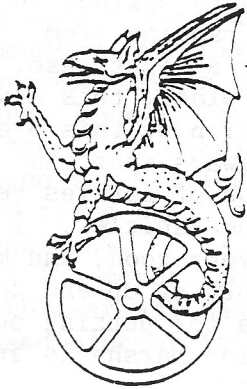


WESSEX STATIONARY ENGINE CLUB



NEWSLETTER

AUGUST 1991

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LISTER - PETTER VISIT Monday 24th June

I arrived there about 7 o'clock, a small group were already waiting, all thinking it started at seven but it didn't, it was 7.30. Any way, eighteen of us were let into the foyer and it was nice to see young lads and ladies in the group. We looked around the engines on display, some of the new range of Alpha engines they hope will take them on to the next century. Our main guide for the evening gave a quick run down on the history of the site, started in the mid eighteenth century, power was supplied by a stream, now culverted, right up to 1986 when it became Lister-Petter.

A short video, then onto the computer block. It seems that about 30% of capacity is used by them and the rest they sell. I did not understand the rest of it but it is running 24 hours a day.

The design computer in the next room seems quite clever, you can draw a picture on the screen and then chop and change it at will, with all departments involved at the same time - saves a lot of time.

Quite a long walk outside next, to get to the foundry. I could not hear all the explanations about what goes on there but there was a lot of molten metal about which, because the furnaces are electric, it is cheaper to melt it at night and store it in a large holding furnace. This takes a lot of smaller load, and you get quite a shower of sparks when you pour them into the large furnace. They not only cast their own castings but cast for other firms as well.

JCB and Massey Ferguson were mentioned so like the computer section, they try to generate some income from their excess capacity. There was one line where at one end was a machine making moulds from sand (?) these were then pushed along a roller line, a man poured in molten metal and at the end of the line the moulds were knocked apart and the castings put in larger boxes. I was half expecting them to go back to the furnace and it starting over again, you could have a job for life.

From the foundry we moved on to the machine shop, here were large machines, fully automatic and controlled by computers. They carried all the tools they needed on a moving belt system, a thing came out and grabbed a tool and took it to the working head. There were lots of machines all seemed to be cleverer than the last one, checking machines, measuring machines, coffee machines!!!

On the way to the assembly line we passed a large box of starting handles, several people wondered if they could get one in their pocket. The assembly is all manual, it is cheaper and easier to get people to change jobs. On to the finished engines, everyone is test run and selected engines are run over a longer period to see if any faults develop. Engines are then painted and sent to a storage warehouse to be sent where - ever.

We were then escorted to the social club where we were treated to a drink and plates of sandwiches, rolls and things, all very nice. Herbie Gane thanked our hosts for a very interesting and informative evening, they gave us a little bag of goodies and then we all went home.

VIC WALTON.

ROB'S TRAVELSHEDDINGTON AND STOCKLEY 6th & 7th July.

Always a nice show is this one although I believe this year the stationary engines were fewer in numbers, but having said that there was still alot to browse over, ranging from Victoria's to a very nice Gardner that was once used to supply the power for a lighthouse. Lots of action at the bottom of the field as the tractor pulling event took place, this always draws a large crowd and this year was the first time I have seen a mini version of this event with tiny but very powerful machines pulling a smaller sledge. This show always sports a nice fairground with lots of popular rides and it always has a good selection of lorries very worthy of a look at as they are usually vintage Scammells, ERF and Foden type vehicles. I thought the model tent was a bit light with exhibits but what was there was very good, and my eyecatcher was a model of a Cornish tin mine with two rows of hammers all bobbing up and down as they crushed the ore. Full credit must go to George Hyde and his helpers for putting on this show and also to Don Baker and John Hedges who were 'installed' as engine marshalls at short notice.

FROME COLLEGE FETE Saturday 13th July.

This fete was opened in rather an unusual way, by the arrival of vintage cars, lorries, tractors, motor bikes and vans, all of which has assembled on the other side of the town and drove in procession to the college sports ground where they joined approximately ten stationary engines that were already in position. Lots of stalls adorned the field and there were exhibitions going on in the college itself. Judging took place in the afternoon and there were 1st, 2nd and 3rd prizes for all classes. 1st in the stationary engine section went to Graham Raymond for his immaculate Lister outfit, well done Graham. All winners received a bottle of wine and a nice plaque for the class and trophy.

BRISTOL DOCKS 13th & 14th July.

This annual steam weekend drew large crowds on Saturday and Sunday to view all the attractions that were stretched out along the dockside from the Industrial Museum almost to S.S. Great Britain. A nice combination of traction engines and rollers, a working steam dockside crane and an 0 6 0 Tank engine that made trips along the old dock railway line was plenty to keep all the steam enthusiasts happy, and as a bonus in the water were no less than eight steam launches. Brian Box had his lorry mounted organ continuously playing while close by was an old penny arcade and a Victorian style entertainer who swallowed swords and did all sorts of things with knives and fire torches, this act really captivated the younger watcher especially when the blood flowed. Approximately a dozen stationary engines were next to the Industrial Museum and it was nice to see four of our junior members, under the supervision of their Dads', showing a cross section of exhibits which included live steam models, a 1½hp Petter 'M' and a Fairbanks Morse Model 'Z'. A road run took place on Sunday with most of the steamers taking part and the Industrial Museum was kept very busy all day.

NETLEY MARSH RALLY 26th/27th/28th July.

My visit to Netley this year was as a visitor and not as an exhibitor owing to the entry forms being sent out a little late and the clash of dates with Rushmore Vintage Show. I chose Friday to visit knowing that this would be a good day with a few less public which would allow easier vision and access to all that was on show. Heavy rain on Thursday made things a little sticky in places and as the site is on a slight gradient some of the steamers and low loaders had to be towed to their exhibit area, but it was possible to wear sandals anywhere else on site. Quite alot of the stationary engines were missing, this sometimes happens on Friday, but no doubt they turned up for the other two days. Lots to look at amongst the motor bikes, cars, commercials and steam section, but the model tent looked a bit short of exhibits and the stall section this year was first class for those who like to browse and barter with quite a few bargains to be had. (Bought the wife a wallpaper scraper and putty knife for 60p). There was even a free bus service from the car park right into the show to save the uphill walk.

SEPTEMBER CLUB MEETING - Monday 30th September. Come along and join in the fun and try your hand at thirty questions.

OCTOBER CLUB MEETING - Monday 28th October. Model Evening, bring along your miniatures, models, projects and anything of interest and enjoy a jaw and a jug and the Old Down Inn.

A Wessex welcome to our new members this month, Mr. Ivan Sparks, Mr. Kevin Wrenn, Mr. & Mrs. J. Allan, Jamie and Dominic and Mr. A. Grant.

RUSHMORE STEAM & VINTAGE SHOW - 27th/28th July.

I always enjoy this show, as its a good opportunity to see alot of new engines and exhibits that do not always venture to the West Country shows. Two engines that caught my eye were a Hayward and Tyler $\frac{1}{2}$ hp hot air engine, a superb exhibit weighing nearly on ton, what a monster for only $\frac{1}{2}$ hp. The other eyecatcher was a vertical engine on approximately 3 hp that was made in Bridport, Dorset, most unusual with a horizontal flyball govener spinning round, located right in front of the engine. No doubt we will see an article of this engine in the 'Stationary Engine' magazine in the not to distant future. An added safety feature around the stationary engine enclosure was an extra fence of nylon square sheep netting, a good thing this, to keep out those little ones who tend to stray when Mum and Dad look the other way.

The motor cycle section had over 150 bikes entered, enough to quench the thirst of any enthusiast and the steam section was once again first class. An odd looking machine that caused alot of interest was the fitting of a Merryweather Fire Pump boiler and engine to the front of an old van that had been cut away in the front to locate the engine and boiler. The drive was via vee belts off engine pulley to a shaft held on the chassis with a plumber block then continuing to, the gear box which enabled normal use of clutch and gears giving top speed of 30 m.p.h. A very clever bit of engineering.

Congratulations should go out to the Three Counties Steam Preservation Society for putting on once again a splendid show.

A STATIONARY ENGINES LAMENT.

- | | |
|--|--|
| 1. The rally season started
Every weekend we will go
Travelling round the country
To our favourite steam shows | 4. When we get to the show ground
And ask "where are we mate"?
The fellow at the entrance says,
"Oh you go through that gate" |
| 2. We're not the great big steamers
Or the Scammells or the Vets
We're the Stationary Engines
Wolseleys, Listers, Japs and Petts. | 5. We'll be shoved into some corner
On a slope out of the way
But we'll try and try our hardest
To keep going all the day |
| 3. We've been painted, oiled and cared for
All through the winter time
But you can bet your bottom dollar
We end up in mud and slime. | 6. We have our place in history
Like all other machines.
So why can't we sometimes be put
Where the field is FLAT and GREEN. |

AUTHOR UNKNOWN, PLEASE WRITE SOME MORE ED.

FOR SALE

Petter 'M' New Model tank cooled 1935 $1\frac{1}{2}$ hp
Lister 'D' Ricardo Patent 1926 with history $1\frac{1}{2}$ hp
Lister Domestic Water Pump.
Villiers $1\frac{1}{2}$ hp WX11 Water Cooled.
Tel:- Midsomer Norton 414077. Ring after 5.00pm.

Fowler PA $1\frac{1}{2}$ hp £75 - restored.
International $1\frac{1}{2}$ hp - Low tension, restored, good runner £550.
Tel:- Simon on Frome (0373) 472328.

FORTHCOMING EVENTS.

Sunday 1st September. Chew Valley Lions Club are holding a fun day at the picturesque picnic area of Chew Valley Lake, and any club members who would like to go along to this function and take an engine, please contact Martin Buckley on Stratton-on-the-Fosse 233338.

FULL QUART CRANK UP Hewish, Nr. Weston-S-Mare. Sunday 29th September - If you are not exhibiting do come along to support this event, with lots to see, and our engine raffle will take place to find the lucky winner of the Stover engine. If you haven't bought any tickets yet or want some extra ones, do it now as time is running out.

ENGINE RESEARCH AT THE UNIVERSITY OF BATH

Part Three.....

An engine in our test-cells which would be of great interest to many enthusiasts is the special experimental Ricardo E6 made in small quantities for research laboratories, universities and technical colleges by Ricardo (Engineers) 1927 Ltd., of Shoreham on Sea, Sussex. This engine shows many similarities with the Webber engine, Webber of Guildford being 'just up the road' and having possibly worked in close conjunction with Ricardo.

The E6 is about the same physical size as a Lister L-type and is essentially a single cylinder, four stroke, ohc., poppet valve engine with 3" bore and 4.375 stroke. The best features however, are that the compression ratio can be varied from 4.5:1 to 20:1 when running on petrol and that it can, by changing cylinder heads, be run as an indirect injection diesel, naturally to the Ricardo Comet system. As a diesel the compression ratio is fixed at 20:1 and a CAV BPEIB jerk pump is fitted in place of the Lucas magneto which fires the normal petrol system. Diesel fuel or indeed any fuel under test is injected by pintle nozzle injector, or as a petrol engine, by Solex carb. with a special variable fuel jet.

The sparking plug recommended for petrol running was a KLG RC 5/4 or a Lodge R53 for methanol or benzene fuels: these have both long been obsolete and records show that the last replacements were purchased in 1981 - only an equivalent was available to special order, KLG SPSI at, wait for it!, a mere £22.65 each plus VAT plus P & P.....! For special testing purposes the plug may be fitted either over the exhaust or inlet valve and there is provision all over the engine for adaption of various devices to measure pressures, airflows and temperatures. The last work done by a research student (from Germany) was into exhaust gas recirculation and study of emissions. This is a subject of which we are all too soon going to be very aware when the new MOT regulations come into force on November 1st this year. We have also used the E6 recently to study the effect of bleeding hydrogen into the combustion chamber at varying engine speeds and mixture strengths.

The Ricardo was originally ordered from their Bridge Works, Shoreham on Sea, in May 1953 by Bristol College of Technology and was delivered on 7th December, 1954. The wheels of Industry and indeed those of Education ground equally as slowly then as now, nearly forty years later it seems! However, the E6 has done a prodigious amount of work over the years with precious little maintenance and a vast amount of student abuse. It certainly was worth waiting for. Similar, but technically more up to date engines are being produced these days by the newer firm of Weslake; one can only speculate as to their durability and longevity compared to the E6.

Last year I was surprised and delighted to come across another E6 - on a rallyfield of all places. Where else but Tatton Park, of course.....!

At the University we have, this year, encountered another revered engine name from the past. Older members and those interested in classic racing cars will no doubt be stirred by the name Coventry Climax. Their engines powered a great percentage of the racing cars of the fifties and sixties and, up to the advent on to the scene of Ford and more latterly Honda, were highly successful due to their power to weight ratio and their reliability. They were developed from an engine manufactured for powering fire-pumps and were of light alloy with overhead camshaft and a very compact design. Diversification into fork lift trucks, and design and production of one of the world's first diesel outboard motors led eventually to closure some four years ago. These two operations are now in the hands of former competitors but the engine business is not dead yet! Far from it; they are here in the West Country under the banner of Horstman Defence Systems in Bath. The familiar ohc unit in petrol and diesel form is being produced in small quantities and, it is hoped, the lesser-known Junkers licensed design of two-stroke vertical 3 - cylinder, six piston, multi-fuel engine which is super-charged. All engines are of light alloy and are 750 cc and 900 cc respectively. We have offered Horstman some test-bed facility at the University and are currently running about a dozen units through a test programme. Although not research, this work is interesting as an example of what can be achieved when industry and Universities pool their resources and facilities.

ERIC G. BRAIN

22nd July 1991.