot themselves in the foot at the start, but even so, they were able to fight back magnificently. After his initial faux pas, Mansell drove hard and fast, although he admitted he got very sideways just before his tyre stop which effectively allowed Prost up into third place.

Berger had to queue up behind Martini coming into the pits, and Prost's pit stop was disastrous. Mansell then found himself in second place, and played a patient, waiting game, whilst fathoming out where his advantage lay over Senna just a few yards ahead.

It paid dividends. He was consistently quicker in the faster corners, and closed on the Brazilian every time in the long final corner where drivers were pulling four G for as long as four seconds. On lap 49, as he set fastest lap of the race up to that juncture, he was able to take a run at Senna in the long final corner, and he was right in the slipstream as they began their lap. To Senna's credit, there was no fight back as there had been a year before. This time the Brazilian knew that it was vital that any placing in the top three should not be compromised, and he had already signalled to Mansell where he might overtake if he was close enough.

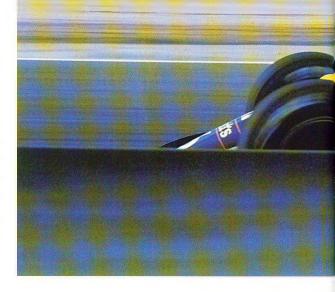
Mansell swept into the lead and instantly drew away. Indeed, Senna acknowledged that all three of the other front runners were quicker than he was on this day, so he was very pleased with second place.

Prost, however, was a potential threat as the race drew to a close. The Frenchman was delighted with his car, saying that it was getting better and better as the race progressed, his Goodyear Cs even picking up more and more grip. Even when he lost sixth gear ten laps before the chequered flag, he was still able to challenge and overtake Berger. According to Prost, however, he had little chance of overtaking Senna without sixth gear and when the chequered flag came out early, it effectively scuppered his chances of moving up a place. The cars were good, good enough to win, but not for Prost.

Of the rest, the Benettons were constantly in the shadow of the top four but never closer.



Williams lost Boutsen early on and Patrese made two stops for tyres, one very slow. Suzuki raced well again but a pit stop for tyres dropped both he and Alesi behind Caffi. The little Italian didn't stop for tyres however, and was in eighth place when Alesi came by and was searching for grip when Suzuki came up. It was a shame that the race should end in such a disastrous way for Alex, but thankfully his injuries were not serious, but bad enough to keep him out of the following weekend's Tio Pepe Spanish Grand Prix.



AIMEL

RACE DEBRIEF

t was a slightly cooler Portugal than usual, which is perhaps why the qualifying record went flying by nearly two seconds. The cool of Friday morning, however, was enlivened by the arrival of Life's now Judd engined machine, although it had taken all the previous night to fit the engine. Unfortunately the engine cover no longer fitted and this flew off so that Giacomelli's one lap was slow. Moreno found him on that lap which ruined one of his. When he came into the pits he was held up again, which denied him the chance of another lap. That sealed the EuroBrun driver's fate: non-pre-qualification for Moreno, while Grouillard, the AGS drivers and Gachot all made it.

Both qualifying sessions were thrilling. With

Clockwise from above:
handling problems, seized
engine and broken throttle
linkage add up to zero for
Warwick. An off colour
weekend for Williams and
Patrese. Sun shines down on
Senna - saved by the flag!
Modena at odds with
Alliot's Ligier.





just a few minutes of qualifying remaining on Friday, the first three were covered by just hundredths of a second. Then Senna went out and set his quick lap which put him 0.3s ahead of Prost, Berger and Mansell, all under the previous qualifying lap record. Patrese got into the 1m 14s next morning as well.

That afternoon Mansell set the pace in the 1m 13s. Senna, initially, could only get into the 1m 14s, and then Prost went quicker than his teammate. Senna and Berger were still in the 1m 14s when Mansell went 4/100ths quicker than his teammate, in spite of a nasty twitch under braking and getting high on the kerbs out of the final corner.

Mansell was already out on the circuit spectating when Senna's reply came but he need not have worried. The Brazilian, feeling his car better in race trim, was just 0.045s away from pole with Prost between him and Mansell, his fiftieth pole denied him. Berger was troubled by a new, but still recalcitrant gearbox, and never broke the 1m 14s but was still fourth, a second under the old lap record. Indeed, the old lap record would only have been good enough for tenth this year. Patrese was once again fifth, leading the supporting cast. Theoretically this circuit suited Williams, but in spite of testing at the Hungaroring they could only fight for fifth behind the McLarens and Ferraris. Patrese was consistently quicker than Boutsen, who spent much of his time in the spare car which suffered from less than ideal brakes.

Benetton's acknowledged position is between sixth and ninth and that's where they ended up. Once again, they worked hard on race set-up, even in qualifying when Piquet used the



spare car for his time. Nannini was upset by traffic, and ultimately used a mixed set of qualifiers for his quick time.

Alesi was between the Benetton pair but frustrated by traffic. Teammate Nakajima wasn't far behind on Friday, but then caught 'flu. He didn't drive on Saturday and was still unwell when he crashed in Sunday morning's warm-up. Consequently, he was withdrawn from his 20th place on the grid and only 25 cars started.

Eric Bernard completed the top ten once he had got over a spectacular fire on Friday morning



Above: Gerhard was as spectacular as ever but could only shadow the number one McLaren.

caused by an oil leak. With Suzuki just behind, it was clear that the cars were handling well and the drivers were pleased with the race set-up.

Ivan Capelli improved more than anyone from Friday to Saturday, using his unwell teammate's car for his quick lap. Pirro was competitive, but teammate de Cesaris was heavily criticised for not looking in his mirrors by Alliot with whom he had a heavy collision on Saturday. Donnelly hit a time barrier at 1m 16.7s, Martini slipped back with understeer, but the Arrows drivers improved dramatically once they had focused their attention on a qualifying set-up.

Sunday's warm-up saw Mansell quickest from Berger, then Prost and Senna calling for a

new engine to replace his misfiring unit. Tyrrell had a dramatic time not only with Nakajima crashing but with Alesi also going off due to brake troubles.

Mansell described his start, 'I gave it full throttle, spun the wheels and almost went straight into the pit wall and in doing so squeezed Alain out. That's the way the car pointed. It was probably the worst start of my career.'

As the Ferraris sorted themselves out, Senna and Berger swept past them into the lead with Mansell recovering for third place. Piquet nipped ahead of Prost for fourth, followed by Patrese, with Boutsen attacking Alesi. The only real changes were back there, as Alesi couldn't keep either Boutsen or Nannini behind for long, and by lap six, he was back in ninth place battling with Suzuki and Donnelly.

The order at the front, was more or less established: Senna from Berger and Mansell, then an ever widening gap to Piquet and Prost. However, on lap 14 the Ferrari finally got past the Benetton, and Prost began to chip away at the 4.9s gap between himself and Mansell ahead.

Senna never really had more than 1.6s lead over Berger, so that when Prost caught the leading trio on lap 25 of the 71 he was very much in touch with the leaders. There was now a gap to Piquet, the Williamses and Nannini, with Boutsen being the first to stop for tyres on that lap. Patrese had a slow stop on lap 27, but Piquet's was quicker. Mansell slid wide on the same lap and dropped to fourth, so pitted a lap later. Senna, closing on backmarkers, came in on lap 29. Prost had a slow stop on lap 30 and Berger was the last to stop, having to follow a slow Martini in on lap 31.

This left Senna with a 3.6s lead over Mansell who had overtaken both the delayed Berger (third) and Prost who was now behind the nonstopping Nannini in fifth place, although by lap 33 he had overtaken the Benetton. For a while the gaps didn't seem to vary significantly, but by lap 36 Mansell was on Senna's tail. There, however, he would stay, although the gaps would vary in traffic. Berger and Prost, meanwhile, were gaining on them. First, however, Mansell would make his move. Discovering that he was constantly quicker than Senna through the long fast, final corner, he got into the slipstream on lap

49 and nipped through at the start of lap 50. Instantly, he pulled away, although backmarkers again cut his lead. Indeed, he bundled Alliot into the armco when the Frenchman failed to see him and turned across him.

Senna had other things to worry about. Behind him Berger was challenging on lap 54 and Prost had joined in two laps later. On lap 59 Prost took Berger and was right behind Senna, but then lost time in traffic, at about the same



time that Caffi and Suzuki crashed.

The rest had been left far behind by the leaders. Nannini had soldiered on on his old tyres, but eventually decided to pit for new tyres on lap 52. At the same time Patrese came in for another set as he had four drivers ahead of him.

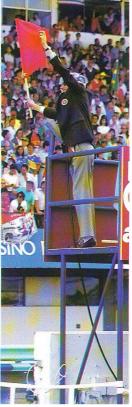
That left Piquet fifth, the rejoined Nannini sixth and Patrese still behind them in seventh place. Caffi, still on his original tyres was eighth, but he was then caught by an advancing Alesi already on new tyres, and also Suzuki. Alesi got past, but when Suzuki tried to do the same thing the two cars touched, sending Caffi's Arrows careering into the barrier. Caffi was injured as a result and as it was taking some time to carefully extract him, clerk of the course Roland Bruynserade decided to stop the race, declaring Mansell the winner from Senna, Prost and Berger. Although Prost said that his championship hopes had gone, Senna was still determined that the series wasn't won yet.

MILESTONES

- Pirro's 20th Grand Prix
- Alliot's 90th Grand Prix
- Life change to Judd V8 power
- Mansell equals Moss's 16 G.P. wins

Left: only one point for
Nannini. Below left: is Nigel
blocking? Below: ten laps early
the race is stopped with a red
flag - good for Senna, but not
so for Prost.







estoril

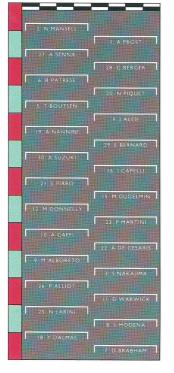
13

Grande Prémio de Portugal, 21-23 Setembro

os	Driver/Nationality		No.	Car/Engine	P.Q. (cool. clear)	Practice I (sunny, warm)	Practice 2	Warm-up (pos) (cloudy)	Laps	Time/Retirement (cloudy, some sun)
	N. Mansell	GB	2	Ferrari 641 Ferrari VI2	(cooi) cross)	1:14.861	1:13.557	1:18.435 (1)	61	1hr22m11.014
2	A. Senna	BR	27	McLaren MP4/5B Honda VIO		1:14.246	1:13.601	1:19.306	61	Ihr22m13.822
3	A. Prost	F	T	Ferrari 641 Ferrari VI2		1:14.530	1:13.595	1:19.160 (3)	61	Ihr22m15.203
4	G. Berger	Α	28	McLaren MP4/5B Honda VIO		1:14.552	1:14.292	1:19.091 (2)	61	Ihr22m16.910
5	N. Piquet	BR	20	Benetton B190 Ford HB V8		1:15.542	1:14.728	1:20.501 (9)	61	Ihr23m08.432
6	A. Nannini		19	Benetton B190 Ford HB V8		1:16.123	1:15.411	1:20.421 (8)	61	Ihr23m09.263
7	R. Patrese		6	Williams FW13B Renault V10		1:15.539	1:14.723	1:20.025 (5)	60	Ihr22m37.546
8	J. Alesi	F	4	Tyrrell 109 Ford DFR V8		1:16.092	1:15.122	1:21.293 (16)	60	Ihr23m06.547
9	M. Alboreto	1	9	Arrows AIIB Ford DFR V8		1:18.630	1:17.081	1:21.216 (12)	60	Ihr23m22.203
10	N. Larini		25	Ligier S33B Ford DFR V8		1:18.958	1:17.269	1:21.790 (20)	59	Ihr22m22.562
11	P. Martini	1	23	Minardi M190 Ford DFR V8		1:27.045	1:16.795	1:21.249 (14)	59	Ihr22m30.286
12	M. Gugelmin	BR	15	Leyton House CG901 Judd V8		1:17.569	1:16.296	1:21.254 (15)	59	Ihr22m55.788
13	A. Caffi	1	10	Arrows AIIB Ford DFR V8		1:18.725	1:16.946	1:21.535 (18)	58	collision
14	A. Suzuki		30	Lola 90 Lamborghini VI2		1:17.189	1:16.012	1:20.643 (10)	58	collision Caffi
15	E. Pirro	1	21	Dallara BMS 190 Ford DFR V8		1:17.653	1:16.290	1:22.472 (25)	58	Ihr22m27.233
16	P. Alliot	F	26	Ligier JS33B Ford DFR V8		1:17.330	1:17.120	1:21.356 (17)	52	collision Mansell
17	D. Brabham	AUS	7	Brabham BT59 Judd V8		1:18.967	1:17.715	1:21.820 (21)	52	3rd gear
18	I. Capelli	11	16	Leyton House CG901 Judd V8		1:18.242	1:16.284	1:21.964 (22)	51	conrod
19	T. Boutsen	В	5	Williams FW13B Renault V10		1:15.646	1:14.934	1:20.269 (7)	30	gearbox/engine
20	E. Bernard	F	29	Lola 90 Lamborghini V12		1:16.477	1:15.673	1:21.237 (13)	24	3/4th gears
21	S. Modena	1100	8	Brabham BT59 Judd V8		1:17.962	1:17.341	1:22.289 (23)	21	3rd gear
22	M. Donnelly	GB	12	Lotus 102 Lamborghini V12		1:17.414	1:16.762	1:20.184 (6)	14	alternator
23	D. Warwick	GB	-11	Lotus 102 Lamborghini V12		1:17.904	1:17.259	1:20.798 (11)	5	screw loose
24	Y. Dalmas	F	18	AGS JS25 Ford DFR V8	1:19.885	1:18.581	1:17.621	1:22.338 (24)	3	driveshaft
25	A. de Cesaris	1	22	Dallara BMS 190 Ford DFR V8		1:17.252	1:17.066	1:21.636 (19)	0	throttle stuck/spun
26	S. Nakajima	1	3	Tyrrell 109 Ford DFR V8		1:17.097	no time	no time		
27	O. Grouillard	F	14	Osella FAIME Ford DFR V8	1:19.394	1:18.512	1:17.775	DNQ		
28	P. Barilla	1 .	24	Minardi M190 Ford DFR V8	1:19.885	1:18.669	1:18.280	DNQ		
29	G. Tarquini	1	17	AGS JS25 Ford DFR V8	1:20.942	1:20.226	1:18.815	DNQ		
30	B. Gachot	В	31	Coloni C3B Ford DFR V8	1:20.000	1:20.662	1:20.516	DNQ		
-	R. Moreno	BR	33	Eurobrun ER 189 Judd V8	1:21.188	DNPQ	DNPQ			
-	C. Langes	1	34	Eurobrun ER 189 Judd V8	1:23,447	DNPO	DNPO			

Circuit Data: Autodromo do Estoril, length 2.703 miles/4.350 km, race distance 61 laps = 164.88 miles/265.350 km.

Notes: S. Nakajima did not start the race due to illness. Race stopped 10 laps early due to Caffi/Suzuki accident. Life now powered by Judd V8, arrived with car incomplete – not classified in pre-qualifying.





	LAD GUADT
	LAP CHART
Grid Order	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61
2 N. Mansell	מו מ
A. Prost	28 28 28 28 28 28 28 28 28 28 28 28 28 2
27 A. Senna	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
28 G.Berger	20 20 20 20 20 20 20 20 20 20 20 1 2 2 19 19 19 19 1
6 R Patrese	
20 N. Piquet	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
5 T. Boutsen	4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
4 J. Alesi	5 5 4 19 19 19 19 19 19 19 19 19 19 19 19 19
19 A. Nanníní	191919 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
29 E.Bernard	21 30 30 30 30 30 30 30 30 30 30 30 30 30
30 A. Suzuki	30 2 12 12 12 12 12 12 12
6 I. Capelli	12 21 21 21 21 21 21 21 21 21 21 21 21 2
21 E. Pirro	10 10 10 10 10 10 10 10 10 10 10 10 10 1
5 M. Gugelmin	16 16 16 16 16 16 16 16 16 16 16 29 29 29 29 29 29 29 29 29 29 29 29 29
12 M.Donnelly	9 29 29 29 29 29 29 29 29 29 29 9 9 9 9
23 P. Martini	29 9 9 9 9 9 9 9 9 9 9 9 23 23 23 23 15 15 15 15 15 15 15 15 23 23 23 23 23 23 23 23 23 23 23 23 23
0 A.Caffi	23 23 23 23 23 23 23 23 23 5 5 5 5 23 23 23 23 23 23 23 23 23 23 23 23 23
22 A. de Cesaris	11 11 23 23 15 15 15 15 15 15 15 15 26 26 26 26 26 26 26 26 26 26 26 26 26
9 M. Alboreto	15 15 15 15 26 26 26 26 26 26 26 25 25 25 25 25 25 25 25 25 25 25 25 27 7 7 7
26 P. Alliot	26 26 26 25 25 25 25 25 25 25 25 12 8 8 8 8 8 8 8 8 8 7 7 7 7
II D. Warwick	825 25 25 8 8 8 8 8 8 8 8 7 7 7 7 7 7 8
25 N. Larini	25 8 8 8 7 7 7 7 7 7 7 7 7 7 12
8 S. Modena	18 7 7 7 11
8 Y. Dalmas	7 18 18
7 D. Brabham	880

		FASTEST LAPS	
Pos.	Car	No./Driver/Team	Time
I	6	R. Patrese/Williams	1:18.306
2	19	A. Nannini/Benetton	1:18.355
3	1	A. Prost/Ferrari	1:18.396
4	28	G. Berger/McLaren	1:18.438
5	2	N. Mansell/Ferrari	1:18.577
6	27	A. Senna/McLaren	1:18.936
7	20	N. Piquet/Benetton	1:19.713
8	5	T. Boutsen/Williams	1:20.575
9	9	M. Albareto/Arrows	1:20,792
0	26	P. Alliot/Ligier	1:20.914
11	4	J. Alesi/Tyrrell	1:20.916
12	25	N. Larini/Ligier	1:20.958
13	23	P. Martini/Minardi	1:21.186
14	16	1. Capelli/Leyton House	1:21.623
15	10	A. Caffi/Arrows	1:21.843
16	15	M. Gugelmin/Leyton House	1:21.894
17	21	E. Pirro/Dallara	1:22.231
18	7	D. Brabham/Brabham	1:22.275
19	29	E. Bernard/Lola	1:22.434
20	12	M. Donnelly/Lotus	1:22.625
21	8	S. Modena/Brabham	1:23.232
22	1.0	D. Warwick/Lotus	1:23.510
23	18	Y. Dalmas/AGS	1:24.879

	Drivers			Constructors	
i	A. Senna	78 pts	1	McLaren Honda	118 pt:
2	A. Prost	60 pts	2	Ferrari	85 pt:
3	G. Berger	40 pts	3	Williams Renault	44 pt
4	T. Boutsen	27 pts	4	Benetton Ford	43 pt
5	N. Piquet	26 pts	5	Tyrrell Ford	15 pt:
6	N. Mansell	25 pts	6	Leyton House Judd	7 pts
7	R. Patrese	17 pts	7	Larrousse	6 pt
8	A. Nannini	17 pts	8	Lotus Lamborghini	3 pt
9	J. Alesi	13 pts	9	Arrows Ford	2 pt
10	1. Capelli	6 pts		Brabham Judd	2 pt
П	E. Bernard	5 pts		·	
12	D. Warwick	3 pts			
13	A. Caffi	2 pts			
	S. Modena	2 pts			
15	Nakajima	2 pts			
16	A. Suzuki	pt			
	M. Gugelmin	l pt			

Existing qualifying lap record - 1989:
Ayrton Senna McLaren Honda MP4/5B 3.5 V10
1m20.291s = 122kmh/117.515mph

Existing lap record - 1989:

Ayrton Senna McLaren Honda MP4/5B 3.5 V10

1m25.779s = 177.022kmh/109.996mph

PAST WINNERS								
Year	Driver	Nat.	Car	Circuit				
1958	Stirling Moss	GB	2.5 Vanwall	Oporto				
1959	Stirling Moss	GB	2.5 Cooper T51 Climax	Monsanto				
1960	Jack Brabham	AUS	2.5 Cooper T53 Climax	Oporto				
1984	Alain Prost	F	1.5 McLaren MP4/2 TAG t/c	Estoril				
1985	Ayrton Senna	BR	1.5 Lotus 97T Renault t/c	Estaril				
1986	Nigel Mansell	GB	1.5 Williams FWII Honda t/c	Estoril				
1987	Alain Prost	F	1.5 McLaren MP4/3 TAG t/c	Estoril				
1988	Alain Prost	F	1.5 McLaren MP4/4 Honda t/c	Estoril				
1989	Alain Prost	F	3.5 McLaren MP4/5 Honda VIO	Estoril				



jerez

Gran Premio Tio Pepe de España, 28-30 Septiembre

FROM ESTORIL THE FORMULA 1 TRUCKS AND MOTORHOMES HEAD QUICKLY SOUTHEAST, ACROSS THE MOUNTAINS INTO SPAIN, THROUGH THE OLIVE GROVES TO SEVILLE. SOUTH OF SEVILLE AND ACROSS THE DUSTY ANDALUSIAN PLAINS ARE THE SHERRY HILLS OF JEREZ AND IT IS HERE THAT THEY REGROUP FOR THE TIO PEPE SPANISH GRAND PRIX. THE JEREZ COMPLEX

IS MODERN, BUT DEVOID OF SOUL, AND FEW MAKE THE TRIP. THE LOCALS UNDERSTAND LITTLE OF GRAND PRIX RACING, LEAVING THE FICIRCUS TO PERFORM FOR ITS OWN ENJOYMENT, AND FOR



THE VAST TV AUDIENCE. SOULLESS OR NOT, JEREZ IS OFTEN AN IMPORTANT RACE, THE CHAMPIONSHIP IS USUALLY FINELY BALANCED AND THE LAST DRIVERS' CONTRACTS ARE IN NEGOTIATION FOR THE NEW SEASON.

Previous pages: the 'pretender',
Nannini drove his way onto the
podium. Senna was in the
wilderness this weekend.



IMPRESSIONS

he emotions that arose from the Tio Pepe Spanish Grand Prix were intense. Nobody who saw it, will forget the sight of Martin Donnelly, lying on the track after his horrific accident, and it dominated the weekend. Ayrton Senna's 50th pole position and the revival of Alain Prost's championship hopes with his 44th Grand Prix win were of sporting importance but counted for little in comparison to the young Ulsterman's miraculous survival. The accident happened in the 51st minute of the Friday afternoon qualifying session. Quite why Donnelly's Lotus suddenly went straight on at the flat-in-sixth 160 mph Enzo Ferrari corner may never be known: the evidence disintegrated when his Lotus hit the unprotected barrier at unremitting speed. Donnelly was thrown out of what was left, his belts still firmly attached to the bulkhead strapped to his back. The first that many of those at the circuit saw was the image from the ever-prying TV camera focused on the motionless driver lying on the road, one twisted leg protruding at an angle. No one touched him for what seemed like minutes, until caring, qualified hands felt for life. That they found it was amazing. Drivers, not normally given to assumption or exaggeration, gave no chance for survival, but gradually came the news that Donnelly was alive. The relief was felt as though he was unhurt; instead, he was still badly injured but that in itself was so much better than was at first feared. Two drivers, in particular, fought with their emotions after Donnelly's accident. Ayrton Senna admitted that he nearly didn't go out again. He needed to go away, sit by



himself and gather his thoughts. That he then went out and set what was nearly the fastest lap of the weekend was astounding, and the next day he claimed his 50th pole position.

Derek Warwick had talked to his Camel Lotus teammate in the medical centre. Even though the cause of the accident couldn't be pinpointed, designer Frank Dernie and race engineer Steve Hallam suggested two areas which were attended to overnight. Although Warwick was still uncertain as to whether he would practice the next day, he eventually did and qualified higher than he had managed all year.

Sunday's race became a Ferrari versus Senna tussle, the three having a showdown at the start

of lap 27 of the 73 as Prost caught Mansell and Senna accelerated out of the pits. Ferrari's finely gauged strategy had dictated an early stop for Mansell, and that Prost should stop on lap 26 and hope that he would find himself leading Senna when the Brazilian stopped. It worked, Mansell waved Prost ahead of him and Senna had to overtake Mansell. Once Piquet had slid wide and handed the Frenchman the lead, he never looked back. Sure, that was partially thanks to a tubular support stay off another car which punctured Senna's radiator and he simply dropped backwards out of contention but Ferrari



had come up with the right tactics this time.

Senna still led the series, but Prost was within a win of the Brazilian, and both would now have to start dropping scores. The championship would go to Japan.

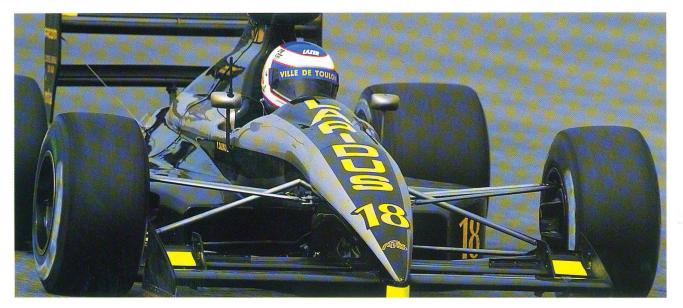
BRIGHT SPARKS

enna's 50th pole position amazed even himself. 'I think this pole is unbelievable for me,' he said. 'After yesterday's accident with Donnelly, which was a very sad moment for us all, I went to the place where he was lying and when I saw the consequences of the accident for myself it was very difficult to cope with, to maintain balance, to absorb it and to go forward from there. I thought about not running any more, but after I saw the incident there, I spent some minutes on my own in the motorhome and I was able to go through very special moments, getting everything together inside of me.'

'And I went on and did an amazing lap. It was unbelievable for me under the circumstances. As much as I can try and express my feelings, I don't think anybody will be able to understand and feel what I felt yesterday.'

That lap was almost good enough for pole, and after his mechanics worked on suspension problems the next day, Senna did go out, convinced that to take pole he would have to go much quicker. Suddenly, he was confronted by Piquet and Grouillard, side by side and apparently having some feud of their own. Amazingly, Senna was able to miss them and

Tap: Grouillard had no problems in pre-qualifying.
Centre: On -board with
Suzuki,the Larrousses
broadcast a drivers eye view.
Below: one of the two AGS's-both in the race for the first time this year- Dalmas finished ninth!





Clockwise from above: Warwick bravely challenges Gugelmin in another ten tenths drive.

Madena & Brabham had an unhappy weekend, while Larini recorded his best ever F1 finish. Spanish race fans will do anything to get a better view as Alesi's car is lifted from the sand trap, at the first corner.

complete his lap, which was an incredible 1.9s inside the qualifying lap record.

Prost made a great effort to get on terms with Senna, mindful that of all the circuits, this was the most difficult on which to pass. Having got onto the front row, he and the Ferrari team

plus teammate Mansell worked on a strategy which would win them the race. For 20 laps they harried Senna's McLaren until Mansell dropped off the tail end and pitted for his new tyres, again according to strategy.

It worked for Prost too, and when



teammate Mansell waved the reigning World Champion past, it was clear that vital lessons from the previous weekend had been learned and heeded. Once Piquet had slid wide, Prost was leading and when Senna retired, he was followed home by teammate Mansell. Suddenly Ferrari were 18 points behind McLaren in the Constructors series.

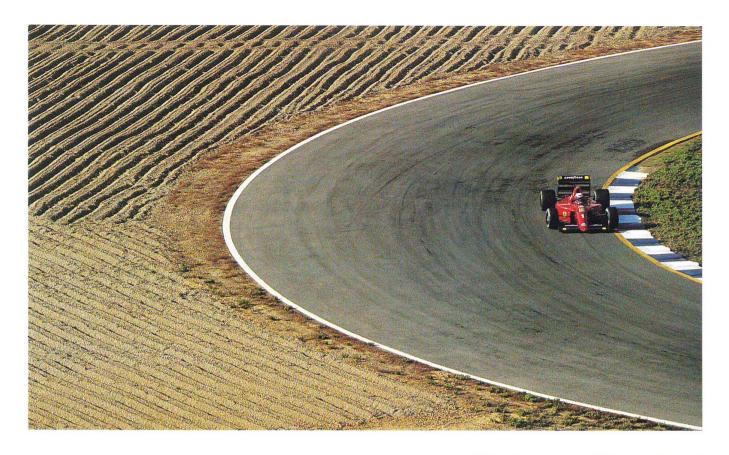
There were other noteworthy performances in Jerez. AGS, for instance, started two cars in a Grand Prix for the first time. The Leyton House cars looked as though they might score a point for a while. However, Capelli slipped back with a dead leg, and Gugelmin lost his clutch, allowing Aguri Suzuki to come charging through in another very solid performance from the Japanese driver. Derek Warwick had been there too, putting in another incredibly solid performance. Just three weeks after crawling from the wreckage of his car in Monza, he had seen his teammate seriously injured, had qualified tenth and better than ever so far this year, and had then raced hard with the Leyton House cars, Suzuki and Martini. But he'd been having trouble with second gear which he then lost altogether. Once he'd worked out a way to compensate, he was easily able to run as quickly as leader Prost, until the gearbox broke up altogether just ten laps from home.

RACE DEBRIEF

controversy following the lack of Ferrari tactics the previous weekend. Ferrari president Piero Fusaro held a press conference, and gave the team a pep talk, to underline that they would now all pull together to help Prost in the title race. There were grumblings about this elsewhere, but eventually it all worked out. Track action began 15 minutes late, on schedule however, as it was still dark. Sadly for Moreno, it was the same four who qualified as for the last few races, the Brazilian missing out by mere thousandths of a second.

That morning there were a few reminders that Jerez is not an easy circuit. Schneider, replacing the injured Caffi, crashed heavily but took the spare car, and Martini and Brabham collided, to the Minardi's expense. Even Senna had a brush with Capelli.

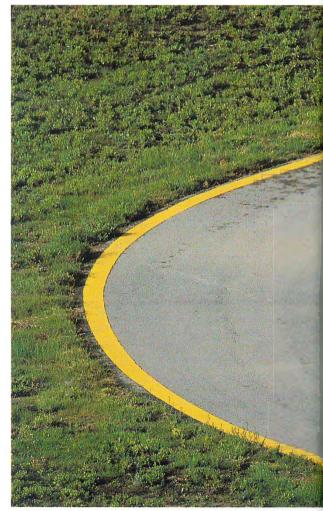




Clockwise from right: Patrese
was nearly driven round the
bend in his attempts to
catch the Ferrari driver.
Teammates: Nigel backed
his leader and still came in
second - Berger threw it away.
Senna - centre of attention.

The afternoon was dominated by Donnelly's accident and although Senna set a fantastic time, given the circumstances, everyone expected to go quicker again the next day. Alesi, third, was already amazing everyone, and the next morning he was fastest of all.

In the afternoon, Senna got pole position in spite of an incident with two slower cars, and teammate Berger was also in trouble, having to abort a lap when de Cesaris got in his way. After suffering gearbox trouble in the first run, he then had to wait for his third run, on used tyres, to set what turned out to be fifth fastest time with a run over kerbs when the grip went. Prost was pleased to be second quickest if he couldn't be on pole, appreciating that pole or the front row was vital to championship chances. He admitted to taking risks with engine and chassis set-up, but he was worried about the Ferrari's heavy steering. Mansell was next up, having given up the spare to Prost. However, he needed it during qualifying on the first day when an electrical fault stranded his car out on the circuit and the following morning he had an experimental engine to try. He said he was glad that Prost could do his own start ahead of him...



Alesi maintained his position within the top four. Having been 'absolutely on the limit' on Friday afternoon, he didn't think he could go any quicker but still improved the next day even though he used the spare as his race car's engine and brakes were slightly down on performance. Teammate Nakajima felt he could have improved on his 14th grid position, although this wasn't one of his ideal circuits.

The Williams pair were behind Berger in spite of progress on a circuit that should have suited them. Patrese was happy with his time, but Boutsen felt that he could have been quicker but for having to overtake two slower cars.

The Benettons started in what they considered to be the lower limits of their qualifying performance. Piquet set his eighth fastest time in the spare car while Nannini cured his car of understeer but made mistakes on both qualifying runs. His clutch wasn't right either.

It was Derek Warwick's decision to go ahead with qualifying and he did a remarkable

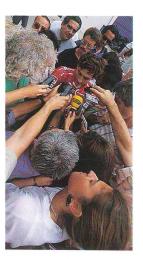




job. Behind him came Martini on a circuit which seemed to favour only some of the Pirelli runners, then came Gugelmin quicker than a troubled Capelli. Alliot went well again on this circuit while Larini was in the wars and the Lola pair looked as though they should have been higher on the grid than they were. After overnight rain, it was fresher and clearer on Sunday morning as the 25 cars went out in the warm-up. Prost was quickest from Senna, then Mansell and Berger. The Ferrari drivers had a choice of either throttle slides or butterflies, and Mansell wasn't happy with his slides. The Williamses weren't far away from Alliot, not on full tanks, then Warwick ahead of Bernard and Piquet. It was already warm as the cars lined up on the grid. Chez Goodyear, Berger and Piquet were on the harder Bs while everyone else was on Cs and it was a matter of deciding whether to stop once or twice for tyres. When the lights turned green, 'Ayrton got a little too much wheelspin and I made the better start, but not good enough to overcome the eight metre difference between our start positions,' said Prost. This allowed the McLaren straight into the lead.

Further back, Berger muscled out Alesi causing him to hit Patrese's front wing as he took to the grass. He eased up and Alesi found some road again, but he'd cut his left rear tyre on Patrese's front wing endplate so on trying to take the first corner, he slid wide onto the kerb, into the sandtrap and out of the race.

By the end of lap one Senna led Prost and then came Mansell, and within three laps these





Clockwise from above:

Berger succeeds in taking
himself out of the race - a
fortunate Benetton went onto
finish fourth. Little joy for
Latus in Spain - Warwick's
brave drive ended when the
gearbox exploded. Flags
flutter for Prost.

three had begun to edge away from Berger on his harder tyres. He had the Williamses (Boutsen from Patrese) and the Benettons (Piquet from Nannini) behind him, then Martini and Alliot, followed by Gugelmin and the Lolas, and this is how it remained for the first 20 laps.

Prost never relaxed his pressure on Senna. Once there was a second between them, but that's

all. Mansell dropped to 2.7s behind on one lap, but was rarely less than two seconds away either. Berger, however, was steadily dropping away with his escort of Williamses and Benettons, and then another gap opened up to Warwick and the rest. Mansell and Patrese were the first to stop on lap 20, followed by Berger and Nannini a lap later. Warwick stopped on lap 23, Prost and Boutsen on lap 25 and then Senna on lap 26. No one had a particularly long stop, but Prost was just catching Mansell as Senna accelerated out of the pits. Mansell waved past Prost under braking for the first corner, and suddenly had Senna diving down his inside as he turned in. It was very tight for a moment and there wasn't much room for Senna, but he got ahead.

Piquet hadn't stopped for tyres, and wasn't going to, and very soon Prost caught him. Thankfully for the Frenchman, the Brazilian went wide almost immediately, and Prost went through, but so too did Senna. The chase was on, we thought, yet even though Senna was second, the gap between leader Prost and his championship rival continued to rise until it was well over half a minute on lap 47. It dipped briefly but there was nothing that Senna could do. He thought his tyres were off, but much later



it was discovered that a tubular support stay off another car had punctured his righthand radiator, water was spilling onto the tyres, making his handling precarious.

Prost even had time to stop for tyres, and still retained the lead. From lap 45 Senna had Mansell challenging him. The Briton had come out of the pits suffering a tardy throttle return and had been unable to get by Piquet for many laps. Then the Brazilian had pitted with a flat battery, and Mansell was through.

When Senna went in for fresh tyres on lap 52 and the mechanics studiously ignored the trail of liquid left by the visiting McLaren, Mansell was up into second place, safe when Senna's overheating engine lit up its oil warning light and the Brazilian pulled off. A Ferrari one-two, Nannini was third, challenged briefly by Boutsen who had also made only one stop for tyres, but the pair were being closed on by Berger. However, he made an ill-judged attempt to overtake Boutsen, slid off and over the Williams front wheel and out of the race. Patrese made two stops to finish fifth, while Capelli, Gugelmin, Warwick and Suzuki might have taken sixth but all but the Japanese had problems and Suzuki was followed home by a hard-charging Larini.



MILESTONES

- Senna's 50th pole position
- Both AGS cars race for the first time
- Grouillard's 20th Grand Prix
- Modena and Gugelmin's 40th Grand Prix
- Larini 7th place his best ever finish
- Bernd Schneider replaces Alex Caffi
- Rory Byrne's last race with Benetton



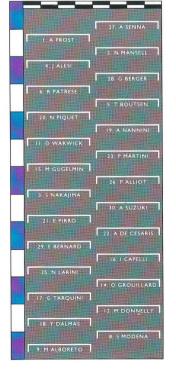


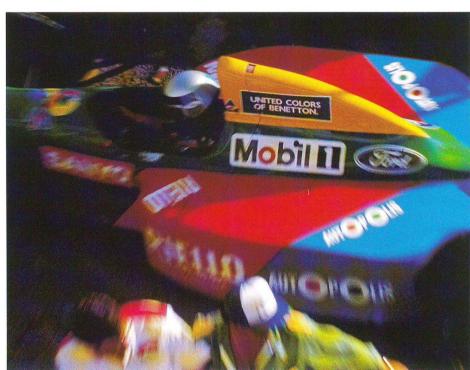
jerez

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Gran Premio Tio Pepe de España 28-30 Septiembre

os	Driver/Nationality		No.	Car/Engine	P.Q. (overcast, warm	Practice I (sunny, warm)	Practice 2 (hazy, sun)	Warm-up (pos) (sunny, warm)	Laps	Time/Retirement (sunny, hot)	
	A. Prost	F	ı	Ferrari 641 Ferrari VI2	_	1:20.026	1:18.824	1:23.637 (1)	73	Ihr48m01.461	
	N. Mansell	GB	2	Ferrari 641 Ferrari VI2	-	1:21.005	1:19.106	1:24.785 (3)	73	1hr48m23.525	
	A. Nannini	1	19	Benetton B190 Ford HB V8	-	1:21.383	1:20.367	1:27.444 (17)	73	Thr48m36.335	
	T. Boutsen	В	5	Williams FW13B Renault V10	-	1:20.721	1:19.689	1:25.695 (6)	73	Ihr48m44.757	
	R. Patrese	1	6	Williams FW13B Renault V10	-	1:20.562	1:19.647	1:25.465 (5)	73	1hr48m58.991	
	A. Suzuki	1	30	Lola 90 Lamborghini VI 2	_	1:21.740	1:21.244	1:27.216 (15)	73	1hr49m05.189	
	N. Larini	i	25	Ligier IS33C Ford DFR V8	-	1:23.290	1:21.996	1:26.586 (11)	72	1hr48m19.422	
	M. Gugelmin	BR	15	Leyton House CG901 Judd V8	_	1:23.019	1:21.167	1:27.552 (19)	72	1hr48m39.304	
	Y. Dalmas	F	18	AGS JH25 Ford DFR V8	1:22.470	1:23.249	1:22.716	1:27.116 (14)	72	Ihr49m03.585	
0	M. Alboreto	F	9	Arrows AIIB Ford DFR V8	-	1:24.043	1:23.161	1:27.838 (20)	71	1hr48m55.806	
1	D. Warwick	GB	-11	Lotus 102 Lamborghini VI2	-	1:22.111	1:20.610	1:25.996 (8)	63	gearbox	
2	I. Capelli	- 1	16	Leyton House CG901 Judd V8	-	1:23.866	1:21.910	1:28.517 (24)	59	cramp in leg	
3	G. Berger	Α	28	McLaren MP4/5B Honda VIO	_	1:19.643	1:19.618	1:24.928 (4)	56	collision Boutsen	
4	A. Senna	BR	27	McLaren MP4/5B Honda VIO	_	1:18.900	1:18.387	1:24.713 (2)	53	loss of coollant	
5	N. Piquet	BR	20	Benetton B190 Ford HB V8	-	1:21.111	1:19.700	1:26.346 (9)	47	alternator	
6	A. de Cesaris	1	22	Dallara BMS 190 Ford DFR V8	-	1:22.953	1:21.467	1:28.084 (22)	47	engine	
7	O. Grouillard	F	14	Osella FA I ME Ford DFR V8	1:22.708	1:24.784	1:22.288	1:27,474 (18)	45	wheel bearing	
8	P. Martini	1	23	Minardi M190 Ford DFR V8	_	1:22.255	1:21.060	1:26.901 (13)	41	wheel bearing	
9	P. Alliot	F	26	Ligier IS33B Ford DFR V8	-	1:23.783	1:21.170	1:25.735 (7)	22	spun	
0	E. Bernard	F	29	Lola 90 Lamborghini VI2	_	1:22,403	1:21.551	1:26.351 (10)	20	driveshaft	
1	S. Nakajima	1	3	Tyrrell 019 Ford DFR V8	-	1:22.690	1:21.215	1:27.433 (16)	13	spun	
2	G. Tarquini	í	17	AGS IH25 Ford DFR V8	1:22.592	1:23.260	1:22.466	1:28.430 (23)	5	collision: Dalmas	
3	S. Modena	- 1	8	Brabham 8T59 Judd V8	-	1:23.641	1:23.133	1:28.022 (21)	5	spun	
4	J. Alesi	F	4	Tyrrell 019 Ford DFR V8		1:19.923	1:19.604	1:26.899 (12)	0	spun	
6	M. Donnelly	GB	12	Lotus 102 Lamborghini V12	-	1:22.659	accident	no time		,	
7	D. Brabham	AUS	7	Brabham BT59 Judd V8		1:25.899	1:23.163	DNQ			
8	P. Barilla	-1	24	Minardi M190 Ford DFR V8	-	1:25.093	1:23,274	DNQ			
9	B. Schneider	G	10	Arrows AIIB Ford DFR V8	-	1:24.675	1:23.924	DNQ			
0	B. Gachot	В	31	Coloni C3C Ford DFR V8	1:24.603	1:26.593	1:25.114	DNQ			
	R. Moreno	BR	33	Eurobrun ER189 Judd V8	1:24.621	DNPQ	DNPQ				Ī
	C. Langes	1	34	Eurobrun ER 189 Judd V8	1:25.736	DNPQ	DNPQ				
	B. Giacomelli		39	Life L190 Judd V8	1:42.699	DNPQ	DNPQ				





	LAP CHART
Grid Order	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73
27 A. Senna	<u> </u>
I A. Prost	
2 N. Manseli	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
4 J. Alesi	28 28 28 28 28 28 28 28 28 28 28 28 28 2
28 G. Berger	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
6 R. Patrese	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
5 T. Boutsen	20 20 20 20 20 20 20 20 20 20 20 20 20 2
20 N. Piquet	19 19 19 19 19 19 19 19 19 19 19 19 19 1
19 A.Nannini	11 11 11 11 11 11 11 11 11 11 11 11 11
II D. Warwick	23 23 23 23 23 23 23 23 23 23 23 23 23 2
23 P. Martini	26 26 26 26 26 26 26 26 26 26 26 26 26 2
15 M. Gugelmin	15 15 15 15 15 15 15 15 15 15 15 15 15 1
26 P. Alliot	30 30 30 30 30 30 30 30 30 30 30 30 30 3
3 S. Nakajima	29 29 29 29 29 29 29 29 29 29 29 29 29 2
30 A.Suzuki	3 3 3 3 3 3 3 3 3 3 6 16 16 16 16 16 16 16 16 16 6 622 22 25 14 14 25 18 18 18 18 18 18 18 18 18 18 18 18 18
21 E. Pirro	22 22 22 22 22 22 22 16 16 3 3 3 22 22 22 22 22 22 22 22 22 25 25 14 25 25 18 14 14 14 14 14 14 14 14 14 14 14 14 14
22 A. de Cesaris	25 25 25 25 25 16 16 22 22 22 22 22 22 25 25 25 25 25 25 25
29 E.Bernard	16 16 16 16 16 16 25 25 25 25 25 25 25 24 14 14 14 14 14 18 18 9 9 9 22 22 22 22 22 22 22 22 22 22 22
16 I. Capelli	14 14 14 14 14 14 14 14 14 14 18 18 18 18 18 18 9 9
25 N.Larini	17 17 17 17 18 18 18 18 18 18 9 9 9 9 9 9
14 O. Grouillard	88889999999
17 G. Tarquini	9 9 18 18 18
18 Y. Dalmas	18 18 9 9 9
8 S. Modena	
9 M. Alboreto	

		FASTEST LAPS	
Pos.	Car	No./Driver/Team	Time
1	6	R. Patrese/Williams	1:24.513
2	20	N. Piquet/Benetton	1:25.095
3		A. Prost/Ferrari	1:25.177
4	25	N. Larini/Ligier	1:26.104
5	28	G. Berger/McLaren	1:26.250
6	11	D. Warwick/Lotus	1:26.252
7	19	A. Nannini/Benetton	1:26.599
8	15	M. Gugelmin/Leyton House	1:26.773
9	2	N. Mansell/Ferrari	1:26.957
10	30	A. Suzuki/Lola	1:27.158
11	5	T. Boutsen/Williams	1:27.206
12	27	A. Senna/McLaren	:27.430
13	18	Y. Dalmas/AGS	1:27.710
14	23	P. Martini/Minardi	1:28.314
15	16	I. Capelli/Leyton House	1:28.436
16	22	A. de Cesaris/Dallara	1:28.471
17	9	M. Alboreto/Arrows	1:28.712
18	29	E. Bernard/Lola	1:29.296
19	26	P. Alliot/Ligier	1:29.329
20	14	O. Grouillard/Osella	1:29.692
21	3	S. Nakajima/Tyrrell	1:30.347
22	17	G. Tarquini/AGS	1:31.062
23	8	S. Modena/Brabham	1:31.467

	Drivers			Constructors	
1	A. Senna	78 pts	1	McLaren Honda	18 pts
2	A. Prost	69 pts	2	Ferrari	100 pts
3	G. Berger	40 pts	3	Williams Renault	49 pts
4	N. Mansell	31 pts	4	Benetton Ford	47 pts
5	T. Boutsen	30 pts	5	Tyrrell Ford	15 pts
6	N. Piquet	26 pts	6	Larrousse	7 pts
7	A. Nannini	21 pts		Leyton House Judd	7 pts
8	R. Patrese	19 pts	8	Lotus Lamborghini	3 pts
9]. Alesi	13 pts	9	Arrows Ford	2 pts
10	I. Capelli	6 pts		Brabham Judd	2 pts
П	E. Bernard	5 pts		•	,
12	D. Warwick	3 pts			
13	A. Caffi	2 pts			
	S. Modena	2 pts			
15	A. Suzuki	2 pts			
	S. Nakajima	2 pts			
17	M. Gugelmin	l pt			

Existing qualifying lap record - 1989:
Ayrton Senna McLaren MP4/5 Honda 3.5 V10
1m15.468s = 207.505kmh/128.938mph

Gerhard Berger Ferrari 640 Ferrari 3.5 V12
1m18.986s = 198.263kmh/123.195mph

Year	Driver	Nat.	Car	Circuit
1975	ochen Mass	D	3.0 McLaren M23 Ford	Montjuich
976	James Hunt	GB	3.0 McLaren M23 Ford	larama
1977	Mario Andretti	USA	3.0 JPS/Lotus 78 Ford	larama
1978	Mario Andretti	USA	3.0 JPS/Lotus 79 Ford	larama
1979	Patrick Depailler	F	3.0 Ligier SI Ford	larama
1980	Alan Jones	AUS	3.0 Williams FW07B Ford	Jarama
1981	Gilles Villeneuve	CDN	1.5 Ferrari 126CK t/c	Jarama
1986	Ayrton Senna	BR	1.5 Lotus 96T Renault t/c	erez
1987	Nigel Mansell	GB	1.5 Williams FWIIB Honda t/c	lerez
1988	Alain Prost	F	1.5 McLaren MP4/4 Honda t/c	lerez
1989	Ayrton Senna	BR	3.5 McLaren MP4/5 Honda VIO	erez



suzuka

Fuji TV Japanese Grand Prix, 19-21 October

AFTER A SUMMER ON THE HIGHWAYS AND BYWAYS OF EUROPE, THE AUTUMN SEES FORMULA I TRANSPORTED ACROSS THE GLOBE TO JAPAN'S PREMIER CIRCUIT - SUZUKA. BUILT BY HONDA, IT IS NEXT TO AN AMUSEMENT PARK DEDICATED TO THE CULT OF THE AUTOMOBILE. LIKE MONTREAL THIS CREATES A STRANGE

FEELING WITH AMUSEMENT RIDES VISIBLE FROM THE TRACK, ITSELF UNUSUAL FOR IT'S ANTI-CLOCKWISE FIGURE-OF-EIGHT FORMAT. IT IS A PLACE FOR HIGH SPEEDS, NOTABLY THE



SLINGSHOT LEFT-HANDER GOING BACK TOWARDS THE PITS, FOLLOWED BY A TIGHT CHICANE. ANYTHING CAN HAPPEN HERE WITH CARS BRAKING HEAVILY ON OVERTAKING MANOEUVRES, AND WITH HONDA ON HOME GROUND THE HUGE CROWDS ARE NOTHING IF NOT PARTISAN...

Previous pages: united in
victory. Moreno embraces his
friend, mentor and driving
instructor, Piquet.
An acrimonious end to the
Championship was just
around the corner.



IMPRESSIONS

e were robbed; that was everyone's feeling as the remaining 22 cars set out on lap two of the Japanese Grand Prix to try and inject some interest into the next 52 laps. Everyone wanted to see a good, close battle for the championship, so that it might be kept open until Australia. As it was, Ayrton Senna was now unbeatable on points in the World Championship, and McLaren-Honda in a similar situation in the Constructors series.

The build-up to the Japanese Grand Prix had been huge both in terms of publicity and

preparation. Both Berger and Mansell were now firmly committed to helping their respective, Championship contending teammate. McLaren had brought a spare car for each driver, Honda had developed the Series 6 version of their engine: altered combustion chambers, reduced internal friction, two kilos lighter. Ferrari had also worked on the engine: more power throughout the rev range.

Practice had seen a great battle for pole with the two protagonists on the front row, and almost gratefully, their two teammates on row two. Senna was in typical pole winning form on the Saturday after problems the previous day,



Instead, he suffered wheel spin and Prost nipped straight into the lead. Prost turned into the first corner with Senna aiming to go inside him, but too far behind to have any right to the corner. Prost, for a split second, pulled left before resuming his line, and closed the door on Senna. However, the Brazilian was already committed. The McLaren hit the rear end of the Ferrari and they spun off into the sand traps and out of the race.

Why did Prost leave the door open, and why did Senna commit himself to the point where he said 'Prost made a big mistake to close the door when he knew I would go for the gap'? There was a strong sense of deja vu except this time the situation was reversed.

It didn't help the spectacle of motor racing, although stopping the race and restarting it might have solved that. However, there is nothing in the sporting code that would have warranted a stoppage as the cars were actually off the track, even though there was still some debris on the circuit.

Everyone was left feeling flat, empty and more astounded when Berger went off at the same corner a lap later. Mansell thought the race was his until he booted the car out of the pits and a universal joint broke. So Benetton scooped victory at Suzuka for the second year running, Nelson Piquet winning the duel with Williams, backed up superbly by a new teammate, Roberto Moreno. Another sometime 1990 pre-qualifier, Aguri Suzuki, delighted his home crowd with his, Japan's, Larrousse's and Lamborghini's first ever appearance on the rostrum.



Clockwise from above:
Gugelmin's Leyton House on
it's President's territory. Down
at heel, Alboreto had only De
Cesaris behind him on the
grid - roll on Porsche power.
Three firsts as Suzuki charges
to third place.

while Prost did marvels to get so close to the pole position ace, close enough to be tempted to suggest that perhaps he might have got pole after all.

Suggestions that the Ferraris were better than the McLarens in race conditions if not in qualifying were confirmed by a Mansell & Prost one-two in the warm-up. Ron Dennis couldn't believe that they were on full tanks.

So to the race. Senna said that the placing of pole position on the right side of the circuit contributed to the accident. It was the dirtier side of the track and he lobbied to have it changed to the cleaner left but the stewards didn't agree.



Below: parked McLaren and
Ferrari signalled the resurgence
of aff-track hostilities.
Opposite top to bottom:
Piquet's first win in over three
years is nearly thwarted by
the AGS. Both Lotuses
failed again but Formula 1
returnee Johnny Herbert
impressed. Boutsen never really
came out of his shell - only fifth
for the Williams Renault driver.

BRIGHT SPARKS

ou couldn't ignore the two championship-contending teams, nor the effort that they'd made. Although it was Berger who took provisional pole on the first day while Prost and Senna were second and third, what is almost the status quo of qualifying was restored the next day with Senna claiming pole position number 51. Prost's effort to get within 0.2s of him was understandably rewarding and it was working its way towards being the perfect championship battle. Prost was even saying that if nothing else, he knew that he would have no problems with Senna in a sporting sense...

Behind the leading quartet from the Ferrari and McLaren teams came Thierry Boutsen, happy that he had not only beaten his teammate but the likes of the delayed Alesi, the Benettons and the rest.

Yet one man was showing incredibly. Friday, October 12, 1990 will long be a day Roberto Moreno remembers. It was when he rang Walter Brun's office and was told that he wouldn't have to pre-qualify; the EuroBrun team was no longer in Formula One. It was also the day that he went down to Benetton to discuss some testing and was told the sad news that Alessandro Nannini had suffered a terrible injury in a helicopter accident and that he might replace him.

The Benetton team as a whole did Nannini proud. Piquet was sixth on the grid, where he had a chat via Italian TV to his teammate whom he wished a speedy recovery. However the Brazilian was ably backed up by the very capable Moreno in ninth place, and if his time on Saturday morning had been counted (and the track supposedly slower that session) then he would have bumped Piquet back a place.

Moreno then drove an immaculate race, shadowing his old friend Piquet all the way, and finishing just 7.9s behind him. He reported that he hadn't made any mistakes, and although he had admitted to slight lack of confidence, having not raced since Phoenix (1983, joked Piquet!) his performance was fantastic. After being reduced to tears by his accomplishment, Moreno, typically



dedicated his second place to Nannini whose work, he said, he was simply continuing, and his old mate Piquet who had put him on the road in the first place.

The first three were a happy bunch, and afterwards the ever jokey Piquet introduced the pair with whom he shared the rostrum, in case we didn't recognise them! Aguri Suzuki was just as deserving, for he has shown immense maturity this year, as he noted afterwards, 'only driving between eight and nine on Friday mornings' last season.

Suzuki started tenth, just one place lower than in Britain, and raced hard enough to overtake Derek Warwick and claim a place ahead of Patrese when the Italian stopped for tyres. Only Patrese's new tyres prevented Suzuki from claiming fastest lap as well. Of course, his compatriots were delighted, and they deserved to be. They had put on one of the best organised races of the year, and had then been prevented from enjoying the championship battle that they deserved, particularly after the previous year's controversy. But Suzuki's fine perfomance and Nakajima's sixth place nearly made up for it.

RACE DEBRIEF

here were absentees and returnees in the Japanese Grand Prix field. The long haul East had provoked a couple of Formula One withdrawals: EuroBrun had given up the unequal struggle, and Life had finally called enough. All of which meant that there were just four to pre-qualify, and as four go through anyway, pre-qualifying was cancelled. Ironically, none of the usual pre-qualifiers made it into the race this time.

EuroBrun's no-show meant that Roberto Moreno was free to drive for Benetton in place of the injured and much-missed Nannini. Johnny Herbert was making his Formula One return after a year of F3000 in Japan. He replaced the man who once replaced him, Martin Donnelly, who was making slow progress in hospital after his horrific crash at Jerez. Gianni Morbidelli had taken over from the non-qualifying Paolo Barilla in the Minardi team for the final two races and 1991.

Qualifying was just as thrilling as it should have been. Senna had a spin and lost 35 minutes













of the Friday morning session and then bottomed out badly on one qualifying lap in the afternoon. This left him only third with Berger pole and Prost between them. Mansell was fourth after losing one set of tyres when Alliot had the second of two accidents that day. Pirro, Gachot and Alesi also crashed, the latter straining his neck which later prevented him taking any further competitive part in the weekend.

On Saturday, the status quo was restored. Although the track seemed slower in the morning, Ayrton fulfilled his own prediction with a pole securing lap in the high 1m 36s with Prost only 0.2s behind, the pair theatrically setting their times right at the end of the session. Mansell and Berger had set their times a little earlier and would follow their teammates, happy to be on row two, although Berger was upset that Prost had blocked him at the start of his second qualifying lap.

Boutsen suffered vibration throughout the second day of qualifying but was pleased to have beaten everyone else. Patrese progressively lost power on Saturday and didn't improve, starting seventh, between the two Benettons when Alesi was withdrawn. Piquet improved by a whole second on Saturday even though he suffered a little understeer and heavy traffic. Teammate Moreno might have been higher than an already promising ninth but for changing the car after setting an excellent time on Saturday morning, never finding it as good as in qualifying trim.

A mechanical breakage was suspected of causing Alesi's accident on Friday afternoon, and although he attempted slow laps on the next two mornings, his strained neck was incredibly painful and he decided against racing. Teammate Nakajima lost the battle of the Japanese to Suzuki, finding it difficult to make his qualifiers last a full lap. Suzuki was a fine tenth in qualifying and started ninth. Teammate Bernard was disappointingly far back after his engine progressively lost power and he was held up by Martini's slower Minardi. The Italian was more effective than of late and he also suffered traffic problems while his teammate demonstrated the benefit of experience since his outings with Scuderia Italia earlier this year.

Warwick was disappointed that the progress made with the car over the weekend wasn't

reflected in his qualifying time, while new teammate Herbert incurred the stewards' wrath by rejoining the wrong way at the chicane. They took away his quickest time, but it made no difference to his grid position. Capelli looked quite promising, and although teammate Gugelmin had a number of problems he wasn't far behind. Larini and Pirro were quicker than their accident-prone teammates, although it was Pirro who hurt his leg in a big shunt in the quick corner after the straight. The Brabhams were in a lot of trouble, both engine and mechanical, while the Footwork Arrows drivers suffered a drive shaft breakage apiece.

The crowd, as usual, was huge and in the warm sun they saw Mansell and Prost head the warm-up times. The 25 cars then took up the grid positions, with Moreno changing to the spare when his own car engine missed for a second.

Senna was beaten off pole position immediately, but went for the inside line as Prost turned into the first corner. The pair collided and were gone, spinning wildly into the sand-trap. Further back in the chaos, the Arrows pair touched to the detriment of Alboreto's side pod. Alliot and Modena tangled, the suspension being ripped off the Brabham. Berger led Mansell by 2.9s at the end of the first lap, but was very quick into the first corner at the start of his second. Whether he found oil or just sand kicked up by the others is unclear, but he went spinning off into the sand-trap and both McLarens were out of the race. Now Mansell led the Benettons (Piquet & Moreno) and the Williamses (Boutsen & Patrese). Next came Warwick pushed by Suzuki, then Herbert, Nakajima and Bernard once he'd overtaken Pirro and Martini. Mansell gradually eased away from the Benettons, who in turn eased away from the Williamses, but Suzuki got past Warwick on lap seven. Herbert, Nakajima and Bernard made up a battling trio by lap nine and they were closing on Warwick.

Mansell had a five second lead over the Benettons by lap 20 when Boutsen became the first to stop for new tyres. It was a lengthy 13 second affair and he consequently lost out to both his teammate and to Suzuki's Larrousse. However, he was always going to be overtaken by Patrese's Williams because the Italian was never planning to stop, having started on the harder B

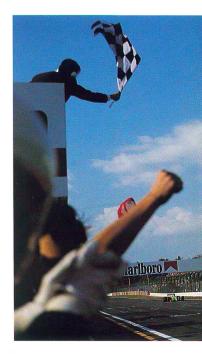
compound Goodyear tyres and the Benettons were in a similar position.

So when Mansell pitted at exactly half distance, we could then expect to see a sparkling drive to catch and challenge the Benettons and Patrese for the first three places. After a great 5.8s stop, Mansell lit up the rear tyres and then suddenly lost drive. A universal joint had broken in the transmission and a devastated Mansell was out of the race. This left Piquet leading by 3.6s from Moreno who in turn led Patrese by 7s. Then came a big gap to Suzuki who, with a couple of fastest laps, beat off a challenge from Boutsen's understeering Williams-Renault. Warwick was further back, fending off Nakajima whose Tyrrell had got ahead of Herbert's Lotus during his pit stop. This battle quickly came to nothing when Herbert retired with engine failure. Instead Nakajima challenged sixth placed Warwick who was in trouble with a recalcitrant third gear. Lap 36 saw both the local drivers in luck. Patrese, his tyres now badly worn came in for a new set of Bs, handing third place to Suzuki. Nakajima got ahead of Warwick who was soon to retire anyway with a gearbox failure.

So Piquet cruised home to win, despite carrying so much downforce that he found it very difficult overtaking backmarkers. Less than ten seconds behind, Moreno made it a brilliant one-two for Benetton in only his ninth Grand Prix. Suzuki made a valiant attempt to catch the Brazilian but finally settled for third place, having set fastest lap of the race on lap 40 only for it to be bettered immediately by the following Patrese on his new tyres which were rapidly losing grip. He had been able to pull away from teammate Boutsen, while Nakajima completed the top six. Larini, Martini, Alboreto and Alliot came home a lap down.

MILESTONES

- Senna and McLaren now unbeatable in World Championships
- Herbert replaces injured Donnelly
- Moreno replaces injured Nannini at Benetton, his first rostrum appearance and Championship points
- Morbidelli replaces Barilla at Minardi
- First rostrum appearance for Suzuki, Japan,
 Larrousse and Lamborghini



Clockwise from above: jubilation greets the first
Benetton 1-2. More Japanese support for Modena. Unlucky lap thirteen - De Cesaris is off ogain. Lap two - Berger's off ends Honda's interest in the race on their own circuit.



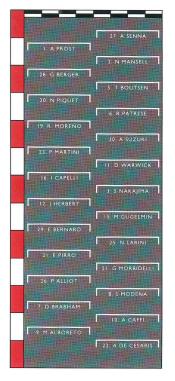
suzuka

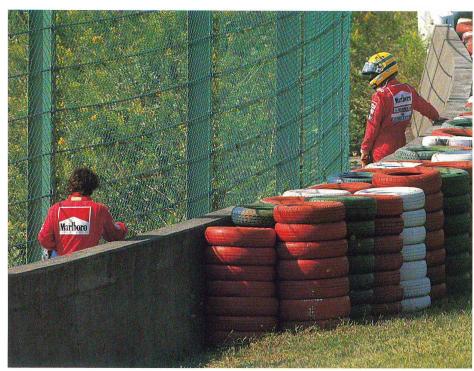


Fuji TV Japanese Grand Prix, 19-21 October

os	Driver/Nationality		No	CarlEnaina	Practice I	Practice 2	w		T1 (D.)
US	Driverrivationality		No.	Car/Engine	(sunny, warm)	(sunny, warm)	Warm-up (pos) (sunny, dry)	Laps	Time/Retirement (hot, sunny)
I	N. Piquet	BR	20	Benetton B190 Ford HB V8	1:41.041	1:40.049	1:47.927 (22)	53	Ihr34m36.824
2	R. Moreno	BR	19	Benetton B190 Ford HB V8	1:41.719	1:40.579	1:46.731 (17)	53	Ihr34m44.047
3	A. Suzuki	J	30	Lola 90 Lamborghini VI2	1:41.442	1:40.888	1:46.731 (17)	53	Ihr34m59.293
4	R. Patrese	- 1	6	Williams FWI 3B Renault VIO	1:40.355	1:40.664	1:45.270 (7)	53	Ihr35m13.082
5	T. Boutsen	В	5	Williams FWI 3B Renault VIO	1:39.577	1:39.324	1:44,422 (5)	53	1hr35m23.708
6	S. Nakajima	J	3	Tyrrell 019 Ford DFR V8	1:41.208	1:41.078	1:45.602 (8)	53	1hr35m49.174
7	N. Larini	1	25	Ligier JS33C Ford DFR V8	1:43.396	1:42.339	1:46.336 (15)	52	Ihr34m58.244
8	P. Martini		23	Minardi BMS 190 Ford DFR V8	1:40.899	1:41.964	1:47.532 (19)	52	lhr35m01.090
9	A. Caffi	1	10	Arrows AIIB Ford DFR V8	1:43.270	1:43.887	1:48.220 (23)	52	Ihr35m12,139
10	P. Alliot	F	26	Ligier JS33C Ford DFR V8	1:44.106	1:42.593	1:46.149 (12)	52	Ihr35m48.434
П	D. Warwick	GB	11	Lotus 102 Lamborghini V12	1:41.482	1:41.024	1:46.289 (14)	38	gearbox
12	J. Herbert	GB	12	Lotus 102 Lamborghini VI 2	1:43.111	1:41.558	1:46.433 (16)	31	engine
13	M. Alboreto	1	9	Arrows A11B Ford DFR V8	1:43.304	1:43.610	1:46.082 (11)	28	engine
14	N. Mansell	GB	2	Ferrari 641 Ferrari VI2	1:38.969	1:37.719	1:42.820 (1)	26	driveshaft
15	E. Pirro	1	21	Dallara BMS 190 Ford DFR V8	17.40.230	1:42.361	1:47.661 (21)	24	alternator
16	E. Bernard	F	29	Lola 90 Lamborghini V12	1:42.141	1:41.709	1:45.672 (9)	24	oil leak
17	G. Morbidelli	- 1	24	Minardi M190 Ford DFR V8	1:42.858	1:42.364	1:47.326 (18)	18	spun
18	I. Capelli	- 1	16	Leyton House CG901 Judd V8	1:41.657	1:41.033	1:45.864 (10)	16	misfire
19	A. de Cesaris	1	22	Dallara BMS 190 Ford DFR V8	1:43.601	1:43.647	1:48.717 (24)	13	spun
20	M. Gugelmin	BR	15	Leyton House CG901 Judd V8	1:42.049	1:41.698	1:47.545 (20)	5	engine
21	D. Brabham	AUS	7	Brabham BT59 Judd V8	1:43.156	no time	1:48.970 (25)	2	suspension
22	G. Berger	Α	28	McLaren MP4/5B Honda V10	1:38.374	1:38.118	1:43.741 (4)	- 1	spun
23	S. Modena	- 1	8	Brabham BT59 Judd V8	1:42.617	no time	1:46.225 (13)	0	collision/Alliot
24	A. Prost	F	1	Ferrari 641 Ferrari VI2	1:38.684	1:37.228	1:42.981 (2)	0	collision/Senna
25	A. Senna	BR	27	McLaren MP4/5B Honda VIO	1:38.828	1:36.996	1:43.353 (3)	0	collision/Prost
26	J. Alesi	F	4	Tyrrell 019 Ford DFR V8	1:40.052	no time	no time		DNS
27	O. Grouillard	F	14	Osella FAIME Ford DFR V8	1:43.993	1:43.782	DNQ		
28	G. Tarquini	- 1	17	AGS JH25 Ford DFR V8	1:44.281	29.56.038	DNO		
29	Y. Dalmas	F	18	AGS JH25 Ford DFR V8	1:44.410	1:46.326	DNO		
30	B. Gachot	В	31	Coloni C3C Ford DFR V8	20.22.535	1:45,393	DNO		

Circuit Data: International Racing Course Suzuka, length 3.641 miles/5.859 km, race distance 53 laps = 192.973 miles/310.527 km.
Notes: No pre-qualifying, only 30 cars made trip to Japan. J. Herbert replaced Martin Donnelly in the Lotus. Gianni Morbidelli replaced Paulo Barilla in the Minardi and Roberto Morene replaced Sandro Nannini at Benetton. J. Alesi did not start, suffering whiplash caused by Friday accident.





	LAP CHART
Grid Order	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53
27 A. Senna	28 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
I A. Prost	2 20 20 20 20 20 20 20 20 20 20 20 20 20
2 N. Mansell	20 9 9 9 9 9 9 9 9 9
28 G.Berger	19 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 6 6 6 6 6 6 30 30 30 30 30 30 30 30 30 30 6 6 6 6
5 T. Boutsen	5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 30 30 30 30 30 30 5 5 5 5 5 5 5 5 5 5 5
20 N.Piquet	6
6 R. Patrese	11 30 30 30 30 30 11 11 11 11 11 11 11 11 11 11 11 11 11
19 R. Moreno	30 12 12 12 12 12 12 12 1
30 A. Suzuki	12 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
23 P. Martini	3 23 23 29 29 29 29 29 29 29 29 29 29 29 29 29
II D. Warwick	23 21 29 29 23 23 23 23 23 23 23 23 23 23 23 23 23
16 I.Capelli	21 29 21 15 15 25 25 25 25 25 25 25 25 25 25 25 25 25
3 S. Nakajima	29 15 15 21 21 21 21 21 21 21 21 21 21 21 21 21
12 J. Herbert	15 25 25 25 24 24 24 24 24 24 24 24 24 24 24 10 9 9 9 9 9 25 26 26
15 M. Gugelmin	24 24 24 24 10 10 10 10 10 10 10 10 10 10 10 10 10
29 E. Bernard	25 10 10 10 16 22 22 22 9 9 9 9 9 9 9 26 25 25 26 26 26 26
25 N. Larini	10 7 16 16 16 22 16 9- 9 22 22 22 26 26 26 26 25
21 E. Pirro	7 22 22 22 26 9 26 26 26 26 26 16 16 16
24 G.Morbidelli	22 16 26 26 26 9 26 16 16 16 16 16 16
26 P. Alliot	26 26 9 9 9
B . S. Modena	16 9
7 D. Brabham	,
I 0 A. Caffi	Tomas .
9 M. Alboreto	
22 A. de Cesaris	

Pos.	Car No./Driver/Team	Time
I	6 R. Patrese/Williams	1:44.233
2	30 A. Suzuki/Lola	1:44.850
3	20 N. Piquet/Benetton	1:45.114
4	19 R. Moreno/Benetton	1:45.539
5	5 T. Boutsen/Williams	1:45.706
6	3 S. Nakajima/Tyrrell	1:45.887
7	II D. Warwick/Lotus	1:46.042
8	26 P. Alliot/Ligier	1:46.106
9	2 N. Mansell/Ferrari	1:46.272
10	12 J. Herbert/Lotus	1:46.463
11	25 N. Larini/Ligier	1:46.681
12	0 A. Caffi/Arrows	1:46.849
13	23 P. Martini/Minardi	1:46.897
14	9 M. Alboreto/Arrows	1:47.094
15	29 E. Bernard/Lola	1:47.518
16	21 E. Pirro/Dallara	1:48.506
17	24 G. Morbidelli/Minardi	1:48.865
18	6 I. Capelli/Leyton House	1:49.035
19	5 M. Gugelmin/Leyton House	1:49.471
20	28 G. Berger/McLaren	1:49.573
21	22 A. de Cesaris/Dallara	1:49.761
22	7 D. Brabham/Brabham	1:54.765

	Drivers			Constructors	
I	A. Senna	78 pts	- 1	McLaren Honda	118 pt:
2	A. Prost	69 pts	2	Ferrari	100 pt
3	G. Berger	40 pts	3	Benetton Ford	62 pts
4	N. Piquet	35 pts	4	Williams Renault	54 pts
5	T. Boutsen	32 pts	5	Tyrrell Ford	16 pts
6	N. Mansell	31 pts	6	Larrousse	II pts
7	R. Patrese	22 pts	7	Leyton House Judd	7 pts
8	A. Nannini	21 pts	8	Lotus Lamborghini	3 pts
9	J. Alesi	13 pts	9	Arrows Ford	2 pt
10	R. Moreno	6 pts		Brabham Judd	2 pt
	I. Capelli	6 pts		•	·
12	A. Suzuki	6 pts			
3	E. Bernard	5 pts			
14	D. Warwick	3 pts			
15	S. Nakajima	3 pts			
16	A. Caffi	2 pts			
	S. Modena	2 pts			
18	M. Gugelmin	l pt			

Existing qualifying lap record - 1989:
Ayrton Senna McLaren Honda MP4/5 3.5 V10
1m15.468s = 207.505kmh/128.938mph

Existing lap record - 1989:

Gerhard Berger Ferrari 640 Ferrari 3.5 V12 1m18.986s = 198.263kmh/123.195mph

	PAST WINNERS					
Year	Driver	Nat.	Car	Circuit		
1976	Mario Andretti	USA	3.0 Lotus 77 Ford	Fuji		
1977	James Hunt	GB	3.0 McLaren M23 Ford	Fuji		
1987	Gerhard Berger	Α	1.5 Ferrari F1/87 t/c	Suzuka		
1988	Ayrton Senna	BR	1.5 McLaren MP4/4 Honda t/c	Suzuka		
1989	Alessandro Nannini	1	3.5 Benetton B189 Ford V8	Suzuka		



adelaide

Fosters Australian Grand Prix, 2-4 November

FORMULA I ARRIVES IN ADELANDE FOR THE
FINAL RACE OF THE YEAR. SOMETIMES

THERE'S A SHOWDOWN AND THE TENSION MOUNTS, SOMETIMES THE CHAMPIONSHIP IS OVER AND IT'S A PLACE TO RELAX, WHICHEVER, IT IS A PLACE THAT THE F1 CONTINGENT ALWAYS LOOKS FORWARD TO. THE AUSTRALIANS WELCOME THEM WITH ENTHUSIASM AND THE RACE FORMS PART OF A LARGE FESTIVAL, A HUGE PARTY TO CELEBRATE THE END OF ANOTHER FIA FORMULA 1 WORLD CHAMPIONSHIP. ADELAIDE IS A CITY

OF PARKLAND AND THE TRACK IS TEMPORARILY LAID OUT ON PUBLIC ROADS AROUND THE VICTORIA PARK RACECOURSE. IT IS A TRACK WHICH SOMEHOW MANAGES TO FEEL PURPOSE BUILT, ONE WHICH THE DRIVERS ENTHUSE ABOUT, A PLACE WHERE THEY CAN REALLY RACE!

Right: Patrese fights
for Williams' position in
the championship. Larrousse
in colonial settings. Alesi's
last outing for Tyrrell.
Below: Grouillard in the Osella
made the best of his Sunday
run, upsetting Mansell
along the way.





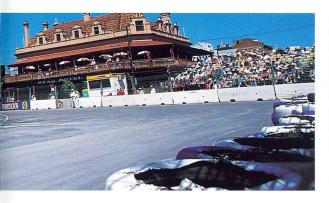
IMPRESSIONS

igel Mansell's thrilling last minute charge will be engraved in the minds of 115,000 Australians for many years as the highlight of their fifth Australian Grand Prix and the 500th round of the FIA Formula 1 World Championship. Admittedly, Ayrton Senna was running away with the race and had been 25 seconds in the lead when he went out, but Nelson Piquet was also in the right place at the right time having overtaken everyone but Senna, and justly scored his second win in succession. It wasn't the greatest race of the season, but Mansell's late burst more than brought it alive. That it didn't net him victory was almost academic because the Ozzies don't let things like that worry them - fortunately! Senna was now unbeatable in the championship but the repercussions of Suzuka still echoed around Adelaide's ever more efficient paddock. You could hear every viewpoint expressed and every side taken. One party was super-relaxed, as he might be with the title under his belt. The other's mood worsened as the weekend progressed, finally breaking off all but the most curt relations with the media.

Happily the locals let all this wash over them. They were in Adelaide for the 500th World Championship round, the Foster's Australian Grand Prix and for a big party. No bickering foreigners were going to stop them from enjoying it. The sun shone, the entertainment was bigger and better than ever with a fantastic race and a free concert by Cher as the finale.

The new champion dominated the race until he couldn't select second gear and crashed out, failing to complete the distance for the third race running. The old champion admitted to nothing special, perhaps handicapped by low downforce and the all-too familiar complaints about brakes







and worn tyres.

Even the eventual winner suggested that he was too relaxed, lapping around the 1m20s/1m 22s mark as Mansell, on fresh tyres, closed on him. Finally, digging deep into his reserves and finding remarkable grip from his old Goodyear tyres, the Brazilian responded to the Mansell challenge. He managed to hold off the Ferrari even when the Englishman made a last ditch attempt at getting past at the end of the straight.

Piquet held his line and the two cars missed by inches. The locals loved and appreciated the excitement of it all: Nelson Piquet and the Benetton team had taken their second victory in as many weeks and Mansell had once again demonstrated the true racer's spirit that runs so strongly through him. Just read those words at the beginning of this paragraph again: when they miss it's great, but it's a very fine line that separates greatness from controversy.

BRIGHT SPARKS

t's never been easy to be on top in Adelaide. The track surface was bumpy and slippery, not because of dust and its city street useage, but because of the surface itself. Heat in particular and supporting events to a lesser extent make it tricky, although this year many of the bumps had been levelled.

Even so, the track for the second qualifying session was slower than it had been the previous day, yet one man dominated both with virtually identical lap times. Ayrton Senna admitted to having been relaxed on the Friday. 'Yesterday morning I felt so easy and I was driving so naturally that it was a tremendous feeling for me. I enjoyed it a lot. Out of the entire season it was the best, enjoying pure driving.'

However, the lack of pressure meant that on the Saturday, 'I had to pump myself up a little bit because I was too soft. I had to push myself in Below: last years winner,
Boutsen, could only manage
fifth in the dry.



order to gain back my alert condition and be very sharp. I perform better under pressure. It brings out the sensitivities in me. I will have to wind myself up a little bit for the race. I want to win tomorrow but if it doesn't happen, it won't be the end of the world. For me, the most important thing now is next year.'



Clockwise from right: lift off on the straights slowed Gerhard. Capelli's flaming exhausts. Herbert in Oz!



The next day Ayrton made the best start and it seemed that only Mansell could challenge him. Even so, the Brazilian still appeared to have the upper hand. Every time Mansell got close for one reason or another (including mistakes by the Brazilian) the McLaren seemed to be able to edge away. When Mansell pitted, Senna stretched his lead to 25 seconds and it looked like that no one could do anything about it. However, second gear went AWOL, deciding otherwise. The Australian Grand Prix, along with the Brazilian and French, would remain elusive to Ayrton.

Enter a compatriot. Piquet started seventh, overtaking teammate Moreno in the second qualifying session. He had passed Patrese by the end of the first lap and took Prost three laps later. Berger went the same way on lap nine, and Mansell spun back into his clutches just after half distance, Piquet getting past his old teammate before Mansell pitted for tyres.

Mansell's fight back was the feature of the second half of the race, while Piquet admitted to relaxing. Yet when the Ferrari closed on the Benetton with four laps to go, Nelson found the pace in both the car and himself to hold off the advancing challenge. This was a more satisfying win for Nelson than Japan, as he pointed out, he'd had to overtake his rivals.

The Australians deserved this race too. Once again they had made an enormous effort to ensure that things ran smoothly. They provided entertainment, the best facilities available and had fine-tuned every aspect since the previous year. They had revised their marketing and invested a small fortune. They had every right to a good race.

RACE DEBRIEF

delaide weather can be awful, of course. That was demonstrated in 1989, but the only real threat during the four day Grand Prix meeting was excessive heat. It had been well into the thirties the previous week, and after a brief cold change, the temperature was working its way back up during the build-up to race day.

Heat was probably the only wild card this year. The track was smoother, and intense track action meant that the dust was soon blown away. However, the circuit did seem slower towards the



end of the second day of qualifying which meant that we didn't have the usual exciting climax to the final qualifying session.

We didn't really need it. Senna was a second quicker than he had been the previous year on Friday, 0.7s ahead of chief rival Alain Prost, and he set a nearly identical time the next day with teammate Berger coming the closest but still 0.6s slower. Mansell and Prost were within a second.

Senna, as ever, seemed to find holes in the traffic, leaving his rivals to trip and stumble over the slower competitors. Ferrari, however, seemed curiously low-key, their fine chassis not finding the grip that also seemed to elude so many of their rivals, but not their chief one.

Alesi might have bumped his future teammate back another place but for continued problems with the brakes which finally drove him to a change of supplier for this race alone. He was a regular spinner and even ran out of cars during one session. Once the change had been made, he decided to devote his time to racetuning, settling for fifth on the grid. Teammate Nakajima lost time with an engine failure and dropped two places on the second day.

If there were scores to be settled in this Foster's Australian Grand Prix then one revolved around the Williams and Benetton teams. The one-two in Japan had seen Benetton move up to third in the championship, but they could still be beaten by Williams, while Piquet was in with a chance of pipping Berger for third place. The two teams' cars occupied the next four places, principal honours going to Patrese followed by the Benettons and then Boutsen. Only Piquet improved on day two, moving ahead of his teammate. For the Williams team this was a disappointment in spite of Renault's Evolution 3 engine featuring reduced friction. However, they couldn't capitalise on any advantage due to a lack of grip, while the previous year's winner suffered a chassis imbalance.

Piquet found his car fantastic in the corners but slow on the straights in the second session, but still improved in spite of traffic. Moreno could not reply after locking his brakes twice before an oil leak was discovered, which put him in the spare for his second run, then also hampered by traffic. Pirelli's tyres were looking good on the street circuit again. Martini improved his time on the second day in spite of a missed gearchange and a broken oil line while Morbidelli dropped four places with more than his fair share of spins.

Johnny Herbert was quicker than teammate Warwick on the first day but then Derek had engine and gearbox trouble. The pair virtually swapped places on the second day, although neither driver was exactly enchanted with his car's handling.

Nicola Larini started his last Grand Prix for Ligier from a fine 12th on the grid, seven places ahead of his teammate (who kept his nose remarkably clean this weekend) and his best grid position of the year. Leyton House might have hoped for more, as they were better placed than on a number of occasions. Larrousse suffered a catalogue of disasters which was not representative of their usual performance and Arrows simply lacked grip.

The morning warm-up provided both good and bad news for Prost. The bad news was that the spare car's engine blew, but the good news was that he set fastest time of the session. However, Senna, Berger, Mansell, Alesi, Boutsen and Patrese were all within a second of him. Piquet was ninth, quickest in a straight line. By the time of the race, the temperature had risen to 34 degrees. While all Goodyear's runners were on

Below: Alliot's last race for Ligier proved to be well behaved. Bottom: impressionist Adelaide, always rich in colour.







Above and right: a standing ovation from the pit wall in celebration of a fantastic finale and five hundreth race.



Ds, brakes and even fuel were thought to be greater factors than tyres which teams were not planning to change.

Berger made a poor start, and this held up Prost. Consequently, Senna led into the first corner, Berger recovered into second place, while Mansell was up to third ahead of Prost, fourth. Then came Patrese, Alesi and Boutsen before Moreno and Warwick. At the start of lap two Berger brushed his cut off switch and the car faltered, allowing Mansell into second place, with Berger challenged by Prost for a lap before he was replaced by Piquet. On lap four therefore we had Senna leading with Mansell trying to close. Then came an increasing gap to Berger from Piquet, the pair leaving Prost behind as he struggled with brake problems when following slower cars. Another



gap had opened up to Patrese trying to pull away from Alesi who was dealing with Boutsen.

Piquet's constant worrying of Berger eventually paid off, with the Brazilian moving up to third place on lap nine, while Senna made a mistake a lap later and had Mansell challenging briefly before he pulled away again. A few laps later backmarkers saw Senna open up his lead again to nearly three seconds, only for that to shrink when he was delayed by a spun Morbidelli. Mansell was right behind Senna behind Piquet, Prost was then seriously challenging Berger, only for the continuing brake problem to intervene. Senna began to pull away, with Mansell occasionally suffering badly from backmarkers, so that as they came up to half distance he was over seven seconds behind the Brazilian. Then, on lap 49, the Englishman spun

as his grip disappeared. He was hoping to come in for tyres on that lap, but had to wait another four laps by which time he was overtaken by Piquet. After a lightening quick tyre stop by the Ferrari pit crew he rejoined behind Berger and Prost, the pair battling together again.

Senna now had a 19s lead over Piquet. Prost eventually moved up to third on lap 49. Berger, suffering from a pain in his right foot causing him to lift off on the straights was allowing the flying Mansell to catch him. On lap 57 the Ferrari swept past the McLaren.

After another delay with backmarkers, Mansell soon began to reel in his teammate, but this battle became for second place on lap 62. On the previous lap Senna had suddenly run wide in the final corner when trying to lap Patrese. He'd missed second gear, and when he tried for the gear again on the next lap there was nothing there and the McLaren just went straight on, across a sandtrap, into the barrier and out of the race. Mansell caught Prost on lap 68 only to be delayed again, allowing Piquet to pull away once more. Mansell renewed his challenge three laps later and with more downforce, he had more grip from his tyres than his teammate who waved him through. Now Mansell began to chase Piquet and whittled away the gap until Nelson responded only four laps from home. Onto the straight for the final time, the Benetton lost time behind Modena, and going into the corner at the end of the straight, Nelson left the door wide open. Mansell, in a valiant attempt came shooting down the inside, but Piquet suddenly turned in on line just ahead. The Ferrari ran wide with brakes locked up in a cloud of smoke, and Piquet was home and dry to take victory.

Prost was a lacklustre third, Berger a painful fourth, and Boutsen just freewheeled across the line in fifth place with a broken gearbox. Patrese had stopped for tyres but was still sixth ahead of Moreno and Alesi who had also stopped for new rubber.

MILESTONES

- 500th round of the
 - FIA Formula 1 World Championship
- Piquet's 22nd win
- Moreno's tenth GP, best ever grid position
- De Cesaris' 150th Grand Prix

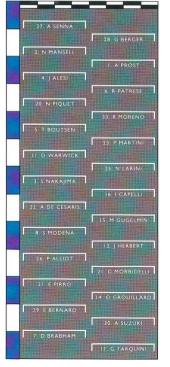


adelaide

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Foster's Australian Grand Prix, 2-4 November

os	Driver/Nationality		No.	Car/Engine	Practice I (warm, sunny)	Practice 2 (warmer, sun)	Warm-up (pos) (sun, warm)	Laps	Time/Retirement (hot, sunny)
	N. Piquet	BR	20	Benetton B190 Ford HB V8	1:17.640	1:17.173	1:20.775 (9)	81	Ihr49m44.570
2	N. Mansell	GB	2	Ferrari 641 Ferrari V12	1:17.294	1:16.352	1:19.666 (4)	81	Ihr49m47.699
3	A. Prost	F	-1	Ferrari 641 Ferrari V12	1:16.365	1:17.021	1:19.422 (1)	81	1hr50m21.829
4	G. Berger	Α	28	McLaren MP4/5B Honda VIO	1:17.431	1:16.244	1:19.645 (3)	81	Ihr50m31.432
5	T. Boutsen	В	5	Williams FW13B Renault V10	1:17.596	1:18.112	1:20.082 (6)	81	Ihr51m35.730
6	R. Patrese	- 1	6	Williams FW13B Renault V10	1:17.156	1:17.449	1:20.254 (7)	80	1hr50m06.735
7	R. Moreno	BR	19	Benetton B190 Ford HB V8	1:17.437	1:18.089	1:20.953 (10)	80	1hr50m49.875
8	J. Alesi	F	4	Tyrrell 019 Ford DFR V8	1:16.837	1:17.246	1:19.845 (5)	80	1hr51m05.395
9	P. Martini	1	23	Minardi M190 Ford DFR V8	1:18.235	1:17.827	1:21.303 (11)	79	Ihr50m07.290
10	N. Larini	1	25	Ligier IS33C Ford DFR V8	1:19.567	1:18.730	1:22.487 (18)	79	Ihr50m59.005
11	P. Alliot	F	26	Ligier IS33C Ford DFR V8	1:19.202	1:19.835	1:22.200 (15)	78	Ihr50m33.092
12	S. Modena	1	8	Brabham BT59 Judd V8	1:19.861	1:18.886	1:23.696 (25)	77	Ihr49m46.959
13	O. Grouillard	F	14	Osella FAIME Ford DFR V8	1:21.047	1:19.722	1:24.115 (26)	74	1hr50m31.199
14	E. Pirro	3-1	21	Dallara BMS 190 Ford DFR V8	1:19.476	1:19.609	1:22.554 (20)	68	engine
15	A. Senna	BR	27	McLaren MP4/5B Honda V10	1:15.671	1:15.693	1:19.516 (2)	61	accident
16	G. Tarquini	1.0	17	AGS JH25 Ford DFR V8	1:21.222	1:20.296	1:23.147 (23)	58	oil fire
17	J. Herbert	GB	12	Lotus 102 Lamborghini V12	1:19.091	1:19.185	1:22.248 (16)	57	stalled
18	S. Nakajima	- J /	3	Tyrrell 019 Ford DFR V8	1:18.738	1:19.066	1:21.678 (12)	53	spun
19	I. Capelli	1	16	Leyton House CG901 Judd V8	1:19.341	1:18.843	1:22.990 (22)	46	stuck throttle
20	D. Warwick	GB	- 11	Lotus 102 Lamborghini V12	1:19.579	1:18.351	1:20.734 (8)	43	gearbox
21	M. Gugelmin	BR	15	Leyton House CG901 Judd V8	1:19.804	1:18.860	1:21.701 (13)	27	rear brakes
22	A. de Cesaris	- E-15	22	Dallara BMS 190 Ford DFR V8	1:19.107	1:18.858	1:22.091 (14)	23	electrics/short circuit
23	E. Bernard	F	29	Lola 90 Lamborghini VI2	1:21.489	1:19.858	1:22.314 (17)	21	gear selector
24	G. Morbidelli	1.	24	Minardi M190 Ford DFR V8	1:19.408	1:19.347	1:22.795 (21)	20	gearbox
25	D. Brabham	AUS	7	Brabham B59 Judd V8	1:20.846	1:20.218	1:23.546 (24)	18	spun
26	A. Suzuki	J.	30	Lola 90 Lamborghini V12	1:19.970	1:20.235	1:22.500 (19)	6	differential
27	M. Alboreto	1	9	Arrows AIIB Ford DFR V8	1:20.630	1:20.545	DNQ		
28	Y. Dalmas	F	18	AGS JH25 Ford DFR V8	1:21.342	1:20.570	DNQ		
29	A. Caffi		10	Arrows AIIB Ford DFR V8	1:21.101	1:20.609	DNQ		
30	B. Gachot	В	31	Coloni C3C Ford DFR V8	1:23.135	1:23.975	DNQ		





	LAP CHART
Grid Order	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 22 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 65 75 88 59 60 61 52 63 64 65 66 67 68 69 70 71 72 23 74 75 76 77 78 78 80 81
27 A. Senna	20 בסו מו מם
28 G. Berger	28 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
2 N. Mansell	2 76 76 78 78 78 78 78 78 78 78 78 78 78 78 78
I A. Prost	1 20 20 20 20 20 20 20 20 20 20 20 20 20
4 J. Alesi	20 20
6 R. Patrese	666666666666666666655555555555555555555
20 N.Piquet	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 5 19 19 19 19 19 19 19 19 19 19 19 19 19
19 R. Moreno	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
5 T.Boutsen	19 19 19 19 19 19 19 19 19 19 19 19 19 1
23 P. Martini	
II D. Warwick	16 16 16 16 16 16 16 16 16 16 16 16 16 1
25 N. Larini	23 73 72 72 72 72 72 72 72 72 72 72 72 72 72
3 S. Nakajima	3 3 3 325 25 25 25 25 25 25 25 25 25 25 25 25 2
16 I.Capelli	25 35 25 25 3 3 3 3 3 3 3 3 3 3 3 3 3 3
22 A. de Cesaris	22 22 22 22 22 22 22 22 22 22 12 12 12 1
15 M. Gugelmin	8 8 8 12 12 12 12 12 12 22 22 22 22 15 15 15 15 15 22 72 72 72 72 72 72 72 72 72 72 72 72
8 S. Modena	12 12 12 8 8 8 8 15 15 15 15 15 15 15 22 22 22 22 22 22 22 22 22 22 22 22 22
12 J. Herbert	15 5 5 5 5 5 8 29 29 29 29 29 29 29
26 P. Alliot	76.76.76.76.726.79.79.79. 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 26.26.26.21 21 17 17 17 17 17 17 17 17 17 17 17 17 17
24 G. Morbidelli	14 14 14 29 29 26 26 26 26 26 26 26 26 26 26 26 26 26
21 E. Pirro	21 29 29 14 30 30 14 21 21 21 21 21 21 21 21 21 21 8 24 17 8 8 14 14 14 14
14 O.Grouillard	29 21 30 30 14 14 21 14 24 24 24 24 24 24 24 24 24 24 17 814 14
29 E. Bernard	39 30 21 21 21 24 24 14 7 14 14 14 14 17 17 17 17 8 14
30 A. Suzuki	24242424277 7 7 141717171714141414
7 D. Brabham	דד ו דד ו ד ו וו וו וו וו דר ד ד ו
17 G. Tarquini	יו לוכוי דו ד

FASTEST LAPS				
Pos.	Car No./Driver/Team	Time		
I	2 N. Mansell/Ferrari	1:18.203		
2	20 N. Piquet/Benetton	1:18.527		
3	27 A. Senna/McLaren	1:19.302		
4	I A. Prost/Ferrari	1:19.434		
5	19 R. Moreno/Benetton	1:19.707		
6	5 T. Boutsen/Williams	1:19.717		
7	4 J. Alesi/Tyrrell	1:19.732		
8	6 R. Patrese/Williams	1:19.818		
9	28 G. Berger/McLaren	1:20.025		
10	25 N. Larini/Ligier	1:21.209		
11	23 P. Martini/Minardi	1:21.257		
12	3 S. Nakajima/Tyrrell	1:21.713		
13	26 P. Alliot/Ligier	1:21.921		
14	12 J. Herbert/Lotus	1:22.142		
15	15 M. Gugelmin/Leyton House	1:22,200		
16	21 E. Pirro/Dallara	1:22.505		
17	II D, Warwick/Lotus	1:22,524		
18	16 I. Capelli/Leyton House	1:22.583		
19	8 S. Modena/Brabham	1:22.693		
20	17 G. Tarquini/AGS	1:23.147		
21	29 E. Bernard/Lola	1:23.272		
22	22 A. de Cesaris/Dallara	1:23.897		
23	30 A. Suzuki/Lola	1:24.007		
24	24 G. Morbidelli/Minardi	1:24.272		
25	14 O. Grouillard/Osella	1:25.642		
26	7 D. Brabham/Brabham	1:25.703		

	Drivers			Constructors	
I	A. Senna	78 pts	I	McLaren Honda	121 pts
2	A. Prost	71 pts	2	Ferrari	110 pts
3	N. Piquet	43 pts	3	Benetton Ford	71 pts
4	G. Berger	40 pts	4	Williams Renault	57 pts
5	N. Mansell	37 pts	5	Tyrrell Ford	l 6 pts
6	T. Boutsen	34 pts	6	Larrousse	lipts
7	R. Patrese	23 pts	7	Leyton House Judd	7 pts
8	A. Nannini	21 pts	8	Lotus Lamborghini	3 pts
9	J. Alesi	13 pts	9	Arrows Ford	2 pts
10	R. Moreno	6 pts		Brabham Judd	2 pts
	I. Capelli	6 pts		•	·
12	A. Suzuki	6 pts			
13	E. Bernard	5 pts			
14	D. Warwick	3 pts			
15	S. Nakajima	3 pts			
16	A. Caffi	2 pts			
	S. Modena	2 pts			
18	M. Gugelmin	l pt			

Ayrton Senna McLaren Honda MP4/5 3.5 V10

1m16.665s = 177.500kmh/110.293mph

Existing lap record - 1987:

Gerhard Berger Ferrari F1/87 Ferrari V6 turbo

1m20.416s = 169.220kmh/105.148mph

PAST WINNERS					
Year	Driver	Nat.	Car	Circuit	
1985	Keke Rosberg	SF	1.5 Williams FW10 Honda t/c	Adelaide	
1986	Alain Prost	F	1.5 McLaren MP4/2C TAG t/c	Adelaide	
1 98 7	Gerhard Berger	Α	1.5 Ferrari F1/87 t/c	Adelaide	
988	Alain Prost	F	1.5 McLaren MP4/4 Honda t/c	Adelaide	
1989	Thierry Boutsen	В	3.5 Williams Renault VIO	Adelaide	

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