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Last month in Revolution, I wrote about my ‘Taster Day’ of marshalling at Silverstone. I have great memories of a terrific experience and in particular the sense of camaraderie from the marshalling community who welcomed me with open arms.

Having experienced this fresh perspective, it seemed valuable to spend some more time in the frontline of other areas of the sport. Happily, this coincided with an invitation from Andy Dee-Crowne, the CEO of the HSCC, to join his team of officials as an observer for the prestigious end of season Formula Ford finale, the Walter Hayes Trophy weekend.

Returning to Silverstone once again, as I climbed the stairs in Race Control, I was struck by the irony that today I would be ensconced inside while on this rare occasion the Silverstone sun shone. By contrast six weeks earlier I had joined the Orange Family in their duties as the rain lashed down. Timing, as they say, is everything.

I was full of anticipation ahead of a busy day in race control, with 104 entries and the challenge of managing equally matched cars with the best drivers from across the country vying for success. Race control centres have evolved dramatically in recent years and are now more like something out of NASA, with multiple banks of television screens facing tiered ranks of clerks and race administrators. There is a well-structured system that allows race control to communicate with marshals and other officials around the circuit, adding to the all-seeing cameras that observe every moment of on-track action. Race administration ensures that everything keeps moving, and that competitors and officials know precisely where to be at any given moment in time. It quickly becomes apparent that the main driving transgression during every race is with track limits.

COVID has forced us to innovate in many ways in our lives, and we’ve benefited from a rapid migration to the use of electronic documentation. At Silverstone I was introduced to a new race management software package that has been trialled by many of the clubs across the country. It offers a tremendous improvement in the ability to aggregate reports that come in from around the circuit and to instantaneously pull them together and link them to drivers within the race. The most striking advantage is in this area of track limits. Messages and reports that come in from around the circuit are immediately entered into the cloud-based system, which can then be observed by all signed on users. Repeat transgressions are then automatically escalated to the next level of intervention, such as a black and white warning flag and ultimately resulting in the application of penalties.

On a related subject, many of you will have recently received a questionnaire asking for your feedback on the level of driving standards within motorsport. I’d like to thank everybody that took part in the survey and for giving us clear indications of the levels of concern. The instigation for this research came from feedback across the sport that there has been a deterioration in driving standards over the last few years. All of us accept that there is the need for a rigorous code of conduct to allow motorsport to take place. Motorsport has the capability of being very dangerous and it is a containable risk because of the fantastic evolution of safety precautions and systems, and the cooperation of everybody involved in the exercise.

Sometimes we all need a reminder of the things that we should be doing but have allowed to lapse. And with that in mind, with the competitors licence renewals that have just gone out, you’ll notice a small card included in the pack that...
CEO’s MESSAGE

Chris Pearson MBE

summarises our code of conduct and the expectations of everybody that competes. Of course, this extends beyond the competitors and must be reciprocated by all the volunteers and officials as they carry out their invaluable work. This year, we are asking for a specific commitment in signing your licence application, namely that you subscribe to this code of conduct and will uphold it even in the most challenging of times, which inevitably come to the fore in the heat of competition.

I mentioned before that there was a great deal of discussion around track limits, and this continued as I made my way to the Stewards’ room to listen to their feedback. They are there to manage the judicial process and ensure that competitors and teams have the right of appeal to decisions taken by the clerks. This is not an easy role to carry out. But it’s done so in a highly professional way, as two appeals were held while I was observing the process.

I do feel that the subject of track limits has a fundamental role to play in driving standards overall. The notion that there isn’t a fixed limit on what one can do is, by its nature, an invitation for people in a competitive environment to stretch the boundaries and find new limits. We’re working with all the key stakeholders, including the clubs and circuit owners, to arrive at new solutions regarding many aspects of on track behaviour, and we will be reporting back to our community in due course.

While all of this was being discussed in race control, there was of course, some exciting racing on the track. Formula Ford continues to be a fantastic category of motor racing, providing incredibly close competition and highly visible car control, without the aid of downforce from aerodynamics or the grip of slicks. I have no doubt that one of the reasons that we have produced so many world champions over so many years has been the vibrant nature of Formula Ford in the UK, traditionally culminating in the crucible of talent that is the Formula Ford Festival at Brands Hatch. The UK circuits are particularly tricky and unforgiving, and I’ve recently read two interviews with graduates from our own Formula 4 championship, now competing on the world stage, in which they reflect on the invaluable experience of racing at places, such as Knockhill and Oulton Park. Walking through the garages and looking at the wide variety of machinery that represents over 30 years of Formula Ford designs, it consistently illustrated the pure simplicity of the design and the ease of maintenance and consequent reliability. I think there is a great deal to be said for a formula that captures the DNA of Formula Ford. And I think that Motorsport UK can, and should, do more to promote this form of affordable and highly competitive motorsport. It has certainly given me a great deal of food for thought.

One of the highlights of my time at Silverstone was meeting a driver called Colin Turner, who at last year’s Walter Hayes Trophy event became involved in a truly horrific accident and as a result, is now a double amputee. I was very fortunate to spend some time with Colin in one of the garages and to hear him talk with unbridled enthusiasm about the sport. I told him that when I was at the Medical Centre last month, that the staff had expressed how enormously impressed and grateful they were that Colin had personally come to see them and thank them for all the help that they had given him during that traumatic time. Colin was bubbling with enthusiasm about the prospect of returning to racing and explained how he was exploring the necessary steps he will have to take to get back behind the wheel of a racing car, and to compete once again at the Walter Hayes Trophy. What an absolute inspiration to all of us, but then, as a former RAF pilot, I have the sense that he’s made of tough stuff.

As the motorsport season draws to a close, I reflect on how it has been a terrific team effort to deliver across the sport and how this bodes so well for 2022. I am sure many of you are already making plans for next year, and right about now you will be receiving your renewal pack.

Wishing everyone a safe and successful month ahead.

Best regards,

Hugh Chambers
CEO, Motorsport UK
In this month’s Revolution: Lessons learned post-COVID, as scrutineering looks to the future; how Clubs can benefit as Targa Road Rallying continues its rise in popularity, and how to get the best from your in-car action camera. We meet rescue trainer Shaun Miller, Chris Pearson – the co-driving Chief Nurse, and follow four Academy members as they progress up the motorsport ladder.
The typical cost in pounds of the entry fee for a one-day event, or around £120 for a two-day event.

The minimum number typically needed to make an event happen.

The age at which you can still compete successfully in Autocross.

The typical length, in kilometres, of an Autocross course.

The typical number of trophies handed out on a Sunday at some events in the North East.

The amount of horsepower in your car you can still compete with and potentially win.

The highest number of entries in one event run by the South West this year.

Competitor numbers are strong across the country, and have increased from 25-30 about six years ago.

The maximum length in metres of any straight on an Autocross course, according to the Motorsport UK Blue Book.

In the Channel Islands they hold about 20 Autocross events on the beach at low tide every year.

The target weight loss, in kilogrammes, by Easter that you will probably set every year as a New Year’s Resolution to be more competitive…!

The average of number of first-time drivers participating in each event, either trying out Autocross having come from other disciplines or complete motorsport novices.

One of the best things about Autocross now is that you can compete in a Clubmans status Autocross event with an RS Clubman Competition Licence. Which takes 2 minutes to apply for online and is free.

The age in years at which you can start competing in Junior Autocross. You can compete at any point in the year of your 14th birthday until the year of your 17th birthday, with engine sizes limited to 1,400cc.

The year in which the first ever Autocross series ran in the UK, organised by Taunton MC. British Autocross began in the early 1950s when clubs organised timed runs around farmers’ fields.

The reaction time in seconds that you should aim for to be first into the first corner.
THE QUEST FOR SUSTAINABILITY

What will fuel motorsport in the future? How can our sport tackle the carbon crisis? *Revolution* asked former top-flight Formula One engineer Paddy Lowe to share his insights.
The FIA has announced that the WRC will be moving to a net zero fuel from 2022, and by 2025 Formula 1 wants a new power unit that will run on 100% sustainable ‘drop-in fuel’, designed to help the championship achieve its goal of being Net Zero Carbon by 2030.

These major showcases of technology will capture the imagination of the media and fans around the world, which should be the accelerator of acceptability that gives political legitimacy to the need for a dual approach to solving the problem of net zero transportation.

Former world championship winning F1 engineer, Paddy Lowe, has established a new enterprise focused on these Net Zero fuels. “The need to move away from fossil fuels has never been clearer,” says Lowe. “We are in a climate emergency. Electric vehicles are fantastic for many situations where weight and endurance are not performance imperatives. However, the low energy density of batteries compared to liquid petroleum fuels (gasoline, kerosene, diesel) means there are many applications where electric power is not an option and will not be in the foreseeable future.”

Zero Petroleum’s vision is to become a leading supplier of carbon-neutral fuel, created by recycling water and carbon dioxide using renewable energy. “The fuel we will produce is a drop-in solution,” explains Lowe. “It will enable vehicles to run without any engine modification and to deliver the same performance, creating a perfect net zero carbon energy source for the transportation, motorsport, and classic car industries. The advantages of Zero Petroleum lie in their ease of application. They can be used in combustion engines and plug-in hybrids and can make use of the existing network of petrol stations.”

It is Motorsport UK’s intention to introduce certain championships that will run purely on net zero fuel as soon as possible, which will deliver a practical demonstration of the way that these fuels can provide exciting, affordable and technically viable solutions at a national level of competition.

How will all this take shape and what bumps in the road lie ahead? From boardroom to trackside, Lowe gives us his very own viewpoint on how motorsport must adapt to survive:

As a leading member of the Motorsport UK Sustainability Committee, can you give Revolution an insight to the workings of the committee and share some of its recent activities (since August 2021)?

I’ve only very recently joined the committee. It is a great honour to be able to take part in important work for Motorsport UK. There is the promise of creating some very good strategy in this very important period in the history of industrial society.

Motorsport has a history of taking the lead technologically in many sectors, not just within motorsport itself. That should apply in the context of sustainability too, so I am very pleased to be able to contribute. As an engineer, I think I can bring some good technical perspectives to the discussion and help to shape an appropriate strategy for the years ahead. A lot of the work so far has been context setting.

It is very important that motorsport faces up to the core challenge – the combustion of fossil fuels. The spotlight is shining quite brightly on combustion of fossil fuels and the associated emission of carbon dioxide. It is very important that Motorsport UK focuses on that. It is recognised within the committee that this is where the attention needs to be, addressing the consumption of fossil fuels at a fundamental level in a sustainable manner. A manner that is not creating new problems, that is scalable, and that is appropriate to the future of the planet and the people on it.

What are the next steps that championships need to take towards Net Zero motorsport here in the UK?

I do not have all the answers here, but that is the problem that we face. Motorsport UK needs to take care not to create supposedly net zero motorsports that do not stand up to scrutiny and become effectively greenwash.

This has been one of my inputs to the sustainability committee, to take great care over the standard of offsets to be used, if that is the pathway that is selected.

As an industry, we do have to be very careful about offsetting, which is one of the pathways to net zero. So, what does net zero mean? In a fully synthetic fuel, it means something that has no relationship at all to fossil fuel resources. But it also can mean something else at the other extreme, burning conventional fossil fuels, and then finding some way to mitigate those carbon emissions by capture and storage in some manner. The spectrum of providers of such offsets is very wide indeed.

There is an interesting report in Nature studying Microsoft, which received hundreds of tenders for offsets for the Microsoft organisation, and yet were only able to accept a very, very small number of programmes that were found to be acceptable. A true offset would have to recapture that carbon and store it within a geologic format from where it came. There are providers doing that, but the prices for the proper solution of that type are higher than the cost of the low-grade offsets that are on the market.
The synthetic fuel market is expanding: Prodrive has developed a fuel with Coryton Advanced Fuels, Porsche is exploring its own synthetic fuel production on Chile, while renewable racing fuel from ExxonMobil has been used in the Porsche Supercup this year. Your own company, Zero Petroleum, has some competition. Where will all this lead?

To power a motorcar of any sort, including racing cars, we essentially have three solutions for the powertrain. We can be all electric, we can be hydrogen powered or we can use liquid fuels like gasoline. Or there are hybrids of one or two of those.

In that order, electric, hydrogen, gasoline, you progress down an energy density graph, where batteries are 50 times heavier than the equivalent energy within a volume of gasoline.

In a racing context, particularly, that is a very significant number. You simply could not build a Formula One level of performance in an electric vehicle. The physics do not support it in terms of electricity storage, and nor will they in the foreseeable future. It is not a matter of development; it is not a matter of technology. Batteries have already moved up a terrific performance curve but that will not continue at that gradient. We are working with two totally different sets of physics. One is combustion, which is about molecules and the separation of molecular bonds, and one is about the movement of electrons, which is a much less dense activity.

I must stress that, the electric solution for personal transport is very much the right answer. But what I see in motorsport is that all three solutions will emerge in different contexts, and we fully support this. Each has its merits, but I do think that liquid fuels are here to stay for high-energy formats.

So, we need a renewable form of gasoline. Within that sector you have biofuel solutions, which are fuels made from agriculture; you have fuels made from waste, so that could be fossil waste or biological waste, plastics etc; or you have full synthetics, which is what Zero Petroleum designs and manufactures, that is fully man-made from first principles using water for the hydrogen and carbon dioxide from the atmosphere. By that method, you create a fully circular process. The fuel, while it emits carbon dioxide on combustion, that same carbon dioxide is reused in due course to make new fuel. So the net carbon is zero, it is completely fossil free, there is no fossil carbon involved, it is all circular carbon via the atmosphere. That is a net zero, fully sustainable process and is very scalable, but still quite early days. I think in the long-term, and I am not alone in that thinking, synthetic petroleum products will be the appropriate solution for a wide range of applications, not just in motorsport, but long-range aviation, extending into other less obvious things like agriculture, for combine harvesters and so on.

There are still a very small number of providers and solutions that work on this sector relative to the size of the market and the demands on the planet, so I think there are quite a few different technologies to produce synthetic gasoline, each with their advantages and disadvantages, and we will see over the next decades where that settles out. At the moment we really need to promote a very open market and a very open-minded approach to technology in this sector.
The FIA has set a timetable for both WRC and F1 to be using carbon zero fuels. How realistic are these targets? Can they be met with existing technology?

It is absolutely appropriate that the FIA should be setting targets in this aspect. It addresses the core issue within motorsport, in terms of sustainability, and the FIA, as the regulator of international motorsport, they really are the right ones for setting the pace.

Motorsport UK wants to implement its own net zero fuel championships as early as next year. How do you see this being delivered?

We have a gasoline that we have already been making which is of a quality to run in whole blend, 100% fill, as a drop-in in current cars without modification. That is absolutely possible, the challenge at the moment is the scale-up and build-out of capacity to meet requirements.

Where Energy Density is critical, and supply limited, is there a danger of synthetic fuels being restricted to just commercial aviation?

I think this can be market driven. If you have a market that wishes to invest in plants and pay the right price for products from that plant, then it deserves to use it. That comes down to motorsport taking that pioneering stance and taking that opportunity so as not to be pushed aside.

If you have a fossil-free air freight solution using synthetic fuels, then it is fossil free. So, there is not a problem to buying an avocado from Africa if you are willing to pay for it. Obviously, other factors need to be considered, but purely from a carbon emissions sense, that is how it is.

Could motorsport become demonised in the future? A niche activity deemed unworthy of the scarce resources it consumes?

If motorsport does not take a lead, this will be done to it by others. When global warming and the climate crisis escalate further, the things that will come under increasing scrutiny first, and be socially outcast, are optional leisure activities, discretionary activities, that create fossil carbon emissions and motorsport is clearly in dead centre of that category.

It already does not have the greatest of reputations from an environmental perspective, so if it does not do something about its own housekeeping, others will come from outside and potentially try to shut it down. We must be clear to imagine these futures that are on the horizon as the crisis becomes more extreme. But the important point is there are solutions, I think now is the time to take decisions to steer towards them.

Target Zero

Zero Petroleum is dedicated to the production of “net zero” petroleum-based products (fuels and petrochemicals), synthesised by the recycling of water and carbon-dioxide using renewable energy. Society has gained immeasurably from the unique advantages of hydrocarbons; Zero Petroleum’s vision is to be a prime constructor of a fully circular and carbon-neutral supply at scale.
OUT OF THIS WORLD

Impaktor by Wera
Motorsport UK Academy supports Movember for the second consecutive year with its #60kmCircuitChallenge, and encourages the motorsport community to ‘Move for Movember.’

In support of the month-long Movember campaign to raise awareness of men’s mental health, the Motorsport UK Academy has selected race circuits throughout the UK which make up a distance of approximately 60km. Sixty kilometres represents the 60 men lost to suicide each hour, every hour across the world, and we are welcoming the motorsport community to join our team and get active with the #60kmCircuitChallenge.

The Mo the merrier

You don’t have to be an ultra-athlete to get involved. Run, walk, sprint, strut – how you move through your 60km is up to you! Remember to ask friends, family, teammates and colleagues to move with you to support your efforts. Get onboard here: https://uk.movember.com/team/2396549
A TRIBUTE TO SIR JOHN ROGERS

Motorsport UK is deeply saddened by the passing of Sir John Rogers, a former Executive Chairman of the RAC Motor Sports Association, as the governing body was then known. He was 93 years old.

Air Chief Marshal Sir John Rogers enjoyed a long and distinguished career in the military - a former aircraft apprentice and Cold War fighter pilot who rose to serve on the Air Force Board of the Defence Council.

During his RAF career he maintained his long-standing interest in motorsport, and in the late 1980s took part in many events at Silverstone, Brands Hatch, Cadwell, and Donington Park. By this time, he had acquired LM6, a 1931 Aston Martin Team car, and regularly featured in races in the same event as his two sons who took it in turns to drive their second Aston Martin Le Mans.

Sir John's motoring hobby eventually turned into a second career and in 1986 he became a director of David Wickens' British Car Auctions, which encouraged him to renew collecting. His daughter's wedding became a spur to buy a 1923 Rolls Royce. His job took him all over the world to different motoring events, and he regularly competed in classic car trials.

In 1989 Sir John became the executive chairman of the RAC Motor Sports Association, a position he held for 10 years before being made a Life Vice-President. In 1995 he became a member of the Fédération Internationale de l’Automobile (FIA) World Motor Sport Council, a role which took him to many international Formula 1 events as an official and UK representative.

Our thoughts are with Sir John’s family and friends.

CLUBS SURVEY UPDATE

In July this year Motorsport UK conducted a survey of all its affiliated Clubs. Sent to over 670 clubs, the survey produced a response representing 25% of member clubs, which supplied data and information back to the Club Development Team.

From this data Motorsport UK has been working to identify the needs and desires of the Clubs to help create an action plan for 2022. One area that has been highlighted is a growing nationwide concern as to the availability and access to venues for Clubs to run their events. This knowledge, and the other information captured by the survey, is now being channelled into the Motorsport UK Club Toolkit. This suite of tools and services is being developed to help Clubs tackle a variety of issues and challenges.

The Toolkit is timetabled for release early next year, and Motorsport UK is looking forward to helping Clubs to make the most of future opportunities and supporting their growth.

Any Clubs that require support with a current venue, can contact the Competitions and Clubs Team on competitionsandclubs@motorsportuk.org.
FIA RALLY STAR UK WINNERS ANNOUNCED

Following the National Final held at its Bicester headquarters last month, Motorsport UK has announced the FIA Rally Star UK winners

Robert Wilson and Katie Milner have been selected to represent the UK in the Continental Final, and will advance alongside UK finalist John Bebnowicz-Harris, one of the top #RallyAtHome competitors, to the next stage of the FIA’s global talent detection programme, designed to unearth the next rising star in the discipline.

Upon arrival at Bicester, the finalists were put through their paces with the first of two timed heats around a designated course in identical Vauxhall Corsa road cars, in an exercise designed to test their car control and to find out who can achieve the fastest time.

Following a fitness test, conducted by the Porsche Human Performance team, and incorporating challenges such as the plank and beep tests, the finalists were sent back out on track for a second opportunity to better their benchmark times.

Notably, each competitor posted an improvement on their previous attempt, before rounding out their evaluation with a media session alongside journalists from the motorsport and automotive sectors. This ensured a complete and thorough overview of the finalists’ abilities in each of the three key areas required to compete to a professional standard.

After assessing their scores and times, Wilson, Milner and Bebnowicz-Harris were unveiled as the UK’s entrants into the Continental Final, set to be held in Germany on 28th – 30th January 2022, where the finalists will have an opportunity to sample the LifeLive TN5 Cross Car.

The winner from each continent will embark on a season of coaching and development in 2022, including entry into a minimum of six rallies to build up crucial experience, before embarking on a fully-funded campaign in the Junior World Rally Championship as part of the FIA Rally Star team in 2023.

The top three competitors will be retained for a second season to give them a shot at taking the title; should any of them achieve this, an additional programme the following year in WRC2 will be provided to continue their progression.

“I’d like to start by saying congratulations to each of our FIA Rally Star UK winners”, added Hugh Chambers, CEO of Motorsport UK.

“The standard of competition across the board from our finalists was of an exceptionally high standard, so to advance through to the Continental Final is certainly no mean feat.

“Each of the challenges was designed to test each competitor in the key areas required to compete in Rallying professionally, not just as an exercise for deciding who should progress further in the programme, but also to provide instructive feedback for their future development.

“Everybody at Motorsport UK would like to wish Robert, Katie and John the very best of luck going forward in the Continental Final, and we look forward to monitoring their progress.”

Motorsport UK would like to congratulate its UK representatives for the FIA Rally Star Continental final, and wish them the best of luck. Also, to the rest of our UK finalists, who impressed on the day with their passion and enthusiasm.
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The second stage of the governing body’s talent pathway, which consists of multiple programmes and equips the UK’s most promising young drivers with the knowledge, skills and attitude needed to maximise their performance, is targeted at individuals aged 15-24 in active competition within Junior and National championships.

For drivers, the first of a two-year programme will be focused around an introduction to the key principles of development within the sport, alongside performance management provided by the Academy’s expert in-house team of coaches. In the second year, the programme consists of more in-depth technical knowledge about elite sports performance with insight from industry experts.

The one-year Co-Driver programme is for those with the potential to reach an elite level in rallying and features individualised one-to-one performance management coaching, workshops, expert industry insights as well as collaboration with the driver’s programme. Applicants for this programme must be aged 18 years or above.

Designed to support the stage of the pathway beneath Team UK, the Team UK Futures programme is for competitors looking for an opportunity to progress both professionally and personally in a supportive, high performance environment.

Applicant requirements (at the time of application):
- Aged 15-24 (18+ for co-drivers)
- Hold a Motorsport UK-issued competition license
- Hold (or be eligible to hold) a British passport
- Regularly competing at Interclub events or above
- Demonstrate the potential to achieve excellence within their chosen field
- Demonstrate the values and behaviours expected of an ambassador of Motorsport UK
- Demonstrate high levels of commitment and desire to develop and progress in the sport

Successful applicant’s obligations will include:
- An expectation to attend all programme events (dates to be advised upon selection)
- To develop effective communication channels with Motorsport UK Academy staff and coaches
- Represent and promote the Motorsport UK Academy (and associated programmes) appropriately

REGISTER FOR YOUR FUTURE NOW
Motorsport UK Academy welcomes applications for the Team UK Futures programme for both drivers and co-drivers for 2022

The closing date for applications is Monday 17th January 2022.

To submit an application, Click Here

Revolution - November 2021
NEW FIRE EXTINGUISHER REGULATIONS

From 1st January 2022 all vehicles with a mandatory requirement for a fire extinguisher will need to comply with the new regulations.

Safety is paramount. In the event of an accident, escape is the key priority. The fundamental intention of any fire extinguishers carried in motorsport vehicles is to allow the occupant(s) time to escape from a burning vehicle.

- Since 1st January 2018, it has been a requirement for all extinguishers to be serviced in accordance with the manufacturer's guidelines or every 24 months, whichever is sooner.
- Since 1st January 2019, new build vehicles in disciplines that require a fire extinguisher must comply with current (K) Competitors: Safety; Appendix 3.
- From 1st January 2022, all vehicles in relevant disciplines that require a fire extinguisher must comply with current (K) Competitors: Safety; Appendix 3.

So from 1st January 2022, all vehicles for which there is a mandatory requirement for a fire extinguisher will need to comply with the new regulations in current (K) Appendix 3. The individual discipline regulations will define whether the requirement is for a plumbed-in or hand-held system. If your vehicle was built before 2019, and requires a plumbed-in system, you will need to ensure that it is fitted with one homologated by the FIA. There are currently two FIA homologation standards: Fire Extinguisher Systems in Competition Cars (1999) and FIA Standard 8865-2015.

Details of the systems homologated by the FIA can be found on the relevant FIA Technical Lists on the FIA Website: https://www.fia.com/regulation/category/761

For FIA-homologated plumbed-in systems, the extinguisher capacity will be defined by the homologation, so there is no minimum capacity as such. However, competitors should note that only certain Fire Extinguisher Systems in Competition Cars (1999) systems are homologated for use in stage rallying; these systems are indicated on FIA Technical List No.16 with a tick in the column headed ‘Rally’, and national regulations stipulate a minimum 3kg capacity for these systems. All FIA standard 8865-2015 homologated systems are eligible for rallying.

Hand-held extinguishers will need to comply with the regulations in (K) Appendix 3, articles 3.2.2 to 3.2.7, or comply with FIA Standard 8865-2015. The hand-held extinguisher must contain one of the permitted extinguishants and the regulations detail the minimum capacity of the extinguisher in either litres or kilograms depending on the extinguishant used.

Servicing
A fire extinguisher is not a ‘fit and forget’ item; regular servicing and maintenance of extinguisher systems is vital to ensure they are ready to work when needed. For any FIA-homologated extinguisher (List 16 or 52), the servicing must be carried out by the manufacturer or their agent. This is part of the FIA homologation requirements, therefore getting an FIA-homologated system serviced outside the manufacturer’s network will effectively void any homologation.

Firesticks – what you need to know
Under the current regulations, Firesticks (and similar products) do not meet Motorsport UK requirements where an extinguisher is mandatory, but may be considered as an additional item, to be carried at the competitor’s discretion.
For an FIA-homologated extinguisher, the homologation regulations define what work must be undertaken as part of the service. This is a very thorough service that will involve, among other checks, the internal and external examination of the bottle, replacement of all seals, cleaning and testing of the operating heads and nozzles, and replacement of the extinguisher contents. The servicing schedule mandated as part of the FIA homologation is extensive and only the manufacturer will have access to the replacement parts and specialist tools required to undertake this service.

If you have an FIA-homologated extinguisher that is overdue a service, the first thing to do is to contact the manufacturer to see if they can assist. If the manufacturer advises that the time elapsed since the last service is too long and the system cannot be serviced, then the only option is for the extinguisher to be replaced.

DRIVING FORWARD RACIAL DIVERSITY IN MOTORSPORT – INAUGURAL ANNUAL CONFERENCE

On the 25th November at the Bicester headquarters, Motorsport UK’s Racial Diversity Sub Committee will welcome speakers and panellists to explore how best to create a more racially diverse sport together.

Motorsport UK’s Racial Diversity Sub Committee, which sits within our broader Equality, Diversity and Inclusion Committee, features the following dedicated members:

- **Mike Bugembe**
  Bestselling author, founder, and executive adviser in data, analytics, and AI

- **Barbara Phillips**
  PR strategist, anti-racist activist, I&D consultant, and Founder of Brownstone Communications

- **Jahee Campbell-Brennan**
  Masters educated engineer with eight years of industry experience and Founder of high-performance engineering consultancy Wavey Dynamics

- **Francis Mensah**
  Big 4 Management consultant with over 15 years’ of experience and independent consultant

- **Carl-Daniel Chase**
  Skilled car and bus engineer, semi-experienced racer, and avid motorsport supporter

- **Barry Peter Alleyne**
  Freelance building surveyor, with over 35 years’ experience managing capital investment projects in both private and public sector organisations

- **Sophia Bi**
  Assistant Production Manager at ITV and motorsport marshal with the British Motorsports Marshals Club

We look forward to sharing the ideas and opportunities the conference generated with you in a future issue of Revolution. Should you be interested in attending, please contact events@motorsportuk.org for more information.
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FORESTRY ENGLAND GIVES MOTORSPORT THE GREEN LIGHT

Following the successful running of Trackrod Rally Yorkshire and Round 5 of the Britpart British Cross Country Championship in Kielder at the end of September, motorsport events have resumed on the Forestry England estate. No additional restrictions or guidelines have been imposed. Event organisers should continue to work with their Forestry Liaison Officers and local Forestry England Districts, to ensure they follow current Motorsport UK and government COVID-19 guidance when planning and running events.

Trackrod Rally Yorkshire saw record spectator numbers attend the event in Cropton and Dalby forests.

In further good news, Forestry England and Motorsport UK have now agreed a temporary extension to the Master Agreement for 2022, with work continuing on a new Master Agreement, which will come into effect from 2023 onwards.
Established in 2005, SACRED has cafes in London & Cyprus and has established partnerships with banks and hotel groups worldwide. In sport, SACRED is a proud partner and is in the 12th year as the Official Coffee to Porsche Motorsport GB. The partnership with Porsche Motorsport expanded in 2015 to include Porsche Motorsport worldwide programmes via Stuttgart and currently include the Porsche Mobil 1 Supercup, Porsche WEC GT & Le Mans 24hr and Tag Heuer Porsche Formula E. SACRED gourmet coffee is loved by motorsport drivers & teams globally for its great taste and high quality caffeine that keeps them focused pre-race or during training off the track.

2021 SACRED joined Motorsport UK as the Official Coffee Partner. Members will be able to enjoy SACRED coffee and specialist teas in the new HQ at Bicester Heritage as well as avail themselves of special offers through the Member Benefits Programme.

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CALLING OUT FOR A HERO

An innovative platform to help offset the carbon footprint of motoring activities has been launched for motorists and motorsport enthusiasts. Called NET-HERO, the digital tool guides users through a simple three step process to become environmentally responsible drivers.

Using NET-HERO, conscientious drivers can turn climate awareness into climate action. The AAA+ rated programme helps motorists offset internal combustion engine emissions from as low as two pence per mile. Each carbon credit purchased contributes to supporting sustainable projects around the world, including afforestation, restoration of peatlands and grass protection. This rating has been developed using a proprietary methodology for assessing the efficacy of certified carbon projects called the BeZero Carbon Rating.

NET-HERO references a database of millions of registered vehicles, allowing drivers to accurately calculate the greenhouse gas emissions for both new and classic cars.

- Enter vehicle details to calculate the carbon footprint
- Contribute to high quality carbon projects by purchasing from the NET-HERO offset basket, developed with decarbonisation specialists BeZero Carbon
- Receive an email certificate and a custom vignette to showcase environmentally friendly driving

For more information and to become a NET-HERO visit https://net-hero.org

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THE MANX CLASSIC

Comprising three closed road hillclimbs over three days, at three different venues, the 2022 Manx Classic will run on 28th-30th April

Organised by the Manx Motor Racing Club and first held in 2010, the Manx Classic comprises of the Sloc Hillclimb on the Thursday, followed by Creg Willey’s Hillclimb on Friday, and the Lhergy Frissell event on the Saturday.

**Day one:** The Sloc Hillclimb is on the A36 situated in the south west of the island north of Port Erin and is 1.06 miles in length rising by approximately 1 in 14 to what is the highest finishing line of any hillclimb in the UK.

**Day two:** Creg Willey’s hillclimb uses part of the beautiful Glen Helen section starting on the A3 at Glen Moar, just after the 9th milestone of the TT Course and heads north through a series of curves past Black Dub and Girdwood Bridge to the left-hand corner at Glen Helen, where the climb starts in earnest, passing Sarah’s Cottage, with a challenging camber, and on to Lambfell Moar before arriving at the finish on the Cronk-Y-Voddy straight after 1.39 miles.

**Day three:** The 1.48 mile Lhergy Frissell Hillclimb with the start line in Barrule, Ramsay on the TT course at the beginning of the mountain section. Starting with the first tight left, Ramsey hairpin, followed by Barrule steps, Waterworks, then up and round the world famous Gooseneck and a short straight to the finish line having risen by a gradient of 1 in 23 and 100 metres in height.

There are categories catering for most types of vehicles, including Edwardian and Bugatti cars, plus Pre-1941, Pre-1968, Pre- and Post-1981, with each category split down further into classes. Additionally, the organisers are happy to create classes for five or more individual marques or models.

The entry form and regulations are available on the Manx Motor Racing Club website. Further details at [www.manxmotorracing.com](http://www.manxmotorracing.com)
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Achieving higher performance and efficiency, and more robust engines

It sounds ideal, but these two cannot be achieved at the same time, or at least that was thought. BDN Automotive wants to open the box and see what is happening inside the combustion chamber – and use this knowledge to help improve engine efficiency and performance.

Combustion analysis is an investigation method relying on high-frequency in-cylinder pressure measurement in an internal combustion engine. By capturing and visualising the pressure trace against crankshaft position in a running engine, all the vital thermodynamic processes can be observed. This gives engine developers a much better insight to how effectively the given engine works. With cylinder pressure investigation it is possible to analyse both the combustion, and the gas exchange process as well. That significantly improves calibration or further engine development.

Using the pressure signal, the most important cycle parameters can be calculated. These include MFB 50 (Mass Fraction Burned), which shows where 50% of the energy is released, or IMEP (Indicated Mean Effective Pressure), which directly correlates to the engine's torque. The graph (Fig: #1) demonstrates a comparison between different ECU setpoints, where two different air-to-fuel ratio and ignition timing variations are shown to observe the influence of the different calibration factors at the same operating point (RPM, MAP).

Ignition timing effects the magnitude and location of peak cylinder pressure. Air-to-fuel ratio effects combustion duration, and the fuel's latent heat affects peak temperature, which brings the engine closer to the knock limit. However, knock is not binary, it is a high frequency component of the pressure wave, and it is crucial to know its amplitude. Knock is not harmful if its amplitude is within the predefined limits. This can be only observed by looking at the cylinder pressure trace – see Fig: #2.

The engine's performance can be optimised on the dyno, and on the road or race track, using the IMEP calculation. The whole process is significantly safer than before, as harmful knock can be avoided while keeping the engine at its limits. Stop guessing and tuning blind, sign up for our test programme and let the facts convince you!

BDN Automotive’s mission is to provide affordable and easy-to-use combustion analysers in all levels of motorsport. For further information, see www.bdn-automotive.com
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THE FUTURE OF SCRUTINEERING

Motorsport UK is reverting to pre COVID-19 scrutineering methods while simultaneously addressing solutions for the future in a considered way. Will Gray spoke to members of Motorsport UK’s Technical team to discover what that future could look like.
A season on from the implementation of response measures for motorsport during the COVID-19 pandemic, the lessons learned are about to be used to steer the direction of an evolution in scrutineering.

The scrutineering process is one of the most vital elements of a race weekend, ensuring the safety and eligibility of every vehicle going out on track, and the social distancing measures required by COVID-19 last year demanded innovative new approaches to be rapidly deployed.

The experience has opened eyes up to both the benefits and challenges of new procedures, and while traditional service will soon be resumed, this is only for the short-term while Motorsport UK draws from a collective of viewpoints to develop a new plan for the future.

John Ryan, Motorsport UK’s Sport, Safety and Technical Director, explains: “We have heard a wide range opinions on the approach to scrutineering during COVID-19 times, hence the reason we are now looking to launch trials, during 2022, to determine how to modernise methods.

“We want to maintain and improve safety and also to improve the customer experience and efficiency of meetings. To do that, we are undertaking a thorough review and hope to gather feedback from all parties concerned, including competitors, officials, clubs and venues.”

Lessons from COVID-19

The scrutineering procedures introduced during the COVID-19 pandemic were an emergency measure. They were part of an impressive and rapid reaction to changing times to enable the sport to restart under exceptional conditions. However, the rapid rollout required meant they did not go through the usual proposal, testing and approval procedure.

“That was the only way it was possible to get motorsport action up and running again,” explains Ryan. “At a time when the camaraderie and excitement of competition was sorely missed, it was important for us to get people back in action as rapidly, but as safely, as possible when permitted to do so.

“At their inception, it was not intended for the new procedures to be a permanent change. They were designed simply as temporary solutions, and it was always the plan for Motorsport UK to revert to traditional scrutineering measures once it was possible to do so.”

The temporary measures included self-declarations for eligibility and safety, which were provided pre-event with only a percentage of the field physically seen by the scrutineers on site. This extended to PPE, and included the acceptance of photos to enable evidence to be viewed remotely.

From the start of next year, however, the COVID-19 scrutineering guidance will be withdrawn and all events in all disciplines will revert to traditional procedures. All cars will be required to undergo physical scrutineering, but competitors will continue to be required to complete a scrutineering technical declaration as part of their signing-on, as has been the case during the pandemic.

That is not the end, however, it is just the beginning. The temporary measures have left a lasting legacy. The potential benefits have been noted, as have the limitations, and it is now time to take stock, review and test procedures, to strike a balance on how best to improve the system.

Self-declaration

One of the major changes to scrutineering procedures during the pandemic was the implementation of competitor self-declaration. This has brought with it both positives and negatives, and the analysis of these will play a crucial part in deciding if, and how, this process could be evolved for the future.

It is a model that is used at the top level of the FIA in Formula One, with teams producing their own scrutineering declarations and submitting to the Technical Delegate a written report of what they have checked. In principal, that is where the genesis of the idea has come from.

“During the pandemic, trying to find new ways of scrutineering the cars without reducing the safety was a big challenge,” recalls Ryan. “It led us to explore a format that continues to have checks on cars but to have them not carried out by the scrutineers, but by the competitors themselves.

“We need to remember that competitors have been, and always will be, responsible for the eligibility and safety of their equipment. The scrutineer is there to offer help
and support and to do basic checks, but the time given to scrutineering procedures at an event makes it impossible for them to do a thorough examination.

"The new self-declaration process led to a significant growth in inquiries from competitors and preparers of cars to the technical team around the eligibility and safety of vehicles. That should be seen as a positive. We also found in many cases that the reduction in time required for pre-event scrutineering led to an increase in efficiency at meetings."

Along with many positives, however, there were also some areas that could be improved upon. For example, new starters with less prior knowledge or experience of scrutineering missed out on the guidance and support from the event officials.

There were also reports that competitor standards had dropped. In a survey of National Grade (Chief) Scrutineers, more than a third of respondents said they had seen an increase in the number of vehicle eligibility issues, while nearly two-thirds said they had seen increased numbers of vehicle or equipment safety issues.

"We are now striving to find the right balance between carrying out the correct checks needed and ensuring that the meeting continues to move smoothly," says Ryan. "This will involve looking into different methods of scrutineering and which can best work for which disciplines. An element of self-declaration is likely to be part of that, but defining its final form is the next task for 2022."

Vehicle Passports

Another part of the review is the consideration of a Digital Vehicle Passport system. The Vehicle Passport already exists in a physical form for certain categories, such as Stage Rallying, Rallycross and certain Speed events, and digitising it has the potential to provide significant benefits to organisers and competitors alike.

The approach is similar to the route the NHS has taken with doctors’ records. Many years ago, a GP had to refer to physical notes that only existed in a filing cabinet in their particular surgery. Now, through digitisation, records can be accessed far more widely.

"At the moment, where a passport system is in place scrutineers will write down any issues in the passport so that the comments can be read the next time the car goes through scrutineering," explains Motorsport UK Technical Manager Michael Duncan. "It is currently under-utilised and it does not have a history of where the car has been as passports do not need to be noted every time.

"Moving to a digital app-based version would enable vehicle data to be held electronically in a central database and accessed through an app by competitors and scrutineers. That would enable competitors to manage their vehicle passports themselves, removing what is currently a very manual process.

"In the context of Future Scrutineering, we are looking at the potential for Digital Vehicle Passports to be used to track
vehicles through events, producing a full record of their scrutineering. We are also exploring ways to use the app to guide competitors through the self-declaration process step by step.

“It should make for an easier process through scrutineering, saving competitors time at events, while also giving a bit of provenance to the vehicle. For example, if a competitor comes to sell a competition car and it has a Digital Vehicle Passport with 10 years of clean scrutineering passes, that will be a benefit in the same way as a service record on a car.”

Motorsport UK is developing a Beta version for testing, and it is hoped that the ability to provide interactive content and updates to competitors, with reportable data on all competing vehicles, should greatly assist the checking and tracking of cars once scrutineering procedures are changed. In conjunction with the introduction of a low cost Incident Data Recorder (IDR), it has the potential to herald a new modern age of vehicle safety.

Building on innovation

Prior to COVID-19, the Motorsport UK Technical Committee had already been discussing a desire for more extensive scrutineering throughout events, in addition to pre-event scrutineering. These conversations were in their formative stages when the pandemic hit and forced focus to quickly shift to emergency measures.

Now that motorsport is firmly back in action, the Working Groups at Motorsport UK are moving through a process to develop new methods of scrutineering. The Future Scrutineering project will seek comments from all stakeholders – clubs, competitors, venues and officials – to help develop a new framework that offers the best of modern and old.

The solution is likely to be different for different disciplines, and also for different levels within each discipline. The immediate project will focus solely on Circuit Racing, after which approaches will also be developed for the many other categories covered by Motorsport UK.

To optimise the efficiency of self-declaration, consideration will also be given to the introduction of competitor training and education on event, as well as the development of online videos to provide greater understanding and guidance on how to check compliance of a vehicle, whether that is for safety or eligibility.

“We are looking to develop improved methods of communication and provide preparation tools for competitors and preparers of vehicles,” adds Ryan. “This is both from Motorsport UK centrally as well as from the many different championship organisers and their scrutineers.”

Timeline to the future

The aim is to roll out new procedures for the 2023 season, dependent on the results and feedback from initial trials. Motorsport UK is now inviting suggestions from all comers and has already received a range of proposals. The project will also research and absorb best practices and future conceptual ideas from the many other progressive ASNs around the world, such as Australia.

Surveys will be sent out to the UK motorsport community towards the end of 2021, after which the Working Groups will review responses and develop a series of plans to run through a number of different trials during the first half of the season in 2022.

“Working with selected clubs and championships focused on Circuit Racing, the trials will help us to develop real-world experience and enable all those involved to evaluate what works and what does not,” explains Duncan.

“This will help define what the future procedures will be. For example, it might be to employ a level of self-declaration, with 20 per cent subjected to detailed scrutineering. Or it could be to instigate a basic level of pre-event scrutineering for all, with selected cars subject to detailed checks during the event.”

Based on these trials, any approaches or activities deemed to be appropriate for implementation will be proposed for regulation changes in the middle of next year. Once a commitment has been made, the Future Scrutineering roll out will take place on the very first day of 2023.

At the same time, throughout the entirety of 2022, the Digital Vehicle Passport system will be tested. Seminars and education activities will be run for scrutineers during the first
quarter of the year and if all goes well, a finalised version of the Digital Vehicle Passport will be introduced and rolled out also from 1st January 2023.

Duncan adds: “The Digital Vehicle Passport trial will allow us to see how it fits into the overall system, how it can allow us to do things in a different way and whether that proves a benefit to the competitors and organisers.”

A new opportunity

The pandemic has inadvertently given many industries and businesses an opportunity to evaluate their working procedures, and to utilise the new tools available to them to evolve their processes. Motorsport UK is keen to grasp this chance, and to deliver a clear route to improve operations for all.

Already, the sport has embraced digital working, from timing apps to remote zoom training sessions. Competitors of all age ranges have picked up and run with new methods, and many have found it surprisingly easy to adapt. It is with this philosophy that these plans will be developed.

Asked to define the vision of the future, Ryan concludes: “I would like to see us come into a digital age. I would like to have a mixed method of communications, by electronic means between scrutineers around the compliance of vehicles from one event to another.

“That will provide us with a great opportunity to understand common issues that occur, so we have a better reporting system of these. Using that, we can then try to rectify them through regulation and education, to help make the competition environment a happier place, a safer place and a fairer place.”
To qualify for these offers, Motorsport UK Members must present proof of eligibility in clinic, such as membership card or proof of membership. Offers are valid at Optical Express clinic only. *Free Essential eye test worth £50 can be redeemed once every two years. Members may upgrade to an Essential Plus eye test and pay an upgrade fee of £50. **Please claim 10% discount on corrective eye surgery; the offer must be presented along with a proof of eligibility at the Member’s initial free consultation appointment. Offer is not available to anyone who has booked surgery prior to being eligible for this offer. Treatment is subject to clinical suitability as determined at time of consultation. Minimum laser eye surgery value is £3,000 or more after discount has been applied. Minimum lens replacement or cataract surgery value is £5,000 or more after discount has been applied. Offer only valid with bilateral lens replacement surgery. Toric lens and phakic IOL surgery are excluded from this offer. +Member discounts do not apply to online purchases and direct debit contact lens sales. Discounts cannot be used in conjunction with any other promotion, offer or discount available to the general public. Offers cannot be redeemed for a cash alternative. Optical Express reserves the right to amend this offer. Offer valid until 31st December 2021. Over 18s and UK only.

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WIN a copy of
Murray Walker: Incredible!
A Tribute to a Formula 1 Legend
by Maurice Hamilton

The book celebrates the extraordinary life of legendary commentator Murray Walker, and is due to be published on 11th November, worth £20. Motorsport UK has five copies to giveaway.

Murray Walker was the voice of Formula 1, matching the thrill of the track with his equally fast-paced and exhilarating commentary, delivering the euphoria of motor racing to millions.

Commentating on his first grand prix for the BBC at Silverstone in 1949, Murray’s broadcasting career spanned over fifty years. His natural warmth and infectious enthusiasm won great affection with audiences, while his passion and knowledge of motor sport allowed him to hone his instinctive presenting style into a craft. When Murray passed away in March 2021, tributes came flooding in from every corner of the sporting world.

This book, compiled by Murray’s great friend and colleague Maurice Hamilton, celebrates the extraordinary life of this truly legendary man. With contributions from drivers and industry figures, and many friends from the world of motor sport and beyond, Incredible! combines fond memories, never-before-told stories and famous ‘Murrayisms’ with reflections on the highlights of a life lived at full throttle.

HOW TO ENTER

To enter, correctly answer this question:
How many years did Murray’s broadcasting career span?

Send your answer and Motorsport UK membership number to: revolution@motorsportuk.org by midnight on Tuesday 30th November with the subject line ‘Murray Walker’. The winners will be notified by email.

For full terms and conditions visit: www.motorsportuk.org/competition-terms-conditions
TIME TO TARGA
In a nutshell, Superkarts are one of the most extreme forms of racing available on a Motorsport UK licence. This low-cost, high-adrenaline discipline is often overlooked in the ‘traditional’ pathway into circuit racing, with many drivers jumping directly from short-circuit karting to Formula Ford, Ginettas or similar, leapfrogging a sport that offers more performance-per-pound than pretty much anything else on four wheels.

The name ‘Superkarting’ was introduced to the UK kart scene in 2012, previously it was known simply as ‘long-circuit karting’, which is officially classed as gearbox karts raced on circuits longer than 1,500 metres. They are powered by adapted motorbike engines or bespoke kart motors with gearboxes featuring up to six ratios, depending on class. Thanks to the aerodynamic bodywork, they look rather like mini Le Mans prototypes, with performance to back up the looks.

Ian Rushforth from British Superkart Racing Club outlines the sport’s origins. He has been involved in this scene since the very beginning, racing short-circuit initially in the 1960s until a more exciting opportunity presented itself to race on bigger tracks. “Long-circuit was pioneered by a guy called Sid Taylor from Lincolnshire, who began running events for gearbox karts as part of the Cadwell Car and Kart Club way back,” explains Ian. “Sid handed over the reins to John Shaw and the Cadwell Kart Club carried on for many years before stopping when John retired. Those meetings Sid ran were a must for me in my racing days. ”

Ian continues, “I raced for quite some time and then took on secretary of the meeting duties and developed from there. I’m 74 now and I started when I was 18. ”

Speed remains a major attraction. “The 250 T win is the Formula One of the sport,” he says, “and they will do as much as 145mph. ”

If that sounds an exciting prospect with your backside skimming the track surface, the lap times are arguably even more impressive. For a sense of context, the Superkart lap record at Donington Park is 1:25.888, driven by Peter Elkmann in 2017. Compare that with the pole time of 1:26.548 for a McLaren 720S GT3 in British GT at the same track and you get a sense of how fast they really are.

Phill Tromans digs into the detail behind the growth of Targa Road Rallying and why it is becoming increasingly popular among all age ranges.

A relatively new style of event is breaking down some of the barriers to participation in cost-effective rallying. Targa Rallying is not even a decade old, but it has rocketed in popularity at motor clubs across the country. It combines the appeal of Road Rallying with the skill, challenges and accessibility of an Autosolo. And to top it off, it requires comparatively little investment in equipment to be competitive.

The low average speeds bring relaxed safety rules, with no fireproof clothing or helmets needed, and reduce the benefits of spending big on heavily modified cars. All you need is a road-legal vehicle. It is a recipe that has proved extremely popular.

Today, many clubs around the country have well-supported championships and in 2021, the first national BTRDA (British Trials and Rally Drivers Association) championship was launched, letting the best regional drivers and navigators battle it out for nationwide supremacy.

What is Targa Road Rallying?
The activity first developed in the east of England and quickly spread across the UK clubman motorsport scene. In response, Motorsport UK produced a specific section of regulations for the new discipline.

A Targa is defined as a Road Rally event, requiring a driver and a navigator. It comprises mainly of timed tests, which use passage controls, code boards and manoeuvres to keep speeds down, and a bogey time means there is no benefit to going faster. These low speeds remove the need for expensive safety equipment, and therefore keeps costs at a minimum.

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The skills that help achieve Targa success are good car handling, excellent planning of the course and top-notch communication between driver and navigator to make sure all the tests are completed properly.

The format favours small, light cars and very little specialist mechanical preparation is needed. Popular models include Vauxhall Corsas, Rover 214s, Nissan Micras and Mazda MX-5s. However, more prepared cars, with roll cages and sump guards, are permitted too, as long as they remain road legal.

Navigators get a test diagram showing the route and are required to guide the driver the best way around it. Many Targas take place at one venue, such as airfields or farms, and the format usually involves several runs, which means drivers and navigators can ‘double-enter’ and swap roles halfway through.

Born from Historic Road Rallies

Paul Barrett is the secretary of Chelmsford Motor Club, which pioneered the discipline in the early 2010s. He says the idea for a new format came from historic Road Rallies, which combine tests on private land with sections on the public road.

“Around 10 years ago, we started thinking ‘what if we got rid of all the boring road road stuff and just have special tests?’ That is essentially the format that’s evolved into Targas,” he explains. Gymkhana-style events were devised, which then developed into a quantified discipline. The format proved an instant hit with club members.

“It’s a relatively low-budget sport; the entry fees are typically in the order of £60, which is substantially cheaper than Stage Rallying,” Barrett says. “All of the problems of competing in Road Rallies on public roads, which can include PR issues, navigational problems and various things like that, are taken away as well. And I think the word got around pretty quickly.”

Matt Endean is a Chelmsford MC driver who has been a fan of the format from the start. He tackles Targas in a Nissan Micra and an MG ZR. “I’ve been competing in motorsport for 20 plus years, on all types of club level events,” he says. “I was around when Targas were first conceived.

“Most of the time I compete with my wife and on a lot of Targas, you can double drive, so you then get to both drive and navigate. That is good for us. In some ways we get double value out of a day’s motorsport.

“We also do Stage Rallying, but that is effectively an open cheque book category! The more you spend, the faster the car will go, so therefore the better result you should get. Class wins for us are very few and far between, whereas on a Targa, you can be fighting for a class win or an overall win in the same car and it is a more level playing field...although it does give you fewer excuses for why you have not done well!”

Low-cost opportunity

Very quickly, competitors found that Targa gave a lot of driving and enjoyment for relatively little expenditure. Its early fans competed in other disciplines of motorsport too, and spread the word about the new format.

Other clubs around the country began to organise their own events. Paul Barrett highlights that the resources needed by clubs to stage a Targa are much smaller than other motorsport disciplines.”They are actually relatively easy to put together; you just really need a core team of three or four people to plan and design the tests,” he says. “You also need fewer marshals because you are not marshalling for safety, you are marshalling for adherence to driving through the cones.”

Alan Wakeman organises the BTRDA championship, as well as heading up the discipline for the Cotswold Motor Sport Group. He is a keen Targa driver himself. “When people think of rallying, they think of Stage Rallying, and right now it is a big leap to actually get into Stage Rallying,” he says. “Financially, organisationally, there are lots of regulations to follow; safety equipment needs to be present, needs to be up to date, and so on. So, Targas are really very accessible. You can compete in an absolutely bog standard car on the smoother events.

I have seen people go out and buy a car from the auctions and compete in it the weekend after on a Targa.

“You can get a lot of mileage in for relatively low cost. For around £50 to £60 per event, you can get about 20 to 25 miles. If you compare that to Stage Rally, you can almost put a zero on the end of that cost, and you will need a far more expensive car.

“Of course, if you want to fit roll cages, seat harnesses and so on, you can. You can also use helmets, but you can only use intercoms if you have a medical condition. The majority do not use helmets right now. Some events do require cages, seats and harnesses, but those are typically the larger ones where there is something solid around, like trees and ditches.”
Neil Raven is former president of Ilkley and District Motor Club in the north of England, and discovered Targas in around 2014. He competes in a virtually standard Citroen Saxo VTR, which he bought for £750. “I always wanted to be Colin McRae,” he says. “The closest I used to get was doing grass Autotests, which were fantastic. You got to pretend to be McRae for about 50 seconds.

“I actually got into Stage Rallying as a competitor in 2010, but then I soon found out the true cost of rallying. That was in a Subaru Impreza, which needed seats, harnesses and of course the big costs were tyres and fuel. Then I had to have a trailer and a car to pull it, plus helmets, HANS devices and so on.

“My principle as a clubsport person is that you should be able to use your car day-to-day and then go to an event over the weekend. That’s where Targas started to appeal. You could use your everyday car to do what was basically an historic Road Rally, but without the regularities.”

Get involved
New to Targa Rallying and want to find out more? Here is a small selection of the many great events to check out around the UK.

ASWMC Targa Road Rally Championship
The Association of South West Motor Clubs organises several Targas each year with its member clubs, spread across the south west, including events in Bath, Salisbury and Shaftesbury, Ilfracombe and Exmoor.
For more information: www.aswmc.org.uk

The Knutsford Targa Rally
Taking place on 21st November, the Knutsford Targa Rally is run at Three Sisters Circuit in Wigan and organised by Knutsford and District Motor Club. It uses a mix of race circuit tracks and the paddock area.
For more information: www.knutsfordtarga.co.uk

It’s Not the Boxing Day Rally
Ulster Automobile Club is hosting a festive Targa Rally on 27th December, with more than 120 crews scheduled to take part. The previous event proved hugely popular at Edenmore Golf Club in Craigavon, but last year’s event had to be cancelled due to COVID-19.
For more information: www.ulsterautomobile.club

Wearsie Classic and Targa Rally
The Durham Auto Club has an annual Targa that takes place in the first weekend of September. This year’s event was held at the Nissan plant in Sunderland.
For more information: www.durhamautoclub.co.uk

Javalin’s Jumbo Targa Rally
Run by Anglia Motor Sports Club and Chelmsford Motor Club, this event takes place at the Carver Barracks near Saffron Walden, Essex, on 20th March, 2022.
For more information: www.chelmsfordmc.co.uk

“You do not have to have a really expensive car to win. It’s what is sitting in the seats inside that makes the difference”
As well as the driving aspect, many Targa competitors praise the format, as it balances out the waiting around with driving activity, and this boosts the social side of things. "We have met some really good people, and it is fascinating the cross-section of people that you get," says Raven. "You get people from Autotesting, Road Rallies, Stage Rallying, and they are all mixed up in this pot of enthusiasm and enjoyment."

Looking to the future
With its popularity continuing to grow, the future of British Targa Road Rallying looks bright. Wakeman envisages the next step to be more classes for different types of vehicle, and he is very keen to use the events as a way of encouraging more young people into motorsport.

"If you look at our [BTRDA Targa] committee, they are all young, apart from me and a few others, and that is what we desperately need," he says. "There is a large number of motorsport events and disciplines that are run by members of the older generation. There is nothing wrong with that, but of course we should be mentoring new people to come through to pick up the reins and go forward. So I am also looking upon the Targa championship as a way to bring new blood into BTRDA, to pick up the mantle and go forward.

"I would really like to see people to begin to start with Targas as a novice, move through, prove themselves and then make progress to other disciplines, such as Stage Rallying, Rallycross and other loose surface disciplines."

Neil Raven echoes these thoughts. "A lot of clubs are jumping on to them," he says. "I think more clubs need to start to get hold of it and use it to promote other events. To become good at Targas, you need to be good at Autotests. People are always looking to improve on what they do, so you could advertise your club’s Autotest by saying, ‘look, there is a Targa coming up, come to our Autotest this week to practice and shake your car down for £15’.

Raven recalls a recent Targa that was won by a 1.0-litre Suzuki Alto. "There was all sorts of wonderful machinery there," he says. "There were Mark II Escorts, we were in an MX-5, and there were some really decent bits of kit. Then they turned up and won it in that! That is what I love about Targas: you do not have to have a really expensive car to win. It’s what is sitting in the seats inside that makes the difference.

Wakeman is urging newcomers to motorsport to give Targa Road Rallying a go. "What I tell people is, if you want to follow an asphalt-based discipline, then Autosolos are probably the best place to start. But for those who want a lower grip environment, I would always recommend Targa Road Rallies, as they give a great deal."

Andy Manston
Event insurance

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MAKE THE MOST OF YOUR MEMBERSHIP

Now is the time to renew your licence. If you have not competed before, or have let your licence lapse, this is your opportunity to join the Motorsport UK community.

Back on track
The hard work and resilience of our community, combined with Motorsport UK’s Restart Guidance – developed in step with government guidelines, to facilitate the safe and speedy return to motorsport – has enabled us to get back to enjoying the sport we all love. Despite the very real challenges of the pandemic, we have continued with our commitment to innovate and deliver ever better service and benefits to our community.

Our work to get the motorsport community back racing has not gone unnoticed. Motorsport UK is proud, as your governing body, to be shortlisted for a 2021 Sports Industry Award, in the ‘Best COVID-19 Response by a Sport’ category.

An exciting new chapter
Officially opened by Sir Lewis Hamilton MBE, our new headquarters are working well as a hub for our community. We have already welcomed hundreds of members to training days, events, and conferences. In the heart of ‘Motorsport Valley’ we are now in a more relevant setting to:

- Offer increased accessibility to our partners
- Showcase entry points into grassroots disciplines
- Train and develop our volunteers and officials, without whom there would be no motorsport

In addition to welcoming hundreds of members to Bicester we have also opened our doors to new audiences, as well as motorsport fans, visiting Bicester Heritage and the many events it hosts. We will be announcing a programme of opportunities throughout the year, to ensure our member groups continue to benefit from this impressive new facility.

Driving diversity in motorsport
Encouraging steps have been taken in recent years with our programmes supporting women in motorsport, disability, and accessibility, and in addressing the affordability of participation, particularly at the entry level. However, there is much more work to be done. We all need to recognise that new regulations or policy statements alone will not achieve what is required.

To bring together the best experts in the field, Motorsport UK has established a new Equality, Diversity and Inclusion (EDI) Committee, with four specialist sub-committees to specifically represent Women in Motorsport, Racial Diversity, Disability and Accessibility and LGBTQ+.

Motorsport UK is committed to positive progress. To achieve this, we are requesting additional data from our members in 2022, via next season’s Application Forms, regarding ethnicity, disability, and gender identity. This will help us establish a clearer understanding of our membership and enable us to make more informed decisions on behalf of our community, while ensuring our sport is even more inclusive and welcoming.

Delivering a sustainable future for our sport
While the pandemic is far from over, motorsport is back on track and we embark on 2022 with much to look forward to.

However, we face a very different world going forward. As a governing body, we must take action that is considered, yet agile, to adapt to the continuously evolving challenges we face; ensuring motorsport remains relevant to both enthusiasts and broader audiences alike.

A positive consequence of the past couple of years is that the pace of change has increased significantly and many of the lessons learned have applications for the future. This has enabled us to review and embark on new initiatives and opportunities, for the long-term benefit of our community and sport.

In 2021 we proudly launched the framework for our Sustainability Strategy 2021-2030, through which we have started offering clubs and events a range of resources to help them become more environmentally aware. Online modules, combined with workbooks and associated worksheets, are all...
now in place to assist clubs as they work towards creating a robust Environmental Management System (EMS), in alignment with FIA Environmental Standards.

**Accelerating investment and development**
There were important milestones in our sport development strategy that saw Motorsport UK:

- Become the organiser of the F4 British Championship, certified by FIA, with a vision to develop the series as the best platform from which rising stars can continue their pathway to international competition
- Assume the role of championship organiser and promoter for the British Superkart Championship
- We also introduced the first sanctioned Drifting Championship in the UK

As the national governing body for four-wheel motorsport in the UK, Motorsport UK is a not-for-profit organisation (limited by guarantee) that exists to service and grow the sport, and is a member of the world governing body, the Fédération Internationale de l’Automobile (FIA).

We hope you have a great year in motorsport. Please visit www.motorsportuk.org/Events/Find-Events to find out more about upcoming events in 2022.

**Maximise your Membership**
As a member of our motorsport community, you have access to a wide selection of benefits, including personal accident insurance as standard, for that all-important peace of mind, and discounts from many automotive and motorsport suppliers, track day and experience providers, and more…

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**Your membership... more than a licence**
Your new licence puts you at the heart of a community of over 60,000 like-minded people, who all share a love for our sport. As a member of Motorsport UK you are supporting the work of the sport’s not-for-profit governing body in recruiting, training, developing volunteer marshals, officials and sustaining clubs and motorsport in the UK. We work all year round to ensure that motorsport is safe, fair, and fun, and are committed to the development of initiatives and opportunities to help secure the long-term future of the sport.

Your membership is more than a licence – it allows you to take part in hundreds of different events all over the country and access a world of member benefits and discounts from a range of motorsport, automotive, travel and high street brands to help your budget go further.

Motorsport UK personal accident insurance is included in your membership as standard, providing peace of mind for unexpected eventualities.

**Make the most of your motorsport and enjoy the 2022 season!**
Choosing the right gift can be a challenge. Making the right choice for the planet can be even harder. But it doesn’t have to be. This Christmas, make the right choice with our experts and shop sustainable gifts from the Our Planet range.

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Motorsport UK

Starter Packs

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Visitors can drive themselves around the F1 circuit and follow Santa on his journey around the world while enjoying a fabulous show featuring over 400 laser beams and 400,000 lights. The Silverstone pits feature an ice rink in the pit lane and a welcoming winter lodge full of entertainment and festive food and drink.

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Motor Sport Magazine

Christmas Gift Guide

The festive season is upon us, but before scouring the web for racing-themed gift ideas check out Motor Sport’s top picks, all available from the Motor Sport shop. They are offering an exclusive 10% off to members available up until Christmas.

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Garmin

Garmin Catalyst™

Garmin Catalyst™ is an industry-first racing coach and driving performance optimiser that’s changing the world of motorsports. It mounts in the cockpit to gather your performance data and provide real-time audible coaching. Immediate session analysis helps drivers of all levels achieve their full track driving potential.

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Wera Tools is a global tools’ specialist that firmly believes its tools make life simpler, safer and “full of joy” for users. Motorsport UK members can get an 7.5% additional discount off all ToolManiac online prices

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SONAX, recognised as the leading European car care brand, is now represented in the UK by Anglo American Oil Company. With over 33 fulltime chemists, SONAX, who recently celebrated 70 years of successful worldwide trading, focus on making sure all their products are market leaders. As an example, the SONAX Brilliant Shine Detailer is one of the all-time favourites by car detailers and professionals alike. **RRP £8.99 per 750ml**

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Fire Safety Sticks
These compact Extinguishers have been Motorsport proven to be truly effective at minimal cost and weight (from 215g). They fight all major classes of fire and leave no residue. With a 10 year shelf life and no service requirements, they are an ideal addition to any car, workshop or home.

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**Save an extra 10% on any purchase using the code MSUK10**
When making changes to your strategy on the track, data is vital in helping you make improvements. The Garmin Catalyst is a ground-breaking, real-time coaching tool which has been designed by motorsport enthusiasts and professional racers within Garmin.

**Live Coaching**

With performance optimisation in mind, the Garmin Catalyst gives coaches and drivers detailed insight to help achieve their full potential on the track. The Garmin Catalyst is a driving performance optimiser set apart from any other GPS lap timer or data system on the market. The device mounts in the cockpit of a track car to gather performance data and provide live audible coaching to help drivers achieve their full potential on the track.

**Data on Device**

Catalyst is a perfect extension of a coaching team as it provides a session analysis to show areas of gain, directly on the device’s display. This is all without the need to download data, configure graphs or invest considerable time interpreting data. The on-track coaching and off-track data insights from Garmin Catalyst are aimed at optimising track performance to benefit drivers of all levels.

**True Optimal Lap™**

Catalyst boasts two features which allow a higher level of track performance analysis. The first feature – ‘True Optimal Lap™’ gathers several data metrics to try to identify where laps can be seamlessly joined together to create the fastest racing line. This feature shows users their fastest achievable time based on lines actually driven and gives them an optimal lap they can truly achieve.

**True Track**

Also including True Track Positioning™ technology designed to generate a car’s racing line on the track using a robust combination of built-in accelerometers, image processing, and 10Hz multi-GNSS positioning. The included Remote Cam accessory captures 1080p HD video which can be played back on the Garmin Catalyst device with time-synced overlays showing speed, lap data, and more.

While on the track and without any device interaction, the Garmin Catalyst will allow drivers to hear real-time coaching cues when using a compatible headset, or by streaming through the car’s stereo via Bluetooth technology. The audio cues occur before and after corners, delivering immediate feedback such as early or late apex decisions without having to wait until the end of the lap.

**Detailed Data**

The process of downloading and interpreting data can present challenges for novice and professional performance drivers alike. The Garmin Catalyst has revolutionised this experience by offering users automatic and immediate on-device data analysis. In conjunction with saving time, users will also eliminate the daunting guesswork that comes with analysing cumbersome data provided in the form of ‘squiggly lines’.

Additionally, Garmin Catalyst provides valuable performance metrics including best lap time, delta time, number of laps and session time. Adaptive suggestions also help inform both coaches and drivers on how to better optimise their time on the track. Furthermore, a preloaded global track database makes it convenient to use the device on road courses around the world.

The Garmin Catalyst is available via [Garmin.com](https://www.garmin.com) and specialist retailers. Motorsport UK members can benefit from an exclusive discount of 20% off Catalyst via [Garmin.com](https://www.garmin.com) using the code ‘MOTORSPORTUK20’. T&C’s apply.
Shaun Miller now coordinates rescue training for the British Automobile Racing Club (BARC), assisting Martin Hunt, Rescue Coordinator for BARC, and the TOCA safety team.

**SHAUN MILLER**

Firefighter Shaun Miller was inspired to get into motorsport by a chance chat between his young son, Tom, and a scrutineer at Oulton Park. 14 years later, he is at the cutting edge of rescue as a leading trainer, working hard to continue the quest for improved safety for all those out on track. He and Tom now spend most of their weekends in a rescue vehicle at a circuit or motorsport venue somewhere in the UK. And they love it. We caught up with Shaun to find out more.

**Revolution:** What first made you interested in motorsport?

**Shaun Miller:** My earliest motor sport memory is watching Rallycross and F1 with my dad on the television when I was a young lad, watching the likes of James Hunt and Niki Lauda. We were both big Nigel Mansell fans, but we never got the opportunity to see a race live due to my involvement in show jumping in my younger years – a different type of horsepower!

**R:** How did you get involved in motorsport safety?

**SM:** I had never seen a motorsport event for real until I took my son Tom to a British Touring Car meeting at Oulton Park in 2006. The following year we went again, and it was so wet Tom was soaking. He needed another jacket and all I had was his young firefighter jacket, so he put that on, and a marshal started to talk to him about it. Tom explained what I did, and the marshal asked me if I fancied working behind the scenes. He introduced me to Alan Stockton of BARC North West rescue team and a few weeks later, having spoken to the team’s crew chief, Colin Whitter, I joined them on track for a taster day in 2007 and the rest is history. My son, Tom, joined as a marshal as soon as he could at 18 and was later invited to join the team as a trainee in 2015. He is now fully licensed, so we get to spend time together giving something back to the sport we both enjoy.

**R:** Did your experience working in the fire service help you get into the role?

**SM:** I worked out of a busy station with a Technical Rescue Unit and was trained in road traffic collisions and heavy rescue, so I was able to add value and help advance the team further with new skills and knowledge. My skills gave me the opportunity of direct entry without prior marshalling experience, but I joined as a trainee as I had lots of other things to learn on the medical side and motorsport way of working. I still get my leg pulled by the team for not doing ‘my time’ on the bank, so when Tom started marshalling, he made me join him on a few occasions. Anglesey in winter – I think I earned my wings!
R: How important is that relationship between marshals and the rescue team?

SM: It is absolutely vital. When I started, I noticed the two were often seen as separate entities. I once heard someone say ‘here come the prima donnas’ and I thought that’s not right! After that, I got involved in marshals training to try to build up a mutual understanding of the respective roles. As a rescue team, when we arrive on the scene, we need the area clear and sterile so we can operate in a safe system of work with a set of procedures to ensure the safety of all involved. As a North West Rescue team, we were invited by BMMC North West to assist in marshals’ annual training and created a course to explain our procedures and what their role was in helping us at the scene of an incident. This has developed over the years to include demonstrations and practical first aid sessions and is now built into the first marshal on scene module we deliver. In the years we have been doing it, we have seen a massive improvement.

R: How many are in your crew?

SM: We have 11 on the BARC North West team, run by Crew Chief Colin Whiter. We always try to operate at a venue with six but during COVID-19 this reduced to four. We train together and all know each other’s strengths and weaknesses. In that respect we are quite unique as a very close-knit team on and off track.

R: What events do you cover?

SM: The North West unit covers any track event from club championships through to the British Touring Car Championship (BTCC) and, when asked, the British Grand Prix. We also cover charity events such as CarFest and Race Of Remembrance. We go all over the country during the race session and although we class Oulton Park as our home circuit, we are very rarely there! In the TOCA Safety Team, we cover the BTCC events, with 10 three-day weekends plus testing. With a few exceptions, crew members on both teams are usually rotated, as it is impossible for everyone to cover all events.

R: How do you prepare for an event?

SM: Before we leave for the venue, we check the vehicle and do lateral flow tests the night before. Once we arrive, we check equipment and review the layout as it helps to know the areas where you tend to get incidents. The crew chief then assigns each member of the team a role to operate at an incident. Each of us then checks our equipment and PPE before heading to our standby location.

R: What do you do during an event?

SM: A lot of people think we just sit there and drink tea and eat cakes, but that is all a myth! We monitor the radios and if we get a call to scramble or see anything we think we need to go to, we inform race control. If time allows, we will also do some training, such as an extrication from a team’s car or a Q&A on equipment. At larger events such as the BTCC, the North West and TOCA teams train together, normally on a Sunday morning. Over the years this has helped to build a solid working relationship between the two teams. When we are on post, we quite often jump out and give the marshals a hand if a vehicle needs to be pushed to a safe location or fire cover. After all, we are one motorsport team with the same objective, just different roles.

R: Does the adrenaline kick in if you do get an incident?

SM: Oh, yes! We could be laughing or joking or talking about something but when we get a call of either ‘scramble’ or ‘rescue standby’ everything goes up level. It is normally met by a bit of silence as we all get ourselves into the mindset for what we are likely to have to go and do. There is always an adrenaline surge because, at the end of the day, we are going out to do a job we train hard for. I am glad to say we do not often have to do it, but when we do, it does have a way of focusing the mind...

R: Is your ideal race weekend one without incident?

SM: If you end the weekend without having to do anything that’s good, but it is also nice to use your skills. So, in a way, it is an even better race day where you have been called to an incident and everything has ended up alright. Sometimes we get scrambled as a precaution, so we go there to make sure the driver is okay and stabilise the situation. When they step out of the vehicle having been checked over by the medic and everything is fine, that is a great sense of achievement.
**R:** What incident do you remember the most and why?

**SM:** It involved almost the entire field and resulted in three drivers needing technical extrication and medical attention. We were first on scene as it happened near our location and we dealt with it right the way through, alongside another team that is now the TOCA Safety Team. The task and workload were huge but with good teamwork and technical skills, practiced during endless days of training, we were able to extract all drivers involved and get them on their way to hospital within 60 minutes of the incident occurring. That was a difficult but ultimately very successful rescue.

**R:** How have things changed since you started?

**SM:** Safety is one of the biggest drivers of change and PPE, such as helmets for rescue teams, is now an accepted practice. New car technology is also a big one with vehicle construction constantly changing. Greater use of advanced materials such as ultra high strength steels and advanced high strength steels can create a big challenge in a technical rescue, and we have changed some of our techniques and rescue equipment to manage that. We are also having to learn new approaches to deal with EVs. With TOCA, we are involved with the new hybrid for next season and are changing protocols and procedures for that. At the same time, we have to keep a sensible lid on things. There is a bit of hysteria within motorsport around hybrids and EVs and it just needs to be put into context. That is something the motorsport rescue and recovery training group are working hard to do, by getting training packages out there to allay the fears and put to bed myths.

**R:** Where do you see the future of motorsport safety heading?

**SM:** I think the emphasis has to be on developing skills and equipment to suit the future, and that will evolve alongside changes in technology, such as construction and power sources. Club events are starting to see relatively new cars in use now, so rescue teams need to make sure they have the right skills and equipment to deal with those types of vehicles.

**R:** What are your aims for the future?

**SM:** I would like to continue to grow my involvement in training and I have recently been asked to help deliver training for the FIA with the World Rally Championship at an event in the Netherlands sponsored by Holmatro in November. My personal aim is to improve knowledge and training across the board for all rescue teams. It is difficult because it is voluntary, so it is hard to get availability of people. I like to use the term ‘unpaid professionals’ because it is a life-saving role, so we have to be professional and not being paid is no reason to not provide a professional service. I have also recently been invited to become a part of the Rescue and Recovery Training Working Group headed by Charley Webber. It is a privilege to have been asked and to join a team of people who are committed to improving safety and training for motorsport rescue and recovery teams and I am looking forward to contributing to ongoing projects.

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**How to get involved**

The first step is to apply to become a licensed trainee, which requires you to develop skills that meet a set of criteria for technical rescue and medical skills. Once that is completed, you will go for a full assessment and, if you pass, you will receive your full license. You can then operate as part of a rescue and safety crew. Each license lasts for three years, after which every individual must take a re-qualification to learn the updated techniques.

Find out more about the BARC North West rescue team here: [www.facebook.com/groups/2046338218945771](http://www.facebook.com/groups/2046338218945771)
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The Motorsport UK Academy was created to provide a performance pathway for the sport’s talented young athletes, giving the nations’ future stars the chance to learn, develop, thrive, and ultimately unlock their full potential.

Over the years, it has supported hundreds of young drivers, with Formula E’s Jake Dennis, British Touring Car driver Tom Ingram and World Rally Championship star Elfyn Evans among its many successful alumni.

More than one hundred athletes are currently on the scheme, and in the latest edition of this regular feature we meet a DTM hopeful, a GT Cup champion, a class-winning co-driver, and a future-focused electric racer.

**Patrick O’Donovan**

**Born:** London, 13th April 2004

**Academy Programme:** Enhanced DiSE Programme

**Competes:** FIA RX2e championship / 5 Nations British Rally Championship

**Recent Results:** RX2e, Spa (6th); 5 Nations BRX R150, Knockhill (3rd); RX2e, Loheac (7th); RX2e, Holjes (6th); RX2e, Catalunya (3rd)

**Instagram:** @patrick_odonovan13  **Twitter:** @Patrick81708351

What is your earliest memory of motorsport?

Watching my father racing in Rallycross. I used to go to all of his races, and I still do.

What has been the highest high in your career so far?

My first podium on my debut in the FIA RX2e Championship in Spain, as a support class to the World Rallycross Championship. My family and I celebrated with a nice meal out, which was special as most things were still closed as a result of lockdown.

What has been the lowest low in your career so far?

At Croft in 2019 I lost the British Junior Rallycross Championship on countback to my title rival, who I had been swapping the lead with every round that year. To overcome that, I worked hard to take a more professional approach for 2020.

What has been your biggest break?

Racing in the RX2e series alongside the World Rallycross Championship. It has helped me gain more experience in a high-pressure environment and has really helped me to learn how to use new things, such as data analysis and setting up the car correctly.

What are your aims and when do you want to get there?

I want to become a professional driver so that I can do what I love for a living, and I would hope to be at that level within the next five years.

Describe your driving style

Aggressive. I will drive to every inch of the track while maintaining the absolute limit of respect. I also do not mind a Full Send or two!

What is the biggest lesson you have learned?

Opportunities do not always come twice, so you need to try to take every one that you can. You never know what it could lead to.

If you could get career advice from one person in motorsport, who would it be?

Ross Brawn, because of how much he has accomplished within the sport. I feel like I could learn a lot from someone like him.

What are you currently competing in and how are you doing?

This year I am driving a 200bhp RX150 buggy in the 5 Nations British Rallycross Championship and am currently leading that class. I am also driving a 250kW electric FIA RX2e car, equivalent to 335bhp, and am third in that championship.

What has been the biggest challenge for you this year?

Stepping up onto the World Championship level platform. To overcome this, I had to train harder and learn to adapt quicker than I have had to before.

You are competing in electric motorsport - do you see that as the future and if so why?

I do, yes. Combustion engines can be damaging for the environment, so I strongly believe electric motorsport is the future as it can help to set trends and steer people in a renewable energy direction.

What are your views on sustainability in motorsport?

I believe that motorsport could definitely be run more sustainably, but it will take a lot of commitment from teams, officials, and organisers. That would also come at a big cost, but it would be 100% worth it.
What is your earliest memory of motorsport?
I remember attending events when I was young with my dad, who was a mechanic, and being in the garage helping him to prepare cars. I also have a vivid memory of sitting in a van in a service area somewhere in Ireland eating a giant strawberry – although I don’t know why that one sticks out!

What has been the highest high in your career to date?
On my birthday this year I was accepted onto the Excite Rally Raid Team, an all-female team aiming to compete on the Dakar Rally in 2023. This was a huge achievement for me, and I was very proud to be selected out of a strong pool of applicants. In our first year, we won the T2 Production Class of the British Cross Country Championship with my good friend Jade Paveley as the driver.

What has been the lowest low in your career so far?
We had a high speed off on the Wyedean in 2017 where we tumbled around like a washing machine! The accident didn’t bother me, but I was disappointed for my driver, Ross. We came back better than ever, though, and have had several great results since.

What has been your biggest break?
In August this year I got called up to compete in America with fellow Academy member Tom Williams. I was given just one week’s notice after my husband, who was supposed to be co-driving, couldn’t make it due to travel issues. I had never competed in an R5 car, never mind on the other side of the world. It was a stressful but very cool event – and we were seeded just behind Travis Pastrana and Ken Block! Tom and I won our class and it was a real high as I had overcome and also learnt so much along the way. That event ticked off a lot of firsts and bucket list items for me.

What are your aims and when do you want to get there?
My ultimate goal is to compete on Ypres Rally. It has always stood out for me, and I would love to take on the challenge of such a historic and tricky event. Aside from that, I would love to do more events in an R5 and really work on being the best I can be. I also want to work on helping to push females in motorsport and help bring younger girls into the sport.

Describe your co-driving style
My style has changed over the past few years. I really try to do as much research as possible before the event, so I have all the information and can just be calm and concentrate on delivering notes. I naturally very organised, so that side of things comes instinctively. I am moving towards a symbol system, as the recce can be a very busy day, and that has really helped.

What is the biggest lesson you have learned?
Co-driving for Tom has been an amazing opportunity to move up a level in the sport. I have learned so much, not only about co-driving but also about the approach to events. Tom is a very calm, collected, and professional driver and I really admire that. The biggest lesson I have learnt is that ‘I can do it.’ I spent years doubting my ability but when the opportunity in America came along, I just had to throw myself into it.

If you could get career advice from one person in motorsport, who would it be?
Molly Taylor. I was lucky enough to meet her several times in 2010 when my dad was helping to run the C2R2 Max she competed in. She is such an inspiration. She is a woman on a mission and has achieved so much. I think her can-do attitude is so admirable and if I can achieve half of what she has I will be very proud.

What are you currently competing in and how are you doing?
Most recently I competed in a Ford Fiesta R5 and soon I will also be competing in an R2 car with The Forest Experience Rally School owner and good friend Ross Leach. Apart from winning our class in the British Cross Country Championship (BXCC), I have not completed a full championship this year because of COVID-19 halting plans.

What has been the biggest challenge for you this year?
Competing on the BXCC presented new challenges for me as a co-driver. Being in a Pajero jeep with 100 litres of fuel, sitting up high, it feels completely different to the modern rally cars. Adjusting to that was a learning curve. Moving up to the R5 cars is also a change in pace and a lot to take in, but it was a challenge I relished, and they are incredible cars.

Hannah McKillop
BORN: Ballymena, NI, 23rd March 1994
ACADEMY PROGRAMME: Futures Co-Drivers Programme
COMPETES: Rally and Cross Country
RECENT EVENTS / RESULTS: Lake Superior Performance Rally, Marquette, America; Hills Ford Three Shires Rally, The Malverns, UK; Ojibwe Forest Rally, Detroit Lakes, America; Gareth Hall Memorial Stages, Wales, UK; British Cross Country Championship, UK (T2 Production class winners)
What is your earliest memory of motorsport?
Watching what I think was the 2006 Sebring 12hr on TV. I remember the first time I drove a kart as clear as day – it was on holiday when I was aged six or seven.

What has been the highest high in your career to date?
That has to be winning the British GT4 Title in 2017 – although I ‘celebrated’ it by spending the next few weeks in bed with a fairly horrid tonsillitis, having raced with it over the weekend!

What has been the lowest low in your career so far?
This is a super tough one. I would say that in 2015 I was lacking in confidence, direction, and results – but thanks to the brilliant guys at HHC Motorsport, I had such a great feeling, and I won the first race of the 2016 Ginetta Junior Championship. I ended up winning the title.

What has been your biggest break?
Probably getting the opportunity to race for T3 Motorsports in ADAC GT Masters in 2019. It was my first proper professional seat in what I still think is the world’s closest and toughest GT Championship. We did well for such a small and underfunded team, scraping a few top-ten finishes and a load of points against the world’s best. I am still proud of what we did with so little compared to the factory boys.

What are your aims and when do you want to get there?
I want to become a fully professional factory driver. When? As soon as possible! I am working very hard to make that dream a reality.

Describe your driving style
Calm but relentless. I always focus on a mega lap in qualifying then switch focus to keeping my average lap time to a minimum in the race. To race at the highest level, you must be able to find and keep those thousandths per lap. They make up a lot of time in an endurance race.

What is the biggest lesson you have learned?
That getting results in professional motorsport as a driver is about being able to bring together your whole team and making sure the cohesion is perfect. When people are happy, you go fast. Be happy, humble, and willing to learn.

If you could get career advice from one person in motorsport, who would it be?
Someone who has done it all before, like Nick Tandy, Raffaele Marciello and Maro Engel. They are such inspirations for on-track performance, but I would also love to be able to talk to some of the engineers and team owners behind them, to get their perspectives on performance.

What are you currently competing in and how are you doing?
This year I raced a Mercedes AMG GT4 in the DTM Trophy and we came second in the championship. We lost the lead – and therefore the championship – in the final five to ten minutes of the final race! That was sad, but this was the team’s first year of operation, and I signed the contract the week of the first race, so we had no prep time. Our result is incredible considering that! I also raced for Walkenhorst Motorsport in the Nürburgring Long distance Series, scoring many podiums and a lap record in the M2 CS Racing, and I raced with Grahame Tilley in his Nissan GTR GT3 in the GT Cup, where we came third in GT3 – thanks to Sennan Fielding for filling in for me when I was away.

What has been the biggest challenge for you this year?
Battling our top speed deficit in the DTM Trophy, as we have been more than 10kph down compared to the other manufacturers. That was always difficult, but we worked around it as a team with relentless effort to optimise every single part of our car and ourselves to make up for it.
What is your earliest memory of motorsport?
When I was 12 years old, I went to watch my dad race in the Silverstone 24-hours in an M3 GTR. I fell in love with racing then. All I did was clean the car and help with the tea and coffee, but it was enough to get me hooked.

What has been the highest high in your career to date?
Our first British GT race win at Donington Park. We had so much bad luck all year, including 2020, so to finally get that win was incredible. It was the team’s first overall win in British GT, so it really was special to all of us.

What has been the lowest low in your career so far?
Probably the Silverstone 500 British GT. It was before we had a podium in British GT, and we came into the pits in second place. Five laps into my stint the gearbox compressor failed, and we had to retire the car. It was tough because we had all done an incredible job.

What has been your biggest break?
I have been very fortunate to have had a lot of opportunities at a very young age. I could name many, but the biggest break was driving a Mercedes AMG GT3 in British GT.

What are your aims and when do you want to get there?
I want to become a factory driver and to win the Le Mans 24-hours. I think this is the dream for a lot of people in racing and I want to achieve it as soon as possible!

Describe your driving style
It is different to a lot of people. I like a car with a lot of front end, so this means the rear is quite loose. It is a harder car to drive, but it is a very fast car as well.

What is the biggest lesson you have learned?
I learn every time I go out in the car so I cannot pinpoint one time when I have learned a big lesson.

If you could get career advice from one person in motorsport, who would it be?
My racing hero is Ayrton Senna, but if I wanted to sit down and chat to one person, I think it would be Michael Schumacher. The way he worked with the team to get the best out of the car was incredible, and his work ethic was just amazing.

What are you currently competing in and how are you doing?
I am currently racing a Mercedes AMG GT3 in British GT and GT Cup for Team ABBA Racing. This season has been incredible. Achieving two podiums and a race win in British GT is not easy at all and it is our best season to date. We also won the GT Cup championship overall with 16 wins to our name. I cannot thank the team enough for how much effort they have put in this season. They have given me an incredible car all year.

What has been the biggest challenge for you this year?
I would not say there has been a ‘biggest challenge’ but as this was my second year in British GT I had to really perform. So being on top form at every round has been a difficult challenge to meet.

Instagram: @samnearyracing Web: www.samnearyracing.com
Modern technology has opened up the opportunity for motorsport participants to capture and share the on-track action using compact in-car cameras – and now showcasing your driver’s eye view has never been simpler or cheaper.

On board capture was pioneered in motorsport in the late 1970s while dash cams have been used in on-road law enforcement in the US since the 1980s. Now, action cameras can be picked up for as little as the price of a tank of fuel, opening up in-car footage beyond the premier categories to a wide range of grass roots and club competitors too.

The use of such cameras is now embraced in many disciplines – notably with the exclusion of any on-road rallying – and many competitors now fit them to capture footage to share with family and friends. In some series, cameras are mandatory, to assist in accident investigation, while in Stage Rallying, many crews also use them in recce as fundamental tools to help produce pace notes.

When fitted and used in the appropriate manner, they can both help showcase the excitement of competition and also contribute to improving safety on many different types of events. We spoke to experts in the field, to find out all the things that you should know.

Permissions
In-car action cameras can be used on any event except Road Rallying unless the organiser specifically rules against it. In Road Rallying, they are not permitted in any vehicle.

The Motorsport UK ‘Blue Book’ contains detailed regulations relating to the appropriate use of the devices, spread across several sections, but with specific reference to section 5.21 in section J on page 152.

Produced with kind assistance from Reece Tarren and Matt Pickford
The Yearbook can be downloaded from the Motorsport UK Resource Centre: www.motorsportuk.org/resource-centre/ and from there use the sector filters down the left-hand side of the web page to download a PDF copy.

Positioning: On-board cameras can be mounted in any position – as long as it is safe – but it is in the hands of the Chief Scrutineer to make the final decision regarding the use of any specific camera, the appropriate mount type, and the location.

If the cameras are being used for judicial purposes, the front-facing camera should be mounted to provide a ‘driver’s eye’ view covering the steering wheel, dashboard and the view of the circuit ahead, with a field of vision of about 100 degrees. In open wheel cars or karts, both front wheels should ideally be in view.

In karting, the weight of the camera must not exceed 100g (excluding any additional casing, mounting and associated fixing) and it must be fixed securely to the kart. As with all camera fitments, it must be approved by the Chief Scrutineer, but also by the Event Organiser.

Cameras cannot be fixed to a helmet unless the helmet manufacturer provides an integral camera and the helmet model meets one of the accepted standards. If there are doubts over helmet camera mountings, the FIA Technical Lists provide detailed presentation forms approved for each model of helmet.

Mounting: When mounting the camera, it is important to be aware that suction cup mounts cannot be used as a primary attachment. The reason for this is that if a suction-mounted camera were to fall off externally it could hit a competitor and if it failed internally it could fly around the cabin or get stuck beneath a brake pedal.

Instead, cameras must always be mounted using mechanical means, ideally with two methods in combination for extra security. The mounts must be robust enough to withstand the stresses and vibrations of typical motorsport and have no sharp edges or projections close to the driver’s body or helmet.

Simple roll cage mounts are popular, and they can be bought online for under £10. They operate with a prong and bolt connection method and have an in-built tether cable that can be looped through the mount for back-up security. Competitors often leave mounting brackets permanently on the car, to make race day set up quicker and easier.

As an example, MX5 racer Matt Pickford has two roll cage mounted cameras in his open-top car. These are required by the series, but also used to make team highlights videos. The front-facing camera is mounted on a horizontal bar to the left of centre, as there is no passenger seat. The rear-facing camera is fitted to the passenger side, on one of the roll cage uprights.
Capturing footage

The ease at which cameras can be set to record depends on which type you use. Some have a simple ‘one touch’ record option, while others can be more complicated. It is important to make sure you do not set the wrong mode and end up with no recording. Not only is this frustrating, it is potentially fine-inducing if your camera is mandatory and you cannot provide footage in the event of an incident.

Most people with cameras will use them in all sessions – whether legally obliged to or not. It is best to turn cameras on once you are in the assembly area and turn them off in parc ferme. For a 20-minute session, that means there is typically about 40 minutes of footage captured.

It sounds obvious, but make sure the camera is well charged if you are running it using its battery. Depending on the camera type, a battery will last for around two hours on a full charge. Some drivers have USB charge cables wired into the car’s electrics to power the camera during a race, which is particularly useful for longer endurance style events.

Storage

Cameras typically use memory cards to store footage, and these can easily be removed and replaced – which is important given the amount of footage that is often captured during a race weekend. Make sure you have enough cards, and also that there is sufficient free space remaining on the card before heading out on track.

Sharing

Any footage that is recorded can be used for personal consumption and, in cases where permitted, can be implemented as evidence in judicial proceedings. However, it is often misunderstood that recorded footage can be freely shared on social platforms, forums or other Internet media. That is not the case, unless permission has been sought from any rights holders.
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Autocross is an ideal discipline for novices looking to get their first taste of competitive motorsport. The aim is to tackle a temporary course in a grass or stubble field, competing against the clock in many different categories. There is a thriving scene run by the Association of South Western Motor Clubs, while in the North East events run by Cramlington & District Motor Club are rapidly growing in numbers, and they are keen for clubs to join together to create a regional championship in 2022.

The reaction time in seconds that you should aim for to be first into the first corner: 0.2

The minimum number of marshals typically needed to make an event happen: 12

The typical number of trophies handed out on a Sunday at some events in the North East: 20+

The amount of horsepower in your car you can still compete with and potentially win: <100

The highest number of entries in one event run by the South West this year: 65

The maximum length in metres of any straight on an Autocross course, according to the Motorsport UK Blue Book: 200

In the Channel Islands they hold about 20 Autocross events on the beach at low tide every year: 20

Produced with the kind assistance of Matt Endean (Chair of Autocross and Rallycross Sub Committee), Colin Anderson (member of Autocross and Rallycross Sub Committee), Simon Tappin (Cramlington & District Motor Club Competition Secretary) and Jon Olds (Autocross enthusiast and supporter)
The typical length, in kilometres, of an Autocross course.

The age at which you can still compete successfully in Autocross.

The average of number of first-time drivers participating in each event, either trying out Autocross having come from other disciplines or complete motorsport novices.

One of the best things about Autocross now is that you can compete in a Clubmans status Autocross event with an RS Clubman Competition Licence. Which takes 2 minutes to apply for online and is free.

The typical cost in pounds of the entry fee for a one-day event, or around £120 for a two-day event.

The minimum number typically needed to make an event happen.

The target weight loss, in kilogrammes, by Easter that you will probably set every year as a New Year’s Resolution to be more competitive…!

The typical number of trophies handed out on a Sunday at some events in the North East.

The amount of horsepower in your car you can still compete with and potentially win.

The highest number of entries in one event run by the South West this year.

Competitor numbers are strong across the country, and have increased from 25-30 about six years ago.

The maximum length in metres of any straight on an Autocross course, according to the Motorsport UK Blue Book.

In the Channel Islands they hold about 20 Autocross events on the beach at low tide every year.

The year in which the first ever Autocross series ran in the UK, organised by Taunton MC. British Autocross began in the early 1950s when clubs organised timed runs around farmers' fields.

The age in years at which you can start competing in Junior Autocross. You can compete at any point in the year of your 14th birthday until the year of your 17th birthday, with engine sizes limited to 1,400cc.

The average of number of first-time drivers participating in each event, either trying out Autocross having come from other disciplines or complete motorsport novices.

One of the best things about Autocross now is that you can compete in a Clubmans status Autocross event with an RS Clubman Competition Licence. Which takes 2 minutes to apply for online and is free.
Many clubs, events and competitors tag @OurMotorsportUK each month. We love to see what you are up to – here are some of the posts.

It’s such an honour to be featured by @ourmotorsportuk. We’re incredibly proud to be the only school in the UK to be recognised as an official club by the organisation and are so excited that our team has just won the national @greenpower_team Siemens sustainability award!

Tag #OurMotorsportUK in your posts for a chance to appear on this page

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The National Court is the UK Disciplinary, Investigatory and Appeal Court as required by the Statutes of the FIA and the International Sporting Code. The Court is independent of Motorsport UK and administered by an external lawyer and the judges are drawn from a panel of experienced motorsport lawyers and suitably qualified motorsport professionals.

Sitting 26th October 2021
Mark Heywood QC (Chairman),
David Munro, Tony Scott Andrews
J2021/16 Appeal

This case came before the National Court in the following circumstances. Following investigation into a collision between Mr Nuttall, (car no. 46) and Mr Heaton (car no. 10 in the BRSCC Caterham Seven UK Championship race at Oulton Park on 12th September 2021, the Clerk of the Course summoned both drivers after the race and, having heard from both, adjudged Mr Nuttall "to have moved over on #10 on the straight after T3 Cascades the manoeuvre caused the collision causing #10 to retire."

The Clerk of the Course recorded that evidence was taken from in-car footage from both cars. As a result, Mr Nuttall was disqualified from the results of the race for an offence under General Regulation Q12.21.1.

Mr Nuttall appealed against the decision to the Stewards of the Meeting, who upheld the appeal and annulled the decision of the Clerk of the Course.

Mr Heaton did not appeal within the specified time. However, on appeal to this Court, leave was given on the basis that there appeared to have been a procedural error in that he may have been misdirected as to his entitlement to appeal. What is clear is that he was not present in the hearing before the Stewards.

Mr Heaton asks this Court,

i. To correct the procedural error, as he asserts that he was a party to the issue to be decided,
ii. To look again at what took place on track.

As to the procedure to have been adopted, the Clerk of the Course having instigated the investigation, and heard from both drivers, with supporting evidence, the stewards ought to have convened the appeal in a similar fashion. Mr Nuttall makes no submissions to the contrary, nor that it is appropriate for the Court to adjudicate upon what took place on track.

The Court has had the benefit of viewing all the relevant footage, including the television feed, in-car footage from both cars and slow-motion footage of the incident in question. We have also heard from both drivers and been assisted by Mr Champkin, acting neutrally as an advocate to the Court.

The Court finds, against a background of close and determined racing in difficult conditions, Mr Nuttall exited Cascades ahead of Mr Heaton and moved his car towards the left-hand side of the circuit; this being the natural racing line and also, as he accepts, to defend his position from Mr Heaton. The Court finds that he was entitled so to do.

Mr Heaton, who had had a quicker exit from Cascades, had, as he concedes, very little time to decide whether to try and pass Mr Nuttall on the right or on the left. He chose the left. However, the gap was closing. His own car was already running along or on the white line to his left and at the point of collision his front offside wheel impacted against Mr Nuttall's rear nearside wheel, causing Mr Nuttall to lose control of his car, spin around and collide with the left-hand barrier, though he was able to continue.

Mr Heaton was able to continue, but subsequently retired due to damage that he concedes did not result from this collision.

The Court is satisfied that the collision was caused by Mr Heaton's manoeuvre in attempting to overtake when the gap was closing and was not caused by any fault of Mr Nuttall's. Accordingly, Mr Heaton's appeal is dismissed.

Further, the Court finds Mr Heaton to have been in breach of General Regulation Q12.21.4 (causing a collision). However, in all the circumstances the Court is satisfied that a written reprimand pursuant to General Regulation C2.1.1 is appropriate.

Accordingly, the Court judges that:
1. The appeal fee is forfeit
2. Given the findings, no order is made as to costs.
Sitting 26th October 2021
Mark Heywood QC (Chairman),
David Munro, Tony Scott Andrews

J2021/17 Disciplinary: Motorsport UK v Paul Jones

On 10th October 2021, Mr Jones was competing in the Pickup Trucks race at Pembrey Circuit.

The Clerk of the Course found that, after the chequered flag had signalled the end of the race, Mr Jones had contravened General Regulation C1.1.5 (driving in a manner incompatible with general safety or departing from the standard of a reasonably competent driver.) Mr Jones was disqualified from the results of the meeting and his licence endorsed with six points.

The case comes before the National Court by way of a disciplinary hearing. Motorsport UK summoned Mr Jones to answer the following allegations:

1. That at Pembrey on 10 October 2021 being a person under investigation for breach of GR C1.1.5 for aggravated post-race contact you failed to appear before the Clerk of the Course contrary to GR A10.1.2 and A10.1.3
2. That at Pembrey on 10 October 2021 in a Pickup Trucks race your driving in breach of GR C1.1.5 was on the facts of the case contrary to GR A10.1.4 and GR A10.1.5 and GR C1.1.4.

The facts before the Clerk of the Course, and which apply before us, were that following the signal of the end of the race, Mr Jones overtook at least one truck between himself and truck no. 39, driven by Danny Hunn. Having passed the trucks between himself and Mr Hunn, Mr Jones was found to have made “repeated contact with Pickup #39”.

Mr Hunn has made a statement setting out his account of what took place. Mr Hunn, for personal reasons, was unable to attend the National Court today.

Mr Jones has been made aware of these proceedings and we are satisfied that he has declined to attend. He has indicated his position in correspondence.

The National Court has also had the advantage of viewing in-truck footage from Mr Jones’ onboard camera. This footage, independently of witness accounts, shows Mr Jones deliberately and at speed, driving to collide with the back of Mr Hunn’s truck. Following the first collision, Mr Hunn appeared to be able to continue, notwithstanding the force of the impact. Mr Jones then drove with sufficient force to collide again with the rear of Mr Hunn’s truck, this time forcing Mr Hunn off the track.

The impacts caused the fuel tank of Mr Hunn’s truck to split. Mr Hunn attended the accident and emergency department of the local hospital but, fortunately, was not injured.

It is clear from the footage that Mr Jones acted deliberately throughout. If there was any doubt about that, Mr Jones own recorded words to two associates outside the truck in parc fermé confirm that view. He appeared to be boasting about what he had done; that he had done it in an act of retribution for an earlier incident. He displayed no remorse or concern for Mr Hunn.

The witness statements of officials Stuart Bradburn and Barbara Howard make it plain that Mr Jones refused to attend the Clerk of the Course when required so to do.

Mr Jones’ own comments in an email to Motorsport UK, dated 16th October 2021, contain admissions that his actions were deliberate, although asserting that he chose “safe times” to cause the collisions without danger.

Mr Jones stated that he did not wish to attend the National Court. Being satisfied that it was appropriate to proceed in his absence on the basis of written evidence and the video footage referred to above, the National Court finds that the allegations for which Mr Jones was summoned are proved.

The Court is satisfied that these were particularly serious matters and Mr Jones’ conduct throughout was prejudicial to the interests of motorsport generally.

In respect of the driving offences, Mr Jones’ competition licence is suspended until 31st December 2021, and he is disqualified from applying for any Motorsport UK licence until 1st January 2027.

In respect of failing to appear before the Clerk of the Course, the Court imposes no separate penalty.

Mr Jones is ordered to pay costs in the sum of £1,000.

Sitting 26th October 2021
Mark Heywood QC (Chairman), David Munro, Tony Scott Andrews

J2021/11 Appeal

McKenzie Douglass competes in the Minimax class of the 2021 British Kart Championships. During the championship round at Clay Pigeon circuit on 22nd – 23rd May 2021, McKenzie was walking alongside the track exit/entry to park fermé as a line of karts that had just finished their race were returning to the paddock. As he did so, he made a gesture with one hand, directed towards the driver of the last kart in the queue. The scene and the gesture were recorded by the circuit’s video cameras.

The Court heard that, earlier, this driver had been involved in an on-track incident. A teammate of McKenzie’s had also been involved in that incident and subsequently had retired from the race. Whatever the exact nature of that incident was, it appears the race officials did not become involved.
When the evidence of what had been recorded was considered, the Stewards of the Meeting found that McKenzie had infringed General Regulation C1.1.9 – “abusive language, behaviour or assault” and disqualified him from the meeting. In consequenc, McKenzie's competition licence was endorsed with six penalty points.

The Stewards' decision was imparted to Mr Douglass snr., who immediately indicated a wish to appeal. He was informed that a pre-populated appeal form would be emailed to him. That document was delayed in reaching Mr Douglass, so the appropriate extension of time was allowed to allow the document, dated 25th May 2021, to be lodged.

As the appeal was processed by Motorsport UK, it was noticed that the event in question had been run under a National Permit (121031). In reliance on General Regulation U21.2, which provides that “the Stewards of the Meeting are responsible for all judicial duties,” Motorsport UK duly informed the Appellants that their appeal was ineligible.

The Appellants dispute that and maintained their appeal to the National Court. Motorsport UK acknowledges that the appeal is now properly before the National Court, it having been lodged with the required fee, and leave to appeal having been granted by a Chairman of the Court. However, they argue that General Regulation U21 and its sub-sections, correctly interpreted, properly restrict the right of appeal and invite the National Court to rule accordingly.

In respect of the eligibility of the appeal, the Appellants submit, in summary, that General Regulations U21.1.2 and U21.1.3 apply only to decisions and penalties “during any timed qualifying or heats.” McKenzie was not competing on track at the time and to extend the reach of U21 to cover “off-track” behaviour would mean there would be effectively no limit on the decisions that could be made without any possibility of appeal. That, it was argued, was not the intention behind General Regulation U21 and would be manifestly unjust. It would deprive competitors of any ability to challenge a decision that might be objectively wrong without seeking a means of challenge in the civil courts.

As to the merits of the decisions in issue, the Appellants submit that they did not receive a fair hearing before the Stewards, whose decisions were against the weight of the evidence. In all the circumstances, they submit that a gross miscarriage of justice has occurred, and the penalty imposed on McKenzie is wholly inappropriate for the breach of regulations, if such be made out. They submit that both limbs of General Regulation C7.1.3 are therefore established.

Motorsport UK submit that General Regulations U21.1.2 and U21.1.3 apply only to Interclub status events, not to National Permit events such as this. This case, they submit, is governed by General Regulations U21.2 and U21.2.2 and, taken together, those provide that the Stewards of the Meeting are the sole judicial body and there is no further appeal from either their decisions for imposing a penalty or the penalty itself.

The issues raised in this appeal are complex. Having heard argument concerning the eligibility of the appeal, the Court decided to reserve judgement and proceed to hear the parties' arguments and evidence relating to facts of the case, to save time and expense re-convening (probably on a later date) to hear those matters if the Court decided that the appeal was admissible.

The Eligibility of the Appeal to the National Court

Competitors and other licence holders' right to appeal to the National Court in the final instance is enshrined in Article 15 of the FIA International Sporting Code. 1 As a member club of the FIA, and as the UK National Sporting Authority (ASN), Motorsport UK commits itself to uphold the rules of the International Sporting Code. As the ASN, Motorsport UK is empowered to draw up its own national competition rules, which are published as the General Regulations.

The right of appeal is not, however, absolute. As the ASN, it is open to Motorsport UK to restrict the right in appropriate circumstances.

The Court is satisfied, however, that Motorsport UK's submission is correct, and General Regulation U21.1.2 and U21.2.3 do not apply to National status events. Accordingly, it is inappropriate for the Court to interpret the meaning of "sporting decisions" in this case.

It is then necessary to examine the interpretation of the regulations that do apply to National Permit events.

U21.2 provides simply that "For Interclub and above status short circuit Kart events: The Stewards of the meeting are responsible for all judicial duties."

U21.2.1 provides for Clubman status events where specific permission for the operation of the "(21.2) CIK Judicial process" has been granted. U21.2.2 then provides "Neither the decision for imposing any penalty nor the penalty itself is eligible for appeal."

As the same wording, "Neither the decision for imposing any penalty nor the penalty itself is eligible for appeal" appears following the regulations dealing with Interclub status events operating the Clerk of the Course Judicial process (U21.1.2), and thereafter with Clubman status events operating the CIK judicial process, but not in respect of "Interclub and above," the Court is constrained to interpret General Regulation U21.2 restrictively. It is, at the very least, arguable that had it been

1 https://www.fia.com/regulation/category/123
intended that the same restriction should apply to Interclub and above status events, the Regulation would have so provided, or rather than deal with each event status separately, there would have been a clear statement relating to all events irrespective of status.

The Court has considered whether the expression "all judicial duties" is sufficient to encompass appeals to the exclusion of a right of appeal further against the decisions of event judicial officer in question. As General Regulation U21.1.3 does provide for appeals to the Stewards of the Meeting from the Clerk of the Course in sporting matters and specifies that there is no right of appeal to the National Court against sporting decisions of the Stewards of the Meeting or against eligibility decisions, it is implicit that matters falling outside those definitions may be appealed. Accordingly, we cannot construe "all judicial duties" as necessarily encompassing all appellate jurisdiction.

Eligibility of the Appeal - Conclusions
For the reasons set out, the Court is satisfied that the grounds of appeal advanced by Appellants in respect of the interpretation of General Regulation U21 must fail.

However, although we agree with Motorsport UK's submissions that General Regulation U21.2 governs National Permit events, the Court is satisfied that in respect of events of such status (and above) the wording of the Regulation is insufficiently clear and unambiguous to justify derogating from the right to appeal. Accordingly, the Court accepts jurisdiction to hear the appeal on the facts.

The Appeal on the Facts
The Court viewed the CCTV footage of the incident and heard from McKenzie Douglass himself. There was no other evidence presented.

At the heart of the matter was the raised arm gesture that McKenzie directed towards a rival competitor whom he believed had been involved in an earlier incident in which a teammate of McKenzie's had been caused to retire from that race. The Stewards found that this gesture had been of an offensive and abusive nature.

Before this Court, McKenzie stated that he did not remember the incident clearly, but accepted that he had made a raised-hand gesture directed at driver A, intended to convey "what are you doing?" It was, he said, a spontaneous gesture. He denied that he had been waiting to make his feelings known to A; it was just coincidence that the opportunity arose.

The Court was sceptical of McKenzie's evidence. However, considering the quality of the video evidence and the lack of any other evidence on the issue, we cannot conclude on the balance of probability that McKenzie's behaviour was abusive or threatening within the meaning of General Regulation C1.1.9.

It is therefore unnecessary for us to decide whether the hearing before the Stewards was conducted fairly or not.

It is also unnecessary for us to decide whether, had the breach of regulations been proved, the penalty was wholly inappropriate. We observe however that Appendix 1 of the relevant Championship Regulations specifically provides that the penalty for a breach of General Regulation C1.1.9 is disqualification from the race or meeting. Appendix 2 expressly invokes the "Race 'n' Respect" values by which competitors commit to being polite and treating everyone with respect. It is clear to those competing in this high-profile championship that the highest standards of behaviour are expected and consequently, deterrent penalties are provided for where those standards are not lived up to.

The Appeal on the Facts – Conclusions
For the reasons set out, the Court allows the appeal. The penalty of disqualification from the meeting and the penalty points endorsed are annulled. The appeal fee is to be refunded. No further order is made in respect of costs.

Supplementary Matters
The effect of the Court's interpretation of the applicable regulations is not to render invalid all decisions previously arrived at under U21 and not challenged at the time. It does not follow automatically that previous decisions can, or should, be set aside. The fact that previous misconceptions about the meaning of a regulation may have been put right does not, of itself, afford a proper ground for allowing an extension of time in which to appeal to the National Court. Any such appeal would have to satisfy a Chairman of the Court that the established criteria of General Regulation C7.1.3 are made out.

The Court respectfully invites Motorsport UK, in conjunction with the relevant committees, to consider how the General Regulations, particularly U21, C6 and C7, could be re-drafted to improve certainty on the issues raised by this appeal.

Finally, the Court expresses its gratitude to Ms Franklin and Mr Champkin for the detailed skeleton arguments submitted in advance of the hearing and the identification of material that was relevant to the issues under consideration.
Motorsport enthusiasts come from all walks of life so when you’re getting stuck into a club competition, you never know whom you might be up against. Some people have extra-ordinary backgrounds, and in this feature we celebrate those who do something ‘a little different’ in their ‘other life’.

**Name:** Chris Pearson MBE

**Profession:** Chief Nurse / Executive Director of Nursing

**Motorsport activity:** Stage Rallying navigator
What type of motorsport do you compete in?
I have competed as a navigator in five Stage Rallies with a further three planned to the end of the year. The driver I compete with, Keith Anglesea, has entered the MSN Championship, so hopefully I will be joining him on a few more events in the next six months.

How did you get into motorsport and when did you start?
In September 2019, after a difficult time personally, I wrote my bucket list of 60 things to do before turning 60. I had just two years (I am 60 in December) and having always been a fan of motorsport, particularly Rallying, I included sitting in a rally car on the list. Keith offered me the opportunity to sit in 'the silly seat' (that was what I was told!) and learn to navigate, and I competed in my first Stage Rally in March 2020. We had a full diary planned but COVID-19 caused all the events to be cancelled. We did a few track days once lockdown had been lifted and this helped me get more of a feel for being in the car and different circuits. I still consider myself to be a novice at navigation, but I learn something new after every event that I add to my toolbox to help me do better next time.

What made you want to be a nurse and how did you get into it?
I wanted to be a nurse from an early age. When I left school in 1980 I started my nurse training in Manchester, and I have completed a first degree and Masters Degree to aid me in my career. I have been involved in a few specialist areas of nursing, working as a district nurse for many years and, for the last eight years, as a Chief Nurse of a large organisation with five hospitals and community services. I lead around 2,800 nurses, midwives, and Allied Health Professionals (AHPs) and represent nursing, midwifery and AHPs on the Trust Board. My job can be really challenging, ensuring that we provide safe, personal and effective healthcare to the people of East Lancashire. The last two years have been even more challenging during the pandemic. In my 40 years of nursing, I have never experienced the challenges that we face today.

How does nursing help in your motorsport, or vice versa?
In my nursing role, I need to prepare both mentally and physically because the job is very demanding, with long hours. I am involved in strategy and planning and on a daily basis I need to make some difficult decisions. In motorsport, you apply the same set of skills and preparation is key – planning the circuit, having discussions with your driver, and deciding your strategy. You need to think and act quickly in both roles. There is also the element of teamwork in both, as in my day job I am only as good as my team around me, and in Rallying my driver relies on me and has to have confidence in my ability, just as I rely on him to drive well and keep me safe.

What is the one thing you love most about your day job?
I love the variety in my role as a Chief Nurse, but most of all I love seeing patients receive high quality nursing care provided by my nursing teams. This makes me really proud.

What is the one thing you love most about motorsport?
I love the adrenalin rush as you count down on the start line, but most of all I love the support competitors offer each other. Everyone will go that extra mile to help each other out with advice, support or help in repairing the cars. I have also met some great people during my short time in motorsport – other competitors, marshals and other volunteers who all make Rallying a great experience. I think I have demonstrated it is never too late in life to try something new and I encourage other women to become involved in motorsport in some way, whether taking part or just following the sport.

Do you have a unique hobby or intriguing day job outside of motorsport? Get in touch with us for a chance to be featured on these pages. Send an email briefly outlining your interesting talent or day job to: revolution@motorsportuk.org
Kames Autotest
Kames, 14th November
The East Ayrshire Car Club will run this Autotest at the Kames Motorsport Complex on the outskirts of Muirkirk. The route will follow a set of markers in the venue’s large, sealed paddock area, with changes of direction requiring the use of forward and reverse gears.

For more information visit: http://eastayrshirecc.co.uk/home

EnduroKA “Indy 500”
Brands Hatch, 20th-21st November
The final round of this year’s EnduroKA championship will see competitors run a 500-minute race on the Kent circuit’s Indy layout. The series is all about competitive, cost-effective endurance racing and involves a field of Ford KA Mk1 1300cc cars, produced between 2002 and 2008. All entrants must have 2-4 drivers and cars must be painted up in a ‘racing livery’ to enter.

For more information, please visit: www.msvracing.com/cars/race-series/enduroka

BUKC Karting
Whilton Mill, 20th-21st November
The British University Karting Championship holds its first and second rounds and the opening round of the Inters / Rookies at this Northamptonshire venue. The series involves more than 1,000 students from 55 universities racing 60mph high-performance 2-stroke Rotax Evo engined karts.

For more information visit: www.bukc.co.uk
Rothwell Trail
Rothwell, 28th November

The Yorkshire Off Road Club heads to the popular Rothwell off-road centre in West Yorkshire for this event. It is open to all comers with road-going 4x4 vehicles, including Land Rover Series, Defenders, Discovery and Range Rovers and Jeeps, Suzuki and Foers Ibex.

For more information visit: www.yorkshireoffroadclub.net

Race of Remembrance
Anglesey, 13th-14th November

Established by Mission Motorsport, this unique 12-hour endurance event runs through the night. It pauses at 10:45 on Sunday for competitors, pit crews, marshals, staff, and supporters to join together in a pitlane service of remembrance, with readings from injured personnel, hymns sung by a military wives choir and a poignant recital of The Last Post. The race is open to cars from Caterhams to Citroen C1s with Lotus Elises and Mazda MX-5s also popular.

For more information visit: www.raceofremembrance.com

Le Jog
Lands End to John O’Groats, 4th-7th December

Considered by crews as one of the most demanding and challenging events in Europe, this Reliability Trial is open to cars of a specification built before 1986. Tough conditions are to be expected, but no-one crosses the finish line without a smile on their face. The organisers recommend undertaking less advanced events as a preparatory measure prior to competing in this one.

For more information visit: https://heroevents.eu/event-schedule/le-jog-2021/
**Ulster Rally**

Ulster, 19th-20th November

The final round of the British Rally Championship sees drivers take on the bumpy, challenging roads of Northern Ireland. Moved from its usual August date, the unpredictable winter weather will make it even more taxing. The list of past winners includes Elfyn and Gwyndaf Evans, Chris Meeke, Mark Higgins, Malcolm Wilson, Colin and Jimmy McRae, Stig Blomqvist and Penti Arikkala.

For more information visit: [www.ulsterrally.com](http://www.ulsterrally.com)

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**Roger Albert Clark Rally**

Scotland, Wales and England, 25th-29th November

One of the UK’s premier classic rallies, this five-day event is the longest and toughest special stage rally in Great Britain since the 1991 Lombard RAC Rally. It begins in Scotland and Northern England and will include the classic Mid-Wales forest special stages of Dyfnant, Gartheiniog and Dyfi for the first time, before ending in the Epynt region and Carmarthen. Entries are limited to 115 UK cars and 20 overseas competitors.

For more information visit: [http://racrmc.org](http://racrmc.org)

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**Allen Classic Trial**

Hinton, 28th November

First run in its current form in 1946, The Allen always attracts a full entry for the 75-mile drive around the Mendip countryside. Twice winner of the national Trial of the Year award, it starts and finishes at The Bull pub, five minutes south of Junction 18 on the M4, and takes in classic sections of Big Uplands, John Walker, Toghill, Travers and Burledge. The winner receives the fabulous eponymous trophy.

For more information visit: [https://bristolmc.org.uk](https://bristolmc.org.uk)
From Motorsports teams and tracks to competitions and events, our team is a well-established market leader.

Entertainment of all types is a foundation of our business, from 100 years of Hollywood to over 25 years of Motorsport. We are committed to supporting the Motorsport sector through innovative insurance partnerships to support all aspects of the Motorsport industry including live events, contingency and manufacturing Insurances.

www.agcs.allianz.com
Osian Pryce and co-driver Noel O’Sullivan made themselves title favourites after a victory in the Visit Conwy Cambrian Rally. The pair led all the way to secure back-to-back, with Seb Perez and Gary McElhinney in second.

With the Clwyd Trial canceled the championship concluded as it stood after Gaby Mohr. Rupert North took the title in his Suzuki Alto. Trevor Moffatt (Class 1), Garry Preston (Class 2) and John Charles (Class 3) completing the honours.

Leo Machitski and Dennis Lind survived a nerve wracking wet/dry decider at Donington to wrap up the title, finishing fourth behind first-time race winners Morgan Tillbrook and Marcus Clutton with Ian Loggie and Yelmer Buurman just one position shy of stealing the crown. Will Moore and Matt Cowley scored their second GT4 victory of the season.

Matthew Rees sealed the title with a hat-trick of top-five finishes at Brands Hatch. McKenzy Cresswell won the final event.

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Jason Pritchard and Phil Clarke secured a third consecutive title in a tense and exciting finale at the Ford Parts Cheviot Stages Rally.

Garry Pearson and Niall Burns secured the title after a head-to-head shootout with Jock Armstrong and Cammy Fair in five Kielder tests on the Carlisle Stages.

Garry Pearson scored maximum points on the Eventsigns Woodpecker Rally and Visit Conwy Cambrian Rally to take a six-point lead over George Lepley into the final round of the season.

Ben Friend and co-driver Cliff Simmons put in a stellar performance around Kielder forest in their Ford Escort MK2 to secure their maiden title in the final round of the season, the Carlisle Stages Rally.

Zak O’Sullivan rounded off his impressive season with two wins at Donington Park, both from pole, giving him a total of seven victories and seven podiums overall. Mikkel Grundtvig took a win in the final race.

Ash Sutton sealed the title at Brands Hatch having led the way since the second event in June, signing off with a victory in the last race of the season. Josh Cook won the other two races to move him into the top three, just behind second-placed Colin Turkington.

Fifteen-year-old Max Cotton became the inaugural champion after the final event at Snetterton. Luke Woodham was crowned Driftkhana Champion.

Callum Devine and Brian Hoy won the Go Power Tour of the Sperrins Rally while Jonny Greer and Kirsty Riddick secured their second championship title with a measured drive that saw them finish third overall.

Roberts Vitols won at Lydden Hill’s firework spectacular, while double Super 1600 Champion Jack Thorne won the second event. Derek Tohill finished second to top the standings.

GB3 Championship

Final Championship Standings
1st Zak O’Sullivan 545 points
2nd Ayton Simmons 381 points
3rd Christian Mansell 375 points

Kwik Fit British Touring Car Championship

Latest Championship Standings
1st Pearson / Burns 115 points
2nd Armstrong / Fair 107 points
3rd Beattie / Lees 99 / 101 points

Motorsport UK Protyre Asphalt Rally Championship

Final Championship Standings
1st Jason Pritchard 118 points
2nd Mark Kelly 109 points
3rd Neil Roskell 105 points

Motorsport UK Pirelli Welsh Rally Championship

Latest Championship Standings
1st Pearson / Burns 83 / 87 points
2nd Lepley / Taylor 77 / 66 points
3rd Black / Atkins 62 / 57 points

Motorsport UK KNC Groundworks Scottish Rally Championship

Latest Championship Standings
1st Pearson / Burns 115 points
2nd Armstrong / Fair 107 points
3rd Beattie / Lees 99 / 101 points

Motorsport UK British Rallycross Championship 5 Nations Trophy presented by Cooper Tires

Latest Championship Standings
1st Derek Tohill 173 points
2nd Ollie O’Donovan 171 points
3rd= Julian Godfrey 151 points
3rd= Roberts Vitols 151 points

Fuchs Lubricants Motorsport UK British Historic Rally Championship

Championship Standings
1st Friend / Simmons 86 pts
2nd Stevenson-Wheeler / Pickavance 66 / 68 pts
3rd Elliott / Price 63 pts

Motorsport UK Drift Pro Championship

Latest Championship Standings
1st Max Cotton 115 points
2nd Oliver Evans 110 points
3rd= Matthew Denham 90 points
3rd= Paul Cunnington 90 points

McGrady Insurance Motorsport UK Northern Ireland Rally Championship

Final Championship Standings
1st Greer / Riddick 114 points
2nd Wright / Moynihan 107 points
3rd Hurson / Connolly 93 / 96 points

Revolution - November 2021
# Latest Rotax Championship Standings

<table>
<thead>
<tr>
<th>Category</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
</tr>
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<tbody>
<tr>
<td>Mini Max</td>
<td>Ethan Jeff-Hall</td>
<td>Scott Marsh</td>
<td>Ewan Charman</td>
</tr>
<tr>
<td></td>
<td>843 points</td>
<td>797 points</td>
<td>786 points</td>
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<tr>
<td>Junior Rotax</td>
<td>Daniel Guinchard</td>
<td>Sam Gornall</td>
<td>Leon Henderson</td>
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<tr>
<td></td>
<td>805 points</td>
<td>798 points</td>
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<td>Senior Rotax</td>
<td>Rhys Hunter</td>
<td>Kai Hunter</td>
<td>Sean Butcher</td>
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<tr>
<td></td>
<td>824 points</td>
<td>810 points</td>
<td>808 points</td>
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<tr>
<td>Rotax 177</td>
<td>Daniel Tate</td>
<td>Louis Large</td>
<td>Matthew Easton</td>
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<tr>
<td></td>
<td>828 points</td>
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# Latest IAME Cadet Standings

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<tr>
<td>Mini Max IAME</td>
<td>Zac Drummond</td>
<td>Lewis Wherrell</td>
<td>Noah Wolfe</td>
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<tr>
<td></td>
<td>895 points</td>
<td>873 points</td>
<td>859 points</td>
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<tr>
<td>Junior X30</td>
<td>Leo Robinson</td>
<td>Macauley Bishop</td>
<td>Wesley Swain</td>
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<tr>
<td></td>
<td>915 points</td>
<td>903 points</td>
<td>846 points</td>
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<tr>
<td>Senior X30</td>
<td>Daniel Guinchard</td>
<td>Bart Harrison</td>
<td>Sam Shaw</td>
</tr>
<tr>
<td></td>
<td>890 points</td>
<td>847 points</td>
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# Latest Honda Championship Standings

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<tr>
<td>Honda Cadet</td>
<td>Timo Jungling</td>
<td>Noah Wolfe</td>
<td>Joshua Graham</td>
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<tr>
<td></td>
<td>769 points</td>
<td>755 points</td>
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# Latest KZ2 Championship Standings

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<tr>
<td>KZ2</td>
<td>Joe Charlton</td>
<td>Ryan Cannon</td>
<td>Tom Longfield</td>
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<tr>
<td></td>
<td>606 points</td>
<td>656 points</td>
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# Latest Bambino Championship Standings

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</thead>
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<tr>
<td>Bambino</td>
<td>Austin Newstead</td>
<td>Calbe Pattison</td>
<td>Max Gilman</td>
</tr>
<tr>
<td></td>
<td>410 points</td>
<td>388 points</td>
<td>380 points</td>
</tr>
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</table>
OUR AWARD-WINNING WINTER ATTRACTION
RETURNS THIS CHRISTMAS

LAP OF LIGHTS

1 DECEMBER - 3 JANUARY

FOLLOW SANTA’S LIGHT-FILLED JOURNEY AROUND THE WORLD IN OUR BIGGER, BRIGHTER & EVEN LONGER LAP FOR 2021

FROM £30 PER CAR
### Automotive Accessories

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- Unit 3B, Wellington Road, Waterloo Park, Bidford-on-Avon, Warwickshire, B50 4JH
- Phone: 01789 330668
- www.powermaxed.com

### Batteries

**DMS Technologies**
- Belbins Business Park, Cupernham Lane, Romsey, Hampshire, SO51 7JF
- www.dmstech.co.uk

### Communications Equipment

**Tower Communications**
- 12 The Rampart, Haddenham, Cambridgeshire, CB6 3ST
- Phone: 01353 749859
- www.towercomms.co.uk

**IntaRace Radio Communications**
- Driver to pit radio kits, race receivers, track marshal radios and headsets.
- For all your communication needs:
  - Phone: 01527 908658
  - www.intarace.com

### Automotive Destination

**Bicester Heritage**
- The Station Armoury, Building 123, Buckingham Road, Bicester, OX26 5HA
- Phone: 01869 327928
- Email: hr@bicestherheritance.co.uk
- www.bicestherheritance.co.uk

### Breakdown

**RAC**
- Phone: 0330 159 8727
- www.rac.co.uk/uk-join/motorsportuk

### Circuits

**Bicester Motion**
- The Station Armoury, Building 123, Buckingham Road, Bicester, OX26 5HA
- Phone: 01869 327928
- Email: hr@bicestermotion.com
- www.bicestermotion.com

**Castle Combe Circuit**
- Chippenham, Wiltshire, SN14 7EY
- Phone: 01249 479881
- www.castlecombecircuit.co.uk

**Llandow Circuit**
- Llandow, Cowbridge, Vale of Glamorgan, CF71 7PB
- Phone: 01446 796460
- www.llandow.com

**Silverstone Circuit**
- Towcester, Northamptonshire, NN12 8TN
- Phone: 08443 750740
- www.silverstone.co.uk

### Coaching

**IAM Roadsmart**
- Motorsport UK has partnered with IAM Roadsmart to offer members a 20% on advanced driving courses.
- Phone: 0300 303 1134
- www.iamroadsmart.com

**iZone**
- 2255 Silverstone Technology Park, Silverstone Circuit, Silverstone, Northamptonshire, NN12 8GX
- Phone: 01327 856872
- www.izoneperformance.com

### Coffee

**SACRED Coffee**
- Unit 14 Highbury Studios, 8 Hornsey Street, London, N7 8EG
- www.sacredPOD.com

### Control Fuels

**Anglo American Oil Company**
- 58 Holton Road, Holton Heath Trading Park, Poole, Dorset, BH16 6LT
- Phone: 01929 551557
- Email: info@aaoil.co.uk
- www.aaoil.co.uk
### Control Fuels

**Haltermann Carless**
Haltermann Carless UK Ltd  
Grove House, Guildford Road, Leatherhead,  
Surrey, KT22 9DF  
Phone: 01372 360000  
www.haltermann-carless.com

### Control Systems

**Moog**  
Moog  
Ashchurch, Tewkesbury,  
Gloucestershire, GL20 8NA  
Phone: 01684 296600  
www.moog.co.uk

### Data Logging

**VBOX Motorsport**  
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The Mini Cooper S, piloted by Darell and Nicky Staniforth, at Walton Lodge, one of the special tests on the Dansport Historic Rally, the final round of the Motorsport News HRCR Clubmans Rally Championship. Car number five finished fifth-overall and won its class.

Photographer Ben Lawrence who captured this moment, is just 12, and loves his motor sport and photography. His ambition is to work as a photographer on the World Rally Championship. He takes his camera to racing, rallying and hillclimbing, in particular, and is visiting around 30-40 events a year.