



BVAC News

March 2021

Editor's Notes

It's very gratifying to have one's pleas not only noticed but responded to! This month it's a bumper 12-page issue and I've hardly had to write any of it myself. Thanks to Alistair Lindsay for a marvellous old picture, to David Tait and Mike Webber for interesting forward-looking articles and also to Neil Renilson, Dennis Fortune, Fred Magill and Kenny Wilson for passing on snippets. Long may it continue! I hope you'll forgive another report on my Morris, but I'm pleased to say it's still making progress in spite of everything. If anyone else has any restoration stories to share, please pass them on. I'm not naïve enough to think the glut of material will last forever.

Meanwhile lockdown continues for at least another month, so opportunities to use our classic cars is limited to 'essential journeys'. There are times when it's a positive benefit not to live within walking distance of the supermarket! I know Chris Biggs is just as keen to get club events started again as we all are to take part. Maybe by next month we'll have some news to share on that front.

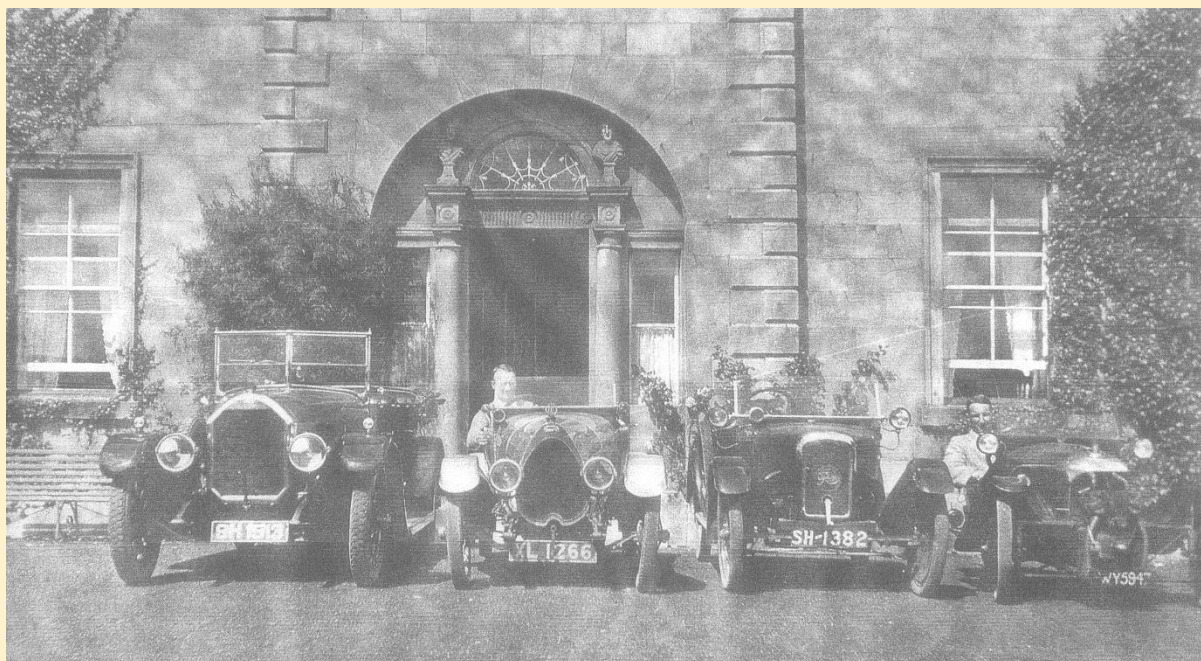
Mellerstain Remembered

My mention of the 1979 Mellerstain show last month prompted Neil Renilson to send me a picture of the rather handsome desk pen and stand which was his attendance award for that show. We obviously gave rather grander gifts in those days. Does anyone else have memorabilia from our early shows? Fame (or at least publication in BVAC News) awaits anyone who can come up with an older one.



Prendergust in the 1920s

Alistair Lindsay has very kindly shared this picture taken in front of Prendergust, the house near Ayton where he still lives. The cars, from left to right are: a Humber Tourer, a Bugatti Type 23, a Rover Eight and a Morgan Three-Wheeler. Alistair's father, then aged about 12, is sitting in the Rover, while his Aunt Jean (who owned the Rover) is in the Humber. The line-up is completed by Uncles Bill (Bugatti) and Howie (Morgan).



Alistair tells me that Jean was in between wartime nursing service in France and a farming life in Australia, where in retirement “there were very few faster cars along Dequetteville Terrace (in Adelaide) than Aunt Jean in her Minor 1000, complete with semaphore indicators!”. At least the Minor would have synchromesh, because she wasn’t totally au fait with double-declutching and Bill used to tell her she didn’t need a klaxon – “you just change gear at people!”. Bill went on to work in Malaya and there’s a photo of him around 1930 with a dead tiger strapped to his Vauxhall 30/98 as “in those days, tigers used to terrify the lieges, devouring livestock or even slow-moving lieges!”. We’d love to see that one too, Alistair.

According to ‘The Automobile’, the Bugatti was driven by G Blackstone on the Royal Scottish Automobile Club’s Six Day Scottish Trial for light cars in June 1922, but its subsequent history is unknown. Anyone got it in their barn?

The house is little changed these days, but all that’s outside it now is a modern Izuzu D-max.

To EV or not EV, that is the Question... by Mike Webber

From the outset, I should confess to having the use of a company Battery Electric Vehicle (BEV) for the last seven years. Sadly, the time has come for it to go back and the replacement will have to come from my own pocket. The question is, whether to go all-electric, hybrid* or internal combustion?

There is no doubt what the government would prefer – it has thrown its weight behind pure electric, putting significant financial incentives in place. There is presently a £3000 grant for

the purchase of a new electric car; road tax is zero; if you have an EV as a company car, the Benefit in Kind (BIK) calculation is zero. Then there is a potential four-figure saving every year in fuel costs.

The £3000 grant is much needed as presently EVs are significantly more expensive than petrol or diesel driven cars, although this will change as volumes increase and competition intensifies. Cheaper EVs are on the way from Chinese manufacturers such as Xpeng, Li and Nio. At the time of writing there is an Energy Saving Trust interest-free loan available of up to £28,000 for anyone buying a new or ex-demo EV, or up to £20000 for used.

A consideration is that electric cars are great to drive and great to ride in as a passenger, in addition to leaving no pollution in their wake.

The elephant in the room is large. Range is an Achilles heel for all but the most expensive EVs, although things are improving. The latest Renault Zoe offers 245 miles, the new Vauxhall Corsa e 211 miles and the Kia e Niro 282 miles. In the higher price brackets, various Tesla models will do from 263 to 500 miles and the excellent Jaguar I-Pace (World Car of the Year in 2018) offers 292 miles. These are all official WLTP figures, but real-life ranges are less. Deduct 12% for summer use; in winter, with the heater, heated seats, heated screen etc going full blast, deduct 15 to 20%.



Because recharging at home is by far the most convenient option, it's ideal if the majority of journeys are to a destination and back within the single-charge range of your EV. It only takes seconds to connect to a wall box - better than spending time standing freezing at filling stations while the tank fills then picking your way through diesel spillages to pay. Typically, it costs 3p - 5p per mile to charge an EV at home, against the 15p - 25p per mile cost of fuel used by an ICE car.

If charging en-route is necessary, careful planning is required. Fortunately Zap Map is on-line to help, showing the location of public charge points UK-wide, what speed they charge at, whether they are in working order (not a given) and whether they are in use at the time. The good news for Scots is that most public charging points north of the border are free to use and part of a unified network, Charge Place Scotland.



South of the border, it's not so rosy. Most charge points require payment and the infrastructure is fragmented. Multiple recharging companies have sprung up, each with its

own system for collecting payment and some with a better reputation than others for reliability and ease of use. It's the Wild West out there! However, major players such as the oil companies are getting in on the act which should raise standards, and the UK Government is stepping in to ensure all the latest installations accept universal methods of payment. It has also announced a £500 million investment to support the rollout of the fast-charging network. Public rapid chargers will give about 100 miles range for £6-£7 in 30 minutes (source: EDF). They can be found at filling stations, hotels, pubs, supermarkets, public buildings, motorway services, places of interest, town centre car parks and more – have a look at Zap Map!

Tesla has its own network of Superchargers. When a Tesla is connected, the driver sets the distance required and the charger says how long it will take to reach the required level of charge to go that far. To free up the charge point for the next user, the driver is expected to return within 10 minutes of the finishing time, or pay an excess charge; good thinking by Mr Musk, again.

Despite all the above, it remains that if you cover greater distances on a regular basis, an EV is currently (sorry) not for you, unless as a second car.

On the environmental side, EVs emit zero tailpipe emissions, which is great for air quality, but there are downsides, mainly in the extraction of raw materials for the batteries and motors; it is said that a small EV has to cover 25,000 miles before showing an overall environmental gain over a modern petrol or diesel car, a large EV 40,000 miles.

The deciding factors could lie elsewhere - convenience, economy, rapid serene progress and the fact that electric cars are fun to drive. Full torque is developed from the instant the accelerator is pressed and even the seven-year-old Leaf still steps off very smartly. It has given no trouble of any sort in seven years. There is less to go wrong; no warming up, no pistons whizzing up and down driven by more-or-less-controlled explosions, no gearbox, no clutch and there's little brake wear due to regenerative braking with the result that servicing costs are low.

In all, provided the available range fits your intended usage there is little not to like about an EV. In our case, 95% of journeys would fall within the single charge range of an EV capable of 200+ miles; Edinburgh and back, Newcastle and back, and so on. So, pure electric is a good choice for everyday use, although a diesel or petrol car is better for longer journeys, at least until the charging network improves. Then we need a classic to bring out on sunny days; the conclusion is, we all need three cars!

But where does electrification leave the classic movement? Driving classics will still be legal for many years to come, so if you have one, hang in there and look forward to the return of the classic scene – and BVAC – in the late Summer of 2021.

Mike

* There are arguments for and against hybrids – for, no range anxiety issues and good economy if the electric propulsion system is used to maximum effect. Against, hybrids, whether MHEVS or PHEVS, rely principally on fossil fuel and there are still tailpipe emissions. Whole of life environmental impact is probably worse than ICE or BEV cars, as both a fossil fuel engine and an electric motor to be manufactured. The ability just to fill up as and when is a major plus.

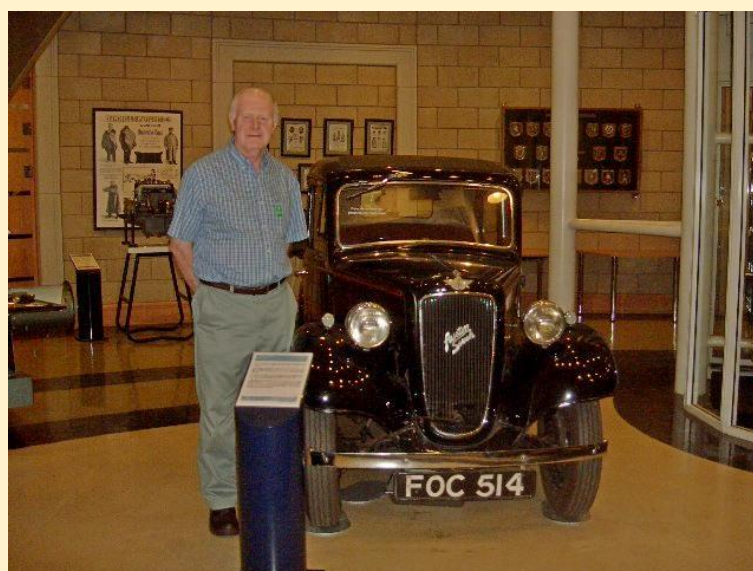


Editor's Thought – Several companies are now offering (very expensive) electric conversions of classic cars. Is this the way forward or some kind of sacrilege? What do you think? Do let me know at entries@bvac.org.uk

E10 Petrol (Part 1)

by David Tait

I thought our members might want to read this article on the research I have done over the past two years in relation to the new addition of Ethanol to motor fuels with the help from MG and European Automobile Manufacturers Association. As you all know we have in the UK to reduce our Greenhouse gases by 2035 to protect our own environment for the future. As



you will have read that the UK Motor Manufacturers are stepping up production of full electric cars by 2030. Some, however - Ford and Land Rover – are changing by 2024-2026. But in the meanwhile we have to tackle the introduction this year of E10 petrol for our Vintage and Classic cars.

The introduction of ETHANOL in petrol seems by some a simple one as the Government indicates that 97% of all car owners will be able to fill up with the NEW FUEL without any issues.

However as this is a very complex subject for older cars and even your own petrol tractor or lawnmower, as there are many practical variables make assessment and prediction of its impact very difficult.

UK Legislation introduced the option for Ethanol to be introduced to all fuel up to 5% (E5) back in 2003, but the lack of enthusiasm throughout the petrol supply industry saw less than 1% added by 2007 so clearly we were getting away with that percentage up to that time. Then

by 2014 the introduction of Ethanol was increased gradually to (E5) 5% for both petrol and diesel.

The UK clearly in the past was not a leading light in the use of ethanol in fuel for motor car engines, as other countries have been using it in their fuel for much longer and in some countries at a higher percentage concentration. This in turn drove the car manufacturers to use materials in all their fuel systems and engines that would be ethanol resistant, this was long before the UK was required to think about the situation. I know from what I read from my MG workshop manual that MGs will run on unleaded petrol manufactured pre 1995 but no mention on Ethanol. I did however enquire about the production of E5 petrol at one stage and was informed that all MGF & TF all over the world were using the higher Ethanol 5% at that time and the cars were running and coped reasonably well over the years.

However, MG car owners did have specific problems which was quite common I gather from their MG engine running, which I will cover later.

The basics of adding Ethanol to motor fuels is that this is to reduce the CO₂ and CO emissions and also the nitrous oxides in all engine emissions. This is because ethanol is distilled from fermented harvested crops such as feed wheat, where these crops are planted annually to create renewable energy in a time scale a lot quicker than the years it took to source crude oil for the conventional petrol which is refined and is a more expensive process. The diesel we have at present B7 is produced from oilseed rape producing bio fuel which is added as an emulsified additive to diesel at 7% today, previously 5%. The waste meal from the biomass plant OSR process is manufactured into pellets for cattle feed 26-28% protein, and the same with the wheat distilling process after distilling the meal is pelletised to make 32% protein pellets for sheep or cattle as the pellets have no copper content from this distilling process (with copper being toxic to sheep) as the system is all stainless steel, different to the copper stills.

The information from the UK Government says that moving from E5 to E10 fuel will reduce the UK's CO₂ emissions by 750,000 tonnes per year because the added ethanol volume is offset by planting more crops, which in turn will be distilled into more Ethanol. That 750,000 tonnes is the equivalent of taking 350,000 cars off the road, but is less than 0.6% of the total UK road vehicle annual emissions of CO₂. However, the Government report in 2015 thinks that the renewable part of road fuel petrol or diesel will reduce the CO₂ emissions by 2018 to Four Million Tonnes, that was the report then.

Now getting into the nitty gritty of things our mainstream supply of E5 95 RON fuel will become E10 95 RON in 2021, leaving only E5 97+ RON super unleaded petrol known to motor engineers and ourselves as the "protection grade" as you will find some are at 97 to 99 octane depending where you buy the fuel with a performance and protective additive added at the refinery. The next question would be, can our vintage cars run on E10 petrol? Also, if choosing super unleaded fuel at what extra cost would this be? There is also a more pertinent question how many petrol stations will provide super unleaded at the pump, also if the volume sales of super unleaded are low, how long will they supply both grades of E10 and E5. There are however a few garages offering ethanol free super unleaded grade and this will be allowed to continue and small filling stations in rural areas will be able to continue selling E5 unleaded, but for how long will be dictated by economics and not legislation. Many of us wanting to use E5 Super Unleaded 97-98 octane may not be able to easily access this type of petrol either,

which means will our vintage classic cars run on E10 and more to the point what modifications will we require? Generally speaking the older the car the more will have to be done to enable the engine to run. which also means at the moment we are buying E5 fuel usually 4.5% to 5% Ethanol, which in all practical terms can be treated as the same level and so the effect on cars not suitable for it will be consistent. But obviously the introduction of E10 petrol this year 2021, most people think that this means doubling of the ethanol content which in turn most vintage and classic owners will find this unacceptable . The Government however have stated that the E5 Super unleaded petrol will at the pumps until 2026.

The latest news is that the Government proposes to change the legislation in respect of the Ethanol content of E10 fuel that then allows it to be between a min 5.5% and 10% max Ethanol content, these changes unfortunately will be left to the fuel supply industry.

This is where a bit of confusion sets in, for owners with vintage or classic cars filling up with E10 with intention or accidentally, and the ethanol content is at say 5.5% you will find very little or no difference as how the engine runs, but however if you fill up at the same filling station at a later date and a new delivery has been done in between time to that filling station and the content is 9.9% Ethanol , this will have an immediate impact on the running of the Engine. I have been reading in my MG magazine that members touring France in the past filling up with E10 have had as they say a very torrid time with the way the engine runs until the tank is nearly empty and topped up with E5 petrol when available, this will be because the MGs mentioned would be manufactured to UK specification and not compatible with E10 petrol. I will highlight some other points later.

For those of you with pre 1955 Classic cars running on E5 was a major problem with quite a few makes but not all of them, to give an example my MGF was manufactured in 1996 and modifications were done with the Engine's and ECU units to enable the car to run on unleaded and E5 petrol. If the truth was known my MGF 1.8VVC engine has a Honda Cylinder head fitted and is compatible with unleaded E5 petrol so I am told, but I have always run on Super unleaded Shell or Esso petrol mainly for that bit extra protection, engine



performance and also achieve a consistent 44 to 46 mpg and as I only do about 950miles per annum the cost is very little. However, pre-1995 MG cars are not suitable for the proposed E10 petrol. I myself think that moving E5 fuel to E10 in such a short period of time is bound to find some negative issues as there are too many variables and negatives involved in the manufacturing.

The most important problems with Ethanol in older cars can revolve around components within the fuel tank and fuel system being incompatible with the Ethanol content that corrodes plastic pipes, metal tanks and degrades all hoses that are made of non-compliant materials. The most common will be fuel hoses, gaskets, and seals from nitrile rubber, and cork gaskets, also the fuel line from the tank. The other issue that we have we don't know when some parts in the fuel system, have been replaced over the years what type of material they are sourced from. After saying that it would be fair to say some cars manufactured prior to 2010, materials were certainly not normally Ethanol resistant, so it will be about 10 years ago now that Ethanol inclusion was gradually increased from 1% up to 5% in the UK.

It would be from 2003 when Ethanol was first introduced to the UK as other world markets were already using Ethanol to a higher degree. This was a wake-up call for all UK manufacturers and imported cars to the UK to have all engines compatible with Ethanol.

But not to confuse with the information above I can remember although was not old enough then, seeing the Cleveland Discol petrol pumps at a motor and cycle repair shop at Atkinson's of Glendale Road Wooler and the pumps were still in situ until about 1990 but not used. This petrol (Ethanol) was produced from wheat or maize by Distillers for Cleveland. In those days after the second world war petrol was very short and rationed. My father would either fill up his Austin 7 at Wooler or at Coldstream whatever was available. The question now is how did these cars run on this Ethanol fuel and without any corrosion or leaks? In 1999 Invergordon Distillers enquired to me about the Cleveland Discol petrol garage in Wooler as they wondered if I could trace any documentation on the Ethanol percentage of the petrol delivered at that time, as due to computerisation they had no records. *(This advert dates from 1962 – Ed)*



I suppose with compression ratio's lower and side valve engines must have coped okay and the materials such as the fuel tank would be made from steel not recycled as of today and some of you will keep me correct on the fuel pipes and connections were either copper or brass, as it is on my 1959 Vintage Massey Ferguson Petrol/TVO tractor (Standard Vanguard Engine). The other reason I presume then the Ethanol was distilled from wheat, but today the methanol is processed from a variety of cereals which can be a bit variable. The other addition is Oil Seed Rape producing biofuel now at the diesel pumps B7 (7%) this is added as an emulsifier to the Diesel @7%. As all methanol and biofuels are hygroscopic they have the desire to draw water from the atmosphere, and merge with the fuel until it becomes saturated, and then with the excess water drops out (Phase Separation) and results in two layers of two different compounds, this collects in the bottom of the fuel tank and fuel lines that can cause corrosion especially cars with steel or plastic fuel tanks and fuel pipelines. No glass bowls in the fuel line in our classic or modern cars to spot and catch the sediment.

More on E10

The FBHVC have sent us a press release (via Kenny Wilson) which also addresses this topic:

After an extensive consultation process, the Department for Transport has announced that they will legislate to introduce E10 petrol as the standard 95-octane petrol grade by 1 September 2021. They will also require the higher-octane 97+ 'Super' grades to remain E5 to provide protection for owners of older vehicles. This product will be designated as the 'Protection' grade.

The introduction of the 95-octane E10 grade and the maintenance of the Super E5 protection grade will be reviewed by the Government after 5 years to ensure they remain appropriate to the needs of the market. In relation to the E5 protection grade, such a review will examine market developments over the period. HM Government have sought to reassure FBHVC members and historic vehicle owners that, without a suitable alternative becoming available, it is highly likely the Super E5 protection grade would continue to be available.

Filling stations that stock 2 grades of petrol and supply at least one million litres of fuel in total each year, will need to ensure one product is the Super E5 protection grade. While not all filling stations meet these criteria, almost all towns across the UK will have a filling station that supplies the 'Super' grade and currently one major retailer, a national supermarket group, has committed to offer the product. The main exception to this is in certain parts of the Highlands, north and west coast of Scotland, which will be covered by an exemption process and allowed to continue to market the 95-octane E5 grade.

The Federation therefore recommends that all vehicles produced before 2000 and some vehicles from the early 2000s that are considered non-compatible with E10 - should use the Super E5 Protection grade where the Ethanol content is limited to a maximum of 5%. To check compatibility of vehicles produced since 2000, we recommend using the new online E10 compatibility checker: <https://www.gov.uk/check-vehicle-e10-petrol>

It should be noted that some Super E5 Protection grade products do not contain Ethanol as the E5 designation is for fuels containing **up to** 5% Ethanol. Product availability varies by manufacturer and geographical location and enthusiasts should check the situation in their location.

Bo'ness Revival

One piece of good news amongst the current gloom is that the Bo'ness revival hill climb is going ahead in September, although the format will be somewhat restricted and the venue changed. Here's an extract from their latest newsletter.

VENUE CHANGE FOR 2021



The 2021 Bo'ness Revival will take place at the Forrestburn Speed Hill Climb near Harthill. It will be held on a date yet to be confirmed but we hope to keep the original date of 4th-5th September 2021

The change in venue away from Bo'ness' historic home at the Kinneil Estate is due to the ongoing difficulties presented by Covid-19 restrictions. With the cost of holding an event at Kinneil too onerous for the BHCR, the

committee decided to look at alternative venues rather than cancel again in 2021.

After friendly discussions with the Monklands Sporting Car Club, it has been agreed to run a classics-only event at Forrestburn under the Bo'ness banner. The hillclimb will give competitors the chance to enjoy their cars in a competitive environment at one of Scotland's best hillclimb tracks.

Due to ongoing concerns about Covid-19, the event will be open only to entrants, with no spectators to ensure the safety of all attending.

We are determined as long as restrictions allow to make sure this event goes ahead. If you have not raced at Monklands before you are in for a real treat.

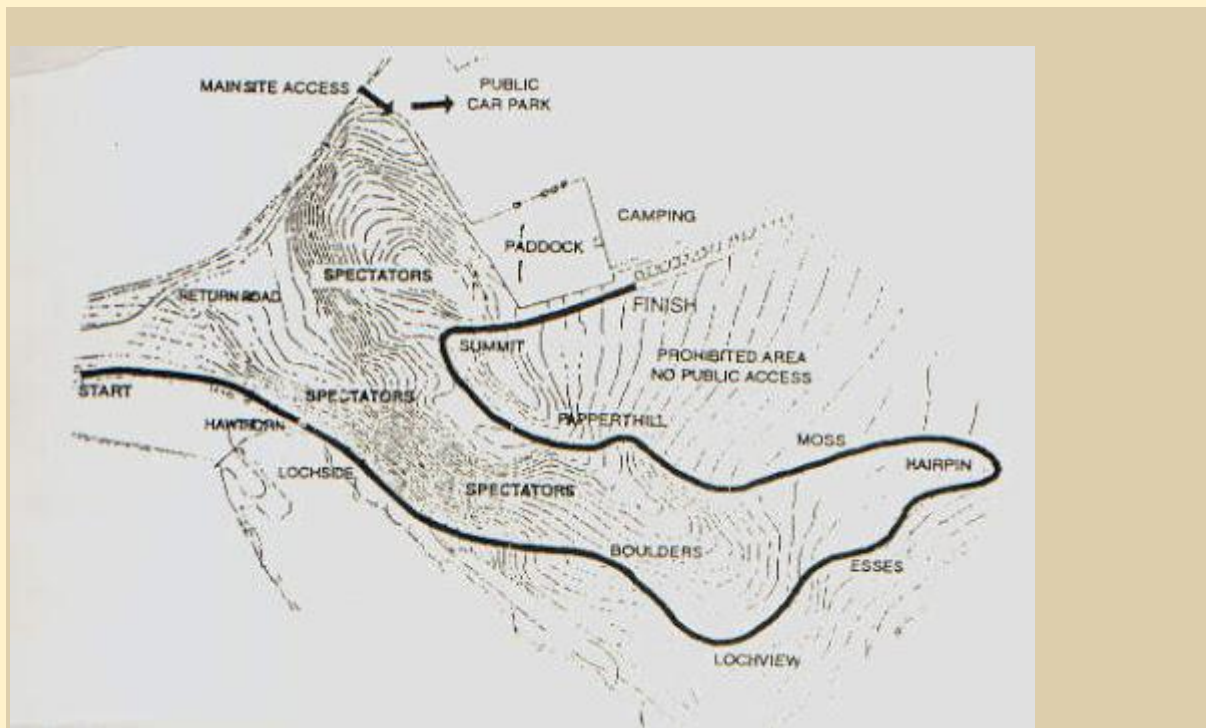
Further information will be confirmed as soon as we have it and entries will open as soon as possible.

Monklands Sporting Car Club

The track layout was designed by the original MSCC committee members (Marion and Brian Hopkins, Stephen Kay, Gordon McRobbie and Willie Miller) with assistance from [Derek Ongaro](#) of the RAC MSA, former Scottish Hill Climb Champion Kenny Allan with advice from many others on safety and marshal requirements.

The track is 1030 metres in length rising from 221m to 246m AOD with a maximum gradient of 1:4.

The track has been used as a film set on a number of occasions, including the 39 Steps (2008) in which Forrestburn supplemented other Scottish locations.



DVLA Issues

Another press release from the FBHVC which Kenny has passed on relates to issues with service from DVLA during the pandemic and delays in pursuing a number of policy matters on behalf of classic owners. If you want to see the whole text, it can be found here: <https://www.fbhvc.co.uk/news/article/fbhvc-urge-patience-with-dvla-to-resolve-historic-vehicle-owners39-concerns>

Classics for Carers is Back!

You may remember last year the 'Stay at Home Motor Show' where people were encouraged to display their cars at their own home with plaques sold in aid of NHS charities. Well, it's happening again this year, on March 21st. Details are here <https://www.classicsforcarers.com/>.



Morris 8 Progress

While I've not been able to work on the car personally at Petrol Haven during lockdown, and most of the staff have been furloughed, Andy Valentine has been working solo three days a week in order to provide an MOT and repair service for essential car users in the village. That work has turned out to be rather sporadic, so he's been filling in with the Morris rebuild and the chassis is starting to come together. The back axle is refitted and just waiting for the return of refurbished wheel cylinders to complete assembly. The problem of rebuilding the 'pear-shaped' shock absorbers has been avoided with the fabrication of very neat brackets to allow use of telescopics as fitted to classic Minis. This has saved time, considerable expense and will probably improve the ride. Before the purists shout at me, the brackets bolt to the unmodified original mountings, so the change is easily reversible. At the front, the axle is back on using springs from the wreck I stripped a couple of years ago. Amazingly, these were in excellent condition with only light surface rust. New king pins have been fitted and the steering is starting to come together. The aim is to have a rolling chassis very soon and then start on the engine. I have two options there – either the one which came with the car or a spare I acquired a few years ago via Jim Holyoake – so the first step is an assessment of which is the better prospect.



All the best, and clear roads,

David