WESSEX STATIONARY ENGINE CLUB



NEWSLETTER

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WHO PUT THE 'H' IN 'RUS(H)TON' ?

Until recently I had always thought that it was some slightly careless faction of the Stationary Engine 'Movement' that was responsible for originating the mis-spelling of the name RUSTON-HORNSBY. Hardly a rally would pass without either the programme or, worse still, the name-board in front of the actual engine would fail to transfer the name from the nameplate to the printed page without the insertion of the aggravating 'h'. Even our own esteemed newsletter (in the very early days, of course!) was once guilty of this literal crime.

I suppose that I must be rather more sensitive to this sort of thing than many since I regularly suffer from having my own name wrongly spelt and my father, upon receiving any letter offering the slightest alternative spelling of our surname, would return it un-opened to the sender, marked, "No-one of this name known at this address!"

So, I was fascinated to discover, whilst browsing through some recently acquired copies of a weekly journal, the MECHANICAL WORLD AND ENGINEERING RECORD, that, on December 5th, 1930, the following paragraph appeared in the Trade Notes column:-

"Notwithstanding previous announcements by the manufacturers of the Rushton tractor and RUSTON and HORNSBY Limited, Lincoln, an impression that RUSHTON is associated with the name RUSTON and HORNSBY Limited, still persists, particularly in some overseas countries where the term 'tractor' may be used to denote an internal combustion engine. RUSTON and HORNSBY Limited are not the makers of the RUSHTON tractor, nor are they in any way associated with the company manufacturing the tractor in question."

So poor old Ruston has suffered at least sixty years of having his name abused. Almost as long as my father! But what of Hornsby? Has he fared any better? Well, not if an auctioneer that I heard a few weeks ago is any thing to go by. "Here we are then, lot three hundred and twenty nine, a nice little RUSHTON HORNBY stationary engine, very desirable, what am I bid, ladies and gentlemen, who'll start me at...?"

He probably played with clockwork trains as a boy, too!

TOM RANDALL.

P.S. Amongst the entries received for a certain club rally, due to be held at a place which shall remain nameless but has strong associations with mousetraps, was one for a RUSSIAN HORNY! Is this taking Glasnost too far, I ask? Do I even believe you, Shirley Gale!

CLUB DIARY.

- Mon 31st July. "CALL MY BLUFF" Professor Joe Munt invites you to participate in a test of knowledge and observation to be held at the Old Down Inn. The Professor has selected a team of experts to put the questions, all that is required of the audience is to find the answers. The first question will be "Have you done your chores?", and anyone replying "What chores?" can be expected to be told.... "Mine's a pint".
- Sun 6th August. The WSEC sponsored TENCREST RALLY on the A37 near Gurney Slade, next to the Tencrest Garage. Engines, cars, motor bikes or indeed any thing mechanical and interesting is invited to attend. A Car Boot Sale is being organised and if previous years can be taken as the standard, bargains can almost be guaranteed. Details concerning engine etc. entries from Bill Coombes on Oakhill 840868, Car Boot from Phil Harris on Wedmore 712048 and The Draw from Brian Verrall on Cheddar 743460.
- Mon 21st August. Visit to The Somerset Rural Life Museum at Glastonbury. Assemble at 7.00pm for a conducted tour.
- Mon 25th Sept. A showing of the popular "Dustbin Films". More details later.

FORTHCOMING EVENTS.

- Sat 2nd Sept. Wellow Floweer Show. Stationary Engines are invited. Details from Mrs. Lois Gumm Tel. Coombe Down 835840.
- Sat 9th Sept. Faukland Flower Show. Members are invited to exhibit 7 or 8 engines at this local show. Details from Rob Lambert Tel. Frome 63526.
- Sat/Sun 16/17th Sept. Isle Abbots Vintage Fair and Tractor Working. Details from Brian Lovell, 9 Cottage Corner, Ilton, Ilminster, Som. TA19 9EP Tel. 0460 53846.
- Sat/Sun 14/15th October. Dean Forest Railway Rally. Details from John White, 59 Claverton Road, Yatton, Bristol BS19 4LD. Tel Yatton 833879 after 7.30pm please.

CLUB ACTIVITES.

Monday 24th April. Monthly Meeting. Stuart Turner Models.

For this meeting there was a very good turn out of members, which as usual was opened by our Chairman with details of forthcoming events and of the Cheddar Rally. He then introduced the guest speakers for the evening, Mr. John Woodruff and Mr. Paul Manning from Stuart Models Ltd. of Cheddar.

John Woodruff told us how Stuarts came to Cheddar in the first place. They wished to seperate their expanding pump manufacturing enterprise from the model business and were able to do so by acquiring his business known as Moorwood Engineering which was then a small company manufacturing copper boilers for model railway locomotives, stationary steam engines and even marine engines. Since moving to Cheddar Stuarts have expanded still further by the acquisition of a second company, Plastows, and can now offer a range of boilers suitable for model traction engines. This wide range of boilers was of course in addition to the model steam engines which are also produced at Cheddar either in finished or kit form and were well illustrated in the catalogue of which all members attending were given a copy. This booklet alone made the evening worth while as it makes absorbing reading.

Paul Manning then took over and gave an account of how Stuart Turner first started back in 1906 and showed slides of the original premises. Here they produced their first steam engines which were intended for use in small workshops and factories. Stuarts products were not however confined to engines, as Paul Manning showed us further slides of a small lathe they had produced, a 250cc engine fitted to a pedal cycle and even a full blown motor cycle

one of which the company still owns.

cont'd.

Stuarts went on to produce generating sets, pumps and engines for marine use although their range of steam driven pumps has now been withdrawn as electrically driven directly coupled pumps have become available.

The casting and machining processes were illustrated by further slides and we saw that Stuarts at Cheddar are using the most modern techniques available. This part of the evening

concluded by the showing of a Stuart promotional video.

During the break Eric Gay, our new Raffle Organiser, dipped into his bag of goodies and awarded Paul Hurt chocolates, Robin Lambert spanners, Derrick Hodges wine and Ruebin Smith handkerchiefs.

Finally we had a demonstration of Stuarts latest product, The Mendip Boiler which within

two minutes produced steam to run a small table engine.

On behalf of all members present I would like to thank both John Woodruff and Paul Manning for a most enjoyable and informative evening, and for their kind invitation to the Club to visit their Cheddar factory next year. Brian Verrall.

Sunday 21st May. Visit to The West Somerset Railway and Hinkley Point Power Station.

Sunday 21st May found twenty-four of us en-route from the Old Down Inn to Minehead, and arriving in time for a short look around the town and station area before boarding the 10.15 train to Bishops Lydeard. The train was steam hauled throughout the 1hr 40min trip by "Evening Star" BR class 9F 2-10-0, the last loco. BR built in the 1960's. From my vantage point at the rear of the coach reserved for us, I was amused by a number of "Wessex heads" hanging out and the way they all changed sides when the train went round a curve. All the little wayside Halts and stations were beautifully restored and complete with luggage on the platforms. Ernie, our coach driver, had driven onto Bishops Lydeard and was waiting there on our arrival enabling us to retrieve our picnic lunches. As there was no shade to sit in I for one was glad when we

moved off to Hinkley Point Power Station where we arrived just after two o'clock.

After passes had been issued, we were driven on into the Station for a very welcome.cup of tea whilst we watched a video presentation about the Station and it's operation. We were then split into small groups each with a guide, for a tour of the Station complex. We were shown around the 'B' Station, commissioned in 1976 and able to generate 1,230 Megawatts. Our first stop was the Cold Water Pump House where sea water is drawn in via large drum-screen filters and pumped to condensers and onto the Steam Turbines before being discharged again into the sea 14 deg. C hotter than before. Next we saw the gas turbine plant; as an insurance against a total loss of power on site, four 17.5 Megawatt alternators powered by a version of the "Olympus" aircraft engine are provided to keep essential supplies to the electrical systems going Passing through the main turbine hall we were taken to the viewing gallery overlooking the reactor pile cap. From a window, the charge machine could be seen, this removes and replaces any of the 308 fuel rods in the reactor, the rods last five years before being changed. Various cut away models of the reactor and boilers were shown and examples of naturally occuring radioactive substances such as rocks from Cornwall were demonstrated on a radiation meter. The make up of the uranium fuel rods was shown, just one small pellet will power a 100 watt lamp for ten years (just the job for my sons bedroom light which is always left on). Finally we were shown the Control Room where the reactors and turbo-alternators are controlled by duty engineers.

Altogether a very interesting and varied day out. Although the railway and power station appear to be of vastly differing technologies remember that both use steam engines and Hinkley 'A' station was commissioned in 1965, about the same time that "Evening Star" was built.

My thanks to all who supported the trip.

Jeremy Adams.

THE MARKET PLACE

FOREST CARAVAN. 12'6", 5 berth. rebuilt, rewired, resprayed. Large awning, toilet compartment, Heater. New Covers and curtains. £550 ono. Alison Raymond Tel (0225) 764579.

FOR SALE PETTER "A" type, air cooled $2\frac{1}{2}$ hp. Rebored and restored but paintwork needs a little attention. Tel Bath (0225) 834127 evenings.

Gerald Atherton has passed on to me a Shell Technical Services Bulletin dealing with Tractor Vaporising Oil. Although it may be somewhat dated it may be of use to new owners of engines using TVO and has some relevance with the restriction of 2star petrol. Due acknowledgement of Shell is made.

Tractor Vaporising Oil - Recommendations for an alternative fuel

Although Tractor Vaporising Oil (TVO) was withdrawn in 1974 a number of TVO engined tractors (and stationary engines) still exist, and we are often asked to recommend alternatives to TVO. The purpose of this Bulletin is to provide background to the subject and our suggestions for a suitable substitute.

Standard grade kerosene is obtained from crude oil as a fraction with a boiling range of about 150/250 degs. C, Because it does not attract a high duty like petrol, kerosene became established a long time ago as an engine fuel, usually being used in spark ignition engines with exhaust/inlet manifold heat exchangers to vaporise the fuel and having low compression ratios to suit the low octane number of about 15/20. Paraffinic crudes were most suitable for wick—type burners in lamps and heaters because there lower tendency to make smoke but as engine fuel they were of lower octane number. Conversley, napthenic and especially aromatic crudes had lower burning and smoke qualities but were better engine fuels as they had a higher octane number.

Premier grade burning oil was developed from the standard grade by using extraction processes to remove a large proportion of the aromatic content. The burning quality improved but the engine performance deteriorated as the octane number fell towards zero.

Tractor vaporing oil came into being as an improvement for engine applications by blending into standard grAde the high octane aromatics which had been stripped from premium grade burning oil. By this means TVO acquired an octane number in the order of 55/70.

In describing these products and their octane rating, no mention is made of the determination by research or motor methods. At the level of octane qualities involved, there would be little difference.

From the point of view of distillation characteristics and ease of vanorising in the inlet manifold, there is nothing to choose between TVO and standard grade kerosene. However, the octane number of the later fuel is lower and caution must be exercised when using standard grade kerosene to aviod knock. We therefore suggest that the following procedure be adopted by our customers.

As a first step, try running the engine on standard grade kerosene. If knock, which is readily audible is encountered stop the engine and add about 10% Regular Grade (2 star) petrol to the tank. Repeat this trial, adding two star motor spirit in 10% increments until the knock disappears and the engine runs smoothly. The petrol contenct should never exceed 50% and there are distinct advantages in keeping this proportion to a minimumal level. The lower the petrol content the lower the cost, the lower the lead level (exhaust valves in TVO engines are not necessarily lead resistant) and the lower the fire hazard. Two star motor spirit is recommended for this very reason that its lead content can be lower than higher octane three or four star grades.

We would emphasise that when making up blends of fuel, the proper safety precautions must be observed. The most practical and safe way is to pour the two compnents into the fuel tank and leave the natural turbulence of filling to complete the mixing. It is also suggested that users check with their insurers in case any modification to insurance policies is required. A petrol/kerosene mixture is almost certainly more hazardous than the individual components and it is for this reason that safe handling must be stressed. Standard grade kerosene does not carry excise duty, and blends with gasolene should not therefore be used on the road without Custom and Excise sanction.

May 1981.

This bulletin suggests a blend of 2 star and kerosene but with the withdrawal of 2 star obviously unleaded petrol should be used instead. This step will have two advantages. Firstly as unleaded has a higher octane number than 2 star less petrol will be required to achieve the same result. Secondly as no lead will be in the fuel at all there is no likelihood of the non lead ristant exhaust valves being damaged.

Yet more benefits of going GREEN....