



NEEDELL ON DIESELS, DOCTORS AND DANGER

PLUS  
TOYOTA AT LE MANS  
V8 SUPERSTARS  
MARKUS PALTTALA  
JOE OSBORNE

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# October

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## MARKUS PALTTALA 16

Our resident Finn takes on one of the main talking points of 2011; balance of performance.

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## JOE OSBORNE 18

Just how short can a 24 Hour race be? *Joe* finds out at the Britcar 24, in unreliable style.

---

## TIFF NEEDELL 22

Britain's best loved racing and TV star talks to *Stephen Errity*, and the gloves are off...

---

## TOYOTA AT LE MANS 32

*Stephen Errity* looks back on a colourful history for the Japanese Sarthe returnees.

---

## SOLID GOLD 40

The Gold Coast 600 brought some of the world's best drivers to V8 Supercars. *Jake Yorath* investi-



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# SPEED CHILLS

## *A note from the editor*

editor@lendurance.co.uk

**Jake Yorath**



**I'm sad to say our season ended this month. It's been amazing, from the first day right to the last.**

It opened with a trip to the British GT Media Day, which gave me the first first of the season; great light at Silverstone. It wouldn't be the last time my lenses would be blessed with beauty from above this year. Dawn at Le Mans, sunset at Donington


these days. I hope it continues, because I know a lot of people there are working really hard and deserve it.

The highlight for me, though, was Le Mans. Picking up my pass to the Le Mans 24 Hours was almost like winning it. It's a huge sense of achievement on the part of this little magazine and everyone who's been involved over its short life. I'd thank every single person who has given up their time but they'd need a magazine of their own. Rest assured, I'm grateful to each and every one of you!

We've altered things a little this issue, because we've switched to a bi-monthly format (quality, not quantity is the idea). We've got a new look, too.

I hope you enjoy this issue as much as we've enjoyed putting it together. It's a privilege that you're reading it.

**Picking up my pass to the Le Mans 24 Hours was almost like winning it... It's a huge sense of achievement on the part of this little magazine**



Park for GT500 and the Silverstone Classic.

Following the British GT Championship for the first time has been a great experience. The series is back on its feet after a difficult time and it looks really strong

*l'endurance*

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*in focus*





**British GT Championship GT500, Donington Park**  
Jake Yorath used a Nikon D200 and 300mm F4  
Nikkor. Shutter speed 1/1000th at F4, ISO400.

*in focus*







**Intercontinental Le Mans Cup, Silverstone 1000km**  
Jake Yorath used a Nikon D200 and 300mm F4  
Nikkor. Shutter speed 1/2000th at F4, ISO500.

*in focus*





British GT Championship GT500, Donington Park  
Dan Bathie used a Nikon D50 and 300mm F4  
Nikkor. Shutter speed 1/640th at F4, ISO200.

*in focus*





Intercontinental Le Mans Cup, Silverstone 1000km  
Dan Bathie used a Nikon D200 and 300mm F4  
Nikkor. Shutter speed 1/1500th at F4, ISO400.

*in focus*





**Intercontinental Le Mans Cup, Silverstone 1000km**  
Jake Yorath used a Nikon D300S and 80-200mm F2.8  
Nikkor. Shutter speed 1/200th at F2.8, ISO400.

# talk

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**G**T3 cars were introduced in 2006 and it's now a five year old concept. Many of us agree that it has been a success and it seems to be the way most national and international sports car championships choose to take.


However, GT3 has always raised controversy because of the Balance of Performance system. The purists are against the BoP, but everyone involved knows it's simply necessary to avoid the already too-high development costs and car prices getting completely out of control. It

would be less of a subject, though, if it was done properly.

It's practically impossible to exactly balance front, rear and mid engine cars with very different shapes and weights. Even if it were close, it's still impossible to make everyone happy. Anyone entering a car to one of the GT3-based series has an easy tool to make excuses if they are not winning, but that aside, it shouldn't be too difficult to get all these different cars at least in the same ballpark. I think this is the key to get the GT3 concept really break through.



**At its best,  
BoP creates  
a level  
playing field.  
At its worst,  
it can kill the  
season for a  
team.**



This year I raced in the Blancpain Endurance Series (BES), FIA GT3 European Championship and some races in International GT Open and Belcar Endurance Series. It's been interesting to notice that even though the basic BoP system should be the same, the outcome is very different. Everyone has their point of view. Mine is that the BoP of the FIA GT3 was the worst and the BES was closest to the truth. The different national series were somewhere between those two.

At its best, the BoP creates a level playing field. At its worst, it can kill



Markus Palttala is an international GT racing driver with over ten years' experience in sportscars and saloons. He is the Blancpain Endurance Series vice champion.  
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## *Markus Palttala*



the season of a certain brand or team. In the BES I was on the podium with both a Ford GT and BMW Z4, which in itself is a good sign and even better is the fact that 4 different brands won in those 5 races. That Ford was given a minimum weight of 1210kg and although it wasn't one of the fastest cars, it was good and we were in the game. In the FIAGT3, our Ford should have also weighed somewhere around 1200kg, but instead weighed 1300kg in the first race, 1275kg in the second race, 1230kg in the third and by then, there was no driver interested in driving one.

That's just an example of one car, but it helps illustrate the point.

Obviously, I'm happy to talk about the BES because we achieved some good results there winning the last two races and finishing second in both the drivers' and teams' standings. Nevertheless, I truly like the series in many ways. I did the GT1 World and GT3 European Championships last year and I like their flat-out 1-hour race concept but after over 20 starts in different 24-hour races and 5 seasons in the Le Mans Series, I was missing the endurance spirit of sports car racing. SRO's

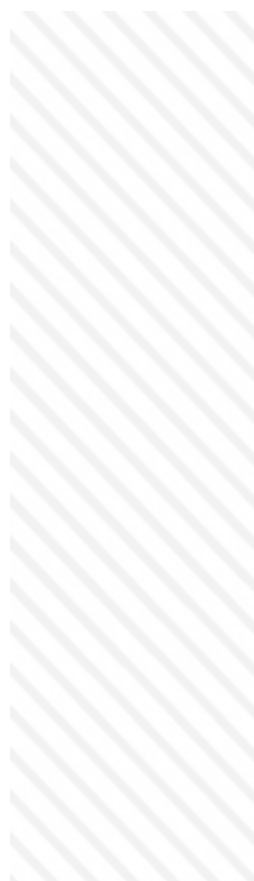


Photo: Jake Yorath

plans for yet another GT series created quite a buzz amongst teams and drivers last winter, as anything new does and especially because the GT1 World was in doubt and the grid in GT3 Europe was getting smaller. In the end, we had a nice grid in Monza in April and even better than the number of cars was the quality of teams, drivers and cars.

My outfit, Marc VDS Racing Team, was the first major player announcing that the BES will be their main focus next year, which was bad news for GT1 but good news for BES. Let's see who else will be there...

# talk...



**I**n my last article, I was writing about my experience at the Spa 24 hours using it as mentoring session to learn about the ethos of endurance racing.

Well, good news for that new found intelligence: it was called upon much sooner than anticipated, and I was asked to race in the Britcar 24 hour with Optimum Motorsport in a Ginetta G50. Not the most prestigious 24 hour race, but a good start as Silverstone is my local circuit and I know the car better than Liam Fox knows his advisors. This opportunity had arisen from someone that I instruct, Lee Mowle. He is the typical/perfect gentleman driver. His attributes

(in no particular order); money, talent, commitment, physical fitness, intelligence and being a nice guy! Lee had decided that he wanted three quick drivers to drive alongside him, so he drafted in 2008 British GT4 champion Stewart Linn, Ginetta G20 hotshot Gary Simms and myself.

I had never competed in a Britcar organised event: for the past four years I'd been in the GT monopoly that SRO has at the moment. For me SRO seem to take a huge amount from the sport and not to return it in equal amounts, while Britcar has a very different philosophy. For every car entered, you are given 50 free entrance tickets, countless car passes and

generally made to feel wanted. A novel idea to keep the people paying you money happy.

Anyway, down to the important stuff. Practice started well with all four drivers within five seconds around the Arena GP circuit, with a few setup changes to try and make the car more driveable over the three hour stints we would be doing on the tyres during the race. For qualifying, I'd been nominated to go and bang in the time early on with new tyres. Stewart Linn was our old head on old shoulders so he gently reminded me that qualifying was 24 times less important than my FIA GT3 counterpart. Understanding his logic I pushed to the front of the queue in the pit-lane to get myself some

**I was starting to like this endurance racing, being told to drive slower for the first time in my career**

Joe Osborne is a GT racing specialist. Having won the European GT4 series in 2009, Joe stepped into GT3 in 2010 and '11, showing professionalism and racing ability at every turn.


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## **Joe Osborne**

clear track. This worked nicely as I got two flying laps with minimal traffic posting a nice steady lap, putting us P1 in class by one point four seconds... After getting told off for being too fast, I was congratulated. I was starting to like this endurance racing, being told to drive slower for the first time in my career. We decided on a laptime that would keep us at the front but also more importantly keep the car out of the garage. I headed out into night practice with this laptime in my head, mainly because the engineer Andy was reminding me over the radio ever 30 seconds. It was my first time driving at night and it was truly amazing. It was eerie to start with but that soon eased as I realised all I could see was the tarmac, no distractions what so ever, with laptimes slow enough to keep everyone happy I called it a night.

The next morning we discussed the plan of action. All of these plans on paper look amazing, on circuit not so much. The duty was given to Stewart to start the race as he had the experience and mentality for these long distance rac-

es. Unfortunately for us, he was the only one out of the 57 starters, and after only two laps we had been hit, snapping a rear hub and bending a few wishbones. The team sprung into action readying parts needed to fix the stricken car which would be put on a flatbed and brought back to us. An hour of hard work from the boys got us back into the race but Stewart wasn't happy with the handling of the car, something we would need to address in the next stop. When we got the car in the garage again we got the trusty string out to track the car up which found our issue so fingers crossed we had all of our issues. Lee jumped in the car and was having a steady stint until a small trip across the grass that at the time looked harmless. He did another four laps and brought the car for me to get in for my first ever stint in a 24hr race. As soon I jumped in I could smell burning, either a bad time for a stroke or something to do with the car. As I turned on the ignition I saw the water temperature was at 178°C: since the age of 15 I had it drummed into me that water boils



**Coming into the last corner, the team asked how things were going. "Not ideal," I replied. "I'm in the pitlane, possibly on fire."**




Photo: Jake Yorath

at 100°C and that is bad for the engine. Hot water bad for the engine in my mind I pointed this issue out over the radio, I was told it would be because of some grass stuck in the radiator which has caused some heat sink and was a false reading. Now my mind fully at ease I headed out into the darkness. Heading down hanger straight I looked down at the dash to see what the water temperature had fallen to... 190°C. I got on the radio to let the team know the heat sink was following me around, I had a loss of power. I put the car into sixth gear to try and keep the revs low as possible. Coming into the last corner, the team asked how things were going, "Not ideal," I replied. "I'm in the pitlane, possibly on fire."

That was it. Ironic is an overused term, but I couldn't help but feel my first 24hour race was exactly that. One lap completed. It was gutting for the whole team, who had put so much time and effort in. We were out after four. Not deterred by this experience, Lee Mowle has entered us in the Dubai 24hr this coming January. I don't think sand can block radiators.



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# THE NEEDELL

*Stephen Errity* chats to the TV  
star about McNish, Ullrich and  
taming the 956...



F



**H**e's known to most people for his ability to hold a powerslide in the latest high-powered road car, or perhaps for the Nissan British Touring Cars campaign in the early '90s. But Tiff Needell is also one of Britain's most experienced sportscar drivers, having entered Le Mans no less than 14 times and sampled some of the discipline's finest cars.

He first arrived as a young driver at a time when it was still very much a fallback option for Formula 1 outcasts. "The F1 career wasn't working out, so I started to look sideways," he remembers. His first Le Mans entry came in 1980, sharing a Ford DFV-powered IBEC P6 with 1970 British F3 champion Tony Trimmer. After failing to qualify that year, the duo returned in '81, only to retire due to head-gasket failure. "It was pretty unreliable," recalls Tiff, "but so many young drivers have got a break with amateur British teams like that. Later I drove with Steve O'Rourke, so it was the rich amateur and the young professional, which is still the way with GTs these days."

Following the uneventful IBEC years, Needell switched to the Nimrod project for the 1982 season. Despite the involvement of Lo-

la's Eric Broadley and engine tuners Tickford, the car was a disappointment and failed to bring engine supplier Aston Martin the success it was looking for. "It was a big old lump!," laughs Tiff. "It was about three years out of date before it was born. But it was a good, solid car to drive, just not quick enough compared to the 956 we were up against. It tried to kill me down the Mulsanne straight. The rear bodywork and wing came off and I went pinballing down the barriers at 200mph. I was very, very lucky to get out of that. The EMKA Aston I drove the following year was better. It was more nimble, but still didn't have enough grip."

The EMKA did at least give Tiff his first finish at La Sarthe, coming home 17th in 1983. This was also the year he first got behind the wheel of a Porsche 956, and though it was a vast improvement over what he had been driving up to this point, it was still some way off the supremely accomplished machine it would become in later years. "In terms of reliability, it was much better, but it wasn't an easy car to drive," says Tiff. "The brake pedal would go soft and you'd have to pump it up and down, wheels fell off and you had the locked rear diff. The 956s were a bit of a pig to drive

when they first came out, so it wasn't exactly 'this is wonderful,' but it just had so much power, reliability and strength that you always finished races, so you could be up there."

1983 was also the year that Tiff first ventured out to Japan, driving the futuristic-looking, Autobacs-sponsored Dome RC83 at 1000km races in Fuji and Suzuka. This would be the start of a long association with Japan and Japanese teams. In 1984, he drove a Dome 84C for Toyota's TOM'S team, a deal that continued into 1985, when he also got back behind the wheel of an Aston Martin-engined EMKA in Europe, netting an 11th place finish at Le Mans. 1986 was a fragmented year, encompassing the failed Lamborghini Countach QVX project, selected outings in a March 84G for Cosmik Racing and a podium finish at the Silverstone 1000km in a Kremer 956.


However, Tiff's perseverance and Japanese connections eventually paid off: in May 1987, he arrived at the Le Mans test day as a works Toyota driver. But these were the early stages of the manufacturer's La Sarthe forays, and the car was uncompetitive. "The thing is, I've always been in the wrong car at the right time, or vice versa," Tiff notes. "When I should've been in a Porsche, I was in



Right: We interviewed Tiff on his return to the British GT Championship at Silverstone, with Secure Racing.

Photo: Jake Yorath





Nowadays  
they're  
obsessed  
with doing  
four or five  
stints at a  
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know what's  
going on!

I've always been in the wrong car at the right time, or vice versa. When I should've been in a Porsche, I was in the Nimrod. I went to Porsches and they were out dated!



Photo: Jake Yorath

the Nimrod. And with Toyota, I had the two-litre engine, so it was never going to win. I left just before they got the three-litre V6s and began to win races. I then went to a Porsche team, but of course by then the Porsches were a bit out-dated, and then the Mercedes turned up!"

After failing to finish at Le Mans in 1987, Tiff came home 24th in 1988, in a Toyota shared with Paolo Barilla and Hitoshi Ogawa. But a one-off appearance alongside Derek Bell in a Richard Lloyd-run Porsche 962C at that year's Silverstone 1000km led to a full season of racing alongside Bell in 1989, sponsored by Porsche Cars GB. Although Le Mans was not a highlight ("Derek went off to lunch on Sunday because we were doing so badly!"), it was a positive year overall for Tiff. "It was great racing with someone who had so much experience. Derek's a lovely man - a proper, old-fashioned, nice-guy racing driver," he says.

But the real highlight of Tiff's sportscar career came in 1990, when he took a Porsche 962 prepared by the small Alpha Racing Team to third place overall, sharing with Anthony Reid and David Sears. Excepting the Dauer 962s of the mid-'90s, it would be the last time a 956/962 finished on the podium at Le Mans. "That was a

nice little landmark,” says Tiff with a smile. “We drove flat-out, we single-stinted the whole thing. We had no money for physios or dieticians, but we reckoned if we double-stinted, we’d be knackered. It was better not to get completely exhausted, as then it takes you more than two hours to recover. So we just drove one hour flat-out at a time each. We thought we’d double-stint during the night, but we ended up just changing drivers every stop.” This approach is a world away from the multiple stints that characterise Le Mans in the 21st century. “Nowadays, they’re obsessed with doing four or five stints at a time. I don’t know what’s going on, it’s like an ironman mentality, an ‘I’m fitter

than you’ sort of thing. I don’t think keeping one driver in for four hours actually makes the car quicker over 24 hours.”

The other aspect of modern LMP racing that has come under scrutiny of late is the number of serious accidents occurring while slower cars are being lapped - particularly by Audis. “Allan McNish is one of the most respected drivers out there, but at Le Mans this year he was looking for an accident,” says Tiff. “He was flashing his teammate and he’d already made one attempted dive... It’s the same macho philosophy, with the team saying ‘you mustn’t lose time in traffic, you must save every tenth.’ It has become all-out sprint racing, because the cars don’t break down any-

Allan McNish is one of the most respected drivers out there, but he was looking for an accident

more. So whereas in our day you respected the car, and if you lost a second here or there it wasn’t the end of the world, now the team managers are putting huge pressure on their drivers to dodge the traffic as quickly as they can. Also, the cornering speeds have come on immensely. There’s still the same difference in a straight line between a prototype and a GT, but the cornering speeds have gone up so much, because Le Mans is now a high-downforce track.

“As soon as they put the chicanes in, they changed the way you drive it. The Porsche curves were quite slow for us, because we had low-downforce setups, but now, with the high-downforce trim, they’re 20, 30, even 40mph fast-

1981

Makes debut at Le Mans, driving a Ibec-Hesketh 308LM alongside Tony Trimmer.

1987

Lands a factory drive with Toyota Team Tom’s at Le Mans.

1989

Partnered with Derek Bell for the World Sports Prototype Championship in the Richard Lloyd Racing 962.

1990

Secures a career highlight third at Le Mans with Alpha Porsche team alongside David Sears and Anthony Reid

1998

Takes two victories along the way to second place in the British GT Championship driving a Lister Storm.

career

er. And then if it's a slower driver, the speed differential in the corners is even greater. They've allowed the cars to become too quick, with too much grip from too much aero - a bit like Formula 1. McNish and the boys say that it's like driving an F1 car once you're above 60 or so miles per hour."

Given Tiff's comments on team bosses, it's unsurprising to find that he's no great fan of Audi supremo Dr Wolfgang Ulrich. He's shocked to hear that the German regarded the Peugeot incident at Petit Le Mans this year as a 'racing incident'. "Normally he's down stabbing the other team manager in the chest! It was outrageous when he went down to poor Charlie Lamm at Le Mans - he does get a bit carried away, and that's what's wrong - it's too intense and there's too much pressure on the drivers. Senna started it in F1, and it's just the way that drivers treat drivers these days. It's all over motorsport now. If they drive like that, they end up having big shunts. And, fortunately or unfortunately, they walk away from them. Maybe the modern Le Mans prototypes are too safe if drivers can have these big crashes and walk away. We knew if we did that, we'd probably get sliced in two by the Armco. But nowadays they just jump out

of the car and blame the slower driver!"

Following the 1990 Le Mans podium, Tiff had two more years driving 962s for various teams, before tackling several seasons in the British Touring Championship in the familiar Old Spice-liveried Nissan Primera. But sportscar racing came calling again in 1995 in the form of the Jaguar XJ220 GT1 car, and later, the fondly remembered Newcastle United Lister Storm. "It was a relief to get out of front-wheel-drive touring cars and into a powerful rear-wheel-drive car again," says Tiff. "The BPR series really got GTs going, but then of course Porsche came along with their rule-bending GT1, and then everything had to have a long tail and it was all ruined. BPR had Ferrari F40s, Lister Storms, the 'normal' McLaren F1s and even the Lotus was almost on the pace. But the normal road-car-based Porsche GT1 was nowhere, which is why they brought out the special car, then Mercedes killed it off completely with their CLK that won everything."

Fond as he may be of the BPR GT years, Tiff shares many fans' view that Group C was the last true 'golden age' for sportscar racing. "It was just fantastic, but I don't think we'll see the likes of it again," he concedes. "Now we've

**It was a relief to get out of front wheel drive cars and back into a powerful rear drive car again!**

got these ridiculous diesels ruining motorsport. I know Dr Ulrich is a passionate man, but every time James Weaver qualified on pole in his little Dyson Lola-Judd in the ALMS, Ulrich went straight to the organisers, saying 'I cannot have this! I cannot have this little kit car beating my Audis! I'm taking all my cars home unless you give me more boost!'

"And when the performance disparity is pointed out, they just say 'oh, if you had a factory-run petrol car, it would be on the pace.' Ulrich took the whole Audi DTM team out of a race in Spain because he didn't like the way the Mercedes were driving, but you can't do that - you can't allow teams to push organisers around, which is what's happening in sportscar racing.

"I hate the diesels - half the fun as a spectator is the sound, and with them you can't even hear when a driver's lifting or who's on full throttle; you can't hear the driver driving. The spectacle now is just of a car rushing through the corner with squeaky tyres. Until they hit something, you don't realise how quick they're going. We need to get rid of the diesels - the overall winner needs to be a petrol car, maybe with KERS. All this green stuff needs to be in a subclass. Then you can muck about with giving them

a 10kg weight break or 20psi more boost. The top class needs to be a clear, equal formula - a meritocracy. At the moment, it's like that, but it's only between two diesel teams. Equivalency never works in my book, unless you go back to a fuel formula, which of course Group C was, which everyone forgets! People criticised it when drivers were running out of fuel in the last couple of laps, but NASCAR's like that, IndyCar's like that - you know you might run out of fuel, it's part of the game. The challenge is to make the best lap time with the fuel you've got. So at least then you're driving flat out under the same rules."

Tiff's own experience of contemporary sportscar racing consists of a handful of outings for Barwell Motorsport, the team managed by his brother Chris, in an Aston Martin DBRS9 in 2006, and his recent British GT outing in the Secure Racing GT4 Aston. But he has also been active in historic racing, so the latter race was not his first time experiencing the new 'Arena' layout at Silverstone. "I drove a RAM Cobra in a Heritage GT race. I was leading, then a wheel fell off!" And while the new Silverstone has been roundly praised, Tiff does not count himself among its fans.

"Unfortunately, they've ruined it - it was their one chance to create a decent overtaking spot, but they've totally mucked it up."

As a young man, Tiff had dovetailed his fledgling racing career with a day job as a civil engineer, so surely he would be the man to call if you wanted to update your circuit? "Oh, I'd love to do that type of thing, but they'd never ask me, I'm just not in the right circles. You have to have a clear, long straight with a hairpin on the end of it to allow modern racing cars to overtake. But instead we get 22 corners and no-one can pass! A great racing track should have six corners with a straight after each one, so if you cock up one corner, you can overtake on the next straight. With S-bends, you block the other driver in the middle, and then you both come out at the same speed. Whereas with a single corner, if you make a mistake, you hang back and then you've got the exit speed going onto the following straight.

"Look at Abu Dhabi: at the end of the straight where you make your move, there's a tight corner, but then it immediately makes the car go back the other way. So if you've got a bit of a run on someone, you're halfway alongside, but you can't

**Silverstone have ruined it. It was their one chance to make a decent overtaking spot, but they've totally mucked it up**

complete the move because there's another bloody corner in the way! Arena has a ridiculous left-hand hairpin. If someone blocks you into that on the inside line, you go wide and get the exit speed, so you're half way up the inside on the way out. But there's another bloody left-hand corner right after it, so you've to go back into single file. And as soon as you do that, you're going the same speed. So it ruins any momentum.

"Everyone raves about the Becketts bypass as well, but you need the fastest element at the end. There, the fastest corner is on the way in, then there's a medium left-hander, then and even slower long right-hander. You can't follow a car. Thruxton is a much better layout: it has the tightest bits at the beginning, then the middle bits are medium speed, then the last bit is full throttle, so you can build some momentum and start the straight going two miles per hour faster than the other car."

A third career in circuit design clearly beckons for Tiff, if only someone would ask him to do it. But with another series of Fifth Gear on our screens right now, and doubtless a few more one-off racing opportunities on the horizon, finding the time to do it could be the bigger problem...

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# TOYOTA AT LE MANS: UNFINISHED

In July 2007, a Toyota Supra won Japan's Tokachi 24-hour race. The event is not one of the great household names of endurance racing, and the win didn't attract much fanfare, but it was significant nonetheless.

The victorious Supra was powered by a petrol-electric hybrid drivetrain, which is the same technology found in Toyota's Prius family car - the vehicle which more than any other helped kickstart the motor industry's current green revolution. Where other manufacturers, such as Audi and Peugeot, have nailed their colours firmly to the

diesel mast in the quest for lower emissions in their road cars, for Toyota, it's petrol hybrids all the way. And now, the company is looking to take this technology to a much higher profile victory - namely the LMP1 class at Le Mans 2012.

But as anyone with more than a passing interest in motorsport history will tell you, this won't be Toyota's first time trying to crack the La Sarthe nut. The company first appeared on a Le Mans entry list as an engine supplier for Japanese constructor Dome's cars in the mid-'80s. By 1987, the collaboration had evolved into a full works effort



As the Japanese marque returns to Le Mans, *Stephen Errity* looks back at some of Toyota's high (and low) lights at La Sarthe



# D BUSINESS



This clean face  
is a taster of  
what Toyota will  
bring to France  
in 2012

Photo: Toyota

- albeit with cars still designed and built by Dome - run by Toyota's in-house Japanese motorsport and tuning arm TOM'S. Driving the Toyota-Dome 87C, Tiff Needell and Eje Elgh were tenth fastest at that year's practice day, and the pair of works cars qualified 14th and 16th for the race. Neither would go on to finish the rain-hit event, however: the car Elgh shared with Alan Jones and Geoff Lees ran out of fuel and the one Needell drove with Japanese pair Masanori Sekiya and Kauro Hoshino suffered engine trouble.

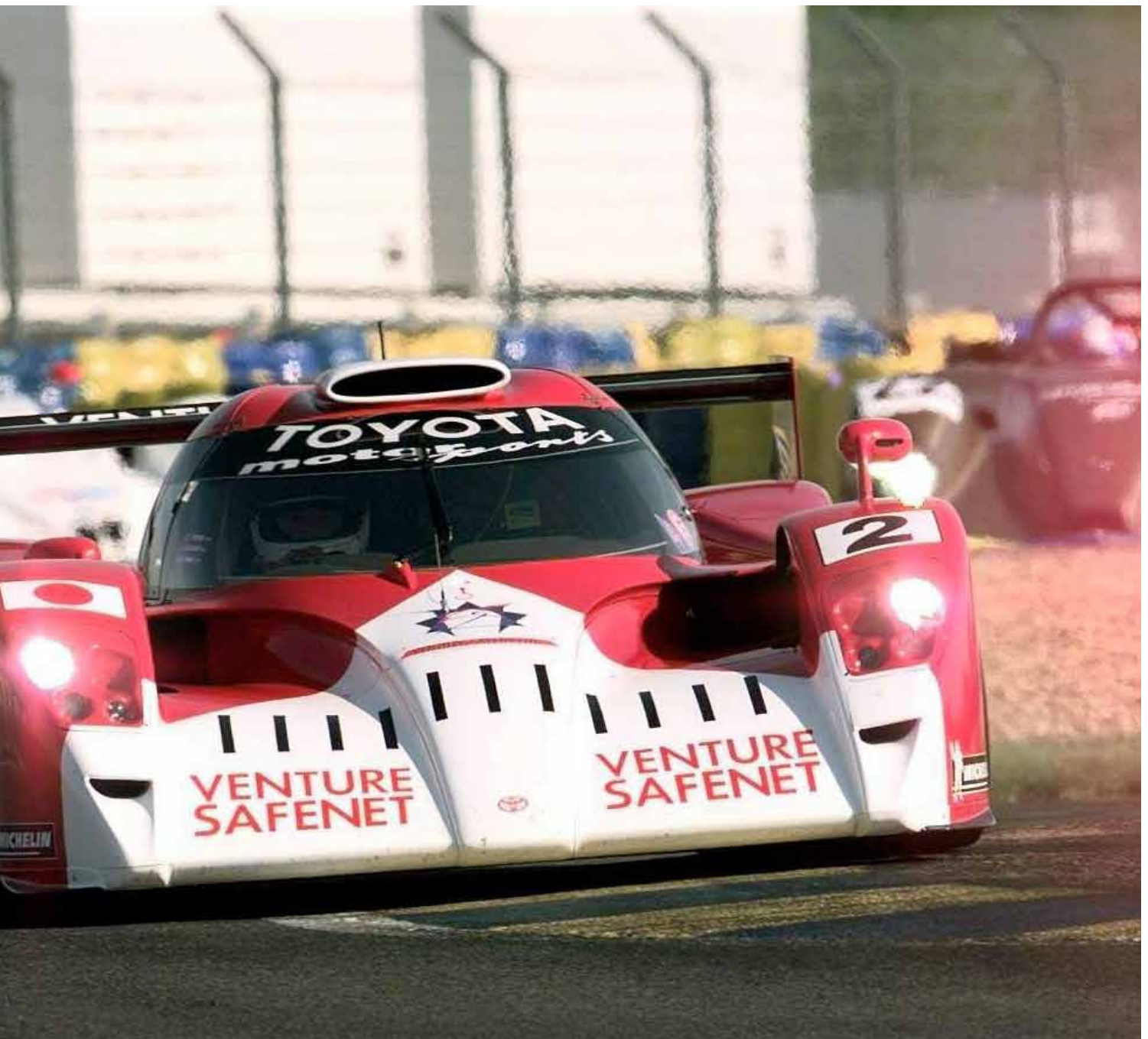
The 1988 season brought an improved car, the 88C, although still running the 2.1-litre turbocharged four-cylinder engine that had hampered the team's competitiveness thus far. The works cars finished sixth and seventh at the Fuji 500km Japanese championship race in March, and this was bettered with a fifth-place finish at April's 500km race in Suzuka. The run of steady but unspectacular results continued at Le Mans, where Lees, Sekiya and Hoshino finished 12th and Barilla, Ogawa and Needell came home 24th. October's world championship event at Fuji resulted in only 21st and 22nd places, but it did mark the debut of the more potent 3.2-litre V8 engine.

The revised 89C car demonstrated its potential by qualifying first and second for the Suzuka world championship race in April 1989, but the race itself would yield only 6th and 20th place, with a third car coming home 24th. Further promise was shown at Dijon the following month, where Lees shared with Johnny Dumfries and came home fourth after qualifying second. But optimism quickly turned to despair at Le Mans, with all of the works machines qualifying outside the top ten and failing to finish. The TOM'S squad did take some positives from 1989, however, as the 89C scored a win and two podium finishes in domestic events at Fuji and Suzuka later that year.

Toyota got off to a winning start in 1990, when the 90C, now running a 3.6-litre turbocharged V8, was victorious in the opening round of the Japanese series at Fuji in March. It proved to be a good omen, for at Le Mans that year Lees, Ogawa and Sekiya scored Toyota's best result thus far with sixth place, having qualified 10th. But this was tempered by a massive accident for Aguri Suzuki in a sister car, after coming together with race leader Gianfranco Brancatelli at the Dunlop curve. DNFs all round at



**Both Toyota's Le Mans  
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second-place finish  
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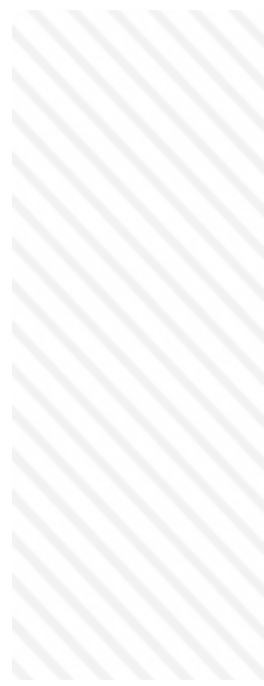


ns programmes to  
minated in a close  
- it seems unlikely  
the third attempt.



The GT-One had everything: looks, pace, technology. But it couldn't claim the victory Toyota craved

Photo: Toyota



TS010 on track. It may have looked the part, but it was never a match for Peugeot's all conquering 905

Photo: Toyota



Once again, Toyota had fallen just short of the goal

the subsequent Dijon and Nürburgring world championship rounds further knocked the wind out of Toyota's sails, but again there were some reasonable results at home in Japan. The 1991 evolution Toyota, the 91C, took a podium on its debut at Fuji in May, then won at the same track in July. But, with the advent of the '3.5-litre' rules in the world championship, Toyota had taken the year out from overseas competition and could only look on with undoubted envy as Mazda finally broke the Japanese duck at La Sarthe with their rotary-engined 787B. At the end of the year, Toyota wheeled out an all-new car, designed not by Dome, but by Englishman Tony Southgate, the brains behind Jaguar's all-conquering Group C machinery.

This TS010 featured an all-new engine built to the 3.5-litre rules. A naturally aspirated 72-degree V10, it boasted five valves per cylinder and was capable of producing 700bhp in its highest state of tune. The car and engine combination broke cover at the season-closing 430km race at Autopolis in Japan in 1991. Sadly, this would be the only time that the new Toyota would get to take on the benchmark cars from Mercedes and Jaguar - both outfits would not return in 1992. Instead, Toyota

faced a new challenge in the shape of the sleek Peugeot 905.

The effort got off to the best possible start at the opening round of the 1992 World Championship in Monza with a win for Toyota. But the fact that the TS010 was one of only four classified finishers, from a meagre 10-car grid, took some of the shine off the achievement. A double DNF at the following Silverstone round was less promising, and by now the Peugeots were beginning to edge ahead of the Japanese cars on raw pace. The French cars dominated qualifying for Le Mans, but the race was a much closer affair that saw Toyota clinch second with the Casio-sponsored Pierre-Henri Raphanel/Kenny Acheson/Masanori Sekiya car. The latter became the first Japanese driver ever to finish in the top three at Le Mans. Further podium finishes at Donington in July, Suzuka in August and Magny-Cours in October, along with wins in Japanese championship rounds at Fuji and Mine, capped off Toyota's strongest season of international competition to date. But it would also be the last season of the World Sportscar Championship. From now on, the Le Mans 24 Hours was the only game in town.

For 1993, Eddie Irvine and Juan Manuel Fan-

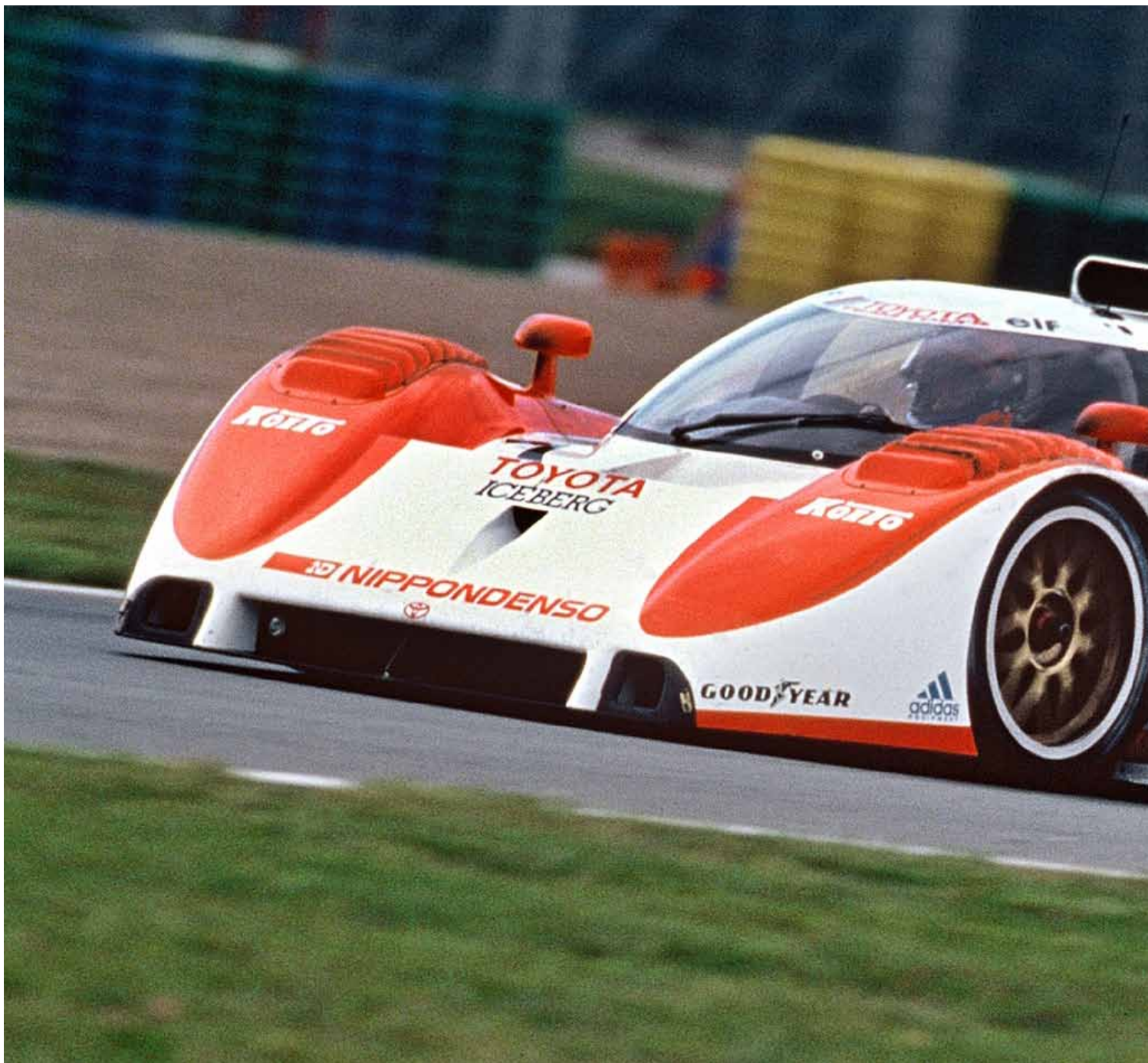
gio's eponymous and reasonably talented nephew joined the driving squad for Le Mans. Toyota laid down the gauntlet with second and third quickest times at the test day, but they were thoroughly outclassed come the race. The Peugeots romped home to an utterly dominant 1-2-3 finish ahead of the five-strong collection of newer TS010s and older Group C cars entered by Toyota that year. The end of the race brought the chequered flag down on not only Toyota's first period of participation at Le Mans, but the entire Group C era itself.

Toyota now turned its focus to what is still its most successful motorsport endeavour to date: the World Rally Championship. This project was overseen by the Cologne, Germany-based Toyota Team Europe, run under the direction of Swedish rally legend Ove Andersson, and when the decision was taken to return to Le Mans in the late '90s, it would be TTE, not TOM's or Dome, that would be charged with bringing home that elusive victory once and for all. In typical Toyota style, money was no object and only the best would do. The best, in terms of aerodynamics anyway, coming in the form of Andre De Cortanze, the Frenchman behind the TS010-beat-

ing Peugeot 905. His GT-One was one of the first top-level racing cars to be designed entirely on CAD software, eschewing the traditional drawing board for even the early concepts. Dallara, who would go on to build monocoques for the all-conquering Audis of the 21st century, was also involved, and extensive use was made of its in-house wind tunnel.

The stunning-looking GT-One was a clean sheet of paper in all but one respect - its 3.6-litre twin-turbo V8 was a development of the engine that had last appeared in a Toyota racer in 1990, though it was given a thorough working-over by Norbert Kreyer's engine division at TTE. Power was transferred to the track through a bespoke XTRAC six-speed sequential gearbox and a Sachs quad-plate carbon clutch. It's easy to forget amidst all this that the GT-One was a production-based racer - but only in that comically loose sense of the word that prevailed in late-'90s sportscar racing. A single road-going version was built, and even that never found its way into private hands.

The GT-One had the pace for victory on its Le Mans debut in 1998, and when early failures put paid to the challenge of the rapid but fragile Mercedes CLK LMs, the team looked set for a comfortable win. Then



the infamous gearbox problems surfaced, handing the lead to the factory Porsches, but Toyota were not done yet. Both Porsches had to take long pitstops in the 16th hour, allowing Thierry Boutsen to pull out a three-lap lead for TTE as the sun rose. But the car's gear sets needed to be replaced again, and at once McNish in the Porsche was back on the lead lap. Boutsen and the Scot traded first

place numerous times before finally the pressure proved too much: the GT-One's transmission called it a day at Arnage with little more than an hour remaining. The only one of the three Toyotas to finish was the Ukyo Katayama/Toshio Suzuki/Keiichi Tsuchiya car, down in ninth overall, after Martin Brundle crashed the other entry during a morning rain shower.

For 1999, Toyota se-

cured the driving services of its nemesis from the previous year, McNish. After being beaten by Mercedes in qualifying in 1998, fortunes were reversed this time around as Brundle went nearly six seconds faster than the previous year's pole time and Boutsen secured a front-row lockout for TTE. Mercedes, meanwhile, had to contend with two massive airborne accidents for Mark Web-



ber's CLR. Once a third airborne moment, this time for Peter Dumbreck, forced the German team to withdraw from the race, it came down to a Toyota versus BMW battle for the win. As in 1998, the speed was there, but the previous year's gearbox problems were also present. They would not be the cause of defeat this time around, though - both Brundle's and Boutsen's races came to an end

with massive night-time accidents, and in Boutsen's case the resulting back injury ended his career. Once again it was left to the Japanese trio of Katayama, Suzuki and Tsuchiya to uphold their employer's honour. Katayama's late-race charge, including a new race lap record of 3m35.032s, was sadly cut short by a puncture.

Once again, Toyota had fallen just short of the goal, and with

The TS010 also took a Le Mans podium but, despite victories away from La Sarthe, wasn't able to climb the top step

Photo: Toyota

the company's Formula 1 programme gathering pace, that would be all she wrote for the GT-One, save one final outing at the Fuji 1000km at the end of the year. Both Toyota's Le Mans programmes to date have thus culminated in a close second-place finish - it seems unlikely that will suffice on the third attempt. With TTE at the helm and the might of the Japanese behind them...

# GOOL BOUY



Photo: Bundaberg Racing / © inetpics.com



# DENNIS

A host of international sports and GT racing stars trekked out to Surfer's Paradise to taste some winter sun at the V8 Supercar Gold Coast 600. *Jake Yorath* takes a look at how they got on down under.



**W**henever V8 Supercars are mentioned, excitement often flows through the ensuing discourse.

People automatically put on slightly rubbish over animated Australian accents and excitedly talk about 'The Mountain' and the differences between Holden and Ford, the Commodore and its deepest rival, the Falcon. The fierce rivalry between the brands is legendary, ingrained into families (and often, in the form of gaudy tattoos, skin) from birth. The drivers are household names, famed for their ability

to manhandle the cars (bereft of the excessive technology that characterises Europe's closest equivalent, DTM) in similar style to Roman charioteers.

It seems an odd move, then, to invite members of the international racing community to come and share this most specialist of worlds. But that is the entire premise of the Armor All Gold Coast 600, a two race, 600km showdown on the narrow, bumpy and scary Surfer's Paradise street circuit. The names on the bill read oddly like a round of the ILMC; Simon Pagenaud, Sebastien Bourdais, Joerg Bergmeister, Pat



Left: Darren Turner stepped in and did a 'cracking job' as replacement for Dan Wheldon according to team mate James Courtney.

Photo: Toll Holden Racing Team

Long and Andy Priaulx to name a few. They would be competing for the inaugural Dan Wheldon Trophy, a poignant award dedicated to the Briton killed just days before the event. He would have been on the grid but for his tragic accident, but fellow Brit Darren Turner bravely stepped in to race in his place.

The cars are not quite as sophisticated as the European racers might have expected. Live axles, (ostensibly) production bodysells and zero traction control are matched to 600bhp from 5.0 litres of V8 power. To avoid runaway designs, the cars are tightly controlled and there is an element of performance balancing too. It adds up to stunning racing of the kind that those non regulars stepping up from a GT racing background may well be used to.

But Patrick Long, who shared his Shannons Mars Racing Holden Commodore with V8 Supercar regular Fabian Coulthard, reckons it's not all about rustic technology. "Technically, within the rules that are allowed you can have some quite complex designs. It's at the same level as some GT cars, and some of the tech would rival a current spec LMP1 car." And he reckons the driving experience to be quite something, too. "The rear end, with the lack of a

differential, combined with 3000lbs of weight, and the power, makes it a very unique car to drive. It's like nothing else out there. Some drivers got to grips with it quite quickly, but

“As you all know, it was a pretty heavy hearted weekend for all of us, the Indycar drivers. I think it's been a great showing for Dan. I'm sure he would have loved it and I'm so sad

## It's like nothing else out there. Some drivers got to grips with it quite quickly, but others never even got close

others never even got close.”

One man who got to grips with the car was Sebastien Bourdais, the Frenchman earning the Dan Wheldon trophy as best non native. On collecting the trophy, his feelings were very clear. Addressing the assembled crowd, he spoke from his heart.

he couldn't have been a part of it this weekend.” Close to breaking down, the Frenchman finished, “This means a whole lot. Thank you.”

Another man doing a good job was Darren Turner, and he reckoned it was a challenge as well. “I love V8 Supercars,” he beamed after the first race. “There

was a lot going on at the start but I managed to find my way through and settled into the race. The main thing for me was to hand the car back to James [Courtney, reigning champion and team mate] in one piece. I loved every minute of it.”

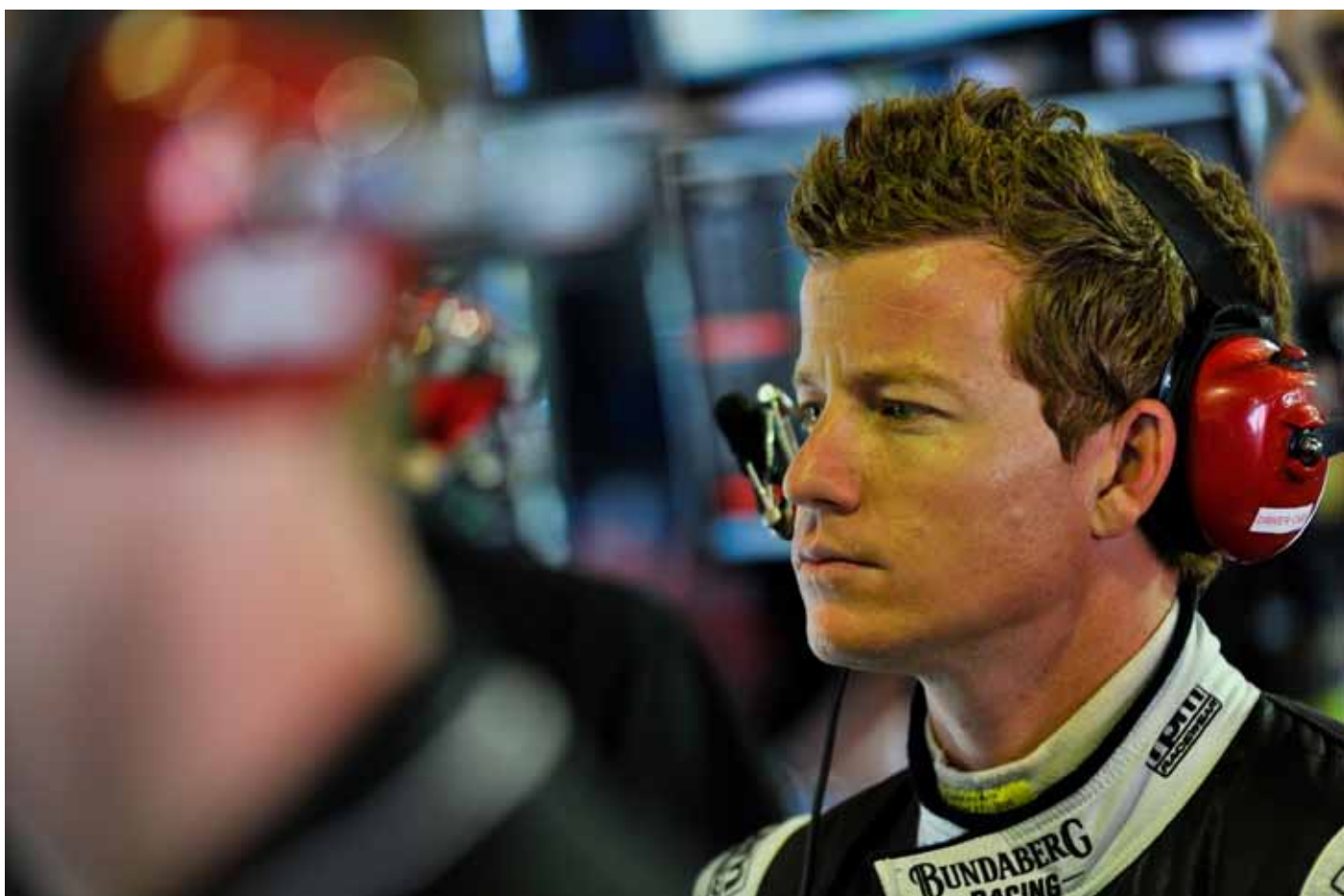
Though there was a sombre note to his words, too, “The team has really looked out for me this weekend under difficult circumstances,” he explained on Sunday evening. “I think all of us still have Dan very much in our thoughts. He should have been here this weekend and although it would have been nice to get him a really good result, I think with today's sixth we did the best job we could.”

Of those finding the

Patrick Long

Below: Patrick Long impressed alongside Fabian Coulthard.

Photo: Bundaberg Racing / © inetpics.com



Bourdais shone for Team Vodafone alongside Jamie Whincup, winning one race and taking home the Dan Wheldon Trophy.

Photo: EDGE photographic/ V8 Supercar



driving more difficult, Gianni Morbidelli struck many as a man all at sea. The Italian, more used to Superstars in his native country, had one blinding moment of idiocy and ended up driving the wrong way into oncoming traffic. The incident has become a YouTube sensation and the unfortunate driver will be left red faced for a while.

Fellow Italian Vitantonio Liuzzi, on a break from driving at the back of the Formula One field for HRT, raced at the back of this field too, in his Wilson Security Racing Ford. "I really enjoyed driving the V8 Supercar. It's a great world, great atmosphere, great Grand Prix and was cool," said the Italian, who was the first current F1 driver to sign up for the event. "I really want to come back next year, for sure. I wanted to try this and it's a new world and I really wanted to discover it. I hope I will get another opportunity in the future: I think now I understand better the car. I learned a lot about it and during the race we had a really good race pace, so I'm really looking forward, in case it happens again

in the future."

Bringing the internationals over does have one major benefit for the series, in that they go out and spread the word about the series: it is not 'backward' at all.

"I think backward would be an ignorant comment; [the detractors] just haven't got down there to see how professionally it is run in Australia," muses Long, dispelling the myth that V8 Supercars is anything other than a top drawer series. "It's one of the last Mohicans of a totally sponsor funded race series where teams are paid to do their thing. It really is in the same league as Nascar is in America, or Formula One in Europe. [When I first came over] I was pleasantly surprised by how professionally the teams operated."

It certainly is a huge deal. In 2007, 2.157 million people tuned in to watch the Bathurst 1000: that's nearly 1 in 10 Australians. And though that figure is falling (down to 1.643 million in 2010), it is still one the key parts of Australian sporting society, second only to Aussie rules in terms of viewers.

**I really enjoyed driving the V8 Supercar. It's a great world, great atmosphere, great grand prix**

Vitantonio Liuzzi

"From the moment I got on the plane, it's a different world," explains Long. "The centre spread of the paper was on Bathurst, and the on demand TV on Virgin Australia was every round of V8 Supercars from the 2011 season."

Following the American (but increasingly global) trend, the events are almost all sponsored. This was the Armor All Gold Coast 600, and just like any American series, the drivers are quick to thank their sponsors in interviews and telecasts. Each car has a full set of sponsor decals and every team is named after their principal backer, and for good reason. Cars cost somewhere in the region of A\$600,000 (roughly £400,000), and teams are reputed to spend in excess of A\$ 10,000,000 (£6,600,000) a year running a two car team. Big business.

With 2012 bringing a Nascar style 'Car of Tomorrow' in an attempt to curb costs, improve safety and generally keep the series on top of its game, the future is rosy for the V8 Supercars. And if the Australian audience keeps falling, there's a fair bet the series would be pretty popular in Europe...

This issue is for Dan and Marco

Two champions gone too soon