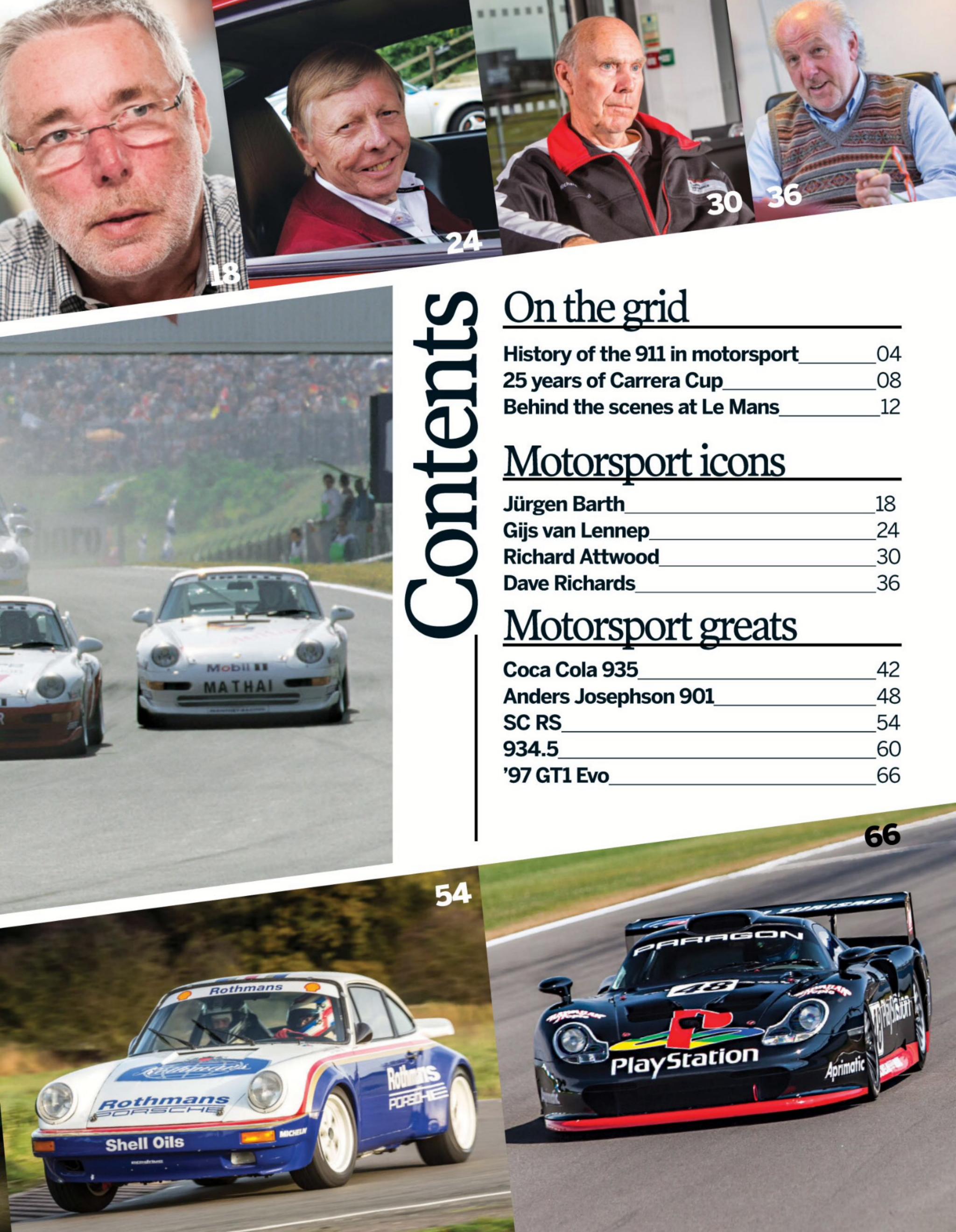
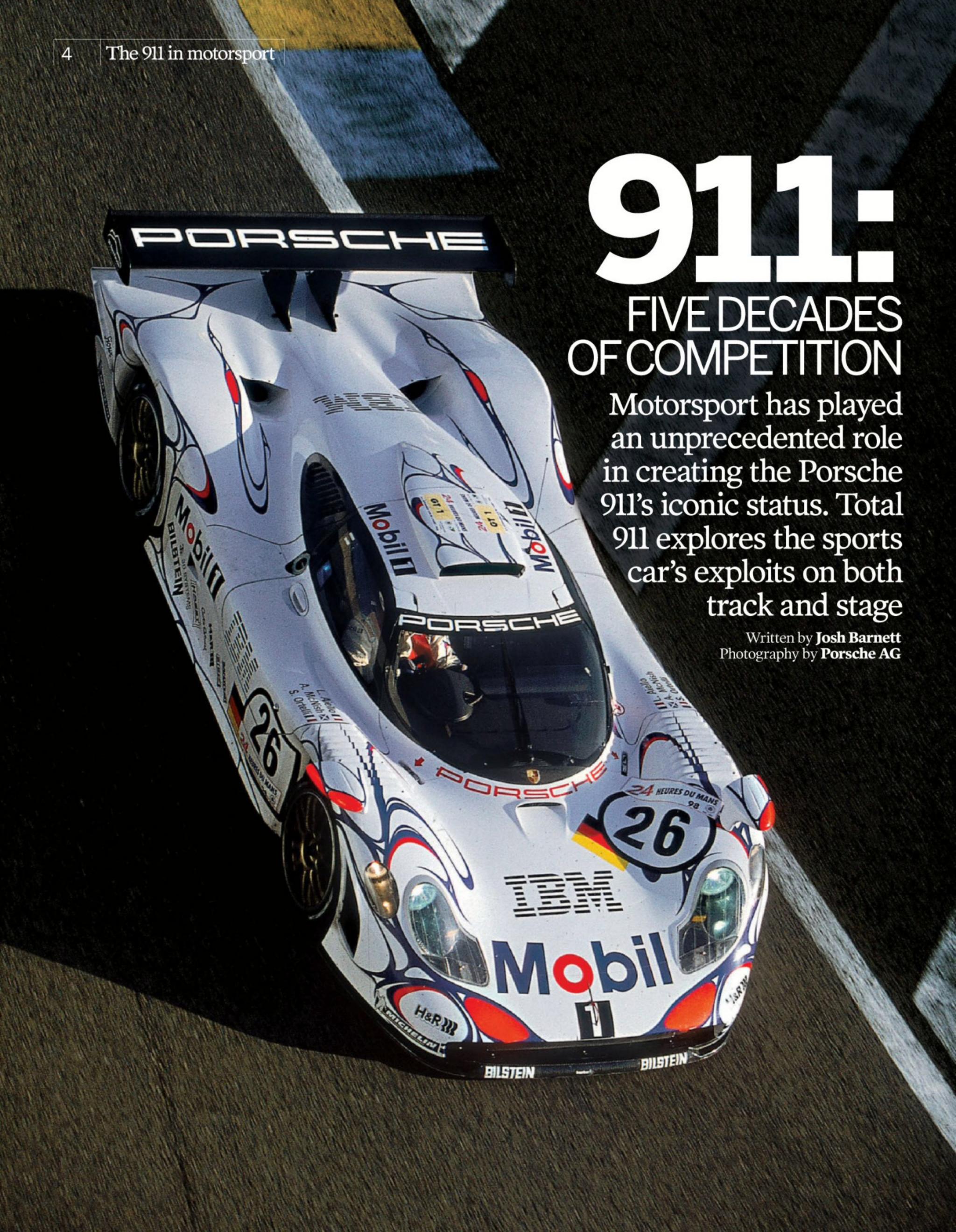
PCHSCHE MOTORSPORT













s competition debuts go, fifth place may not sound like the start of an illustrious career in motorsport. However, come the end of the 1965 Monte Carlo Rally, this was the finishing position of the Porsche 911 piloted by Peter Falk and co-driven by Herbert Linge.

The event's classic format required competitors to travel from their starting positions around the globe and, combined with atrocious weather, over 200 of the cars competing in the 1965 edition of the event failed to make the finish. As one of the 35 cars present and correct at the finish line in Monaco, the red 911 had proved its speed and reliability – two key factors in what has been a successful racing career.

For a car that was never designed with mud, gravel and snow in mind, the Porsche 911 proved itself on the international rally stages throughout the remainder of the Sixties, too.

After Vic Elford took a showroom 911 to victory in the first rallycross race at Lydden Hill, the British all-rounder convinced Porsche's head of racing and PR, Huschke von Hanstein, to provide cars with which they could go rallying around the globe.

1967 then saw Elford take the European Rally title in a 911S. The following year, Elford won the Monte Carlo Rally in a 911T, starting a run of three successive victories for Porsche in the event. When Elford was provided with the car for 1968 however, he noticed that it was without a spares package. Upon questioning this, Elford was met with a stark reply from von Hanstein, who famously declared "Porsches never break." Luckily, his bravado proved to be true, the car going on to take victory.

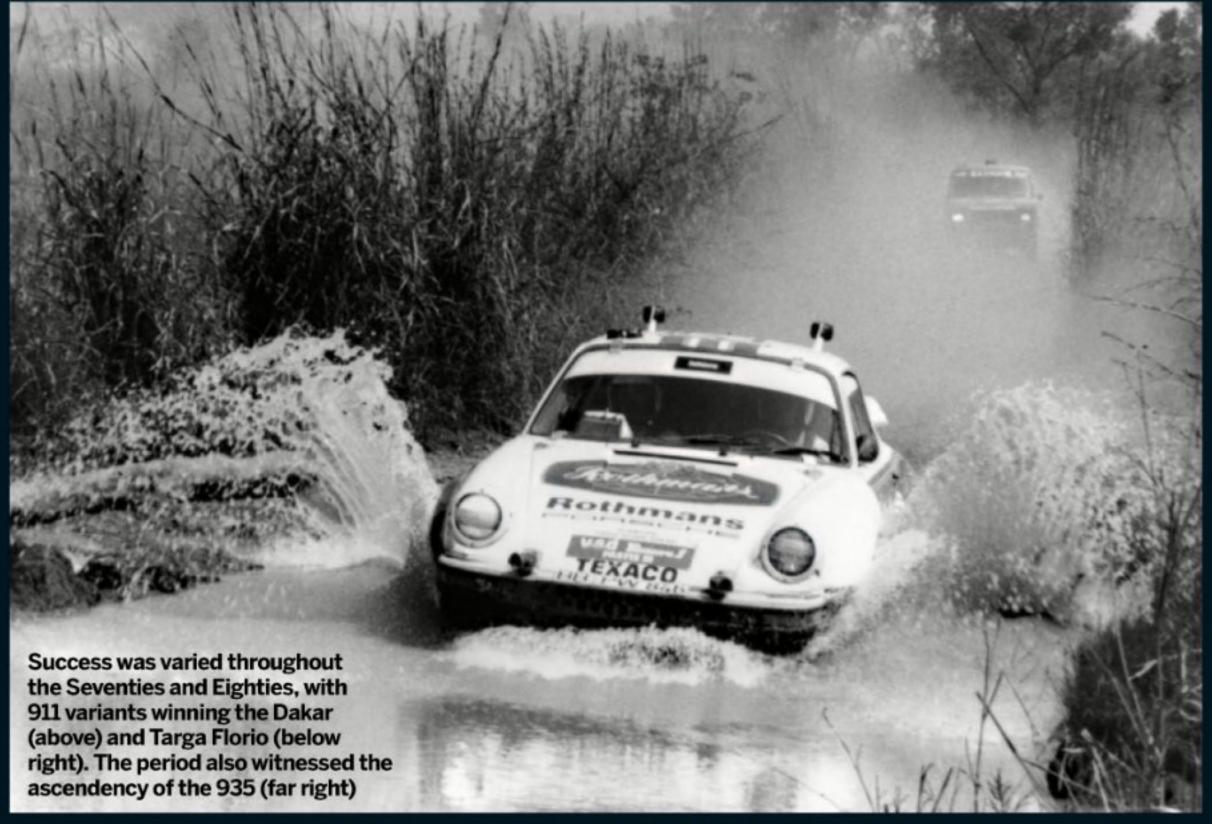
By the turn of the decade, with Ferdinand Piëch at the helm of the racing department, Porsche had refocused the majority of its competition efforts to the track. 1973 saw a turning point in the 911's fortunes with the introduction of the Martini-liveried 911 3.0-litre RSRs. At the 24 Hours of Le Mans, the lead entry, driven by Gijs van Lennep and Herbert Müller, finished fourth overall as the first car home behind the Matra and Ferrari prototypes. A pair of 2.8 RSRs also finished inside the top ten.

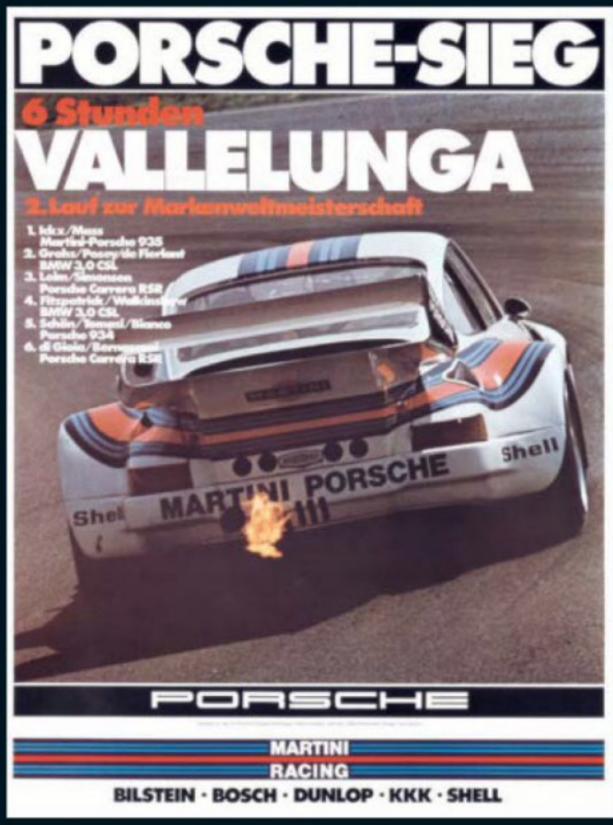
Earlier in the year, van Lennep and Müller had triumphed in the final Targa Florio aboard a 911 3.0-litre RSR again. Across the Atlantic, 911 RSRs had won at both Sebring and Daytona, therefore providing Porsche with victory in all of 1973's major endurance motor races.

After the release of the 930 road car in 1974, Weissach's approach moved down the turbocharged route with the release of the 934 and 935 models. Built to FIA Group 4 and 5 regulations, it was initially the more production-based 934 that saw success with greater regularity, as Toine Hezemans took the European GT championship.

After finding a loophole in the Group 5 rules, the 935, which started out with the traditional 911 front wings, was given a mid-year makeover for Le Mans: with the more aerodynamic slantnose, the revised car couldn't stop the prototype 936 machine winning at Le Sarthe. However, fourth place matched the 3.0 RSR's best finish.

Through 1977 and 1978, various specifications of factory Porsche 935s won around the globe in six-hour endurance races. In the latter season, the famous 'Moby Dick' longtail variation was revealed. The enlarged 3.2-litre powerplant saw a move from air to water-cooling and, on the long Mulsanne straight at Le Mans, the car was good for 235mph.











"Between 1978 and 1984, 935s took 12 wins from 14 races at the 24 Hours of Daytona and Sebring 12 Hours"

However, despite its radical aerodynamics and improved motor knocking 15 seconds off lap times at La Sarthe compared to 1977, an engine change before the 24-hour race precluded the car from challenging the winning Renault-Alpines.

While the Moby Dick proved uncompetitive, the Porsche 911 was finding a second wind on the rally scene. First, Jean-Pierre Nicolas won the Monte Carlo Rally in an electric blue Carrera 3.0-litre carrying sponsorship from French cigarette maker Gitanes. In another timeless livery, the works Martini 911 SCs of Vic Preston and Björn Waldegård finished second and fourth in the toughest rally on the World Championship calendar: the Safari.

Back on track, with the factory starting to prepare for the arrival of Group C in 1982, the fate of the 935 was left in the hands of numerous customer teams. After three years without a victory at Le Mans, Kremer took their 935 K3 (featured in Issue 105 of **Total 911**) to victory, with Klaus Ludwig doing the lion's share of the driving after perpetual wet weather led to the Whittington brothers realising their own limitations at the wheel.

The 935 saw success across the Atlantic, too.
Between 1978 and 1984, 935s from teams like Dick
Barbour Racing, Brumos Porsche and JLP Racing
took 12 wins out of 14 races at the 24 Hours of
Daytona and Sebring 12 Hours. Of these cars, the
JLP-3 version, raced by John Lee Paul Snr and Jnr,
proved particularly formidable, winning six races in
1982 and securing that year's IMSA Camel GT title.

By the mid Eighties, Stuttgart was dominating Group C prototype racing with the 956 – and subsequently 962 – sports cars. With millions being poured into the top-class efforts, the middle of the decade was understandably quiet for the Porsche 911. However, this didn't stop the factory taking a debut win at the Paris-Dakar Rally in 1984.

Designated the 953 and driven by René Metge, the Porsche 911 Carrera 4 x 4 was Stuttgart's first four-wheel drive sports car. Racing through the dunes of Ivory Coast, Guinea, Sierra Leone and Mauritania, Jacky Ickx was hampered by a puncture on the opening competitive stage in Algeria.

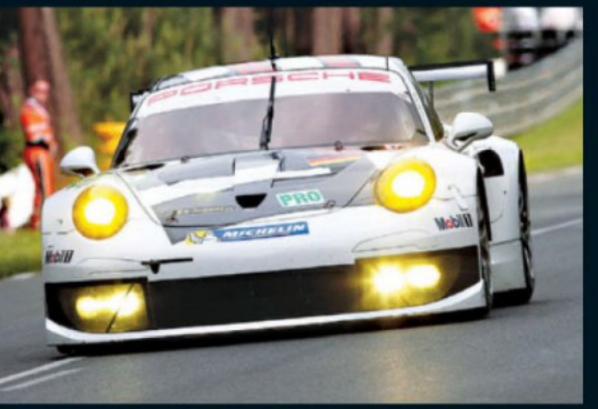
However, Metge (co-driven by Dominique Lemoyne) took a lead he would never lose on the fourth stage, crossing the finish line in Dakar (after 12,000 kilometres and 18 gruelling special stages) to take Porsche's first win in the pan-continental event. In an attempt to make up the ground, Ickx took nine stage wins, while Metge managed three and Roland Kussmaul triumphed in one.

In similar conditions, the newly created Prodrive team, backed by Rothmans, ran the new 911 SC RS Group B car in both the Middle East and European Rally championships. While only Henri Toivonen could make the car competitive in Europe, Saeed Al-Hajri took the Middle East Championship in both 1984 and 1985. This, however, would be the 911's last great success on the world's rally stages.

With the success of the 964, Porsche decided to highlight the prowess of its revised 911 with the now-famous one-make Carrera Cup series. After initially taking place in Germany, for the 1993 season the Supercup was born. Running the 964











Carrera 3.8 Cup car as the series supported many of the European Formula One Grand Prix.

Altfrid Heger took the inaugural crown, but then-McLaren test driver Mika Häkkinen put in some remarkable drives, leading to a seat alongside Ayrton Senna in the last three Grand Prix races of the season. As a guest, Häkkinen wasn't eligible for championship points. However, the 'Flying Finn' won in the showpiece event in Monaco, adding to his victory tally at the Hungaroring.

The Supercup is now in its 21st season and has seen five different generations of 911, with 13 different champions, among whom Duncan Huisman is the most successful, winning four titles and taking the chequered flag first 24 times between 1996 and 2007. Aptly, he has been nicknamed 'Mr Supercup'.

Meanwhile, after trying to make the 911 GT2 competitive in the race for overall honours at Le Mans, Porsche realised they needed to go back to the drawing board. Cleverly interpreting the rules, the 911 GT1 was created. In its debut season, the GT1 finished second at Le Mans and took three

wins in the BPR Global GT Championship (later the FIA GT series).

While the 1997 iteration, the GT1 Evo (as seen in **Total 911**'s last issue) did not perform to expectations, the all-new, carbon fibre monocoque 911 GT1-98 finally provided Porsche with its 16th overall victory in the twice-round-the-clock enduro.

After taking its record-setting La Sarthe victory, Porsche's works team once again disappeared from top-line motorsport. This did not mean that the 911 had exited the international racing scene, however. With the introduction of the 996 GT3 RS, a plethora of privateers were provided with a way to compete in GT championships around the world.

In 2003, one of them pulled off one of the 911's most remarkable victories: formed in 1992 by Kevin Buckler, the Racer's Group had been racing 911s in the US for a decade when, in 2002 and 2003, Porsche offered the team factory support – including drivers – for Daytona.

As a round of the Grand-Am series, the 2003 24 Hours of Daytona saw the introduction of new top class regulations: the Daytona Prototypes. However, in their debut season, the prototype machinery struggled to lap faster than the GT cars.

The number 66 TRG 911 GT3 RS only qualified in 16th. By the end of the first quarter, though, the Porsche's mixture of consistent pace and reliability placed it in the lead. After trading the lead with the Brumos Daytona prototype into the darkness, the Racer's Group would come out on top, taking the chequered flag nine laps ahead of the opposition. The win has proved to be the 911's last overall win in a major American endurance race to date.

Fast-forward a decade and 2013 has seen the return of Porsche AG-entered 911 RSRs to international GT racing. The new 991-type racer proved particularly effective at Le Mans, taking the 911's 99th class win at the Circuit de la Sarthe. Nine laps later, the IMSA Performance 997 GT3 RSR won the GTE-Am class to rack up class victory 100.

In the FIA World Endurance Championship,
Porsche are in contention for the title in all GTE
class crowns. Come 30 November, Porsche AG
Team Manthey may well create more 911 racing
records in the heat of the Bahrain desert.



25YEARS OF CARRERA CUP

One of the best known and most successful one-make race series celebrated its first quarter century in 2014. Total 911 looks back at the first 25 years of Porsche's stellar competition

Written by **Kieron Fennelly** Photography by **Porsche AG**

ne-make race series are not a new phenomenon. Formula Ford championships were often the highlight of club race meetings in the Seventies, and Ford was not the only manufacturer to exploit the publicity value of the track: Porsche too from its very beginnings used motorsport as its shop window and early Porsches were all built for competition use. For decades, the company competed at the highest level in sports car racing either through works or private teams. The idea of a one-make championship was attractive though, because it offered the chance to

promote production cars: win on Sunday, sell on Monday.

In the mid Eighties, Porsche had three distinct model ranges: the 911, the 928 and the 944. With its predilection for turbocharging, Weissach developed a boosted version of the 944 which was launched in 1985. Despite very similar performance to the 3.2 Carrera, it lacked the image of its older sibling, and so the motorsport department devised a championship race series, the Turbo Cup. Porsche built a largely standard 944T with a sealed engine and fitted with a racing seat and roll cage and adjustable suspension. The races were a success

featuring fields of 40 cars (which Porsche sold at DM 78,900 each, roughly £30,000). A French series was inaugurated in 1987, meanwhile the German series spawned rounds in Italy, Belgium, Austria and Spain. But the 944 was fast approaching the end of its career, the general slump in sales distracted the company, and in the confusion, there was uncertainty about how to follow up this popular series. The contemporary view was that there were no longer enough "car guys" at the head of Porsche, now led by its former accountant and which would shortly appoint a new CEO, Arno Bohm from Nixdorf Computers. However, one



new appointment at least was an acknowledged 'car guy': Ulrich Bez, formerly of R&D at Weissach and more recently at BMW, returned to Porsche as Technical Director. Bez's tenure in the senior engineering post is remembered for a series of controversial decisions: pursuing the ultimately futile four-door 989 project; abandoning Porsche's participation in the US CART series just as its efforts were showing fruit, and returning to F1 in an expensive but vain attempt to repeat the glory of the TAG McLaren era. But one decision has in retrospect been entirely vindicated. Bez saw - as had Peter Schutz - that the future of the company lay in the 911. He persuaded the board to let him revamp the racing series as the Porsche Carrera Cup so that it would feature the new 964.

Building on the foundations of the Turbo Cup, the new trophy would prove to be even more successful, one round even preceding the German Grand Prix. The presence of one-off celebrity drivers, who would include Mika Häkkinen, Walter Röhrl and motorcycle champion Kevin Schwantz, added piquancy to what was already very close racing. Olaf Manthey became the first German champion in the 1990 season.

A great deal of the success of the series lay in the cars: the Cup 9lls were strikingly reliable, a historic characteristic of racing Porsches. Almost 20 years earlier, Mark Donohue had recommended the 3.0-litre RSR to Roger Penske, then devising the IROC series in the US, with the words: "There's no question about it: the only way is to go is with factory-built Carreras. The car can't be broken as long as it isn't over revved and as long as it's shifted correctly."

Porsche was equally careful to make its new production racer affordable: priced at a reasonable DM 123,000 (£55,000) Weissach had no difficulty in amassing 150 orders for the first batch of 964 Cup Cars, a figure which it reduced to a more

manageable 40 by asking for a bond of DM 75,000, repayable only when the client had competed in six races. This condition also kept speculators away. Donohue had observed that no production race car was as identically equal as the 911 RSR, which put the onus entirely on driver skills. Porsche would make the 964 Cup car to the same exacting standard. Research Director Helmut Flegl, who





worked on that original RSR, planned the Cup car's specification, and test driver and engineer Roland Kussmaul supervised the build. Jürgen Barth, customer motorsport manager, was responsible for the commercial side, and veteran works racer Herbert Linge oversaw the running of the first season. With such experienced management, the series would get off to a flying start.

The build specification of the 964 Porsche Cup car has made Kussmaul something of a legendary figure in Porsche competition history. The deftly lightened and lowered 964, its cabin stripped for competition, has become a 911 icon, and Kussmaul would repeat his magic on the next three generations of the 911 Cup car. It was significant that for the 964, he could select engines from the production line simply on the basis of a dynamometer reading. It meant buyers of the stock 964 could rightly identify closely with the racer, quite the antithesis of 'silhouette' racing cars, and although the series was limited (until 2001) to Germany and France in terms of exposure, it

quickly had the desired impact, and the Carrera Cup acquired an almost unstoppable momentum.

Introduced for the 1995 season, the 993 Cup car weighed 1,100 kilograms and cost DM 173,000, a significant increase over the 964 price and indicative of Porsche's growing confidence in the event. Bernd Maylander was the first winner in a 993; for the following season the 993 Cup sprouted a larger fixed rear wing, and was fitted with a lower sixth gear. Veteran Harald Grohs won that year by the narrowest margin yet, and Christophe Bouchut took the French championship.

The marketing potential of this championship inspired Porsche Motorsport in 1993 to set up an umbrella event, an international series known as the Michelin Supercup until 2007 when the main sponsor became Mobil. In a deft move, Porsche secured this event as the main supporting race to Formula One, and with a direct influence it did not have in the national championships, it was able to use the Supercup as a way of nurturing talented young drivers. Creating and controlling

a flagship event, effectively an international shop window in the vital new Chinese, Far Eastern, Gulf and other markets was typical of the company's highly focused marketing as it sought to establish brand awareness. The Supercup also 'tidied up' the national championships by turning them into a logical 'second division' at the same time as providing a source of new drivers. On top of this, each year Porsche now select one Carrera Cup driver to receive a €200,000 bursary to race in the next Supercup season. Such competition helps to stop any one driver becoming dominant: since 1994 there have been 14 different Supercup winners, the most recent being Kiwi and Porsche scholarship driver Earl Bamber.

The national Carrera Cups, which in the UK in 2014 had 16 drivers representing six teams, uses the standard production GT3R which has become the most-produced factory racer ever; the real sea change was the arrival of the 996 GT3R in 1999. The water-cooled 911 was of course all-new, and Weissach's dedicated production line could



build four times more than previously. Greater production means more customers, and so the series proliferated steadily, championships starting in Australia and Japan and elsewhere in the Far East, with Italy and the UK joining in 2003.

In the realm of the Porsche Cup in the days of the 996 GT3R, Lukas Luhr won the first German championship in 1999, and Dominique Dupuy took the inaugural French Cup; Barry Horne was the first British GT3R Cup winner, followed a year later by Richard Westbrook. 1992 winner Uwe Alzen won again in Germany in 2007, and Jean-Pierre Beltoise's son Anthony has been a consistent winner of the French championship.

The 2007 997 GT3R brought the first capacity increase from the inaugural 3.6-litre of 1990 (then air-cooled) but the 997 GT3 went on to 3.8 then 4.0-litres, a remarkable engine which conservatively produced 500bhp. 2013 saw the replacement 991 GT3R which continued to use the 4.0 rather than the production 3.8-litre engine.

More than two decades on, the Carrera Cup

and Porsche Supercup show no sign of flagging. After Formula One, the latter is regularly the most televised form of motor racing, and as Porsche Motorsport put it in 2014: "The secret is in the mix: talented youngsters and ambitious teams use the Porsche Mobil 1 Supercup to draw attention to themselves. Many of them are now enjoying success, especially in endurance racing. Porsche Junior Klaus Bachler competes in the Porsche Mobil 1 Supercup in 2014, alongside Earl Bamber as winner of the International Cup Scholarship and funding candidate of Porsche AG. The championship title is regarded as a top recommendation for a career in touring car or GT racing."

If for tomorrow's potential champions the Porsche Carrera Cup and Supercup are viewed as the motor racing equivalent of Oxbridge or Harvard, for 911 enthusiasts these series also help to perpetuate the last significant rear engined car in history that also happens to be the greatest sports car ever made.

Porsche Supercup champions 1993-2014

1993 Altfrid Heger Porsche Zentrum Koblenz

1994 Uwe Alzen Porsche Zentrum Koblenz

1995 Jean-Pierre Malcher JMB Competition

1996 Emmanuel Collard
JMB Competition

1997 Patrick Huisman Olaf Manthey Racing

1998 Patrick Huisman Olaf Manthey Racing

1999 Patrick Huisman Olaf Manthey Racing

2000 Patrick Huisman Olaf Manthey Racing

2001 Jörg Bergmeister Farnbacher Racing

2002 Stéphane Ortelli Kadach Tuning

2003 Frank Stippler Farnbacher Racing

2004 Wolf Henzler Farnbacher Racing

2005 Alessandro Zampedri Walter Lechner Racing

2006 Richard Westbrook Tolimit Motorsport

2007 Richard Westbrook HISAQ Competition

2008 Jeroen Bleekemolen Jetstream Motorsport

2009 Jeroen Bleekemolen Konrad Motorsport

2010 René Rast Al Faisal Lechner Racing

2011 René Rast Veltins Lechner Racing

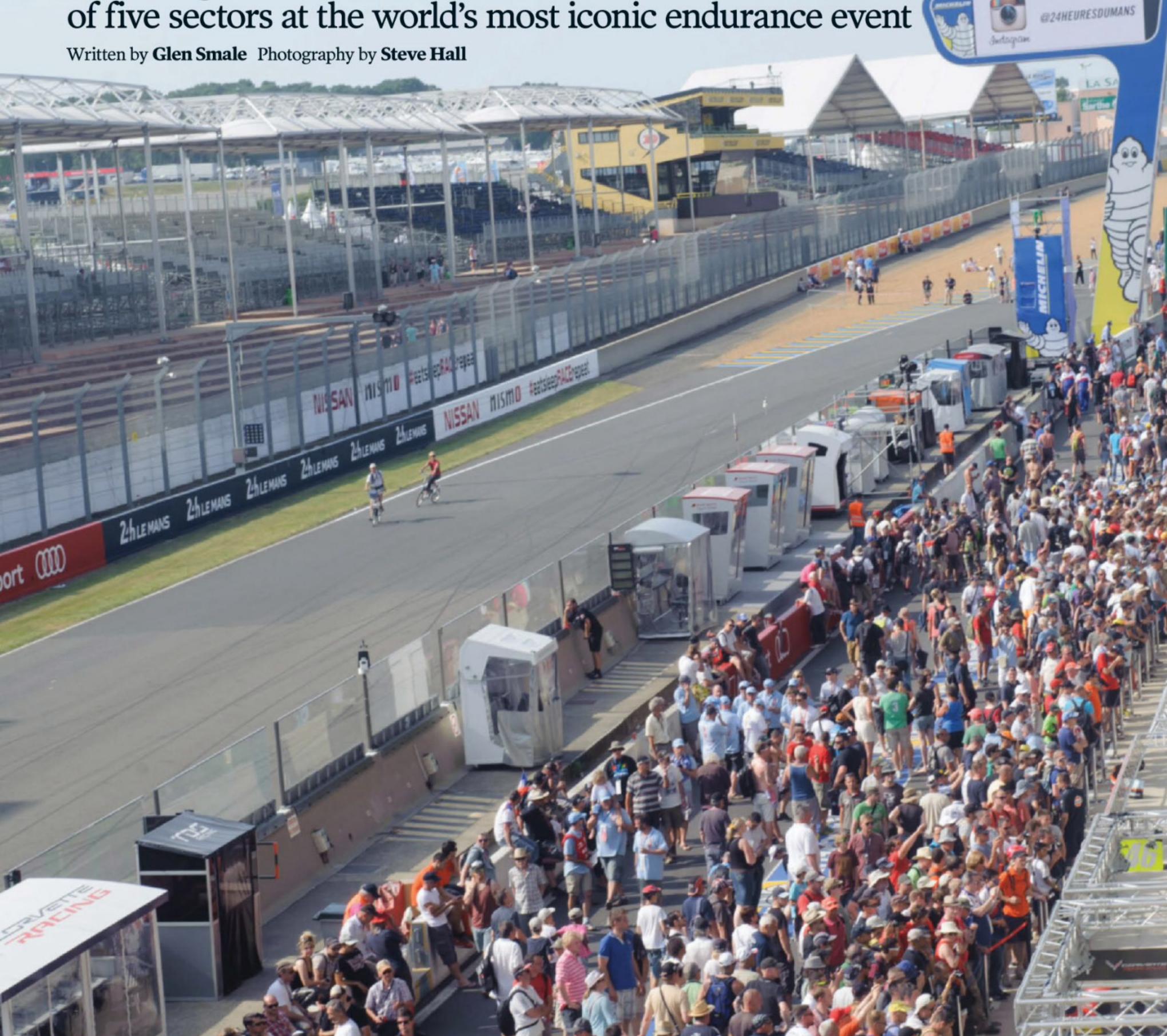
2012 René Rast Hermes Attempto Racing

2013 Nicki Thiim Attempto Racing

2014 Earl Bamber VERVA Lechner Racing Team

THE MAKING OF LEINANS

What do you really know about the 24 Hours of Le Mans? Total 911 goes behind the scenes to reveal the finer details of five sectors at the world's most iconic endurance event







Fuelling

Fuel companies take a similar stance to racing as tyre manufacturers. Richard Karlstetter, Shell's global technology manager for speciality fuels, explains, "We don't come to Le Mans to sell race fuel. It is about enabling the next generation of technology and finding the way forward for the larger automotive industry."

Shell, the ACO, the FIA and the car manufacturers have been working on the next generation of efficient fuels, because fuel is now a critical design element for new engines. Karlstetter confirms: "We have been working with the key LMP1 manufacturers like Audi, Toyota and Porsche for about a year to produce the right gasoline and diesel fuels for Le Mans. This includes road-relevant fuels with the perspective of providing the right fuel technology for the next generation of engines that the car manufacturers are working on. We use Le Mans to demonstrate the performance of these fuels and the new targets they're intended to set."

This approach is in line with the 2014 WEC regulations, the intention of which is to improve overall efficiency and cut energy consumption by 30 per cent (for LMP1 class). This improved efficiency will come through a combination of the fuel, new engine designs and the car's hybrid system.

Naturally, fuelling is a huge operation at Le Mans: for 2014, all 56 garages dedicated to each car required their respective fuel storage tank to be filled with 3,800 litres of racing fuel, be it diesel or gasoline, and this final refuelling is done on the Friday morning before the race (chosen as there's no racing on that day). The logistics of this task are impressive: three tankers enter the pit lane on Friday morning at 6am, and reverse down the pit lane to the first of the garages, where they begin to fill all the tanks. Shell is given a four-hour window in which to carry this out, as at 10am the pit lane is opened for the public.

For Shell, the challenge of motorsport has improved the product we put into our tanks, because endurance racing enables them to create the next generation of road technology. Karlstetter concludes, "This is where you can learn the most about road fuels. It's the fastest research you can have."

Team personnel

Each team has myriad car parts, computers, stands and pit lane paraphernalia to haul around the globe as part of each WEC event. Jens Luy, team manager of Porsche Team Manthey, outlines just what the operation entails: "Like any race series, we have to ship a lot of goods, equipment, spare parts and cars, as well as the team themselves, to the various races. This takes days to then set up on site."

Typically, the team will comprise around 50 people, including marketing and press personnel. The two car crews consist of three engineers per car, plus eight mechanics, while the logistics crew adds another ten personnel. Communication is key in motorsport, and so Porsche even has a dedicated radio technician in charge of around 50 handsets and headsets for the GTE crews alone.

Each car within the works team will in turn have its own data engineer who will oversee the driver's performance and the car's reliability. The engineer will check that the car systems and temperatures are operating within the correct parameters before looking at sector times and throttle application with the driver. The lead mechanic will oversee the preparation and maintenance of the car, including any set-up changes needed by the engineer/driver. The other mechanics will assist the lead mechanic on all aspects of the car's preparation. The logistics crew, who double as pit crew during the race, are responsible for loading the 35 tons of gear plus the two cars into four transporters, driving to the track, setting up the pit garages and tearing it all down again after the race.

Scrutineering at Le Mans commences on the weekend before the race, and so the teams must have the cars ready in time for inspection by the officials, as well as public viewing. Access to the paddock at Le Mans is all according to time slots allocated by the ACO. "We are given a window by the WEC officials as to when the trucks can enter the circuit to avoid queues," said Luy.

Porsche use a combination of fixed staff and freelancers for each race meeting, simply because of the nature of business in shipping freight to events all around the world. After Le Mans, the cars head straight to Austin, Texas, and they don't return to base until January. When the cars and equipment come back they all are refurbished and maintained, with new updates being implemented before winter testing starts again in February.









Le Mans in numbers

FUEL USED BY ALL CARS

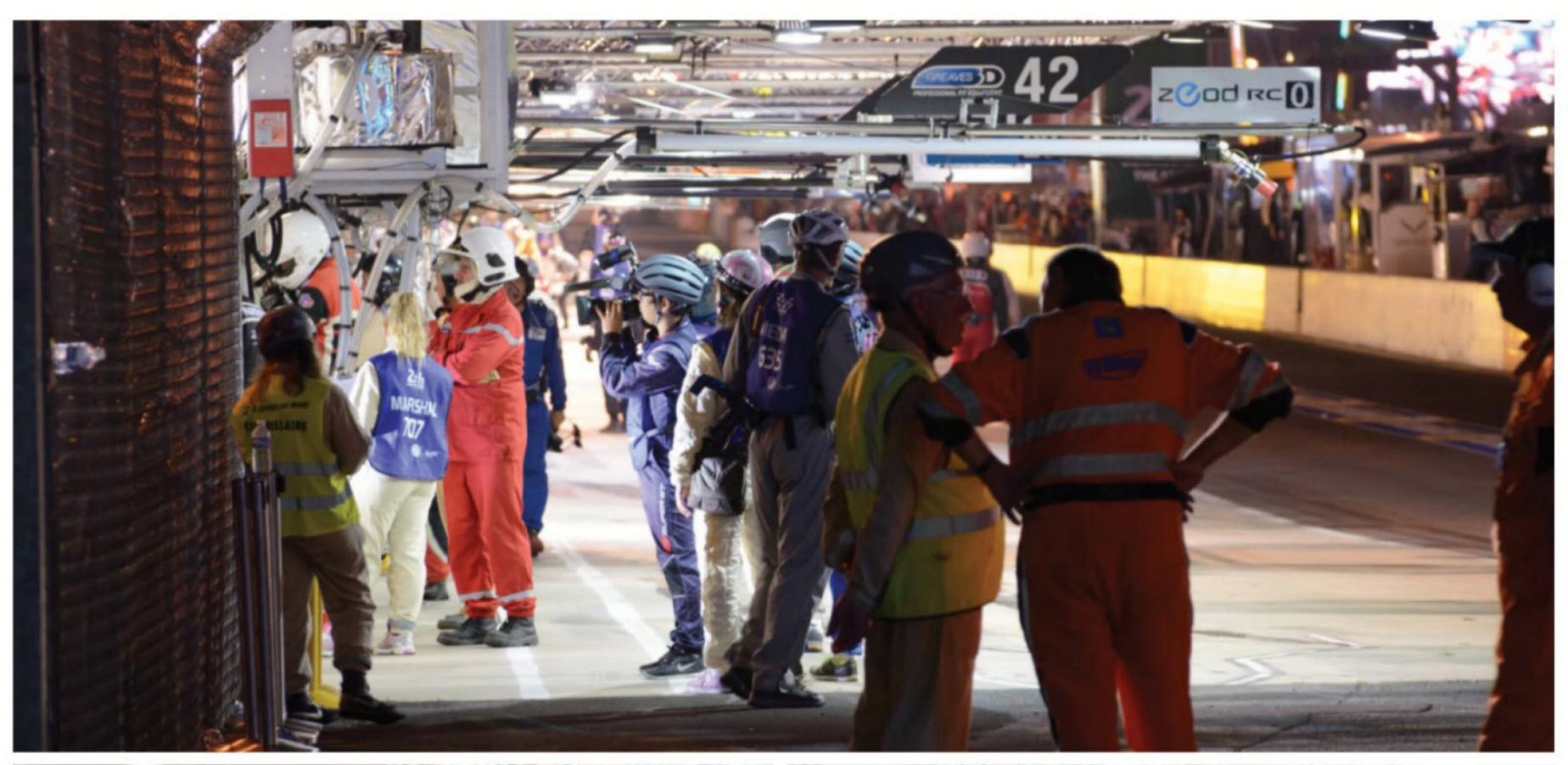
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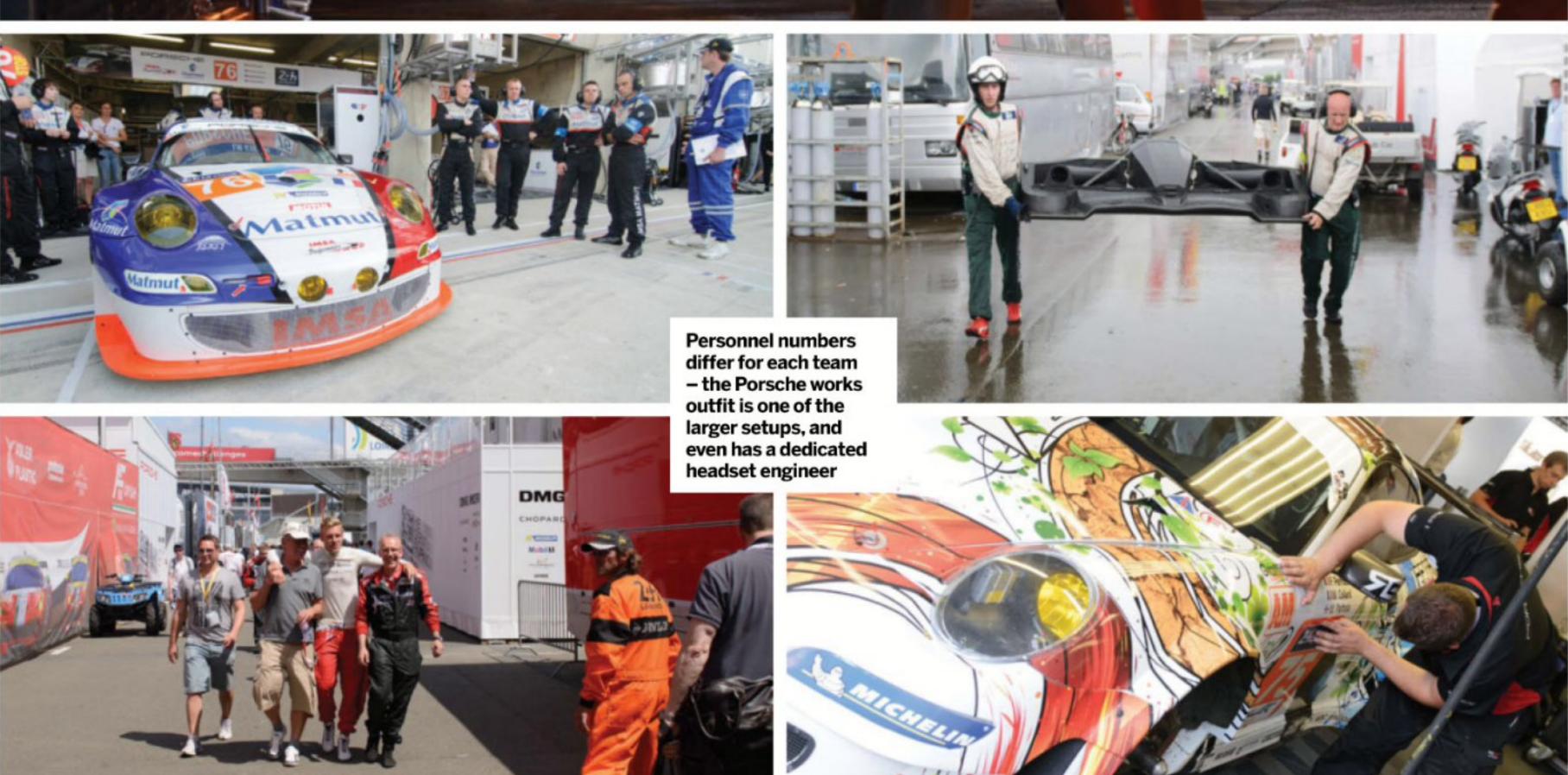
Litres

O HOURS OF DARKNESS

The Le Mans night is one of the shortest of the year, as the sun set on Saturday at 9:55pm and rose again on Sunday at 5:53am.

Litres 263,300 SPECTATORS OVER THE LE MANS WEEKEND, THE HIGHEST IN 20 YEARS





TYRES PROVIDED BY

The shopping list for food and refreshments for the Porsche team and the media hospitality area include: 50 boxes of salad, 50kg of strawberries, 300 melons, 1.2 metric tons of meat, 500kg of fish, 600kg of noodles and 2,000 eggs.

THE NUMBER OF FEMALE DRIVERS AT LE MANS IN 2014

Keiko Ihara, LMP2 #50 Larbre Competition Morgan Judd, who finished ninth in class.

MICHELIN OVER THE 2014 THE PORSCHE 919 HYBRID CAR NUMBERS 20 AND 14 LE MANS WEEK







Drivers

Preparation for such a prestigious event is key for drivers, who need to be in the best possible health and physical condition prior to a race. Joerg Bergmeister, Porsche works driver since 2002, says that the drivers travel to the event separately, and try to make the journey as relaxing an affair as possible ahead of a notoriously busy schedule.

"Le Mans is a pretty long week for us, so we arrive on Sunday morning for scrutineering. I first flew from Düsseldorf to Paris, and then I caught the train to Le Mans, because driving from Germany is 730 kilometres. I prefer it that way, because the journey is a lot more relaxed."

Monday and Tuesday are fairly relaxed for drivers, who usually take care of their media duties here, but thoughts turn to racing on Wednesday when free practice and qualifying starts. "Le Mans is different, because we have pretty late sessions, so you have to change your rhythm quite a bit," says Bergmeister. "I started staying up a little longer on Tuesday and sleeping longer to help adjust my body clock." The routine is upset once again on Saturday as the drivers transfer from their hotel to the circuit early for the morning warm-up at 9am, although the race proper only gets underway at 3pm.

Of course, sleeping is crucial to staying fresh during a 24-hour race. "Since 2013, we have been doing triple stints where you actually have a four to five-hour break, so it makes sense to rest in the sleeping quarters just behind the pits. After a stint behind the wheel, we get out of the car, do a quick debrief with the engineer, followed by a massage, then we eat," Bergmeister explains. Diets, he continues, are individually tailored for a driver: "Usually I eat a lot of pasta, and that works pretty well with something sweet in between for a bit more sugar, but in general each driver prefers something a little different."

On driver training, Porsche work together with the University of Potsdam, where they're fitness-checked twice a year with a fitness camp once a year. Much like diets, each works driver's fitness programme is individually tailored. "I personally don't do much strength training because I am already tall and fairly heavy, and I don't want to gain any more weight, so I prefer cycling," Bergmeister added.

On top of the physical conditioning, drivers must keep right up to date with the latest technology used in racing. Here, Bergmeister points out how the 911 has changed so much since the German first drove it in competition in 2002. "Back then we still had the H-pattern gearbox, but now we have a paddle shift. As well as the downforce level and technology in tyres, everything has just changed so much. We are involved in all the testing and obviously give feedback after test sessions and races, and this is used to develop the car." Drivers can also get used to the tracks - particularly useful for the 13.6-mile circuit at La Sarthe – through practicing for hours on their simulators from home.

"Drivers are fitness-checked twice a year, and have individual dietary plans"









The cars

Weissach introduced the 991 platform to the race track as the works standard 911 for the start of the 2013 season, culminating in a scintillating first and second finish in the GTE-pro class at last year's Le Mans event.

Under current regulations, the 2013 and 2014 cars are principally the same, but the manufacturers are given a window of opportunity within which to introduce upgrades to their GTE PRO class cars. Hartmut Kristen, head of Porsche Motorsport, sheds some light on the matter: "When you homologate a new GTE car today, the homologation is frozen for two years, but you are allowed to do an upgrade within the first 12 months. However, you must race with those changes within the first season, so that's why we raced the new specs at the last race of 2013 in Bahrain."

One area of concern for Porsche in 2013 was the width of the RSR's rear wheels. The rear engine location dictates that the 991 has a 40/60 front to rear weight distribution, and the aero balance has to follow the same split, with 40 per cent of the overall downforce over the front wheels and 60 per cent over the rear. If you have 60 per cent of the downforce on the front and only 40 per cent of the weight, the car would get nose-heavy at speed, with correspondingly less downforce in the rear, which is what happened last year. The engineers worked on shifting the aero balance to the rear by 'filling in' the cutouts below the front lights for 2014, reducing front-end downforce and shifting some aero to the rear.

Another area of development was the rear wing itself, as Kristen explains, "The regulations require the rear wing to

be as wide as the standard road car, but the 911 body width is the smallest in the class, so our rear wing was also the smallest. All the other race cars have either wider or deeper wing dimensions, so we were limited with rear downforce where we actually needed it most." A waiver granted to Porsche now permits the wing to be 40 mm wider this year, helping with rear downforce.

The reduction in front-end downforce and the wider rear wing, however, placed additional stress on those rear tyres, so Kristen (again) made a request to the FIA for wider rear wheels, which was granted in time for the final race of the 2013 season at Bahrain. While the mechanical side of the car remains unchanged, its better weight and aero distribution has helped the 2014 991 RSR compete successfully this year.



















One of the seminal figures of Porsche Motorsport, the 50th celebrations of the 911 mean Jürgen Barth is in demand this year. Total 911 caught up with him at the RS Club de France's gathering at Reims

Written by **Kieron Fennelly**Photography by **Laurens Parsons** and **Porsche Archive**



In a unique career spent entirely at Porsche, Jürgen Barth was apprenticed to the company in 1963 and did a variety of jobs before graduating to support mechanic on the Tour Auto, then becoming racing and test driver.

He made 13 Le Mans appearances in Porsches – a record in itself – including victory with Jacky Ickx and Hurley Haywood in 1977 and second the following year. Jürgen's father, Edgar Barth, was Porsche's most consistent works driver for almost ten years, but it was Edgar's untimely death from cancer in 1965 that really brought the younger Barth into the Porsche fold. After his racing career and extensive experience assisting competition clients, Jürgen built up the Motorsport Division and laid the basis for the operation, which for 25 years has run the Porsche Cup. As assistant to racing and PR manager Huschke von Hanstein, Jürgen was also responsible for starting what became the Porsche Archive. Aptly, he went on in later years to produce *Das Porsche Buch*, a

ESSENTIAL FACTS

- · Porsche works & test driver like his father.
- Founded Porsche Motorsport division.
- Homologated the RS 2.7 and built 964 C4 lightweight.
- Made a record 13 Porsche appearances at Le Mans.
- Started Porsche photograph archive.
- Restarted GT racing in the Nineties with the BPR championship series.

series of volumes on not just production models, but all Porsche's vast range of racing and prototypes – a work regarded as the definitive technical and historical reference guide to the Porsche 911.

You and your family were smuggled out of East Germany by Huschke von Hanstein so that your father could drive for the works team. Would you say you were predestined to a career at Porsche? It's true: Porsche and racing were part of my life by the

time I was ten. Our home was near the Solitude circuit,

and after the Grand Prix the drivers used to come back to our house. My father had installed a bar in our cellar, and I knew all the Sixties stars. At weekends he used to take me to the Nürburgring if he was testing a car, but I preferred to go bowling in the Nürburg Hotel, then one day I had to do both timing and pit signals as nobody else was available. Suddenly, I got really interested in being involved and the sport began to mean something to me. Dad's racing became the high point of life, and I suppose it was inevitable that I would want to follow in his footsteps.

You owe a lot to von Hanstein...

Yes, he really took me under his wing when my father died. I was already a Porsche apprentice but he got me into the racing department such as it was, organising his photographs and preparing paperwork for rally cars. He took me along on the 1968 Monte (Vic Elford's works 911T would win), and I really got a taste for rallying. Porsche training was very varied: as well as office jobs, I did a lot of machine shop work, dismantling and rebuilding the Fuhrmann









twin cam and sectioning a flat six and gearbox, which is still on show in the museum today!

When was your first competition?

In the evenings I helped out at a local garage. The proprietor asked me to be his navigator in his 356 SC on the Stuttgart-Lyon rally, but because reading in the car upset my stomach I did most of the driving and in a field of 911s we finished fourth. I was also preparing a 911T for an American serviceman as well as driving in rallies for him, but the first tarmac outing in my car was at the Schauinsland hillclimb. The organisers invited me and Hans-Joachim Stuck, both of us being sons of famous hillclimbers. I managed to scrape together enough money to buy an ex-rally 911T with a broken engine, which I rebuilt – it just needed cams and valves, and I came sixth in the GT class.

When did Porsche first send you abroad?

In 1969 I drove in the service VW Beetle supporting Zasada's semi-works 911T in the Safari rally, and later went to Le Mans, officially as an observer. It was quite a moment to step onto the track where my dad had competed. One of the 910s came in with the

exhaust hanging off, so I welded it back together. It was the start of customer service! This developed into a commercial operation, selling parts to racing customers – the beginning of the Motorsport division.

When did you first race at Le Mans?

I shared a 911S with René Mazzia in 1971. We finished eighth, and the next year with Louis Meznarie's 911 2.5 ST we came 13th and won our class. I did Le Mans every year until 1982, and went in a 964 RSR in 1993.

What was special about Le Mans?

I like long-distance events, and it was there that I learned how to conserve the car. Sports racers were more fragile in the Seventies than they are today. I got a reputation as a driver who could hold them together.

You never lost your taste for rallying?

No. I especially liked events that ran over several days. I did the 1978 Monte in a Toyota, though that was to support Jean-Pierre Nicolas in the Alméras 911, which won. It gave me the idea that the 911 could still be competitive. Alméras entered a 280bhp SC for me and Roland Kussmaul for the 1982 Monte, and we





"Seventies sport racers were more fragile than they are today: my strength was getting them to the finish line"

finished ninth and second in Group B. Porsche was working on the 959 for Group B, but it wasn't ready, so [development director] Helmuth Bott allowed Kussmaul and me to devise a Group B 911. Because the 3.2 had already been launched, we got the SC RS. It was outclassed by the 600bhp Turbos, but Prodrive SC RSs won three Middle East Rally championships and numerous European rallies. I even finished sixth at Monaco ahead of a flotilla of Turbos!



What was your involvement with the RS 2.7?

I was responsible for homologation, and we fooled the FIA into homologating it at 975kg when they should have taken the weight of the Touring, which was over 1,000kg. We also got away with describing the 3.0 RS as an 'evolution', so only had to build 100 rather than 500 for a new model – which, of course, the 3.0 was!

As Motorsport manager, you were behind the 964 C4 lightweight. How did that come about?

We had gear left over from the 953. After the 964 RS was launched, I built a 4x4 version. which was 100kg lighter than the RS. There were 21 sets of transmissions, so that's how many cars we built.

They cost more than twice the 964 Cup car. How did you justify that?

[Smiles] These were hand-built, and we sold them all!

But you didn't always get your own way.

I wanted Porsche to develop a Rennversion of the Carrera GT. It needed a race series to promote it, like we did with the RSR/GT2 in the early Nineties. There was interest, but the company wouldn't do it.

You left Porsche in 2007. What have you been doing since then?

I'm involved with homologation of historic race cars, and I've set up an all-comers Porsche Sports Cup,

"Porsche should have had a series to promote the Carrera GT. There was interest, but they wouldn't do it" which is in its third season with five rounds in France, one at Zeltweg and one at Spa.

You said you were leaving for China next week. What are you up to there?

There's no tradition of motor racing in China, and the Chinese Motoring Federation has asked me to help create awareness of the sport. One of the things we have done is set up a driving slalom in a shopping centre to get people interested in car control and competitive driving.

You've written a number of seminal works on Porsche in the past. What else do you have in the pipeline?

Besides updating Das Buch, I've been writing books on particular models – the next is on the 936. I'm also working on the 964 RSR to come out in 2014.

A serial of your early career in Porsche is currently in the media. Does this mean we can start looking forward to the autobiography?

Not for a very long time – I've got far too many other things to do first!









The Targa Florio and Le Mans-winning Porsche aficionado discusses Formula One, distance records and conquering the Mulsanne with Total 911

Written by **Johnny Tipler**Photography by **Johnny Tipler, Antony Fraser**and **Porsche Archive**



In a career spanning five decades, Gijs van Lennep has driven most Porsche racing cars. From the 904 Carrera GTS, 906 and 910, to the 911R and RSR, the Dutch aristo won at Le Mans in 1971 with Helmut Marko in a mighty Martini

917, setting a distance record of 5,335 kilometres, which remained unbroken until the 2010 Le Mans race. He also managed four years in Formula One and F5000 single-seaters, competing in eight Grand Prix races between 1971 and 1975 with under-financed Ensign, Williams (Iso-Marlboro) and Surtees teams. In 1972 he won the highly competitive British F5000 Championship in a Surtees TS11. Gijs (pronounced 'Ghys') won Le Mans again in 1976 with Jacky Ickx in a 936, yet, as he tell us, the victory he's most proud of is the 1973 Targa Florio in a 911: a 2.8 Carrera RSR.

Your first World Championship was with your brother in the 1966 Nürburgring 1,000km, when you drove for five out of six hours. That highlights your prowess as an endurance driver...

ESSENTIAL FACTS

- Gijs competed in various endurance races in 1966 with his brother, including the 1,000kms at the Nürburgring, Spa, and Monza.
- 1971 Le Mans Winner: while partnering Helmut Marko in a 917, Gijs set a distance record for the famous 24hour race that lasted almost 40 years.
- 1972 British F5000 champion: van Lennep was one of only two teams to race with the Surtees TS11 design.
- 1973 Targa Florio winner: piloting the famous Porsche 911 2.8 RSR, van Lennep conquered the notorious Sicilian race with co-pilot Herbert Müller.
- 1976 Le Mans winner: Gijs won Le Mans for a second time, this time with co-pilot Jacky lckx, before announcing his retirement from professional racing.
- van Lennep also competed in eight Formula One races over four years, for various teams.

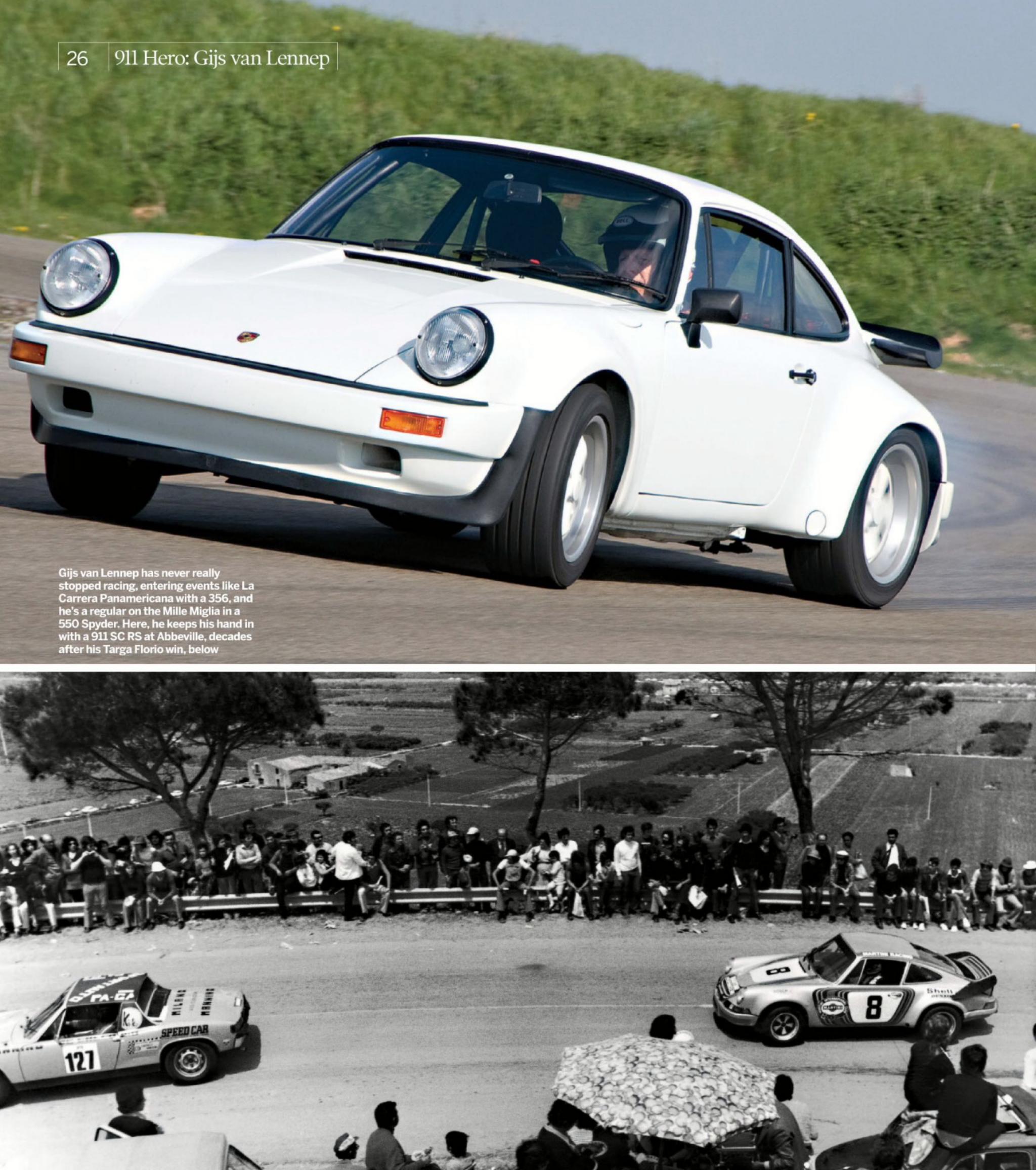
There were 13 Carrera 6s in that race, and I finished first in class and seventh overall. It started raining one lap before the end when I was third in class, and I used my experience from Rob Slotemaker's Zandvoort skid school to climb a couple of places higher. I'd been

racing karts since 1957, and then a Beetle with a 356 engine, but the skid school was valuable training.

In 1967 you mostly drove a 911R, but at Spa you had a bad crash in a Carrera 6.

It was just before safety belts became mandatory, and I pitted to have the roll bar adjusted. Then I went out again, but they hadn't fastened the rear-hinged engine cover properly, and one of the catches broke. I'd just changed to fifth gear and the engine lid came off – it was like an aircraft taking off. I spun, but there was no guardrail on the Spa circuit in those days – the track was about a metre higher than the surrounding land, and the car kept going for about 200 metres. I dropped out of it and fell into a ditch, and at first they couldn't find me. I only broke a finger – my boots and trousers were gone, but I was bloody lucky, as I should have been dead.

In 1971 you drove the Martini-liveried 4.9-litre 917 in the World Championship for Makes, partnered by Helmut Marko, in which you scored your first Le Mans victory.





Yes, that was the last year of the traditional Le Mans starts, and the speed record down the Mulsanne straight was 236mph. We led from the 13th hour all the way to the finish, won our class and the Index of Performance, and set a distance record that lasted almost 40 years! The 917 was beautiful to drive, though Porsche was clever with the aerodynamics. There were three short-tails – we had one of them – and three longtails. We were the lightest car, but the longtails did 230mph on the straight, and we did 217mph. They put new bulbs at every pit stop, and we won, although as a Martini car the JW Automotive squad didn't like that. That was my first great victory.

After the rule change that banned the 917 prototypes for 1972, Porsche concentrated on turning the 911 into a giant-killing machine. Could you describe the transition from the 2.8-litre RSR that you won in Sicily with in 1973, and the turbocharged 2.1-litre RSR that you came second in Le Mans with the following year?

Porsche always wanted to be in the prototype class with the normal Carrera, so they took the 911 out of the GT category, bored out the engine to 3.0 litres, fitted lightweight body panels, 11-inch and 14-inch wheels from the 917 and a huge rear wing. We drove the '73 24 Hours of Le Mans with the car as a prototype, finishing fourth. Porsche wanted to not only say it was a prototype, but also a sort of road car,

not like a Matra or Ferrari 312 with the flat-12 engines, because they could do very well sometimes, and it made them look like they could beat the prototypes with a road car, like we did in the Targa Florio, winning with the 2.8-litre Carrera RSR when there were two Alfa T33s and three Ferrari 312 prototypes, which all went out. [Clay] Regazzoni crashed one Ferrari in practice, [Arturo] Merzario had engine failure in another and [Jacky] lckx hit a wall, so suddenly after three or four laps we were in the lead and drove home unopposed. It was nice to win, because only five people have won Le Mans and the Targa Florio.

So Porsche 911s could win in the prototype class against these real prototypes.

Yes, but it wasn't so straightforward. At Le Mans, Dr [Ernst] Fuhrmann, who was the company boss, said to me and Herbert Müller, "You have to drive as fast as you can, all 24 hours long, flat-out all the way!" In the early days people thought Le Mans was for old men, while nowadays it is a sprint race, but in '73 it was the same sprint race! We would really be going flat out.

That meant there was no time to relax.

I was so tired at night, but the engines are cooler, and we were always faster than in the daytime because of the oxygen in the air, so the engine was better and the brakes cooler, but this time I had to go faster, and we finished fourth overall between the real prototypes.

That sums up Porsche; no engine failures. All they said was: "You use 8,200 revs and that's it – for the rest do what you like. Be nice to the gearbox, because then the car is nice to you." So we had to drive as fast as we could, braking as late as we could, but let the tyres take the strain in the corners because you can always put new ones on. We had to refuel, of course, and that took about a minute, so we did the tyres at the same time.

So that's how you make up the time.

Yes, or they have a problem or they stop, But then the 3.0-litre RSR wasn't fast enough anymore, so for 1974 they built the new Porsche RSR Turbo. It's got a much bigger rear wing and is a fair bit wider, with even wider wheels and a 2.1-litre Turbo engine; it was a great car. We drove Le Mans again in '74 as a prototype, and in the morning when the leading Matra had a gearbox problem it looked like we could win. But then, about five and a half hours before the end, all our gears broke apart from fourth. We don't know what caused it – if one tooth breaks it ruins the whole box – but the fourth cog up in the corner stayed together. In fourth gear in a Turbo, going away from the pits and in the slow corners, it's difficult, but anyway we drove for five and a half hours in only fourth gear! On the straight we were allowed 8,000 revs, but in fourth gear 8,000 revs is only about one or two millimetres of throttle, so there's no pressure on the pistons or







bearings, so the engine was rattling because it was just short of idling, and I said, "This will never make it to the finish." Porsche had said I was a bit kinder to the car than Müller, so they let me drive for the last two hours. I was easy on the throttle, because otherwise it would bang about at low revs, though on the straight it would still be quite fast. But they put another gearbox in the Matra, and now Audi does it in seven minutes, but back then they took 45 minutes and still won. We were second, having run five and a half hours with only fourth gear, so that was something. If we'd had a good gearbox we could have won.

There were 13 Group 4 RSRs running at Le Mans in 1974, one of which was being driven by one of your biggest rivals, Clemens Schickentanz.

Yeah, there was a moment on the Mulsanne when we were neck-and-neck. He came out of my slipstream on the long straight and moved alongside me. I looked directly into his eyes at 160mph, and at that moment I heard a bang, and he suddenly seemed to go very quickly backwards. I saw a lot of smoke – he'd blown his engine at full throttle, so I waved bye-bye!

Your professional racing career ended on a high

I finished in '76. Porsche asked me to do Le Mans again because they knew I could drive well there. I was paired with Jacky Ickx, who had already won twice. I loved it, and we won again in the 936. It was the same 2.1-litre Turbo engine we'd used in '74 in the Carrera

RSR. I'd said beforehand that I would stop after Le Mans, and it is good to finish your career with a win.

Do you have any regrets about F1?

Formula One was not good enough for me. I did eight Grand Prix races, finishing sixth twice, but never got the real contracts, so I never got the right car, and in sports cars I more or less won everything that there was to win, and a lot of my contemporaries killed themselves along the way. 34 is quite a young age to stop, but there were other things I wanted to do.

Which of your Le Mans wins was most satisfying?

In 1986 I was world champion without Stucky [Hans Stuck] because of Porsche leaving me out of a couple of races, so I didn't get the points. I thought I'd lost the title to Jaguar and Derek Warwick, but in the last race at the Norisring somehow they didn't do as many laps as they had recorded. John Fitzpatrick lent me his old 962 because he spotted that Porsche were entering just one car, and said, "It is pretty obvious they want Stuck to be world champion on his own." It was the only round that had one driver, and he was doing it in a rocketship of a car. Stuck had problems and came 13th, and I was driving around slowly in 11th or 12th place, and beat him to the title by one position, which seemed like poetic justice.

Is there an event that stands out as the best?

The IMSA at the Miami Grand Prix, where I was in

the Lowenbrau 962. The organisers wanted the American muscle cars to win, and there was a full-course yellow flag. When I went to restart the car, it was firing on four cylinders instead of eight, and I got overtaken by the works cars and Budweiser cars – it took two whole laps for the engine to clear. When it finally did though, I went on to win.

I think the most memorable WSC race I didn't win was Le Mans in 1983 with Jacky. He got hit on the first lap, and there was big pressure on fuel economy, so we had to really economise, yet we managed to take a lap off the whole field to get back in the lead without more fuel. Then we had a fusebox problem, so I had to change the electronics at Mulsanne, and then we had to work our way back up through the field – we finished second by about 26 seconds.

What has been your favourite moment?

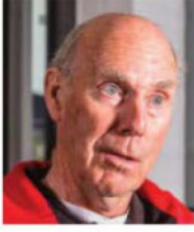
Le Mans '71 was actually my best win ever, but in my heart the '73 Targa Florio is actually the win I'm most proud of; that's my best moment in a 911!

Gijs grasps every opportunity to drive in historic events. He has raced a Porsche 356 in La Carrera Panamericana, and regularly runs a sponsored 550 Spyder in the Mille Miglia. He'll turn up at an Abbeville trackday, Classics at the Castle or the Naarden-Vesting model collectors' fair just for the craik, and if he gets to drive a Porsche, so much the better. Like he says, he's a 911 man through and through.



Never tasting the Grand Prix success his talent deserved, 'Dickie' Attwood was one of Porsche's British aces in the Sixties. Total 911 sits down with the modest yet charming racer to discuss Le Mans, the 911's legacy and Steve McQueen

> Written by Josh Barnett Photography by **Andrew Tipping**



The son of a Wolverhampton garage owner, Richard 'Dickie' Attwood rose to prominence during the late Sixties as one of Britain's top sports car hopefuls. However, his stock had been rising since the turn of the decade, when

a Formula Junior victory at the prestigious Monaco Grand Prix support event brought him to the attention of Britain's burgeoning Formula One industry.

At the end of 1963, his impressive performances in the Junior ranks landed him with the inaugural Grovewood Award, voted for by the Guild of Motoring Writers, as well as a contract with the BRM Formula One team, making him their third driver.

Opportunities with the Borne-based squad were few and far between though, and despite some standout performances in a three-year-old car, Attwood soon became disenchanted with his Grand Prix dream, switching full-time to sports cars in 1967. In the endurance-racing scene, 'Dickie' soon caught the eye of Weissach, securing a works drive with Porsche in 1969 and narrowly missing out on a 24 Hours of Le Mans victory.

The following year though, Attwood made amends, triumphing in the famous French classic and providing Weissach with their first overall victory at La Sarthe.

ESSENTIAL FACTS

- Attwood started his racing career in 1960 at the wheel of a Triumph TR3, quickly progressing into single-seaters in the Midlands Racing Partnership.
- After the debut season of Formula Junior, Attwood stepped up to international competition, winning the Monaco Grand Prix support race.
- He helped develop the dominant Ford GT40 sports car after joining the programme in 1964.
- Achieved a best Grand Prix result of second at the 1968 Monaco Grand Prix, driving a works BRM P126.
- A full-time move to sports cars yielded a contract with the Porsche factory in 1969.
- · Attwood took Porsche's first 24 Hours of Le Mans victory in 1970, partnering Hans Herrmann in a Porsche Salzburg-run 917K.

How did the 1970 24 Hours of Le Mans pan out for you?

We weren't meant to win it. We basically had a slow car: the 4.5-litre engine, not the 5.0-litre. The year before we retired with only three hours to go. We were six laps in the lead, we had a very dominant car, and it broke the gearbox. I wouldn't want to do that again.

So in February, I think it was Helmuth Bott rang me up and said, "What do you want for Le Mans?" and I said, "Well, a 917 would be handy!" which he didn't really find funny. So I said, "Right, I don't want a 5.0-litre," which was new at that time. By the time we got to June, it was a stonker [the 5.0-litre engine]!

Also, in 1969 we had a five-speed gearbox, yet whether it was the strength in it or not, in '70 it was four-speed, but we were not allowed to use first at Mulsanne or Arnage. We were losing through a lack of torque, three seconds per corner, so that's six seconds per lap. And then on the rest of the lap we were losing time as well, because we didn't have the same punch as the 5.0-litre car.

Having qualified, I realised we didn't have a chance. If everybody else had done the job that we did, we would never have won. But I remember watching the race for the first few laps, and it was like a Grand Prix. It was insane. I think everyone in a Ferrari 512 or a 917 realised they had a chance to win, and they did. It was just the most amazing race, because there were lots of driver errors.

The Jo Siffert/Brian Redman car was probably the favourite, and they were way out in the lead early on, but Jo wanted to get by a gaggle of slower cars quickly to keep the pace up, and in his haste he went from third to fourth, and missed it. I heard it, and knew it would destroy the engine. I thought, "That's another one out."

Those sort of things happened. There was one incident where three Ferrari 512s went out in the same accident. Three! Bang, bang, bang, All sorts











of things like that happened. After only ten hours, unbelievably we were in the lead!

What was it like to win at Le Mans?

From ten hours to 24, we had to keep the car running and not do anymore. We just pounded on to the end. People ask, 'What was it like to win?' but it was, for us, uneventful. If you have an uneventful race and you don't make unscheduled stops, you'll do well at the Le Mans.

Were you aware of the significance of your 1970 Le Mans victory at the time?

No. It was another race at the World Sportscar
Championship. Le Mans has become more
prominent and prestigious now; it's the greatest
sports car race in the world. Indy (the Indianapolis
500) claims that it's the most important race, but as a
European, I think it's probably Le Mans.

The year after, you came close to winning it again...

It would have been easy to win three in a row. I think, with a different attitude to '69, we would have not bothered to extend the lead, and if we'd paced ourselves we might have lasted those three hours.

In '70, when I thought we had no chance, we won. And in 1971 we had a gearbox problem in the night where a synchro hub came apart. It was a glued part. It could have been glued and pinned, but the factory didn't pin it. They didn't think it was necessary, and it came off and jammed the gearbox in a gear. I was driving at the time, and I came in.

You couldn't change a gearbox like you could in later days. You could change the insides, but not the whole gearbox. So they took it apart and had to wait for it to cool down. It took 45 minutes to rebuild, and off we went again. The winning car, the number 22 Martini car, had the same problem about two hours later. By then, they know exactly what the problem was, so they were able to fix it far more quickly. They repaired it in about 20-25 minutes. We lost the race by five. We should have won that one.

The 917 now has a legendary reputation, but by all accounts it was quite a difficult car.

Very.

What was it like to drive?

It was horrendous in '69. It was aerodynamically unstable, and I only learnt a few years ago why the factory didn't recognise that when we told them. The reason was aerodynamics, pure and simple. If you look at the silhouette of a 908 Coupe Longtail, it's exactly the same shape as a 917. They modelled it on that car. It was aimed at being slippery through the air without there being too much thought to keep it on the road.





The reason they never found out about that when they were out testing on an airfield was, on any airfield, which might be two miles long – maybe two-and-a-half miles long – eventually you've got to stop, turn around and go back. They weren't reaching the ultimate speed that we were down the Mulsanne straight. I guess they were getting it up to about 185mph. At that speed the car was manageable, though it was starting to get difficult.

How did the short-tail 917K come about?

John Wyer was going to take on the project as the factory running the Gulf cars. John Horsman was also there, and I think the first thing they did (you'd have to check with Brian Redman) was take the rear tail section off. But the car immediately felt better.

Then they furnished this upward tail, and the downforce cured the problem, thanks to Horsman really. He talks more about it in his book, *Racing In The Rain*.

What made you retire at the end of 1971?

Lots of reasons. It was a dangerous game. I said I wouldn't get married while I was racing. I did get married in '69, which was against my own orders. But then I said I wouldn't have children until I'd finished, and I didn't. I also promised my father, who had









sponsored me for the first four years of my life, that I would go back and help him with the family business, the garage business in Wolverhampton, which I did.

Did you really buy a Porsche 917 as a 'pension'?

Brian Redman bought it off a German garage. How he found it, I don't know. He bought it in '74 and as soon as I heard, I rang him and said, "Brian, if ever you sell that car, can I have first refusal?" Four years later, he rang me and said, "I want to sell the car." How I paid for it is another story; I won't go into that! I stretched myself to buy it.

Brian didn't know what the chassis number was or what its history was. Eventually, by deduction, bits on that car proved that it was Solo Productions' camera car, which I'd driven mostly during the film *Le Mans* in 1970. I spent a lot of time on the film, because I wasn't seeking a career improvement in '71.

What was it like working on the set of Le Mans?

Boring. Any film work is really boring, because you've got directors, the light man, the cameras and the sound. Something is always wrong. It's meant to be a sunny scene, but it's not; it's pissing with rain. So you waste an awful lot of time. There were many days where we didn't even turn a wheel, but I love France. I speak the language, and it was very pleasant with the French food. I quite enjoyed it.

I didn't mind not racing; it was safer, and the money was pretty good. If you worked a week there it was probably more than you'd get at a race weekend, so

I was quite happy to stay. And Steve McQueen was a great guy to work with. He was a great athlete, he rode bikes, and I always describe him as a 'man's man'. Obviously, he was a girl's man as well!

Is there a similar character between the modern 911 and the early cars?

Well, if you're talking about 911s, the first car I had was a '69 911 when I joined the factory as a driver. It was a car that you had to balance. It had characteristics of severe understeer, as well as oversteer. The tyre and wheel sizes at the front and back were the same; not like they are today. A lot needed sorting on the car, but that was its nature. And the engine at the back actually now proves that it probably was the right place to put it.

Journalists talk about the Cayman and the Boxster being mid-engined and far better handling cars, but the real driver can get more out of a 911 than they can a mid-engined car. It's the exit of corners that you get the performance through the corner, and it pays all the way out down the next straight. So technically the 911 is, I think, a good car.

What do you think has made the 911 so popular?

Evolution. We know that the silhouette of the 911 is still there, and you can see the Boxster going on for a similar length of time. The Boxster will still be here in 50 years.

The way Porsche have done that, I don't think any other manufacturer has done that, where they've

taken basically the same layout – mechanically, it's the same – but evolved it, and today it handles like a normal car. The electronics help the situation as well. Getting into trouble in a modern 911 is very difficult.

What's been your favourite Porsche to drive?

I've been asked that many times, and I say, "I don't have one." I don't. I've had loads of 911s in my life, a lot of them second-hand cars. My local dealer used to look after me very well. He'd supply me with a used car that everything had been done to. They did it almost like a sponsor deal, really. They knew me very well, and they liked me, I suppose, as a local boy, to be in one of their cars.

I've loved them all, but my favourite 911 was my first one, because you had to be a driver. It was a challenge to drive that quickly and safely; it had no ABS or anything like that, of course. You would probably describe it as a dangerous car now, but if you don't understand what a Sixties car is like to drive, you drive one because you cannot drive it like a modern car.

That car was a tricky car to drive. The driver had to be good, and that's where the reputation of the 911 comes from, because people who couldn't drive fancied having something different like a Porsche (a 911), but of course they crashed it, because they couldn't drive it.

Today, you don't have to do that at all with a modern car; it's totally different. The 911 is still a great car, but it's a different car. Anybody can drive a 911 quite quickly and get away with it.





Prodrive may be better known for their all-conquering Subaru Impreza rally cars from the Nineties, but David Richards' incredible company wouldn't be where it is today without the Porsche 911. Total 911 sat down with this unsung hero to talk about the foundation of his successful team, the SC RS, and Colin McRae

> Written by **Josh Barnett** Photography by **Daniel Pullen**



After co-driving Ari Vatanen to the World Rally Championship title in 1981, David Richards had developed a good relationship with Rothmans, the sponsors of his Ford Escort RS1800.

The following year, Richards

was helping the cigarette brand set up their Formula
One team in collaboration with chassis constructors
March. Despite tasting success in the Seventies
(thanks to the likes of Jackie Stewart and Ronnie
Peterson), March was a shadow of its former self by
1982, leading Richards to seek out an alternative path
for Rothmans' motorsport strategy.

With his ear constantly to the ground, he heard about Porsche's plans to return to Le Mans with the 956 Group C prototype. "I spoke to Jochen Mass, one of the drivers in the [Rothmans] Formula One team," Richards explained. "I said, 'This will be far more effective for our sponsors and it will be good for you. Why don't we try to pull this together?"

After a meeting with the key Porsche personnel at Weissach, including Ferdinand Piëch, a deal was done

ESSENTIAL FACTS

- Richards won the 1981 World Rally Championship, alongside Ari Vatanen, in a Ford Escort RS1800 for the Rothmans rally team.
- After being formed in 1984, Prodrive ran Saeed Al Hajri to the Middle East Rally championship title in 1984 and 1985 with a Porsche 911 SC RS.
- Prodrive's Subaru Impreza rally cars have won the WRC drivers championship in 1995 with Colin McRae, 2001 with Richard Burns and 2003 with Petter Solberg.
- The team's first Le Mans class victory came in 2003 after building and developing a Ferrari 550 Maranello, built from a standard road car.
- Prodrive currently runs the Aston Martin Racing team, whose V8 Vantage GTE car competes against Porsche's 911 RSR in the FIA World Endurance championship.
- Away from motorsport, Prodrive are involved with the construction of the new McLaren P1 hypercar.

and one of the most iconic partnerships in sports car history took to the track. But that wasn't the end of the relationship, as David explains.

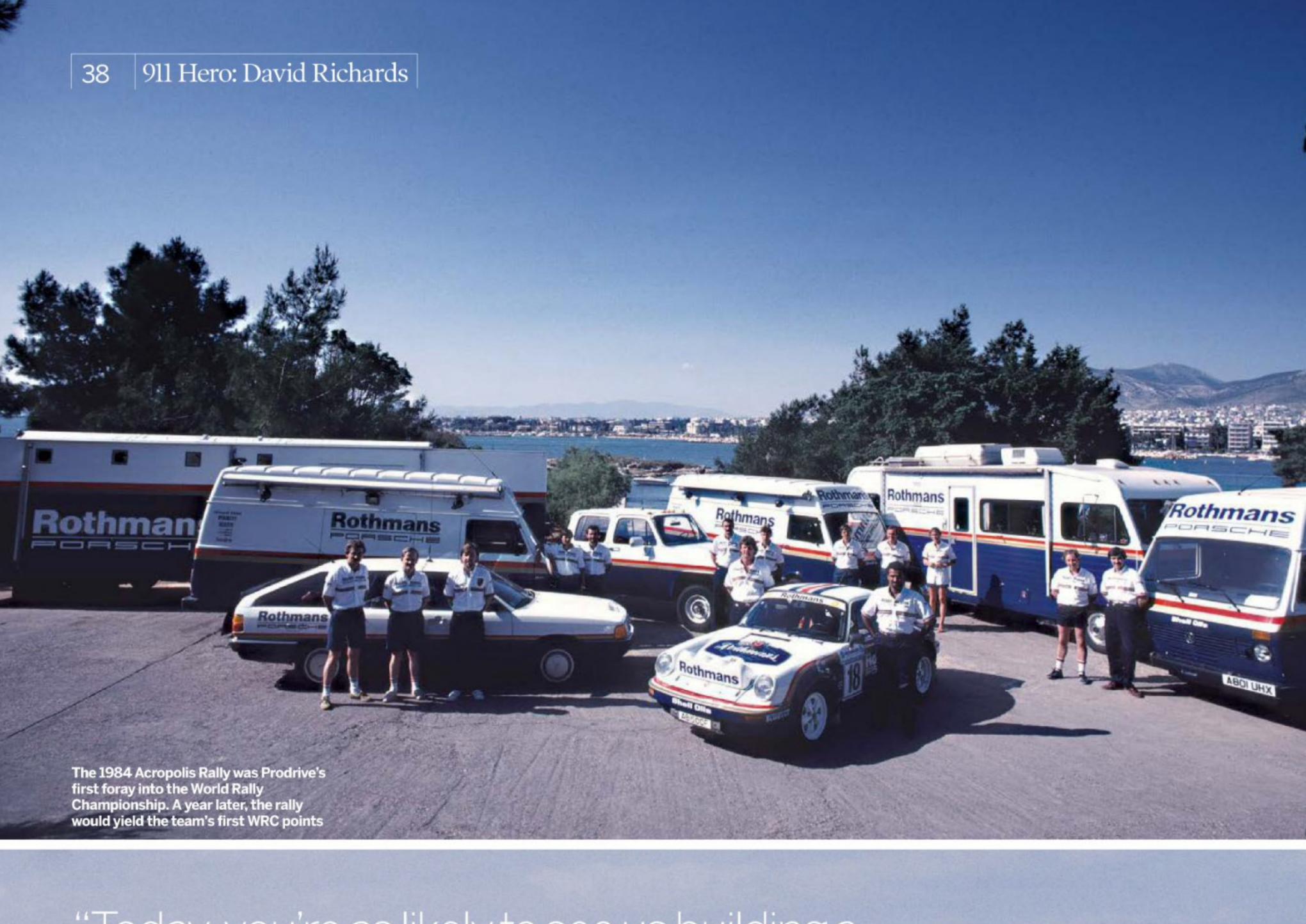
How did the Rothmans Porsche rally team come about from this Le Mans partnership?

In 1983 we started talking about my real aspirations: to build a rally team. They said, "We've got the 959 coming, which will be a Group B rally car," and I said, "Okay, let's work towards a rally programme and contest the world championship." But they said, "It's going to be two or three years away. Why don't we do an interim programme?"

Jürgen Barth was running the motorsport programme there with Roland Kussmaul, and they said, "We could build a lightweight 911 for you with a normally aspirated engine, aluminium panels, and this, that and the other, and we could build our experience in that."

They were already running one themselves just prior to that. Walter Rohrl had driven the car at the San Remo Rally, and done very well. He'd led the event until he broke a driveshaft.

We thought, "That's a good starting point." So they did the homologation special (the SC RS), I went and signed Henri Toivonen to drive for us, and Saeed Al Hajri from the Middle East.



"Today, you're as likely to see us building a product that is going to end up landing on Mars as you are seeing us racing at Le Mans"











How did your first event with the 911 go?

The first event we went to was Qatar in 1984. We took the SC RS straight out the box, and Jürgen Barth said, "It should be fit to do anything, it'll be fine."

We won, but by the time we finished the car was virtually bent in half. We brought it back and sat down with David Lapworth, who had just joined the team. He took a look and said, "We're going to have to start again and really do a big redesign." Over the following year, we went through the car, redesigning lots of it.

Tarmac wasn't such a big issue, but even then we had to devise a special means to change the gearbox, the weakest link on the car. The first time we did it was in the desert – it took two hours! But we got it down to 12 minutes by the time we finished all the systems we put in. We had the whole rear subframe on long bolts so the gearbox could be dropped out.

Was this the only modification you had to make?

We had to stiffen up the whole front of the car, change the damping, a whole range of things. By the time we had finished, we had won Middle East events (which were particularly rough), we were fourth on the Acropolis Rally (the roughest of the European World Championship events) and had a great product.

The other weak link was the rear trailing arms, which were a cast trailing arm off a Turbo. They suffered from stone damage, so we eventually laminated kevlar onto them to protect them.

What was the greatest success of the 911?

I look back on that fourth place in the Acropolis Rally as a standout result. For Saeed, that was probably his best result in a World Championship event, and for us as a team it was a great result.

Of course, winning the Middle East championship as well. The crown prince remembers being there [in Bahrain] as his grandfather flagged the cars away.

Was Henri as special as everyone always says?

Henri was an extraordinary talent. Unfortunately, when he was driving for us he had hurt his back. The only reason he finished runner up [in the European Championship] was because we had to miss a couple of rounds. We should have won it that year.

Did the programme lead to other projects with Weissach?

We had quite a strong hand in the Paris-Dakar programme when they were doing the first of the four-wheel drive 911s. It was agreed that we would go to the Pharaons Rally in Egypt. They would develop a car from Weissach, and we would do one ourselves. They gave us a pile of bits and said, "If you can build it in time, you can come."

David Lapworth took a slightly different route than they did on a few aspects of our car, one of which turned out to be very perceptive. He looked at their car and said, "I don't really think the way you run the oil coolers on the back of the car is very sensible on a gravel rally." They were more used to Le Mans and the Nürburgring. He said, "I wouldn't put them there," so on our car he relocated them.

On the very first stage of Pharaons Rally, Jacky lckx's car had a stone through the oil cooler and went up in flames. Our car went on to finish the event completely unscathed.

What was your relationship with the Porsche factory like?

We had a great relationship with Porsche. I still see a lot of the people today: Norbert Singer, Jürgen Barth, Roland Kussmaul, all the old guys who are still around. We had a great rapport with them.

How important was that particular car to Prodrive's development?

I look back on those days, and it was a very important car for us, the 911. It set us on our way in terms of our credentials in rallying.

It set us on our path and built our engineering skills. It wasn't just a case of buying a complete product and taking it off to events, as we found out after that very first event in Qatar. We had to do a lot of engineering work ourselves, and we were respected for it.

Were you disappointed that the 959 programme didn't come to fruition?











Well, the 959 programme got delayed, as it moved more slowly than they anticipated. The car grew more into a GT car, heavier than anyone was expecting. Audi were winning everything around, and it became quite clear that it [the 959] was not going to be the product we needed to win.

Moving away from the Porsche specifically, what do you think is Prodrive's greatest success?

Some of our greatest successes are the projects you never hear about; things that we do for engineering programmes or for people we can't publicise or are sworn to secrecy on.

Each decade of our history has had great accolades. In the era of Subaru, we really did punch well above our weight as a little company, beating the mighty likes of Ford, Toyota and Lancia, and going for the world title. More recently, we managed to do something similar with Aston Martin against the likes of Porsche and Ferrari.

Is that one of your favourite projects?

It's a project that I have a lot of passion for because I've always loved Aston Martins. But behind the scenes, there are success stories in our composites business, where we make the composites for the new McLaren P1 road car. We are working on a range of activities for different manufacturers at the moment.

It's the diversity of the business that excites me. We evolved from a rally team into a racing team, an engineering business, into merchandising and R&D. Today, you're as likely to see us building a product that is going to end up landing on Mars as you are racing at Le Mans or running in a World Championship rally.

Who was your favourite driver to work with?

'Favourite driver' implies drivers that are easy to work with, but easy drivers don't often win things. If you want to have a driver that is going to be really successful, look for single-mindedness and focus. Those ones tend to be the more difficult ones to manage and control, none more so than Colin McRae.

How did the Subaru project come about?

It came about probably because of our track record prior to then, whether it was with the 911 or the BMWs. A gentleman called Mr Ryuichiro Kuze from Fuji Heavy Industries had been charged with changing the image of a very traditional Japanese motor company and bringing them into the modern era, because they had a new range of products coming.

They thought motorsport was the most powerful tool to do it with. He came to see me in 1989 and said, 'We're looking to set up a World Championship team. Would you be interested in doing that for us?'

It was a great relationship: he had enormous trust and faith in what we did. These kind of partnerships with car manufacturers are rare. Their effort goes into capitalising on performance and marketing opportunities, leaving you to deliver on the track or on the rally stage.

Was it the trust that made the project a success?

To my mind that was the thing. I remember one day he said one of the most telling things: we we had Colin McRae driving on the Swedish Rally, and he said: "You never told me about him, and yet you've signed a contract with him. You never told me who he is or what the arrangements are." I said, "I thought you'd trust me to choose and get on with it." He said, "Yeah, okay, I suppose. Let's see how he gets on."

Where do you think the World Rally Championship is heading in the next few years?

I think it's got problems. It has lost direction, and if I had to single out one thing that would sort it out, it's to make the cars more exciting. The heyday of the WRC was these wonderful Group B cars. They had a safety issue, there was no getting away from that, but do you really want to go and watch a Ford Fiesta? No.

Do you think a solution will be found?

You've got to go back to the basics. I don't think it's any coincidence that sports car racing, Le Mans and the World Endurance Championship are seeing a great resurgence at the moment, because the cars at the centre of the action are exciting and aspirational, and we've got great racing.

LASTHURRAH OF THE 935

Total 911 investigates how Bob Akin and his no-holds-barred race car delivered what was the final, most extreme iteration of the revered Porsche 935

Written by **Andrew Krok**Photography by **Andrew Tipping**



ust as the Porsche 934 was built specifically for FIA Group 4 racing, the Porsche 935 was built specifically for FIA Group 5. While both were still considered production vehicles, the 935 was able to get away with a few more modifications due to the 'silhouette' rule; in essence, the rule stated that teams were allowed to modify their cars however they chose, so long as the basic silhouette of the car matched the production version.

As a result, the 934 and 935 looked quite different from one another. Keen eyes will notice the 'bigger brother' has a larger wing and a wider stance. But if you were to ask most Porsche fanatics about the 935's most defining feature, many would be quick to mention its nearly flat front end.

However, the very first Porsche 935 did not sport the flachbau many enthusiasts remember as the car's defining feature. Originally, the 935 was run with a standard 911 front end, the same as the 934 and its street-going brethren. Later on, Porsche engineers discovered they could exploit a fender-modification loophole in the Group 5 rule book. Thus, the headlights were moved down to the front wing and the slantnose was born.

Even though the 935 was introduced for racing as early as 1976, there were a couple of years' worth

of growing pains, including the aforementioned rhinoplasty. "The cars really came into their own around 1978," says John Ficarra, marketing director for California-based Canepa, which famously has many 935s in its collection. "After that time, it was the car to have."

In 1977, when the 935s were beginning their turbocharged dominance, John Paul Sr spent his entire International Motor Sports Association (IMSA) season attempting to beat the 935 at its own game. It was the first year IMSA allowed tubeframe Corvettes to race, and Senior built a monster of a Corvette that year, specifically to trounce the 935; it even used 935 brakes. However, his attempts proved futile, and the following year, Senior purchased a 935 of his own. As the idiom goes: "If you can't beat them, join them."

By all accounts, the most important year of the 935's existence was 1979. A majority of races fielded several 935 entries, and the car would go on to win just about every race in which it participated. Most notable was the 935's overall victory at the 1979 24 Hours of Le Mans. "The '79 victory was especially important because it was the only production car to win the race since Jaguar did it in the 1950s," Ficarra tells us. "It was also the last one to do that. It must have been interesting to watch purpose-built

JOK SIGNAL

Five famous 935s

1. JLP-3

JLP-3 stands as the most successful 935 of all time. 27 races resulted in nine wins and 16 podiums – and seven of those wins were consecutive. It's

also the only car to achieve victory in both the 24 Hours of Daytona and the 12 Hours of Sebring in the same season. JLP-3 won the IMSA Camel GT Championship that same year too. There's also the interesting fact that the car may or may not have been built using drugtrafficking money.

2. Kremer K3

The K3 was Manfred Kremer's attempt to improve upon Porsche's standard 935. Kremer

focused primarily on shedding weight, reducing complexity and reshaping the body panels ever so slightly. The result was a competent racer that was selling faster than Kremer could build them. The K3 would go on to win the 1979 24 Hours of Le Mans outright, the last time a production car claimed that honor.

3. 935 Street

The 935 Street is one of Porsche Exclusiv's earliest projects, commissioned for Mansour Oijeh, head of the

TAG Group, which now owns 25 per cent of McLaren. The 935 Street consists of a 930 bodyshell, a 934 flat six tuned to 375bhp, and several components from the 935, including the brakes, suspension, wheels and aero. The invoice featured 550 total modifications over 17 pages.

4. 935/78 "Moby Dick"

The 935/78 was intended only for Le Mans. It featured a larger, 3.2-litre flat six and the driver was on the right-hand side of the car for better weight distribution in Le Mans' infamous right-handers. Porsche took advantage of a Group 5 loophole that allowed them to cut the floor pan out and lower the car. Its long, white tail earned the car its literary nickname. Moby Dick represents

5. 935/77 2.0 (Chassis no. 935/2-001)

The 935/77 2.0 was a purpose-built machine to

prove Porsche could win the DRM (Deutsche

Porsche's final works efforts with the 935.

Rennsport Meisterschaft) division that allowed engines no larger than 1.4-litres. Engineers shrunk the 935's flat six down while keeping power at 370bhp. Combined with a low 750kg kerb weight, the 935/77 2.0 won the only race it ran by 50 seconds and was promptly sent to the Porsche Museum afterward.



936s and Ferraris lose to a production car, although perhaps not so much for the losing teams."

Despite all its successes, the 935 was slowly fading away by the end of the decade. Porsche had built its last 935 in 1979, so all future construction would have to be done by individual teams such as Kremer. "Kremer was overwhelmed in 1979," Ficarra explains, "It couldn't build enough K3s to satisfy demand. The car was just that popular, even after the factory stopped building them."

Three years later, enter Bob Akin, the man behind the Coca Cola 935 gracing these pages. Akin was born a racer; he started out with boats and on drag strips in the 1950s, eventually making his way to road racing. He dropped out of the sport in 1961 to focus on his family business, but after competing in a 1973 vintage race behind the wheel of a Mercedes-Benz 300SL, he was once again smitten.

For the 1982 season, Akin wanted to run a Porsche both in IMSA and at Le Mans. Given that factory 935s were three years gone and plenty of more powerful, more aerodynamic vehicles had arrived in the interim, Akin knew he needed something beyond a standard 935. He needed something special, something that could only be built by a person with serious experience in this field. Naturally, he went to Chuck Gaa.

Chuck Gaa is the namesake behind GAACO, a company responsible for building some very serious Porsche race cars. In fact, just a couple of years earlier, GAACO finished JLP-3, the 935 that would go on to become the most successful 935 in history. Akin knew GAACO could build what he wanted, and so the company set to work attempting to pull the 935 back into racing relevance.

It is for this reason the Coca Cola 935 did not start out life as a standard 935: it was actually built from the ground up using Porsche parts that bolted right onto GAACO's bespoke handiwork. "The only exterior parts that came from Porsche were the roof and the windshield, which needed to remain 'stock' as per the new GTP-class regulations," Ficarra says. "However, even those two components were tilted slightly to create a better airflow over the top."

Under the body panels, GAACO had built a chassis that was unlike any 935 before it. "The nose, the floor – actually, a majority of the car is a bonded aluminium monocoque," Ficarra explains. Bonding holds many advantages over the more traditional welding. For example, welding can potentially distort aluminium, which is a softer metal than steel. Heat can also cause issues with aluminium, which could affect the material's effectiveness. Thus, bonding was the preferred method of joining

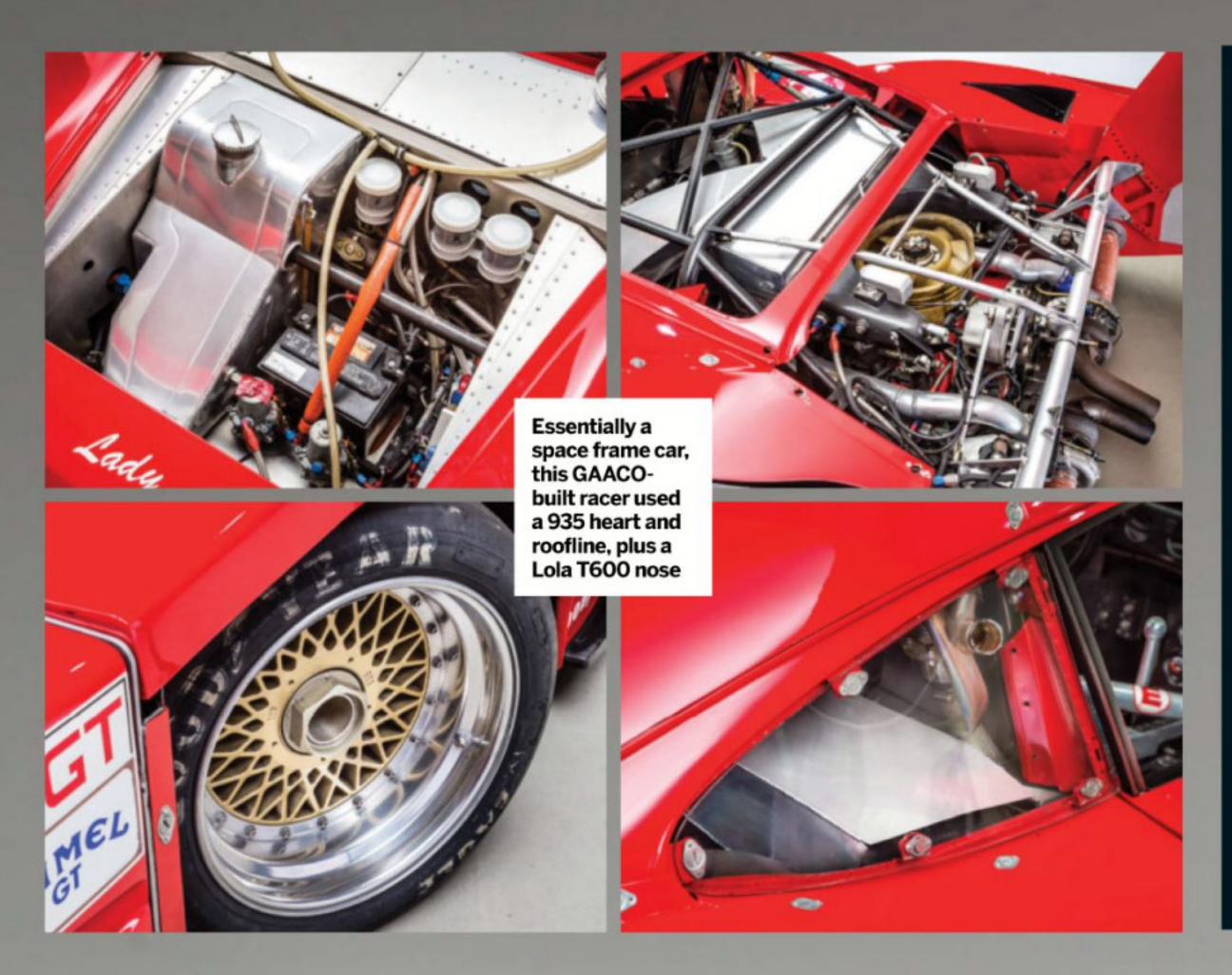
the aluminium together.

It wasn't all aluminium, though. GAACO also made use of steel in the construction. "The roll bar and vehicle superstructure are still made of steel," Ficarra says. "It's not a complete steel-tube frame like the Corvettes of the time, but one of Chuck Gaa's many specialties was the steelwork he put into the Akin 935."

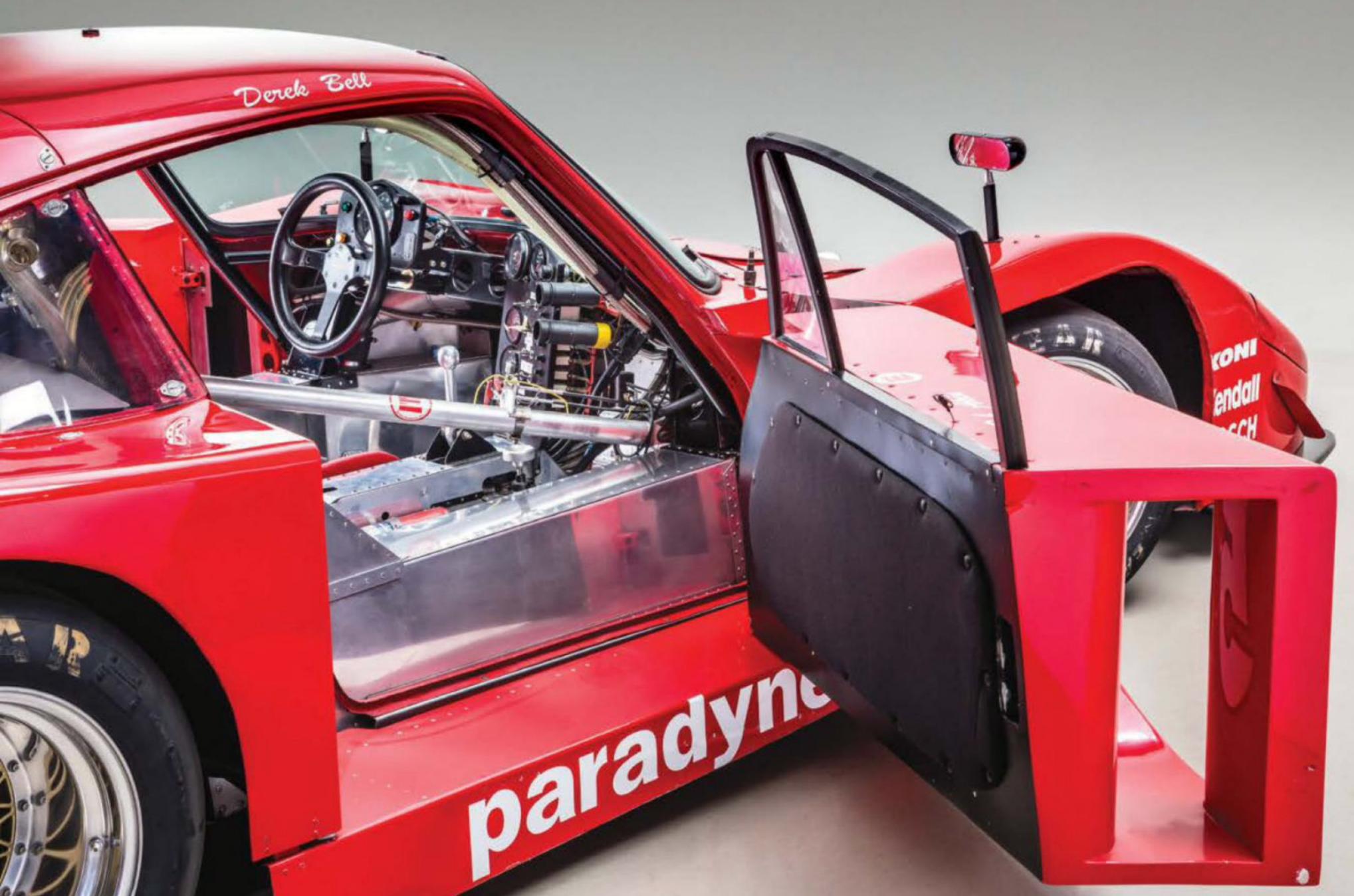
Keen eyes will notice that Akin's car also lacks the ubiquitous flachbau. Simply put, the front end wasn't doing all it could in terms of aerodynamics, so GAACO took a rather unconventional route around this issue. Instead of the standard nose, GAACO used one from a Lola T600 GTP car.

The Lola T600 was introduced as a customer chassis in 1981, specifically for the GTP class. It was the first GTP car to use ground-effect tunnels to create additional downforce, and while many different teams attempted to emulate this in the future, that specific feature never made it to the Coca Cola car. Without that additional drag, the Lola nose stood the best chance at producing the best top speed for Akin's project.

The nose was as close to bleeding-edge technology as GAACO could get, and combined with the 935's tried-and-true mechanicals, Gaa and company built what they believed to be the



Model	Porsche 935
Year	1982
Engine	
Capacity	3,200cc
Compression ratio	8.5:1
Maximum power	750bhp+
Maximum torque	740Nm (estimated)
Transmission	Four-speed manual
Suspension	
Front	MacPherson strut with coilovers; Bilstein dampers; anti-roll bar
Rear	Coilovers; Bilstein dampers; trailing arm; anti-roll bar
Wheels & tyres	
Front	23.5x10.5/16
Rear	27x14/16
Dimensions	
Length	4,838.7mm
Width	1,981.2mm
Weight	1,054.2kg
Performance	
0-62mph	Not tested
Top speed	225mph (depending on gearing)



best of both worlds. It's rather ironic that this car used components from other GTP cars, when the GTP class was more or less developed to rid the racing world of the 935's domination over it.

This car was a monumental effort of engineering. However, as anybody who has built a race car will explain, work of this calibre takes time, and plenty of it. So it wasn't exactly a surprise when GAACO was unable to deliver the car for the beginning of the 1982 racing season. Instead, the car's first outing took place at the Coca Cola 400 race at Lime Rock Park in May of that year. The Coca Cola 400 was essentially a test session in preparation for the 1982 running of Le Mans. Bedecked in its Coca Cola

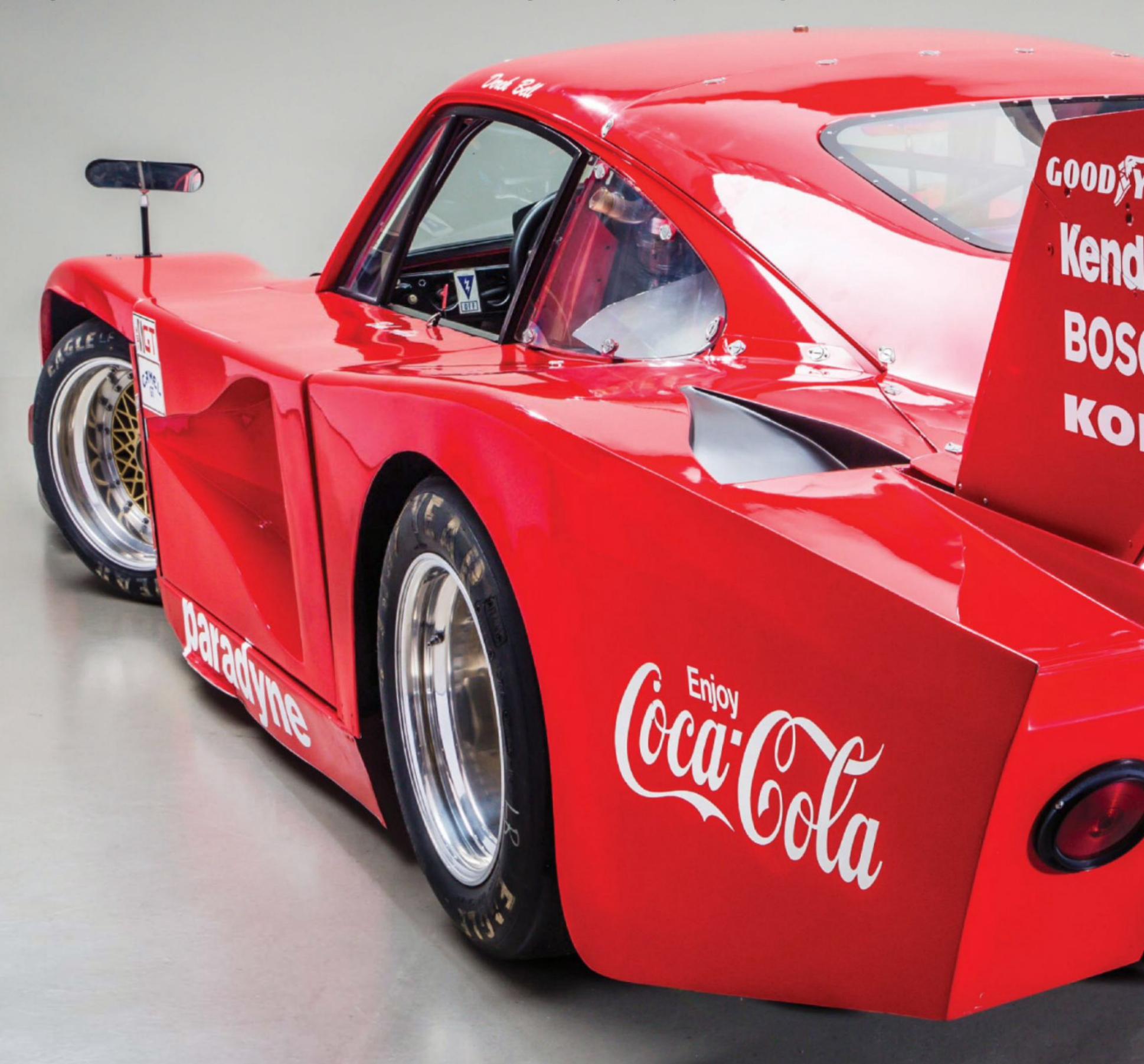
livery and sporting the number five — the number this car would wear for all its American races — Akin took the 935 to a 23rd-place finish at Lime Rock.

At Le Mans, the Lola nose proved to be worth the graft. "The straight-line speed was ludicrous. It was outrunning dedicated prototypes on the Mulsanne straight by ten miles per hour or more," Ficarra enthuses. Sadly, the vision of 935-based resurgence was quashed before the sun even set over the race track that day; two hours into the race, fuel delivery issues sent Akin's car to the garage, from which it never returned.

"Akin was not running an incredibly wealthy

team," Ficarra tells us. "Some teams could throw money at problems until they went away. Back around this time, there was less pressure from sponsors to have their names and logos in front of the crowds and the cameras, so if a team wanted to quit, it could do so relatively easily."

That's what happened with Akin, but Le Mans wasn't the end of the 935's racing efforts. After Le Mans, Akin and the Coca Cola 935 returned to the United States to finish the IMSA season. Sadly, though, the car never achieved the glory some had hoped it would; in the four races the 935 ran after Le Mans, it finished no higher than fourth place. It didn't even finish its final race, the



Pocono 500 Miles, due to a tyre issue. Nevertheless, Akin did share seat time that season with two of motorsport's more recognisable drivers, Derek Bell and Hurley Haywood, the latter of whom is possibly the most prolific American Porsche racer of all time.

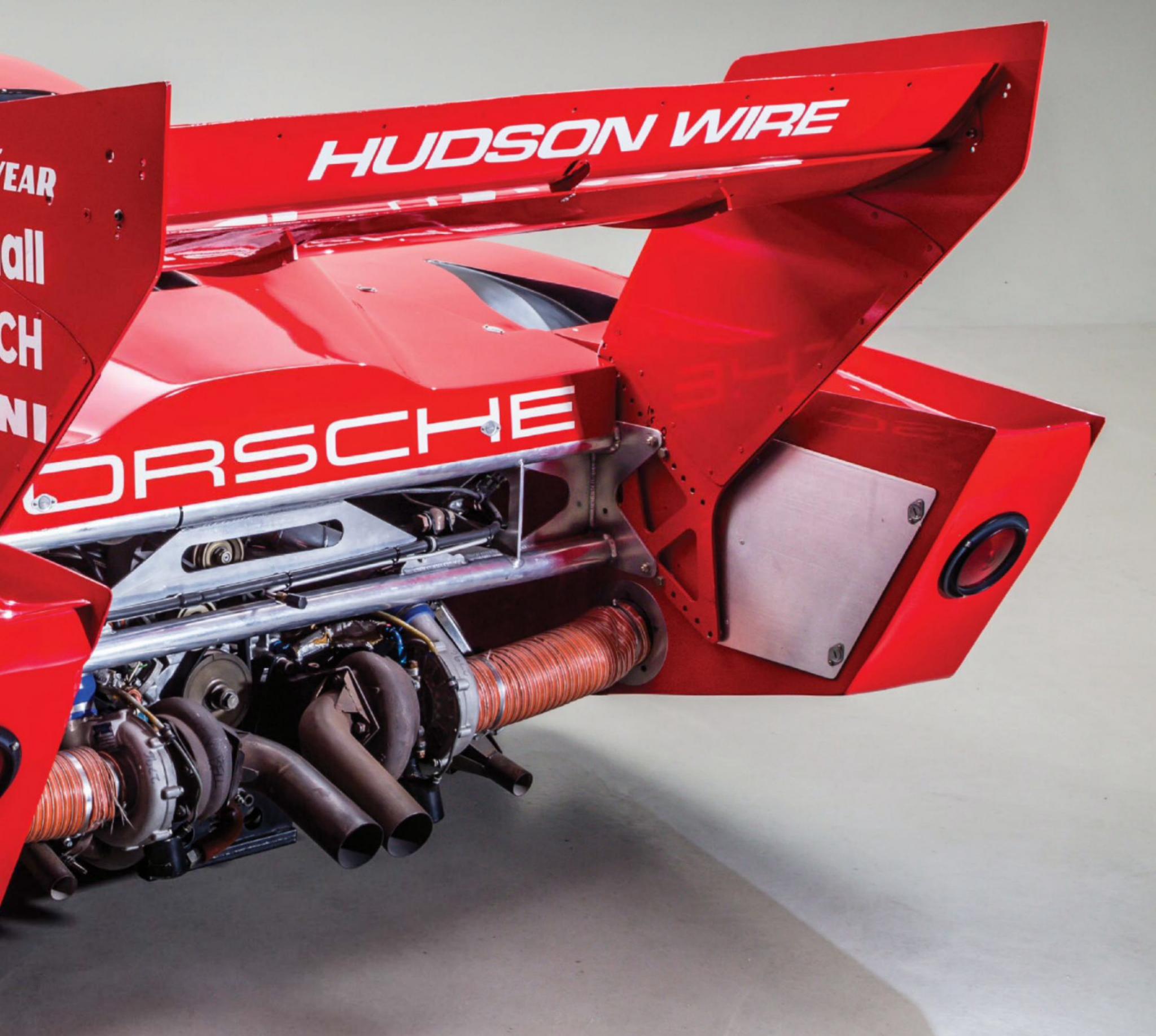
After the 1982 IMSA season concluded, the Coca Cola 935 had outlived its usefulness, and thus it was relegated to a corner of Akin's shop, where it sat for the better part of two decades. However, the 935's journey would start anew when it was purchased in 1999 by Jacques Rivard, who planned to restore the 935 to its original condition, if not better.

Over the next few years, the car was broken

down almost completely and built back up.
Suspension components were removed, checked for microscopic cracks, and cracked parts were replaced. G&S Autoworks did a complete rebuild of both the engine and transmission. Rivard also placed a heavy focus on fixing the issues that plagued Akin.

When that was all done, the Coca Cola 935 returned to racing, although this time two things were different. First, it was obviously fit for vintage racing and not much else. Second, it began to dominate in a way that would have made Akin proud. "Akin's car is one of the most potent 935s in vintage racing," Ficarra explains.

Vintage racing credentials isn't what earns this car a spot in Porsche motorsport history, though. The Coca Cola 935 deserves a spot among the greats because it was the last of its kind. "This car is the end of the 935, as far as its competitiveness was concerned," Ficarra muses. "Yes, teams still ran 935s after Akin, but Akin's car was one of the last ones to blow people away." While it couldn't produce the results Akin desired, it still destroyed 962s and other Group C cars on the straights. This is one of the last of its kind, one of the most extreme versions of the 935 ever built. Even though it never achieved greatness, it deserves its due respect for the ingenuity and heart that went into it.



SWEDISH SUPERSTAR

Exactly 50 years after leaving Zuffenhausen, Total 911 uncovers the unconventional history of a 901 that blossomed on track and road

Written by Josh Barnett Photography by Daniel Pullen



rumos, Martini, Rothmans. Just a mention of these three iconic Porsche liveries and you will be able to picture their flowing red, white and blue stripes. However, if I was to mention Anders Josephson Racing, the chances are your mind would be, understandably, blank. After all, why would you remember the livery of a car that only finished second in the 1968 Swedish Touring Car Championship when the aforementioned triumvirate have numerous Daytona, Le Mans and Dakar victories between them?

The answer to my rather unusual question lies on these pages before you. This is the 1964 Porsche 901 campaigned by Anders Josephson Racing during the late Sixties. Love it or loathe it, the livery is undeniably eye-catching. In fact, the psychedelic design is so memorable that this particular 901 won 'The Most Iconic Car' at last year's Salon Privé, the Porsche's first event after a meticulous two-year restoration at classic Porsche specialists, Maxted-Page & Prill. First though, let us rewind.

Chassis number 300 147 was one of just 232 cars to leave Zuffenhausen's Werk II building in 1964, slipping out of the assembly shed on 23 December. This rightfully gives its title to the '901' moniker that brought about Peugeot's threat of legal action. A little over three months later, the spring of '65 saw number 147 land in Sweden, where Scania Vabis, Porsche's Swedish importer, pressed the car into action as a demonstrator for the newly renamed 911. This makes it possibly one of the



earliest press cars we've ever featured in **Total 911**, as evidenced by the 901's appearance on the front cover of *Teknikens Värld* ('World of Technology' for those of us not fluent in Swedish) on 15
September 1965. At the end of the year, the Signal red 901's launch duties were over as Scania sold the car on to Anders Josephson, who re-registered the car, switching from 'B7004' to 'AB 20195'.

In its new owner's hands, the car's purpose changed dramatically. The Josephson family were one of Sweden's most wealthy dynasties, having made their fortune in the textile and retail fashion trades. However, Anders, who inherited this business empire, had interests beyond mere fabrics. As if owning one of the earliest 911s around wasn't enough, Josephson sent the car into battle on Sweden's tracks, run under his eponymous banner.

Behind the wheel, Josephson saw a reasonable amount of success between 1967 and 1969, the highlight of which was that runner-up spot in his native touring car championship.

Unlike many European 911 racers though,
Josephson's motorsport exploits didn't stop during
Sweden's harsh winter months. Making use of the
rear-engine platform's excellent traction, Josephson
found his 901 an excellent steed on the country's
numerous frozen lakes. Yes, number 147 won the
1968 Swedish Ice Racing Championship too. If
you don't believe me, check out the front cover of
February 1969's issue of *Illustrated Motor Sport*.

By now, you are probably wondering where the livery comes into this story. Or you may have actually started figuring it out, given I have already dispensed information relating to



901 v 911 differences

Between October and December 1964, 232 Porsche 901s were built, although the 232 Registry Group believes that only around 50 now survive. The list of current owners reads like a who's-who of famous Porsche collectors, with FIA president Jean Todt recently joining the likes of Jerry Seinfeld and Alois Ruf.

These early 911s all share differences with cars from 1965 onwards (many of which I'm obliged not to publish in order to make sure only a select few know the true differentiating marks between a 901 and a 911). However, here are a few of the key differentiators, all of which Lee Maxted-Page restored on the ex-Anders Josephson car.

The 901 features chrome horn grills with a four-screw fixing, while inside the African mahogany dashboard trim is bereft of the '911' badge that later cars gained. The decklid features a gold, two-part 'Porsche' script, again without the slanted '911' that was added in 1965.

Most intriguingly, the decklid grill on 1964 cars is 20mm deep rather than 15mm. The 20mm item is effectively a carry-over from the 356, and when fitted to the 911 doesn't fit flush with the decklid (unlike the 15mm grill). When the shell didn't come with this rare piece of brightwork, Lee was initially worried that sourcing a 1964 grill would be expensive, if not impossible. That was until a chance phone call with Total 911 contributor and fellow 901 owner, Magnus Walker. The Urban Outlaw had one in his vast stock of classic Porsche spares, immediately popping it in the post to Lee free of charge.

While Lee has muted that the car could be for sale, Goodwood have announced that next march, the 73rd Members' Meeting will honour these early Porsche SWB racers with a feature a race dedicated to a field full of pre-'67 2.0-litre 911s. So, number 147 may not be for sale just yet...



Josephson's profession. In 1967, the car remained predominantly unadorned, racing with a simple red star within a white circle on the bonnet. Plans were afoot for something more eye-catching in the 1968 season though, with the car rolling onto the track bedecked in sunflowers on the roof and every wing. Rather than an unusual homage to Vincent van Gogh, the sunflower pattern was one of Josephson's most popular prints. For a textiles company, it was the perfect promotion, and perfectly befitting of the Swinging Sixties. Can you imagine Burberry or Paul Smith flaunting similar fabrics in such a way?

In 1970, Josephson had finally taken his fill of road, track and ice action, bringing to a close number 147's remarkable early competition history as the 901 passed through two subsequent owners before it was retired from road use altogether.

As you can see though, this 901's story didn't end in a garage. Returning to the near present, Lee Maxted-Page, proprietor of his eponymous classic Porsche broker, first saw the car – or more accurately, the painted shell – on a dolly at Castle Hedingham in 2011. The car had just been imported into the UK, and was in the hands of Devon-based restorers R-to-RSR, who were bringing the ex-Josephson 901 back to life for a client.

Lee immediately knew he had to have the car: "I was attracted to it because of its racing history," he explains. After a little persistence, Maxted-Page took ownership of the car in 2012, starting a full yet sympathetic restoration on what would become his personal project. It was a process that wasn't without its challenges, but for anyone who has read the company profile in issue 118, Maxted-Page & Prill is possibly the most adept business for such a classic 911 rejuvenation.

With number 147's Sixties racing pedigree,
Maxted-Page's restoration would not simply return
the 901 to perfect road-going condition. Instead,
the decision was made to build the car to the FIA's
Appendix K specification, the motorsport governing
body's set of technical regulations for historic
vehicles. This would enable the car to compete in
numerous international historic race meetings,
prolonging the car's intriguing competition history
while also preserving the unique 1964 build details.

In order to make the car eligible for modern motorsport, an FIA-compliant Recaro seat has been fitted, alongside a rare, period sports seat for the passenger. Similar competition necessities include a 100-litre endurance fuel tank that, while not exciting, highlights Lee's incredible attention to detail. Many people would use a modern, rubber, bladder-style fuel cell. However, Lee sourced a rare steel tank. A custom-made roll cage, Schroth four-point harness and Zero 360 fire extinguisher (with the prerequisite dashboard kill switches) round off the necessary FIA safety equipment.

Under the decklid, the FIA regulations permit a reasonable amount of engine tuning, with Lee confirming that it is possible to squeeze 200bhp out of the 1,991cc flat six. "I wanted this car to be driveable on the roads too," he explains. Therefore, the motor modifications are a slight compromise between race and road specification. Still, 177bhp is not to be sniffed at, especially compared to the 130bhp of a standard 901.

The engine was built in-house, with the workshop overseen by respected Porsche specialist, Andy Prill. The crankshaft is from the 906 (Porsche's last road-going sports prototype) while the pistons and con-rods are all uprated. The camshafts provide higher lift than the standard 901 items but don't have the ridiculously aggressive profile of some Appendix K racers, in order to preserve the aforementioned on-road usability. The notoriously fickle Solex carburettors are a spectacular visual flourish with their six separate down-draft trumpets and despite their reputation, they don't take as much effort to keep in tune according to Maxted-Page.

Mated to the race-ready engine is a five-speed 901-type gearbox, rebuilt with limited-slip differential and short ratios that provide a top speed, for most circuits, of around 130mph at 7,500 rpm in fifth gear. However, for Le Mans (should the car ever be entered in the prestigious Le Mans Classic event) the top speed would be stretched for the longer Mulsanne straight to a frankly incredible 160mph with a different set of ratios.





The ultimate connection to the road is provided by Avon CR6 historic racing tyres, wrapped around a set of 5.5x15-inch steel wheels (the FIA allowing an extra inch of width over the 901's standard 4.5-inch rims). Many similar pre-'66 racing 91ls are run on the iconic Fuchsfelge. However, with his car being built a full two years before the forged alloys made their debut on the 91lS, Lee feels "it would be wrong to run on anything other than the steel wheels", even if Anders Josephson did campaign the five-leaf design later on in the car's original competition life.

Possibly the most remarkable part of the two-year restoration was the replication of the distinctive sunflower pattern that Josephson used from 1968 onwards, even if Maxted-Page describes the process as "relatively simple". With the Josephson textiles empire now defunct, Lee gathered together all available period photos of the car, before hiring an artist to digitally replicate the floral pattern. This was then printed onto self-adhesive vinyl and applied onto the front and rear wings of the 901. The end result is a livery that stays as faithful to the original design as possible, evidence of the extra mile that Maxted-Page & Prill put into every Porsche restoration that comes through their doors.

The demanding Spa Six Hours Historic may not be everyone's idea of the perfect shakedown event. However, after the love and attention that went into the restoration, Maxted-Page (an accomplished historic Porsche peddler) and his co-driver, Robert Barrie, managed to bring the ex-Anders Josephson 901 home in one piece, eventually classified 65th

out of 106 finishers in the 2013 event. The car's only other competition outing came earlier this year in a two-hour Sixties Endurance race at Mugello where Lee shared driving duties with his good friend – and Jamiroquai frontman – Jay Kay.

With the car's unique history, immaculate condition and six-figure restoration price all fighting for attention in the forefront of my mind, to be handed the keys to this incredible 901 is an honour, even if it is only for a brief blast around the surrounding Essex countryside.

That tuned flat six bursts into life with an intent that can only be matched by another racing 911. Despite the supposedly road-friendly cam profile, the engine needs a little throttle to idle comfortably, always teetering on the edge of cutting out. It's clear that this is still a racer's 911, no matter what Lee says about compromising for road usability. Eventually, though, the note settles on a deep thrum.

Pulling out of Maxted-Page's immaculate driveway, the limited-slip diff begins to chunter as I apply some steering lock, sending distinctive shudders through the stripped out shell. Soon though, we're onto the open road and, with the oil and engine temperatures suitably up to operating levels, the chance to open the throttle is upon me. Lee urges me on from the passenger seat; it seems rude not to oblige.

Never has the 'noisy pedal' been a more apt moniker than in a race-ready, short-wheelbase 911. The six Solex trumpets greedily begin to suck in air with an audible gasp form the engine bay and the basso boom of 2,000rpm is replaced with a growing crescendo of flat six splendour as the revs rise. And rise. And rise. The 901 motor, normally topping out just after the 6,000-mark, is eager for more as I top out at a glorious 7,000rpm.

There's a noticeable kick to the power delivery as the upper echelons of the green rev counter sweeps through. Meanwhile, it becomes hard – as the trees begin to flash by the Perspex quarter windows – not to imagine myself blasting through the generous assortment of twists and turns of Karlskoga circa 1968, à la Anders Josephson.

Having previously 'enjoyed' a love-hate relationship with the 901-type gearbox, Lee's rebuilt, short-ratio shifter proves a joy to use. The vagueness between the gates has been eradicated, as each gear engages with a joyous positivity that I hadn't encountered in previous classic 911s.

While SWB 911s are nowhere near as fearsome as many would have you believe, it always takes a little while to gauge their individual personalities. Not so with this 901. The wider-than-normal rubber adds an extra level of composure while the Bilstein dampers at each corner help to stiffen up the standard dynamics without compromising on feel. It's a wonderful, darting car to drive, and would be simply perfect blatting through the forests of the Nordschleife (Lee, if you need a driver for the Oldtimer, I'm available).

All too quickly my time at the 1972 MOMO Prototipo wheel is over: a mere taster of this 1964 Porsche 911's true capabilities, but one that will live long in the memory, just like the undeniably one-of-a-kind colour scheme.







mixture of childish excitement and trepidation fills me as I arrive at Curborough Sprint Course to the sight of a Rothmans-liveried Porsche 911 SC RS being unloaded from Prodrive's unassuming box trailer. The white and blue colour scheme, with its red and gold pinstripes, has enthralled me since reading about the partnership's halcyon days, winning Le Mans with the 956 and 962 sports prototypes.

Driving a Rothmans Porsche has always been high on my wish list, and now, on a dry autumnal day, that wish is about to come true. However, while it was Weissach's Group C offerings that sparked a love affair with the Rothmans livery, this particular Porsche isn't designed for the track; this is a Group B rally car, designed to take the Stuttgart manufacturer back to the world's special stages.

The SC RS came about after David Richards, the man behind the Rothmans Porsche sponsorship deal, went to Weissach to talk about his passion: rallying. Richards had co-driven Ari Vatanen to the 1981 World Rally Championship, and wanted to set up his own team. With Porsche developing the 959 four-wheel drive car for Group B, an alliance with Stuttgart was logical, but the 959 project was suffering from delays, leading Porsche to suggest an interim programme with the new SC RS.

For the 1984 season, Weissach built 20 examples

to satisfy the FIA's competition homologation process, passing five cars onto Richard's fledgling Prodrive outfit to be run as part of the works-assisted Rothmans Porsche Rally Team.

The SC RS was an SC in all but name, with most of the components derived from the 930. The chassis is a modified version of the 911 Turbo's, with its wide-arched bodyshell also utilised, albeit featuring lightweight aluminium wings, doors and bonnet. The fibreglass bumpers and rear wing helped save further weight. The final carryover from the 930 is the use of its brakes, with the front calipers from the 3.3-litre version on all corners. Underneath its feathery clothes, a rally tuned 2,994cc motor powered the SC RS. New forged pistons, an increased compression ratio, higher-lift cams, revised cylinder heads and a switch to Kugelfischer fuel injection helped Weissach's 930/18 engine produce 255bhp at 7,000rpm.

Jürgen Barth, Porsche's Racing Manager, was confident in the car's ability. However, Prodrive's first rally in the roughhouse environment of Qatar highlighted some major flaws. Although Saeed Al-Hajri guided the SC RS to victory on its debut, the new car crossed the finish line "virtually bent in half," according to Richards.

Something needed to be done. David Lapworth (who would later go on to head the team's dominant Subaru programme in the Nineties) was brought in

to oversee a complete overhaul of the car. 'Lappie' was in Sardinia with the British Junior Rally Team when he first met the Prodrive crew. "We were chatting out there and they obviously had loads of issues," he explains. "When we got back, I got a phone call from Charles Reynolds, who said, 'Do you fancy coming in for a chat?' That was it. I started working within days."

This was the start of Prodrive's constant diversification, moving from simply running cars to designing them. They set about completely reworking the SC RS in time for the car's World Rally Championship debut in the 1984 Acropolis Rally. Lapworth explains the main failing with the cars from Weissach: "The specification we'd inherited from Germany was a bit too underbuilt." While cars such as the Peugeot 205 Tl6 were purpose-built, no-compromise machines, the SC RS was "still a converted car."

Rather than modify the road-based components, Prodrive manufactured their own bespoke parts, fit for the world's rally stages. The experience would prove invaluable in later years as they started to build rally cars from the ground up. The 555 Subaru Impreza may be their most iconic offering, but the Rothmans Porsche 911 SC RS was the car that set Prodrive on their way to rallying greatness.

With all the modifications finished, Prodrive's SC RSs were radically different to the 15 other

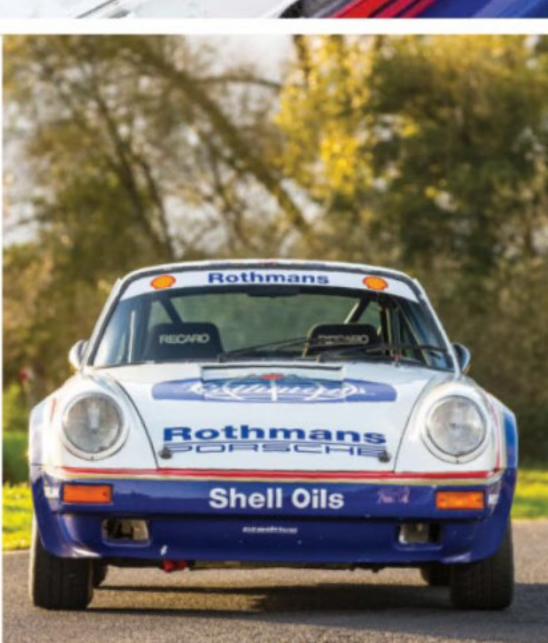










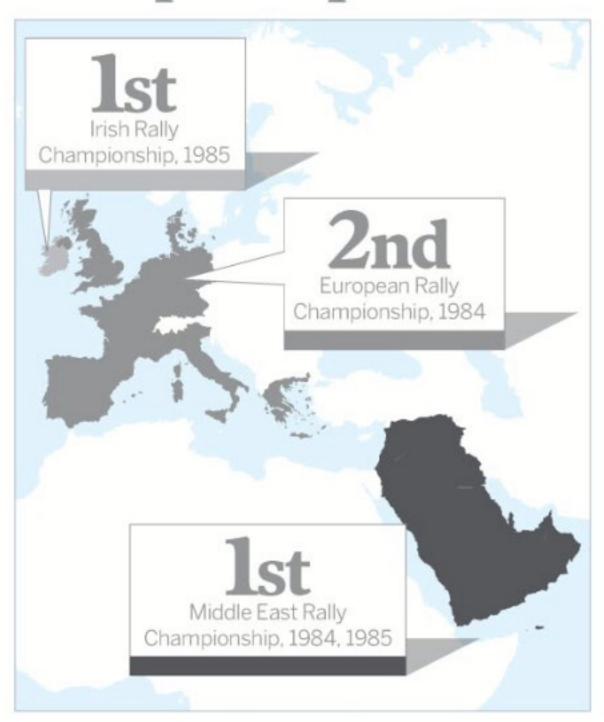


SC RS in numbers



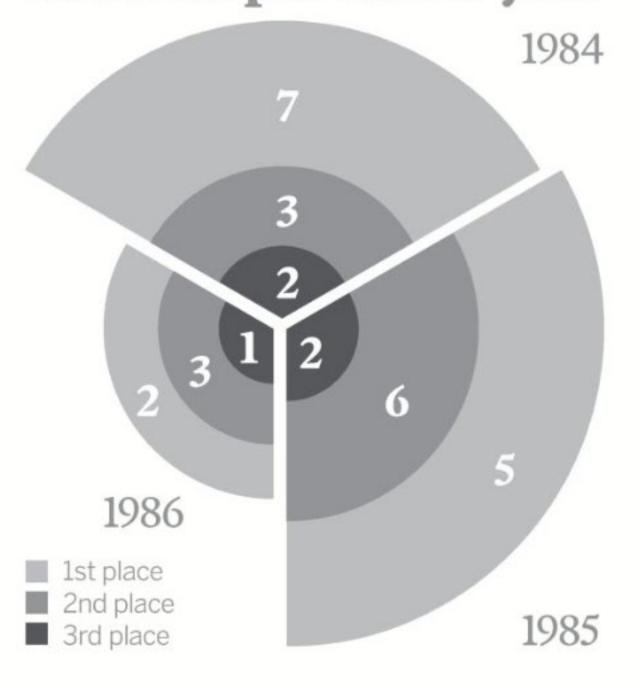
S Al-Hajri/J Spiller
H Toivonen/I Grindrod
H Toivonen/J Piironen
J Kankkunen/J Piironen
JL Thérier/M Vial
R Clark/I Grindrod
B Beguin/JJ Lenne
B Coleman/R Morgan
B Beguin/G Borie
B Beguin/C Tilber
J McRae/I Grindrod
S Al-Hajri/R Morgan
N Karam/J Saghbini

Championship results



2 World Championship points (5th place, 1985 Acropolis Rally)

Podiums per career year





cars Porsche sold as road cars. Heavy-duty shock absorbers were now fitted, the strut brace reinforced and antiroll bars stiffened up massively. The 915 gearbox (the SC RS's Achilles heel) could now be replaced in 12 minutes thanks to new, extralong bolts on the rear subframe. The works-assisted cars also now produced an impressive 290bhp, while (in its ultimate Tarmac specification) the dry weight of the SC RS was lowered to 940 kilograms – below the 960-kilogram minimum limit of the 3.0-litre Group B cars.

Prodrive didn't lack success with the Porsche 911 SC RS, with victories in Qatar, Oman and Dubai landing Al-Hajri and co-driver John Spiller the Middle East Championship. In Europe, Toivonen missed out on the 1984 European crown after a recurring back injury forced him to miss the Manx Rally. Four wins were little consolation for the Finn. 1985 brought two more championships, with Al-Hajri defending his Middle East crown and Billy Morgan giving Rothmans Porsche the Irish Rally title. Prodrive also secured its first WRC points as Al-Hajri finished fifth on the Acropolis Rally.

Prodrive doesn't know the exact history of the car I'm about to step into. However, with just five cars given to them, it's likely this example has some serious stage pedigree. Ben Sayer, Prodrive's PR manager, also informs me that they have insured the car for over £200,000. Having never driven a rally car before (let alone a Group B example), the words 'baptism' and 'fire' spring to mind.

With the illustrious history and mighty performance filling my head, I step inside the SC RS. For my first experience of Group B brutality, Lapworth (who often shakes down Prodrive's cars and knows more than his fair share about vehicle dynamics) is going to take me out as a passenger and show me the ropes. I'm in good hands.

David tells me that the brakes are "wooden" as we navigate Curborough's twists. This 911 is vicious, too, as Lapworth proves in an attempt to get sideways through the 180-degree left-hander at the start of our loop. With a bootful of throttle, we're suddenly pointing the wrong way. Now it's my turn.

The inside of the SC RS is bereft of creature comforts, with the stark metal of the exposed bodyshell a reminder that this 911 weighs under a ton. However, while much of the car's cockpit is bare compared to Zuffenhausen's road cars, the dashboard is anything but. Behind the steering wheel, the famous five-dial pod is the central focus, yet all is not what it seems. Three light switches have replaced the clock, while the fuel gauge has been exchanged for a fuel pressure dial. Although the ignition's location is unchanged, a red ignition cut-off switch supersedes the key, with a separate 'Start' button used to spark the engine into life.

Over on the co-driver's side, a gambit of exposed fuses is within easy reach, in case of in-stage failures. It's the aforementioned starter button that interests me now as I turn the ignition switch to the right and push the unassuming black button, using a little throttle to help the car roar into life. In the driver's seat you really get a true sense of the powerplant's anger. The noise is deafening, even with a full-face helmet on, and the throttle response is instant, with the revs rising and falling effortlessly; this engine is a true thoroughbred.



The clutch engagement is similarly aggressive. After pushing the gear lever across into reverse, the car judders violently as the centre plate bites the flywheel. Thankfully, I'm no stranger to competition clutches, avoiding an embarrassing stall before backing the car gently onto the circuit, guided by one of Prodrive's rally mechanics. This is it; I'm now in full control of a Rothmans Porsche.

The first lap is for getting used to everything, so I accustom myself to the precise yet weighty steering and barely existent brakes. I hope they'll wake up once there's a bit of heat in the pads, as I'll need them at the end of the main straight. The pedal moves much further than I'd like, too; not providing me with much confidence or stopping power.

The 915's synchromesh isn't suitable for the rigours of rallying, where dog rings are what you really want for fast and reliable shifting. You can't rush the incredibly vague gear changes; jumping up and across the gate from first to second is akin to navigating a dark alley while blindfolded. Lapworth describes the difficulties with the SC RS's gearbox. "The synchromesh kept failing," he said. "The teeth used to just wear away, and while on a road 'box you can bang it into gear, this wouldn't go."

With the controls proving less than user-friendly, I decide to take the second lap to continue my crash course in Group B cars. If only drivers like Henri Toivonen could drive this, I better not try anything too heroic after just 60 seconds behind the wheel.

The brakes are starting to warm up now, but the pedal is still pretty long, and the lack of feel is disconcerting. The offset pedal box is straight out of the road car, retaining the famous 'organ'

accelerator. Coupled with the lack of performance from the 930 calipers, I don't have much confidence in the braking zones. Still, this is effectively a museum piece, so I imagine the brakes were better in period, although probably not as much as I'd like.

I'm feeling a bit more relaxed now, and my hands are sweating a little less beneath my nomex gloves. Coming out of Curborough's final corner, I feed in the power gently before hitting full throttle hard on the main straight. Behind me, a cacophony of sound erupts and I'm thrown back into the bucket seat. The acceleration is almost GT2-esque, and the engine note is similarly brutal. Through the two, unsilenced pipes it snarls and screams all the way up to 7,000rpm, where I chicken out and shift up to second. Imagine a Mezger engine minus any muffling, and then splice it with the rawness of a chainsaw, and you'll have this SC RS in full flight. It is beautiful yet frightening, and I am quickly coming to understand the allure of the Group B era.

While the SC RS dispatches straight lines with ease, cornering proves more difficult. The shell of this car shows some of the hallmarks of a gravelspec machine, with a plethora of dents inside the front wings. In order to provide the necessary traction, the front antiroll bar was stiffened with a 22mm diameter bar, making wheelspin nearly impossible on the bone-dry tarmac.

Instead, with a reasonable amount of midcorner throttle application, the SC RS just wants to understeer into the nearest greenery. With the soft springing, the car squats down onto its haunches under acceleration and, even with the fuel tank up front, the front tyres struggle to bite into the

bitumen. Thankfully, the unassisted steering is communicative, allowing the understeer, while excessive, to always feel manageable.

If I had the confidence to find and hit the brake pedal hard I could trail brake into the corners, forcing the car to pivot around its front axis. As it is, though, the brakes are scarily ineffective at high speed. It seems the only way to drive this car fast is to use a liberal amount of throttle. Power application needs to be hard and fast in order to break the superb traction and counter the car's will to dart head-first towards the scenery. However, as Lapworth showed on my passenger laps, hustling the car leads it to bite back.

In an attempt to overcome the brilliant traction, I jab the throttle confidently through the leftright chicane. The tail violently (and almost unexpectedly) jumps round, leading me to quickly correct it. The inherent understeer masks any feedback from the rear end. I can only imagine that on rally-specific rubber, rather than the current Michelin road tyres, the effect is accentuated. This SC RS is a car that wants you to fight, but it isn't afraid of fighting back.

Stepping out of the car, I feel belittled by Prodrive's SC RS. It may not be the behemoth that is the Audi Quattro A2, but it is still a Group B car that demands respect. To drive the team's first rally car, you need to be alert at all times, and being Henri Toivonen would certainly help, too. I'm almost glad the experience is over, allowing me to lower my concentration levels but, like any adrenaline thrill, I already want to go again. Next time I want to come out on top.

PORSCHE'S FIRST 934.5



Beneath the Interscope terracotta livery lies a thrilling story on how Porsche's final 934 chassis became a prototype stopgap American racer, as Total 911 investigates...

> Written by Andrew Krok Photography by Andrew Tipping

> > GOODFYEAR

he 1970s were very good to Porsche as far as the American motorsport scene was concerned. In the first half of the decade, the 911 Carrera RSR was dominating: in 1972,

Porsche developed the Carrera RSR 2.8. Weighing just 890 kilograms and packing approximately 300 horsepower, the 2.8-litre racer was first run at the 1973 Rolex 24 at Daytona, where Peter Gregg and Hurley Haywood took first place overall. With the help of Dave Helmick, the 2.8 went on to win the 12 Hours of Sebring too.

The 2.8's successor, the Carrera RSR 3.0, began production in that same year. Utilising a highercompression 3.0-litre Typ 911/75 flat-six with Bosch slide injection, twin-plug ignition and a dry-sump oil system, the RSR 3.0 dominated just as much as its forefather, if not more so. In 1974, the RSR 3.0 went on to claim championships in two different series, the International Motor Sports Association (IMSA) Camel GT Championship and the Sports Car Club of America (SCCA) Trans-Am Series.

When Porsche introduced the turbocharged 934 for the 1976 season, the RSR teams were less than overjoyed. The 934 was based on the production 930, utilising both the 930's bodyshell and whaletail spoiler. The standard suspension was altered with solid mounts, nylon bushings and adjustable anti-roll bars. The 934 also borrowed its brakes

GOOD YEAR

934.5: the first season

The 1977 IMSA season was this car's busiest year, and also its most successful. While under the stead of Interscope Racing, this 934.5 was driven by three big names in American motorsport. Here's a timeline of its first season, along with a biography for each driver:

1977 season timeline

- 12 Hours of Sebring, Sebring International Raceway: Fifth place
- WQXI Road Atlanta 100 Miles, Road Atlanta: Ninth place
- Monterey Triple Crown, Laguna Seca Raceway: Tenth place
- Mid-Ohio Twin 200, Mid-Ohio Sports Car Course: Eighth place
- Pepsi Grand Prix, Brainerd International Raceway: First place
- Daytona Paul Revere 250, Daytona International Speedway: 40th place
- Pocono Carquest Twin Grand Prix, Pocono International Raceway: 22nd place
- Mid-Ohio Twin 3 Hours, mid-Ohio Sports Car Course: Fifth place
- Labor Day Race, Road Atlanta: Fourth place
- Daytona Finale 250, Daytona International Speedway: 47th place

Driver biographies

Ted Field

Ted Field founded Interscope Racing and was the heir to his father, Marshall Field's American department store empire. After a stint behind the wheel of the 934.5, Field would go on to start Interscope Records with music producer Jimmy Iovine. Field also tried to bring Porsche to the Indianapolis 500 in 1980, but that fell apart when officials neutered the car by limiting its boost.

Danny Ongais

Danny Ongais' racing career spanned multiple disciplines, including motorcycle racing, drag racing, and Formula One. His nickname was "On-Gas," due to his proclivity for abusing the throttle. Shortly after his time in the 934.5, Ongais moved to CART. He is the only native Hawaiian to compete in the Indianapolis 500.

Hurley Haywood

Haywood is one of, if not the most decorated American endurance racers in history. He achieved five overall victories at the Rolex 24 Hours of Daytona, two overall victories at the 12 Hours of Sebring, and three overall victories at Le Mans. All of his Le Mans wins involved Porsches (936, 956, 962, respectively). He still remains close to the brand as the chief driving instructor at the Porsche Sport Driving School in Alabama.

from the 917. The street-legal 930/75 motor received new pistons and a large KKK turbocharger to boost output to over 450 horsepower.

Somewhat expectedly, the 934 blew the less powerful RSRs out of the water. Some teams running the RSR complained to IMSA, in part because they weren't exactly excited to be forced into buying yet another entirely new car in order to remain competitive. No matter the reasoning, IMSA didn't allow the 934 to compete in 1976. SCCA Trans-Am, however, did. After watching its profits and viewership slide for a year, IMSA relaxed the rules for the 1977 season, granting access to the turbocharged Porsches.

Only, the 934 wouldn't be what arrived to race in 1977. IMSA's regulations allowed for several modifications to the 934, so Porsche dipped into the 935's parts bin to create a car specifically for

IMSA, and thus, the 934.5 was born. "The 934.5 was a weird little stopgap before the introduction of the 935," says John Ficarra, marketing director for the Canepa collection, which is the car's current home. "It followed the rules, but IMSA didn't quite know what to make of it."

The 934.5 was, as its name belies, a mixture of 934 and 935 parts. Ficarra explains: "The 934 was still, by and large, very close to the 930 road car. However, IMSA regulations allowed for a few parts to be pulled from the much more purpose-built 935, including its massive rear wing, rear brakes, and wheels. Engine output was also raised." Production was scheduled to begin at the tail end of 1976, but only ten examples would be built.

That brings us to this specific car, which is known by the last four numbers of its VIN, 0180. What makes 0180 interesting is that it was not, by nature, a 934.5 to begin with. 0180 started out life as the final 934 off the production line, and it was originally scheduled to land in the hands of Vasek Polak, one of the first team principals to bring the 934 to America.

However, there was an issue. "Ted Field's
Interscope Racing team had ordered two 934.5s to
be delivered for the 1977 season, which holds its
first race at Daytona in January," Ficarra tells us.
"Porsche knew it couldn't get both cars ready in
time, so instead of sending the last 934 to Polak, the
factory used that body to construct the first 934.5,
which would be sent to Interscope." That means
that 0180 is not only the last 934, but it's also the
first 934.5, or rather a prototype of sorts. "It was a
bit of a rush job," Ficarra says with a laugh.

As it turns out, 0180 still missed the 1977 season opener at Daytona. Field wasn't very pleased, but



Porsche made sure the vehicle wouldn't miss out on the second race, the 12 Hours of Sebring. To ensure prompt delivery, Porsche shipped the car from the factory to Florida by air. However, it was done in a bit of a last-minute rush; in fact, there wasn't even a proper way to get 0180 off the plane. Instead, Field had to utilise a nearby catering truck to get the car on the ground.

Still, even though Porsche had delivered on the promise to get the car in Florida for Sebring, it had done so without much time to spare. Instead of concerning himself with livery, Field left the car's white paint as-is, affixing a single zero to the car's doors using some spare vinyl that was lying around. Field had exactly one evening of practice in 0180 before the big race.

Even though the odds were against them, Interscope Racing and 0180 fared well at Sebring. With a trio of drivers including Field, Danny Ongais, and Hurley Haywood, the number '0' 934.5 qualified on the front row, eventually going on to a fifth-place overall finish.

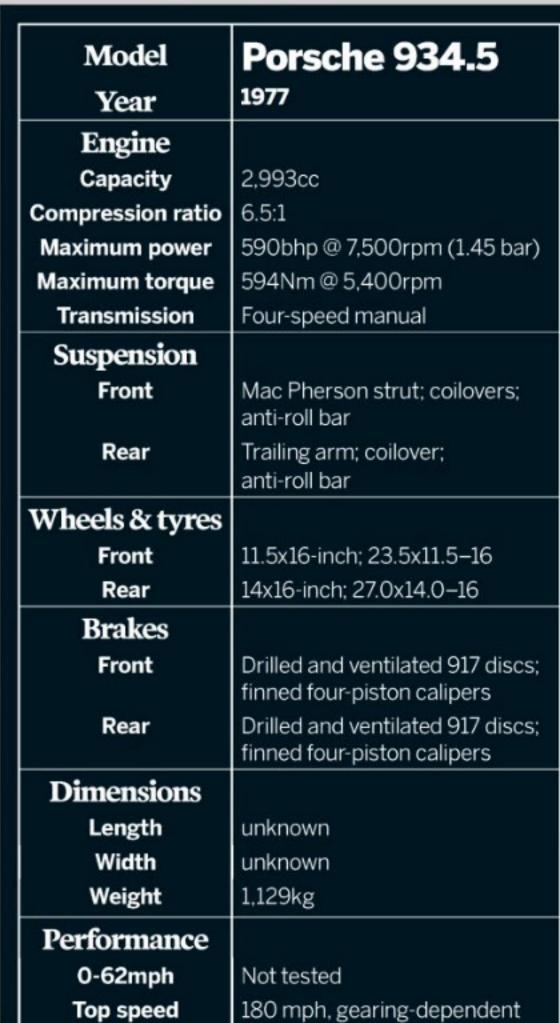
The Sebring race also marks a very strange period in 0180's history. "There are actually two stories regarding Sebring," Ficarra says. "There's a theory printed in more than one book that 0180 was not actually the car to run at Sebring. We have spent plenty of time researching this claim and after talking to multiple eyewitnesses, including a future owner who was present when the car was on the catering truck, we are standing firm in the belief that 0180 was, in fact, the fifth-place finisher at Sebring in 1977." Apparently, teams were not exactly meticulous in documenting which racing numbers were assigned to which VINs, hence the persistent confusion.

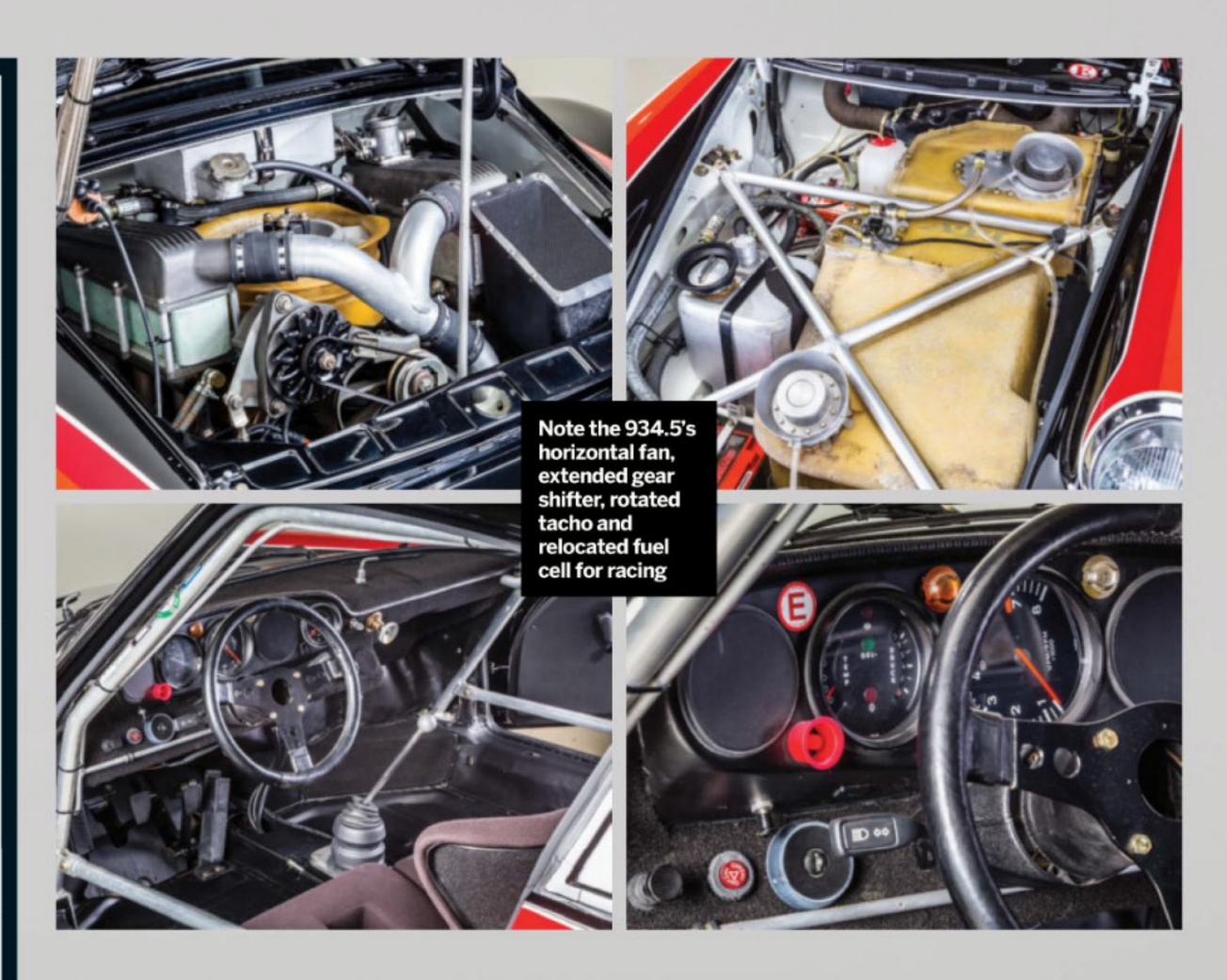
Either way, following Sebring, there was finally enough time to paint 0180 in the correct Interscope livery. The car was officially numbered '00' at this time, too. This is the same design that the car sports today, down to the exact shade of Interscope's ubiquitous terracotta stripe.

For the remainder of the 1977 season, 0180 continued to race with Field, Ongais, and Haywood. Over the course of the nine other races it completed, the car saw decent success. Six of its finishes were in the top ten, and it achieved one victory at the Pepsi Grand Prix at Brainerd International Raceway.

When IMSA announced that it would permit the more hardcore 935 to enter the 1978 season, Interscope Racing placed an order for two brandnew cars. 0180 was sold to Hal Shaw Racing, where the team itself converted the car to full-935











specification. 935 body panels were affixed to the body, the intake and fuel injection pumps were swapped out, and the aluminium roll cage was replaced with one made of steel. Using the race number 13, 0180 would go on to race in select IMSA and Trans-Am races in the 1978 season. It did not achieve a single first-place finish that year; its best outing was a second-place finish at Westwood Motorsport Park in Canada. It did, however, finish in the top ten in the majority of its 1978 races. Under the banner of Hal Shaw Racing, 0180 was driven by seven different drivers: Hal Shaw, Jim Busby, Howard Meister, Tom Spalding, Monte Shelton, Gary Belcher, and Norm Ridgely.

1979 was 0180's last year in both IMSA and Trans-Am. Hal Shaw Racing only ran the car in three IMSA races, one of which, the Riverside 6 Hours, saw the car finish in 53rd place. 0180's final race would be at the 1979 running of the Watkins Glen 6 Hours, where it finished 23rd. Now a retiree, 0180 went back to Shaw's shop in California, where it sat for three years.

Then, Tom McIntyre – the man who watched it descend off the plane onto a catering truck for Interscope – purchased the car from the Shaw estate. It wasn't driven much, though, participating in only two Los Angeles Porsche Club time trials. McIntyre then spent five years in the early-1990s restoring the car back to 934.5 specification, just as it was at Sebring in 1977 – white paint and all. Two former 911 racers, Jim Torres and Jim Borsos, spearheaded the restoration. 0180 would go on to participate in the 25th-anniversary Monterey Historics in 1998, where it has returned to multiple times since.

Most recently, the car has been under lock and key as part of Bruce Canepa's collection. "Bruce didn't think the white livery was appropriate for the car," Ficarra informs us. "He wanted it in the Interscope livery, as that was how it was run for most of its career." What followed was a painstaking restoration to bring the car back to its Interscope form. "We tore it down to the tub and repainted it using methods that would have been used when the car was originally painted," Ficarra says. And so 0180 once again transitioned from a body-in-white to a terracotta warrior.

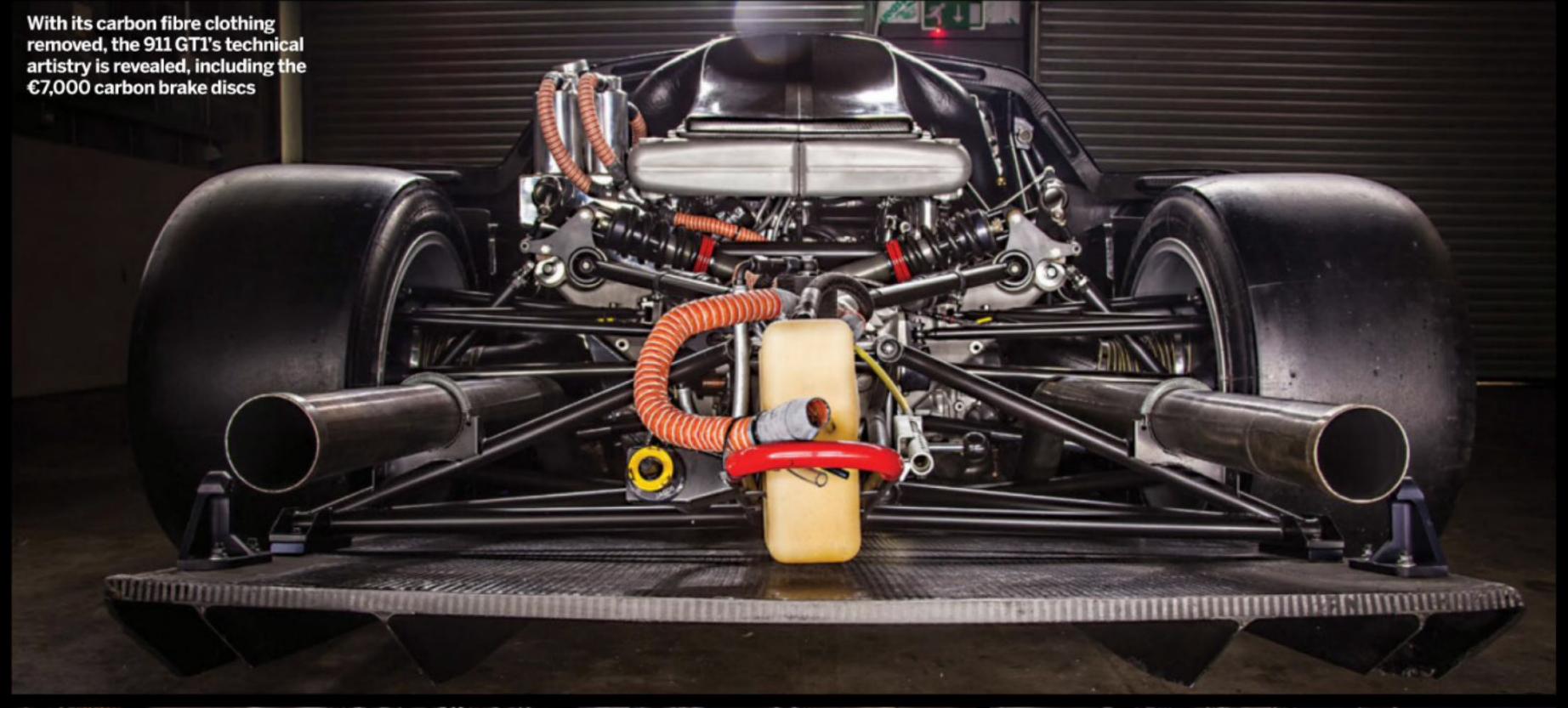
Canepa's eye for detail leaves the car looking like it came straight out of a time machine. The graphics were recreated with the utmost dedication to detail. A period racing seat is present and the turn signal lamps were replaced with oil-cooler screens.

Even the genuine BBS wheel fans are present, which is not a common occurance in these types of restorations. "Canepa is one of only a few select locations to have the original wheel-fan molds from BBS, so we were able to build a new set from scratch, just as they would have been in 1977," Ficarra explains.

Nowadays, 0180 does not participate in any races – instead, it spends its days basking in the California sunlight coming through the windows at Canepa. "The car hasn't been in a single race since it's come to us," says Ficarra. "Bruce has another 934.5 that he races. Right now, 0180 exists as more of a showpiece. We put so much time and effort into its restoration that we wouldn't want to endanger its cosmetics. We'll leave the racing to the car's future owners."

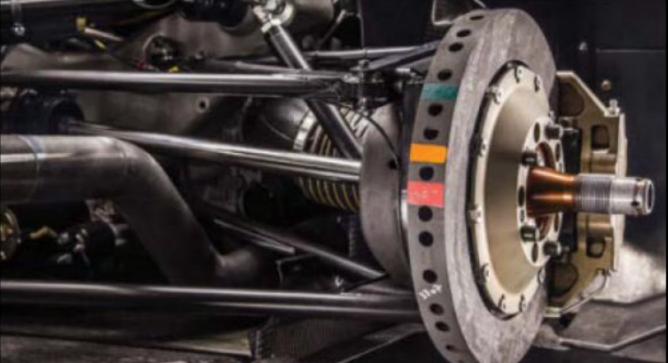
As for that second 934.5, the one some believe was the actual runner at Sebring? "The car got wadded up under the ownership of Garrison Enterprises, so the car was stripped and crushed into a cube," Ficarra tells us, laughing. "It is now Garrison's coffee table."











by wins at Brands Hatch, Spa Francorchamps and Zhuhai in the BPR Global GT Series.

This stunning entrance to the GT scene led to myriad enquiries from privateers keen to get their hands on Porsche's latest offering. Stuttgart obliged, producing nine cars for customer teams to run during the 1997 season. However, Porsche didn't rest on their laurels. While the privateers turned up at round one of the new FIA GT Championship with their 993-faced GTls, Porsche AG unveiled an updated version of their works cars.

The 911 GT1 Evo was a comprehensive overhaul. The 993 subframe was removed (although the dashboard remained) and the aerodynamics improved, most visibly with the addition of the new 'kidney' lights that would feature on the 996.

Unfortunately, neither the GT1 nor the works
Evos were a match for the 6.0-litre naturally
aspirated V12s powering the McLarens and the new
Mercedes CLK-GTR. The FIA rules dictated that
turbocharged engines needed to run 33.9mm air
restrictors as a means of balancing performance.

Even at Le Mans, where the cars ran unrestricted, the 911 GT1 Evo couldn't enter into legend. Despite the lead car (driven by Bob Wollek, Thierry Boutsen and Hans Stuck) qualifying in second place and enjoying better fuel economy than the Joest prototype, Wollek crashed on Sunday morning. The other GT1 Evo took over the lead, only for a failed heat exchanger to scuttle the efforts of Emmanuel Collard, Ralf Kelleners and Yannick Dalmas.

The rest of 1997 was similarly ignominious, as the McLarens and Mercedes continued dominating, much to the chagrin of the privateers who had signed up with Porsche. In August 1997, their loyalty was rewarded when seven of the original nine cars were updated to Evo specification by Weissach.

1998 saw a change in the FIA GT1 rules. Just one road-going example was needed for homologation, paving the way for a season of even more outlandish 'Grand Touring' cars. After the disappointment of the Evo, Porsche went to new heights with the 911 GT1-98. If the previous attempts were racing cars converted to the road, this new iteration was an all-out prototype. The GT1-98 featured a full carbon fibre monocoque, extreme aerodynamics, double wishbone suspension and a bespoke cockpit.

Although the car continued to be restricted in the FIA championship, Le Mans victory 16 came to Porsche with a concerted factory effort. As the Silver Arrows and BMW prototype efforts fell by the wayside at La Sarthe, Stuttgart took a 1-2 in the French classic. No GT1-98s were offered to customers, but GT1 Evos continued to race throughout 1998, gradually filtering into national GT competitions over the next few years.

Like the similarly incredible 917, the GT1 didn't feature at the top for long. However, for many the GT1 epitomised the extravagance of late-Nineties GT racing. Sumpter is one such man enthralled by these cars. "A lot of people are romantic with Group C, and I love Group C cars [Sumpter also owns an ex-Joest Racing 962], but I wasn't watching racing when that era was around.

"GT2s and GT1s were my thing. When I was racing Beetles and 2CVs, that's when I started watching Le Mans in the mid-Nineties. I remember standing at Paddock Hill corner and seeing both the works cars bouncing out of the pit lane at Brands Hatch," reminisces Sumpter. So when the chance to purchase a 911 GT1 Evo came around in 2007, Mark jumped at the chance – even though he didn't have the money to pay for it.

For such an extraordinary car, the deal to buy it was hardly normal. A friend of Sumpter's had initially purchased the car – chassis number 109 – from Larbre Compétition, the last team to race it. Unfortunately, a persistent misfire created more trouble than fun. "He [the previous owner] phoned me up at the Goodwood Festival of Speed. He said, 'Today's the day. If you want to buy it, let's have a



911 GT1 Evo

(1997)

Engine

Capacity: Water-cooled 3,163cc twin-turbocharged

Compression ratio: 9.5:1 Maximum power: 600bhp (estimated)

Transmission:

Six-speed H-pattern manual

Suspension

Double wishbone suspension front and rear; adjustable coil springs over gas-pressure dampers; six-way adjustable antiroll bars

Wheels & tyres

Front: 18-inch centrelock
O.Z Racing rims with 30/6518 radial Michelin slicks
Rear: 18-inch centre-lock
O.Z Racing rims with 31/7118 radial Michelin slicks

Brakes

Carbon discs and pads all round; eight-piston front callipers; four-piston rear callipers

Dimensions

Length: 4,710mm Width: 1,980mm Weight: 1,250kg

Performance

Top speed:

193mph (dependent on gearing)

"The carbon fibre panels had their history in paint"

911 GT1 Evo in the cockpit

From the outside, the GT1 Evo looks incredibly planted. The super-stiff springing works in unison with the aerodynamic grip to provide ample levels of adhesion. However, from the cockpit the story can be slightly different.

"It's a really busy car. Half the time it reminds me of the 997 RSR that I've driven. It's quite physical, especially on the way into the apex of the corner," Mark explains.

"Once you've calmed the car and got on the throttle, it feels like a Group C car on the way out the corner. It's got

lots of aero. Through the faster corners, turn it at the right point and it'll go where you want it to. It's quite calm there."

An initial introduction can also be crucial, especially when it comes to driving this 600 horsepower machine. "I was quite fortunate that they couldn't arrange full boost at the first test day. I think I needed to build up to it." With a wry smile Mark added, "Although I said I was disappointed we couldn't run it on full boost, I think in reality it was a blessing in disguise!"





deal.' I had to go and find somewhere quiet to talk, and it was done in ten minutes", Mark explains.

Sumpter managed to convince a finance company into lending him a "big share" of the money. The seller, being a friend, also allowed Mark to take his time finding the deposit. Chassis 109 was initially delivered in '993-spec' to Konrad Motorsport on 24 April 1997. Just ten days later, Franz Konrad and Mauro Baldi managed to prequalify the car at Le Mans. The car was so fresh that it was adorned with only a few sponsors' decals.

Before the 24-hour enduro, Konrad took the car (now in white, blue and green) to a pair of FIA GT rounds. At the latter event in Helsinki, the car took its best finish of seventh. La Sarthe proved an unhappy hunting ground, an accident forcing 109 out. Further DNFs at the Nürburgring and Spa lead to Konrad reverting back to a GT2 for Zeltweg.

In August 1997, the car was sent to Weissach for the Evo update. While at the factory, Konrad sold the car to JB Racing. Its new owners painted the car in the timeless Marlboro livery, although Baldi continued to pilot alongside Emmanuel Collard. Results continued to be unspectacular, and at the end of the 1997 season JB parted with the car.

Larbre then took control, placing ex-Formula One driver Jean-Pierre Jarier in the cockpit of the now-PlayStation-liveried 911 for Le Mans prequalifying. The team tried to get the race organiser to give the GTl a starting slot, but entries were massively oversubscribed. "The organisers said, 'The best we

can do is give you a GT2 entry.' So [Larbre] rallied around and liveried up a GT2 in the same colours," Sumpter explains.

After Le Mans, Porsche legend Wollek was enlisted to drive in a few FIA GT rounds, taking a best finish of ninth at Dijon in France before 109 was mothballed. "When they retired the car, Larbre basically put it in the corner of the workshop and put a sheet over it. It hadn't been touched for seven years (before Sumpter's friend purchased the car).

Mark is pragmatic about the car's minimal provenance. "It would be lovely to have a car with a longer history. But I quite like the fact the car has never been touched. It's completely back to original. It's lovely." He's right. After over a decade away from the track, this 1997 Porsche 911 GT1 Evo has been restored in its evocative PlayStation colours.

Restorations like this take time. Lots of it. But this rebuild has taken longer than originally envisaged. The initial outlay on the car, combined with a will to do it properly, extended the job over a number of years. "I'd dreamed of sitting in one, let alone owning one," enthused Mark. "I just let the dust settle and started paying the finance.

"We were also racing in Group C. The engine needed to come out [the misfire still present], so we sent it to Paul Knapton at Xtec. He'd done a 962 engine for us, and seemed the man to do the GT1."

While Xtec rectified the engine's seemingly omnipresent low compression, Sumpter's Paragon rebuilt the gearbox and suspension components.

Meanwhile, a Motec control system was fitted, replacing the old TAG 3.8 system. Suddenly, the restoration had sprung into life with the GT1 "almost in three places at once."

Then the global recession hit, and Mark's talents were required back in the showroom. "It was actually quite good fun," he muses, "but hard work." The car was put to one side, and the motorsport division disbanded.

After weathering the financial tempest, Mark decided to pass the rebuild to Xtec in 2010. Sumpter explains the handover. "I said to Paul, 'I can't afford a big monthly bill, take as long as you like'. He's taken a couple of years with it, but I think this has benefited the car. When you look at it, we haven't rushed. We've waited for parts."

The brake discs and pads were such parts.

Costing €7,000 (£5,900), the carbon components use an endurance compound, aiding longevity.

Sourced from a supplier to some of the Formula One grid, Paul "ordered them at the beginning of their F1 season, and we got pushed to the back of the queue. They took about eight weeks to come."

It was Knapton's Xtec outfit that updated the car's electronics to the Motec unit. "The TAG unit was basically like an obsolete computer. The Motec makes the car a lot more user-friendly." The control unit can operate the traction control and the ABS, although the latter isn't yet in action, as Mark wants to familiarise himself with the carbon brakes.

The engine rebuild took around 150 hours: two to

