

# WESSEX STATIONARY ENGINE CLUB LIMITED

JUNF 2000

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It really is amazing that a club with over 300 members put their complete trust in just a dozen or so members to run the Club on their behalf. This trust must be completely accepted by the members over the years as no complaints or criticism is levied at the Committee by the rest of the members. Although all decisions are acceptable to everyone you accept the democratic process without complaint. Also within the Committee your point of view won't always be the one accepted by a majority vote. But you always have to accept the majority decision. The long term interested of the Club is always paramount.

#### \*\*\*\* CHAIRMANS REPORT \*\*\*\*

As I write this report and finish the Newsletter ready for the printers, the rally is only two days away, what a hectic week. The rally field is already set up with all the posts and ropes in situ. Things like the beer tent and catering unit is already in place. The best news is the weather forecast. A heat wave is on the way. My phone rings constantly and I don't know if I am on my 'A\*\* or my elbow'. Hopefully we can look forward to a super weekend, it certainly won't be for the lack of trying.

BJB.

#### \*\*\*\* THE MARKET PLACE \*\*\*\*

**FOR SALE.** Cast iron Bentall root chipper complete with hand turned wheel. Would make a nice exhibit driven by an engine. Also two saw benches, one Farris of Shaftesbury, which is all cast iron, and complete with shaft and blades in working order. The other is cast top with steel legs, would make good workbench, any reasonable offer accepted. Ring Terry on 01373 836617 Frome area.

FOR SALE. Mitsubishi L300 hightop L.W.B. 2500 diesel E reg, 1986, recon engine 3000 miles ago £800. For further details ring Nigel on 01225 755366.

**FOR SALE**. One Mayfield tractor complete with plough, wheelstrakes and front balance weight also rotovator, in good working order £50. Also Mayfield tractor with fingerbar mower also plough available (recent restoration) £45 Tel. 01454 411487. South Glos. Area.

#### \*\*\*\* ANNUAL COACH TRIP \*\*\*\*

Sunday August 6<sup>th</sup> to Kew Bridge Steam Museum, London. Coach to leave Nunney Catch Transport Café at 7.30am picking up at Frome and Trowbridge. The Coach fare and admission to the museum will be £12 per person for adults and £6 for children. Please ring Jackie on 01373 463526 to book your seat, book early to avoid disappointment. Kew Bridge Steam Museum has a wonderful collection of water pumping machinery, many of their engines are in steam every weekend including the Grand Junction '90', the massive Cornish Beam engine which pumped water to West London for over a Century. It is the largest working beam engine in the World. The museum is housed in a magnificent 19<sup>th</sup> Century pumping station, and as well as the five original Cornish engines they have a unique range of more modern steam and diesel pumping machinery. Kew also has its own steam Locomotive on site, this will also be in steam. The museum is located close to Kew Gardens, details of the gardens will be in later Newsletters. Book NOW to avoid disappointment.

#### \*\*\*\*\* A NOTE ON LEADED PETROL & LUBRICANTS FOR OLDER ENGINES \*\*\*\*\*

About a month ago, I was lucky enough to hear a talk given by Stuart Arklay, Technical Manager on Castrol, to a group of Chemical Engineers. It was mainly about the history of the development of oils but I thought that some of the information might be useful to Club members. Perhaps I should say that I have no tie or interest in Burman Castrol at all, except that I have used their oils and greases for fifty years now and never yet wrecked an engine because of them. In 1910, Harry Ricardo started research into the problem of engine knocking or 'pinking' a, and showed that this wasteful and damaging noise was caused by the fuel/air mixture not burning smoothly, the problem was worse in high-compression engines. He measured the "knock rating of any given fuel by comparing it with a mixture of two standard fuels, iso-octane (which was excellent) and n-hectane (which was dreadful), so the percentage or iso-octane in the mixture which behaved exactly like the fuel under test would be the 'octance number' of that fuel. Oil refineries could not then produce large quantities of high-octane petrol. Sometime in World War I Dr Midgley and Mr Boyd of General Motors in America discovered that minute amounts of a strange chemical compound, a clear, dense, highly poisonous liquid, 'tetraethyl lead' could be added to gasoline and would markedly improve the octane rating. It was indeed an amazingly lucky discovery - nothing which works better has been found to this day. This 'leaded' petrol left heavy deposits in the engine combustion chamber and these were much reduced by adding an organic chlorine or bromine compound to the fuel together with the lead, so that most of the lead compounds would pass out in the exhaust gas. By 1926 the major companies had started to blend this 'ethyl fluid' mixture into some of their normal fuels to make leaded premium high-octane fuels, at (of course) higher prices than the regular product for use in high performance engines. But lead in petrol had another unexpectedly useful effect, in the 1930s Castrol had developed an oil additive, zinc dithiophosphate, which was the principal additive to Castrol XL and which markedly improved the performance of that oil when hot. When traces of that additive got into the engine combustion chamber, it reacted with the lead in the fuel and produced lead phosphate, a chemical which melts to a treacly slag and deposits a thin film on the hottest parts, the exhaust valves and their seats. This goo protects and seals the valve seat, and greatly lengthens the useful life between valvegrinds. So the effect of removing lead from petrol is clear - the octane number of the fuel is lessened and the exhaust valves/seats lack a useful protection. For high-performance car engines which see extensive hard use it may be necessary to fit new exhaust valves of superior performance and to fit new valve seats made from heatresistant powder-metallurgical alloys - this can be formidably expensive! The octane number is less of a problem the knocking can be controlled by retarding the ignition slightly. The LRP fuels now being sold contain a variety of additives - a clear sign that no-one has yet agreed on the best one to use! - and suffer from an extra duty of 2p per litre levied by a greedy government. Not totally satisfactory. Castrol have developed a fuel additive 'Valvemaster Plus' which they claim works better than anything else. One bottle treats 250 litres of unleaded petrol. I have single copies of their leaflets, which I have passed to the Chairman for anyone interested to read for further information. Now a couple a points for our own historic stationary engines. There won't be any problem with octane rating of the furl - the compression ratio isn't high enough. Nor should there be any real problem with exhaust valve seat attack, because none of our preserved engines will run at high output for long periods of time. So unleaded petrol should be quite satisfactory to use. Some hold the view that old engines should use 'straight' oils, that is, oils without performance-improving additives. I can't at all agree with this. All modern additives are put into the oil to improve various properties of it, and it seems unwise to throw such advantages away. A good, modern multigrade oil (like Castrol GTX) should suit most engines. Multigrade oils contain additives to keep then thin when they are cold so that cold-start wear is minimised, and yet stay thick and retain sufficient 'body' and film strength when hot. One caution, though. Modern oils contain detergent additives to suspend the dirt in the oil and prevent the formation of sludge deposits in an engine. You need to be certain that there is no sludge already lying in the engine before using a modern oil, which would pick up and disperse such sludge around the engine and damage it. Only use modern oils in engines which have been thoroughly cleaned out internally. If a stationary engine is in good unworn mechanical condition and will see little use and rarely get up to full working temperature, it would be a good thing to use an oil in it (such as Castrol Deusol) designed for diesel-engined cars to protect the engine as much as possible.

ROB ARMSTRONG.

#### \*\*\*\* GET WELL WISHES \*\*\*\*\*

The Club would like to wish Rod Harris of Thornbury best wishes, he is going into Hospital on June 28<sup>th</sup> for major heart surgery.

#### \*\*\*\* LETTERS TO THE EDITOR \*\*\*\*

Dear Brian,

Thank you so much for your birthday greetings in a recent issue of the Newsletter. Yes indeed I've no time to put my feet up as apart from rebuilding the Triumph along with my young friend Brian Hill (a very clever engineer) we have recently rebuilt a Sisson vertical steam engine and a Buffalo USA vertical steam engine and about to start on a Blaire horizontal steam engine. If that's not enough we have now taken on removing a 150 KW Bellis & Morcome/ECC generating set weighing some 10 ton from a local factory and getting back to High Ham. We intend to rebuild a shed and make into a 1920 style engine room and have all the engines in steam. Our plan is to have this completed early next year, maybe the club might be interested in having a visit come crank up. We have a three-acre field next to the workshops. Sorry to read that you can't get sufficient members on the committee. What's the matter with members, you only get what you put in why join if your not prepared to help out! If I lived nearer and were a few years younger I'd offer my services. It's the same with most clubs and associations, I remember after being involved with a club for some forty years on the committee I had a hell of a job to get someone to take over. Come on member's get of your butts and help out. Best of luck Brian.

RAY EARLE.

#### \*\*\*\*\* PETTER POINTS \*\*\*\*\*

Over the years I have seen many 1.5 hp Petter M types on the rally field, quite a lot suffering from seizure, this was mostly due to the piston seizing in the bore. Strip down on rally field, clean up piston and rebuild. My own engine suffered this way when it was driving any load. I have had the engine driving my corn mill, water pump and a 50-volt dynamo, this it did not like one bit and it locked up in the bore. Now I do not know if petrol back in the late twenties early thirties contained more lubrication properties than today's modern juice but I have run a few test runs with my 1.5 hp petrol model Petter M type, driving light and heavy loads what I did to overcome the seizing problem was to add about ¼ pint of two stoke oil to a gallon of petrol, this cure the problem, I have made this engine work very hard with no more seizing problems at all. A simple tip I know but it has worked for me others may have thought of it before but I'll pass it on so that it may be of helped to other club members.

E.J.GAY.

## \*\*\*\*\* COXLEY COUNTRY SHOW, HILL HOUSE FARM, LAUNCHERLEY \*\*\*\*\* \*\*\*\*\* IN AID OF MENDIP MILLENIUM PHAB – SUNDAY 21" MAY \*\*\*\*\*

We arrived at about 8.15, after finding that we didn't need our OS map after all, as the show was well signposted from the main road. We were directed to the bottom of the field, under a large hill, and 21 engines arrived in total, with a wide selection of attachments, including pumps, a grinder, and a forge blower. There was also a good display of exhibit boards for the general public, also a great help to us newer members. The show also had vintage cars, an assortment of stalls, and some fairground type rides. The morning was rather dull, with heavy showers and cloudy patches, which kept the expected crowds away. The afternoon was a little better and the rain mostly stayed away, with one or two light showers. The afternoon saw a few people come through, but not the five thousand or more that had been expected. This was the first show held here and I would like to see more later in the year, or perhaps next years.

JONATHAN 'JP' HOCKEDY – AGE 12 – JUNIOR REPORTER.

#### \*\*\*\*\* CLUB HELPLINE \*\*\*\*\*

Some years ago I tried through the Newsletter to start a Club Helpline, at that time I did not get one reply, but now I am going to try again. In the February Newsletter Tony Davis wrote that he was amazed that out of all the membership of the Club he did not get one reply to his appeal for help with one of his engines, I am as much to blame as anyone else as I did not take the trouble to pick up the phone and try to help. Most of us have a skill or knowledge that maybe of help to another club member in their hour of need, it may not take much, just a few words over the phone or a loan of some tool or other. I am sure that some Club members will have great engineering skill and perhaps the machinery to go along with that skill, if some of that skill could go towards helping another club member I am sure that it would be greatly appreciated and who knows another friend is always worth having. If we do have any willing members who would be willing to give help to others in the Club I am willing to prepare a register of the type anyone can give. I will start this off myself by offering the free loan of a large flywheel puller and bench drill also my arc welder will also be available, this is a start, I hope I will not be alone in this Club venture.

E.J.GAY.

#### HAZELBURY BRYAN RALLY \*\*\*\*\*

Brian and myself made our annual visit to that delightful rally at Hazelbury Bryan. The weather was absolutely wonderful, one of the best days we have dad this year yet. Once again there was plenty to interest everyone including a good show of stationary engines, cars, and displays including Brother Colins collection of petrol cans and motoring memorabilia, and a huge amount of car boot stalls selling almost everything. It certainly attracts a large crowd of people from a very wide area and it makes quite a large amount of money to be donated to local charities by Dickie Plummer and his band of helpers, all credit to them and long may they continue to run this very special rally in its present format as a successful one day event. It makes you wonder whether it is worth staging two day rallies which are getting ever more expensive to run some of which seems to cater for caravan owners. RAY BAKER.

#### **SELWOOD RALLY AT RODE BIRD GARDENS**

On Saturday May 27th we visited the Selwood Preservations Clubs Annual Rally at Rode Bird Gardens. The weather was definitely not in the organiser's favour. Every thing was being pulled in by tractors, we waited a few minutes and along came a tractor and hitched up to Brian's van and we were soon in the engine line up, the help by the organisers was very good, but the field was gradually turned into a right quagmire, it is a great shame because the Club had put in a great deal of work to present a great show, they have my greatest sympathy after so much effort, but no one can completely forecast the weather. It certainly kept the public away which effects the financial side of things. Better luck next year we hope. RAY BAKER.

### MELLS DAFFODIL DAY - EASTER MONDAY 24™ APRIL \*\*\*\*\*

As predicted our telephone started to ring early on Sunday morning and continued to ring throughout most of the day with enquiries as to whether the Mells Show was on or off and in particular the condition of the field. Most of you would have watched the weather reports that blighted the British Grand Prix and local to the Mendips events that had been cancelled with rivers swollen and dark clouds looming it definitely looked as though it would be foolish even to leave your home. Early on Sunday morning Robin along with George Coles and young Jason met up with the event organiser for a site meeting and were surprised to see how well the field had held up to all the rain, you could drive anywhere in the field as the ground was still hard with long grass. Our usual exhibiting area around the perimeter fence was to be changed this year to the field centre which was normally taken up by vintage cars, motorbikes and commercials, none of these were present this year (A Mells committee decision) and a big mistake to my reckoning as a lot of visitors would have turned up to see them. So with our compound erected it would remain to be seen how many would turn up on Monday. Robin was on site at 7.45am and three exhibitors were already on site having arrived Sunday night with their campers and by 9am more were streaming through the gate and a grand total of 33 engines turned up with only a handful missing, o it was a great turnout and at this point Robin would like to offer his apologies to the Club members that he had to turn down, as it happened they could have come with the extra space we were allocated. Well there was a good cross section of engines on display and most were doing the jobs they were designed for. An immaculately restored Apple Top 1.5 hp Petter 'M' painted black caused a lot of interest, its owner Mr D Thornhill had done a superb restoration job on what he described as once a very rough engine. Tony Davis had a new exhibit, a nicely restored Bernard driving a centrifugal fan that once used to work in a foundry, and Bill Coombs Ingeco had its second public viewing, the first being at Nunney Catch a few weeks ago, another excellent restoration, well done Bill. It was nice to see friends from the South Bristol Club exhibiting here, many used to be Wessex Members until deciding to form their own club in their area a few years ago, and they now hold an annual one day rally at Wick. This year it will be on Sunday 9th July, many thanks to all who supported our event and if we are invited back next year - you will all know by Christmas. JACKIE.

#### **EVENTS FOR YOUR DIARY**

MON 31<sup>ST</sup> JULY. Club Night. Crank-Up at The Court Hotel, Emborough. Lets have a good selection of engines. Bring and Buy and usual raffle, prizes for the raffle will be most welcome.

SUNDAY 6<sup>TH</sup> AUGUST. Annual Club Coach Trip. See separate advert.

SUNDAY 3<sup>RD</sup> SEPTEMBER. Crank-Up and Car Boot Sale at Brian Fears Garage, Nr Gurney Slade. To book your engine space or car boot ring Roger on 01761 233028.

SUN 24<sup>TH</sup> SEPT. Full Ouart Crank-Up. To book your place in this prestigious event Ring Roy Cox on 01934

419826.