WESSEX STATIONARY ENGINE CLUB LIMITED

NEWSLETTER

MAY 1998



Please send Newsletter material to:-The Editor, Brian Baker, 27 Wickham Way, SHEPTON MALLET, Somerset. BA4 5YG.

Telephone (01749) 342671

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****** EDITORIAL *****

With our own rally just a few weeks away I would like to appeal for any items you have that are unwanted that we could sell on the club stall, books, china, clothes, household goods, etc would be most welcome, let any member of the committee have them or bring them along to Marg Appleby on the club stall at the rally. Also at the rally we will be having our usual Auction, so turn out your surplus items and turn them into cash, remember we pay out in cash on the day. Also the June meeting consists of a chat about the rally and also a table top auction, this will only be successful if we have something to sell, so once again you have the opportunity to turn your unwanted goods into money.

***** CHAIRMANS REPORT *****

I think the thirty or so members who went on the trip to Ed Boltons enjoyed the day out, it was certainly a comfortable journey due to having a nearly new coach. The next trip is planned for August when we hope to visit Dingles Steam Village in Devon, details to be announced later. I would like to personally thank Bob Hallam, Andy Gale, Ray Baker and Dave Clack who turned out on a cold and wet night recently to erect the large advertising signs in the rally field at Semington. Thank you one and all.

*** LETTERS TO THE EDITOR ***

Dear Ed, In last months newsletter you reported that a club member had approached you regarding being charged an entry fee for exhibitors, and that these rallies should be boycotted YES I TOTALLY AGREE but by your comment you are referring to the Finlake Rally in October. Well having attended this rally last year, (as previously reported) I feel I must speak up in defence, giving the location and facilities available to everyone on site, electric hook up for caravans, toilets, shower facilities and swimming pool all free, which quite a number of exhibitors took advantage of, so from a personal point of view I do not object, after all we do have the pleasure of being on a holiday park. I also feel that for an end of season rally theres no harm in being spoilt is there? Another point where does the fee go? I think Ross should answer this one, I personally don't mind whether is goes to charity or covering expenditure, does it really matter as long as everyone concerned enjoy themselves. Another point worth mentioning is that some small one day shows charge exhibitors for plaques, fine if you are prepared to buy your plaque. I have heard through the grapevine that a small one day rally near you makes the same charge and attracts quite a few Wessex members whom I presume quite happily pay. I have no intention whatsoever of paying to exhibit at any rally other than the one stated, I only hope that others don't try and jump on the band wagon and think they can do the same, because it will be a very sad day for rallying if this should happen and bring our hobby to a halt. Please note that I only support the Finlake charge purely for its location and facilities.

A.K. VICKERY.

I still endorse my comments in a previous newsletter concerning this issue, after all what do you require a electric hook up for? has your Calor run out? And who the hell wants a swimming pool in the middle of October knowing the English weather. ED.

SODBURY SORT OUT.

Burt Holloway, Ray Bassett and myself, all club members, made the annual trip up the A4 to Sodbury. This year we arrived a little later than normal only to find lots of people walking about and lots of the goodies already being sold. I parked the van and we headed in the general direction of the goodies, of which there were plenty, virtually everything including the kitchen sink. I myself found parts already mentioned for my Ruston, Ray found a pulley for his B.S.A. and Burt found some wheels. There were plenty of engines to be had, there were most of the usual makes, a very nice large Amanco, Listers, Ruston P.B.'s and P.T. which was complete and original, and I would say class 2/3 condition. There was a trailer full of engines shipped in from Australia, which I believe was part of the Sellers sons collection of 200+ engines. They had numerous makes for sell, Internationals, a Waterloo Boy, two sizes of Ronaldson-Tippett in class 2 condition which took my fancy, but had to restrain myself reluctantly from purchase. There was a board displaying a list of other engines also which were too numerous to remember maybe somebody else can? Certainly many engines that will never be seen in popularity in this country.

A.K. VICKERY.

AUCTION AT BRIGHTWELL-CUM-SOTWELL, OXFORD.

Another sale Ray Bassett and myself attended at the beginning of March was at Brightwell-cum-Sothwell, Nr. Wallingford, Oxford uncovered some interesting items at fantastic prices for the owners. A Lister domestic pump £70, Ruston P.T. 1948/50 £130 class 2. A Wolseley WD8 badly frosted £65 class 3/4, and a small open cranked believed to be a Fuller & Johnson, no identification available class 2/3 fetched £470 and Ray learnt the purchaser was prepared to pay £600 for it. Also an Amanco $2\frac{3}{4}$ class 2 £430, a couple of Lister D's at giveaway prices.

A.K. VICKERY.

CLUB NIGHT AT THE OLD DOWN INN - 30TH MARCH.

The Old Down Inn was packed to more than the capacity for our March club night meeting, everyone was expecting Richard Bufferey from R.A. Lister to give us a talk. Owing to business overseas he was unable to attend. However our secretary was able to re-schedule the April speaker, Philip Thornton-Evison to attend a month early. It was very kind of Philip, who is a club member, to make the long journey from Oxford. Anybody who may have been disappointed that our invited guest could not attend, should have any fears soon removed. Philip, as always provided a most interesting and enjoyable evening. The basis of his talk was a look at a sewage pumping station in Portsmouth. Philip explained with some wit, the dreadful conditions that our Victorian forebears had to endure, before the advent of sewage control and cleansing. Following an outbreak of cholera in 1845, it was decided by a council board that it was time to establish some sort of sewage plant for the local inhabitants. By 1851 the plant (pumping houses etc) had been built, interestingly enough by the firm of Mowlem, who are still building today. A beam engine was installed, utilizing a twenty five inch bore, fired by a Cornish Boiler. This system was capable of moving two thousand gallons of effluent per hour. By 1887 there was a need for a second engine. This was provided by James Watt & Co. This engine was still used as a standby as late at 1959. 1964 saw the installation of a number of Crossley Gas Engines, these ran until 1971. Electric pumps were then taking over duties. Philip illustrated the above information with a series of colour slide views, explaining in great detail the working of the plant. For a number of years the engine house was a museum, now sadly closed. After the break Philip continued to entertain us with a selection of slides of various stationary engines. Again, thank you Philip for providing us with an interesting evening. The following lucky people were prize winners in the raffle, Gloria Carp, Herb Gane, Phil Marshall, Rob Armstrong, Roger Pike, Ted Phillips, Ian Skuse, Jackie Lambert, Jeremy Adams, Ted Routley, Tony Davis, Bill Coombs, Ken Shakespear and Fred Biggs. Finally thanks to all the Members who provided prizes. PHIL CAUDLE.

SOURCE OF ODD OILS.

I've found a useful source of unusual and specialist lubricants. Rock Oil are based in Cheshire, but have a small local depot in the Treenwood Industrial Estate in Bradford-on-Avon, telephone number 864724. They are helpful and well informed, and even produced a single litre bottle of a specially light hydraulic oil which I needed at a reasonable price.

ROB ARMSTRONG.

***** LOW-TENSION IGNITION BY ROB ARMSTRONG *****

All of this was prompted by a lucky discovery of three old books during a wonderful holiday last September. Frances and I had been touring around parts of America which we hadn't explored before, but were spending the last few days on familiar ground, on the California coast. We had visited again that fantastic aquarium in Monterey - surely one of the best anywhere in the world - and after watching the sea otters playing and feeding in their enormous tank (it's wonderful how such a wet animal as a sea otter can seem so cuddly!) and marvelling at the delicate magic of the luminous jellyfish, we lunched in a restaurant at the end of the pier where we could watch the sea lions basking lazily in the sun. We needed to walk off some of the effects of our superb meal and the fine Californian wine before returning to our rent-car. A gentle stroll from the pier for a block inland and then about six blocks south-east brought us to an "Antiques Mall" unpromisingly housed in an enormous corrugated—iron shed. Here were two floors of stalls containing all sorts of other peoples' cast—offs, with the odd exciting item to find. I yearned after a fine Zenith radio of perhaps 1934 date and very moderate price — but the bulk and enormous weight would have been impossible to manage on our economy flight from San Fransico back to London. I did pay \$15 for three little books by the Motor Car Publishing Company of New York, the 1910 reprints of their original 1908 texts, "A Practical and Authentic Advice for All Who Motor". The three titles, "Maintenance and Repair of the Power of the Hour", "Battery Ignition of the Power of the Hour" and "Magneto Ignition of the Power of the Hour" are indeed a 'simple, non-technical and comprehensive treatise', well suited to pioneer motorists, and holding a lot which can directly apply to Stationary Engines so I will try to pass on some useful bits of it.

LOW TENSION IGNITION This system "is used in preference by some makers because it is simple, easily understood by the average motorist, requires a minimum amount of wiring, will ignite a charge that a jump spark will not ignite because of its greater heat, and is said to be more efficient as regards fuel consumption". Hayward's "Automobile Ignition, Starting, Lighting" of 1918, another American book which I collected some years ago is more specific. The chief advantage of low-tension ignition is its immunity from troubles caused by short-circuiting by leakage of the current through poor insulation...This led to its almost universal employment on motor boats for a number of years....it is now only to be found on stationary engines, the low rotative speeds of which make it practical." "As the low-tension current will not jump an air-gap, a mechanically-operated spark plug (or igniter), i.e. one that is held closed until the maximum current is passing through it and is then suddenly opened by being mechanically tripped by a cam or rod operated by the engine, is essential. Such a plug produces a spark that is immensely superior in heating value....but this most desirable quality is likewise quickly destructive of the contact points, necessitating frequent re-adjustment of the plugs." The description which follows does not make it really clear how this excellent spark is produced. Nor do the other books I have looked at - the statements are either so mathematical and abstruse that they don't help or are just plain wrong. Whenever this happens to me I like to try something out in the workshop to clear my mind. Try this - it's quite helpful. Connect a twelve-volt car battery to one or two small bulbs as shown in the sketch. The bulb(s) will light, taking a current of one amp of bulb(s) totalling twelve watts are used. Break the circuit. A small weak spark can just be seen at the break as the bulb(s) go out. Not much use for anything. Now connect the battery to a choke from an old 80-watt fluorescent lamp fitting. The same sort of current will flow, perhaps about one amp. Now break the circuit, but do be careful not to touch any of the wires while you do this, to avoid an electric shock which will startle you. A lovely big flaming spark will be seen. Why the difference? The current being broken is the same. The reason is the inductance of the When the battery was connected to the lamp, the current rose to its full value instantaneously (well, almost!). When the circuit was broken the current could fall to zero just as promptly and so nothing special happens. When the choke was connected to the battery the current could not rise to the full value all at once because of the inductance, but took a small fraction of a second to get all the way there. While the current was rising some energy was stored as magnetism in the iron core of the choke coil. When the circuit is broken this trapped energy has to go somewhere. It can't appear as a gentle decrease of current - the broken wire prevents that - so a very high voltage must appear across the choke winding, to force a spark to jump across the break in the wire and allow this energy to flow away. You can use such a car battery and a fluorescent lamp choke as an excellent temporary ignition supply for any L.T. engine whose magneto is not very well. The L.T. system is described and illustrated in Hayward, using a battery and coil or a magneto. "In all cases where the low-tension system is used for ignition, the car is furnished with a mechanical generator of electrical energy because the ordinary galvanic

cell will not supply current sufficient for extended and constant use". This was certainly true for the dry batteries of that date which were often carried as an alternative or emergency ignition source. I've been trying to keep the theory and mathematics firmly under control, but when we come to think about "mechanical generators of electrical energy" whether magnetos or dynamos, we do need to tackle one basic idea. If a wire is moved in a magnetic field (whatever that is, another substantial difficulty; let us say instead between the poles of a magnet) a voltage appears across its ends and a current will flow in the wire. Trouble is, the current will be tiny. To get a substantial, useful current you have to increase all three factors. Instead of one wire, use a coil of wire which adds up the effect of each single turn. Then move this coil rapidly - the quicker it moves, the more juice is made. Finally, arrange for the magnet to be as strong as you can get it, large and thick. Make sure that the magnetic effect flows through iron of generous cross-section so that the magnetic field is as high as it can be. Even the tiniest air-gap reduces the field (and so the current generated) markedly. It is a pity that none of these books contains a good picture of a low-tension magneto. Hayward states badly "A low-tension magneto is nothing more or less that the simple instrument which formed part of the thousands of telephones of the hand-ringing type still to be found in rural districts. Built with more powerful magnets and wound to give a greater current output at a lower voltage.. .. As the mechanically operated make-and-break plug circuits are timed, the magneto is simply revolved continuously without reference to the motor timing, the current being constantly delivered to the circuit though the usual collector ring and brushes". This last bit is quite seriously misleading. An LT magneto is indeed wound to produce about 40 volts or so but it does need to be timed, as the output is far from constant as the armature revolves. The point is nicely shown in the picture (photo marked 5a) of an HT magneto, but it will do to explain this point. "During the greater part of the armature rotation the changes in (field) strength will be slight and the current induced in the wire correspondingly small; but at the instant that the core becomes re-magnetised, as the armature leaves position C the current produced will be at its maximum and it is necessary to so time the rotation of the armature that at this instant one of the cylinders is in condition to be fired....it is imperative that the armature be driven in such relation to the crankshaft that each production of maximum current coincides with the ignition point.. .." This timing problem is overcome by the designs (by Webster, for example) of magnetos which do not rotate but are tripped by a cam/spring mechanism at the proper moment. You get fast movement of the wires past the magnets and so good generation of energy, but wear of the trip mechanism can be tiresome. "Another disadvantage is that (ignition) timing is exceedingly difficult to adjust especially on multi-cylinder motors...an operation requiring great skill and patience. Then there are the added disadvantages of moving parts in the cylinder which are operated from the outside, necessitating the use of bushes which wear in time and cause loss of pressure... In modern motors the use of his system has been largely discontinued because....the make and break rods and mechanism must weigh something and so their inertia will prevent them breaking contact at the proper time. Another thing is that to advance the timing more mechanism must be used....It is difficult to make a low-tension spark plug suitable for a high speed engine without resorting to the most expensive machine work". An unsuccessful attempt to overcome these snags was the magnetically operated lowtension igniter plug which just would not work for long enough without attention. It is clear that this writer didn't really approve of low-tension ignition one bit. And these are the reasons why high-tension ignition was preferred then (and now) once the serious problems of insulation of the high voltage's needed to jump a spark across the points of a spark plug had been properly solved.

****** WESTBURY GATHERING ******

Here we go again, our 20th year of rallying. Our first rally of the season dawned, yes you've guessed, WET. All loaded up with our 'new' Petter engine we set of for Bratton. The site was very good with a garden centre and crafts and a lovely tea room next door. The field soon filled up including a very impressive engine line of some thirty engines. The Army were well attended as were the vintage cars, tractors and commercials. There were go carts, bouncy castle and model racing cars to keep the young amused, and various stalls and stands for us 'older people'. In between the showers the sun came out to make a very pleasant day. Roger's engine enjoyed its first rally too, and behaved all day. A good start to what will be I'm sure, another busy rally season.

LINDA PIKE.

It is with great sadness I have to report the death of Wessex Member Amanda Jane Pointing (Mandy) at the age of only 32 years. Mandy was the wife of Roy Pointing who has been a member of our Club for a great many years, and until recently was a member of the committee. Mandy will be sadly missed as she and Roy were regular exhibitors at most rallies. Our sincere sympathy and condolences go out to Roy and the Children.

MELLS DAFFODIL DAY.

Everyone knows what miserable weather was forecast for the second week in April, we all watched the weather forecast hoping for some good news for all the events that were arranged over the Easter Bank Holiday, and for myself I wasn't surprised when on Saturday my phone began to ring to see if Mells Daffodil Day was still going to take place and also what was the state of the field. Usually I liase with the organiser on Sunday morning and tell him how much space I require, knock in a few pins and lay a loose rope on the ground and return home, when the exhibitors arrive on Monday morning they all know where to go, but I became more and more worried after looking at the Teletext weather reports on Saturday and just had to go and have a look a day early at the field for my own piece On arriving at the field entrance it was a bit muddy as the Civil War Society encampment was already in situ. and the beer tent was doing a roaring trade as Cromwell's Men got themselves primed for Mondays battle. Looking torward the area that would be allocated to our Stationary Engines I was flabbergasted to see beautiful 5" long nice green grass with no cow-pats and no wheel marks, I walked all around and the ground was rock hard, just wonderful for what we needed, no one would have a problem getting out as long as it doesn't rain and as you all know it stayed fine for Monday, but what a bitter cold wind came across the field which drove most people inside their vehicles. Our Stationary Engine lines were very well supported with a good cross section of exhibits one of which looked really nice was Colin Baker's collection of fuel cans all restored to a very high standard. We had some large engines attend this year with Brian Read's 7 HP Victoria and Roger Parsons large Lister, both engines ran well and were nicely presented. A new exhibitor and probably his first event was Tony Davis, welcome to the field Tony, may you attend many events and enjoy them all.

The club members who could not make it to Mells through no fault of their own was my mate Bill who is home from hospital and with Marg to look after him and keep him in order, looks well on the mend, and Derrick Watts who along with Dot was coming to Mells for the first time was admitted to Weston Hospital for a long awaited operation which Dot says has

now taken place and Derrick is making a good recovery.

Back to the Show, the vintage car section was well supported as was the commercials and military vehicles, although our Chairman Brian said that the car steward had told him that quite a few failed to turn up, no doubt fearing the worst weather wise, but there was still plenty to look at. It was nice to see two of our past Presidents walking around with their good ladies (Herbie and Tom), its always nice to have a chat as on club nights its not always possible.

Many thanks to all who supported this event and to those who helped me pack up. (This is where I miss Bill). Hope to see you all again next year.

ROBIN.

FOR SALE - $1\frac{1}{2}$ HP LISTER 'B' AND 'H' PUMP. SINGLE FLYWHEEL £200. MILLARS 3 HP O/C £400. BOTH REQUIRE A BIT OF WORK. RING PETER ON (01935) 840370 YEOVIL.

FOR SALE - LISTER 'L' 5 H.P. 1926 RESTORED AND IN GOOD CONDITION £260. WOLSELEY WD ON TROLLEY. GOOD WORKING ORDER £65. LISTER 'DK' (KEROSENE VERSION) ON TROLLEY. GOOD RUNNING ORDER. £75. STUART R2 ENGINE AND WATER PUMP ON TROLLEY £150. 6 ATCO MOWERS FROM 1920 to 1950 NO REASONABLE OFFER REFUSED. RING (01380) 830344 FOR FURTHER DETAILS.

WANTED - WICO MAGNETO. FOR SERIES 'A' PETTER. IMPULSE START. REVERSE ROATATION. RING MR. J. DOMAN 01373 471255.

****** LETTERS TO THE EDITOR ******

Dear Brian, Being a member who is disabled, I have Chronic Fatigue Syndrome and am useless in the morning, and who has an invalid scooter powered by electric batteries, I greatly enjoy any 'do' which provides space for our small caravan and estate car within viewing distance of our exhibits. This enables one to still join in whatever the weather and have a lie down as necessary, but not missing out on whats going on. We use our small awning to house my scooter, the porta loo, wet clothing and the engine overnight. If it is possible to arrive the previous evening of an event and sleep over I am able to partake in these outings with my husband. A joy shared etc! We have found that people are interested in anything old and collectable so they enjoy seeing other bits and pieces of collections, and they make a talking point, not just another stationary engine. Our collection consists of old tools (Fussells of Mells), petrol cans, old bicycles, and bits, woodworking tools and name plates.

VAL ROGERS.

This letter which comes from one of our members who is incapacitated bears out what I have always advocated that service vehicles should be behind the engines and not parked in some far distant field. I would like to thank Val for her letter and wish her many happy rally days.

Having spent the May Bank Holiday at the Abbey Hill Steam Rally which was well supported by Wessex Stationary Engine Club members, I was very pleased to see Brian Lovell, who you will remember last year under went major surgery, was back on 'Henry', his trusty Fordson, doing sterling service, once again with the water bowser, and I must admit he looked as fit as the proverbial fiddle. Welcome back Brian, we missed you in 1997. Also I had a chat to Derrick Watts who also has had an operation recently, and who at present cannot ride his motorcycle or drive his car, we all hope you will soon be fully recovered Derrick.

B.J.B.

**** AUCTION REPORT SATURDAY 25TH APRIL AT MUCH MARCLE, HEREFORDSHIRE ****
550 lots of which 10 were stationary engines. About 15 tractors and a lot of spares, also the usual modern tractors and implements.
STATIONARY ENGINES.

LISTER JUNIOR. NOT SEIZED. CLASS 4. £26. RUSTON PB 3. CRACKED BLOCK, CLASS 4. £60. RUSTON. 2VSH TWIN CYL. DIESEL. CLASS 3. OILY CONDITION. £75 + VAT. PETTER 'A' SERIES 2. CLASS 3. £4. MANUS PUMP AND LISTER PUMP. CLASS 4. £6 THE PAIR. M.A.G. 'V' TWIN. NOT SEIZED. INCOMPLETE. £100. LISTER 'D'. ON TROLLEY. CLASS 3. £24. PETTER 'M'. NO 2647. COMPLETE £245. PETTER 'A'. 1941 CHARGING SET. CLASS 2. £90. PETTER 'A' AND CORN CLEANER. CLASS 2. NICE EXHIBIT. £190. (NOT SOLD). TRACTORS.

FORDSON EN 27 MAJOR AND LOADER. IRON FRONT WHEELS. £360. FORDSON STANDARD. IRON FRONT WHEELS. £300. NUFFIELD (BMC ENGINE). £300. NUFFIELD (PERKINS ENGINE). £580. FERGUSON TVO £380. FORDSON STANDARD 1942. £650. RUNNING ON RUBBERS. VIRTUALLY NONE OF THE MODERN 4 WHEEL DRIVE TRACTORS WERE SOLD.

A. ROGERS.

****** TENCREST RALLY ******

The 'TENCREST MENDIP MAYHEM' will take place on Sunday September 6th 1998 from 9.00 a.m. till 4.30 p.m. at Brian Fears Garage, Oakhill. WANTED - ENGINES, CARBOOTERS, TRACTORS, MOTORCYCLES ETC. Sorry no camping due to lack of room. Early booking advisable for the same reason. Contact Roger Pike or Don Rogers on 01761 233028. Proceeds are shared between W.S.E.C. and C.L.I.C.

Any contributions of raffle prizes would be much appreciated. There is a decent pub next to the garage where it is possible to get a cooked lunch if required.

 $\underline{\text{CLUB MEETING}}$ - The JUNE club night at the Old Down Inn will be an autopsy on the rally followed by an auction please bring items for sale. 10% deducted by the Club and the balance paid out on the night.

IN NEED OF HELP?

Call Alan Bartlett on 01380 830344 for engineering repairs and many more. No job to small.