

YORKSHIRE CENTRE TIMES

Issue No 52



BARC

JANUARY/FEBRUARY 1994

CHAIRMAN'S LETTER

Dear Member

Firstly let me wish you a happy, competitive and prosperous New Year.

We have started the year with a marshals supper in the Club House at Harewood which was sponsored by Winerite's of Leeds and a good night was had by all.

We are currently negotiating with the planners to move the control of the hill down to the barns and examining plans to move the paddock down the hill following long thought over the winter.

Next up is the AGM, details of which appear in this issue. We are very keen to welcome new recruits so please put your name forward.

Following closely on the heels of the AGM is Harewood Practice Day so get your entries in quickly to be sure you are there.

I look forward to seeing you all during the season.

Yours sincerely

Simon Clark

Chairman

HAREWOOD DATES FOR 1994

20th March

Practice Day & Marshals Training Day

2nd April

CCC National Speed Championship

3rd April

Spring National

14th May

Open/Novice/Newcomers

15th May

Open Championship

12th June

Jim Thomson Trophy

16/17th July

RAC Championship

7th August

Montague Burton Trophy

25th September

Championship Finals

THE BRITISH AUTOMOBILE RACING CLUB (YORKSHIRE CENTRE)

ANNUAL GENERAL MEETING MARCH 8th 1994

Notice is hereby given that the Annual General Meeting of the British Automobile Racing Club, Yorkshire Centre will be held at the Parkway Hotel, Otley Road, Leeds on 8th March 1994 at 7.30pm.

By order of the Committee

John M English

Hon Secretary

ANNUAL GENERAL MEETING TUESDAY 8th MARCH 1994 PARKWAY HOTEL OTLEY ROAD LEEDS

START 7.30pm PROMPT

All nominations must be made in writing, with the knowledge and consent of the nominee and must be duly proposed and seconded by two members of the Centre.

Nominations should be sent to the Hon Secretary J M English, 32 Farfield Avenue, Knaresborough, HG5 8HB to reach him by or on the morning of 26th February 1994.

*Articles for the next edition of the Times
please*

to the Editor by MARCH 18th 1994

Mrs Pat Kenyon

4 Leslie Road

Hillsborough

Sheffield S6 4RB

Tel & Fax 0742 340478

A LETTER TO THE CLASSES COMMITTEE

Paul Nutter

I am writing this letter as I would like to see a total re-think on what I see as outdated and ill thought out regulations concerning the Touring and Marque Sports Cars.

Let's begin with Regulation 2.5.1 :-

You can spend a fortune on steel cranks, steel rods, forged pistons, roller rockers etc but you are only allowed a 0.060" overbore. The original gearbox casing must be retained but its internals are free. The original axle and nosepiece must also be retained but again its internals are free.

At the Classes Forum Chris Seaman explained that the plus 60 rebore rule was brought in to give the engine block a longer life but in reality to be competitive you immediately overbore the engine and so if any damage occurred a new block would be required rather than another rebore and so this rule achieves the opposite of what it set out to do.

The gearbox rule is, I presume, an attempt to stop pukka race boxes being fitted, but if that is so, why allow SC/CR gearkits to be fitted. All you are doing is converting a standard box into a race box. If it is an attempt to make sure that the gearbox still looks original why bother when other parts of the car can be changed to those of a different type, make or material of that originally fitted.

As for the axle and nose piece rule, does this mean that RWD cars with IRS and 4x4 cars can run with different differentials and centre diffs as these don't have axles but diff holders bolted to the floor.

You may remove alternators and dynamos (what about starting handles and trembler coils) but you must retain the standard fuel tank, although an auxiliary tank is permitted. Isn't it dangerous to compete with a fuel tank holding nothing but explosive fumes or are we perfectly safe now that the RACMSA has forced us into wearing fire resistant overalls?

Now onto 2.5.2.

You can make any modifications to the braking system and wheels which means that 13" discs and AP racing callipers are OK as are split rim magnesium alloys of any size but you have to keep all seats fitted, most of which are made of combustible foam which gives off a lovely smell when alight. As said earlier concerning the gearbox rule and nose piece rule, why keep those original when

you can change drum brakes to discs and have the part made from any material, by any manufacturer and of any size. The same can be said of wheel hubs, driveshafts, suspension components etc. My view is that this rule was made in the 60's when vehicle's brakes were about as effective as a chocolate fireguard and so a liberal rule was needed to ensure that the cars could stop.

And finally 2.5.2.

You must not lighten coachwork (does that include spurious panels as non-original panels are generally of a slightly thinner gauge than genuine ones and are therefore lighter) and must include all bumpers, fittings and trim but you can remove overriders (yippee!!). Number plates and number plate backing plates (whatever they are?) can also be removed and as a safety measure sound insulation, trim and carpets can be removed from the boot and engine compartments only, whilst only front interior carpets can be removed. This means that the two areas which are checked by the scrutineers to ensure that they are isolated from the passenger compartment can be stripped of combustible material but that the actual passenger compartment, in which you are sitting, must remain full of the same combustible material. This is like lighting a cigarette inside a munitions factory after having fixed No Smoking signs on the outside of the building. As for the rule regarding front interior carpets only to be removed, why? Doesn't carpet burn if it's under your bum or behind you?

In my opinion these rules can't have been introduced as a bid to keep costs down because if they have, they have failed. Also if they were introduced to keep the cars somewhere like original they have also failed as most of the parts can be changed to those made by different manufacturers. If the rules are there to enable the spectator to see that they are, more or less, like the ones that they drive, they are apart from having two or three times the power, running slicks twice the width of standard tyres, having wheel arch extensions, rollcages, no tax and no MoT and of course no alternators or number plates but having two petrol tanks.

The reason for these comments is that cars are continuously changing, becoming more complex, even older vehicles have new parts still being made for them and so the regulations should also

be more modern and apply for the vehicles competing today. For example if the Touring Cars that are such a hit on Grandstand on a Saturday decided to enter at Harewood, they would not be eligible for the Touring Car class. That would clear things up for the all too rare spectators.

NEW CLASS STRUCTURE

Paul Nutter

Here are my ideas for the new class structure if we dropped the RACMSA classes, although as you can see, most of the classes would run to the RACMSA existing regs.

- 1 Road Cars up to 1400cc
- 2 Road Cars over 1400cc and up to 2000cc
- 3 Road Cars over 2000cc

REGULATIONS

Cars to remain standard in every way except for exhaust system, dampers, springs and the fitting of alloy wheels provided they fit under unmodified arches and are not more than 1" wider than standard. Special soft compound tyres are not permitted.

- 4 Modified Saloon Cars up to 1400cc
- 5 Modified Saloon Cars over 1400cc and up to 2000cc
- 6 Modified Saloon Cars over 2000cc

REGULATIONS

Same as Modified Production Car regulations except that gearbox and axle/diff must be made by the same manufacturer who made the car that they are fitted to.

- 7 Formula Fords
- 8 Marque Sports Cars up to 1400cc
- 9 Marque Sports Cars over 1400cc and up to 2000cc
- 10 Marque Sports Cars over 2000cc

REGULATIONS

Same as BARC (Yorks) regs.

- 11 Modified Production and Kit Cars up to 1400cc
- 12 Modified Production and Kit Cars over 1400cc and up to 2000cc
- 13 Modified Production and Kit Cars over 2000cc

REGULATIONS

Same as existing RAC regulations but kit cars will be admitted.

- 14 Sports Libre Cars up to 1600cc
 - 15 Sports Libre Cars over 1600cc
- ### REGULATIONS
- Same as existing RAC regulations.

- 16 Racing Cars up to 500cc
- 17 Racing Cars over 500cc and up to 1100cc
- 18 Racing Cars over 1100cc and up to 1600cc
- 19 Racing Cars over 1600cc and up to 2000cc
- 20 Racing cars over 2000cc

REGULATIONS

Same as existing RAC regulations.

REASONING BEHIND CLASSES AND REGULATIONS

Road Cars

Allowing suspension modifications would remove any argument over eligibility. Exhausts are free as this is generally the first part of the car to be replaced and an enthusiast would be most likely to replace with an aftermarket one rather than a standard one. Allowing alloy wheels is an obvious choice as this is a common modification. In total these modifications will allow a larger section of cars to be eligible yet clearly still be road cars with simple and relatively cheap modifications.

Modified Saloon Cars

The gearbox and axle rule means that the running gear of a vehicle would all be made by the same manufacturer (eg. no Fords with Rover V8 s etc)

The above regulations for the saloon cars would mean that to the average spectator two vehicles of the same model placed together would look similar but one would be an obvious road car and the other an obvious race car.

Sports Libre Cars

I propose merging Classes E and F (existing RAC regulations) due to poor entries in Class F and the fact that the class records are very close.

All in all I think that these classes cater for everyone currently running at Harewood and would settle the argument over 'standard road cars' competing fairly. My own view is that 'standard cars' on a hillclimb are particularly unspectacular and that entries would still be low and so classes would have to be merged, and we would end up in a similar situation to what we have now, but if we don't do something about it, we will never know. I suggest running some form of 'standard car' class for one year and see what happens. It will either work or it won't.

Dear Editor

1994 REGULATIONS BOOKLET

As a regular Marque & Touring Car competitor I should like to take the opportunity to reply to Mr Seaman's note in the last Times.

With respect to the suggestions to allow additional bodywork and engine modifications, I am against this largely on the grounds of cost. Some competitors might see themselves gaining advantage if this were introduced but the keenest and best heeled will always modify their cars to the limit of the regulations and so any advantage would be quickly lost. Additionally, one of the aspects of the Touring Car regulations that appeals to me is that it is relatively easy to return the cars to standard. Additional modifications would make this more difficult.

The suggestions about suspension pick-up points and gearbox casings were my own and were intended purely to clarify the poor wording of current rules.

If it is felt that this is a good time to tinker with the rules then may I make three suggestions.

1) On the grounds of safety it would seem sensible to allow standard fuel tanks to be replaced by safety fuel cells manufactured by approved suppliers, as listed in the Blue Book.

2) On the grounds of cost I would welcome a modification to allow gearboxes to be free. The last time I saw a gearbox for my Europa advertised it was £800 and weak MG Midget boxes are becoming a significant cost factor in that class. Since internals are free (and for crown wheel and pinion) then there would be no performance advantage (other than perhaps a weight saving) so that adoption of such a change should help cheapen the cost of the formula by either cutting replacement costs or increasing reliability.

3) Turbo Equivalency; I believe that this should be increased to at least 2.0. At 1.4 a 1000cc Turbo car could dominate the Mini and Midget classes.

At the classes forum I raised the question of people who are persistently late for practice and thereby gain an unfair advantage. In the latest Blue Book under Law L 9.1.2., it is stated that any competitor not reporting as instructed may be fined or excluded. The introduction of, say, £5 fines for any persistent offenders may stamp out this practice.

Keith Wilford

You will find the 1994 Regulations Booklet, which includes the Harewood entry forms, enclosed with this edition of the 'Times'.

Please read this **CAREFULLY** as there are some changes from last year.

Please also note that entries will be accepted on a FIRST COME, FIRST SERVED BASIS.

The Yorkshire Centre needs to maintain a high entry level for Harewood to remain viable. With this in mind and to also add variety and spice for the spectator, many new championships have been incorporated into this year's programme. The usual favourites, MG, Ferrari, Morgan etc will remain but they are joined by Porsche, Classic Lotus, Group B cars and Pre-War Austin Sevens. As last year, the Cars and Car Conversions Championship will have two rounds at Harewood and although this championship has been split into north and south divisions, they will still enhance entry levels at these events.

No one wants to see Harewood regulars left out of an event so get your entry in as soon as possible.

Don't complain if you cannot get into an event if you leave your entry to the last minute!

CLUB NIGHTS

The Yorkshire Centre unfortunately only has one true social event in its calendar, the Annual Dinner & Dance. It would greatly enhance club spirit and camaraderie if we could re-introduce the Club Nights that were so popular in the 60's and 70's. These could take the form of Noggin & Natters or light hearted competitive events such as Scalextric evenings, gymkhanas, PCT's etc or any other interesting format that anyone can come up with.

To get together officials, marshals and competitors without the usual pressures associated with competition events could only improve relations between all parties and create an enhanced club spirit.

The Barn and the Harewood site would lend itself to any of the above activities so if anyone is interested in Club Nights could they please contact Michael Kempley if they wish to use the Harewood facilities.

Michael Kempley, 106 The Avenue, Harewood, Leeds, LS17 9LD

CHRIS SEAMAN REPLIES TO PAUL NUTTERS LETTER

To take Paul's more serious points in order:-

Gearboxes and Diffs

The gearbox rule is to allow a stronger box with better ratios (ie SC/CR) but not a race box (ie sequential, dog box, Hewland type etc). 4 x 4 IRS cars cannot change the nosepiece of the diff as the rules state (as far as I am aware they still have them, although you may call them a different name!).

Alternators and Fuel Tanks

Alternators/dynamos may be removed, what else would you have us call them? Starting handles are free, although the scrutineers may insist that you remove them prior to venturing onto the Hill and I don't know what a trembler coil is. If you are using an auxiliary tank (which enables you to carry a very small quantity of fuel without surge problems - much safer) then wash the tank out, do not seal it and you shouldn't have any confined explosive fumes.

Brakes and Wheels

Yes, you can fit racing brakes but if you don't think they are any better than standard don't waste your money. You cannot fit wheel rims of any width, they must fit under the wheel arches which are limited to a maximum extension of 75mm.

You are right Paul, these rules were made in the sixties but have been altered and (hopefully) improved over the years on a continuing and ongoing basis.

Lighter Panels

If you wish to build a vehicle out of aftermarket metal panels because they are slightly thinner - good luck! The next step would presumably be to build a 7/8th size replica or to dip the complete shell in acid as the good 'ol boys of NASCAR were rumoured to be doing in the seventies.

Number Plates and Carpets

Look at vehicles old enough to carry white on black number plates as original equipment and you will find that a lot of models had number plate backing plates (I'll guess that your Escort did Paul!). I agree with your parallel drawn with lighting a cigarette in a munitions factory except of course that there aren't many munitions there because

you are allowed remove them from the two most likely sources of fire and if you remember the Blue Book you will know that the vehicle must have a fireproof bulkhead between the engine and fuel compartments and the passenger carrying area.

BTCC Cars

You are quite right Paul a BTCC car would not be eligible for the BARC(Y) Touring Car classes because it is modified beyond the BARC(Y) regulations but there again they only cost £100,000 or so.

Classes

I leave your proposed classes for our members to comment upon except to note that you still include Marque Sports Cars despite the fact that they share the same regs as the Touring Cars which you don't appear to approve of. Your comment regarding "Standard Cars" is one that I definitely agree with.

On a personal note

I don't want to go drag racing, however I don't think that a series of 30mph corners 'sorts the men from the boys' but I think a really quick corner does and I find Paul both quick and spectacular through those, I am therefore most surprised to imagine that Paul's favourite Hill is Baitings Dam (allegedly). There is nothing wrong with the Harewood Esses but that doesn't stop me thinking that they would be much more entertaining for both the competitor and spectator if the road were a little wider.

Chris

AINTREE

It is sad that Aintree, which has become an important speed venue on the northern scene, is likely to be lost in the near future. Since the demise of sprinting at Oulton Park, Donington, Cadwell Park etc, it is one of the few places that you can extend your car and actually hit three figure speeds. It is hoped that many people will write to the Aintree Racecourse Company Limited, Liverpool, L9 2AS and the venue can be saved.

GOOD NEWS

We wish the LAC luck in getting their new sprint venue, the old Leyland Truck Test Track, operating as soon as possible particularly if we are to lose Aintree.

MARSHALS ABOUT

TIM BENDELOW

Since the last article, our intrepid marshals have been all over Britain at a variety of events.

The 40th Anniversary Gold Cup Race at Oulton Park was held for Touring Cars in early August. A trainee fire session was also attended by some of the TOCA 'stars' who were greatly impressed by the skills shown in tackling fires - even having a go themselves. The race was won by Winckelhock's BMW from Cleland's Vauxhall and Soper's BMW.

Later in the month, the Bank Holiday Vintage Meeting attracted a crowd five times larger than the previous day's modern races.

September meant a trip to the Isle of Man for the Manx International Rally. We were timekeeping - not seeing the cars at full speed but still having a good event. Prior to the final Harewood, the Artemis Forest Stages was run - the second Dalby Stage (renamed Housedale for the day).

The Isle of Mull beckoned for the 24th running of the Philips Tour in early October. Sleet and snow greeted the visitors and a young local gave the more experienced drivers a fright with his stage times in an elderly scruffy Mk2 Escort, spending most of his time sideways on the road.

The Network Q/RAC Rally followed in November. Sunday's Clumber Stage was televised for the RAC runners but we missed the Historics beforehand. Two runs were planned but the second was cancelled after Max Harvey & Martin Griffiths crashed their Porsche 911 out in a big way. Ice and snow in large amounts greeted the organisers as the rally moved into Wales. Early morning Monday, marshals had to crawl at 5mph to get into position so that rally cars could travel at 60mph!?

Kielder was little better on the Tuesday whilst Dalby on Wednesday at least had the sun to make the foot deep snow picturesque as we waited for the cars to start. Over £1200 was raised for Children in Need by marshals, spectators and competitors. One brave fellow even ran the stage in the snow and ice to raise funds!

The year was concluded with the post-Christmas Croft Rallycross and the Food Weighhouse Christmas Stages in Hamsterley and around Catterick.

1994 EVENTS

- Feb 27 Kalkkwik Stages, Dalby Forest
BMRMC.
Your help is urgently needed to run this stage. All duties. First car 14.30. Stage length 9 miles incl Mikkolas and two visits to the Woodyard. Contact Bob Wright 0532 391220 or Tim Bendelow 0423 340594
- March 6 Rallycross at Croft
- March 12 Lakeland Stages, Lake District
- March 26/27 Sheffield Auto Show
Contact Simon Clark
- March 26/27 Vauxhall Rally of Wales
- April 4 British Rallycross Championship, Croft
- April 10 Championship Races, Cadwell

For any of these events contact Bob or Tim

MARSHALS AVAILABILITY

A 1994 Marshals Availability Form is enclosed for your use. Please fill it in, retain one half and return the other half as soon as is practical to the Chief Marshal, Tim Bendelow at the address shown.

If you have already received a form, please pass this one onto anyone who may be interested in helping out at Harewood.

I look forward to receiving your offers of help.
Tim Bendelow

COMMON SENSE

I am reeling from the latest onslaught on motor sport and this time it is from within the sport that the attack has come. To attack our marshals, who are acknowledged to be the cream in world-wide motor sport, seems to show a lack of understanding and common sense. It is bad enough when the sport is attacked by environmentalists and others, but to have someone who controls so many of our important club circuits lash out in such a way is a tragedy.

I sincerely hope that there isn't a backlash and that marshals continue to support events at Brands, Cadwell, Snetterton & Oulton.

Brian Kenyon

THE BRITISH AUTOMOBILE RACING CLUB (YORKSHIRE CENTRE)
ANNUAL GENERAL MEETING
MARCH 8th 1994

Notice is hereby given that the Annual General Meeting of the British Automobile Racing Club, Yorkshire Centre will be held at the Parkway Hotel, Otley Road, Leeds on 8th March 1994 at 7.30pm.

By order of the Committee

John M English
Hon Secretary

AGENDA

- 1 To receive and adopt the minutes of the Annual General Meeting held on 11th March 1993
- 2 To receive the reports of:-
 - a) The Hon Secretary
 - b) The Hon Treasurer
 - c) The Hon Competitions Secretary
 - d) The Hon Social Secretary
 - e) The Chairman
- 3 To receive and adopt the accounts for 1993
- 4 To appoint the auditors
- 5 To elect Officers and Committee for 1994/95:-
 - a) Officers
 - b) The requisite number of committee members
- 6 To transact any other formal business which may properly be dealt with at an Annual General Meeting of the Centre.

NOTE

Under Item 6 on the Agenda, time is given for discussion on any other business members may wish to raise. It is helpful, particularly where explanations or answers which will require reference to Centre records, if advance notice can be given.

OFFICIALS FOR THE YEAR 1993/94

OFFICERS (Who retire)

Hon Treasurer P Varley
Hon Secretary J M English

COMMITTEE MEMBERS (Who retire by rotation)

D Dalrymple, D Naylor, J Staveley, J Johnstone (Resigned 1993)

In accordance with Article 39 of the Memorandum and Articles of Association of the British Automobile Racing Club Limited, the Yorkshire Centre Committee makes the nominations for Officers for the following year.

The following nominations have been made for 1993/94

OFFICERS

Hon Treasurer P Varley
Hon Secretary J M English

COMMITTEE

The following have indicated their willingness to stand for re-election

D Dalrymple (nominated by the Committee)

D Naylor (nominated by the Committee)

J Staveley (nominated by the Committee)

Including these nominations there are vacancies for Committee members and nominations for candidates are invited.

All nominations must be made in writing, with the knowledge and consent of the nominee and must be duly proposed and seconded by two members of the Centre.

Nomination should be sent to the Hon Secretary

J M English, 32 Farfield Avenue, Knaresborough, HG5 8HB to reach him by or on the morning of 26th February 1994.

LETTERS TO THE EDITOR

Dear Pat

Having read or heard various negative comments about the 'Esses' at Harewood I would like to say that it is one of the most challenging and demanding parts of the course. To me it shows up any handling shortcomings in the cars and it sorts the men out from the boys. To all those people who don't like the Esses, may I suggest they take up Drag Racing as anybody can drive in a straight line.

Paul Nutter

INFLATION

When everyone is trying to convince me that inflation is now under control and at extremely low levels, I cannot reconcile myself to this when in recent years entry fees, licence fees etc have gone up at a rate far and above inflation.

Although many events have had to be cancelled and entry levels have been lower, hopefully we may soon turn the corner but motor sport in some areas is being priced out of your 'man in the street's' pocket.

Club Member Mick Ward has competed in the ICS Historic Championship but this year the Championship has been integrated into the TOCA package with 13 BTCC meetings plus two others, and entry fees are now up to £135 per meeting, likewise the registration fee has risen from £25 to a staggering £175. To top it all, they want competitors to pay ALL entry fees before the start of the season, a total of £2000+ and this is non-returnable.

Not all club racers have rich daddies or megarich sponsors. I can understand the TOCA people wanting to present a professional looking package but if this is at the expense of driving people out of a series which they have enjoyed, it is counter productive.

No wonder many Historic Saloon Car racers are now looking round for a viable alternative.

Brian Kenyon

ADDITION TO SUPPLEMENTARY REGULATIONS - Schedule 1 in 1994 Regulations Booklet

All events are also open to competitors holding a licence endorsed "Valid throughout the EEC" issued by the AFN of a member country of the EEC. As per General Regulation E 2.6.5.

FOR SALE

4 wheel covered trailer
in excellent order
£950 ono
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WANTED

Revolution 7" x 13" four spoke alloy wheel
Ford fitting
Two Competition 8" x 13" Revolution
or similar alloy wheels 5" inset, Ford fitting
Contact Peter Herbert
(Home) 0325 374656
(Office) 091 386 6111

FOR SALE

Set of four lightened and balanced Schmit
pistons, suitable for Ford 1660 crossflow
£30
Mountney 10" diameter leather steering wheel
£10
Westfield spare wheel carrier
£8
Westfield low drag road legal headlamps
£35 pair
Contact Peter Herbert
(Home) 0325 374656
(Office) 091 386 6111

BARC YORKSHIRE CENTRE OFFICERS & COMMITTEE 1993

CHAIRMAN	Simon N Clark
HON SEC.	John M English 32 Farfield Road Knaresborough HG5 8HB
VICE CHAIRMAN	J Richard Hardcastle
HON TREASURER	Peter Varley
HON COMP SEC	Chris G Seaman 0742 585695 (Business)
COMMITTEE	
Tim C Bendelow	David Dalrymple
David Naylor	John Staveley
Antony J Hodgetts	Graham Wride
Ivor Pashley	

The inclusion of any article in this publication does not imply that the Club, its Officers, its Editorial staff or any other member shares any opinion expressed therein



Wheels

WHEELS, A SUPPLEMENT FOR MOTOR CLUB MAGAZINES, IS PRODUCED BY THE RAC MOTOR SPORTS ASSOCIATION



As well as being highly respected in F1, Brian Hart has links with many other branches of the sport – he designed the alloy block for the BDA engine which led to many Escort successes and his engines have won 9 of the last 10 Hill Climb Championships; he even prepared the engine for the Terrier in which as a driver he won the Chapman Trophy for 1172's in 1960 (shown above). All in all, a good man for *Wheels* to ask for broadbrush advice on engine tuning.

His first tip is perhaps surprising coming from someone whose profession is engines: don't spend ANY money or time on the engine until the suspension, tyres and brakes are properly sorted. Brian reckons these contribute around 70% to the performance of a car and should therefore take priority. This is born out by one-make series where tests often show that the winners don't always have the most power; after all, what's the odd horse or two between friends when you are slithering over a loose special stage? If you increase engine power before the

car is handling properly you may simply arrive at the inevitable accident at a slightly higher speed.

Once the rest of the car is sorted and you turn to the engine, consider what equipment you have available. Motorsport is full of heroic stories of engines tuned on kitchen tables and fine work can still be done that way, but with modern electronics you really need access to a dynamometer or rolling road to make meaningful progress, especially if the rules let you change the engine control unit. Perhaps an idea for a group of club members to hire a rolling road for an afternoon for joint use?

Cultivate cleanliness, use the right spanners and, above all, study the regulations and look for loopholes. If the rules only allow blueprinting then try to get access to a dealer parts store to select components with the most helpful tolerances.

Next, decide *where* you want power. As Brian points out, the Brighton Speed Trials need a different approach to the hairpin at Mallory. If the regs

permit freedom of camshafts then this will help you to vary where the power comes in, although for general tuning attention to the cylinder head is likely to be most productive. Don't neglect the exhaust system – "free flow" should be the aim although keep in mind that noise controls are unlikely to get any easier for motorsport; this is one area where scrutineers may be inflexible.

Final tips:

*Get good clean air to the engine and pay attention to the cooling system. If you *over* cool you can always blank things off but cutting slots to soothe an overheated engine can be a desperate business and, apart from anything else, most undignified.

*Keep records otherwise you won't know which mod contributed what. Even top teams lose their way over development at times.

*Remember that the simplest and cheapest way to improve power-to-weight may be to reduce the latter, not least from around the driver's midriff perhaps. *Stuart Turner*

AUTOSCENE

**JAMES HUNT
PROFILE OF A CHAMPION**
From Duke Video, 69 minutes,
£12.99

A tribute that brings together film of all James's racing highlights in a concise account. It must be an essential addition to anyone's motorsport video library.

**AUTOCOURSE HISTORY OF THE
GRAND PRIX CAR 1945-65**

By Doug Nye, published by Hazleton, hardback, 288pp, £40
As a companion to his previous volume, *Autocourse History of the Grand Prix Car 1966-91*, this eagerly awaited 'prequel' completes Nye's exhaustive history of post-war Grand Prix technology.

Chapters chronologically covering some of the landmark cars of the era, including the Mercedes-Benz W196, the Vanwall and the Lotus 25-33, are interspersed with sections specifically highlighting the major advances in the technology of the sport. Exhaustive marque and engine directories describe every car and power-plant produced for Grand Prix racing during the period and a comprehensive appendix gives results and a mini-report for 433 races run for Grand Prix cars.

The scale and scope of the book is vast, but Nye's ability to write on highly technical matters in an understandable and entertaining manner means the mass of facts presented never descends into turgid shopping lists. With a liberal sprinkling of anecdotes and the author's often wry humour, plus hundreds of excellent contemporary illustrations and photographs, the book is destined to become a classic.

Essential reading.

Rating ★★★★★

LIF

WORLD RALLYING 16

Published by Martin Holmes
Rallying, hardback, 208pp, £19.95
World Rallying 16 retains the familiar format of all previous editions. Essentially the first part of the book reflects the 1993 World Rally Championship, while the latter pages contain the in-depth results from around the world for which it is rightly famous.

Feature material includes a profile of Colin McRae and an insight into the development of the Subaru Impreza, while Hannu Mikkola looks back at his 30 year career which covered the most basic cars to the most technologically advanced.

If there is a criticism of Martin's work, it is that the words tend to be rather 'dry', but this is neatly balanced by his attention to detail and the excellent photographic work by Maurice Selden whose pictures frequently grace the pages of *Autosport* magazine.

Rating ★★★★★

KO

COD FILLET QUIZ



1. What does a Black flag with orange disc and number signify?
2. Name the winning co-driver in the 1989 RAC Rally.
3. Who won the G.P. of Gibraltar?
4. Name the 'Shelsley Special' built by Basil Davenport.

ANSWERS ON PAGE 11

Wheels 2/94 i

FEATURE
BY **AUTOSPORT**

Facts about... HISTORIC RALLYING

• Historic rallying in the UK is currently for cars registered before 1968 although there is a category, which cannot compete for overall honours, called Post Historic for cars registered before 31.12.1974. However the RACMSA is currently reviewing these rules to try to improve the popularity of the latter category.

• Currently historic rallying is largely confined to the older cars and almost every type which competed in the 50's and 60's - such as A40s, various Volkos to an ex-works Austin Healey 3000 - appears on the 60 or so events run each year.

• As with modern rallying, there is a considerable divide between stage rallies and a wide variety of road events ranging from fun runs to events which attempt to copy rallies of the 50's and 60's as closely as possible. John Brown's LE-JOG (Lands End to John O'Groats) was a perfect example of a very competitive event in the latter category with road sections over Exmoor, the Epynt Ranges, Trough of Bowland and around the west coast of Scotland. 48 of the 49 starters finished with a great sense of achievement; only one managed a gold medal.

• Except for the cars, historic stage events do not differ from modern stage rallies and are often run in conjunction with modern events. The Rally Britannia run on the first day of the Network Q RAC Rally is a case in point.

• The variety of historic road rallies is immense. Many include autotests, navigational exercises or map reading (often at night), and regularity sections. The latter are a throw back to the 50's and involve travelling at a consistent speed with crews checked at secret controls, often to the nearest second. Although the emphasis appears to be on the navigator, teamwork is an important element for success.

• Many historic competitors were involved in the sport in the past and see historic events as a means of meeting old friends and reliving old times. Although the will-to-win is always present, the social side of these events is equally important; events often include visits to historic and interesting venues. Such events are more of a family occasion than modern events and far more female and mixed crews take part.

• Not surprisingly, historic rallying is the fastest growing side of motorsport and is an excellent introduction for people contemplating motorsport for the first time.

Colin Francis

NEWS FROM THE RACMSA

Chester to host 1994 Network Q RAC Rally

The 1994 Network Q RAC Rally will be based at Chester, with a single overnight halt at Harrogate. The RAC Motor Sports Association has also announced measures to make next year's event significantly cheaper for competitors.

The Rally will include a maximum of 30 special stages. The finish will take place on the Wednesday afternoon, with the official prizegiving later that evening.

RACMSA Chief Executive John R Quenby explained: "We have been able to retain the elements which make our event such a challenge, while at the same time reducing costs for both factory and private entrants.

"The competitive mileage will be maintained at the current level, but a reduction in the number of stages will make it significantly cheaper to service.

"Further cost savings will be possible as we have cut the number of nights away from headquarters to just one; the reconnaissance will be two full days shorter and the prizegiving will now take place on the same day as the finish."

The Network Q RAC Rally will be the tenth and final round of the 1994 FIA World Rally Championship.

Outline schedule for the 1994 Network Q RAC Rally:

Sunday 20 November	Chester-Harrogate
Monday 21 November	Harrogate-Chester
Tuesday 22 November	Chester-Chester
Wednesday 23 November	Chester-Chester

It is expected that Chester will remain the rally base for both the 1995 and 1996 events.

Promotional events

Members of three motor clubs will be permitted to compete in promotional events without needing any competition licence (other than a club membership card).

A promotional event in this context must be an autotest, a 12-car road rally or a production car trial. Each motor club may be involved in only one such promotional event in any calendar year.

New historic rally rules

The regulations for international historic rallying – contained in Appendix K of the FIA Year Book – have been completely re-written. The new rules came into force on 1 January 1994 and will appear in the new edition of the FIA Year Book.

However, if any person wishes to receive a copy of the new Appendix K immediately, they can do so by sending £5 (including postage) to the RACMSA.

New format and European status for RAC Historic Rally

The 4th RAC International Historic Rally of Great Britain will run as a two-day event on 19/20 November, associated with the 1994 Network Q RAC Rally.

The RAC Historic Rally – organised jointly by the RAC Motor Sports Association and the Historic Rally Car Register – will be the final round of the FIA European Historic Rally Trophy; the first time any British event has been included in the premier championship.

RAC Historic Rally cars will set off on Saturday, to tackle a number of stages laid on exclusively for the historic competitors; it is hoped that these stages will include a pursuit sprint of the type pioneered so successfully on last year's event.

A national rally – probably to be known as Rally Britannia – will follow the international event through the Saturday stages only.

On Sunday, international historic competitors will then tackle a selection of the Network Q RAC Rally's traditional spectator stages. It is expected that international crews will cover a total of about 60 miles on special stages during the two days.

RACMSA Leaders Sprint Championship returns

The RAC Motor Sports Association is pleased to announce that its Leaders Sprint Championship, which did not take place in 1993, will return with a new format this year.

The RACMSA Leaders Sprint Championship will take place over about a dozen rounds, most of which will run concurrently with the RAC British Sprint Championship. The series starts on 17 April at Curborough.

As in past years, points will be scored according to performance in each class, but the system will otherwise be completely new: a class win will be worth 20 points, with lower positions scoring according to how close they finish to the winner.

Because any driver finishing within 20 seconds of the class winner will score, the vast majority of championship contenders will be able to accrue points, which will reward those who support the series on a regular basis.

The class structure has been totally revised, with new classes for road-going saloons and sports cars, while the capacity splits for existing classes have been adjusted to take account of modern engine sizes.

John R Quenby explained: "A special working group carried out an in-depth study of sprinting during 1993. It was apparent to them that many sprint competitors use road-legal cars and that the sport needed different regulations from those of its sister discipline, hillclimbing.

"The chosen format means that the new Leaders Sprint Champion might be driving a road car or an outright competition car. Both will have an equal chance of winning a major RACMSA championship."

The registration fee for the new series will be £15.

Regulations are available from the championship co-ordinator, Robin Boucher, 3 Swift Park Grove, Spennells, Kidderminster, Worcestershire DY10 4HN. ☎ 0562 751163 (evenings only, before 21.30).

TECHNICAL TIPS

SUPPLIED BY  **CARS**
and CAR CONVERSIONS

Fuel for thought

IT'S likely that many competitors have at one time or another considered valves and port sizes relating to engine characteristics. Some people are under the impression that fuel injection is the answer to all those problems of poor tractability for highly tuned engines. Well, it doesn't quite work that way.

With something like a 2-litre engine running big 50 DCOE carbs, big cam and big valved head, you have excellent breathing at high engine rpm. But at low engine speeds much of the depression leaving the cylinder hardly makes an impact on the carb choke, due to its size. We call this a poor 'signal' and the carb isn't sure how much fuel to supply. As the depression builds up the carb starts to get the message, but a lot of the fuel that is dumped into the air stream

never makes it to the engine, it's lack of sheer speed means that it drops out long before it reaches the head.

Still more throttle and rpm and the engine starts to work, but it is still off cam, which means that although most of the fuel and air is now reaching the cylinder, the piston coming up the bore sees the valve still open and pushes the mixture back out of the cylinder. In a bad case that mixture is pushed right out of the carb, passing the main jet and picking up more fuel on the way. Weaken off the fuelling here and it is too weak for maximum power. It's all a bit of a game, trying to juggle the jets and emulsion tubes and air correctors to get the best compromise. If you know what you are doing you can get the thing working surprisingly well.

Fuel injection does take care of the weak signal problems in as much as the electronics can read the weakest of signals, no matter how wild the cam. What it can't cope with is

mixture being pushed out of the bore due to poor camshaft timing. Fuel injection isn't the answer to all the problems, although it does go a long way towards solving most of them. What we need now is a fuel injection system for the same price as a pair of Webers!

QUIZ ANSWERS

1. Mechanical failure.
2. Ronan McNamee.
3. Girling Foss (on Peter Ustinov's LP).
4. SPIDER.

*Correspondence to Stuart Turner,
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