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"In F1, you have to have a big ego..."

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Jackie Stewart and the story
of how F1 *finally* became safe

**THE MAN WHO COULD
BE THE NEXT BERNIE**
Is this the future boss
of Formula 1? See p66



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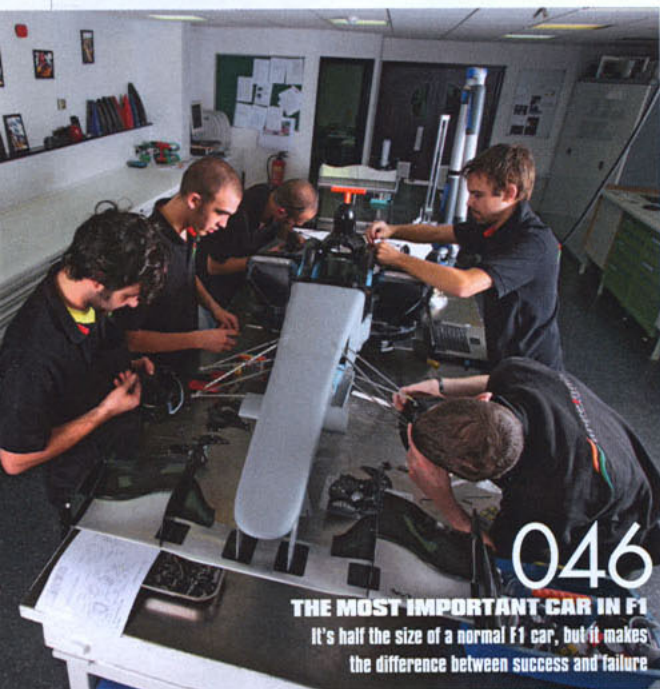
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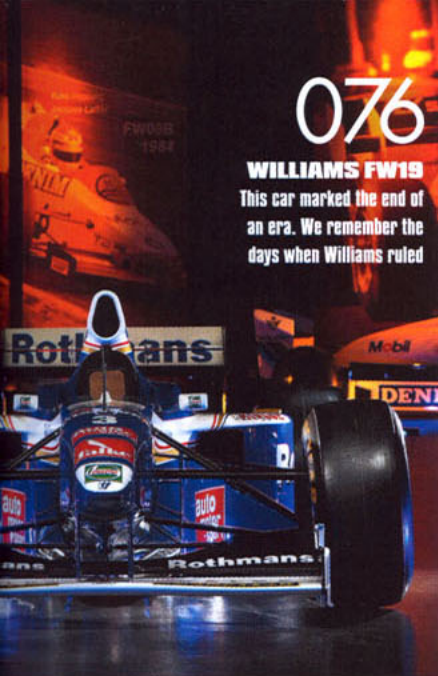
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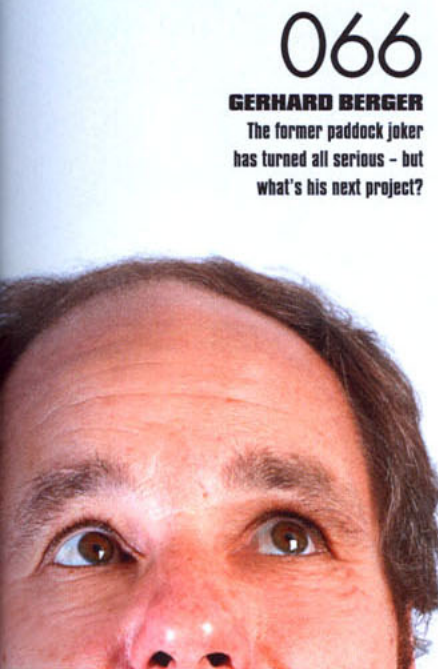
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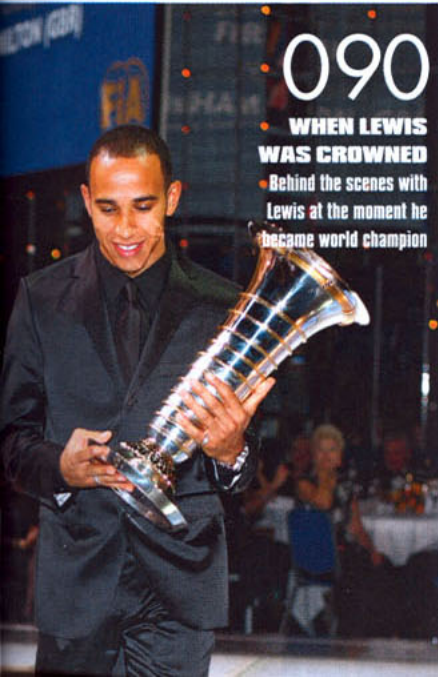
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STEVEN TEE/LAT; MATT VOSPER



From the editor HANS SEEBERG

"WE'D LIKE YOU to hold this big mallet and smash through some glass, please." Not the sort of phrase most F1 drivers are used to hearing when they get to a photoshoot, but then Sebastian Vettel isn't most F1 drivers. Refreshingly normal, completely honest and seemingly on a one-man crusade to prove that Germans love British humour, Vettel is the total antithesis to the sponsor-obsessed robots that F1 critics say drivers are these days. But behind the affable exterior, Vettel has a real steel about

him – and a total determination to be F1 world champion. With the right car from Adrian Newey at Red Bull, this year could see him launch himself into the *proper* big league of Formula 1. Read all about it on page 50.

Elsewhere in this issue, there's plenty to warm the F1 cockles as we count down to the start of the new season. There's a revealing interview with the intriguingly guarded Gerhard Berger, a man currently unemployed in F1 – but not for long, no doubt (p66). We've spoken to Nick Heidfeld, too – a man who rarely gets the headlines but who's beaten team-mates like Kimi Räikkönen and Robert Kubica over the course of a season before. Could he be a dark horse in the sure-to-be-strong BMW this season? (p96) And some of you also put your questions to the legend that is Ron Dennis. You can say what you like about him, but he never ducks a question: turn to page 36 to see him discuss Fernando Alonso, the merits of 'Ronspeak' and, er, how Nigel Mansell's bottom was too big to fit in the McLaren. Enjoy the issue, and from everyone at *F1 Racing* a belated happy new year!

BEHIND THE SCENES ON F1 RACING THIS MONTH



Editor Hans interviews Ron Dennis at McLaren's headquarters, while wandering if that strange sculpture is about to attack the team boss (p36)

We sent deputy ed Stuart over to see Lewis crowned champion at the FIA Gala – and pose with a few trophies when no one was looking, of course



"I touched it!" said picture editor Jonny Reynolds on returning from Williams after snapping the 1997 challenger FW19 (p76)



Chief sub Matt (far left) took a fitness test with the BRDC's Superstars to see what it takes to be an F1 driver. Find out if an ambulance was called on p72



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PARADE

In with the old

New season, new circuit... same old routine. Ferrari test driver Luca Badoer racks up the mileage in the F2008 at Portugal's new Portimão circuit in the Algarve.

Where Algarve, Portugal

When 6.01 pm, Tuesday December 16

Photographer Glenn Dunbar/LAT

Details Canon EOS-1D MkIII,
200mm lens, 1/500th at F8

Analysis with Toyota Optimal Drive.







PARADE

Out of the shadows

Was last year just a blip? 2009 is the chance for the real Kimi Räikkönen to emerge and be a title contender again. In testing there's been pace and consistency, so let's hope he's back.

Where Jerez, Spain

When 9.52am, Thursday December 11

Photographer Emily Davenport/xpb.cc

Details Canon EOS MkII, 500mm lens, 1/500 at F11



PARADE

Bridging the gap

BMW Sauber took their first race victory last year, but can they build on that to challenge for title glory in 2009? In this session, Robert Kubica sets about testing new parts.

Where Jerez, Spain

When 3.56pm, Thursday December 11

Photographer Emily Davenport/xpb.cc

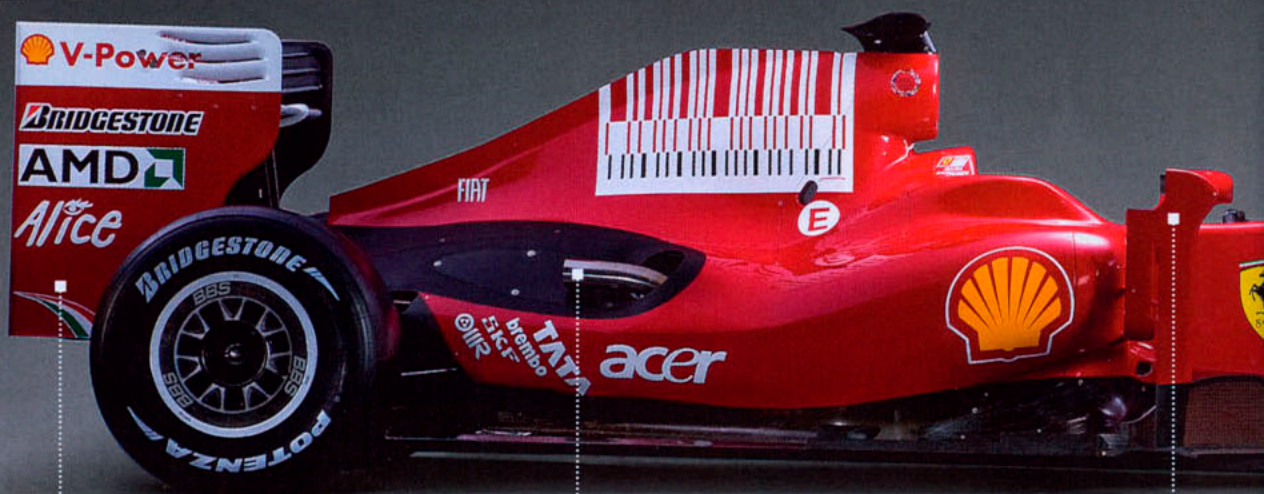
Details Canon EOS MkII, 35mm lens, 1/320 at F10



PITPASS

The stories that matter from the world of Formula 1 this month

FERRARI F60



REAR WING

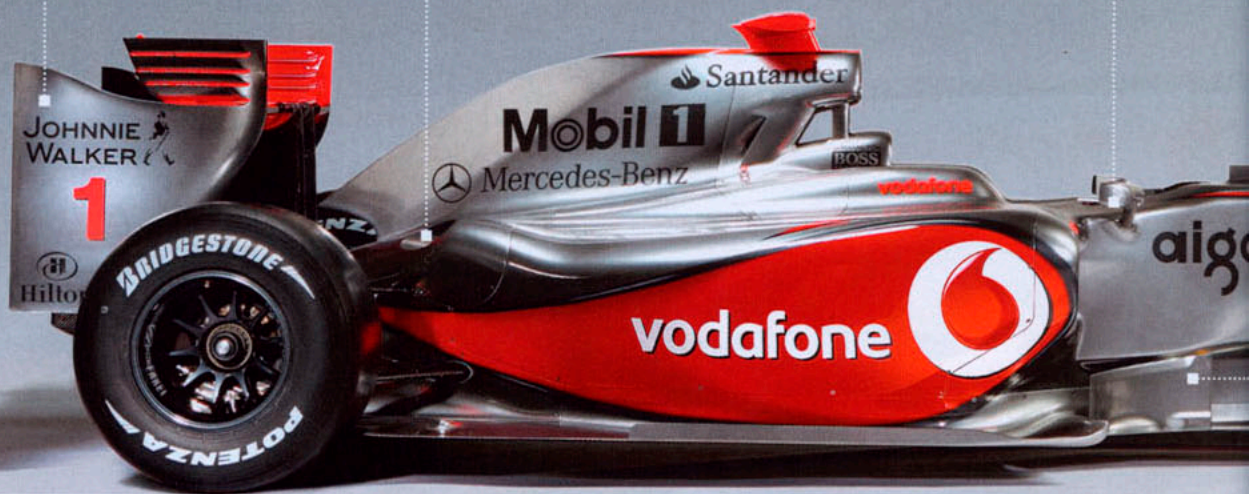
"McLaren's endplate is an evolution of last year's. With the edge sculpted into the flaps, it's a real work of art," says Alan Jenkins. "It will help with controlling the airflow off the rear wing, and is much more extreme than the Ferrari endplate"

EXHAUSTS

"There is a difference in the exhausts," says Jenkins. "McLaren have incorporated it into the bodywork – it looks pretty. I doubt it's to direct gases onto the rear wing, as they'll be variable, but it's a clean finish. Ferrari have left the tailpipe standing in the airflow"

WING MIRRORS

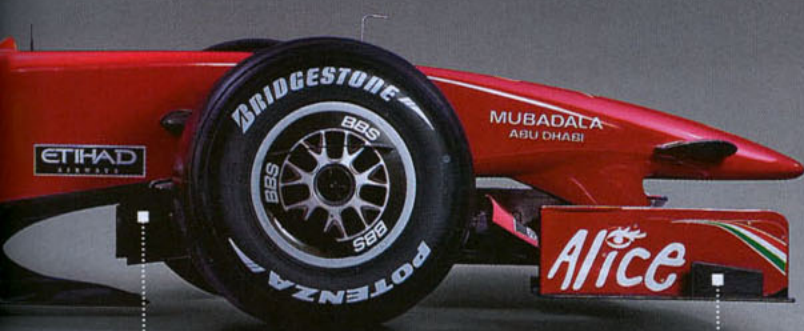
"One of the biggest difference between the cars is one of the saddest," says Jenkins. "The rules were designed to get rid of turning vanes, but Ferrari have this ingenious device that they've put their wing mirrors on to tidy the airflow over the car"



McLAREN-MERCEDES MP4-24

THE 'BIG TWO': IS THE McLAREN SUPERIOR?

Ex-F1 designer Alan Jenkins compares the main title challengers' new cars – and he reckons it's good news for people in the Woking area



BARGE BOARDS

"Ferrari have pulled their sidepods much further back leaving a slot on the car which, although is part of the crash structure, acts as an aerodynamic part," says Jenkins. "They have also developed a device like a barge board in the front suspension"

FRONT WINGS

"I really like McLaren's front wing, it's quite beautiful," continues Jenkins. "But it's a conventional three-wing flap with a simple endplate. The Ferrari is more complex, with a turning vane on the outside – maybe to control airflow around the slicks"



WORK ON THE new McLaren started 10 months ago and it was unveiled five days after the new Ferrari. But which car will win this year's world championship? Well, according to one former F1 designer, it looks like the McLaren might have the advantage...

The car that Lewis Hamilton will try to defend his world title with, the MP4-24, was revealed at McLaren's Technology Centre on January 16. It was also where 61-year-old Ron Dennis chose to announce that he will step down as team principal on March 1, handing over the reins to Martin Whitmarsh.

Arch rivals Ferrari began testing the F60 at Mugello on the day of their launch on January 12. Both cars look strikingly different to last year's machines because of the new rules for 2009, but what struck former Arrows and Stewart designer Alan Jenkins was the refined nature of the McLaren MP4-24.

"I'd say that in every area the McLaren is very finely detailed. It looks more polished and 'finished' than the Ferrari, but both are



Ron Dennis is standing down as team principal, but he will still attend most of the races and head the McLaren group

very good cars," said Jenkins. "When I saw the new Toyota I thought that it looked half decent, but you look at these two cars, and they are in a different league at the moment."

Two months of intensive testing lie ahead for the teams before the season-opener in Melbourne on March 29, in what is expected to be a fascinating battle for supremacy as the new rules have forced teams to start with a clean slate. McLaren's MP4-24 is 10 months in the making, but what's worrying for Ferrari is that the Woking team are also two months into designing their 2010 car...



NEW DRIVER ALERT! MEET... SEBASTIEN BUEMI

Toro Rosso have a rookie for 2009, but is he any good?

HIS FORMULA 1 DEBUT is just two months away and, at just 20 years of age, he'll be one of the youngest drivers to ever start a grand prix. So is Sébastien Buemi ready for the grid?

The Swiss youngster is the latest product of the Red Bull Young Driver Programme – the same one that unearthed Sebastian Vettel, who's graduated to Red Bull Racing.

"The programme has produced a lot of good drivers and Vettel is the best we've produced so far," said Red Bull motorsport consultant Helmut Marko. "But there are a lot of young guys who are coming through like Buemi and it's easy to forget that, although he's achieved a lot already, he's still only 20 years old."

Buemi has been backed by the energy drinks firm since 2005 when he was competing in his second season of Formula BMW. Since then he's competed in F3, GP2 and A1GP, and has tested for both Red Bull and Toro Rosso over the winter. He knows that, as he's had so much investment through the Young Driver Programme, there will be high expectations on him to produce some decent results.

"I know there will be pressure in F1, but there's always pressure to perform through karting, F3 and GP2," he said. "If you did a good job in the lower formulae results would follow. In F1, it's not automatically the case."

So, a new face takes to the grid for the season-opener at Melbourne – here's five facts you didn't know about the man...

- 1 Last year he demonstrated a Red Bull Formula 1 car on the streets of Jamaica.
- 2 He was drafted in to drive the Medical Car at last October's Japanese GP and managed to spin it during practice!

THE AMAZING RULES OF F1!



The lesser-known laws of our great sport revealed

2009 Formula 1 Sporting Regulations

Article 13, Competitors' Applications

13.3 A competitor may change the make of engine at any time during the championship. All points scored with an engine of different make to that which was first entered in the championship may count (and will be aggregated) for the assessment of a commercial benefit, however such points will not count towards (nor be aggregated for) the FIA Formula 1 constructors' championship.

13.3 With the exception of those whose cars have scored points in the championship of the previous year, applicants must supply information about the size of their company, their financial position and their ability to meet their prescribed obligations.

He knows there'll be high expectations to produce results

3 His cousin, Natacha Gachnang, is also a racing driver and she's competing in the new Formula 2 category in 2009.

4 Buemi will be the first Swiss driver to start an F1 race since Jean-Denis Délétraz drove a Pacific in the 1995 European GP.

5 Over the winter, he has completed more than 2,600 miles of testing for both Toro Rosso and Red Bull at Barcelona and Jerez.



Buemi has tested for both Toro Rosso and Red Bull over the winter

THIS MONTH'S BIG DEBATE



ALBERTO ASCARI - ESTIMATED SALARY: €0



"Maybe I could get a paper-round..." Drivers' salaries can't be cut if they're under contract

KIMI RÄIKKÖNEN - ESTIMATED SALARY: €20MILLION

Should drivers have their pay cut?

Yes



Gary Anderson
Ex-Jordan and Stewart
technical director

"I THINK THE salaries are stupid at the moment – right through a team. Their salaries should be cut and, to be honest, it should have happened a long time ago – it's just got silly.

The prices people have been paid over the past few years has been ridiculous, and that extends to drivers. It's a job that has all the glamour and fun of wanting to do it. If you look at racing drivers from the beginning, they did it because they wanted to. It's their hobby.

I suppose there is an argument where people want

returns on their investments. Look at Lewis Hamilton's dad. He invested in Lewis when he first funded his racing career, and the Hamilton business is now very profitable.

On the whole however, it is the market that dictates the price. You can control salaries through the market by each team having a limit on technical directors or chief executives.

There just has to be a limit somewhere. Drivers could be paid a fraction of the money they're on now and live happily for the rest of their lives."

No



Jonathan Palmer
Formula 2 organiser
and ex-F1 driver

"ONE OF THE problems at the moment is that drivers have contracts with teams. If a salary cap was introduced that team would be in breach of contract.

The team would say, 'We're not paying you that anymore,' but then the driver can sue. He has a contract to be paid a certain amount. Any efforts for the teams to reduce salaries will be subject to contract, and the binding agreement of the driver.

I can't see too many drivers agreeing to chop off 20 per cent from their salary. So I think it's going to be difficult to really do

anything until contracts expire, and when they do I'm sure the drivers are savvy enough to know they'll be looking at a slash in the future because the economic climate is tough. Drivers are competitive, yes, they want the best car, but they will be looking for the best deal.

If there was a blank sheet of paper now, then drivers' salaries would be a fraction of what they currently are, and I can't really see any driver walking away from F1 if there was. It would be a culture shock, but it wouldn't change their lifestyles."



REVEALED: THE NEW HAMILTON AND KUBICA KARTS!

Formula 1 hotshoes produce new karts to help the next generation follow in their footsteps

ASPIRING F1 DRIVERS will be able to race karts named after their heroes, as both Lewis Hamilton and Robert Kubica have unveiled new machines for kids to compete in.

Kubica has revealed he will play an active role in his new karting team, while the LH kart, adorning the same colours as Lewis's helmet, has been given official approval to race. They could retail for around £1,500.

The Lewis kart is made by Italian company CRG – which has links with Dino Chiesa, the legendary kart mechanic who ran Hamilton with Nico Rosberg back in 2000. Birel has produced the Kubica kart, which is also decked out in colours mirroring his helmet.

The two new karts will not be the first named after F1 drivers, as both Fernando Alonso and Jarno Trulli have models, while manufacturer Tony Kart has produced a



Lewis Hamilton's kart livery is based on his iconic helmet design, which he has had since his days on the kart tracks

limited-edition Ayrton Senna kart in the past.

Prior to Christmas, the Lewis Hamilton kart was homologated, which means it has been granted approval to race by the karting authorities. As that's an expensive process, it could indicate that the kart is planned for widespread use. One idea is that McLaren's latest protégé, 16-year-old Oliver Rowland, could race the LH kart as he aims to follow in the footsteps of Hamilton.

The RK kart is expected to be a hit, as Kubica has close links with karting, and will help run his new team with Birel. "I wanted to do something active in karting and I'm planning to use my experience to help young drivers and guide their first steps," said Kubica. "I train by karting now, so can provide technical opinions and advice for the team."

Both karts were on show at the end-of-season FIA prize-giving gala held in Monaco.



Along with the introduction of his new kart, Robert Kubica will help to run his karting team



F1 MASTERMIND

Test your knowledge with our fiendishly tricky quiz



- Where did Hesketh score their only F1 world championship victory?
- Which two drivers started the first race for Jordan back in 1991?
- Who partnered Vittorio Brambilla at Alfa Romeo in 1979?
- In which race (and year) did John Watson win after starting 22nd on the grid?
- Why did Nelson Piquet win the 1987 world title the day before the Japanese GP took place?
- Which Tyrrell driver rolled at the start of the 1995 Portuguese Grand Prix?
- In which French town was Sébastien Bourdais born?
- Who was awarded an MBE in the recent Queen's New Year's Honours list for his services to motor racing?
- Which former F1 circuit had corners called La Bretelle, Parabolique and Courbe de Pouas?
- Who was the last driver to score points for the Prost Grand Prix team?



IN ASSOCIATION WITH



Answers 1 Zandvoort (1975) 2 Andrea de Cesaris and Bertrand Gachot 3 Bruno Giacomelli 4 Long Beach, 1983 5 His closest rival, Mansell, crashed in qualifying 6 Ukyo Katayama 7 Le Mans 8 Lewis Hamilton 9 Dijon-Prenois 10 Jean Alesi (Germany 2001)

ASK F1 RACING

All your questions answered

Looking at Heikki Kovalainen's McLaren from last year, I noticed that there was a strange bath tap-shaped object at the front of the car - what is this?

Oliver Mollart, UK

This 'tap' is a smaller version of one of the strange gadgets that we featured in last month's *Pitpass*. It's a Pitot tube and yaw probe, which is used to measure wind speed and atmospheric pressure. In testing, there is no



The 'bath tap' is a Pitot tube and yaw probe, used to measure wind speed and pressure

scrutineering, so teams use larger versions on top of their car's roll hoops. It's an important piece of kit, which gives engineers readings for aerodynamic loads.

Send your F1 conundrums to askf1racing@haymarket.com



NEW McLAREN-MERCEDES SUPERCAR TO HONOUR MOSS

£700,000 SLR will top 217mph, making it one of the fastest road cars ever

THIS STUNNING NEW supercar is a limited-edition special celebrating the great Sir Stirling Moss. It will accelerate to 60mph in 3.4secs and with a top speed of 217mph the SLR Stirling Moss will be one of the fastest production cars on the planet.

It's a car that will make a knight proud, but you wouldn't want to own it if you lived in rainy Britain because, with a price tag of £700,000, it doesn't even come with a windscreen or roof.

The 650bhp V8 SLR will be built at McLaren's Technology Centre headquarters in Woking during June when production of the current SLR roadster ends.

But you'll need to have your chequebook out early, as only 75 will be made.

The SLR is based on the Mercedes-Benz SLR 300 that Stirling Moss famously drove to victory on the 1955 Mille Miglia road race.

And, true to the original, the new SLR has wind deflectors a few centimetres tall that protect both the driver and passenger from the airflow. It's also built from lightweight

carbon fibre, weighing just over 1,500kg.

"I raced the 300 SLR in the Mille Miglia road race. The Mercedes was called that because it had a 3ltr engine and SLR stood for 'Super Light Racing'. It was such a fantastic car," said Moss.

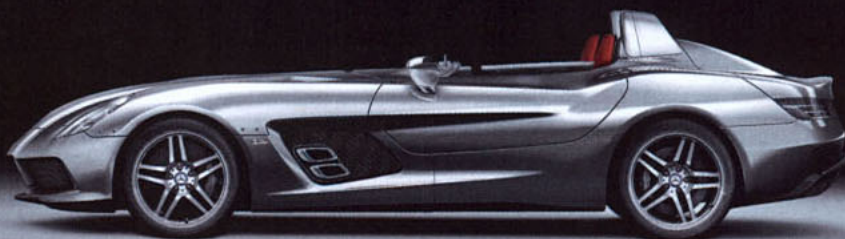
Inside the cockpit of the Mercedes is an

aluminium plate, positioned near the gear lever, which has the engraved signature of Sir Stirling himself.

Moss contested 66 grands prix between 1951 and '61, winning 16 races. Although he was never world champion, he was runner-up four times.

SLR SIR STIRLING STATS

- Number built **75**
- Top speed **217.35mph**
- Power **650bhp**
- Price **£700,000**
- 0-60mph **3.4secs**
- Engine **5.4ltr V8**



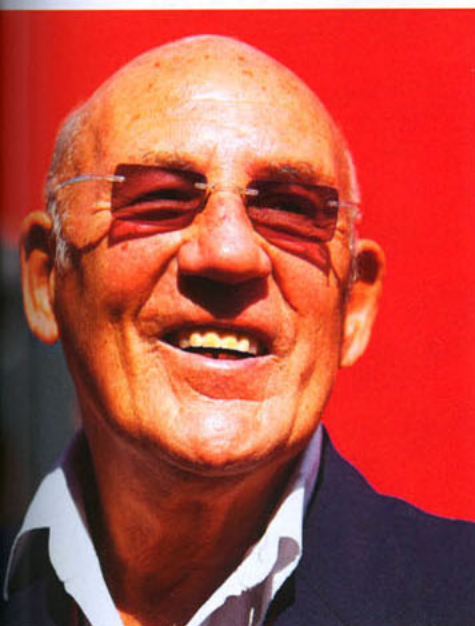


Emulating the SLR 300 Moss drove in 1955, the SLR doesn't even have a full windscreen - just small deflectors...



...And if it rains, well, tough. Mercedes are making just 75 of the limited-edition cars, and none will have a roof

The car is based on the SLR 300 that Moss won with in the '55 Mille Miglia



Sir Stirling Moss has put his name to an evolution of a car which gave him one of his most celebrated victories

DO YOU REMEMBER WHEN...



...Taki Inoue was hit by a rescue car?

POOR OLD TAKACHIHO INOUE. Running in a lowly 18th place at the 1995 Hungarian Grand Prix, he brought his smoky Footwork Arrows to a juddering halt after just 13 laps.

He uncoupled himself from his cockpit and noticed some smoke rising from the back of the FA16. Sensing an imminent fire and a slow response from the marshals around him, Inoue ran to the Armo to get a fire extinguisher. But, as he was returning to his stricken Arrows, he failed to notice a rescue vehicle that had drifted into view and it struck Inoue, sending the hapless Japanese driver over the bonnet of the car. Inoue was taken to the medical centre with bruising. Unbelievably, it was his second, similar incident of the year. At Monaco his Arrows was being towed back to the pits when it was upended after being hit by a course car. The back of the Arrows was destroyed and Inoue was forced to miss qualifying. "I thought F1 cars were dangerous, but I've had more problems with safety cars," he said.

PITLANE HEROES

F1 just couldn't exist without them

No 8
RENAULT'S PITSTOP RE-FUELLER



YOU'D THINK that holding a 40kg re-fuelling system, that pumps 12 litres of fuel a second, during a pitstop is concerning... "No, but from

Renault's John Massey loves the adrenaline of pitstop refuelling



an adrenaline point of view it's fantastic," says 41-year-old John Massey.

Massey took over re-fuelling the Renaults last year after working on the spare rig. He's been a presence in the pitlane for the past 15 years, originally as a tyre fitter for Goodyear.

"It's my job to put the nozzle on to the car during the pitstop, but as it's so heavy I've got another guy behind me who takes most of the weight of the hose," explains Massey.

When either Alonso or Piquet pit and the hose connects, the sensors trigger the pump. There are three lights: green indicates it's armed, amber shows fuel is flowing, and red shows the flow has finished. But what about the fire risk? "Safety is so good in F1 now, it's not a concern. Plus we have air pumped into our helmets, carry a supply on our back and have fire-proof suits, so we'd be okay. I certainly want to be doing this for a few years yet."

MAIN PIC: MERCEDES-BENZ; INSETS: LORENZO BELLANCA/LAT; MERCEDES-BENZ; PA PHOTOS; CLIVE MASON/GETTY IMAGES

PITPASS

PADDDOCK SPY

They'd say they're multi-talented, but drivers should probably stay in the cockpit...



Before the '95 Argentinian GP, jockey-sized Johnny Herbert mounted a horse to play polo



Heikki Kovalainen looks adept with the oar, as he navigates the seas in his kayak off Melbourne at the start of last year



Schumacher shows his poise during beach volleyball in 2005



Kimi stares intently at that puck in 2003. The 'Ice Man' was playing ice hockey in Slovenia



Tonio Luzzi and Scott Speed surf it up in 2006



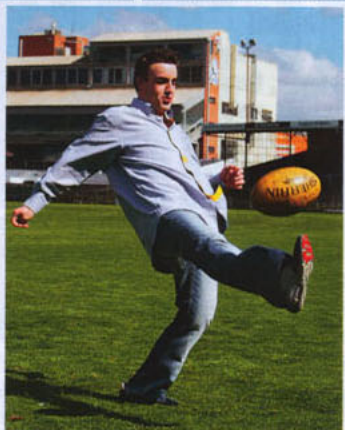
He's missed the apex! Jacques Villeneuve takes to the ski slopes in France in 2002



Vettel: makes it look easy 'on the wet' as well as in it



BMW's Mario Thissen shows that team bosses can ski too



Fernando Alonso attempts to play Aussie rules football before the 2003 Australian GP



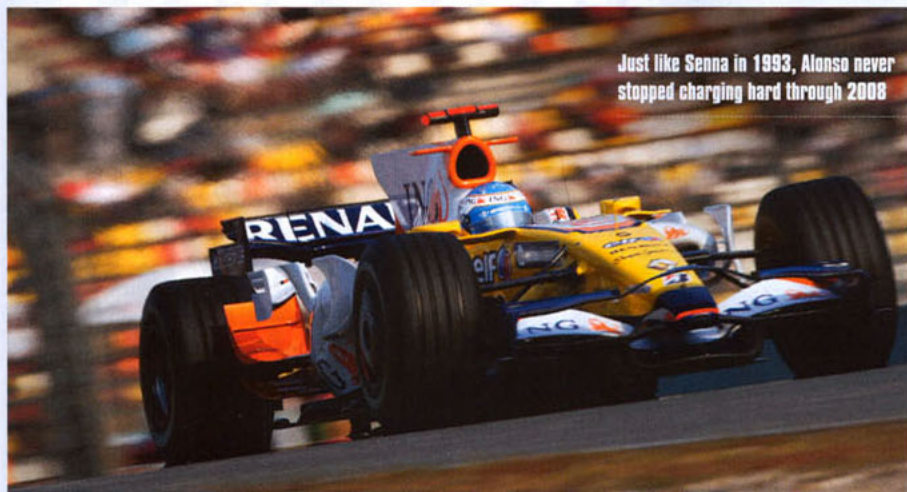
It's not only cycling that Webber's good at... Here he is attempting a cross-court forehand. Don't break anything!



Felipe Massa wasn't going to get lost during any sudden avalanches while skiing in 2008

LETTERS

Praise for quiet heroes... and proof the Hamiltons have their feet on the ground



Just like Senna in 1993, Alonso never stopped charging hard through 2008

DID ALONSO MATCH AYRTON?

In last year's Chinese GP, one view down the long straight showed Hamilton keeping his gap to the two Ferraris. And way back, out of focus, Alonso's Renault coming out of the corner, nearly hitting the barriers, then bouncing back on to the track. He finished fourth, just four seconds behind Massa. This encapsulates how great his year was: his 2008 season compares with Senna's in 1993.

Patrick O'Brien

Cape Town, South Africa

Quite right! But Senna beats him on wins for their seasons of struggle: 5-2

ONE WE FORGOT

The feature on great lost teams (*F1 Racing*, January) had one important omission: BRM.

After its efforts in the 1950s, BRM was rescued by Sir Alfred Owen and taken within his company, Rumbery Owen. It went on to win the constructors' title in 1962 and Graham Hill became world champion. Today, in Bourne, the impressive display of trophies is evidence of the team's success.

Peter Putterill

King's Lynn, UK

Good point, Peter. BRM are certainly worthy contenders for inclusion...



Graham Hill at East London for the 1962 South African GP during his title-winning year with the Bourne-based BRM

REMEMBERING SUPER COOPER

The Cooper segment of the article on great lost teams brought back memories. My father bought one of the original F3 models from hillclimb champion Denis Poore.

His position as a steward of the meeting for the Half-Litre Club meant I got to watch the races from the startline area in the infield, long before the pits were built. I remember meeting Stirling Moss's Dad, Alfred, in 1954 soon after the Italian GP at Monza, in which the "lad" had driven for the first time as part of the Maserati team. He wasn't best pleased that poor workmanship had left the oil tank hanging off when he was leading after soundly outdriving Fangio.

Later, I was particularly intrigued to find myself using bound copies of old O-Level exam papers bearing the distinctive signature of a now fellow old boy, Stirling Moss. As he reminded me years later, he never sat O-Levels, after missing most of a year's education, owing to kidney problems.

Jon Barrass

Irchester, UK

For more memories, see p106 for Moss's win at the 1957 Italian GP

APPLAUDING UNSUNG HEROES

I enjoyed your touching article about Mauro, (*F1 Racing*, December – about Senna's first mechanic). It was moving to see that among some of the poorest neighbourhoods, resides a humble man who spends his time helping youngsters develop talent. We should be thankful for the unsung heroes of our sport.

Andrew Sweeney,

Wirral, UK

Who knows, without Mauro we may never have seen F1's greatest icon

STAR LETTER

LEWIS KEEPS IT REAL

I have a warming tale for the anti-Lewis brigade. Over the last year or so we have all been making fun of my mother for sending letters, via McLaren, to Lewis Hamilton and his family. We thought she was barking mad when she explained we had named our son, her grandson, Lewis.

Imagine our surprise and delight when, a week before Christmas, we received a handwritten Christmas card, personally signed by Anthony, Linda, Nic and Lewis. They addressed it to the 'Kent family and Lewis', which proves that they read and responded to the letters.

Cold and corporate? No way. Massive thanks to the Hamilton family and McLaren, from the Kent family and Lewis.

Jason Kent

Devizes, UK

Well, you can't say fairer than that. Good work, family Hamilton



Lewis may be world champ but he and his family still have their feet firmly on the ground – and in touch with the fans

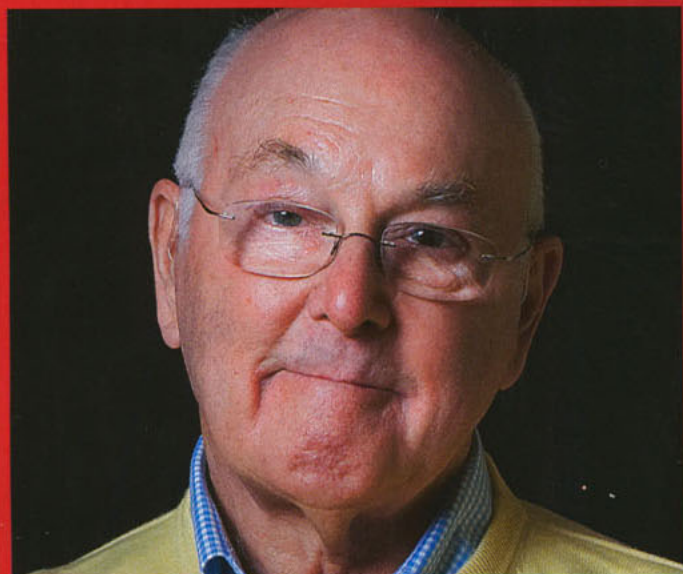
STAR PRIZE

Jason wins an Italian leather holdall from Caracalla Bagaglio's Commemorative Motorsport Collection. For more information visit, www.cbfil.co.uk



CARACALLA BAGAGLIO

FINEST ITALIAN LUGGAGE



MURRAY WALKER

The voice of Formula 1 speaks his mind every month – only in *F1 Racing*



Jenson Button took Honda's only win of their most recent F1 stint, at the 2006 Hungarian GP

HONDA F1: AU REVOIR BUT NOT FAREWELL

In his voice-in-the-wilderness missionary work to reduce the costs of F1, Max Mosley has always said that the major road car constructors enter and leave the sport as it suits them, and sadly he is right. Mercedes-Benz have done so. So have Alfa Romeo, Renault and BMW. Only Ferrari have had an unbroken presence since 1950, but if you'd asked me last December which team would be one of the least likely to be missing in 2009, I would have said: "Honda."

I was privileged to meet the late, great Soichiro Honda in 1954 when, as a visitor to

the Isle Of Man TT, he led a small delegation from his company (that none of us had heard of) to investigate what the world's greatest motorsport event was all about. Little did I realise what that visit was to lead to.

Mr Honda, a mightily impressive man, passionately believed in the value of racing to improve the breed, gain publicity and train engineers in the heat of competition. It wasn't long before, with a bewildering variety of technically advanced bikes, Honda ruled the roost and contributed to the downfall of the British motorcycle industry. Then it was cars, with Ritchie Ginther's first Honda F1 win at Mexico 1965 in the 1.5ltr V12. In 1967

John Surtees was victorious in the 3ltr V12 'Hondola' and then came the glory years as engine supplier to Williams, Lotus and McLaren which netted 69 victories between 1984 and 1992. But even Honda, with all their passion, had sabbatical years, notably from 1969 to 1982 and from 1993 to 1999. And now they're out again.

In the last three years I've had the unforgettable experience of being Honda's F1 ambassador. I've worn the uniform, been part of the team, attended many of the meetings and learned things I never knew as a commentator. 2006 was great, with Jenson's win in Hungary and the prospect

of continued success, but the last two years were a hideous letdown. Finally, the Honda management bit the bullet and hired Ross Brawn who did so much to make winners out of Benetton and Ferrari. Happy days were here again because now Honda had everything it needed to win, in the form of experience, determination, money, talented people and the right leadership. But it was not to be. Not under the Honda name anyway – with a potential race-winning car for '09, Japan pulled the plug.

As I write it remains to be seen whether or not the negotiations with possible buyers will be successful. However, even in the happy event that they are, I grieve over Honda's understandable decision – everyone in what is a great team deserves so much more. Much better that, though, than the team goes under. But of one thing I am sure, and that is that, when the balance sheet permits, Honda will be back. Racing is part of their DNA and I eagerly look forward to their return.

RETIREMENT ISN'T ALWAYS WELCOME...

F1 is an ever-changing scene and every year drivers retire or are dropped by their teams. This year, with our sport in a state of flux due to dramatically changed regulations and ruthless cost cutting, we're sadly facing the loss of three of the very best. David Coulthard is going of his own accord after a brilliant career which gained him 13 victories. But if the aftermath of Honda's withdrawal is also the loss of Jenson Button and Rubens Barrichello, it certainly won't be what they want. They will, in fact, be F1's first enforced casualties of the credit crunch.

Practically everyone has, rightly, spoken in praise of David Coulthard but I've been waiting to welcome him to his new life as a broadcaster, for which he's admirably suited. He's been there and done that as a driver and won everyone over with his dignified and friendly persona. Now, with his ability to speak his mind authoritatively, fairly, forcefully and eloquently, he'll be a strong and most welcome member of the BBC team.

Just as Stirling Moss had the misfortune to be partnered by the great Juan Manuel Fangio, and Rubens Barrichello was overshadowed at Ferrari by Michael Schumacher, so David lost at least two victories by having to defer to Mika Häkkinen. Even so, he won more grands prix than several world champions and can, justifiably, be more than content with his career as he faces up to his new challenge.

But it's very different for Rubens and Jenson. Despite the fact that Barrichello has competed in more grands prix than any other driver, and that he won a very impressive nine of them, his passion to race is undimmed. The cynics will maintain that he was going to be replaced at Honda by Bruno Senna this season in any case, but I'm not so sure and, for what it's worth, I firmly

believe that he could still win races in the right car and that his unequalled experience and ability would be an asset to any team.

Some would say that both David and Rubens have had their rewards and should now make way for others, but you certainly couldn't say that of the unfortunate Jenson Button. For one reason or another, usually due to the car he's been driving, he has never been in a consistent position to win, but his superb 2004 season, and his 2006 victory in Hungary, showed that he is more than capable of getting the job done. If you can

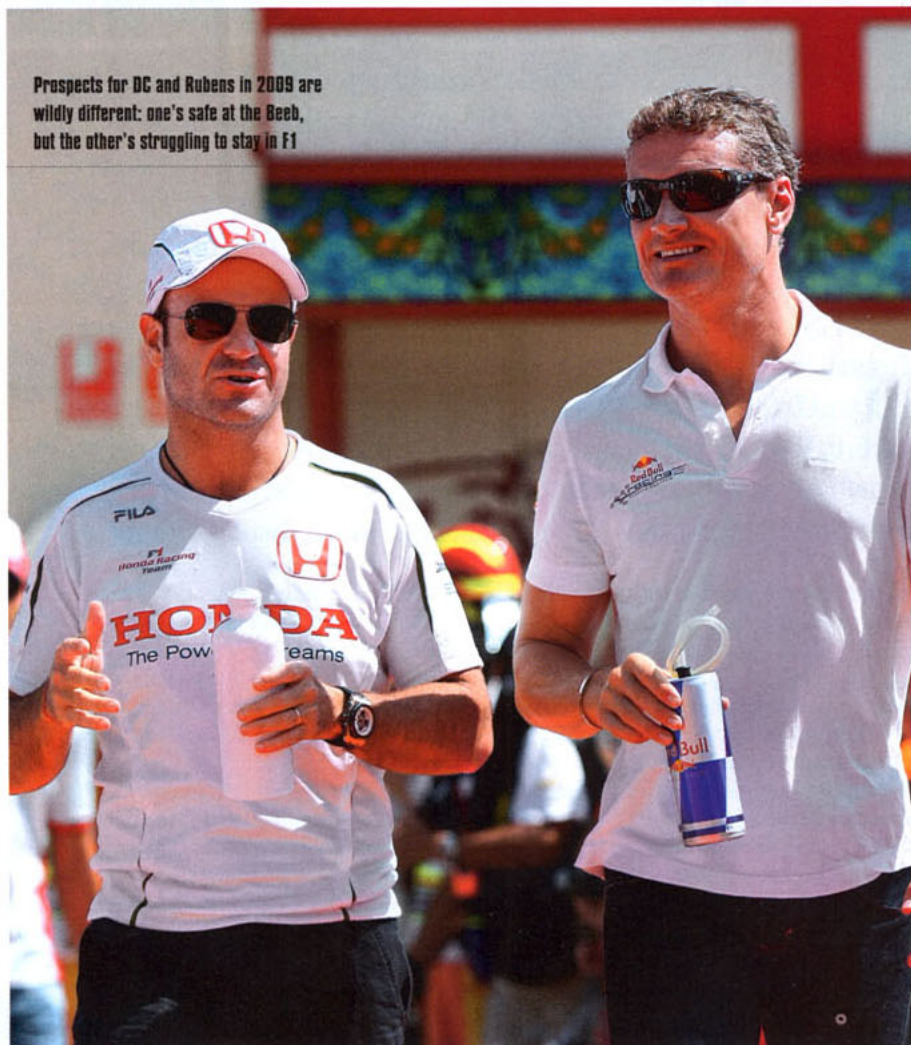
win races, you can win the championship.

Jenson is a top man and I am full of admiration and respect for the fact that he never uttered a word of public criticism during 2007 and 2008 when his cars were not worthy of his considerable talent. I find it hard to accept he won't have a seat this year. He's just too good not to, though at this 11th hour, it's hard to see where it'll be.

Fingers crossed for Jenson, then. The same, but with less optimism, for Rubens... and be ready for viewer brickbats, David. We all get them!

“Jenson's just too good not to have a drive. But it's hard to see where it'll be”

Prospects for DC and Rubens in 2009 are wildly different: one's safe at the Beeb, but the other's struggling to stay in F1



LAT ARCHIVE, VLADIMIR RYS/BONGARTS/GETTY IMAGES

{ WHATEVER HAPPENED TO... }



Then Barbazza on his way to an impressive sixth at Imola with Minardi in 1993



FABRIZIO BARBAZZA

EX-MINARDI
DRIVER. NOW
INTO FISHING
IN CUBA

Anybody born in the town of Monza was always likely to develop a passion for motor racing. And sure enough Fabrizio Barbazza caught the bug at an early age. By 22 he was third in the Italian F3 series, then decided to switch his career to America. In 1987 he was top rookie of the year in Indycars and finished third in the Indy 500.

In 1991 he realised his dream of competing in F1, but the woefully slow AGS never made it past qualifying. After a year out, he joined Minardi for '93 and impressed by scoring valuable points at Donington Park and Imola, before a lack of cash saw him replaced by Pierluigi Martini. Back in America, in sportscars, his career was cut short following a nasty accident at Road Atlanta. It was in the year he spent recovering from his injuries that he had an inspired idea...

"I was racing sportscars at Daytona and during Christmas decided that I would head down to Cuba to do a spot of fly-fishing, as that's my other great passion. It was such a great vacation that, when I was recuperating after my sportscar accident, I was thinking more and more about that holiday.

"I knew I would never put on a helmet and race again, so in 1997 I decided that I would set up a fishing resort for tourists in Cuba.

"Since then the company has grown and I'm setting up another resort in the north of Cuba, called La Villa Clara. I have 13 boats in total and there's no better place for saltwater fishing than Cuba, where the average sea temperature is 26 degrees C and there are lots of tarpon, bonefish, snook and barracuda. I'm

also a big fan of freshwater fly-fishing too. A lot of my clients are English and a few of them do recognise me from when I raced – but mainly they want to talk about fishing.

"Actually, before I set-up the resort in Cuba, I had started work with race organisers about improving safety for drivers and circuits. After Ayrton Senna's fatal accident, I couldn't believe how stupid it was that a driver could be killed by hitting the wall. So I helped develop a product that could be used on retaining walls that could absorb energy much better. I started to work with the Italian racing authorities to develop this material.

"When I raced in F1 back in '93, that was the last truly great era – it was before it became too electronic, and I don't have the



Now After a serious accident in sportscars, the Italian turned his attention to fly-fishing

same passion about F1 that I did.

"Here in Cuba there's a local chap who's interested in racing and who runs a kart team. He asked me if I wanted to try driving a kart – I refused, I never wanted to go back after my accident. But he kept pestering, so eventually I agreed, and I loved it! I bought a kart straight away and when I get any spare time I go karting. I even came second in a championship last year. Racing's in my blood and, even though I love fishing, I've found you never lose that racing instinct."

THE TOP TEN...

CLOSEST EVER F1 FINISHES

No one remembers who finishes second, unless they're right up your exhaust

1 ITALIAN GP 1971 - 0.010secs

Pre-chicane Monza always used to produce thrilling races, and the 1971 Italian GP was no exception. As five cars rounded Parabolica on the last lap, Peter Gethin judged his pass to perfection to clinch his only F1 win by 0.010secs. Just 0.6secs covered the first five cars across the line.

2 UNITED STATES GP 2002 - 0.011secs

Michael Schumacher had wrapped up the title early and decided he would pay back team-mate Rubens Barrichello at Indy. Or was he trying to organise a dead heat? Whatever, he slowed but Rubens was unsure of the plan. He just passed Schumi at the line in front of a bewildered crowd.

3 SPANISH GP 1986 - 0.014secs

Nigel Mansell's Williams was closing on Ayrton Senna's Lotus at the newly built Jerez de la Frontera. Rounding the last corner for the 72nd and final time, he jinked out from behind Senna's rear wing and the pair crossed the finish side-by-side. But Mansell was second and subsequently argued the finish line had been moved...



A close finish at Jerez in 1986. Senna won and Mansell meaned: as would be the case for years to come...

4 AUSTRIAN GP 1982 - 0.050secs

Five laps from the flag, Alain Prost retired, handing first place to Elio de Angelis's Lotus. Behind him Keke Rosberg was catching, and as the pair headed onto the final lap of the awesomely quick Österreichring circuit, just 1.6secs separated them. A lap later de Angelis held Rosberg at bay by 0.050s to claim his first win.

5 ITALIAN GP 1969 - 0.080secs

Monza '69 belonged to two men: Jackie Stewart and Jochen Rindt. Their Matra and Lotus machines constantly vied for the lead over 68 laps at the historic *autodromo*. As they headed for the finish, Stewart timed his move to fractionally eclipse Rindt as they sprinted across the line.

6 FRENCH GP 1954 - 0.100secs

Mercedes-Benz returned to grand prix racing at Reims, and the German marque won first time out. Argentinian legend Juan Manuel Fangio led home a formation finish ahead of Karl Kling. The two W196s dominated the race and finished a lap ahead of everyone else.

7 FRENCH GP 1961 - 0.100secs

Dan Gurney's Porsche was set for victory in the searing heat of Reims, when coming out of Thillois the Ferrari of Giancarlo Baghetti gained a tow and passed Gurney just before the line. Baghetti sealed his place in history, becoming the first man to win on his championship debut.

8 CANADIAN GP 2000 - 0.174secs

Michael Schumacher was comfortably leading, but his Ferrari was struck with mechanical gremlins and he started to slow down. Catching him up quickly was his dutiful team-mate Rubens Barrichello and, despite pulling alongside at the flag, he backed off just before the line.

9 AUSTRIAN GP 2002 - 0.182secs

Ferrari shenanigans once again, but this one left a sour taste in the mouth. Barrichello led but, under orders from the Ferrari pitwall, was asked to let Schumacher through to win. The crowd booed. Michael offered Rubens the top step of the podium. The crowd booed again.



The Ferraris caused controversy at the end of the Austrian GP in 2002, after team orders were enforced

10 BRITISH GP 1955 - 0.200secs

Mercedes-Benz team-mates Stirling Moss and Juan Manuel Fangio vied for contention at Aintree. Moss appeared to have the advantage at his home race ahead of the 'Maestro' but at the final corner waved Fangio through. Whether Fangio lifted or not, no one's sure, as it was Moss who won.



Peter Gethin (second left) edges out Ronnie Peterson to win the closest grand prix in history at Monza in 1971



HELMUT MARKO

The man who chooses Red Bull's drivers on losing his eye... and flying cakes

DR HELMUT MARKO'S doctorate in law delayed his early racing career, but Jochen Rindt's friend was soon progressing through F3 into sportscars, and was in F1 by 1971.

Despite death-defying drives in the Targa Florio road race, it was the 1972 French Grand Prix that ended Marko's racing career when a stone pierced his visor and left him blinded in his left eye for life.

He stopped racing and became a hotelier in his hometown of Graz in Austria, before a close alliance with Red Bull boss Dietrich Mateschitz took him back into motorsport. He helped Gerhard Berger and Karl Wendlinger move into F1 and ran a Formula 3000 team where Jörg Müller clinched the title in 1996. Since then Mateschitz has charged Dr Marko with seeking out the best young driving talent to race for Red Bull and



Toro Rosso in Formula 1. His best discovery to date has been the not-too-shabby Sebastian Vettel. *F1 Racing* sat down with The Doctor to discuss his life in the sport.

FAVOURITE PERSON JO BONNIER

"Someone I liked, who is sadly no longer with us, was Joakim Bonnier. He cared about safety and was one of the founder members of the Grand Prix Drivers' Association. I remember going to his house in Switzerland – there was a famous Picasso on one side of the front room and one of his racing cars on the other. He used to combine his love for culture and sport; he was a real gentleman."

FASTEST DRIVER **JOCHEN RINDT**

"I have seen so many good drivers over the years and it's difficult to compare a driver in the 1970s with one from today. If you're talking about outstanding drivers in F1, for me you have to include Jochen Rindt because of his natural speed. Silverstone at that time didn't have the chicane before Woodcote corner – he was something else through there. I also have to mention Ayrton Senna. His qualifying lap at the Pacific Grand Prix at Aida in 1994 was amazing."



FUNNIEST MOMENT **PARTYING WITH** **JOHN SURTEES**

"It was in Nivelles for the Belgian Grand Prix in 1972, and after the race we had a great party which all the teams and drivers went to. That was more common in those times and I remember Graham Hill was there with John Surtees. He was always a very strict and formal person, but that evening he was part of the party – and that really surprised me. Graham was always a lot of fun, but to see Surtees try and relax was really funny. There were cakes flying around and everything..."



FAVOURITE CIRCUIT **NÜRBURGRING**

"I'm from an earlier era and, as a track, you can't beat the Nürburgring Nordschleife. I knew the old version before guardrails, which had loads of jumps all over the place. It's been modified a few times since then. It was a really special circuit, somewhere that you had respect for and it really took your breath away. It was a track where you could take risks and could genuinely catch someone who was ahead."



BEST DRIVER TODAY **FERNANDO ALONSO**

"I would say it's Alonso, and you only have to look at his performance at the Singapore Grand Prix to prove it. He is the most complete driver we have at the moment. What I mean by that is that he's fast, he can motivate a team, he pushes everybody around him, he's determined and every lap he's on the limit. He's unbelievable."



WORST ACCIDENT **FRENCH GP 1972**

"I was driving the BRM P160B, which had more than 200ltrs of fuel in it. Anyway, I saw something suddenly come towards me – it was a stone that came through my visor and went into my eye. I thought, 'Shit!' There were about 20 cars behind me. I thought if I don't do something, with all that fuel on board, it could be a horrifying accident. I parked the car, and then I fell unconscious. I was taken to a hospital and some guy injected fluid directly into my eye, which was bloody painful. Then I was put into an ambulance and moved to another hospital... but there was no doctor because we were in the middle of France on a Sunday afternoon. Finally by eight o'clock a specialist arrived. I'm relieved that safety in Formula 1 has improved so much since my day."

{ YOU ASK THE QUESTIONS }

RON DENNIS

F1's arch perfectionist has a lot to talk about: Fernando Alonso, 'Ronspeak' and how he *nearly* signed Michael Schumacher. And, of course, the aerodynamic capabilities of Nigel Mansell's bottom

“Is my tie straight?” Sat in his cavernous office in the McLaren Technology Centre in Woking, Ron Dennis fiddles with his immaculate tie knot as the *F1 Racing* camera readies itself. Eager that it should be perfect, he moves it ever so slightly to the left. Then a smidgen more. One last tiny adjustment, and it's finally deemed acceptable for photography.

It might be the sort of attention to detail that infuriates his detractors, but whether he's dealing with a tie or an F1 world championship, Ron Dennis leaves no stone unturned in his pursuit of

WORDS HANS SEEBERG
PORTRAITS LORENZO BELLANCA/LAT

perfection. It's a trait people can point to when trying to back up their case of Ron as a bit, well, *dull* – yet he's far from it. Yes, he speaks with precision, but under the corporate sheen is a sensitive chap with a wickedly dry sense of humour.

“Mr Dennis, this is the best response we've had for *You Ask The Questions* – you got more than double the responses that Flavio Briatore got,” ventures *F1 Racing*. He smiles. “I tell you what then, why don't you make that the

first question?” *Really?* Okay, Ron. In a huge break with tradition, here goes...

For this *You Ask The Questions*, the response from *F1 Racing's* readers was more than double that of any other person we've done – including Flavio Briatore. How does that make you feel?

Hans Seeberg, Editor, F1 Racing, London Well, I've spent my life beating Flavio, so that's not an exception to the rule! But I'm very flattered. It's nice to know that people have sufficient interest in both me and McLaren to ask these things. ➤



{ YOU ASK THE QUESTIONS }

What was the real reason Juan Pablo Montoya quit Formula 1?

Danny Mullins, UK

I felt he'd become disenchanted with Formula 1 as a whole, and that he was therefore uncomfortable in our team. Most of that disenchantment was a result of his early season accident in 2005. He never really got the right mindset back after that. I was therefore comfortable with the decision we jointly took to end his contract prematurely. It wasn't working out for him and it wasn't working out for us, so it was the right thing to do – but we wished him well in NASCAR and we parted as friends.

Hello, Mr Dennis, what's with the flamboyant pitcrew helmets?

Brandon Halvorsen, USA

We wanted to convey a specific image, and I quite liked the idea of our team having a different look during the pitstops from when they were working on the cars. My analogy was that the outfits they wore during pitstops should look like battle-ready armour. When we were designing all the pit equipment, we looked at uniforms worn by soldiers and even astronauts... we even went back in time and looked at war paint.

If you retired now, could you ever imagine yourself working for Ferrari one day?

Ike, Santa Clara, USA

[Laughs] Amusing question. You know, if you cut me I'd bleed McLaren, but it goes beyond that. The DNA of McLaren is in me and I'm in the DNA of McLaren. I simply can't imagine ever being able to put my mind where it would have to be in order to function effectively in another Formula 1 environment. It's as simple as that.

Was Kimi too wild for McLaren?

Luc Verhelle, France

Not at all. Kimi did a great job for us – there were two world championships we should have won together, 2003 and 2005, and he left McLaren as a friend and he still is a friend. It's great to beat



When it came to designing McLaren's pitcrew overalls, Ron studied soldiers, astronauts and even war paint

him: although I'd far rather one of our drivers had won, it made me smile when he won his world title in 2007.

Would you consider taking over Max Mosley's position at the FIA? I think you'd be ideal for the job.

David McKinnon, Scotland

Thanks for the vote of confidence, David! However, I feel very strongly that no senior member of any Formula 1 team should ever go on to hold a senior position within the FIA. Anybody who's in a position of leadership of a company has to live, sleep and breathe that brand, and I think it would be impossible for me – even though I consider myself extremely disciplined – to be completely impartial regarding all the teams. I don't think it's possible for anyone who's led a successful team, frankly, and it would therefore be inappropriate for me.

How do you feel when drivers want to leave McLaren just because they're not enjoying driving for the team, such as Montoya, Alonso and Räikkönen?

Murray Stevenson, Scotland

Well, change is inevitable, but those three drivers left in entirely different circumstances. What's clear is that we at McLaren have a very defined culture, and we expect a great deal from everyone who works for McLaren. At the end of

the day, our drivers are simply our highest-paid employees – no more, no less – and sometimes our culture doesn't sit well with their characters. Montoya's problems stemmed from the accident in which he broke his collarbone; with Fernando I think he clearly didn't expect the situation with Lewis to unfold the way it did, but I have no malice towards Fernando. Again, it just wasn't working out for him or for us, and difficult decisions therefore had to be taken – but they were the right decisions. With Kimi, I think he was made an offer he couldn't refuse – he secured a much better commercial arrangement with Ferrari than we could have offered. I wished him well then and I still wish him well now. But, to be honest, I wish all our ex-drivers well – I don't carry any mental baggage with these issues.

What did you say to David Coulthard when you found out he was retiring from F1?

Guillaume Navarro, France

First of all, DC is a very good friend. Secondly, I think it was the right decision for him to retire. He'd enjoyed a long and successful career at McLaren and, although the world championship eluded him, he won a great many races for us [12]. He was always the perfect gentleman and a delight to work with.

What's been your biggest mistake?

Bernard Krabbenhöft Viudez, Spain

I've had a pretty long career – it's 42 years since my first working grand prix – and I intend it to be longer still. But, over a time span of that length, it's inevitable that you'll make the odd mistake. I guess, from a business point of view, I strayed a bit too far from McLaren's core business when I put a lot of time and energy into our audio/visual company, and there was frustration when it didn't work out. We achieved a lot of technical goals with that project, and we won a huge number of awards for the sheer quality of our products, but in the end the idea failed to deliver one key ingredient: it didn't make money.

Was the McLaren car Nigel Mansell couldn't drive particularly narrow, or did he just have a large arse?

Mike Paterson, UK

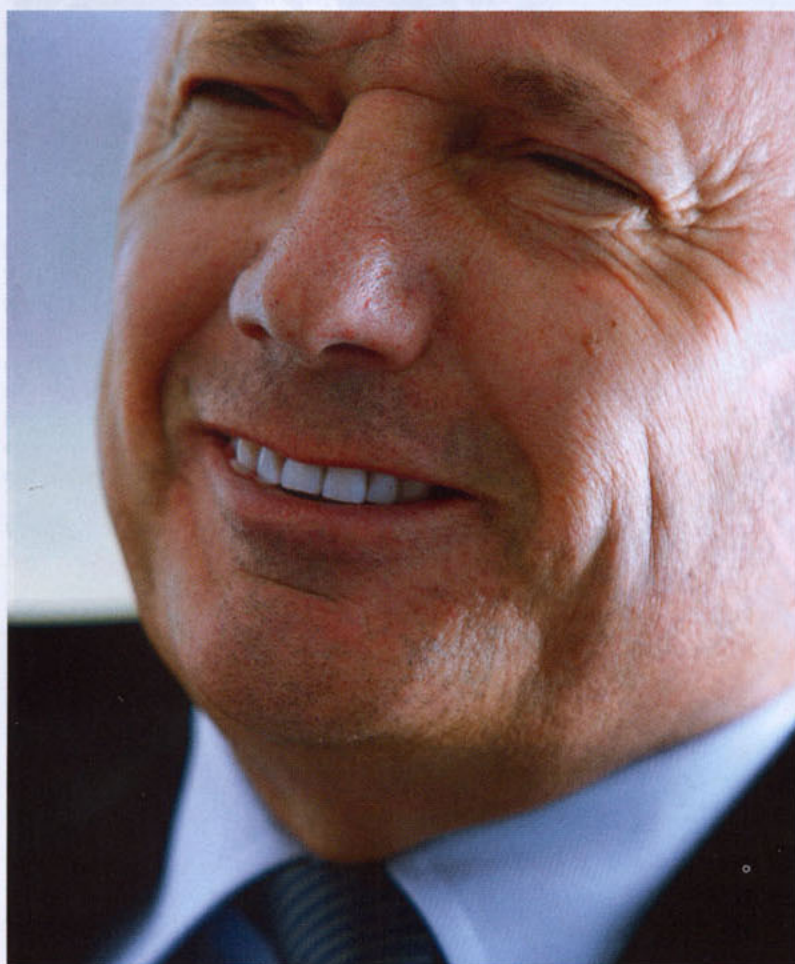
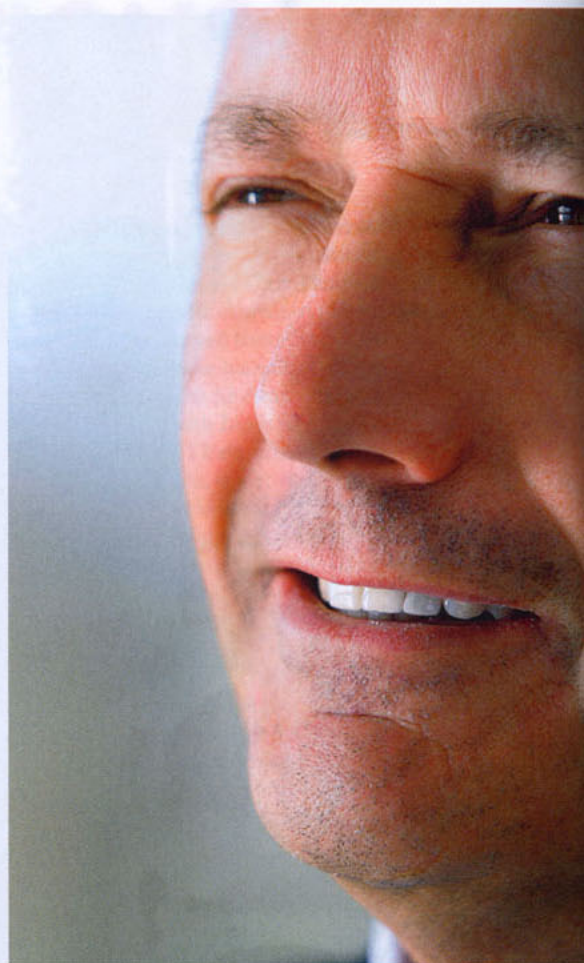
[Laughs] I suppose you could say a bit of both. Seriously, though, we wanted to give Nigel every opportunity to drive our car properly, but it was clear that he was ▶

“Montoya had become disenchanted with F1 – it wasn't working out”

A young Ron Dennis talks with Jack Brabham (centre left) while working as a mechanic for the Aussie legend's team at Monaco in 1970



MAIN PIC: LAT ARCHIVE. INSET: CLIVE MASON/GETTY IMAGES



{ YOU ASK THE QUESTIONS }

a little, er, broader in the beam than the car would accept, so we had to make special monocoques for him. Besides that, the car we produced that year wasn't one of our better ones, to be honest, despite the fact that we tried hard to make it work. But I think Nigel was a better friend when he left McLaren than he was when he joined, and the important thing is to part good friends.

Having been his boss, could you give us your perspective on Kimi Räikkönen's strange form in 2008? Was it a lack of motivation, or an inability to adapt his driving style to the car and tyres?

Charlie Furness Smith, England
I'd say it was neither. Despite what his detractors say about him, Kimi is always motivated. He's very quiet, yes – in that uniquely Finnish way – but he's a great driver. He'll be quick in 2009 and he'll therefore be a fierce competitor.

Mr Dennis, all motor racing fans are very familiar with 'Ronspeak'. How does it feel to have invented your own linguistic sub-culture?

Martin Wellbelove, UK
[Laughs] Adherence to a homogeneous lexicon axiomatically optimises messaging consistency. So it feels good.

There have been stories about you trying to sign Michael Schumacher in the '90s. How close did you get?

Tom Driscoll, England
We had several conversations – he was having a period of disillusionment at the time, and the only hurdle we had left to cross was one that we weren't able to cross, which was regarding contractual details. But it wouldn't be appropriate to share those details with the readers of *F1 Racing*, I'm afraid.

What do you think about the current system of points scoring in F1? Do you want medals?

Erwin Bal, Poland
Whatever system we have in place should be designed to identify a true

world champion, and we're not opposed to anything that enhances that process. But we do strongly believe in doing the right research to make sure any new system doesn't confuse the public or distort the outcome of the championship. We'll support whatever the majority of the teams want to do.

Are Fernando and Juan Pablo on your Christmas card list?

Karen Smith, USA
[Laughs] I'd be very surprised if they aren't but I'll check and if they're not I'll make sure they are. There's no reason why they shouldn't be.

What is the most important personality trait that a team principal should have?

Peter Olsso, Canada
Well, there are a few: calmness under pressure, the ability to focus, the ability to multi-task, the ability to listen... A gift for paying attention to detail combined with a vision for the bigger picture.

With the new regulations in 2009, which team do you see as a serious threat, other than Ferrari?

Mike Mitchell, Scotland
Hmm... there's obviously some well-financed teams, who *should* have the ability to hit the ground running next year. It's likely that BMW and Renault will be two of them, but there'll also be a dark horse. I'm not sure who that'll be yet, but there *will* be a dark horse...

If you were FIA President, what would be the first things that you would change in F1?

Ben Nelson, USA
[Laughs] The first thing is to make all Formula 1 cars illegal if they weren't made in Woking. Seriously, I'm a big advocate of regulatory stability. I think regulatory stability decreases costs and promotes closer racing.

How do you feel when some of your former drivers and teammates talk about you in the media



Inappropriate format: Mansell didn't fit in the MP4/10

and say you can be a difficult person to work with?

Rafal Sokol, Poland
I understand that any driver has to be driven by complete self-belief, so any problem can never be down to him – it's the team. It's just a consequence of the self-belief a driver has to have.

If Ferrari decided to leave F1, what state would the sport be left in?

Gianni Cocozza, Scotland
Well, it would be a hell of a lot easier for us to win races! But Ferrari are part of the history of Formula 1, they have tremendous heritage and the sport would be a poorer place without them. From McLaren's perspective, not having Ferrari to compete against would be a disappointment for us.

What are your passions outside F1?

Melodee Ghosn, USA
I love contemporary art and architecture. From a sporting point of view, I like skiing, golf, scuba diving and shooting. I like them because I can share them with my kids. All my kids are certified scuba divers, proficient skiers and very good at golf, and I'm very proud of that. And it's great fun on a Sunday morning in the winter to go out with my son and shoot a few hundred clays.

Ron, how would you like to be remembered when you finally leave motorsport?

Martin Grout, UK
I don't think about it much, but I'd like the people closest to me to know what I've tried to achieve, and that I've given more to motorsport than I've taken. **FO**

JOIN OUR READER PANEL

Want to put a question to an F1 star? Visit www.f1racing.co.uk and join the Reader Panel. We'll let you know which interviews are coming up

“Nigel Mansell was a bit, er, broader in the beam than the car would take”



WHAT THE CREDIT CRUNCH REALLY MEANS FOR FORMULA 1

The sport's addiction to extravagance makes it vulnerable in hard economic times. *F1 Racing* investigates how the industry plans to ride out the global crisis

WORDS EDWARD GORMAN ILLUSTRATION PETER CROWTHER

Formula 1 came down to earth with a bump when the news emerged from Tokyo in mid-December that Honda would be withdrawing. The impact of that sudden decision was seismic. For the team's Brackley factory it marked the beginning of a battle for survival and for the livelihoods of more than 700 employees who work there; for the sport as a whole it came as the biggest wake-up call imaginable...>

“Gone are the days of 1,000-plus personnel in a grand prix team”



Christian Horner
Team principal, Red Bull Racing

“F1 is dangerous, exciting, glamorous and noisy – all those things make it very appealing to a large number of people, and none of that has changed”



Nick Fry
Chief executive officer, Honda F1

Formula 1 was not supposed to be about the real world. There are hard times on the high street as the global economic downturn begins to bite; people are losing jobs, companies are going out of business but the pinnacle series of motorsport, with its extravagant budgets, vast marketing programmes and stellar driver salaries was surely immune to the slings and arrows of economic fortune.

That was true up until the moment Honda pulled the plug on an operation which was thought to be eating up well over £200million a year, and was poised to begin a fightback to the podium-end of the grid under the calm guidance of team principal Ross Brawn. No-one predicted Honda's exit; an 'independent' maybe – Force India or the Red Bull 'B' team, Toro Rosso – but not one of the powerhouses of the sport which had been increasing their exposure, not trimming as some others had been, such as Renault.

In the long road that stretches back to 1950, it's no surprise that concepts like 'watershed' and 'turning point' have been applied to this moment in Formula 1's evolution, and most of the big players have subscribed to that. FIA President Max Mosley, who has been urging a more modest budgetary environment on motor racing's most exotic championship for several years, could quite rightly say, "I told you so," while Ferrari's Luca di Montezemolo could see the opportunity for a new start in the wake of Honda's pull-out. "The cost-cutting measures we have taken so far are only the first step," he intoned recently. "In my opinion, between now and the end of 2011, we have to renew F1 ready for 2012, or at the maximum 2013, with a completely new sport."

Indeed, the Honda decision has already had a tangible impact on day-to-day business. There can be no doubt that the outbreak of unity among the F1 teams, under the guise of the Formula One Teams Association (FOTA), has been made easier by the sudden loss of one of their number. Equally there can be little argument that the recent cost-cutting deal between FOTA and the FIA, which has seen team operating budgets cut by as much as 20 per cent for the 2009 season and includes a ban on in-season testing this year and severe limits on windtunnel usage, would not have been so easily arrived at without the collective prod in the ribs delivered by Honda.

Honda was killed off in Formula 1 by a worldwide recession, which has a depth and magnitude we can still only guess at. The question now is what long-term impact this economic downturn is likely to have on Formula 1, and how the sport can best ride out a downshift in activity which is hitting the car industry harder than almost any other sector. In the immediate aftermath of Honda's decision, there were fears that other

teams could follow suit, among them Toyota or Renault. But those have receded for now, and it seems unlikely that the grid will lose any more players before the Australian GP opens the season at the end of March.

The most apocalyptic of analyses might question Formula 1's very survival as it becomes progressively trapped in a pincer between tight money and a global environmental crisis which will ask ever more searching questions of it. But Bernie Ecclestone has no such fears, and routinely reacts with a mere shrug of the shoulders to suggestions that his business could collapse. He appears remarkably sanguine about the future – he's unworried by Honda's absence and jokes that if more cars were to pull out he would replace them with GP2 machines.

Ecclestone is not alone in his determined optimism. *F1 Racing* has spoken to a broad cross-section of opinion-formers within the sport and, without exception, they see a strong future for Formula 1 even if Christian Horner, the team principal of Red Bull Racing, warned we are still in the dark to some extent. "The problem is, nobody knows how bad things are going to get before they get better," he says.

The general view is that the business of Formula 1 is too robust to face a life-threatening crisis like this, so long as it continues on the path of prudent cost-cutting during the downswing.

Mario Theissen, the team principal of BMW Sauber, has no doubts: "Clearly Formula 1 cannot escape from a worldwide economic crisis," he says. "On the other hand, Formula 1 has a very strong profile. It is a unique blend of top sport, high technology, business and entertainment. This is why it attracts such a diversity of fans and supporters worldwide. F1 has all it takes to master a challenging situation and I am confident about its future."

Nick Fry, chief executive of Honda F1, who is fighting on the frontline to save his outfit, could be forgiven for seeing a glass that's half empty, but even he believes the future is looking more than manageable. "Although we are quite rightly critical of our business and we work out ways in which it can be improved, it is still the number two or three ranked sport in every country in terms of popularity, and it still has a vast worldwide fanbase. Why? Because generally, around the world, people like cars; Formula 1 is dangerous and exciting. It's glamorous and noisy, and all those things make it very appealing to a large number of people. None of that has changed, and it won't change. Those predicting its downfall are misled in their views," says Fry.

The debate starts, however, about cost-cutting and its purpose. Most believe that the current round of cuts and the proposed measures for 2010 are merely the first steps in a direction that Formula 1 must follow, regardless of the economic conditions. According to this approach, the recent

past is already a bygone era of extravagant spending which, even in times of prosperity, should not be revisited. As Luca di Montezemolo put it: "I think one important, fantastic era of Formula 1 has finished for various reasons." In other words, this recession will prove a turning point and the beginning of a new trajectory towards a permanently down-scaled, cheaper version of Formula 1. This is likely to feature increasingly standardised machinery but, as the first steps have already shown us, with just enough differentiation at all levels to keep manufacturers interested.

"What we are going through now has actually focused everybody's mind and everybody, to a greater or lesser extent, is in a similar position where costs are critical and need to be contained," says Christian Horner.

"Gone are the days of 1,000-plus people in a grand prix team. I don't think that'll come back. I don't think it should be allowed to come back to those kind of levels. There are some important lessons to be learned. The teams are approaching 2009 responsibly and it's important we don't let the reins go. We have stability within the regulations, because stability also controls costs. It is crucial not to allow another spending frenzy."

Fry does not agree and, given F1's long-established penchant for the glamorous and the esoteric, he may well be right. "Formula 1 is not only extremely competitive on a sporting front, but also reflects capitalism at its most raw," he says. "The amount of money spent will go up and down with the economic cycle. At the moment it is certainly going down, and it will continue to go down over the next couple of years because of the reduced amount of money available and the reduced involvement of the motor manufacturers. But I am fully confident that at the next upturn which is, let's say, in five years' time, expenditure will go up again, even if it's spent in different areas than in the recent past."

It's hard to predict just how far budget cutting will have to go before expenditure increases again, if it ever does. Mosley has made it clear he wants cuts in the order of 80 per cent of 2008 budgets in the long run – cuts which he believes will have no impact on the quality of the competition from the point of view of fans at home or in the grandstands. Most see a compromise which would allow teams to continue spending at a level which would keep the manufacturers involved, but allow independents to flourish.

John Howett, the team principal of Toyota's F1 operation, warns that too much standardisation could lead to other manufacturers following Honda's example, but for different reasons: "We are talking now about standardising the powertrain, more and more standardised chassis parts. Is that something that gives value? Some people need to realise that it will possibly lead to four or five teams leaving, but I do

acknowledge and accept that you could have other teams then joining," he says. As Howett's remarks indicate, there is a possibility that this recession could mark the beginning of the end of a phase of the sport when it has been dominated by big car manufacturers who, in turn, replaced the tobacco companies as the dominant commercial force in the pitlane. Fry, who may well be running an independent team this year, thinks this is likely. "The thing that is going to change is not necessarily the end, but a reduction in the influence of the car manufacturers. I think it will vary between those that exit the sport – of which Honda is obviously the first and there may be others – and those that will wish to significantly reduce their involvement.

Many manufacturers will want to stay in but they won't want to spend the money they have been spending over the last few years, because they won't be able to."

Looking ahead it's easy to see the direction in which expenditure is going in the short term, and the likely trend in future rounds of negotiations between FOTA and the FIA. What is not so clear is what will happen on the revenue side where the leaders of FOTA – di Montezemolo and Howett, his number two – are both quite open about their desire for a significant realignment. At present, the commercial rights holders, Bernie Ecclestone and CVC Capital Partners, the main owners of Formula 1, keep 50 per cent of the sport's revenues. The Toyota and Ferrari bosses believe that must change if the sport is to prosper through the recession and beyond.

"The one point that all businesses need to look at is revenue. Not only are all the teams reducing costs dramatically, we have got a following wind for this raft of measures and I think we will need to further reduce costs. But at the same time we still need to look at the revenue," says Howett, who also remarked that the teams were being "bled dry". Montezemolo is outspoken too: "We will discuss this with [Ecclestone] starting from one point; there is no professional sport in the world where the players get less than 50 per cent of the total cake."

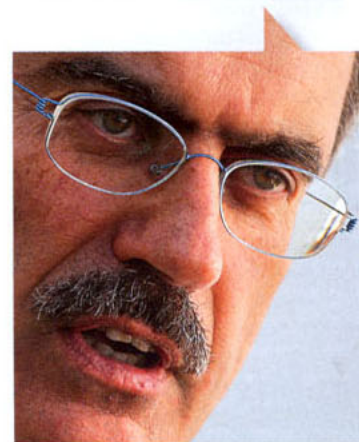
So, there could be political battles, but F1 wouldn't be the same without them. Let's leave the last word to John Hogan, senior associate with Just Marketing International, the company which recently closed a new sponsorship deal with F1 for electronics giant LG, and a man with decades of experience on the marketing side of the paddock: "I can't see a long-term decline. I can see a long-term modification, and a change in the way things are done and the strategic emphasis on certain things. But there's a lot of doom and gloom about at the present time with people saying, 'Oh, it's the end of the world.' I don't think it's the end of the world." **FO**

"This recession will prove a turning point and the beginning of a new down-scaled, cheaper version of Formula 1"



Luca di Montezemolo
Ferrari and FOTA President

"Formula 1 has all it takes to master a challenging situation and I am confident about its future"



Mario Theissen
BMW Motorsport director

IS THIS THE MOST IMPORTANT CAR IN F1?

Force India's windtunnel car may be half the size of the real thing, but it has to be perfectly formed. We meet the men who make it

WORDS MATT WARWICK PICTURES LORENZO BELLANCA

It's top secret, this windtunnel business. *F1 Racing* doesn't even make it to reception on arrival at Force India's Silverstone factory, before being ushered into a van which careers down a country road in the pitch darkness. Like a scene from a road movie, we pull in to a lay-by between the trees next to a small MOT garage a few minutes later, in what feels like the middle of nowhere... well, deepest Northamptonshire. But hidden behind the unassuming little garage is a giant toy box for model cars.

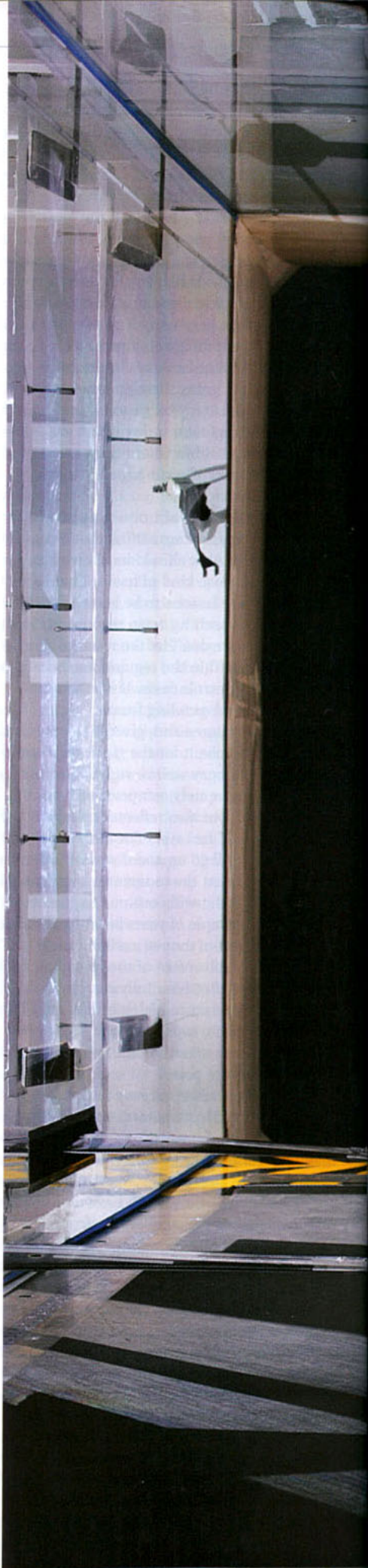
Sitting on a table in the middle of the assembly room are the beginnings of the VJM02. A half-size version of Force India's 2009 challenger that never sees the light of day is being scrupulously attended to by a team of young modelmakers. The first thing anybody thinks is that there's no way it's half the size of a normal F1 car – it seems, well, *tiny*. It's hard not to make comparisons to Airfix kits but when we do, silence descends. There's a feeling that the modelmakers have grown restless. "There was a time when they would have jumped down your throat if you said that because everything was hand-carved," smiles Keith Austin, windtunnel production manager for Force India. "They crafted the whole thing from beech wood and mahogany – not like the carbon fibre and resin today. We have been classed as a toy shop in the past, but there's a lot more to it."

It's far more than a model, of course... more than the ones you used to pore over from morning 'til night before retiring to bed with glue all over your clothes and a brake disc stuck between your fingers. If they don't get *this* model right, it'll all go wrong on the track.

In its infancy, the model is made up of a generic aluminium 'spine' section that doesn't actually look much like the monocoque that you would be presented with for full-size F1 cars. It's more a big lump of metal with holes drilled in it waiting to have various different bits bolted on. It's only when components like engine covers, nosecones and the outer edge of the cockpit sides are assembled that it begins to resemble its bigger brother on the track.

Taking between two and six weeks to build, this pint-sized version has full working suspension, moving front wing flaps, and proper pneumatic tyres made by Bridgestone. "That's why we had to move up to 50 per cent from 40 per cent-sized models – Bridgestone would only make tyres that are 50 per cent. With the 40 per cent we were making our tyres from carbon fibre," says Keith.

And that's just it. You may think that Force India are overdoing the detail a little, going >





**“If we get this car
wrong at 50 per cent
size, it’s twice as
bad out on the track”**

for rubber tyres – it's just a shape after all... an outline of a car that they need to blast air against, isn't it? But it's the *quality* of this design that's so key to getting it right. "Certain materials do different things. A rubber tyre will behave differently to a carbon one, which affects how the air travels around the car," says Keith. "At speed, the shape of the tyre changes on contact with the road and at the top of the tyre. When we made the tyres out of carbon fibre you had to compromise with the shape [to mimic the effects on different parts of the tyres], so they would come out slightly cone-shaped. Now we can get the right squash on the tyre because it's pneumatic."

Even the quality of the carbon fibre makes a difference to the way the air travels over certain parts of the car. The team have to work out the correct thickness and strength of the carbon relative to how it would react to the forces on a full-size car. "We incorporate the same methods here as they do up the road on the full-size, so they have been tested to make sure you've got it right," says Matt Welch, the laminator who cuts, 'lays up' and bakes all of the carbon fibre parts for the car – like engine covers, flaps, wings and bodywork... "We use very expensive, stiff carbon fibre because of how thin it has to be on the trailing edge of a part. If you use cheaper carbon, you get a lot of deflection and movement on it, and on a test in the tunnel it's not going to give you the same reading because it's not moving in the right way. You need 'repeatability' in the tunnel. We run three chassis and the readings they give have to be consistent. I'm a firm believer in what we do. We're a pain with the drawing office because we know how it needs to be. And it has to be *right*."

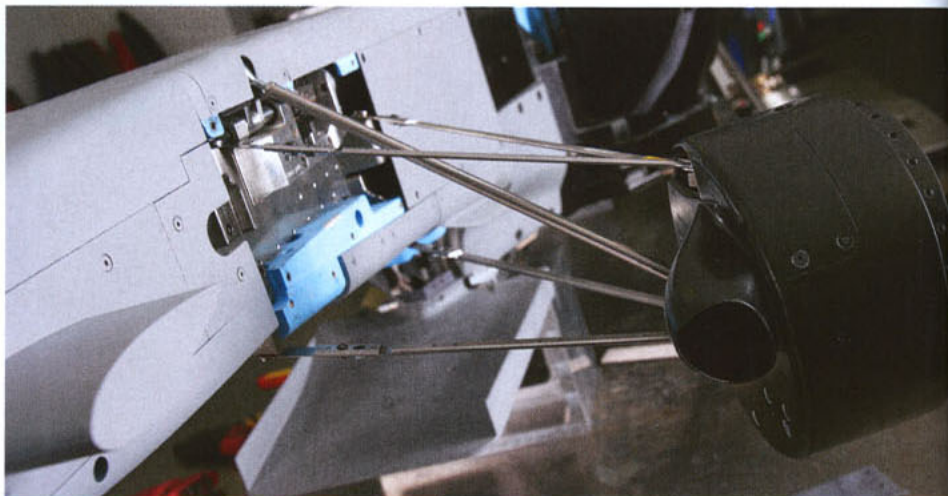
But it's not just carbon fibre that's used for the parts. A lot of the bodywork on the half-size windtunnel model is made of resin components because they can be made much more quickly and are more cost-effective. "Once we know the correct specifications of the carbon to use, we can reproduce the parts using 'rapid prototyping'," says Keith. Basically, after working out the right weight and density of the carbon fibre for certain parts, they can use a 'blue stone resin' to replicate them, building them on a machine that guides a laser beam over a huge block of the stuff to create the right shape.

And as we soon see, there's a good reason to recreate parts more cheaply. This is the real trial-and-error stage for the development of Force India's cars. Many versions of each part of the car's outer body are produced with a slightly different design spec. For example, up to 30 front-wing endplates are made with very slight differences in angles and shape, and each one is fitted and run in the windtunnel to see which one gives the biggest gain. Eventually there'll be a 'winner' – one piece that is considered the most aerodynamically beneficial. All the others end up as scrap in a corner of the factory

where engine covers, suspension mountings and others wait to be disposed of or re-used. In short, it's like trying loads of shirts on for a night out, and settling on the one that shows off your beer belly the least.

That process is repeated for every single area of the bodywork, and with so many different configurations it can take a long time to complete. But it's not always the appliance of science that brings improvements. "Towards the end of last season we developed the 'Trojan helmet' design piece on the rear impact structure [in the middle of the rear wing] using some plasticine to get the general shape," says

"We've been classed as a toy shop in the past, but there's a lot more to it"



Modelmakers fettle the front suspension on their 50 per cent size Formula 1 model, while Matt Welch (far right) 'lays up' some of the carbon fibre parts by sticking it (in its material-like form) to a mould before 'bagging it up' and baking it in the autoclave

Matt Loveridge, a modelmaker who began his five years at the factory as an apprentice. "Sometimes the design team will draw up a part, but they might see a gain by adding an extra piece, so we sometimes improvise."

The modelmakers often prove they are capable of far more than just putting together pre-cut pieces, showing *F1 Racing* some of the things they handcraft in their spare time. "It's important that the younger lads understand the craft of what it used to be like to make the cars from scratch," says Keith, who began here back in 1996, a year

before Eddie Jordan invested in the windtunnel that stands proudly above us.

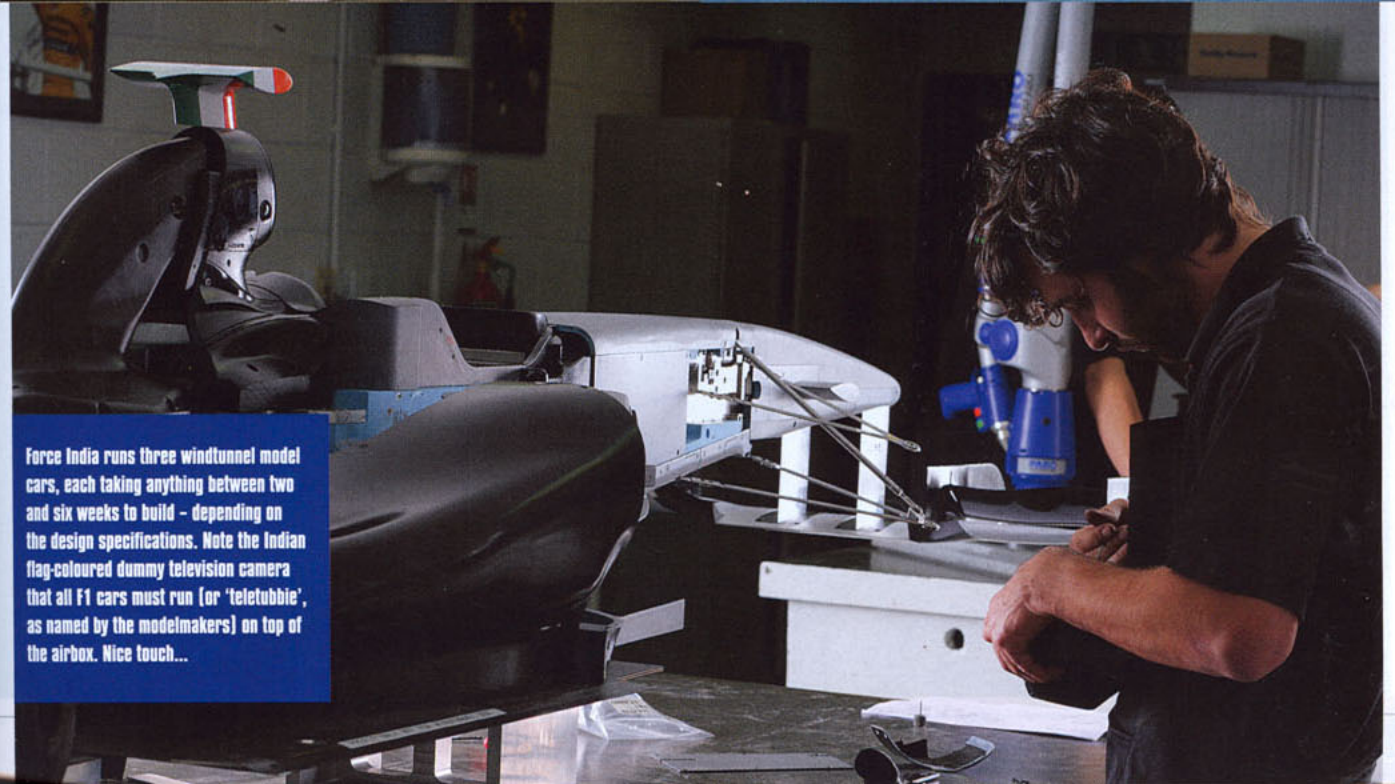
The Airfix reference clearly doesn't do their abilities justice, but that sort of craft still plays a worthwhile role: "It's useful to play around," admits Matt. "It keeps your eye on making things by hand – and gives you good skills."

Those skills are in great demand. The windtunnel production department was running 24 hours a day, seven days a week (until the 40-hour per week limit recently agreed by FOTA) as the team did its best to hit the ground running with the 2009 rules changes. There are still plenty of parts to be blasted in the tunnel between now and Melbourne. "The developments on the car continue throughout a season, so we're always busy in here," adds Keith. The car may never see the light of day, but neither does this family of craftsmen. "There are people to look up to," says Matt Loveridge. "You've got your 'parents' and 'big brothers' here, and loads of people to ask for advice."

There's little doubt that this is a fine art. Throughout the whole day, no one mentions

the word 'real' when referring to the full-size cars. This is as real as it gets. Keith, who left Jordan back in 1999 for a two-year stint at Stewart and Jaguar, returned 'home' in 2001. "It was good to come back. I like it here. The core people are still here from when the Jordan team was first formed and there's a good camaraderie."

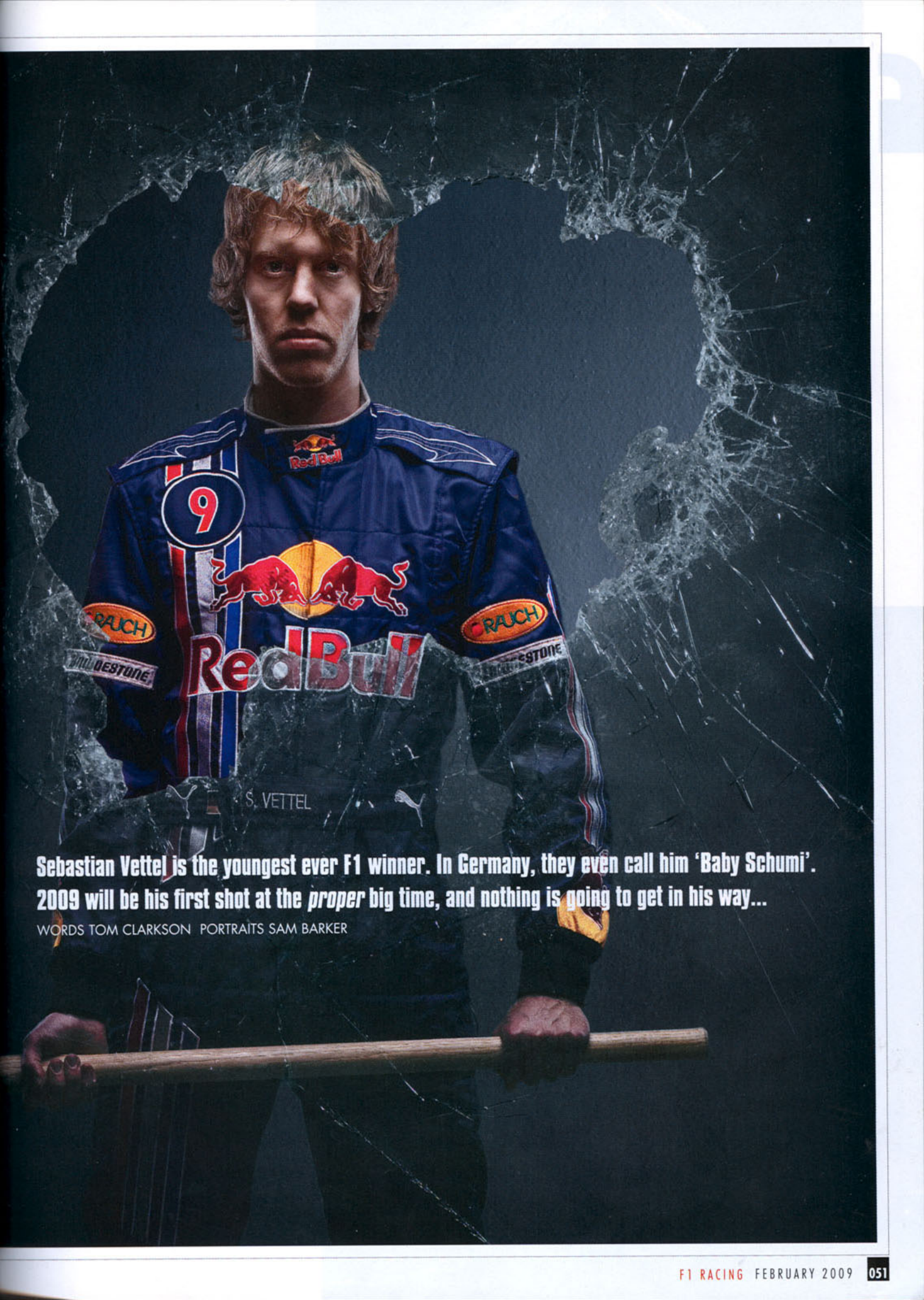
Just because they're hidden away from the outside world in a building with no windows, and work on a car that's half the size of the real thing, doesn't mean the work these craftsmen do is half as important. So, do they feel the pressure? "There's always pressure, but it's more timescale pressure. It was tough when we were running 24 hours a day, seven days a week. Now, we have to get it all done in even less time. And it depends on development – everyone sees everyone else's car that comes out, and if there's something you've missed you think, 'Right, let's make that then,'" concludes Keith. "If we get it wrong at 50 per cent, it's twice as bad for them out on the track." **FO**



Force India runs three windtunnel model cars, each taking anything between two and six weeks to build - depending on the design specifications. Note the Indian flag-coloured dummy television camera that all F1 cars must run (or 'teletubbie', as named by the modelmakers) on top of the airbox. Nice touch...



Vettel breaks through



Sebastian Vettel is the youngest ever F1 winner. In Germany, they even call him 'Baby Schumi'. 2009 will be his first shot at the *proper* big time, and nothing is going to get in his way...

WORDS TOM CLARKSON PORTRAITS SAM BARKER

“I’m sure

he’ll win the title one day,” says Bernie Ecclestone. “He proved in 2008 how good he is,” says Michael Schumacher. “He’s got everything you need as a driver,” says Gerhard Berger. People have been quick to tell *F1 Racing* that Sebastian Vettel is the real deal, which is probably why he’s one of the most cocksure 21-year-olds you’ll meet. Impeccably polite, but ever so confident. The broad, cheeky grin and the constant barrage of jokes and *Little Britain* impersonations come from the mouth of a man with the world, and some of the biggest players in Formula 1, at his feet.

If he’s got the off-track charisma to be a Formula 1 megastar, Vettel still needs to do his talking on the track if he’s to fulfil the predictions of Ecclestone, Schumacher and Berger. He’s the first of Red Bull’s young drivers to reach the top flight still with some momentum behind him, and his maiden victory at Monza last year assured him of a long future in F1. But is he shaping up to be Germany’s next Schumi, or merely a very good grand prix driver like David Coulthard, the man he’s replacing at Red Bull in 2009?

True to form, Sebastian arrives at *F1 Racing*’s makeshift studio at Jerez smiling. He apologises for being late, still smiling, and explains that a debrief went on longer than expected. His handshake is firm and he looks you straight in the eye. Still smiling. It’s hard not to like the guy immediately.

He then walks in front of the camera and waits. Initially he wants to keep his woolly hat on for the photos, but his attention quickly diverts to the sledgehammer. It’s an unusual prop, but he immediately looks comfortable holding it – perhaps the result of years spent helping his father in the building trade as a boy. “You want me to pretend I’m smashing open my piggy bank to help keep the team going during the credit crunch?” he says. “Or shall I just smile?”

What are your goals in Formula 1?

I want to win every race. That’s why I’m here, otherwise it wouldn’t make sense for me to do what I do. I’m not saying that’s going to happen in ’09, but if it turns out that we have a competitive car then we have to go for the championship. That’s why we’re here.

Are Red Bull Racing ready to win the world championship?

We have a very talented group of people and it’s up to us to deliver. The aim is to get the maximum out of ourselves and the car every weekend, whether that places us at the front or in the midfield. At Toro Rosso we had the perfect weekend at Monza last year and just look what happened.

Are you trying to recreate at Red Bull, the close-knit atmosphere that you had at Toro Rosso?

I’d like to do that because we certainly had a very good atmosphere at Toro Rosso. But I can only be who I am; I won’t try to be someone I’m not because you can get away with acting differently once or twice, but over the long term you can’t act.

Has Mark Webber’s enforced lay-off over the winter helped you win over the garage?

What happened to Mark I wouldn’t wish upon anyone. I’m told that it was very painful and I hope he gets back in shape as quickly as possible. At no point have I considered his injury to be a positive thing for me; I haven’t been thinking how I can take control of the team. We will only improve ourselves if we have me and Mark pushing forward together.

How do you see your inter-team battle with Mark developing during 2009?

He’s one of the fastest drivers in Formula 1, so I think it will be close. He has a lot of experience as well, which will be useful. But first I’ve got to understand what he’s saying!

How far would you go to get your own way in a situation?

Until the end. If I’m fully convinced that a particular direction is the right way to go, then I’ll want to go that way. Generally I’m a normal person, but when it comes to work I believe you have to be egotistical and put yourself first before everyone else. The only thing that makes me angry is if I’m too slow.

How much do you actually think about your driving?

A lot. I don’t just rely on talent because I want to improve all the time. We have a lot of data these days and it can be very useful if you know how to use it. Even though I’m in F1, I know I’m far from perfect. We’re all human and we can all improve.

In what areas did you improve in ’08?

Everywhere, but in terms of where I am faster than a year ago, I’d say under braking. The brakes are very important; how you apply them is very important and I think I’ve made a few steps in this area.

Is that why you’re so good in the wet?

I’ve always liked racing in the wet. When I was in karting rain tyres were very expensive and to save money I used to drive a lot in the

wet using slick tyres. That was very difficult, but I learnt a lot and it meant that the kart felt much nicer to drive when I put on wet tyres. I still have a kart and with no in-season testing during 2009, I think I’ll go out and practise like this because it’s a good way to keep yourself in shape.

Does rain allow your talent to shine?

I believe in a thing called talent up to a point, but I don’t rely on it at all. If I have some talent, thank God and thanks to my parents. But I work hard to improve myself. It’s very different to drive in the wet. In the dry you have to be very aggressive in an F1 car, whereas in the wet you need something that’s



difficult to describe. You can take different lines through each corner and you have to play around each lap to find the grip. You’re driving more with your stomach than in the dry; you’re guessing more and you need to have more trust in yourself and in the car because you can’t predict how much water there will be from one corner to the next, or how much brake pressure you can apply. It’s more about finesse, I suppose. ➤

Don't be fooled by the tousled, rock-star hair and smiley demeanour, there's a Michael Schumacher just waiting to break out



“When it comes to work, you have to be egotistical and put yourself first”





“I was too young to be inspired by Senna, so Michael Schumacher was my hero”

The smile is gone, replaced by a pensive frown. Sebastian is thinking hard about his driving and he clearly takes the idea of self-improvement very seriously. There are long pauses between his sentences and he uses hand gestures to emphasise the unpredictability of driving in the wet. This is the steely side of his nature that few people outside Red Bull get to see.

The reason why Sebastian's most memorable F1 performances have come in the wet is because he doesn't need a perfect car to perform at his maximum. A little bit of snap oversteer? No problem. The same with understeer. In Japan '07 he ran third until crashing into Mark Webber behind the Safety Car; in China '07 he finished fourth; at Monza last year he became the youngest winner in grand prix history and in Brazil he overtook Lewis with two laps of the race remaining. All of these races took place in wet or changeable conditions, where grip levels varied from lap to lap.

Sebastian's wet-weather pace not only demonstrates an extraordinary feel for grip, it highlights his intelligence and tenacity. Since that crass error behind the Safety Car at Fuji, he hasn't made a serious mistake in the wet and he has proved time and again that he never gives up. At Spa last year, for example, he overtook two cars on the final lap. And when you combine his racing brain with his slightly lop-sided smile, does Sebastian remind you of anyone?

You've been compared quite a bit to Michael Schumacher. How do you feel about that?

Michael is the most successful driver of all time and his records may never be broken, so I don't think you can compare anyone to him. I have a lot of respect for what he has achieved and it's fair to say that he's been a huge inspiration to me. Unfortunately, I was too young to be inspired by Ayrton Senna, so Michael was my hero when I was karting and he was the reason that I dreamt about getting into F1. I was inspired as much by his approach to the sport as his driving skill and results. He did a lot of hard work behind the scenes and wanted to understand as much as he could about the sport.

You know Michael quite well. Is he just a friend, or does he have more influence on your career than people might think?

He's not like a manager, if that's what you mean. I am very lucky to know him because I think he has made more right decisions than wrong decisions in his career, and if I think I need any advice I can go to him and ask for it. We discuss a lot of things, from driving to the business of Formula 1. People like Gerhard [Berger] and David [Coulthard] are very useful as well because they have a lot of experience in this sport. ▶



“VETTEL IS SPECIAL”

Gerhard Berger was harsh on Scott Speed and Tonio Liuzzi – but with Sebastian Vettel he knew he had talent on his hands

He's been an F1 driver and he's managed them at Toro Rosso, so you expect Gerhard Berger to know his stuff on drivers. He's a tough man to please... "Scott Speed should never have been in Formula 1," says Berger to hammer home the point. "It was a completely wrong decision to put this guy in F1. To be fair, he can be quick – but he doesn't have the commitment, he doesn't have the skills. Franz [Tost] and myself saw it quite soon, but internally we had to fight quite a while to make people understand."

Speed's team-mate Vitantonio Liuzzi followed Speed out of a race seat with Toro Rosso at the end of 2007. "We tried longer with Tonio," explains Berger. "From the talent side, he could do something. But he's too lazy and not committed enough. We spent too much time discussing his mistakes. With Vettel, in the year and a half he was with us, you put everything openly on the table and he took every criticism as a learning stage. He didn't ever try to make excuses."

Vettel has been the unquestioned star – and indeed, the only proven product – of Red Bull's vaunted young driver programme. But when did Berger realise he was a cut above?

"Not immediately," he confesses. "It was after a couple of races. I knew he was talented, but I thought he was half a second too slow. Then I started to work with him, listened to him, and I saw there was much more. He caught up the half-second immediately. And there's a lot of brain, racing instinct and commitment. After half a season, I knew he was something special. He's just totally committed to the sport."

You watched qualifying at the 2008 Canadian GP from Race Control. What did you learn?

I would have preferred to have taken part in the qualifying session, but when I couldn't do that following my crash in practice, I thought it was an opportunity to visit Race Control to observe how the FIA conducts a qualifying session. It was very interesting because I was able to see what they look out for and so on.

Do you have a good relationship with Bernie and Max Mosley?

I'm getting to know Bernie more and more. He has been very, very open even before I had any results in F1. I found that very kind and I was positively surprised by his openness. As for Max, I met him for the first time when I was racing in Formula 3, but I don't think he would remember that.

Who are your main rivals?

Everybody. That might be a bit of a boring answer, but I don't believe there are any

idiots driving around in Formula 1. No matter who it is or how much he gets paid, I think that all the drivers deserve to be here. To be number one, I have to beat them all.

Do you see yourself and Lewis as younger and slightly separate to the likes of Alonso and Räikkönen?

Recently I tried to talk to David [Coulthard] about a TV show that I used to watch and he didn't have a clue what I was talking about. But as race drivers I don't think age makes any difference because we're all in the same boat; we're all geared for the same thing and it always comes down to the same question: are you quick enough? I see F1 as a bit like school. You have a class of 20 people and there are some you like and others you don't like; there are some you have fun with and others that are not your cup of tea. It's very straightforward in my mind.

Did you enjoy racing Lewis in Brazil?

I did, but when I overtook him with a couple of laps to go I didn't know what position I was in. The late pitstops had changed the order so much that I had no idea about the championship situation. All I knew was that I wanted to pass him.

How would you have dealt with the backlash in England, had you lost Lewis the title?

I would have been okay with it, to be honest with you. The thing about it is that I would

have been a hero in Brazil, so it all depends on how you look at it.

Have you ever been intimidated on the racetrack?

When I was a little kid, yes. I was eight years old, driving go-karts, and there was one kid aged 12 who was really tall – something like 5ft 5in already. I was afraid to pass him because I knew he was so big – and I was the smallest. I thought he'd be able to push me into the wall or do whatever he liked. Other than that, I've never been frightened by another car.

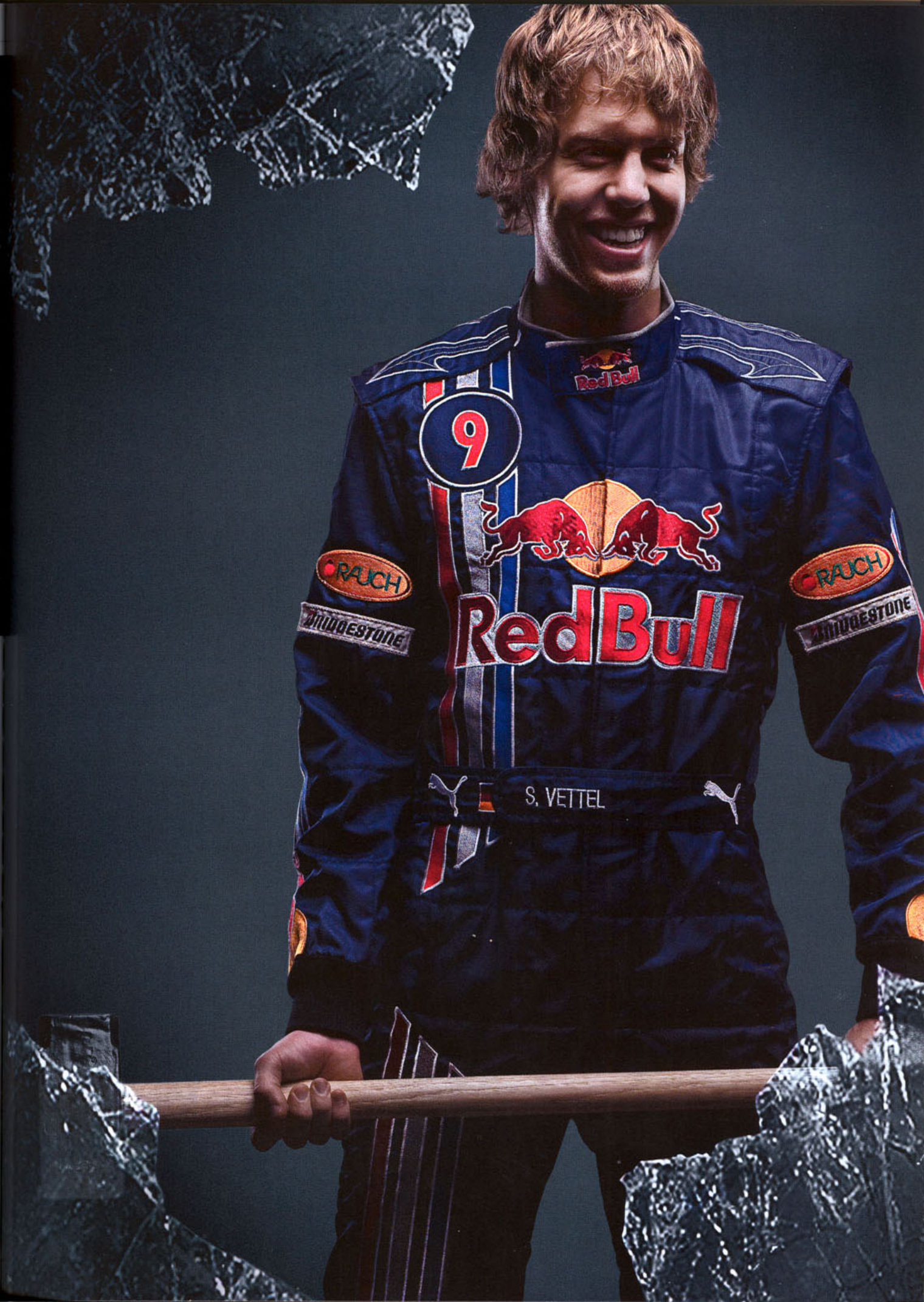
Have you tried to intimidate anyone else? Were you laying down a marker when you pushed Alonso over the white line at the exit of the pitlane at Hockenheim last year?

In a moment like that, you don't think; you act. It was the same when Michael [Schumacher] turned into [Jacques] Villeneuve at Jerez in '97. He didn't think; he just did it. With me and Alonso, it sounds a bit stupid to say I was laying down a marker. I am who I am and I think I always race hard but fair.

Looking ahead to this season, are you excited about the new-look cars?

Until I drive our new car, I can't give you an opinion on that. What I can tell you is that the slick tyres feel much better to drive than the grooved tyres. They feel more natural ▶

“F1 is like school: some people you like and some aren't your cup of tea”



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9



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because they have more mechanical grip, whereas the grooved tyres built up the grip in a very unusual way, and they grained in a different way too. In general, the slick tyre suffers less from graining and gives the driver a much better feeling.

Do you expect this year's cars to be more fun to drive?

I hope so. As a driver you always want to have fun and I enjoyed driving the car last year, but if there is an improvement for 2009, it's most welcome. I don't know whether the racing will be closer, however, because I avoid running close to another car in testing, so I can't tell you whether we're going to be less affected by turbulence on the slicks. We'll have to wait and see.

When do you think that you will be a world champion?

We are not favourites for 2009. If we can score points regularly and get the occasional podium, that will be okay. But if we have a very competitive car, then we *have* to go for the world championship.

It's fighting talk from a driver with only 33 races under his belt, but the more you speak to Sebastian Vettel, the more convinced you become. He isn't arrogant, he's just forthright; he isn't naïve, he's just unbelievably wise for a guy of such tender years. And, above all, he's bright. In so many ways he reminds you of Lewis.

Unlike Lewis, however, Sebastian hasn't outpaced a double world champion in his first full season of Formula 1. He scored 31 points more than team-mate Sébastien Bourdais and more than the other three Red Bull drivers on the grid combined, but the outside world still has some question marks about whether he really is future world champion material – even if Bernie, Michael and Gerhard remain totally convinced.

We got used to seeing Sebastian's Toro Rosso-Ferrari running regularly inside the top six during the second half of last year and he pulled some very opportunistic overtaking manoeuvres in the process. But you could argue that he was simply doing what any other driver would've done: maximise the potential of one of the best chassis-engine combinations on the grid. And it's not that unusual for drivers to win a race in their first full F1 season: Juan Pablo Montoya and Coulthard both did it and neither of them went on to win a world title.

By the end of 2009, once Sebastian has been up against his team-mate Mark Webber, we'll have a clearer idea about his ultimate ability. Webber has been quicker than all of his team-mates in Formula 1 so far, and his pace in qualifying is right out of the top drawer. If Vettel can see off his challenge, we'll appreciate that Bernie, Michael and Gerhard were right; we'll know that Sebastian Vettel is the real deal. **FO**

"If the car's competitive, then we *have* to go for the championship. I am who I am, and I race hard but fair"





COULD THIS BE THE BEST

25million man-hours, 140,000 cubic metres of concrete and £1bn make Abu Dhabi the grandest track

WORDS BRADLEY LORD PICTURES ROBERT WHITROW

The first thing that hits you is the vastness. The sheer, flat-horizoned enormity of this place. Two years ago, this sandy island to the east of Abu Dhabi city centre sat at sea level. There were no roads, power, water or drainage; nothing.

Since then, Yas (pronounced 'yaz') Island has been transformed. There are currently 25,000 workers living here, building everything from luxury five-star hotels to a 15-lane tunnel, 10-lane highway and the world's first Ferrari theme park. Oh, and a world-class F1 track





CIRCUIT IN THE WORLD?

the sport's ever seen. But will it be F1's crown jewel – or a white elephant in the global credit crunch?

that will host the 2009 season finale. It's an austere environment where nature struggles to impose itself; but the Abu Dhabi government has watered its infertile soil with money, and hey presto, a new landscape is being born.

Straight away, it's worth saying that you've never seen anything quite like this place. Amidst more than three dozen cranes and

140,000 cubic metres of concrete, something special is happening. "Our objective was to make something exclusive enough, and unique enough, that it can't be compared to anywhere else," explains Philippe Gurdjian, the man responsible for the project. "The idea of this circuit is to make something that you can immediately recognise as Abu Dhabi. We want to capture the spirit of the Emirates." ▶

There will be a huge pit straight (top) and raised grandstands at the amphitheatre section (bottom)



Capturing that spirit sounds like a simple task – but on site, it translates to huge efforts. Mountains have been moved, or rather made, to provide 30 metres of elevation change through the opening part of the lap, before the circuit plunges down towards a 16,000-seat amphitheatre at the North Grandstand. The seating at this point of the circuit is so extensive the operators plan to use it as an open-air concert venue at other times of the year.

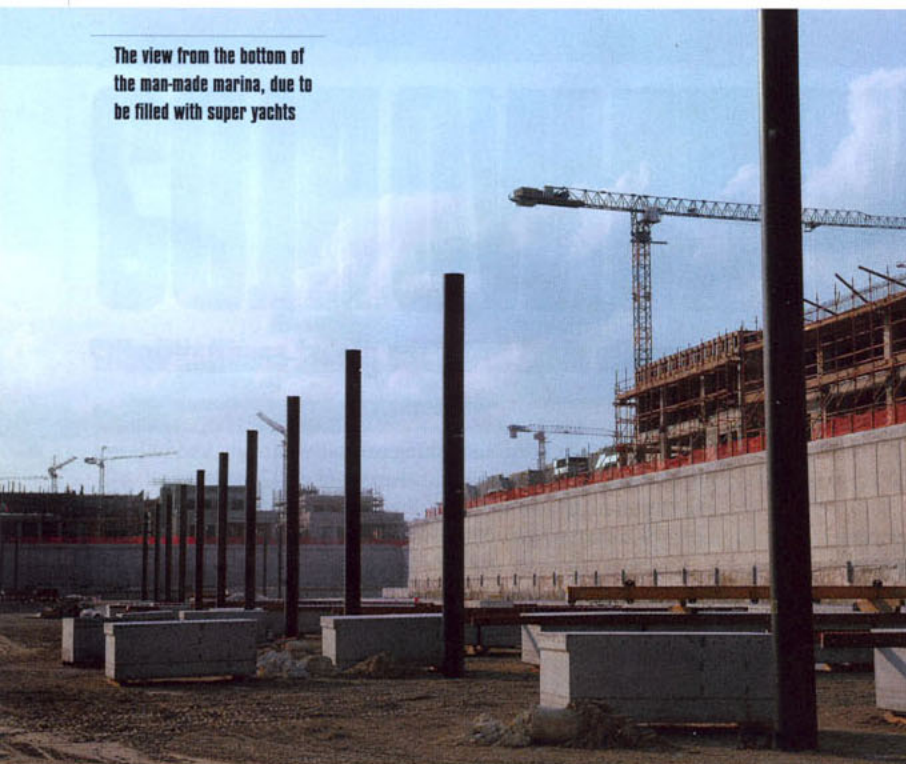
Work at the site began in February 2007; by the time the project has been completed, the contractors expect it will have consumed nearly 25million man-hours of labour. The 6,500 workers on site are currently busy in two, eight-hour shifts, and an on-site asphalt plant has been built so they can retain total control of the mix for the track surface; the stones for the asphalt blend will be coming from as far afield as Asia. The scale and intricacy of the project is mind-boggling.

Quiz Gurdjian on whether the project's on time, and he's rather coy. "We're on time at this moment," he explains. "When you build a project like this, every day you have problems. Today, I cannot know what problems I'll have tomorrow. But I'm there to solve all the problems." When the circuit was launched at last year's Chinese Grand Prix, its novel underground pitlane exit attracted excited comment – going from the pitlane, *under* Turn 1 and feeding onto

The organisers are quick to point out that, as part of the overall Yas Viceroy City development, the circuit benefits from economies of scale that it wouldn't enjoy as a stand-alone project. But they concede spending is in line with other major modern sports venues, such as Wembley or the new Yankee Stadium in New York. In real money, that means anywhere between £800million and £1billion. By way of contrast, in 2004, Gurdjian delivered Bahrain's circuit for £100million, in just 70 days. "Sometimes, when I look at the pictures of Bahrain, I can't believe what we did there," smiles Gurdjian. "But this is something completely different again. Here in Abu Dhabi, we have a track, the buildings, a hotel, the marina, road access... It's a huge project; the biggest I've been involved with so far."

Abu Dhabi follows in the slipstream of races such as Malaysia, Bahrain and China as part of F1's expansion beyond its traditional European strongholds. This expansion is not just designed to give the sport an improved global footprint; it also means F1 is part of a national strategy, known as 'destination marketing', to put the host countries on the world map. Singapore used it to dramatic effect last year, as part of a government-backed initiative to transform the city into a place worth visiting in its own right, rather than just being a stopover on the way to somewhere else.

The view from the bottom of the man-made marina, due to be filled with super yachts



Philippe Gurdjian inspects each detail of the first completed pit garage



the circuit away from the racing line. The double-width concrete tunnel is still under construction – and under wraps, as the builders iron out the design. "We still have a few things to solve," admits Gurdjian. "It's not a problem. The FIA have accepted it, and I don't think they would take any risks. But you saw what happened with GP2 in Dubai (when a flooded circuit forced the cancellation of an Asia Series round). I called my people straight away and told them that when it's finished, the first thing we'll do is put 10 tonnes of water on top to see what happens." Last-minute 'snagging' is a process he knows only too well: "In Malaysia, three weeks before the first grand prix at Sepang in 1999, we had a metre of water in Turn 3 after 10 minutes of rain. And I solved the problem."

And then, crucially, there's the budget. F1 has been keen to demonstrate that it's responding decisively to the ongoing financial crisis, by enabling significant reductions to the teams' expenditure. That should ensure the continued participation of the major manufacturers, for the time being at least, but at the inevitable price of significant job losses across the sport. Does such a grandiose project fit the thrifty tone of 2009?

Abu Dhabi is equally keen to use F1 to promote its location halfway between New York and Australia – in the 'centre of the world' – and also to use the sport as a means of promoting its breathtaking pace of development.

"Abu Dhabi is building the future," explains Gurdjian. "They are working now for 2020, 2030, 2050 even. The ambition is to become the hub of tourism, business, culture, art and sport." A key part of this plan is Saadiyat Island – currently a featureless strip of sand near Abu Dhabi harbour, but due to be transformed over the coming years. "It will be unique in the world," continues Gurdjian. "They are building a Guggenheim museum, a Louvre and other museums, using the best architects in the world. Our circuit will have some unique features because we are going to be the medium used to promote these other projects. It's hard to find ways of talking about museums every day; but when it comes to F1, you can."

The circuit has been built to hold 50,000 spectators – 80 per cent of whom are expected to be locals at the inaugural race. Uniquely for F1, every seat at the circuit will be covered, and each will offer a view of more than 30 per cent of the entire racetrack. "We've got to think about increasing spectator comfort in the future," stresses Gurdjian. "The problem isn't just the sun, but when it rains. I've not been in a grandstand with my umbrella up, but I'll do it one day to understand

“Until now, circuits have been made for drivers – this one has been designed for the spectators” Philippe Gurdjian

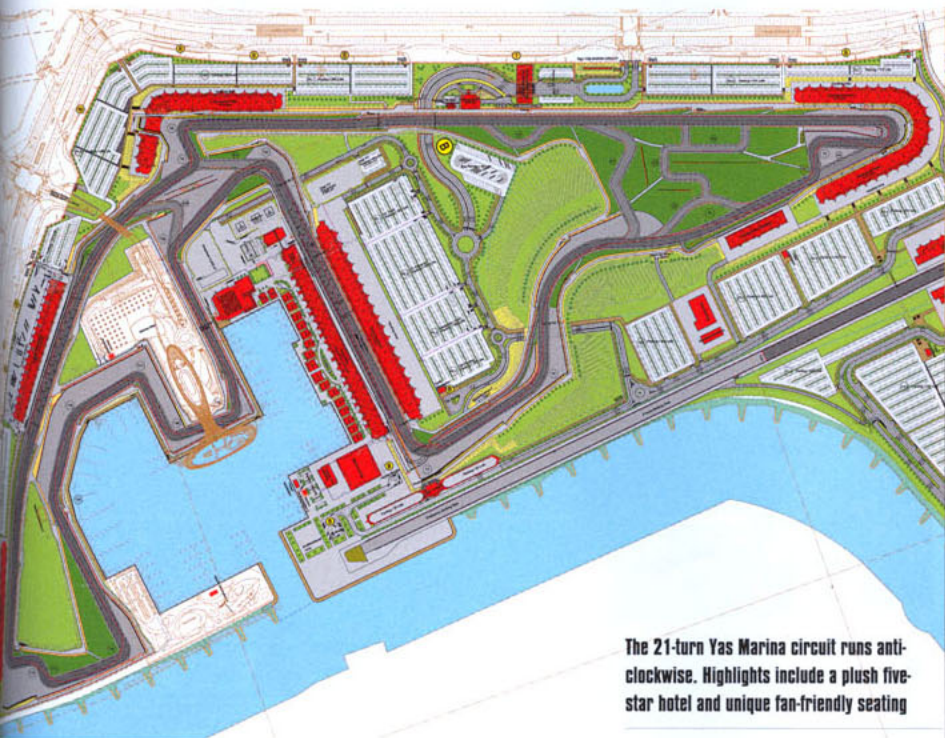
how it feels to sit in water when you've paid £400 for a seat. Look at what happened in the rain at Monza last year: the paddock was crazy, the car parks too. That's the past. We are working for the future.”

Although Yas Marina might seem like a classic made-for-TV, made-for-VIP venue, the circuit has been designed around its spectators. Grandstands have been raised to ensure the fans are sitting above the height of the safety fencing; and at Turn 8 – the tight hairpin after the long back straight which should provide one of the best overtaking opportunities – the run-off area lies *beneath* the grandstand. It should bring the crowd at least 100 metres closer to the action than if they were sat behind the debris fencing that rings conventional gravel traps. “Until now, a lot of circuits have been made for the drivers. This one has been designed for the spectators, the media, the sponsors – and then for the drivers.”

With him, they built an important, charming grand prix during many years. Here, we have to build that story.”

While it's true that Senna came to be most closely identified with the race in his home city, that doesn't take into account the fact that he was only the third Brazilian world champion – after Fittipaldi and Piquet – and that the sport had a strong following before he arrived. Nor that the race has gone from strength to strength recently, in spite of rundown facilities and the 14 years that have passed since Senna's death. What Interlagos has is what the old Nürburgring had; what Wembley used to have, and no longer does. It's not just tradition; it's *soul*. And you can't simply go out and buy it.

There's no question that the inaugural race in Abu Dhabi will be stunning. The facilities will be second-to-none; the welcome warm; and if the final race of 2009 proves to be a title decider, it will put the country centre stage in the global media spotlight – achieving every possible marketing



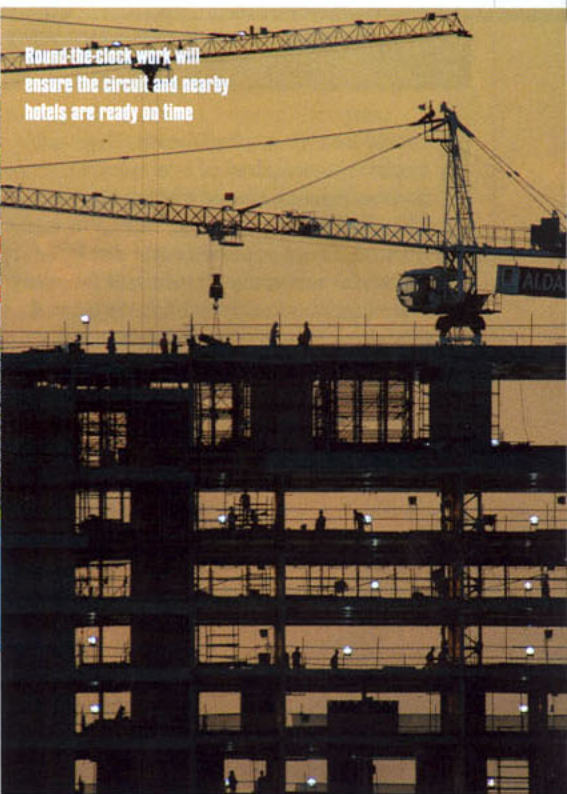
The 21-turn Yas Marina circuit runs anti-clockwise. Highlights include a plush five-star hotel and unique fan-friendly seating

But whatever the logistical and engineering challenges Yas Marina has overcome – and will conquer in the next six months or so until its scheduled completion – the biggest hurdle may not have anything to do with building the circuit itself. Of the 70,000 respondents to last month's ING F1 Racing Global Fan Survey, 90 per cent said that F1 should continue going to classic venues like Spa or Monza. What's more, the last three seasons have seen thrilling title deciders at the final race in Brazil – all held in an atmosphere of feverish support from the dedicated local fans. How will the circuit build a fanbase in a region with little or no motorsport tradition to speak of, which also hosts a poorly attended race in Bahrain barely 250 miles away?

“I think we'll have a good spirit in three or four years' time,” agrees Gurdjian. “We have to build it. I'm not sure the local people here know what Formula 1 is like on the ground. The difference between TV and being at the track is the noise when the engines start. Suddenly you discover the noise, and it's something completely unique. But the story of São Paulo was the story of Ayrton Senna.

objective that has been set for the event. But the key to success isn't just hosting an impressive first race – Malaysia, China and Bahrain all filled the grandstands for their initial F1 outings, but since then crowds have dwindled as Formula 1 has failed to make a lasting impression in those new outposts.

The sport cannot afford to simply pursue expansion at all costs as it has done over the past decade. It must transform expansion into genuine, lasting *growth*. France and Canada have been lost to the calendar for 2009 – one is the oldest grand prix, the other among the most charismatic. It means that F1 needs to put down real roots in Abu Dhabi to transform the race into a proper, must-see event. It's a challenge for everybody involved in the sport to tackle, not simply the circuit itself. The old adage said that, ‘If you build it, they will come.’ That can't be taken for granted in a country with no racing tradition. Making sure the fans come, and then come *back*, will be key to ensuring the billions of Emirati dollars are money well spent. **FO**



Round-the-clock work will ensure the circuit and nearby hotels are ready on time

The strange tale of F1's first race in the desert

In 1981, F1 turned up in Dubai, raced round a hotel and promptly went home again. It didn't return to the Middle East for nearly 25 years. But this footnote in history paved the way for modern-day F1

WORDS JAMES ROBERTS
PICTURES LAT ARCHIVE

It could have been a bad dream. The circuit was composed of a few sandy perimeter roads around a hotel; one car was severely damaged after being dropped from a helicopter; an astronaut drove the Safety Car; the one-make Citroën race for grand prix stars turned into a demolition derby; and the great Juan Manuel Fangio was hospitalised with a heart murmur. But this wasn't a dream. It was the 1981 Dubai Grand Prix.

Twenty three years before Formula 1 arrived in the Middle East, for the inaugural Bahrain GP in 2004, an impromptu motor racing festival was held in Dubai. It was the sport's first tentative step into the region, which today boasts many state-of-the-art circuits across the Gulf.

The entrepreneur who later promoted the Birmingham Superprix, Martin Hone, was asked to organise an event to commemorate the 10th anniversary of the United Arab Emirates (UAE).

But there were a few sticking points. Dubai had no racing cars, drivers, marshals or officials, and no decent roads for a circuit layout. So, with the help of sponsors such as Marlboro, cars and drivers (including all but three of the F1 world champions at that time) were shipped over. A point-and-squirt sequence of roads, 1.6 miles in length, was mapped out around the Hyatt Regency Hotel. Five 10-lap races took place, including an event for Aston Martin DB4s and a Citroën CX celebrity race, while several exotic F1 cars were flown in for demo runs.

One entrant, Joe Wiedmer, brought his Porsche 917/10 CanAm machine to the event and it was transported from the airport to the track via helicopter. The car was winched up using its roll-over bar, which promptly snapped. More damage ensued when it fell 10 feet to the ground as a result.



Circuit conditions were deemed 'tricky' for Patrick Tambay in his Theodore TV01

The Arabs approve of "Grand Prix" racing

INTERNATIONAL motor racing came to the Middle East last Friday when Birmingham entrepreneur Martin Hone staged the "Dubai Grand Prix." A Grand Prix is most certainly new to the region, but a history-making festival of motor sport full of fun and excitement is most certainly not. Apparently the Sheikhs in the oil-rich United Arab Emirates, of which Dubai is the second largest, gave their approval even if the crowds didn't turn up in the numbers expected. The actual racing comprised five short ten lap events on the brand new 1.5 mile Yas Viceroy Street circuit which runs around the hotel it is named after and alongside the Persian Gulf.



John Watson was the only man to attempt a true quick lap in his McLaren. Wattie's fastest time clocked an average speed of over 90mph in the carbon fibre MP4/1



The locals soak up the atmosphere in 1981. Just as well - F1 didn't return to the Middle East until 2004



F1's faltering first steps in the Middle East had commercial and royal backing



Words like 'featureless' and 'flat' cropped up in descriptions of the circuit

Two oil plants were dismantled and the scaffolding used to erect temporary grandstands. On the sandy track – unsuitable for an actual F1 race – Patrick Tambay demonstrated his Theodore TY01, while John Watson recorded a 90mph lap at the wheel of his McLaren MP4/1, and picked up \$5,000 for the honour.

It was a coup to have so many world champions come over for the trip, including Juan Manuel Fangio who demonstrated a 1955 Mercedes-Benz W196. Unfortunately the multiple world champion was looking rather



Fangio drove this title-winning Mercedes, until heart trouble put him in hospital

peaky and he spun during one of his laps. A heart tremor was diagnosed, and he was consigned to a Dubai hospital for a week.

The highlight on the last night was the black-tie grand prix ball. "Everyone was looking immaculate and I asked James Hunt to not stick out like a sore thumb," remembers Hone. "I saw him arrive. He wore a red velvet jacket and black tie, then I looked down and he had a pair of Marks & Spencer's slippers on..."

F1 racer Bruno Giacomelli won the celebrity Citroën race, but his was the only car that was unscathed. Behind him there were plumes of tyre smoke, smashed bumpers and dented panels. Even Helmut Marko was called up to take part in the event – his first since he lost his eye at the 1972 French GP.

"For the ball, James Hunt wore a velvet jacket, black tie and slippers from M&S"

"The aim was to give the UAE a flavour of something different to the usual camel racing," recalls John Watson. "It was an important event for introducing people to one another to do business. It was obviously useful to Marlboro: Niki Lauda and I went back a year later. They gave us a souvenir and Niki put his in the bin. He was never very sentimental: he'd swap his trophies for car washes."

Because of regional politics between the various ruling families over the years, Dubai wasn't ready for another road race straight away. But the Gulf is making up for lost time by fully embracing the sport today. **FO**

THE MANY FACES OF GERHARD BERGER

Balls-out driver. Team boss. Ruthless businessman... Could this man be the next Bernie?

WORDS BRADLEY LORD

PICTURES ANDY EARL



“That car was the biggest shitbox I ever drove in my life,” laughs Gerhard Berger, pointing at a picture of his 1985 Arrows A8. The tape recorder has just been switched off and for the first time, Berger’s interview mask of guarded scepticism has slipped just a little. He’s relaxing in his fastidiously constructed Monaco office: part workspace, part sales brochure for Gerhard Berger the affluent businessman. And the memories have begun to flow.

“I remember once at Brno, driving for BMW in the European Touring Car Championship – ‘85, I think,” he continues. “We were racing Tom Walkinshaw and the Rovers. Every time I went out for a qualifying lap, they’d send a car out to slow us down. So I started my lap at the old Brno, and the team told me on the radio that the Rover was on the track too. When I saw him, I thought, ‘Not this time.’ I was in fourth or fifth gear, I don’t

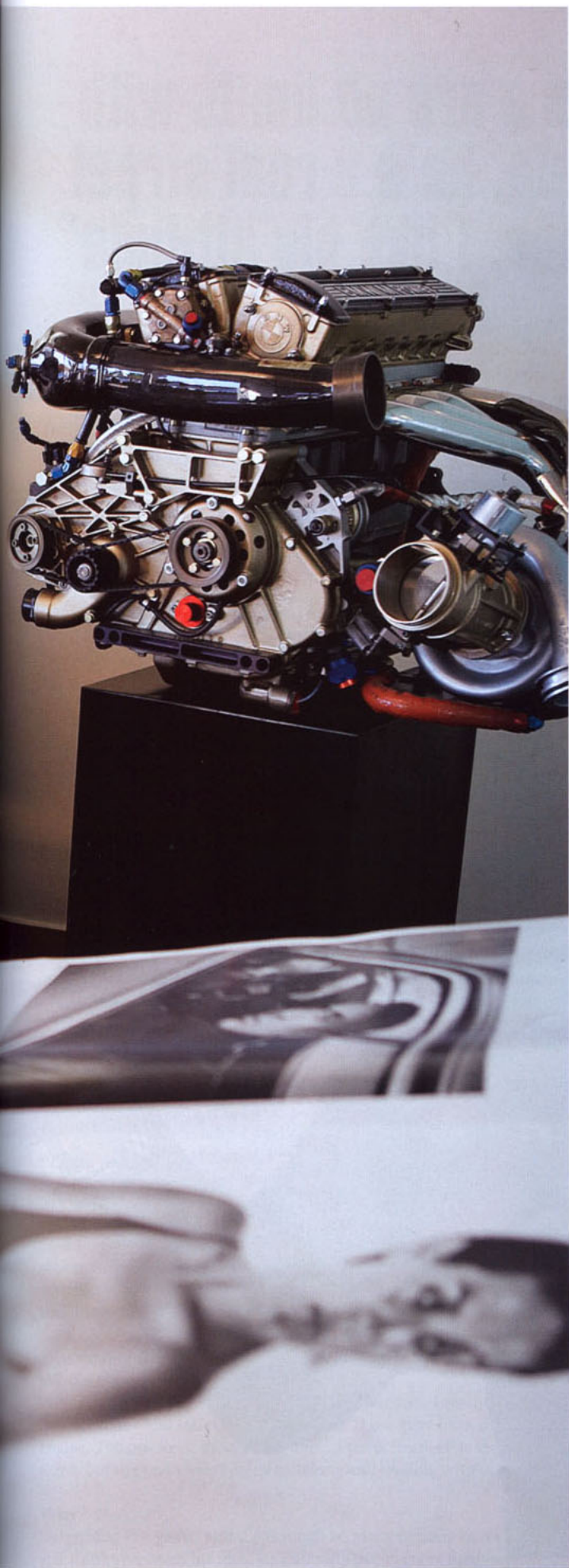
remember, and I just took my hands off the wheel and kept the foot flat. It was a huge accident: the rear half of the other car was totally destroyed. Then I pressed the radio and said, ‘I don’t think the Rovers will be a problem any more...’”

That was Gerhard Berger in 1985; the 2009 model is a different proposition. His office is buried deep in the bowels of the Fairmont Hotel behind a pair of anonymous doors, and overlooks the exit of the tunnel on the grand prix circuit. It’s filled with the usual paraphernalia of a retired driver – old F1 engines, models of his cars, big prints from his driving days – but the other touches seem like the studied details of an over-indulged interior designer: a lavish, lectern-mounted Helmut Newton tome of photography, for example, or artfully positioned books on architecture. It’s immediately clear that in this place, appearance is as important as reality. There’s no ▶



"Bloody invisible Rubik's Cube!" Gerhard Berger gets down to some serious work in his Monaco office, complete with mid-'80s BMW F1 turbo engine





getting away from the fact that Berger's a racing man – but he's an artfully presented one. "Be careful with your equipment," the photographer is warned on arrival. "Mr Berger, he sees *everything*."

Berger, of course, is now technically unemployed in F1. "People think the situation is much more complicated than it is," he explains, when asked why he sold his 50 per cent share in Scuderia Toro Rosso (the *race-winning* Toro Rosso) back to Dietrich Mateschitz in late 2008. "Didi bought Minardi when he thought he could use the synergy of one technology centre for two teams. But when people started to say the regulations would change for 2010, he said it was too much money to build up two teams in the same way. He wanted to sell his part, and that opened my eyes a little bit: I started thinking about what could be the right thing to do in the long term."

Mateschitz's desire to sell the team left Berger vulnerable: there was the potential hurdle of working with a new partner, and the fact that Mateschitz's withdrawal would have left the team without its sole source of funding. So how did he manage to engineer the sale of his

"To win at Monza with Ferrari was special... winning with Toro Rosso came close to it"

share back to Mateschitz, who wanted to get rid of his half too? "Red Bull was interested in my half because if he wants to sell the team, then he has the full 100 per cent to negotiate with."

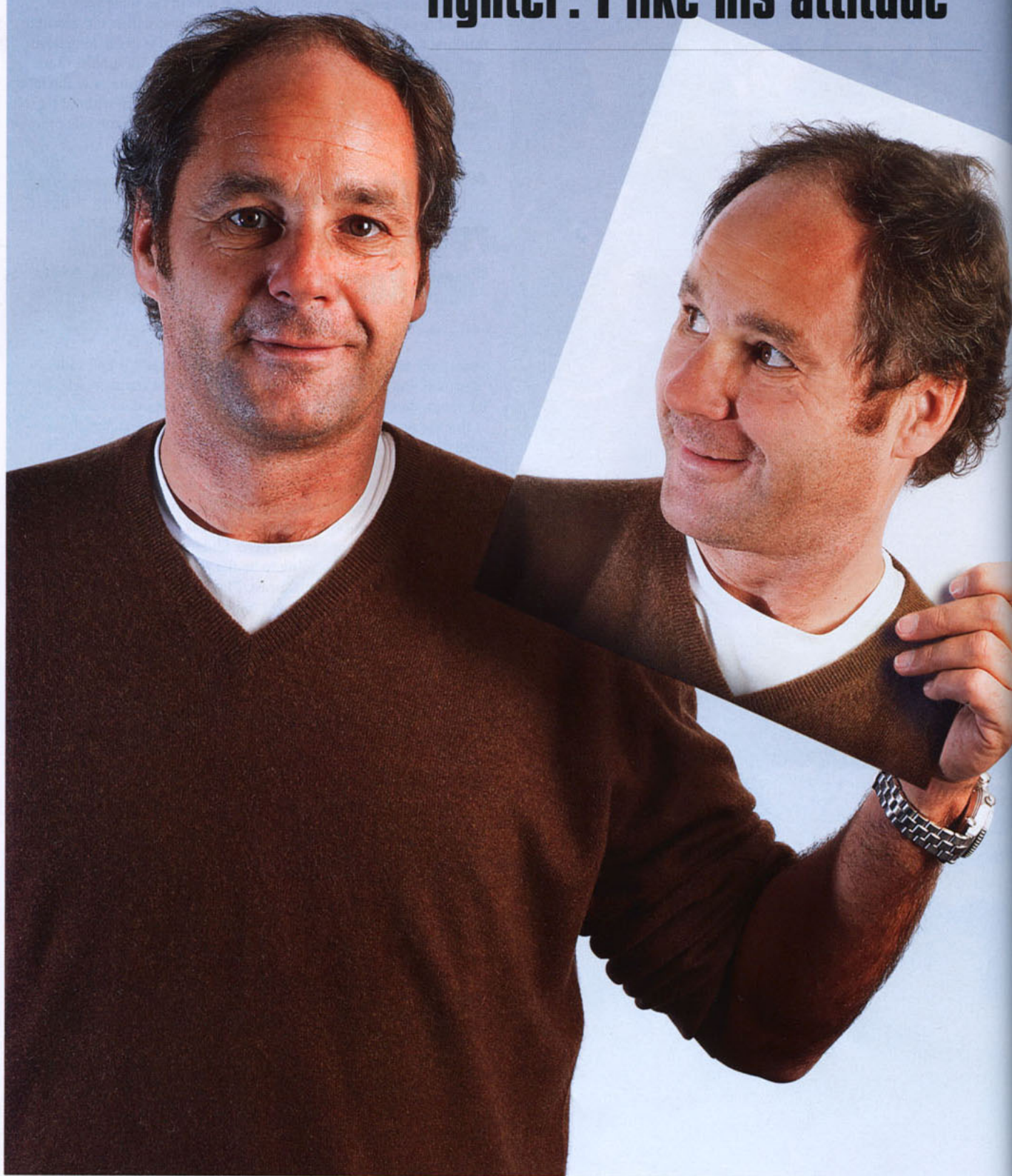
But the financial mechanics of the deal only tell half the story. Sebastian Vettel's win in Monza was the Red Bull company's first in F1, yet there was an undoubted 'embarrassment factor' at seeing what was essentially the reserves beat the first team. Did that play a role in Berger's decision, too? "We finished sixth in the constructors' championship in 2008; obviously, next year I wanted to be better. We'd have needed more forces, more budget. But internally, Red Bull Racing were clearly going to be the focus, so it was probably going to be a smaller budget for us. Plus Vettel was moving... When I put all the plusses and minuses together, there was the chance we wouldn't be able to repeat what we did last year," he rationalises. "And I don't want to be in Formula 1 just to be part of it."

As he speaks, it gradually becomes clear that there's a purpose, and a precision, to everything he says and does. It's a million miles from his devil-may-care attitude as a young driver in the mid-'80s, when "the most important skill you could have was big balls". And Berger's 'clinical businessman' person is as well-honed as that of the paddock joker he used to be. "When it comes to racing and things, I get very emotional too," he admits. "The biggest pleasure I had was winning at Monza with Ferrari – and winning with Toro Rosso came very close to that. But I have learnt to do things logically and less emotionally. At the end of the day, that's the better way to do it." Each of his decisions seems like the equivalent of a chess move. It's hard to shake the impression that there's a bigger plan at work in it all.

They say that everybody in Monaco is running away from something. With Berger, it might well be his past – or rather that part of his past which caricatured him as the grounded joker to Ayrton Senna's gifted, highly strung genius. A biography of Senna sits in Gerhard's office, but any hope of sharing funny stories about the great Brazilian is headed off immediately. "No, no, actually I don't like that. It was all funny at the time, but this is not important for me. What I remember is when his Lotus came out on track in the last seconds of qualifying, and we knew he would produce a miracle. And he did it, again and again. Those are the things I remember much more."

Humour, of course, was what helped Berger stand out as one of that rarest breed of drivers: a guy who can accept that he's *not* the ►

“There are no limits with Bernie, he’s a real street fighter. I like his attitude”



very best. The moment of realisation came when he joined Senna at McLaren in 1990. "Until then, it was quite easy with my team-mates," he recalls. "But he was on a different level. That was when I realised everything comes together: 99 per cent talent, 99 per cent perfection, 99 per cent commitment, 99 per cent experience. I couldn't see his weak point, and on top of that, he was even a nice guy. But I knew the problem was not with him, it was with me. I should have gone training more, watched more videos, been more committed. Before that, I had the natural talent that meant things came very easy: even if I wasn't 100 per cent fit, I could compensate with my speed. But Senna had the speed, and the 100 per cent fitness too."

Berger famously said that he taught Senna "how to laugh". Reflecting upon the psychological impact of coming up short against your team-mate, it's plausible that the humour in their relationship was also a defence mechanism for Gerhard. It's one he still employs: ask him whether Berger the team manager would have signed the Berger the driver, and after a long pause, he deftly parries the prospect of too much introspection: "No," he smiles mischievously. "I'd always have been too expensive..."

Similarly, he remains reticent when it comes to contrasting his era with the modern day. "I never like comparing drivers with drivers, generations with generations. What we had was a feeling in the arse of what the car was doing, and we had to explain it right. Then in qualifying, we had the turbo boost, sticky tyres: we closed our eyes, had big balls and went for it. That was a different approach to today." It's a politician's answer: informative but evasive, entertaining but deliberately not quite getting to the point.

While Berger is unwilling to be defined by his past, the real question is not what he's running away from, but what he's running towards? His explanation for selling Toro Rosso shows that keeping



his stock high, and reputation good, is important to him. He's been a successful driver, winning races for Ferrari (in two spells), Benetton (their first and last wins) and McLaren. He brought BMW back into F1 and helped them to success with Williams. He's won a race as a team boss too, re-enacting David's victory over Goliath in the process. The inventory of teams he's worked with, in one form or another, is startling: Ferrari, McLaren, Renault, BMW, Red Bull, Toro Rosso, Williams – and he still has great relationships with them all. Plus he's close to Bernie and Max. How does he pull off the balancing act?

"I've always been a bit like this. Sometimes I don't like somebody; then I don't give a shit. But most of the time I can cope with different personalities. In life, you have some people who like green cars, some who like blue cars, and nobody's wrong. You have to understand a bit about the view of the other side, and on this I'm quite good..."

You've negotiated with Mr Ferrari, Ron, Flavio and Bernie. Who's the toughest?

They're all very different, and they are all extremes. I really like the fact that I had the possibility to know these guys from different angles. The quickest, most tricky one... I think 'respect' is the wrong word, but the one I most enjoy watching and dealing with is Bernie.

Why?

Everything is a game, and it's through so many corners that even if you think you catch his idea, he's already two corners further ahead.

A bit like following Senna on track?

No – worse! And there are no limits. Plus he has a good sense of humour with it all. I have to say, he's something special.

Is he a role model for you?

I don't think you can learn. He's a real street fighter, with a lot of racing instinct and experience. He has this combination that I appreciate a lot. You have these super businessmen coming out from university, who've studied so many years and can handle perfection. But I like much more this street fighter attitude that Bernie has.

Have you achieved all your ambitions in F1?

No. I love what I'm doing. When I stopped with BMW, I was worn out. Now, it's just a circumstance that happened. I'm quite happy to close a chapter with some success, and see what the future brings.

Berger is categorical that he's not actively looking for a new project: "If there's something, then I look into it. I'm not looking." But he's contradictory, too. While agreeing he hasn't achieved all his ambitions, he claims several minutes later that he wouldn't mind never being involved in F1 again. And throughout, whether he's discussing the new 2009 cars ("ugly as hell"), if the sport's changed for the better since he began driving ("for me, not") or cost-cutting ("we had a very unhealthy situation, where the market would never give you the amount of money you needed. I think it's going to happen now, because with Max we have a very strong guy following the line very hard"), he remains consensual and wary.

He's careful, too, not to bite the hand that feeds. "We had a fantastic championship," he asserts, as the conversation moves to

the current state of F1. "We still had good numbers and with the costs, we know the correction is going to be done. The look of the cars is not the direction I would go, but these are just small elements. You have to see it complete: we must be safe and we must have a certain speed. Overall, it's working."

And what of his own future involvement? He may not be looking for a new role, but would it bother him were he never to be involved in Formula 1 again? "I wouldn't care," he concludes emphatically. "It comes how it comes. I don't see a lot of sense to do something different because I've been in racing for 30 years. If I put my effort into something, I'd like to do it where I have the experience. But I'm relaxed. If it doesn't happen, I'm also happy to just go and watch races, and be a fan."

Driver, joker, engine boss, team boss... and now a humble fan? Berger has many faces he can put on and off, chameleon-like, at will. Read his words about the state of Formula 1, and it's clear he possesses an overview, and an ability to see 'complete', that few former drivers or even team bosses have. It's apparent, too, that he's straight from the same "street fighter" school as Bernie. There's something unique about Gerhard Berger: you can't pigeonhole him, and you can't quite guess where he'll pop up next. He's won races, he's run a successful engine programme, and he's fronted a race-winning team. Could another step be on the cards? Might Berger be the answer when Bernie finally moves on? Maybe. Maybe not. But you wouldn't quite dare bet against it... **FO**



The man on the left is an *F1 Racing* journalist.
The man on the right is an *F1* star of the future.
Prepare for extreme physical exertion with
the BRDC, as our man painfully discovers...

WHAT IT TAKES TO BE AN F1 DRIVER



WORDS MATT WARWICK
PICTURES LORENZO BELLANCA/LAT

“What are you? A man or a mouse?” “A MOUSE. I’M A BLOODY MOUSE! I can’t do any more.” *F1 Racing* is coming to the end of The Longest Day. A day spent in the gym; on the athletics track; in the swimming pool; on the netball court; mixing protein shakes and stuffing down as much pasta as possible. But the neck-muscle strengthening machine is proving a little punishing, as we pit our wits against Britain’s best young racing drivers to find out what it takes to get in to the most exclusive club on earth.

Looking at the facts, trying to reach F1 is a massive gamble for any young driver. There are several thousand professional footballers playing in England’s top four divisions, all making a good wage relative to the average man on the street. But in single-seat motor racing; nobody’s paid in F3 or GP2 – some aren’t even paid in F1, and you have to sacrifice *everything* in your young life to get there. “All your friends are going out, and you’re like, ‘No I can’t come’ because you’ve got to be up early to train,” says Formula 3 Euro Series driver Sam Bird, of his non-existent social life. “We’ve got a specific aim in life and we’ve had that dream for so long that we don’t want to let anything else distract us. We’ve got to be dead on it all the time.” For the thousands of young drivers battling to get there, there are just 18 seats in F1. They’re like gold-dust.

The BRDC Superstars programme is in its first year and has 14 young drivers signed up who compete in Formula 3, the British Touring Car Championship and the Le Mans Series, amongst others. But it’s not just a good way of showcasing British driving talent – the BRDC wants to make these Superstars better drivers, and to develop the cream of the British crop. “It’s always been something the members felt very strongly about,” says Superstars director and British Touring Car legend Tim Harvey. “We wanted a proper driver development programme, for the BRDC to do something to help young drivers, and make a difference.”

In a dimly lit corner at the end of a corridor between random filing cabinets in Oxford University’s gym, we’re strapped into a chair with weights attached to the side – screaming our way to 17 ‘neck-pulls’ on what amounts to torture equipment for the neck muscles. Neck muscles that, for *F1 Racing*, have never been used before. But we’re in okay shape: an hour of football and a five- ➤

mile run every week would surely give us a reasonable chance? However, in the same time it takes us to do 17 neck-pulls, the drivers casually knock out over 200.

And, as the Superstars programme proves, it doesn't matter how committed you are to your fitness, there's nothing like getting the drivers together for some healthy competition to squeeze out five more sit-ups, or make you hang there for just a few seconds longer on the pull-ups bar – willing your broken body to go one better than the guy from touring cars, or the bloke who's just done an F1 test.

So imagine *F1 Racing's* surprise when we win a round of the hand-fencing reaction tests (two opponents stand in front of each other and try to slap the inner thigh of the

“You need endurance like a marathon runner... and the strength of a boxer”

other) by five slaps to three against Sam Bird – the F3 driver who's already experienced the full force of an F1 car with tests for Williams. He knows how important physical conditioning is. “You need to have the endurance of a marathon runner, with the strength of a boxer. My day is based around the gym. In the morning I prepare my protein shakes, and plan my meals for the day.

“F1 cars are massively quick on acceleration. After the initial 0-100kph, they just keep on pulling – it's phenomenal. You get used to the speed after a couple of times, but the first time is a very special moment.”

The hardest part, though, is actually making it into an F1 cockpit, which is one of the reasons why the Superstars programme exists. Career guidance, sponsorship advice, technical workshops and teambuilding exercises are all part of the scheme. It was the brainchild of 1996 Formula 1 World Champion, and current BRDC President, Damon Hill, so the drivers are in very good hands. “There's a lot of career guidance. Damon put together a working group 18 months ago to look at driver development to see where our next champions and world champions are coming from,” says Harvey.

Any driver who wants a sniff of F1 has to be as mentally and physically prepared as, well, a fighter pilot. They have to be ready for war, or at least cope with a dogfight every time they step into the cockpit. Physiologist Stewart Wild of Formula Fitness, who have teamed up with the BRDC for the Superstars programme, trained Jenson Button to F1 in 1999. “In this industry, even F3 teams spend thousands in a windtunnel to shave a couple of tenths off their lap times. But it's easy to save two tenths with a prime specimen in the

cockpit. People think you can't say that because it's qualitative, not quantitative, but if you're dehydrated, too cold, too hot or there's not enough carbo in the system for the brain, your reactions slow down, and there's no way you can function properly.”

In a 4km cycle race, *F1 Racing* is pitted against Oliver Turvey – the British International F3 runner-up, who has just picked up the *Autosport* National Driver Of The Year Award and been honoured with a test for McLaren in 2009. The instructors want us to keep to the same pace as Turvey, which would carry us through with him. It was never going to happen – we can't keep up with his Benny Hill speed, finishing a 'creditable' three minutes behind.



Right: *F1 Racing* entertains the Superstars with a score of half a pull-up. Above: Sam Bird shows how it should be done. Below: losing to Oliver Turvey on the 2,000m rowing event



“Since I've finished studying, I now train seven days a week,” says Turvey, without even a hint that training every single *day* of your life is any way a sacrifice. “It's just what you have to do. My regime is based around upper-body strength and endurance. You train for the category ahead, so last year it was F3 – now it could be for GP2. It's great to be on the Superstars programme – it's very selective of the top young drivers, and they give us fantastic support.”

The trainers even seem to select each workout as the most inappropriate possible to follow the one before, just to maximise the difficulty. For *F1 Racing*, hands still shaking violently from gripping a rowing machine oar, that means the next challenge involves standing below a netball hoop for a Hand-Eye Co-ordination While Absolutely Knackered Test. It's best of five

baskets: *F1 Racing* scores 0/5. And things get far worse as the day wears on. Disqualification in the deceptively heavy medicine ball event; total annihilation in the 60-metre sprint; and we finish a lap and a half behind the rest in the 1.5-mile run. Adding up the 14 events in today's fitness test we come last by about 50 points. That's a lot.

A league table of positions is drawn up at the end of the day, but no driver is too concerned about looking at the results. They have protein shakes to prepare and warm-down routines to go through. “The BRDC is historically the oldest, most famous club in Britain and we pride ourselves on being an elite group of young drivers involved in the club,” says Sam Bird as he checks his hand-



grip pressure test score. Tim Harvey concurs: “It's great to see these drivers competing, but the ultimate aim is to assist them on an upward career path towards becoming professional in whichever their chosen discipline might be. Drivers recognise that their decisions are key to their future career.”

Of the 24 or so decisive mistakes that cost Hamilton and Massa during 2008, 20 were human errors. Whether or not they were caused by a lack of physical and mental toughness, we're getting to a point in motor racing where the cars are so near perfection that the organic blob in the middle is the most fallible part – and driver conditioning is more important than ever.

Superstars trainer Stewart Wild agrees: “If you prick a racing driver's finger, the blood that drips onto a table is so infinitely more complex than a Formula 1 car that you can't even replicate it. The organic part needs to be as finely tuned as any car.” **FO**

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WHEN WILLIAMS RULED FORMULA 1

There was more to the Williams FW19 than statistics. It symbolised a team at the height of its powers

WORDS STEWART WILLIAMS
PICTURES MATT VOSPER

Lesser teams would have struggled with the obstacles in front of Williams in 1997. First they had to cope with losing chief designer Adrian Newey to McLaren and the associated legal wrangling surrounding that move. Then there was the small matter of the on-going Ayrton Senna trial – a major distraction to Frank Williams, Patrick Head, and the whole team. And finally there was Michael Schumacher, who was doing his best to wring every last second and every last point out of his inferior Ferrari, which culminated in a controversial season finale in southern Spain.

Newey had designed every Williams since the FW14, and the FW19 was a development of the highly successful FW18, which had propelled Damon Hill to the 1996 world championship. It was the last Williams to benefit from Newey's input: by November 11 1996 his involvement with the car ended as his legal dispute with the team began. Head took charge of the design team, with Geoff Willis as chief aerodynamicist (having lost Eghbal Hamidy to Stewart GP in 1996) and Gavin Fisher as the senior designer.

The concept and most of the execution of the car was down to Newey, and so his departure was a problem, but not an insurmountable one according to Head. "I would say Adrian's departure put a two-week delay in the programme," he said. "As always with a co-ordinator of a programme not everything was written down on paper, and a lot of the judgements he was making were in his mind. >





"Newey is a very competitive person and gave a useful and positive input into the operation at races," Head added at the time. "Basically, you can't lose someone of Adrian's capability without there being a glitch in the system. A lot of people will be interested to see how we get on without him."

Although the FW19 was a natural progression from the 1996 car, there were some substantial differences, most notably surrounding the Renault engine. The French company had announced they were to leave F1 at the end of 1997 yet still produced an all-new power plant for the FW19. The RS9 was different to all previous Renault V10s in that it had a 71-degree V-angle, as opposed to 67 degrees, and this meant that the engine was 27mm lower, allowing for a lower centre of gravity, plus a saving of 11kgs (eight per cent) in weight.

All this enabled Williams to lower the transmission to feature a much more compact transverse gearbox, thus resulting in an improved aerodynamic package at the rear of the car. They also substantially decreased the drag from the cooling system.

So, the car that had blitzed the field in 1996 had been improved and despite the decision to ditch Damon Hill the team still had one of the brightest young talents on the grid, Jacques Villeneuve. And Heinz-Harald Frentzen (Hill's replacement) was no slouch. The pressure was on Williams to continue to beat all comers through 1997.

At the car's launch, Head insisted on playing down the team's chances of a repeat of 1996 when they won 12 of the 16 races – and could have won 15. "I would have thought the chances of us continuing to dominate are slim," he said. "I don't know whether we've improved the car or not yet. We know the results from the windtunnel, and they are certainly better. Not by a country mile, but they are better. We've done various things which we consider will be an improvement. But whether it will make the car quicker or not, I don't know. Only the testing will show."

The answer to that question was an emphatic and rapid 'yes'. On the car's first day of testing at Barcelona, immediately after the launch, Villeneuve managed 72 trouble-free laps and smashed the lap record with a time of 1min 18.86secs, 1.8sec quicker than Damon Hill's pole time for the 1996 Spanish GP in the FW18. Oliver Panis's Ligier, only 0.1sec adrift of Villeneuve, had been testing for a week and was running on development Bridgestones. Villeneuve's car was straight out of the box and on 1996-spec Goodyears.

Villeneuve was happy with the early work and it seemed that the FW19 was right on the button, even though the Canadian was coy when asked if that lap was achieved on low fuel. "I don't know if I should tell you the truth or not, but it certainly wasn't in qualifying trim," said Jacques. "The car's

neutral, easy to work with and has a good baseline, but I expected that because it's similar to last year. I'm very confident." Panis was a little more blunt: "That car is bloody quick."

As the pre-season testing war waged it was obvious that the FW19 was the pacesetter, although Benetton and Ligier were also headliners at Barcelona during February. Yet it was the FW19's performance in race simulations that really caught the eye and saw Williams installed as pre-season favourites, even by Michael Schumacher. "Yes, Williams will be the car to beat again this year," said Michael. He was right in that, yet lent towards Williams new boy (and former Mercedes team-mate) Frentzen as his main challenger: "From what I have seen so



The FW19's Renault engine sat lower down in the car, giving a better centre of gravity and an eight per cent weight saving

far I would rate him very highly. I think he should be better than Villeneuve." Frentzen never got close to matching Villeneuve and Schumacher himself did the best he could to prove that the Williams was beatable, although the early signs for JV and the FW19 were good...

Australia, the first race, should have been won, even though neither car finished. The car was quick, indeed too quick, as the team was caught out by the extra brake wear needed from a combination of increased speed and grippier Goodyears.

That problem was quickly solved and Villeneuve won both in Brazil and Argentina, and Frentzen in San Marino. But what should have been a very easy victory for Villeneuve (or Frentzen for that matter) in Monaco was lost when both Williams drivers started on slicks and Schumacher opted for a late change to intermediates. It was very much a case of win or bust for the team and its drivers in the early races.

Although Head admitted at the end of the

season that an inability to cope with late-changing weather situations cost the team wins in both Monaco and Spa, he was adamant that it wasn't just down to the team. "On both occasions Schumacher changed the set-up on the grid after taking a last-minute look at the situation," he argued. "But Jacques needs a kind of ritual before getting into the car. He likes to arrive on the grid and stay sitting in the cockpit in complete silence. It's even happened that we've asked him things and he hasn't replied. I believe that there are certain decisions which are best taken by a driver, because it's difficult for an engineer standing on the grid to say he should go out on whatever tyres. The driver must be in a position to give specific feedback. We have to convince Jacques to help us more."

Villeneuve had quickly fashioned himself a 'bubble' with engineer Jock Clear when he first joined the team and it was apparent that this was even stronger now that Damon was no longer with the team.

By Magny-Cours the best car in F1 was being caught and Head knew it. He had issues with both drivers over their set-up, especially Villeneuve's radical tastes which Head reckoned didn't bring the best out of the chassis. "Jacques cannot abide roll in a car," he said, "so he sets it up extremely stiffly, which in turn makes it highly nervous. Look at the in-car footage and you can see that he's having to work much harder than the other drivers." Frentzen, meanwhile, was just struggling to find the right set-up at all.

Patrick Head knew that there was a problem. "Obviously the car was quite quick at the beginning of the season," he said when the dust had settled. "We had some races where we seemed to have a comfortable margin, particularly in qualifying, and maybe we were too confident because we were being told by the press that the car was so good that Jacques was going to walk the championship."

The issue was rear-end instability under braking and mid-corner understeer, but it wasn't until France that Head knew this was going to affect the team badly. "It's easy to look at the thing with hindsight," he added, "but things seemed to be going fairly easily, except for Monaco. In Canada we were really fighting the car because of the rear-end instability and mid-corner understeer, but we came back thinking this wasn't too much of a problem because Jacques said his car was fantastic in the race – even though it lasted less than two laps."

Villeneuve's error in Canada allowed Schumacher right into the title race, and by Magny-Cours he trailed Michael by 14 points. A fortuitous win at Silverstone flung Jacques back within touching distance of Schumacher and although neither of them could establish a commanding lead thereafter, Villeneuve's sixth and seventh wins at the Austrian and Luxembourg GPs gave him a nine-point lead going to Japan. ▶

On the first day of testing at Barcelona Villeneuve smashed the lap record



Badge of honour: until recently, this FW19 chassis had sat in the Williams' museum with the sidepod damage inflicted by Schumacher's Ferrari



Williams were confirmed as constructors' champions at Suzuka but for Villeneuve it was a disaster. A win for Schumacher and the Canadian's disqualification set up a showdown in Jerez. All of a sudden, life had become difficult and Jacques risked losing the title when he'd started the season as odds-on favourite, with the best car on the grid at his disposal.

Schumacher was just a single point ahead going into the European GP, so Jacques had to finish in the points and ahead of Michael. He qualified on pole but, as was often the

case, he didn't make the best of starts.

This was something that Head was aware of with both his drivers yet had been unable to fully solve. "We did a lot of practice starts during private testing," he said. "Afterwards the driver says what an improvement he has been able to make and how useful it has been. Then, at the next race, he makes an absolute balls of the start. It's very difficult to intervene on a technical level. Last year Villeneuve was almost faultless when it came to starts, but the more he worried about it the worse he got."

Schumacher and Heinz-Harald Frentzen both beat Villeneuve away and although his team-mate allowed him back through, Schumacher still led after the second round of pitstops. Jacques needed to get in front. The crunch, literally, came on lap 48.

As they entered the Dry Sack corner Villeneuve braked later and grabbed the inside line, only for Schumacher to turn in on him, the Ferrari's front-right wheel smashing into the left-hand sidepod of the Williams. Schumacher was out on the spot but the damage to Villeneuve's machine, which until

Damon Hill
David Coulthard
Nigel Mansell

FW16B
1994



recently was still visible, wasn't terminal and he carried on to take four points and the title.

The fallout from this – stewards initially concluded that it was a racing incident but Schumacher was later disqualified at an FIA disciplinary hearing – threatened to overshadow the achievements of both team and driver, especially in saving a season that looked as if it was going pear-shaped.

"The championship feels great. It's been a very up and down season. We have been the most competitive team since the beginning," said Villeneuve, "but there were many races

where we didn't get the job done. This is really special, but we made life difficult for ourselves. Until the last lap this season has not been easy. It was a season where you lose a lot of hair. To win it now feels really good."

The final word goes to Frank Williams on the team's ninth constructors' title and Villeneuve's drivers' crown. "The 1997 season gave us our hardest-fought set of titles and our most valued," he said at the end of the year. "Only 1980, and our first championship with Alan Jones, offered the same emotional charge. Here's to the next time..."

The shame is that the next time is still yet to come. Yes, the FW19 was the last championship-winning car to race on slicks, the last car launched at Williams' old Didcot base before the move to Grove and the last Williams to be powered by a Renault-badged engine. But more frustratingly for Sir Frank Williams, Patrick Head and the rest of the team, it remains the last Williams to win a championship. This brilliant car is a bittersweet reminder of the heights Williams once achieved, and the success that they still strive for. **F1**

WHAT DO TEAMS TAKE TO A FLYAWAY RACE?

Nosecones and rear wings seem fair enough, but did you know Force India also take 44 bottles of champagne to a grand prix? *F1 Racing* finds out why...

WORDS SOPHIE METCALFE



The new F1 season may be full of excitement for the fans, but it creates more than a few headaches for the teams back at base. The first four rounds of 2009 will be 'flyaway' races – and that means logistics experts up and down the grid are currently poring over pages of itemised lists. When the teams race outside Europe, the trucks that usually grace the paddock are left behind, so thousands of parts must be boxed-up and loaded into air freight containers. If you struggle to remember your weekly shopping list, it doesn't bear thinking about...

Force India take up to 33 tonnes of freight to each flyaway round: that splits down to 25 tonnes of air freight, and six to eight tonnes more that are sent by sea (a much cheaper option). Everything from wheel guns to flatscreen TVs need to be in place. But what *exactly* will the team require to run at the season opener in Melbourne? And more importantly, why do they need to take so much coffee?



100,000 COFFEE BEANS

The first grand prix usually means late nights, as the mechanics work overtime to get the cars ready to race. Twelve one-kilo bags equate to over 100,000 coffee beans. That sounds like too much caffeine, but a sleep-deprived team, plus the odd scrounging hack, will need all they can get down under



19 WHEEL GUNS

It seems a lot, but they need them: four each for the cars in the garage, four 'primaries' for pitstops – and four back-ups in case of problems. Plus a few spares, naturally



44 BOTTLES OF CHAMPAGNE

The closest Force India have come to spraying the stuff was in Monaco last year, but plenty of corporate guests ensure the bubbly keeps on flowing at every race weekend



1,800 BOTTLES OF WATER

Staying hydrated is vital for the mechanics in hot, humid garages. Team physios will often add mineral salts to the water, to replace nutrients lost through sweating



1,600 LITRES OF FUEL

All fuel must match a chemical 'fingerprint' issued by the FIA – 1,600ltrs is enough for a Ford Fiesta to drive halfway to Albert Park from F1 Racing Towers in London...



80 GARAGE PANELS

They're plastered with branding and custom-made for each team on the grid. The garage panels can easily be erected or packed away in a matter of hours



14 TV SCREENS

The garage, the engineers' office, the drivers' rooms... all must be equipped with flatscreen TVs to keep everyone up to speed. Eight more are used by the hospitality team



3 CHASSIS

Since the start of 2008, the rules have prevented teams from having spare cars in the garage, which means only two of the three chassis on site are 'rolling'. The other one is kept unbuilt, with all the required parts, in case it needs to be pressed into service after a mishap



96 HEADSETS

One set of 'cans' for every team member and a few spares for guests. At Force India, that means they need nearly 100 to keep everybody on the airwaves during the race



While a team will only take six front wings, they need 10 rear wing assemblies. Why? The adjustable flap at the front means downforce levels can be tweaked onsite; this can't be done at the rear, so options for both wet and dry must be available



4 DRIVER HELMETS

Both drivers get two helmets each – the one they use as a spare will often be equipped with a clear visor for wet conditions



5 SETS OF SUSPENSION

One set of suspension (comprising wishbones, trackrods and pushrods) per car, plus one full spare set for both, will usually account for any breakages across the race weekend. An extra set is carried in case the third chassis needs to be built up following an incident



40 RACESUITS

That's five suits each for the drivers (don't forget the test driver), plus another 25 for the mechanics. The pitcrew also need helmets, flame-proof boots and gloves in order to comply with FIA regulations for refuelling



32 BRAKE DISCS

A new set on each car for both Friday practice sessions, the same for Saturday morning, and then fresh brakes are fitted again for qualifying and the race (parc fermé regulations dictate they can't be changed in between)



Graham Hill steps out of his wrecked Lotus 49B after a wing strut failure during the 1969 Spanish GP at Montjuich Park

“1968 brought things in F1 to a head. **Jim Clark died** in April, **Mike Spence** in May, then **Ludovico Scarfiotti** in June.

In July, **Jo Schlesser** was killed at Rouen. We were seeing all of these people being destroyed. I mean, **Jo’s wife** was put in a **straitjacket** because she was so demented by his accident”

Jackie Stewart saw 57 friends and colleagues die in the space of 10 years. These tragedies drove him to change the face of F1. This is the sobering tale of how the most dangerous sport in the world finally became safe

WORDS BRADLEY LORD

On the first weekend of four successive months in 1968, four top-line grand prix drivers were killed just doing their job. On the fifth month, the grid lined up at the Nürburgring. “The conditions were ridiculous. We should never have raced in them,” remembers Jackie Stewart – who won the race by over four minutes. “After I’d won, I got out of the car and my first question was, ‘Is everybody OK?’ By then, we’d had such a shocking succession of accidents that people were unable to avoid the reality.”

Since the earliest days of motorsport, ‘safety’ had been a dirty word. And the sport was caught in a vicious circle: circuit owners resisted change because it meant spending money; the governing body (then called the CSI, or International Sporting Commission) shied away from antagonising the race organisers; and ▶

many drivers simply didn't feel it was their business. Safety was for drivers who weren't made of the 'right stuff'; former driver Innes Ireland even stood in the pitlane making 'chicken' gestures at Jackie.

But Stewart had actually begun pushing for improved medical provision after a serious accident at the Belgian GP two years earlier left him trapped in his crashed car, with fuel leaking around him. Two fellow competitors freed him, using spanners provided by a spectator. He'd landed on the patio of a nearby farmhouse, 8ft below the circuit, having ploughed through a woodcutter's hut and a telegraph pole. When he was taken to the medical facilities, he saw discarded bag ends around him on the floor. Then his ambulance left Spa for Liège, lost its police escort and didn't know the way to the hospital. Had it not been so serious, it would've been comical.

That experience spurred Jackie, and his then team boss, BRM's Louis Stanley, into action. In 1967, Stanley founded the International Grand Prix Medical Service – essentially a bus that went to some events to try to provide a minimum standard of care. And Stewart started publicising his safety campaign – loudly. He assumed the GPDA presidency from Graham Hill, initiating a militant drive to improve safety standards: at the circuits, in the cars and in medical care. But it was a lonely battle.

"Nobody else wanted to be associated with it," remembers Stewart. The crusade took on the sport's traditions, and most notably its two most anachronistic circuits: Spa-Francorchamps and the Nürburgring. "They were the most obstinate, and also the

most costly to modify. There were ditches, grass banks and telegraph poles. At the old Nürburgring, you took off 13 times per lap..."

In 1969, the drivers boycotted the Belgian GP after organisers failed to respond to even a single safety request made by the GPDA a year before – and incurred the wrath of the sport's self-appointed guardians. Notable among them was *Motor Sport* correspondent Denis Jenkinson, who decried the "social security mentality" of the drivers. "Is there any difference between dying in a crash at 100mph or 180mph?" he asked in his monthly column. "Removing an unnecessary tree from the side of the road does not make a circuit any less demanding, challenging or difficult," retorted the safety lobby.

"I'd seen my wife packing a dead man's suitcase. How could I do nothing?" Stewart

The 1970 season added further fuel to the fire: within the same week in June, the drivers attended Bruce McLaren's memorial service at St Paul's Cathedral, after his death testing a CanAm car at Goodwood, and the funeral of Piers Courage. A GPDA meeting was convened at the Dorchester Hotel to discuss the matter, but Stewart still sensed resistance from his peers. Only when Jack Brabham agreed with Jackie did the other drivers finally follow suit.

"People today have no earthly idea of what the dimensions were when those accidents happened," says Jackie today. "The wives were sitting there in the pitlane, with stopwatch and lap charts. Then somebody's husband was killed. How could we accept that when we'd been to a memorial service and a funeral in a matter of days? When we'd been with the wives, trying to comfort them... I'd seen my wife running around packing a dead man's suitcase. How could I do nothing to correct it? What would stop you from trying to change the hypocrisy?"

The result was a wide-ranging proclamation from the GPDA, making recommendations on everything from car construction, to driver equipment and circuit safety. It accelerated the empirical process of 'doing the obvious': first one rail of Armco was specified, until it was found people went under it; then two, until cars started going through them; then finally three. It was trial and error, but it was progress in the teeth of fierce resistance. Stewart's belligerence dragged the sport's authorities along behind him until his retirement in 1973.

Relative to today's provision, though, the standards shouldn't be overestimated. "We were still in the position where the race track people and medical officers would not use the Stanley wagon," remembers Stewart. "In 1970 at Monza, Jochen Rindt was lying on the back of a Volkswagen pick-up truck, dying or dead. The medical facility was no more than six feet away. And he never went in it..." Stewart's retirement marked the beginning of an effective hiatus; the safety movement only began again in earnest with the arrival of Sid Watkins in 1978.



While drivers Ickx and Oliver escaped serious injury in this 1970 accident at Jarama in Spain, marshalling incompetence meant the fires burned for over an hour

When Professor Watkins begins speaking, you listen. Especially when there's a mischievous twinkle in his eye. "In 1980, I'd asked [then FISA President] Jean-Marie Balestre for a permanent medical centre to be built everywhere – and he told me I was dreaming," recalls Watkins with a smile. "We went to Rio in 1981 and the temporary structure wasn't ready. Bernie and Balestre were actually carrying goods by hand! But practice was delayed, so afterwards I got summoned to Balestre's office. He was a great poseur, you know, and it was as if he hadn't been there earlier in the day..."

"He asked why we hadn't started on time and so forth, then why we didn't have a permanent facility anyway. So I told him, 'Because somebody stopped it when I made the suggestion.' When he asked who, I leaned across the desk, poked him and said: 'You did. You shot down my proposal.' 'Now I remember,' he answered. 'We will have a permanent medical centre everywhere.'"

That was in March 1981. By then, Professor Watkins had been in F1 for nearly three years, appointed by Bernie Ecclestone as FOCA's surgical consultant just before the 1978 Swedish GP. "They'd had two accidents in Spain, and Reutemann was taken to hospital," recalls Watkins. "The ambulance stopped at every red light. Bernie was outraged, so he asked me if I'd go everywhere to try and raise the standards." As he travelled, he met the same stubbornness Stewart had fought a decade earlier. The medical facilities in Germany were run from an old bus; in Italy, Watkins was physically prevented from going to the scene of Ronnie Peterson's fatal accident. Change had to happen, but this time the sport's officials came onboard.

The background to Watkins' early years in the sport was the bitter FISA-FOCA war, between Balestre and Bernie Ecclestone. Through it all, Watkins remained firmly loyal to those he was really serving – the drivers. In Spain 1981, when all the FISA-aligned drivers refused to race, Watkins stayed at the track; he did the same when FOCA withdrew at San Marino the following year. "Balestre wasn't comfortable with the fact I was working for Bernie rather than the FIA, so he formed the Medical Commission [in October 1981]," explains Watkins. "I became the President, and we were then able to write down the medical standards. That was when the FIA got behind the project." Significant improvements followed: life support systems for drivers (1979), fast rescue cars (1980) and reinforced survival cells for driver protection (1981) were among them.

The drivers themselves were entirely supportive of his efforts... almost. "Niki Lauda was the most concerned, Mario Andretti was very receptive, as was Jody Scheckter. But Gilles Villeneuve was a daredevil," smiles the professor. "He once offered me a lift to the circuit in Interlagos. I went to get in the back seat, and his wife ▶

THE CHANGING FACE OF SAFETY AT EAU ROUGE

SPA'S FAMOUS CURVE SHOWS BEST HOW MEASURES HAVE TRANSFORMED THE F1 LANDSCAPE



Eau Rouge ('red water') takes its name from the iron-rich stream that flows there. Here, in 1950, Luigi Fagioli husties his Alfa 158 past the original bridge parapet



'Cutting-edge' safety, circa 1970. Double-height Armco partially shielded spectators, marshals and photographers, but the drivers' margin for error was non-existent

Emergency safety modifications for the 1994 race, owing to insufficient run-off, saw speeds slashed. The new chicane made drivers brake head-on to the solid concrete wall at the bottom of the hill...



Modifications through the '90s saw run-off provision extended (below), but it wasn't until major circuit modifications for the 2002 event that it became 'easy flat', with acres of Tarmac replacing gravel traps



said, 'No, you get in the front.' I turned round to thank her, and she wasn't there. When I looked over the seat, there she was lying on the floor of the car. 'I always do this when Gilles is driving,' she told me."

When, in 1982, Villeneuve and Riccardo Paletti were killed, and Didier Pironi suffered career-ending injuries, ground effect was banned at the end of the year to reduce cornering speeds. In 1985, the first frontal crash test was introduced by Balestre. And carbon fibre, which was first used in the sport in 1981, was a material that could be developed to withstand the accident forces. Pat Symonds was then a young engineer with Toleman: "I remember the first crash test with the '85 car. The nose disintegrated on a pendulum rig at Cranfield. It broke the rig, bits flew everywhere. We realised this was going to take a bit of doing. And that was at impact speeds far lower than we use now."

From 1982 to 1994, no driver was killed at an F1 race weekend – with the 1986 death of Elio de Angelis the sole testing fatality. Then at Imola 1994, in Niki Lauda's words, "God took his hand away." The deaths of Senna and Ratzenberger rocked the sport – and added new impetus to Watkins' work, for he had been a close friend of the Brazilian. "A lot of people have asked me why I didn't quit after Senna was killed," he explains. "It was because I knew Ayrton would have liked me to carry on."

The death of a great name has always acted like an electric shock to F1: it was true with Clark, even with Villeneuve, and certainly the case with Senna. Inevitably, hindsight makes the preceding years look complacent when they're compared with what followed – but the notion gets short shrift from Professor Watkins. "It's normal, in history, not just motorsport, that after

"I remember the first crash test. The nose disintegrated" Pat Symonds

some catastrophe, something happens to try and make it better. And Max [Mosley] came up with this brilliant notion of the Expert Advisory Safety Committee [EASC]. He gave us a very wide remit with regard to safety. And he also financed everything."

The concerns were dual: not just for the safety of the competitors, but for the very future of the sport. "The time has come,

DO THE MODERN F1 DRIVERS DO ENOUGH?

Founded in 1961, the Grand Prix Drivers' Association (GPDA) was the spearhead for much of the safety revolution in the '60s and '70s. It was disbanded in 1982, and only reformed following Ayrton Senna's 1994 death at Imola.

"Every driver has a moral responsibility, not just for his own safekeeping but for that of his family," says Stewart adamantly. "It's not about how much membership costs, or where the money goes. You've got to stand up and be counted."

The sport now has a world champion who's not a member of the GPDA, and Stewart has firm views on the matter. "Lewis is wrong," he says. "When you're Lewis Hamilton, you have more power, more influence, more access and more connections to seriously affect a movement. There's a social responsibility to your colleagues, because if you can contribute one little thing..."

Stewart also believes the group as a whole doesn't command the respect it once did. "The governance of the sport doesn't want the drivers to have anything like the power they had at the time when I had such influence. The GPDA simply doesn't have the teeth today. It's no good criticising them as militant: of course they are, because it's their lives at stake."

While the drivers are well placed to evaluate certain problems, they've been wrong in the past: there was vocal opposition to the HANS device when it was made mandatory in 2003, but it has since been credited with saving the lives of Alonso, Kubica and others in severe impacts. Finding a balance is clearly a delicate issue and the view from the governing body is more conciliatory.

"Our relationship with the GPDA is improving all the time," explains Gérard Saillant. "We want to work more closely with them, and they do with us. They're not our laboratory rats. When we were formulating a project for computerised medical records, we consulted them and they agreed it was a good thing straight away. We're working for them, and we must do it with them."

given the gravity of the situation and the force of public opinion, to do what is right in the interests of the sport," said Mosley at the time. Not only was it time to act; it was time to be *seen* to act, and for safety to move beyond mere 'recommendations' to the imposition of concrete regulations.

Since 1994, the FIA has enabled a genuine science of safety. F1's technical regulations now run to 63 pages, of which 21 are devoted to safety; an F1 car must pass 15 separate load and impact tests, which are up to 12 times more severe than in the early '90s; and the medical facilities match or exceed those of a university hospital. The advances made by the EASC were, in Watkins' words, "remarkable"; and they've now been enshrined in the FIA Institute, founded in 2004 as a research body designed to transform the sport's previous trend of reacting to safety problems, into a prospective approach of anticipating and solving them. Each new safety measure introduced to F1 is a result of the work conducted by the relevant research group.

At Canada in 2007, Robert Kubica survived an impact at nearly 150 mph – generating a peak force of 75G. In other words, when the car hit the wall, his body weighed the same as an African elephant – but he was cracking jokes in Polish as he was extracted from the car. Similarly, at the 2008 Spanish GP, a combination of the mandatory composite helmet (introduced in 2007), high cockpit sides (introduced at the start of 2008) and the latest

barrier technology, probably saved Heikki Kovalainen's life when a wheel hub failed on his McLaren.

But while today's standards are higher than ever, there's no complacency. "We will never reach 'zero risk'," admits Gérard Saillant, deputy president of the FIA Institute. "But if somebody were killed, the big question would be: should F1 continue? It will happen one day, and we must be able to show that we minimised the risks. Think about it like a 100-metre race: Jackie's work took us from 14 to 12 seconds; Sid's work took us from 12secs to 10secs. Now, to get to 9.8 or 9.7 is nothing compared to that – but it'll need as much effort as the other steps."

The focus is now on detail improvements: putting the race doctor in Race Control, to give Charlie Whiting instant advice on how to respond to an accident; transmitting data from the car direct to Race Control to indicate the severity of an impact. "They're small details," admits Saillant. "But they help us improve."

It's an unavoidable truth that one day, somebody will again die in a Formula 1 car. But in the last four decades, it's gone from being a probability to a remote possibility. Along the way, some complained that F1 lost its soul; others that it guaranteed its future. "I don't think there's a single thing that safety did to remove an asset that would otherwise have still been there," concludes Jackie Stewart. "Had we not done it, the future prosperity of the sport would have been seriously damaged – and perhaps eliminated." F1 takes that for granted at its peril. **FO**



PATRONS

ANDREA DE ADAMICH
CHRIS AMON
DEREK BELL
JEAN-PIERRE BELTOISE
JOAKIM BONNIER
JACK BRABHAM
FRANCOIS CEVERT
VIC ELFORD
EMERSON FITTIPALDI
HOWDEN GANLEY
PETER GETHIN
GRAHAM HILL
DENNY HULME
JACKY ICKX
JOHN MILES
SILVIO MOSER
JACKIE OLIVER
MIKE PARKES
HENRI PESCARELO
RONNIE PETERSON
BRIAN REDMAN
CLAY REGAZZONI
PEDRO RODRIGUEZ
TIM SCHENKEN
JO SIFFERT
JACKIE STEWART
ROLF STOMMELEN
JOHN SURTEES
PETER WESTBURY
REINE WISELL



Driver cockpit protection has steadily improved since 1994 (above). The last changes were made for 2008 (below)

69,404
FANS
170 COUNTRIES
15 LANGUAGES
230 COMPANIES
197 DATA TABLES
7 REGIONS 6 AGE GROUPS
1 KEY



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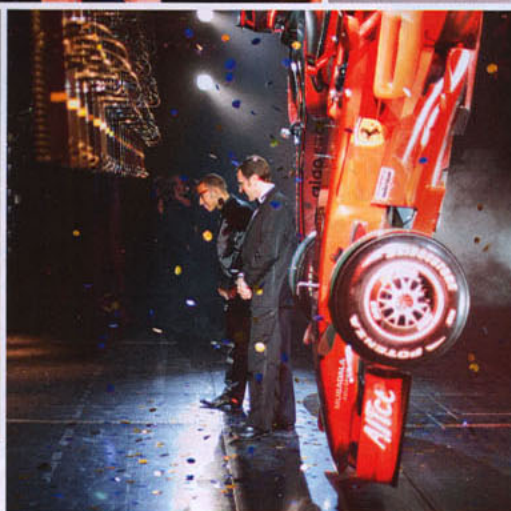
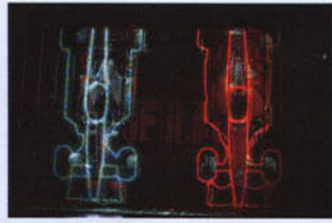
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THE DAY



LEWIS BECAME WORLD CHAMPION



So you thought Lewis Hamilton won the championship on the last lap in Brazil? Think again. He was officially crowned at a lavish gala in Monaco, and *F1 Racing* went backstage to watch it happen

WORDS STUART CODLING PICTURES STEVEN TEE/LAT & FIA

The look on Lewis Hamilton's face says, 'Don't interrupt.' The new world champion is staring intently at a small TV screen perched on top of a flight case in the wings of the Sporting Club de Monaco. If he'd just been evicted from the Big Brother House, this short video sequence would be called his 'best bits'. As it is, Hamilton's just a few metres – and several long minutes – away from being officially crowned FIA Formula 1 World Drivers' Champion. And the screen is showing a spectacular video montage of his title-winning season – including, at the beginning, the unmistakable voice of Ayrton Senna. Hamilton has always made clear how much he admires and respects the man he always calls his idol, and he's focused on every distinctive, accented word. It's a very private

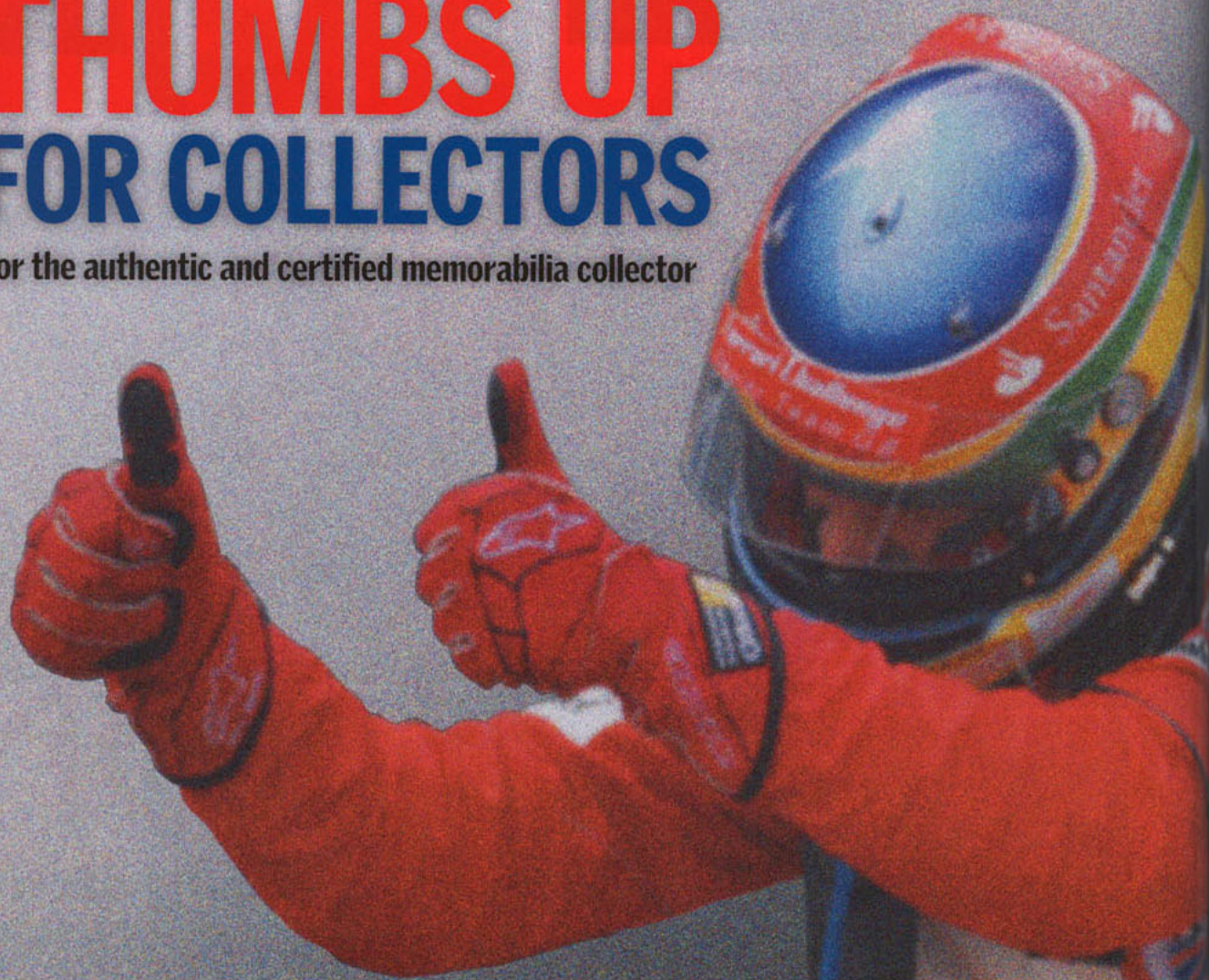
backstage moment – an unscripted glimpse of emotion on an evening when everything runs like clockwork. These are the wings of the 2008 FIA Gala, and Lewis Hamilton is moments away from getting his hands on the trophy he's dreamed about all his life.

"Ah! You can make yourself useful. Just stand over there..." says an FIA representative. Minutes after sneaking in through the tradesmen's entrance of Monaco's Sporting Club, *F1 Racing* has inadvertently stumbled on stage – and is directed to join a line of people facing the empty auditorium. "Congratulations to the FIA GT2 Champions, Toni Vilander and Gianmaria Bruni." A trophy is presented, the lights go out – and the biggest challenge is actually ►



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trying not to trip up the stairs as you leave the stage. That's just one small reason why everything is prepared in such painstaking detail. The prize-giving portion of the evening lasts for just over an hour on the Friday night, but it's the subject of six full rehearsals, starting on Wednesday. We've gatecrashed number five. But with an audience that includes royalty as well as the great and the better-than-good of motorsport, the gala runs to Formula 1 standards of presentation and timekeeping. *F1 Racing* settles in to a chair set for 'Monsieur Bernie Ecclestone' and watches the rest of the preparations.

By the time the guests begin arriving at 7.30pm, everything is in place. Backstage, there's a moveable feast of championship-winning racing machinery, each waiting for its cue: Yvan Muller's SEAT Leon, Sébastien Loeb's Citroën C4, and, hanging nose-down from the rafters, Hamilton's McLaren MP4-23 and Felipe Massa's Ferrari F2008. Amid the throng of high-level lawyers, bankers and deal-makers, Max Mosley cuts a presidential figure, gliding to and fro, greeting distinguished guests. The small-talk is all about how good the snow is in Zermatt and there's a VVIP room with a guestlist so exclusive that even



Lewis is crowned, and (below right) views the 2008 footage with Stefano Domenicali



some team principals can't get in. Felipe and Rafaella Massa arrive hand in hand, but Kimi Räikkönen's nowhere to be seen, a delayed plane accounting for his tardy arrival midway through dinner. By then, Max Mosley is flanked by Anthony Hamilton and Ron Dennis. A place at the president's table might be viewed as a consolation prize for not ending the evening in possession of the constructors' trophy.

Meanwhile, backstage, motorsport's cherished silverware – the F1 constructors' and drivers' championship trophies – sits on a black cupboard occupying one wall of a cramped room, glittering in the low light. The rest of the shelves are occupied by carefully filed glass trophies for the other championship winners, each space demarcated by a label so that the right trophy finds its way into the

“There's a VVIP room with a guestlist so exclusive that some team principals can't get in”

right hands. In the corner, a flipchart carries a stage-plan for each championship, with clear instructions on where to stand and what to do: “Trophies will be presented on your left. Leave the stage at the beginning of the next movie from the side of the stage. SMILE!”

If it weren't for the dicky bows and sharply cut suits, we could be backstage at any F1 podium. Lewis, Kimi, Felipe and Stefano Domenicali are briefed on where to stand, where to walk off – and from which side their trophies will be presented. The atmosphere is relaxed – friendly even. Kimi and Felipe are low-key, hardly thrilled to be celebrating the fact they didn't win in 2008. But Lewis and



Domenicali chat away happily as they wait to be called out.

Massa and Räikkönen slip out on to the stage while the others hang back, captivated by the footage. He may not be grasping the biggest trophy, but Massa gets the loudest cheer of the evening. In the wings, a rueful look creeps over Domenicali's face as he watches the Ferrari mechanics sprint down the Singapore pitlane to retrieve Massa's fuel hose; Hamilton smiles but shakes his head slightly during the replay of the first corner at Fuji. As the events of the season finale unfold, they exchange a knowing look that hints at shared hardship.

Suddenly, Queen's *Don't Stop Me Now* pounds out of the speakers. The two F1 cars descend behind an LED curtain; Ferrari's team principal and the new world champion stride forward into a cloud of dry ice. As the curtain rises they look at each other as if to say, “This is the moment we've been waiting for.” For Lewis it's the affirmation of the monumental self-belief that drives him. There are no speeches but Hamilton commands the stage, staring intently at his trophy while the applause rings in his ears. That ‘don't interrupt’ look is back on his face; he's transfixed, staring at his own signature, which is now forever etched in a spiral of greatness that begins with Giuseppe Farina and passes through his idol, Ayrton Senna.

Then he gathers himself, smiles and faces the cameras – thinking, perhaps, that soon he'll have to set about winning it all over again. **FO**

WHEN HOLLYWOOD MET F1

He had to fight Enzo Ferrari and order untrained drivers to risk all, but in 1966 John Frankenheimer made the remarkable film *Grand Prix*. These rare archive shots show how he did it

WORDS STUART CODLING
PICTURES LAT ARCHIVE

Ever since the 1890s, when cinematic pioneer Georges Méliès sent audiences scurrying in terror from his footage of a railway train, filmmakers have fought to deliver a realistic punch. But in 1966 John Frankenheimer's vision of how *Grand Prix* ought to look was so uncompromising that it caused him to dispense with many of the niceties of conventional filmmaking. He had a script, but he was ready to tear it up to suit what happened on track during filming. And whereas most action films would have a 'second unit' under another director to

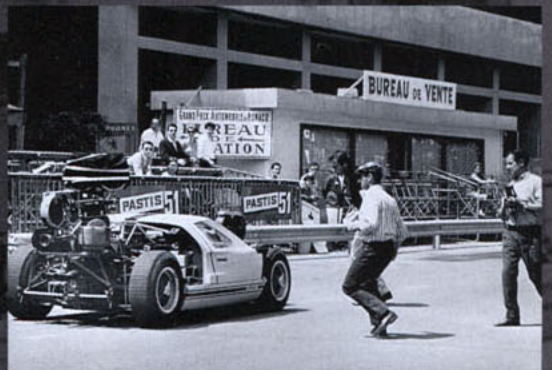
produce sequences not featuring the lead characters, Frankenheimer insisted on supervising every shot personally.

Preparation took months. Hollywood convention dictated that in-car sequences were filmed in a studio, with a separately shot background projected behind the actors while they pretended to drive. The effect never looked convincing. Frankenheimer was determined to mount cameras on the cars, looking back at the actors driving at racing speed. So he dispatched them to 'boot camp'; James Garner, the lead, spent two months with F1 driver Bob Bondurant.

Meanwhile, the production team trialled

methods of isolating the on-car cameras from vibrations. Eventually, they decided not to bother, finding that the shakiness looked more authentic. With a collection of Formula 3 cars built up to look like F1 machines, and a hacked-about Ford GT40 to use as a high-speed camera car, the shoot moved to Monaco to film during the first race weekend of the 1966 season. They weren't greeted warmly.

"During the practice period, Monte Carlo was virtually taken over by a film company," wrote John Bolster in *Autosport*. "Camera cars were on the circuit while practising was going on, and the roads were closed for



The modified Ford GT40 camera car, with cameras mounted at the front and rear, was used during practice sessions – here at the 1966 Monaco GP



Director John Frankenheimer (left) talks to one of the stars Brian Bedford. Below: James Garner (right) gets racing tips from his co-star Graham Hill



hours at other times. The appeal of the mighty dollar seems to have ensnared many racing personalities, much to the sorrow of those who really care for our sport."

The drivers, led by John Surtees, Lorenzo Bandini and Jackie Stewart, objected to the presence of camera cars during sessions in case the cameras fell off. But the hardest man to woo was Enzo Ferrari himself. "Ferrari wanted nothing to do with it," said Frankenheimer. "He told us we couldn't even use the Ferrari name in the picture."

After wrapping at Monte Carlo – including a re-shoot on the Monday after the race, much to the annoyance of the

locals – Frankenheimer assembled a short rough cut and invited himself to Maranello.

Mr Ferrari demurred, claiming not to possess a projector; Frankenheimer, not to be put off, doorstepped him at the factory with the necessary equipment. Won over by the director's determination, and impressed by the footage, Enzo declared, "You can have the team, the factory – everything."

With Ferrari on board, FI's attitude to the film thawed. The drivers accepted cameo roles (Bruce McLaren and Graham Hill have dialogue), and the GT40 was allowed on track – in the hands of 1961 champion Phil Hill – during the opening laps of the Belgian

GP. Hill was absolutely in the thick of the chaos when the rain started, creating one of the film's most memorable sequences.

The blurring of the divide between reality and fantasy is what gives *Grand Prix* its timeless resonance. When Yves Montand's character utters that famous line: "When I see something really horrible, I put my foot down," it isn't some screenwriter's whimsy. It's an almost verbatim quote from Phil Hill. You only have to look at footage of Kimi Räikkönen going flat through the smokescreen from Olivier Panis's blown engine in qualifying at Spa in '02 to know that champions still drive like that today. **FO**



MR INVISIBLE

He's been team-mate to Räikkönen, Massa and Kubica – and beaten them all over a season. But he's never won a race. Can Nick Heidfeld finally step out of the shadows in 2009?

WORDS BRADLEY LORD
PORTRAITS ANDREW FERRARO/LAT

Here's a challenge. Start a conversation with some friends who don't follow F1 very closely and drop in the name Nick Heidfeld. Chances are it won't elicit the faintest glimmer of recognition. Not even a flicker. The German's going into his 10th season as an F1 driver – that's nearly a decade in one of the most high-profile sports in the world. But how many autographs do you think signs when he pops out to the shops?

Not that it bothers him, mind you. Heidfeld's unassuming, quietly spoken and uncomplicated – in the best possible way. When he talks, there's no fuss, no umming-and-aahing, no half-answers or double meanings – just clear, simple logic. He is what he is. And when you look back over his career, that means a driver who's beaten three of the top four in the 2008 drivers' championship over a complete season, and who still believes he can challenge for a world championship. It sounds like an outlandish statement for a man who's never even won a grand prix after 150 attempts – and who, were he to do so, would take the record for the most starts before winning his first race. But Nick doesn't *do* outlandish. It's time to get to the bottom of that seemingly impregnable self-belief... >





The time is now: at 32, 2009 could be a last chance for Nick to prove himself as a genuine title contender

SEVA

You scored fewer championship points in 2008 than in 2007, and your team-mate finished ahead of you in the drivers' title. What happened?

My main problem was with the tyres. I struggled to get them warm enough and into their working window. It was much more difficult than ever before and it just took me too much time to understand and get on top of the problems. But in the end, I managed to do so. It was important for me, for the team and maybe for my future as well.

What did you change?

In the beginning, it was mainly set-up. You always work on your driving style too, but normally that comes automatically. This year, I really had to think about it and make a big effort. I thought the problems were over before Valencia, but then it was a disaster (Heidfeld started eighth on the grid and finished ninth). We made a second step after that, mainly working on my driving style, and I think that was the breakthrough. The last couple of races were pretty good, really. Unfortunately, the car wasn't as strong as it was at the beginning of the season, but my performance was at the maximum of what the car could do. That wasn't the case in the middle of the year.

After nine seasons in Formula 1, did you struggle to adapt?

Yeah, it was difficult because it was new to me. So far in F1, I've been quite happy with each of my seasons; it was the same in F3000 and F3. This was the first time I really struggled so much, and had to work hard to understand and change things. That's why I found it difficult, because it wasn't anything that I was used to.

Your team-mate Robert Kubica came quite close to winning the drivers' championship last year. Has that changed your status in the team?

Within the team there was never a lead driver – officially or unofficially. From the outside, the guy who's ahead in the drivers' standings is seen as being the team leader, but that was as much the case in 2007 as 2008. Robert had a small chance of winning the championship, so people were watching him. But that doesn't mean I'm not as strong in the team as I was in the past, in terms of working with the engineers, developing the car and all those things.

Even when drivers have equal status, one guy usually has the momentum...

In this team, there's nothing like one driver getting a better engine, or a better wing. We try to put the most effort in for everybody to win. Of course, if there's a win within reach, then things can change.

Robert won in Canada because he was able to pass you to make his strategy work; some would say you let him past

to give the team a one-two finish.

How hard was that race for you?

It was one of the toughest races for me, ever. Not because Robert won, but because of how it happened. Really, it could have been my win: I was leading and if Robert hadn't have gone by me, he couldn't have finished on the podium. It was the first ever chance I had to win a grand prix, and I've done a lot of them so far. Normally I'd say, "Okay, I never had the chance, I never had the car," but that weekend it was possible. That's what made it tough: second is good, but knowing that it could have been first...

You were team-mate to Kimi and Felipe at Sauber; since then they've fought for world championships. Has it been hard for you watching them?

No, hard is the wrong expression. I *did* beat them, I know I *can* beat them, so I know I can fight for the championship at least as well.



After working hard on adapting his driving style throughout 2008, Nick Heidfeld is confident it'll pay dividends this year...

Taken at face value, Heidfeld's precise logic makes perfect sense. But he fails to point out that when he was paired with Massa and Räikkönen, both were in their rookie seasons – and left Sauber before getting another bite at the cherry. 2008 was the first time in his F1 career that he's had the same team-mate for two full seasons in a row, and he was comprehensively outperformed. Is that enough evidence to reach a definitive verdict on his true speed?

Probably not, because his track record against Kubica is honours-even so far. But it's a good starting point to debate exactly how good a driver Heidfeld really is. Looking at things objectively, you'd have to say the jury's still out: as well as out-driving Kimi and Felipe over a season, he's been put in the shade by Mark Webber and Heinz-Harald Frentzen. When, in Canada last season, he didn't make life too difficult for his team-mate, he put the team's potential one-two result ahead of his own first win: was that the

right decision from a driver who values his team – or the timid compliance of a man who lacks the necessary cutting edge to go all-out for glory? Can a driver afford to give away a first win, even if it is for the greater good? When David Coulthard pulled over for Mika Häkkinen at Jerez in 1997, he let the 'Mika genie' out of the bottle – and never regained the initiative at McLaren....

Two weeks after the end of the season, you were pounding around Barcelona in front of empty grandstands; some drivers refuse to do that until much later in the winter. Where does your motivation come from?

I don't care if people are watching or not: it's nice if they enjoy it, but that's not why I do it. Even after two weeks, it already felt like I hadn't been in the car for a long time. My main motivation is the same as when I started as a kid: I do it because I love it. It's great fun. And also because I have my target, to win. Even in 2004, driving for Jordan, it was fun because I had the chance to prove myself. I knew that if I gave everything, then maybe people would see it and give me a chance. But I've never had a problem motivating myself for motorsport.

Who would you say was your inspiration or hero?

I don't really have a role model, but the guy I had a poster of in my room was Michael Jordan. For me, he's definitely the greatest sportsman of all time. I remember that in a lot of important games, people knew he'd have the ball in the last few seconds. They went for him and he'd be surrounded by two or three people and still score 90 per cent of the time. It was amazing to watch.

Can you describe what it feels like to do the perfect lap?

To do something the way you planned, without the smallest mistake, gives you a lot of satisfaction. It doesn't happen often because most of the time there's at least one small mistake. The fun part is that I go into a different world – at least that's how it feels. In the car, you don't really think about the team of nearly 1,000 people working for you, you just try to do the perfect job. You go into your own world, make your own decisions and just focus on this one thing.

You never show much emotion to the outside world, though...

You're right, I'm not the guy who normally shows my emotions too much. There are some drivers with huge emotions... like Kimi [laughs]. But when I'm driving, I enjoy the challenge of controlling those emotions. You have to put them in the right place so they help you, and don't make you weaker. If you have a nice overtaking manoeuvre or a perfect lap, and then you scream, "Yes", the next lap it's all over. So part of the job is to control all those emotions. >

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Is 2009 the last chance for you after losing out to Robert Kubica in the 2008 championship?

I'm disappointed 2008 didn't work as I planned: it was the best car I've ever had, but it was one of my worst seasons. In Formula 1, you have to perform every year. I've been asked the same question many times in the past, and in this sport you don't get a single season where you can relax or afford to have a bad performance. You always need to perform to your maximum.

Kubica's seen as one of the sport's best drivers: how will you beat him?

I don't know. I hope I'll beat him, but I can't tell you now. Personally, I'm happy with what I achieved in 2008 because I experienced some problems, understood them and in the last couple of races I didn't have to hide behind Robert. The car wasn't there any more, unfortunately, but I think they were really good performances. I hope next year will be the same. I'm confident I can do it.

Will the rule changes help you?

I guess so, but it's impossible to foresee. We saw it in 2008 with the tyres: nobody expected some drivers and teams to struggle that much – not only myself, because we saw other people have problems. It's so complex that you cannot simply say slicks will go in

my favour, or less downforce will. They ought to, but experience has taught me you have to drive a lot to understand everything.

Your team often talk about sticking to "the plan" – and you do the same...

Most things in life happen for a reason and I'm confident I will still get my chance. The past has already shown that I did get chances, after I had winters at Jordan and Williams when I didn't know what I'd be doing the

"The guy I had a poster of in my room was Michael Jordan. For me, he's the best sportsman of all time"

next year. I joined BMW Sauber, and we've had good seasons over the last two years. In 2008, it was clear we lacked in development, so I hope we learn from that. But this is the strongest team I've been with. And hopefully we'll fight for the championship next year.

Some drivers can excel in a poor car – but they're unable to deliver when their opportunity comes. Do you still believe you can?

No, not "believe". I *know* that I can do it.

Nick Heidfeld was F3000 champion

in '99, and the world was at his feet... in theory. But his passport to success didn't take him very far. The story of every one of the 20 F3000 champions has been similar: between them, they've scored just nine F1 wins (seven of which went to Juan Pablo Montoya) and Nick hasn't yet added to the tally. He'll turn 32 next year: of the last six world champions, only Damon Hill was older when he took his first crown. The odds are stacked against 2009 being a genuine breakthrough season for Heidfeld. But if BMW's car is a contender, it will be his chance to step up to the plate – to be his team's 'go-to guy', in true Michael Jordan fashion – and ensure that Formula 1 remembers him as more than a man who nearly, but not quite, made the grade. **F1**



"Should we not wait 'til it's light, lads?" Nick gets an early start for testing at Barcelona

FRANCOIS CEVERT: THE MASTER APPRENTICE

This dashing Frenchman dated Brigitte Bardot and could well have been world champion in 1974. But fate dealt François Cevert the cruellest hand as he stood on the verge of greatness

WORDS BRADLEY LORD

Albert Goldenberg doesn't sound much like a racing driver. But that's what he should have been called, had his parents – hiding from the Nazi regime in wartime France to conceal his father's Jewish origins – not christened him with his mother's maiden name in 1944. Thus Goldenberg became Cevert, while Albert used his middle name François. Combined with blue eyes capable of entrancing anybody, it was the stuff heroes are made of.

"When he came to collect me from school on his motorbike, it was terrifying," remembered his sister Jacqueline a year after his death. "There was chaos on the balcony. The supervisor banned him from picking me up, but I was so proud to ride behind him." Jackie Stewart, Cevert's F1 team-mate, remembers him like a "fighting cock": "He walked so confidently, head up... I've got pictures of him arriving at the Paris Motor Show with Brigitte Bardot, in a long coat with a mink shawl collar. His style was there." And when he was killed at the final race of the 1973 season, François Cevert had probably become the second-best racing driver in the world.

"I felt like an amateur footballer who had just been selected for Real Madrid," admitted François candidly after he'd been drafted in as team-mate to the reigning world champion Jackie Stewart, for the 1970 Dutch Grand Prix. Johnny Servoz-Gavin had announced his sudden retirement after failing to qualify in Monaco, so Ken Tyrrell was on the lookout for a young French driver – at the behest of title sponsor Elf.

"We asked Ken to have one French driver in one of the cars," explains François Guiter, then Elf's motorsport boss. "We suggested Cevert, supported by Jackie, who'd seen him race and knew he was quick. But we didn't force Ken to do anything." Stewart had lost to Cevert in a duel at the prestigious Reims *loterie* F2 race the year before, so when Ken asked him to go to Crystal Palace to watch François race, the Scot didn't hesitate. "I did it because if Ken was interested, I was interested," he remembers. Cevert crashed out of the race after a mechanical failure and thought his chance had gone. He was wrong.

Cevert's F1 debut saw the start of a master and apprentice relationship with Stewart, the like of ▶





The master apprentice comes of age – here on his way to second place at Montjuich Park, Spain, in 1973

THE CLAIRVOYANT'S TALE

François Cevert was 29 years old when he died, preparing to compete in the final grand prix before his 30th birthday. It proved a spooky coincidence.

A year later, a biography of Cevert was published, entitled *Death In The Contract*. In the introduction, Cevert's former girlfriend, Nanou van Malderen, told the story of a visit she'd made to a clairvoyant in 1966.

She'd first visited with her mother in 1959, when the woman had told her she would meet a man who would change her life, by the sea; Nanou met Cevert in 1964, in St Tropez.

When the woman saw her again, she told her, "You've met him! You'll be very happy but you won't

keep hold of him. His success will come between you..." And then she paused. "I have to tell you this; this boy won't reach 30."

Nanou told Cevert parts of this tale – but not the part about his death. It prompted him to go to the clairvoyant himself, who repeated to him the entire story – without being told of his connection to Nanou. Then François dismissed the idea of dying, "None of it matters at all! By then, I'll already be world champion. What a way to go, to die at my peak!"

When François Cevert was killed on October 6, 1973, he was 29 years old. The US GP would have been his last grand prix before he turned 30.



The eyes had it: Cevert and Jackie Stewart share a joke post-race. Cevert called Stewart 'Maestro' during his apprenticeship with the world champion

which has rarely been seen in F1; the best recent example is probably Michael Schumacher's tutelage of Felipe Massa. "I told him everything I knew," recalls Stewart. "There was a relationship that developed because he was inexperienced and hungry. He wanted to improve. Most drivers are satisfied with using the natural ability God has given them – they seldom have to stretch it beyond what they've been given. But the really good ones use that as a platform."

The pupillage with Stewart began by literally following in his wheeltracks, at ever-increasing speeds. In that first season, Cevert scored a single point in the difficult March 701; in 1971, driving the first Derek Gardner-designed Tyrrell, he scored three podiums – and his first win at Watkins Glen. That afternoon, he finished a full minute ahead of his team-mate. He later confessed to feeling awkward as he ran ahead of his team leader, who drove as his 'wing man' for as long as possible to let François make his escape.

those magnificent eyes did a lot of damage with the birds." Ramirez agrees, "They don't make drivers like that any more – he was full of character. He had a big accident in Canada two weeks before he was killed, where he hurt his feet. We drove to Watkins Glen and stopped in Niagara Falls. We had to carry him so he didn't put any weight on his feet. There was much more camaraderie then – it was just a pleasure to be around him."

The 1973 season saw Cevert come of age. Tyrrell took three one-two finishes, with François playing second fiddle. In Holland Stewart missed a gear, but Cevert lifted, saying he didn't want to win that way. The apprentice had reached maturity; he'd called Stewart 'Maestro' during their time, but now Stewart used the name in return. The race at the Nürburgring confirmed it for Jackie.

"He could have gone faster than he did, and I think he could have won there. Because it was François behind me, I only needed to go as fast as I wanted to. Every now and

certainly believed so, confiding it in an interview hours before he died. He'd even told François Guiter that once he became world champion, he'd retire to America and sell French wine. But it wasn't to be.

At 11.50 on Saturday October 6, 1973, Tyrrell number 6 crashed in the high-speed Esses at Watkins Glen during qualifying. Cevert was killed instantly. "I was shocked," says Stewart. "I went to François and what I saw was horrendous. I'll never forget it for the rest of my life. The mechanics were distraught – they thought it must have been a mechanical failure. I went back out because I knew it wasn't. In my mind, it was a car behavioural issue and an error of judgement."

Some, like Cevert's brother-in-law Jean-Pierre Beltoise, never reconciled themselves to this explanation. But Stewart was able to satisfy himself it was true. He'd been taking the Esses in fifth gear – Cevert had been doing so in fourth. The lower gear meant that if the car got out of shape through the corner,

"François Cevert was full of character – they don't make racing drivers like that any more"

"He was in awe of Jackie," remembers his mechanic Jo Ramirez. "He followed a lot of his set-ups, but François tried new things... I wasn't with the team when he won the US GP in '71, but I remember them telling me he went wild on some settings that he'd cooked up with Derek Gardner. It was something on the front suspension, and it just worked."

Cevert was the first Frenchman to win an F1 race for 13 years – it would be his only victory. But in an era when winning even a single grand prix meant a lot more than it does today, it marked François out as a potential world champion.

François was born into a well-off family of Parisian jewellers, and his father had expected his second son to follow him into the family business. Cevert had other ideas, pursuing a racing career against his parents' wishes. After completing his national service, he won the 1966 'Volant Shell' at Magny-Cours – with his sister and mistress of the time both working jobs to pay for his racing. He'd drive through the night with his car on a trailer, and a coffee machine plugged into the cigarette lighter. Or even steal trailer tyres from parked cars. Privileged he may have been by birth, but Cevert worked hard to engineer his chance.

The image he gave off was one of laid-back insouciance that belied his determination: he had film-star good looks, and an easy charm that won people over. "He was French, romantic, handsome..." recalls Stewart. "And



1974 should have been the year Cevert won the world title, but he was tragically killed at the final race meeting of 1973

again he'd really come up close. I'd stretch my pace and he was always able to keep it. He was right on it." Guiter recalls discussing the same race with Cevert: "François saw things a bit differently to Jackie. He told me, 'When I tried to pass him, he started easing me off the track!' But it was nothing nasty."

After his Canadian crash, Cevert went on holiday to Bermuda with Jackie and Helen Stewart. He was anxious about the following year. Although Stewart had decided to retire, only he and Ken Tyrrell knew. François was destined to be Tyrrell team leader, but hadn't been told, and Ferrari were courting him. "I know he didn't know," insists Stewart. "When we were together in Bermuda, he was asking me for advice on what he should do."

1974 should have been Cevert's year: as team leader, in the car that won the title the previous season, his experience with the team would have given him a shot. François

and the driver lifted off, the engine retard at high revs was so aggressive it exaggerated the problem. In a car like the 1973 Tyrrell – fast, but twitchy because of its short wheelbase – the error proved fatal. "I went through and did the same thing later on," explains Jackie. "But I caught it because I knew what to expect. Using fourth gear was probably quicker – but not *consistently* quicker."

Cevert had been sure that the race at the Glen would be his – something he described as feeling like he was in a "state of grace", as having "the physical feeling that you'll triumph". Tyrrell had privately asked Stewart, preparing to compete in his final race, that if he were leading with François second, would he let him past? "It probably would have happened, but it never needed to, sadly," says Stewart now. Instead, Tyrrell withdrew from the race.

In the pitlane immediately after the accident, Lotus boss Colin Chapman was caught on camera as he received the news: Colin Chapman: "Who is it?" Peter Warr (Lotus team manager): "Cevert." CC: "How bad is it?" PW: "Very bad." CC: "Oh no..."

Chapman was bewildered. "Cevert. Bloody hell." And though he'd lost his great friend Jim Clark five years earlier, although he was hardened to the possibility of death, he let out a mournful sigh that expressed all the pain of a life in motor racing.

In the autumn sunlight of upstate New York, a light had gone out forever. **FO**

HOW F1 USED TO BE

Amazing shots from
the days of yore

THE ITALIAN JOB

It was a weekend of total humiliation for the Italians. Usually the red cars headed the field for the Italian Grand Prix, but at Monza in 1957 it was the green machines that filled the front-row as Vanwall dominated practice.

British drivers Stuart Lewis-Evans, Stirling Moss and Tony Brooks headed the charge for Vanwall, with just Juan Manuel Fangio creeping into fourth place on the front row in his red Maserati.

Following a searing pace in practice, Vanwall kept up the momentum during the 28th Italian Grand Prix and Moss duly stormed to a momentous victory for the British marque.

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Moss won the 1957 Italian GP from Juan Manuel Fangio, but who was third?

- (a) Mike Hawthorn
- (b) Masten Gregory
- (c) Wolfgang von Trips

The closing date is February 26, 2009. For full competition terms and conditions, please refer to www.f1racing.co.uk

1 STUART LEWIS-EVANS

In his first season for Vanwall, Lewis-Evans surprised everyone by eclipsing Moss and recording pole position with a 125mph average speed. Unfortunately his race was ruined following a long pitstop to fix a leak in the Vanwall's cooling system

con

2 STIRLING MOSS

On lap 55 of 87 Moss silenced the Monza crowd when he lapped second-placed Fangio. Then with 10 to go, the crowd roared when Moss limped into the pits. But it was routine - after a bottle of pop and top-up of oil, Moss exited the pits to silence them again



3 TONY BROOKS

As befell his team-mate Lewis-Evans, Brooks struck trouble during the race. On lap 20, the Englishman suffered a stuck throttle and needed to pit to have it freed. He fell a lap down in the process, but made a great comeback to take seventh on the final lap

4 JUAN MANUEL FANGIO

The reigning world champion had tried to keep up with the Vanwalls in the early stages, but by lap 12 he was fourth behind the three British racing green cars. While many hit trouble, Fangio was sympathetic with his Maserati to come home second

5 JEAN BEHRA

The mercurial Frenchman decided to trial the new 12-cylinder Maserati at Monza, while team-mate Fangio stuck to the six-cylinder unit. Unfortunately the gamble didn't pay off and Behra was forced to retire the overheating 250f on the 50th lap





PETER WINDSOR

Forthright views from our man inside the F1 paddock

And so another Williams sponsor has defected. I rang Sir Frank shortly after I heard about Lenovo, the computer company, switching to McLaren for 2009. Was it a blow? Was he angry? And why have several Williams components

– TAG, Honda, Adrian Newey – migrated to Woking over the years? You could probably list FO Williams as the greatest contributor to McLaren's success over the past 28 years.

Typically, Sir Frank would have none of it. He would say nothing against Ron Dennis, McLaren or his defecting sponsor. If that's where the guys at Lenovo feel they need to be, he implied, then that's where they belong. It reminded me of the time I joined Williams in 1985 as manager of sponsorship.

**"We never approach companies connected with rival teams"
Frank Williams**



Lenovo's defection to McLaren is at odds with Williams' policy of never doing a deal with the sponsor of a rival Formula 1 team

"Rule One," said Frank. "We never approach companies connected with rival teams. We seek new sponsors only."

Is it not time, therefore, in this global recession, to ask how McLaren *really* feel about the Lenovo deal? They have now parlayed a part of their success into extra money that used to be spent with another team. What about fresh dollars? If any teams are going to keep the F1 economy looking sharp, surely it's Ferrari and McLaren.

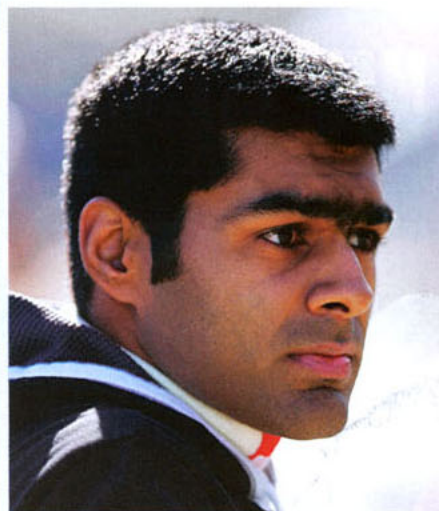
By mid-2008, Lenovo had probably decided upon a McLaren-or-nothing policy. And I'm sure Ron Dennis discussed the issue with Frank in advance. Yet McLaren and Williams are fundamentally different in terms of principles... and principals. Ron is super-slick and an opportunistic force. Frank is conservative, deferential and a sporting gentleman in the Oxbridge sense. Ron is winning Championships, Frank isn't. Ron is a star – but then so, too, is Frank.

Frank knows when to say goodbye and he knows how not to bear a grudge. Thriving when you're struggling is what he's all about. He loves it when people say he's finished. Frank is a case study in both dignity and courage under fire.

So await the Williams resurgence: it will happen, just as new sponsors will emerge. Frank has an integrity that distinguishes him from the F1 rest. That's why he continues to retain the respect of the world at large. That's why – even before he begins his 40th year in F1 – he is still very much a genuine winner.

ARE YOU SURE CHANDHOK ISN'T READY FOR FORMULA 1, VIJAY?

I WAS ABSOLUTELY staggered to read in the Indian press that Vijay Mallya, owner of Force A43 Silverstone By-pass – sorry, India – thinks that Chennai's Karun Chandhok is not yet ready for Formula 1. So what he's really saying is that he isn't ready to replace either an ageing Italian who seemed on the verge of retirement about three years ago or



Karun Chandhok has won races in F1's feeder series GP2, but is not yet ready to make the step up, according to Vijay Mallya

a reasonably quick young German who is admittedly moderately well financed. I've spent many years scratching my head, wondering how on earth trillionaires like Mallya make their money. Now we know: they defy logic and take advice from non-objective hangers-on.

WHY CAN'T F1 DRIVERS TAKE PAY-CUTS?

WHAT ARE all the F1 drivers going to do with their new, extended summer holidays? I'll tell you what they're not going to do, and that's take a pay-cut. Why not, I ask myself? The economy is shrinking, the teams are

cutting back and there's less money for all. All those lucky enough to make a living from F1 have to re-adjust. What's that? You have a contract? Cast-iron? Signed by both parties? Time for the FIA to step in – and for us to



"Fancy taking a pay-cut? No, me neither." Driver money is a hot issue in Formula 1

remind the drivers what the FIA said when faced with a mound of evidence during the fuel-cooling issue of Brazil, 2007: "inadmissible", they declared it. End of story. It worked then and it should work now. Simple.



ALAN HENRY

On the teams wanting more cash, and Max's big decision

There is no more a touchy subject in the F1 community than the question of the sport's finances. So, when Sir Jackie Stewart celebrated Hogmanay with some carefully aimed shots at Bernie Ecclestone at the turn of the year his remarks

served to remind those of us that are on the touchlines of Formula 1 just how little the outsiders *really* know about the way in which the sport's reputed £660million annual commercial rights income is split up between the competing teams.

Stewart's observations that it's no longer acceptable that Ecclestone – and his associates as commercial rights holders CVC Capital Partners – should strip out £330m a year from the sport's revenue streams echoed the sentiments of Ferrari President Luca di Montezemolo a month earlier.

However, you might be forgiven for thinking that di Montezemolo, emboldened though he may be by Ferrari's newly found accord with McLaren, has a bit of a cheek raising the issue at all. Under the current arrangement Ferrari skim off the first five per cent of the teams' income and then get their respective share of the remaining 45 per cent that is shared between the other top 10 teams – giving them two bites of the commercial cherry.

If Luca di Montezemolo had said simply, 'Ferrari is the most important team bar none in the paddock, so pay up and shut up!' then

I would have been behind him completely. But casting Bernie as the big bad wolf is a bit rich when you consider how financially spoilt Ferrari have been over the years. Even if you do actually conclude that such



Luca di Montezemolo is calling for Bernie Ecclestone to hand out more of Formula 1's commercial income to the teams

partiality is wholly justified.

My notes regarding the current state of negotiations for a new Concorde Agreement call for a basic 17 races, and there is what is referred to as the 'Barcelona Memorandum Of Understanding', which binds in, though not legally, McLaren, BMW, Toyota and Renault, plus Honda if they survive.

Ferrari (pots of extra money), Red Bull

and Williams all have separate deals. The Barcelona MOU was signed in 2005 as a prelude to a formal, legally binding deal, but I understand this has not happened yet.

This was the same agreement that was signed by Jordan, Red Bull Racing, Scuderia Toro Rosso, Super Aguri and Williams. Both Jordan (Force India as it is now known) and Williams signed up on the understanding that if Bernie Ecclestone agreed more favourable terms with the constructors

"With the current agreement, Ferrari get two bites of the cherry"

group then they would get the same deal.

Both of these agreements called for a new or 'prolonged' Concorde Agreement. Many insiders believe the FIA, despite putting their name to the original press release, never had any intention of signing a new Concorde Agreement. My spies tell me there has been a massive amount of activity in recent weeks on trying to get one up and running, but the suspicion is that the real sticking point surrounds the mysterious Schedule 10. The financial chapter! Why am I not surprised?

THE QUALITIES NEEDED FROM AN FIA PRESIDENT

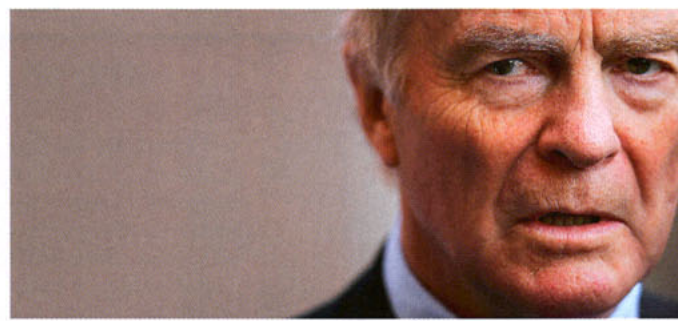
MAX MOSLEY says he will make a decision in the middle of 2009 over whether he will run again for the presidency of the FIA. "I will take a decision in June," he said before Christmas, raising speculation he may continue.

Outlining the qualities a successor would require, he said, "A great deal of patience and an ability to understand quickly a variety of technical and legal issues. I would advise a potential successor to think very carefully before standing for election."

Mosley might usefully have

cited other keynote qualities historically high on the list of must-haves for an FIA president,

namely a skin as thick as a rhino; total, blinkered self-belief; and huge independent wealth.



Max Mosley will decide whether to run again for the presidency of the FIA by the middle of 2009

CAN THEY BUILD IT?

WITH DONINGTON Park organisers breathing a sigh of relief after getting planning permission for the heavily revised circuit, I still have doubts that it will be ready to stage the British GP in 2010, as planned.

I think track supremo Simon Gillett will reflect that getting such permission was the easy bit. Frankly, just how they are going to pay for the construction work in these financially strapped economic times remains the biggest mystery of all as far as I'm concerned.

WHAT'S IT LIKE TO...



"You can't even begin to understand how hot it gets in the cockpit." Lewis feels the heat at Sepang last year

...DRIVE IN THE HEAT OF MALAYSIA?



MARK WEBBER
RED BULL

"You just want to get it over and done with at Sepang; you want a very fast race with no Safety Cars or any delays. To say it's hot is an understatement: you're screaming for something to cool you down, but there's nowhere to go. You might have thought that stopping in the pits would help, but it's the worst thing you can do. The heat is even worse when you're stationary."



JENSON BUTTON
EX-HONDA

"You can feel the hot air coming in through your helmet, which makes it quite difficult to breathe and can feel quite claustrophobic. A couple of years ago, my water bottle didn't work and I started to shiver during the last 20 laps as a result. My vision started to go too, so it was all pretty scary really. But even when your water bottle is working, the problem you have is keeping the fluid cool. After about three laps it's the temperature of tea, which is pretty grim."



KIMI RÄIKKÖNEN
FERRARI

"Racing at Sepang is like sitting in a Finnish sauna with your overalls on. It's very hot and you don't get the chance to cool down on the straights because the air is so warm. You have to prepare carefully. I drink a lot of fluid before the race and try to do some sport outside to help my body get used to the conditions. I like the race a lot because it's an interesting track and I won my first grand prix there in 2003. I'll never forget that."



LEWIS HAMILTON
McLAREN

"You can't even begin to understand how hot it gets in the cockpit. I had a problem at one of my pitstops [in '08], which meant I was stationary for nearly 20 seconds and it got *very* hot during that time. My water bottle wasn't working either, so it was one of the most physical events I've ever done. I was very, very thirsty. The most important thing is preparation: being well hydrated, while continuing your usual training programme."



SIMON FITTETT
TRAINER, RED BULL

"The conditions in Malaysia are the toughest that the drivers experience all year. The cockpit temperatures often exceed 60 degrees C and it's incredibly humid, so hydration is the key. During the days leading up to the event, the drivers steadily increase their fluid intake and David [Coulthard] would drink up to six litres of fluid on race morning alone, followed by another three litres afterwards. The air conditioning is another problem for the drivers because it doesn't allow them to acclimatise to the conditions; for this reason, we make our treatment room quite warm."



JUAN PABLO MONTOYA
EX-WILLIAMS AND McLAREN

"The thing I remember about the Malaysian Grand Prix was that it was really important to be properly hydrated, but I never really found the heat a big problem, to be honest with you. I mean, you sweated a bit, but that's normal in Formula 1, isn't it?"

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