

KEMPSFORD

CLASSIC CAR & MOTORCYCLE CLUB

Newsletter
Winter 2011

Well, here we are at the end of another season of classic driving and riding. Most of our cars and bikes are safely tucked away for the winter, and some of us will be taking the opportunity to take care of those items of non-urgent continuous restoration which revealed themselves during the year. But before I get underway with my ramblings I would like to welcome our latest member, Alan Harries, who has recently taken the very sound step of purchasing an MGA. Alan lived in Kempford for 13 years until 1987, but has since moved to Southrop. On the subject of new members, Terry got us a mention in Classic Cars Weekly who printed a picture of our pitch at South Cerney with Terry's phone no. Let's hope it brings in some more members.

So let's look back over the events of the last four months since the last Newsletter. First up was the Cricket Club Fete on 23rd July. I'm sorry to say the Club turn-out was a disappointing five members. This was the first outing for my 'new' Austin Westminster which just about managed to stagger to the cricket field in second gear and with the front suspension bushes completely worn away.



I wasn't able to get to the Church Fete on September 3rd as I was on holiday, so I'm not able to bring you a report on how it went. Unfortunately none of those who did attend took any photographs.

This is probably a good time for me to digress for a moment and note that only two people answered my call for contributions from members in the last Newsletter. My thanks go to Arthur and Terry. Frankly I find this disappointing and more than a little baffling. How can it be that a group of enthusiastic classic car owners who lavish so much of their time and no little money on their cars, and spend much of the summer going to car shows have nothing to say about it? Where are the amusing anecdotes? Where are the photos?

Attendance at the South Cerney Steam and Vintage Show was better. There were some very interesting vehicles on display and a large contingent of military vehicles which included this Vickers Abbott 105mm self propelled gun. Powered by a Rolls Royce K40 two-stroke multi-fuel engine, the gun has a maximum speed of 30 mph and fuel consumption is 3 mpg on the road and 1.73 mpg cross country. It carries 49 rounds of high explosive ammunition and its 105mm gun will lob them up to 12 miles. So, no road rage problems there.



Back at the classic cars section there were a couple of superb examples from Ford's 1960s Consul range: the Corsair and the Capri. Both of these stood out from the crowd of British cars of their day due to their highly individual styling. The Corsair had a distinctly American flavour, and its front end in particular was heavily influenced by the iconic Ford Thunderbird. It was said at the time (quite incorrectly) that if you exceeded 80 mph in a Corsair

the geometry of the nose would create enough lift to make the car dangerously unstable. In fact in 1964 a Corsair GT set 13 World Speed Records at Monza in the under 1500cc class averaging over 100 mph over 15,000 miles.

The Consul Capri was a very different car. It is smaller and has a decidedly sporty appearance which belies its 79 mph top speed and its 0-60 acceleration time of 22.6 seconds. The Consul Capri did not sell well (less than 20,000 were produced) not least because it had to try and compete with the very popular Ford Cortina.

It was an expensive car to produce and was axed by Ford after only two and a half years. All of which means that it is one of the rarest post-war classic Fords.

There were not many takers for Tony Alden's offer from the Austin Healey Club to take on the Prescott Hill. In fact it was only me and Tony. I can only say that it was a very exciting experience. Of course, my MG was not exactly in the same class as the Ferraris, Lamborghinis and Astons present, nor even the big Healeys, but the course provided all of us with challenges. The course is up-hill for its entire length with little in the way of straights. The driving experience is dominated by the bends, all of which are interesting and three of which are hairpins. The first of these is a fairly flat right hander which tightens-up before the exit and sets the rear tyres squealing. After a short straight comes the next hairpin, climbing steeply to the left. Getting down into second while braking and setting the car up for the corner results in a bit a tangle of arms and legs, or at least that's what it feels like. On through a series of esses and into the final right hand hairpin. This is an unnerving semicircle with the ground falling away on the left so that none of it is visible, just treetops, as you can see in the picture. It's a long bend and the inability to see any ground beyond the outside edge tends to inhibit the use of the accelerator. Walking the course before hand might have been reassuring, or possibly not! I understand from Tony that the Austin Healey club hold these events regularly. Take my advice: next time they do get down there and have a go!



Fairford Steam Rally saw a good Club turn-out and an interesting and diverse display of cars and bikes, like this Morgan.

This year we were parked away from the steam engines, avoiding the motes of soot which have plagued us in the past. For a show which encompasses so many different aspects: cars, bikes, tractors, commercials, military and so on, it was very well organised. But one thing did stand out like a sore thumb. The poor chap who compered the classic car parade was so out of his depth it must have been obvious even to the uninitiated in the audience. An opportunity to stimulate interest and provide informative entertainment was sadly missed.

Last month I had the opportunity to visit The Shuttleworth Collection, an aircraft museum near Biggleswade, under rather unusual circumstances. A neighbour of mine has a share in two aircraft which he keeps at Kemble. After arriving at Kemble and donning the obligatory 'high viz' jacket for the thirty yard walk across the otherwise deserted grass, we took our seats and strapped in. I was presented with a chart and told "You're navigating." The routine radio check revealed a fault which meant we could not communicate with the World outside our tiny cockpit. This necessitated a change of plane (piece of advice: if you're going to get a lift from a friend with a plane, make sure he has two) and by 11 o'clock we were airborne in a Beagle Pup, a classic aircraft from the golden age of the 1960's. The sky was pure cerulean blue and in the bright October sunshine you'd think it would be easy to pinpoint your position from about 2,500 feet. That's less than half a mile. Think



about the distance between the signs as you approach a motorway junction. 90 mph is not fast by aviation standards but it still means that you cover a mile 40 seconds. Believe me, even using a chart with your planned route marked on it, finding where you are is not easy. Fortunately we had radio beacons to steer by and a piece of cutting edge navigational equipment...a stop watch. This I used to time each leg between beacons while my friend got on with what seemed to me to be the relatively straight-forward business of keeping us on the right heading, maintaining the correct altitude, scanning the skies for gliders, balloons, low flying jets and high flying birds, de-icing the carburettor, transferring fuel between the wing tanks, talking to various types on the radio, adjusting the trim and checking the instruments, although given the age of the aircraft there were not too many of these. An hour or so after leaving Kemble we arrived at the home of the Shuttleworth Collection at Old Warden airfield. And I do mean airfield, with field being the operative syllable. Old Warden is a grass strip and a windsock. In truth it does have a control tower but on the day we arrived it was unmanned. They were expecting 40 aircraft that day and it was up to all of us to announce our arrival to whoever may be in the vicinity and sort out landing priorities between ourselves. One other plane was just ahead of us so we followed him in at a respectful distance and taxied over to the museum.



The Shuttleworth Collection contains some important historic planes, all of which are in airworthy condition, including the World's oldest plane still able to fly, a 1909 Bleriot Type IX similar to the one in which Bleriot made the first ever cross-Chanel flight. Not a great distance but a great achievement at the time in a machine which seemed to be made of matchwood and canvas and had a maximum speed of just 46 mph. If you are at all interested in aviation history it is certainly worth a visit especially if you can make it on one of their flying days. They are currently restoring a Spitfire MkV and expect it to fly next year. But its not all planes, there are a few interesting vehicles like this 1901 Locomobile steam car. Designed and originally built by the Stanley brothers of Stanley Steamer fame in 1897 more than 4,600 of these vehicles were built by 1902 and would have cost £200 new. Top speed was 22 mph which must have seemed pretty fast if you were used to horses and bicycles.

BIKE BITS BY ARTHUR ROLLS



This year's Fairford Show was once again well supported by the bike section. Ken, Len, Myself and Phil who between us managed to provide five bikes for both days. The new format for the show of using two rings certainly was an improvement over previous years, as it gave the motorcycles much more exposure, with the opportunity to have up to five visits to one or other of the two rings over the two days. Also the layout of the static display area was an improvement as we were more accessible to the public and didn't feel we were just stuck in a corner, as in previous years.

IS THIS THE NEW CAST FOR LAST OF THE SUMMER WINE?

Unfortunately the weather was not as kind as it could have been, but at least it did stay dry whilst we were in the ring, and we did manage to bring home some silverware again this year. Phil won the Cole & Hamilton best in show award and the B.S.A. Owners Club best post-war motorcycle with his B.S.A. A7. And I retained the Pete Sole Talisman Two Stroke Trophy with my Cotton Continental.

Unfortunately this year's Cassington bike night was cancelled for health & safety reasons. We believe the official reason was that the insurance company wanted the road through the village closed, but the County Council said there was insufficient time to organise a road closure, let's hope they can get it sorted for next year. Although the night was officially cancelled, bikers being bikers turned up anyway. We expected to be turned away by the police, but on arrival we were surprised to find no police and the place full of bikes, and the villagers made us very welcome by organizing parking and refreshments. So although there was no competition and not as many classic bikes as usual, we still had a very enjoyable couple of hours, with old friends and a pie and a pint.



With most of the shows and rallies over for 2011 it's time to give the bikes a final clean and a coat of preserving oil and tuck them away in the shed, or in some cases, the conservatory for the winter. We will now be turning our attention to planning our winter projects, and sorting out our programme of shows for next year. Speaking of which, Len Willie has acquired a very nice 1956 B.S.A A10 (see picture) all in very good order, taxed & tested, which he intends to be his winter project. The plan is to give it a cosmetic make-over during the winter and have it ready for the spring. Still no sight or sound of Mike Couling's Matchless yet, let's hope we get to see it around the shows next year.

PETROL PRICES

Yet again the lowest price petrol in the area is to be found at the Shell Station at London Road, Fairford where it is £1.319 per litre. This is a drop of 5p from the Summer Newsletter.

MEMBERS MOTORS

Roy's TR3A has progressed to the preliminary painting stage. The chassis has been removed into storage courtesy of Steve Blackwell and Roy's son Matthew is spraying-up the body in primer. They are nearly ready to bring the Chassis back and install the engine and gearbox prior to re-fitting the body. At this point the braces keeping the body stable will be removed and the doors replaced. Correct and equal shut lines will be achieved by inserting appropriate packing pieces at the fixing points. I imagine it's one of those "...up a bit...down a bit...left a bit...back up a bit..." sort of operations.



I mentioned earlier that I had acquired an Austin Westminster. I bought it at auction and although I got it fairly cheaply it has turned out not to be quite as much of a bargain I first thought. The principle issues emerged as I drove it out of the auctioneers in Leominster: the car seemed to have a mind of its own, veering unpredictably to left or right as the fancy took it, and the automatic transmission seemed reluctant to venture into top gear. Terry was able to diagnose totally worn out front suspension bushes as the cause of the erratic steering. The parts were readily available from a very helpful

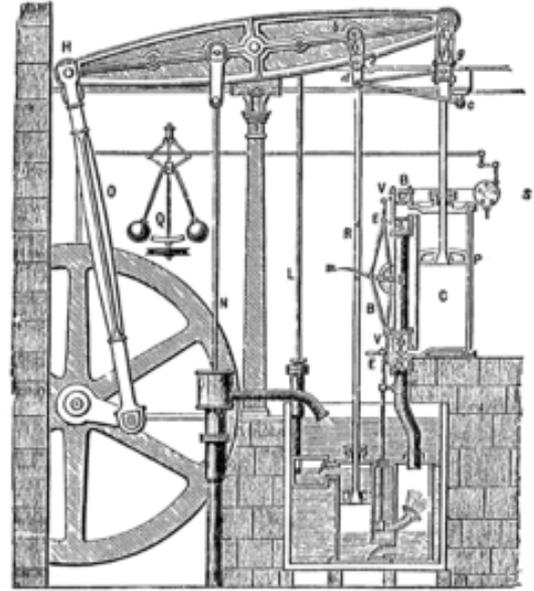
company on eBay and the problem was soon fixed. Encouraged by this I rushed off down to Bath to buy a second-hand Gold Seal gearbox from a very nice and extremely interesting man who owned 12 classic cars, all but one of which he had restored himself. That tale is too long to tell and deserves a whole Newsletter to itself. In the event the gearbox did not fit. BMC had changed the box shortly before my car was made. So

my next step is to get the transmission looked at (and hopefully fixed) by a specialist. Meanwhile, does anybody want to buy an automatic gearbox and torque converter?

HORSE POWER

Have you ever been as confused as me by the term horsepower. What has it to do with horses, and can my MG really be eleven times more powerful than an Austin Seven? I think not. So what does horse power mean and does it always mean the same whenever it is used?

To find an answer we have to go back to the eighteenth century, to the age of steam and to James Watt. Watt needed a way of showing prospective customers for his improved steam engine how much more efficient it was than the horses they were using to provide power. He reasoned that a horse could turn a 24ft diameter mill wheel 144 times in an hour or 2.4 times per minute with a force of 180 lbs. Power is defined as work done over time so the power of one horse was, he calculated, $180\text{lbs} (2.4 \times 2\pi \times 12\text{ft}) = 32,572$ foot-pounds per minute. This is rounded to 33,000 ft-lb/min. Research carried out by Watt and by others subsequently has shown that the power of one average horse is indeed one horse power, although peak power for a few seconds has been measured as high as 14.9 hp. A healthy human can sustain about 0.1 hp



How does this apply to motor vehicles? As ancillary systems such as gearboxes and differentials absorb power the horsepower available at the wheels to drive the vehicle is less than the power generated by the engine. The measure now used for vehicles is brake horsepower or bhp. This is the power at the engines flywheel and the name derives from the De Prony brake system of measuring it. This braked the engine to a designated speed at full throttle. Torque and rotational speed were measured and used to calculate brake horsepower. Today bhp is measured using an instrument called a dynamometer.



Does this mean that an Austin Seven produces only 7hp or 7bhp? Actually it means neither. In 1922 the RAC introduced a method for comparing power output which was used by the government as the basis for calculating car tax. Some manufacturers adopted this as model names, the Austin Seven and Ten being obvious examples. Others incorporated the taxable and measured horsepower such as "40/50 hp"

The RAC, or taxable horsepower was defined $(D^2 \times n)/2.5$. Where D is the bore in inches and n is the number of cylinders. Because the taxable horsepower is based on bore and not displacement British manufacturers tended to produce

engines with long stroke and relatively small bores. This tended to limit the engine speeds which could be achieved and consequently the available power output and although the taxation system was changed in 1947 the legacy continued well into the 50's.

As a matter of interest the taxable horsepower of the BMC B series engine in its 1600 form with a bore of 2.97 inches can be calculated at 14.1 hp but the actual output of that engine as installed in the MGA was 78 bhp.

How does all this relate to torque? Find out in the next newsletter.

USE OF KEROSENE IN PETROL IN HISTORIC VEHICLES FROM THE FBHVC NEWSLETTER

Interest in adding kerosene to petrol for use in historic cars arose in the early 1990s after the disappearance of 'two star' leaded petrol. Some believed that higher octane four-star petrol could not be safely used in older low compression engines. This line of argument has been overturned, and in fact it is now generally accepted that while 'excessive' octane quality might be a waste of money, it is not harmful in low compression engines. The alternative view, that the greatly increased volatility of modern petrol is to blame for operating problems in older engines, is increasingly accepted. This aspect of modern fuels has been brought into focus again recently over the issue of addition of ethanol to petrol under the EU renewable fuels directive. Ethanol addition increases volatility, so any problems associated with high fuel volatility are not likely to be reduced with fuels containing ethanol.

With this in mind, there has been a renewal of interest in the addition of kerosene to petrol. Kerosene has a boiling range from about 160°C to about 250°C, whereas petrol boils over the approximate range 35°C to 195°C. Problems experienced in older engines, such as overheating, power loss, poor hot starting etc. have been attributed to the increased proportion of low boiling material added to petrol in more recent decades. This is believed to result in vapour formation in the



wrong places, thereby upsetting fuel-air ratios, and in the main, causing enrichment of fuel-air mixtures reaching the combustion chamber. Addition of a high boiling material such as kerosene does not affect the 'front end' of the fuel in the sense of preventing low boiling-point hydrocarbons in the fuel from vaporising (low boiling point hydrocarbons in the fuel will boil off and form vapour long before the kerosene starts to boil), but if kerosene is added at 5% or 10% by volume for example, the proportion of the 'front end' components will be reduced by a corresponding amount, and this may be just enough in some engines to alleviate the negative effects of potentially excessive vapour formation. Some owners of historic vehicles report significant benefits from the use of kerosene in this way.

However, the main point about kerosene, which is its higher boiling range, should not be overlooked. The high 'back end' boiling temperatures associated with kerosene may result in incomplete combustion, since a fuel which has not completely evaporated will not burn. Any unburned material will find its way into the sump



where it will dilute the lubricating oil. A significant amount of diluent derived from kerosene addition in the lubricating oil would run the risk of lubrication problems, with consequent increased wear of bearing surfaces. There has been some confusion over the use of kerosene blends in historic agricultural tractors, particularly as some of these used car-derived engines. However, in order for these machines to burn kerosene-blend fuels efficiently, a special vaporising inlet manifold was used on the tractor version, to ensure

that complete combustion occurred, without the risk of oil dilution. The same engine in a passenger car, if operated on kerosene-blend fuels, will not be so well suited to these blends.

Kerosene addition is likely also to increase the risk of deposits in the fuel system, and may also increase the formation of sooty particulates in the exhaust gas. Overall, while it acknowledges that some historic vehicle owners have suffered from poor engine operation with modern petrol, the FBHVC does not feel able to

recommend the use of kerosene in petrol in older vehicles. Instead, the Federation endorses the recommendations contained in a booklet published by the Vintage Sports Car Club, entitled 'Fuel Problems – Use of Modern Petrol in Older Engines' some years ago. These recommendations are felt to address the causes rather than the symptoms of the problem, and are still relevant today. The following suggestions are made in the report:

- adoption of local solutions to reduce heat input to the fuel system, principally from hot exhaust components
- use of insulating gaskets or other thermal breaks between fuel pump and engine and/or between carburettor(s) and inlet manifold
- use of heat shields to prevent heat being radiated from the exhaust system to the carburettor(s) and other fuel system components
- careful routing of fuel feed lines away from sources of heat en route from the tank to the carburettor(s)

These suggestions will be of most value in engines where the inlet manifold and the exhaust manifold lie on the same side of the engine. Engines where carburettors and exhaust are on opposite sides of the cylinder head tend to be much less affected by volatility related problems.

In addition, the condition of the radiator in water-cooled engines should not be overlooked. Old radiators can become really quite inefficient over time with accumulation of scale, debris and sludge on heat transfer surfaces, but the process can be slow and may not be noticed. Chemical flushing can improve cooling efficiency, but in some cases a replacement radiator core may be the best way to restore efficient operation.



Terry Chesterman was on a recruitment drive for his local car club, the Kempford Car and Motorcycle Club. If you want to join, call him on 01285 810612

FORTHCOMING EVENTS

The next Club event is proposed to be a visit to the Haynes Motor Museum near Yeovil in either late January or February next year. If you have not been to this museum I can wholeheartedly recommend it. The collection charts the history of the motor car from its inception to the present day housed in 10 halls from the Dawn of Motoring to The Millennium Hall. It includes the Red Room with 50 beautiful red sports cars, the Hall of Motorsport, the British Motorcycle Hall, the Speedway Collection and a great deal more. On the other hand, if like me you have been before I'm sure you will be glad of the opportunity to go again. The cost of the coach will be £10 per person and entry to the museum is £9.95 and £8.95 for Seniors (over 65 for men and 60 for women)

The next Club meeting will be on Tuesday 6th March 2012 and the next Newsletter on Tuesday 3 April

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