

Championship newsletter: 4/2015 – 30 April 2015

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Welcome

Welcome to championship newsletter number 4 for the 2015 **West Wales Rally Spares R.A.C. Rally Championship**.

Congratulations go to Phil Burton and Mal Capstick for heading the R.A.C. contenders on the **Pirelli Carlisle Rally** to move into the overall championship lead. We also congratulate the other category and class winners and commiserate with those who did not reach the finish. It is clear that the weather led to stage conditions that were not usual for the Kielder region. Our thanks are due to Brian Kinghorn and his team for a warm reception in Carlisle.

Obviously the recent cancellation of the **Neath Valley Stages** has given us a longer summer break than expected, but we still have some superb events to look forward to over the balance of 2015, starting with the **Severn Valley Stages** on 30 May.

Of course, the whole issue of running order is a major topic in historic rallying at the moment. I do not think there will be any change for 2015, but I am in regular dialogue with the MSA to see what is possible for 2016 and beyond.

Entries are now open for round five, the **DMACK Carlisle Stages** (Saturday 13 June). Entries are filling fast, with 30 received in the first week, so please don't delay in you want to secure a place.

Best regards

Colin Heppenstall
Friday 30 April 2015
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The 2015 events in detail

RAC round 4: Severn Valley Stages (Saturday 30 May)

The 42nd Severn Valley Stages will be based at the Royal Welsh Showground at Builth Wells and take place on 30th May. Scrutineering will be on Friday afternoon 29 May. The route takes in eight special stages in Cefn, Crychan, Halfway and Gwibedog with just 3 road miles and an entry fee of £495.

Regs are available from www.severnvalleystages.co.uk

RAC round 5: Carlisle Stages (Saturday 13 June)

The Carlisle Stages will again be based close to Carlisle and will use the superb stages in the Newcastleton and Kershope complexes. Scrutineering will be on Friday afternoon, with Saturday offering a 43-stage mile route with only eight miles double usage. The event is a round of the BTRDA Rally Series as well as the R.A.C. Championship, so a bumper entry is expected. More details are elsewhere in this newsletter.

www.racrallychamp.org

RAC round 6: Harry Flatters (Sunday 26 July)

This one-day rally over the famous Epynt ranges is traditionally based in Brecon where scrutineering and documentation is held on Saturday afternoon. The route recce will take place on Saturday morning.

www.breconmotorclub.co.uk

RAC round 7: Trackrod Rally Yorkshire (Friday/Saturday 25/26 September)

The Trackrod Rally Yorkshire will run to a very similar format to 2014 with Friday afternoon scrutineering followed by a 7pm start and stages in the dark, finishing at around 10pm. The event will then restart on the Saturday at approximately 8.30am with classic Yorkshire stages before finishing early afternoon.

The event will be again based at Pickering.

www.trackrodmotorclub.co.uk

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Regulations published for DMACK Carlisle Stages

The regulations for the 2015 DMACK Carlisle Stages (Saturday 13 June) have been published and now available on-line at www.racrallychamp.org/Carlisle_Stages/competitors.htm

The event offers 43 stage miles in the Kershope and Newcastleton complexes for a competitive entry fee of £470. The entry fee reduces to £420 for Rally First contenders.

The rally will feature three major championships: the REIS/Ravenol BTRDA Rally Series, the MSA English Rally Championship and the West Wales Rally Spares R.A.C. Rally Championship. The event will also be a round of the S G Petch Association of North East and Cumbria Car Clubs Stage Rally Championship and the Association of Northern Car Clubs Forest Challenge.

"The support for the BTRDA Rally Series has been outstanding so far in 2015 and we're expecting a bumper entry for the first BTRDA event in Kielder since 1992," said Clerk of the Course Nicola Heppenstall. "The event is also a round of the West Wales Rally Spares R.A.C. Rally Championship, and it is possible that we'll get to the maximum entry of 150 cars. So, we are urging everyone to enter as early as possible."

Building on the success and excellent competitor response to the first two Carlisle Stages, the Roger Albert Clark Rally Motor Club will run a compact event based close to Carlisle using superb stages.

The rally will again be based at the premises of the R J Murray & Sons Haulage Company in Longtown, Carlisle and will cover 43 stage miles and just 99 road miles. Only eight miles of stage will be double-used, thus ensuring the best possible road conditions. The first car will start at 8.30am and be back at the finish at around 3pm on this compact event.

Scrutineering and documentation will run from 2pm until 7pm on Friday afternoon.

The DMACK Carlisle Stages is organised by the Roger Albert Clark Rally Motor Club.

2015 Trackrod Rally Yorkshire unveiled

The organisers of Trackrod Rally Yorkshire have taken the wraps off the 2015 event, which will use the very best of the famous Yorkshire forest stages from a base in Pickering on Friday 25th and Saturday 26th September.

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The **Trackrod Historic Cup** features 53 stage miles, including two stages in the darkness of Friday evening, and is the final round of the Mintex MSA British Historic Rally Championship and the West Wales Rally Spares R.A.C Rally Championship.

The entire event will be based at Pickering Showground which will be the venue for scrutineering, documentation, start and finish, regroup control and central servicing. Further development of the hard-standing facilities at the Showground is due to be complete before September. However, the main action for the rally will be on the gravel stages in the Yorkshire forests and a recent route survey reported that the roads are in superb condition. The event will also feature a reduction in road mileage.

"The route has been chosen to avoid the long straights and chicanes in Dalby Forest," said Clerk of the Course Rod Parkin. "Competitors who have not visited the event during the last few years will not believe they are in the Yorkshire forests. We have an excellent mix of established stages that everyone is familiar with and some new twists."

Regulations for the Trackrod Rally Yorkshire are due to be published in mid-July.

For more details of the Trackrod Rally Yorkshire, please visit www.rallyyorkshire.co.uk

Burton dominates WWRS R.A.C. Championship in Kielder

Phil Burton and Mal Capstick were the big winners on the third round of the West Wales Rally Spares R.A.C. Rally Championship, the Pirelli Carlisle Stages (Saturday 25 April).

Burton was in fighting form to be top R.A.C. finisher in his Open Category Ford Escort Mk2, while James Potter and Bob Duck were leading historic finishers in their Ford Escort Mk2. Barry Stevenson-Wheeler and John Pickavance were third overall and second in the Open Category. "Fantastic: the car's been brilliant," said Burton after taking a resounding victory.

James Potter and Bob Duck (Ford Escort Mk2) topped the historic R.A.C contenders, despite having to steer around bits of broken BMW on the opening stage. Fortunately, the only damage to the re-liveried Escort was a broken headlight. "The speed is getting back," said Potter on only his second rally since a high-speed off in Yorkshire last September.

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On a day of tough conditions and high attrition, Stuart and Linda Cariss did well to be first Category 2 crew home in their Escort Mk1, finishing ahead of class winners Matthew Honeybourne/James Curtis (Ford Escort Mk1). "It's been a good day but a bit of an eye opener; it's a different world back there," said Cariss of running well down the field.

Notable non-finishers included Grahame Standen/Jane Edgington (Escort Mk2), Simon Crook/Alister Crook (Opel Manta), Tim Mason/Graham Wild (Porsche 911), Will Midgely/Graham Wride (Toyota Corolla) and Bob Bean/Malcolm Smithson (Escort Mk1). Sadly, the Crooks suffered a big roll at the deceptive crest that earlier caught out BHRC contender Ernie Graham and inflicted considerable damage on the Manta.

Meanwhile, ditches claimed Mason and Bean, with Mason being particularly unlucky to spear off the road with a suspected breakage in the final stage when only seven seconds down on Potter.

Out on the opening stage with electrical issues went Grahame Standen and Jane Edgington (Ford Escort Mk2), which left the way open for a class victory for David Hopkins/Tony Vart (Talbot Sunbeam).

The Pirelli Carlisle Stages was organised by the Cumberland Sporting Car Club. Full results are available at:

<http://results.djames.org.uk/results/?m=79>

Awards for WWRS R.A.C. Championship round three

The special award winners for the third round of the West Wales Rally Spares R.A.C. Rally Championship have been announced following the Pirelli Carlisle Rally (Saturday 25 April).

The championship, organised by the Roger Albert Clark Rally Motor Club, runs in parallel to the Mintex MSA British Historic Rally Championship and is aimed at clubmen historic crews as well as those running in the Open Category. With containing costs for clubmen as a prime aim, the championship runs to a six-tyre rule on all events. The 'Spirit of the Rally' award, which is a set of axle brake pads from Mintex, went to brothers Simon and Alister Crook. They are dedicated championship supporters in their Open Category Opel Manta and were pushing hard in the second stage when caught out by a deceptive crest. Sadly the Manta, which had been rebuilt after an accident on the Red Kite, was damaged once more.

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Husband and wife crew Stuart and Linda Cariss collected the Fuchs Lubricants product award for the 'Best Improvement on Seeding'. They took their Ford Escort Mk1 to eighth place in the National B section of the rally from a start number of 93.

The Pirelli Carlisle Stages was organised by the Cumberland Sporting Car Club.

The 2015 West Wales Rally Spares R.A.C. Rally Championship continues with round four, the Severn Valley Stages on Saturday 30 May.

1600cc historic cars to chase major end-of-season award

One of the biggest prizes in club-level rallying has been announced for drivers in 1600cc cars competing in the 2015 Mintex MSA British Historic Rally Championship and the West Wales Rally Spares R.A.C. Rally Championship.

The best performing 1600cc car from across the season will win a free entry on the Roger Albert Clark Rally (27-29 November) in the award presented by Jordan Road Surfacing. The prize will have a value of approaching £2000.

"We want to encourage people to come out and compete in 1600cc cars," said Barry Jordan, who is rallying a 1600cc Hillman Avenger this season. "It is really cost-effective rallying and we're having a lot of fun in our Avenger." Jordan will not be eligible for the award.

Drivers will score points based on their overall finishing position on each round of the two championships and the highest scorer for the season will win the award. The award is open to any 1600cc car from Category 1, 2, 3, 4 and K. To date, 16 eligible cars have competed over the opening two events of the season.

"There is a lot of interest in 1600cc cars at the moment and I know of several more cars being built," said Jordan. "I thought it would be a good to help attract more 1600cc entries."

More awards for the BHRC and R.A.C Championships

Four competitors from the Mintex MSA British Historic Rally Championship and the West Wales Rally Spares R.A.C. Rally Championship will each win a £500 discount on the entry fee for the Roger Albert Clark Rally (27-29 November)

The Roger Albert Clark Rally Motor Club will present the winners of Category 1, Category 2 and Category 3 in the BHRC as well as the overall champion in the R.A.C. Rally Championship with a £500 voucher to be used against the entry fee for the November event.

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The vouchers will significantly reduce the entry fee for the 12th running of the Roger Albert Clark Rally and underline the strong links between the championships and the rally.

Championships and rally manager Colin Heppenstall said he was pleased to confirm the awards: "The club wants to recognise the leading crews from both championships," said Heppenstall. "This award will give four crews a significant discount on the entry fee for this year's Roger Albert Clark Rally."

Full details of the 2015 Roger Albert Clark Rally will be announced shortly.

Smooth roads for all at this year's Severn Valley Stages

Organisers of this year's Severn Valley Stages have gone the extra mile to ensure the later runners in the 30th May event receive the best road conditions possible. After the recent change by the MSA to the running order of all multi-venue events across the UK, crews will be seeded in order of anticipated performance meaning historic cars will no longer run at the head of the field.

To go some way to ensure fairer road conditions for all competitors on the Midland Manor Motor Club organised event, the Joint Clerks of the Course have made some changes to the route, avoiding known soft roads and choosing stages which will best stand up to the anticipated 100 plus entry.

"We are lucky with the Severn Valley Stages in that the forests of Cefn, Crychan, Halfway and Gwibedog are in fantastic condition," said Joint Clerk of the Course Keith Ashley. "National Resource Wales has done an excellent job in re-grading including some 'fine toppings' which isn't always used when repairs are carried out. The stage routes have been chosen to stand up best to double usage based on our extensive previous experience in these plantations and any soft roads have been avoided. We hope that all competitors, no matter where they run on the road, will still get to enjoy these fantastic stages in a great condition."

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Shock absorbers in Historic Motorsport

Please find below an extract from the recent FIA/MSA directive and ruling on period dampers

Shock absorbers are a significant factor in determining the road holding performance of any road vehicle. At one time they were very simple friction devices that dampened the movement of the suspension system; the most modern are very sophisticated pieces of kit with the ability to make all sorts of adjustments. The following aims to give guidance as to which shock absorbers existed in which period. Although written against the background of FIA Appendix K it is equally relevant to MSA Regulations for National Historic Events as it details the type of shock absorbers that were in production and available in various periods. Grateful thanks to John Hopwood who spent a considerable amount of time researching these issues.

Period Specification of Dampers

FIA Appendix K restricts the specification of replacement components to a proven period specification and gives guidance on replacement parts. (App K Article 3.3) Damper technology has changed enormously since 1946 and this document provides guidance on what was available in period and how to identify what may be used. Features that should be carefully considered prior to purchasing dampers are:

- Twin tube or monotube construction
- Atmospheric, low pressure gas or high pressure gas
- Body material
- Fixed, single adjustable or double adjustable damping
- Remote reservoirs
- Mounting type.

Twin tube telescopic dampers have a central oil filled chamber with a piston that moves up and down, thereby moving the oil through valves and creating a damping resistance. As the total volume of oil and metal within the damper body increases as the damper is compressed, a reservoir containing oil and gas (traditionally at atmospheric pressure but more recently pressurised to a low pressure) surrounds the central cylinder and provides a space into which the oil can expand.

A monotube damper is one where there is no oil gas interface and normally only one tube.

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The oil is kept under pressure by a floating piston, behind which is chamber filled with high pressure gas. As the damper is compressed, the volume of the gas chamber is reduced.

Maintaining a high pressure in the oil chamber reduces or eliminates foaming or aeration of the oil. More recent designs incorporate high pressure gas in a twin tube design; this technology is later than any category currently racing in historic motor sport.

Identifying which type of damper is fitted to a car can be difficult but, as a rule, a monotube damper, if fully compressed and then released, will at least partially open when released. If mounted 'upside down' or horizontally a damper will be monotube (or not working!)

MacPherson struts with what appears to be a large diameter piston rod are in fact monotube dampers mounted upside down and the visible moving tube is the outside of the damper cartridge. This has a rigidity advantage as the large diameter tube has a greater resistance to bending (under braking or cornering) than the much smaller diameter piston rod of a twin tube damper.

A damper that incorporates two adjusters in one mounting eye will be a monotube damper. To give an idea of scale, the holes in the adjuster wheels on this particular unit are just over 1 mm in diameter. Monotube dampers are now being made with the adjusters hidden under the top gland nut or base or plugged. This would not be acceptable for a period where the adjustment is not accepted as a period specification.

Twin tube dampers may incorporate valves in the base, the top gland and the piston. It is relatively simple to manufacture a damper with a user adjustable bump valve in the base and this technology was certainly in use from the early 1950s.

Armstrong had, as early as 1957 and possibly earlier, a more sophisticated system which adjusted bump and rebound together by means of one adjuster knob on the base of the unit, as seen on the left. An almost flush adjuster was also available. The bump to rebound ratio was fixed during manufacture and the adjuster altered both simultaneously.

Making bump and rebound independently user adjustable was more difficult and Koni were first to achieve this with their 8211 damper. Monotube dampers, having both valves incorporated in the moving piston, presented a challenge to the manufacturers. There were no user adjustable monotube dampers available until the 1980s and it wasn't until the 1983 that double adjustable monotube units were available. Remote reservoirs for monotube dampers soon followed, and we now have twin tube, gas pressurised four-way adjustable units, obviously not appropriate for any form of historic motor sport.

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MacPherson struts are found in two forms. One is the rarely and now relatively rare struts, where the visible external case forms the external tube of the shock absorber unit. The components are assembled into the case and there is invariably a filler plug visible on the strut body. More common is the unit with a complete shock absorber housed within the strut casing and held in place by a retaining gland nut. Both of these units are twin tube non-adjustable. Where MacPherson strut monotube cartridge inserts (upside down installation) are used, the diameter of the visible tube (not the strut body) must be to a period diameter. Escorts, both Mark 1 and 2, commonly used Bilstein inserts in period – monotube, non-adjustable, with a tube diameter of 41 mm. Meanwhile 50 mm inserts were used on the Lancia Stratos and Fiat 131. An adjuster on the top of the strut indicates a monotube adjustable design. Remote reservoirs are a later specification. Spring platforms must be to the period specification. The regulations make no distinction between platforms integral with a shock absorber and other types of spring mountings on the chassis. For homologated cars, in many periods, Appendix J states that the original spring mountings must be retained so unless the manufacturer has homologated adjustable platforms these may not be used. Appendix K Appendix IX article 2.3.1 also covers this point for CT and GTS cars of periods E, F and G1. Racing cars, from period F onwards, very commonly had adjustable spring platforms on coil spring damper units. There is to date no evidence of any homologated car in period F having adjustable platforms homologated.

Note 1: Although monotube shock absorbers were available they were to a very basic specification and their use in motorsport was very limited in Period F.

Items marked 'Regs' may be 'Yes' or 'No'. Uniball mounting eyes were used in racing cars from Period F but their use on production (usually homologated) cars depends on the Period and Category applicable to the car, as the applicable regulations did not always give freedom of suspension mountings. Applicable Appendix J regulations and period specification for the specific vehicle should be checked before using Uniball mounted units.

It was the writer's intention to list the different manufacturers with an indication of their type and acceptability by period but it became clear that there are too many manufacturers to list. Some manufacturers make twin tube and monotube with and without adjusters and some manufacturers make units with hidden or disguised adjusters.

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Many shock absorber manufacturers have no long history and do not manufacture twin tube units. The competitor should always ask for the specification before choosing a shock absorber and if in doubt seek advice.

Period	E	F	G	H	I	J
Mounting eyes, all categories, metalastic bush	Yes	Yes	Yes	Yes	Yes	Yes
Mounting eyes, Uniball, homologated cars	No	No	Regs	Regs	Regs	Regs
Mounting eyes, Uniball, Single Seater & TSRC	No	Yes	Yes	Yes	Yes	Yes
Twin tube, steel body non adjustable damping	Yes	Yes	Yes	Yes	Yes	Yes
Twin tube, steel body single adjustable damping control	1957 on	Yes	Yes	Yes	Yes	Yes
Twin tube, steel body double adjustable damping controls	No	Yes	Yes	Yes	Yes	Yes
Twin tube, alu body, double adjustable damping controls	No	No	Yes	Yes	Yes	Yes
Monotube, steel body, non adjustable damping	No	1	Yes	Yes	Yes	Yes
Monotube, alu body, non adjustable damping	No	No	Yes	Yes	Yes	Yes
Monotube, steel body adjustable damping	No	No	No	No	No	Yes
Monotube aluminium body adjustable damping	No	No	No	No	No	Yes
Monotube remote reservoir	No	No	No	No	No	Yes

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