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(Affiliated to the Federation of British Historic Vehicle Clubs)

EDITORIAL

The Club Rally day finally arrived, and the Rockingham Castle grounds were enriched by the presence of a dozen Razoredges on a day of hot sunshine. (What a wonderful country. If it's not raining, it's too hot.) We had some pleasant surprises, and a few misfortunes; a fuller account will be found within this edition. We also have more stories and pictures from the huge Triumph and Standard anniversary gathering at Gaydon in May.

The Federation of British Historic Vehicle Clubs is the umbrella organisation of all the classic car clubs in the country, and TROC is a member. The Federation performs important lobbying functions on the part of the whole classic car movement, in Brussels as well as Westminster, and also monitors and scrutinises European legislation on our behalf. One item they have covered frequently in the last year has been **the addition of ethanol** to British petrol, and in the context of wild scaremongering in some sections of the press, and secretive attitudes from petrol suppliers, their balanced and factual reporting has been very welcome. We have summarised the current situation and the developments over the last year in an article to be found on page 46.

An update on **David Coote's 21-year stored 'barn find' TDC**, featured in the last edition of the GLOBE: it is still awaiting a buyer and a new home, but will be moving onto E-Bay in the near future. David has received one offer, which he did not accept; but since then family matters have distracted him from pushing on with the sale. However, we have news of *another* long-dormant Razoredge which is back on the road – see the Rally report in the centre pages.

An appeal to American members – see 'how the other half live' on page 63.

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ETHANOL IN FUELS SHOCK HORROR SCARE

Some issues appear to attract scare-stories and misinformation, and the development of bio-fuels is one such area. At root, you might think that increasing the use of a road fuel we can grow for ourselves must be a good thing: it decreases our expenditure on foreign imports, puts us less at the mercy of volatile middleeastern politics, and diminishes our consumption of fossil fuels.

In March this year, it became legal for oil companies supplying the British service stations to use up to 10% ethanol in petrol (known as E10), increased from

5%. When the legislation for this move was first announced, a plethora of scare-stories appeared, warning of the wave of destruction this would cause. Ethanol burns slightly hotter in the cylinder than conventional petrol; it is more corrosive, and can attack fibreglass, natural rubber, aluminium and brass, amongst other materials; and it provides slightly less power than conventional petrol, so that drivers might become more heavy-footed in their driving, in an unconscious attempt to compensate. On the internet, always a ripe source of rumour and pseudo-scientific assertion (which later often turns out to be based on very questionable evidence) there were tales of motorcycles with fibreglass tanks finding their carburettors bunged up with orange gelatinous residue where the ethanol was dissolving away the inside of the tank.

Unfortunately, the oil industry is secretive by nature, and no-one wants to talk about the proportion of ethanol currently being used. One leading organ of the motoring press managed both to run scare-stories of the damage to be done, and in a separate article to poohpooh the scare stories because they'd surveyed all the leading petrol suppliers and found that NONE of them actually had plans to increase the amount of ethanol in current use. The oil industry has resisted suggestions that there should be labelling at the pumps to inform customers exactly what they are buying, and it's clear this is because even a small shift in purchasing patterns could have massive financial implications for them. If you think of any busy petrol station, and indulge in a little mathematics – multiply the number of customers per hour by the likely average amount spent on fuel, times the number of hours in a day, times the number of petrol stations – and we are talking about tens of millions of pounds of revenue <u>per day</u> which could easily switch from one company to another, if there were a significant cause for concern about the dangers of ethanol-enhanced fuel in any one manufacturer's blend. Where an ill-chosen word could lose your firm millions of pounds in profits, you keep very quiet indeed.

What will be the determining factor, unfortunately, is simply the market price of oil. If the price of crude rises, the incentive to increase the ethanol content will be irresistible, and they won't want to tell us it's happening. In the USA, in many states, 10% Ethanol has been legal for some time, but there is still little awareness of how much bio-fuel is actually reaching the pumps. It's clear that a significant amount IS being used somewhere, because the switch by farmers from growing basic staple food crops over to servicing the demand for sugar cane, maize and other crops that can be used for fuel is having an impact on food prices.

Fuel with above 15% ethanol is possible, but would require adaptation of parts of the engine. (E85, as you would expect, is 85% ethanol fuel, and Brazil and other countries are pursuing this route forward, using adapted engines.) A modern car engine is believed to be able to cope with up to 10% ethanol without any significant problem – but there's the rub: not all of us drive modern cars. Also, the classic car movement has more cause for concern than the ordinary modern motorist. We are not alone in this: sports motorcycle racers and scramblers,



and motor boat owners, are also worried. Part of this comes not so much through the use of the fuel in the engine, but through the pattern of use.

In all our cases, the vehicles are likely to stand for quite long periods of time without use; either through being a relatively infrequent hobby, or through being laid up during the winter. Higher-ethanol fuel tends to separate out, when left to stand, more than ordinary petrol does. This is because ethanol is hygroscopic, meaning it will absorb atmospheric moisture. Ethanol and petrol will remain blended together, but ethanol, water and petrol, will not; the ethanolwater mix is heavier, and will settle to the bottom of the tank, and therefore there may also be more corrosion caused by water in the system. There is oxygen in modern petrol, so that the inside of the tank can rust, below the surface of the liquid. In a modern road car in frequent use, petrol separating out will not be a problem; but in a classic, infrequently refuelled and often left to stand for months at a time, it might well become one. If there is already water in your tank, and you fill with ethanol-containing fuel, the ethanol will find the water and start to settle out quite quickly. It is also a problem for fuel storage depots and petrol stations, who have to purge the bottom of their tanks clear of water/ethanol from time to time.

The attentive reader will have noticed a good deal of cautious conditional wording. 'It might cause...' 'It is likely that...' We are in a situation of speculation and theorising. We don't know these things for sure, because there are so many variables to test, and because the testing must necessarily be slow; you cannot discover how much the fuel settles out, or corrodes certain materials, when standing for months – without *testing* for months. And to start with, we don't actually know how much ethanol we're putting in our cars when we fill up anyway.

FBHVC, The Federation of British Historic Vehicle Clubs, is the umbrella organisation of all the classic car clubs in the country, and TROC is a member. The Federation performs important lobbying functions on the part of the whole classic car movement, in Brussels as well as Westminster, and also monitors and scrutinises European legislation on our behalf. They have been investigating the addition of ethanol to British petrol, and their balanced and factual approach has been very welcome. They have been running tests on the protective qualities of some kinds of additive which claim to defend the engine against the corrosive and hotter-running threats presented by ethanol when it's actually in the running engine, and despite having to abandon their first set of trials because of fuel contamination, they have been able to give limited approval to some products as being effective. This still doesn't cover the problems posed by leaving fuel to stand in the tank for long periods, however. Their detailed guidance is reproduced below.

We can therefore leave our readers not with any firm conclusions, nor even with clear guidelines; rather, with some points for consideration in the management of your classic car (or cars).

- Firstly, if there is any possibility that your tank has been replaced with a fibreglass substitute and bearing in mind that some of the work done on your car before your ownership might not have complied properly even with the restrictions on fibreglass at the time it might be a good idea to have it replaced with a lined steel one.
- Be alert for a smell of petrol leaking from around the tank area.
- If you don't already have one, consider adding an in-line fuel filter to your petrol lead under the bonnet, which will intercept rust and other muck coming up the fuel line from the tank. Check on this each time you check the oil, and replace the filter when

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there's a visible build-up of dark sludge. Your garage should be able to obtain these for just a couple of pounds each – don't fall for Halfords' prices.

- Consider the use of stabilising additives see the FBHVC report below. However, do be aware that these additives won't 'cure' petrol *after* separation has taken place.
- Avoid visiting a petrol station just after the tanker has delivered, stirring up any ethanol/water mix (plus any other rubbish) at the bottom of their tanks. Possibly consider avoiding small low-turnover petrol stations where the fuel will stand for longer and the management of the tank purging might not be up to the mark. (I hate to say that, however, because it further encourages the move from small filling stations to impersonal ranks of pumps at the major dealers and supermarkets.)
- The 'super', 'ultimate' or 'V-power' higher octane varieties of fuel from most suppliers are likely not to contain raised levels of ethanol, and may not contain ethanol at all. This cannot be guaranteed, but appears to be accepted as policy shared by the fuel manufacturers. Consider using this, or perhaps use it for the last couple of fills before the car is likely to be laid up for any length of time, to minimise the amount of ethanol in the tank.
- Consider draining the tank before any extended lay-up. Use the extracted fuel in your modern car, and then fuel up your classic with fresh fuel when you next need to get it out.
- The warning signs to watch for: the engine spluttering or completely stalling in response to hard sudden acceleration. This is the sign of an ethanol/water mix being delivered into the carburettor from the bottom of your tank. (Although ethanol mix will raise the combustion temperature in the cylinder, this probably won't show on the temperature gauge; it's the valves and valve seats which are at risk. The higher temperature will then dissipate through the rest of the engine and be dealt with by the cooling system.)

Is all this too much hassle? Unless you have a good functional drain point on your tank, and easier access to it than I do, you will probably think so – since the dangers seem to be mostly theoretical at this stage. Time will tell.

The FBHVC Ethanol report

The Federation has identified three operational aspects relating to the addition of ethanol to petrol:

<u>Compatibility</u>: some elastomers, plastics and composite materials are not compatible with petrol containing ethanol. Where problems are experienced, incompatible materials in the fuel system should be replaced with compatible alternatives.

Material	Recommended	Not recommended
Elastomers	Buna-N (hoses and gaskets)	Buna-N (seals only)
	Fluorel	Neoprene (seals only)
	Fluorosilicone	Urethane rubber

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	Recommended	Not recommended
Elastomers (continued)	Neoprene (hoses and gaskets)	Acrylonitrile-butadiene hoses
		Polybutene terephthalate
	Polysulfide rubber	
	Viton	
Polymers	Acetal	Polyurethane
	Polypropylene	Polymers containing alcohol groups (such as
	Polyethylene	alcohol-based pipe dope)
	Teflon	Nylon 66
	Fibreglass-reinforced	Fibreglass-reinforced polyester and epoxy resins
	plastic	Shellac
Others	Paper	Cork
	Leather	

Acknowledgement and thanks to CONCAWE who provided the above data.

<u>Corrosion</u>: long-term storage of petrol-ethanol mixtures (eg over a winter period) can lead to corrosion in historic vehicle fuel systems. Following tests, a number of corrosion inhibitor additives which are effective at protecting fuel system metals have been identified and endorsed by the Federation. These additives are as follows:

The stability additives that passed the test are:

VSPe Power Plus, VSPe and EPS from Millers Oils;

Ethomix from Frost A R T Ltd;

Ethanolmate from Flexolite

These all received an 'A' rating in the research which enables all these products carry an endorsement from the FBHVC. The endorsement is in the form of the FBHVC logo and the words: 'endorsed by the FBHVC as a fuel additive for protection against corrosion in metals'.

Millers' Oils - email: enquiries@millersoils.co.uk; website: www.millersoils.co.uk

Frost A R T Ltd – email: order@frost.co.uk; website: www.frost.co.uk

Flexolite - email: sales@flexolite.co.uk; website: www.flexolite.co.uk

<u>**Combustion**</u>: there is no evidence that the addition of ethanol to petrol directly affects combustion adversely, but ethanol does have a leaning effect; fuel mixture strength becomes slightly weaker, and this is particularly true for higher ethanol blends. Petrol containing 10% ethanol for example, would result in a mixture-leaning effect equivalent to 3.6%, which may be felt as a power loss, but also could contribute to slightly hotter running. Adjusting mixture strength (enrichment) to counter this problem may prove beneficial. There is a further secondary effect on engine operation from the addition of ethanol to petrol, in that it adversely affects fuel boiling characteristics by increasing volatility at lower temperatures, and so could exacerbate vapour lock problems. The advice already given about practical steps

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to counter these difficulties (under the boiling characteristics section below) can produce real operational benefits.

Boiling characteristics (fuel volatility)

The Federation has published detailed information about simple practical steps which can be taken to overcome problems such as vapour lock, which stem from the volatility of today's petrol when used in some historic vehicle fuel systems. A summary of the recommendations is given below:

- reduce the flow of (exhaust) heat to the liquid fuel supply to the engine
- route fuel lines away from heat sources
- locate the fuel pump (eg electric pump) away from heat sources
- use a thermal break (eg plastic spacer) where possible for mechanical (engine-mounted) pumps
- shield carburettor(s) from radiant exhaust heat (especially where inlet and exhaust are on the same side of the engine)
- check radiators for condition and effective dissipation of engine heat. Many old radiators may have become furred-up or partially blocked, leading to significant reduction in their ability to keep the engine cool in traffic.

Often, simple modifications such as these can be extremely effective in preventing the formation of unwanted vapour bubbles in the liquid fuel. Relatively minor changes need not alter the character of a historic vehicle, while thermal baffles and heat shields can be fitted sympathetically to provide minimal visual impact.

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Her Majesty the Queen, Her Majesty the Queen Mother, and a lady-in-waiting, alight from the royal limousine during a visit in the 1950s. But what is that other car we spy, over towards the windmill? If you're going to see the Queen, a Razoredge is clearly the car in which to do it.

THOSE WERE THE DAYS



Two pictures sent in by the late Lothar Klemenz. Both give a keen sense of the ease and grace of the fifties, when cars were rarer and life – for those who could afford the Razoredge lifestyle – was good. Top, the Royal Hotel, which is still thriving, at Ullapool in the west-coast highlands of Scotland; below, the promenade at Saltcoats, also on the west coast of Scotland but further south, below the level of Glasgow.



STAR 90 at Gaydon 2013: TRs, Spitfires and Stags

2013 saw the 110th anniversary of Standard Motors, and the 90th anniversary of Triumph. In consequence, the various clubs representing the different marques came together in May for a gathering on a grand scale, at Gaydon National Motor Heritage Centre. There was an extended report in the June issue, and we promised you more; here is some of it. In a future issue we shall also be looking at the Triumph Renown that never was: the TDD.

The idea of a single company called Triumph, comparable with Austin or Rover, is misleading. Although they all ended up sliding into the sink-hole of amalgamation that became Austin/Morris - BMC – British Leyland and then disappeared without trace, most of those companies had a strong independent thread of existence; they were born, under the guidance of a visionary creator like Nuffield or Morris; they flourished, and their fortunes waxed and waned with the success or otherwise of their models, and their marketing ploys, until the inherent weaknesses of the British motor industry, struggling against foreign competition, dragged them into amalgamation and oblivion.

Triumph, however, was a butterfly of a company: The pre-war Triumphs, Dolomites and Glorias and the Southern Cross, were a first flowering; but the post-war company bought up by Sir John Black was really only a name and an image. The skills, the personnel, and the pre-war factory, were all gone. This new incarnation gave birth the Roadster, the Town and Country which became the Renown; and the Maflower; and then the start of the TR series of sports cars was also a product of the Standard-Triumph team of Black, Ken Richardson, and design by Walter Belgrove. The sports cars, however, were so clearly different in style and outlook, (although borrowing much of the engineering; the TR series shared the back axle of the Mayflower) that they took on an identity of their own, and whilst the Renown and the Mayflower struggled to sell in the States, the TRs were a great success, and lived on long after the Renown and Mayflower's demise. Despite changes in ownership and production sites – the TR7 for example was made in three different factories, each of which was closed from under it, at Speke in Liverpool, then Canley, and then at the Rover works in Solihull – the Triumph sports marque has a huge and passionate following.



Using slogans like "It pulls beautifully" and "Go topless this summer", which were eyebrow-raising even before the days of political correctness, the sports Triumphs sold strongly, and some were even quite good as sports (racing) cars. Though it's true, there was never any point revving the engine whilst waiting at the lights in a Spitfire; you'd be left behind by most other cars when they changed green. The last and biggest-selling Spitfire, the 1500, was hardly any better, and the last one made of all, from the Canley works shortly before it closed, in canary yellow, was never sold: it sits in the displays inside at Gaydon.

The TRs and Stags however were a more serious proposition, as sports cars, and the Stag had one special trump card: an engine used in no other car, a V8 made by fusing together two Triumph 1500 straight fours. To stand at

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Gaydon this summer as they paraded through the show ring, in groups of four at a time – one quick circuit and then out – was to hear a wonderful succession of throaty roars. Unfortunately I can't include the sound here in the paper magazine, but I shall ask our webmaster if he can include a video clip in the copy which is posted online at the TROC website: if it works, it will be worth a visit.



Simo Lampinen and Steve Rockingham's TR7 from the 1978 season: a serious competitor.



Lampinen suffered from polio as a child, and as a result was allowed to take his driving test a year early so that he could get to school. He quickly became one of the wave of 'flying Finns' who dominated rally sport from the mid sixties through to the eighties. Most of his real success was in the mid and late sixties; he drove for Triumph in the late 70s.

RALLY REPORT – ROCKINGHAM CASTLE, JULY 2013



A Castle with a view, 14th July 2013. I clambered to the top of the Salvins Tower hoping to have a view of the rally field for a good photograph, and lacking the intelligence to realise that since you can't see the tower from the Rally field, this venture was doomed to failure. However, the view was impressive, so here it is. This shot includes three counties; and turning left and right, you can see into two more.

Our Rally this year took place in mid-July, at the start of what has since turned out to be a proper heat-wave, at least by the standards of a British summer. We have to remember that amongst our readers are members in Crete, Australia, California and Texas, amongst other locations, most of whom wouldn't start to call it 'hot' unless the temperature rose a good ten degrees above what we experienced that day; but it was quite warm enough for most of us, and certainly for the cars.

Members Attending

We had a very good turnout, including new members and a car, new to the club, which had been laid up for forty years. People come from far and wide to visit the Rally – below we have two members of the Polish nobility from about 1780.



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Muriel Hewitt sitting alongside Chairman Chris Hewitt's TDC; Graham Beechey's TDC, and David Wickens' TDB. Chris won the award for best engine bay.



Clive Lungmuss's TDB, and then the 1800s of David Shulver and Colin Copcutt. There was nothing wrong with David's car; we were just peering at the engine – see next page.



New member David Stansfield's TDC Limousine; new member Chris Watson's TDB, which caused much interest through being a new find, put back on the road last year after 40 years dormant; and Graham Beechey and Alan Walton taking their ease next to Alan's TDB.



Taking the Mick: the TDBs of Mike Bettridge, Mike Samson, and TDC of Michael Capps.



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Dirk de Vogelaar's superb roadster. Dirk and Lieve had originally set out in his Razoredge, but whilst trying to overtake a hazardous-looking truck the engine blew a piston; they survived this perilous situation without further damage, and returned home to recommence their journey in the roadster. Their persistence was rewarded, for Dirk won both the distance travelled The engine bay of the 1800 engine, which was fitted in the first Razoredge model, the TD Town and Country Saloon of 1946. At first glance, it appears cleaner and more modern than the 2088cc unit which followed; and it was an excellent power-plant, rugged and dependable.



award and the best non-Razoredge car, which might be some small consolation for the work he now faces getting his other car back on the road.



Tom Dolby's wonderful Standard Ambulance, built in the early fifties using the front end of a Standard Vanguard and a strengthened and extended Triumph chassis. "It's mechanically in good order," Tom comments with some understatement, "but there's a little still to do on the paintwork and the interior."

The best TD or TDA award went to David Shulver, and the best TDB or TDC award was won by David Wickens.

The Lunchtime Quiz was won by Pat and Frances Saunders, ably assisted by Frances' sister and her husband, scoring 14 out of 30. Runners-up in equal second place on 12 points were **team ERP**, comprising Colin, Ros and Edward Copcutt, and the self-titled **Assembled Luncheon Crowd** led by the Robinson family. Best wrong answer was to a question about the exocarp of citrus fruit, where yours truly suggested they must be taking the pith; but the right answer was 'peel'.

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Advertisement from 1946



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HOW THE OTHER HALF LIVE

Some time ago, we were given these photographs of TDC 2617, registration NTR 194, owned in Boston Massachusets by a Mr Polenchar. The car is not in the club, but Mr Polenchar seems to be doing pretty well without us – the TR4 looks in equally well-maintained condition, and the facilities, space and lighting in that workshop certainly have me gazing in speechless admiration. I mean... an *uncluttered* garage? It's hard to pronounce the two words together. Try it. It's just not natural.



Note however that the Club does own a rolling chassis in equally good condition to the one shown below, in our spares stock – contact Chris Hewitt for details.



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APPEAL TO AMERICAN MEMBERS

David Pilcher, of Fort Worth, Texas, is trying to provide extra support and expertise to Razoredge owners in the US, and invites any American members not already know to him, to get in touch. The particular problem faced there is that the TROC insurance will not indemnify us for supplying spares to the USA, so unless they know of alternative sources, or have a friend overseas who can arrange for the purchase of spares and who will then undertake the onward transmission, it can be hard to obtain parts.

If you are interested in the Truimph 1800 Town and Country, the 2000 or Renown, and you're in the USA – Dave invites you to contact him at <u>dpilcher@bh.com</u>.