WESSEX STATIONARY ENGINE CLUB LIMITED

NEWSLETTER



JUNE 1994

Please send newsletter material to:-Robin Lambert, 15, Beechwood Avenue, FROME, Somerset. BAll 2AX Telephone 0373/463526

THE "AEROMOTOR" ENGINE.

Of all the stationary engines that are rallied around the country every weekend there is one that causes a lot of head scratching by both the general public and the other exhibitors. Quite a lot of people are not sure how it operates and on many occasions some quite heated arguments have developed.

The engine in question is the American "Aeromotor" engine. The puzzling thing about this engine is that instead of being the usual four stroke engine, it is an eight stroke one and as far as is known, it is the only engine employing this type of valve timing.

Most mechanically minded people can work out the principle of the four stroke and two stroke engines, but ask them to work out the valve timing of an eight stroke engine and you are met with a blank stare and quite a broad hint that you should pay a visit to the local "Trick Cyclist". The intriguing thing about this engine is that it fires once every four revolutions instead of, as in the Otto Cycle engine, every two.

The engine operates for the first four strokes as a normal four stroke and exhausts to atmosphere via a small open stub pipe but at the top of the exhaust stroke the exhaust valve remains open. When the piston descends on what would normally be the induction stroke no fresh firing mixture is drawn into the cylinder, owing to the fact that the inlet valve is automatic and cannot operate whilst the exhaust valve is off its seat. So a fresh charge of air is drawn into the engine via the stub pipe and is forced out on what would normally be the compression stroke. As the piston descends again another charge of fresh air is drawn in and again forced out by the rising piston. The eight strokes are now completed. The exhaust valve now closes and the whole cycle starts again.

The engine uses neither fan or water cooling and runs incredibly slowly. This results in it being very economical on petrol, which is a very important point given that these engines were designed to drive deep well pumps in the American Outback. This was in the period (circa 1900) when fuel and other supplies had to be transported long distances on very primitive roads, so obviously any saving on fuel was worthwhile.

At the time of writing it is believed that only two such engines are travelling round the Rally fields. So next time you go to a rally, have a look down the list of stationary engines in the programme and if you see the name "Aeromotor", spare a few minutes to go and have a look at this most interesting engine.

ALBERT CRITTELL.

Many thanks for your article Albert, you certainly have explained a mystery to many of us in 'laymans terms'. I know we have some more of your articles in the pipeline and very much look forward to reading them. ED

DORSET SPRING FAIR 20/21/22nd May 1994.

Yet another new site has been found to hold this event, now in its fourth year and the location would be hard to better, large fields adjacent to the Blandford bypass (the Salisbury end) was to be used for this years spring fair.

All the usual trappings to make a successful show were there, fairground, lots of stalls, motor bikes, vintage cars and lorries, several steam engines which included a nice woodsawing area, tractors and a ring for all these vehicles to parade around. Several Wessex members supported this event and from a distance I spotted Brian Lovell driving 'Henry' his Fordson tractor, about to enter the ring, and this year 'Henry' was fitted with iron wheels which actually made him look lower to the ground. The stationary engine enclosure looked a bit depleted as by Saturday half of the engines entered had not turned up and myself situated at the far end of the pen had only 20 odd numbered pegs to chat to as the next engine owner was a loud hailer distance away. Some nice engines still in their original livery were there and two in particular were club members Ken Rendall's 3hp United and son Ian's twin flywheel Lister 'A' type that was belted up to a Bentall root pulper. The engine ticked over like a watch never missing a beat and still had some of the original transfers on the water hopper. Ian told me it was made during the early 1920's and was still on its original trolley. I have at home a Lister $3\frac{1}{2}$ hp 'B' type similar to this engine and its very easy to work on as by undoing one nut the exhaust manifold drops away as does the carburettor and the valves drop out so simple and practical. Ian's Uncle Fred (the whole family must have been there) brought along his 1932 Fowler and Ian's cousin Adrian brought his Wolseley WD8. This three day event up to now (Sunday 8.30am) has been very quiet, visitor wise, Friday was mainly a setting up day and Saturday was striken with long bursts of torrential rain, but this morning the sun has peeped through and a little bit of blue sky is showing amongst very dark clouds on the horizon, so hopefully they will have a busy day and the car parks will be full. on sin single beloom of the child child

Merican Aeromotor engine. The puzzling.

The sales on the club shop have depleted over the past years so we have now introduced some new lines into the shop. We now have good quality tee shirts, three types of pen, china mugs and other good items. I hope to introduce more new lines over the next two years so if you have any ideas, within reason, I shall do my best to stock any items. I am also compiling an information file, the purpose of this file is to provide details of companies and other useful information. I will also have order forms for the various companies. All information will be displayed with the club shop so that members can come along and look through, I hope to be able to take the shop around to other rallies, so please support your club shop as it is there for the membership and does not make huge profits. If any members have any unwanted instruction books they no longer need or any useful tips I will be happy to put them into the info. file. I can be contacted on 0934 822988.

We have on sale the following items:-

Tee Shirts	£ 5.50	Tax Disc Holder	30p
Sweatshirts	£13.00	Key Rings (Var. Colours)	60p
White China Mugs	£ 1.80	Note Pad Refill	60p
Cider Mugs	£ 3.50	Car Stickers	60p
Pens (3types) from	n 25p	Gilt Brooch (Club Badge)	£1.75
Note Pads	£ 1.20	Cloth Badge	£1.00
Address Books	80p	WSEC Log Sheet	10p
Bookmarks	gail 65p hadaw	1993 Brass Plaque	£1.50
Comb in Case	forder55po feet	1989 Cloth Plaque	50p
Brass Member Plates	£ 1.50	1990 Cloth Plaque	50p

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STEVE ROUTLEY by transported long distances on very primitive roavellers

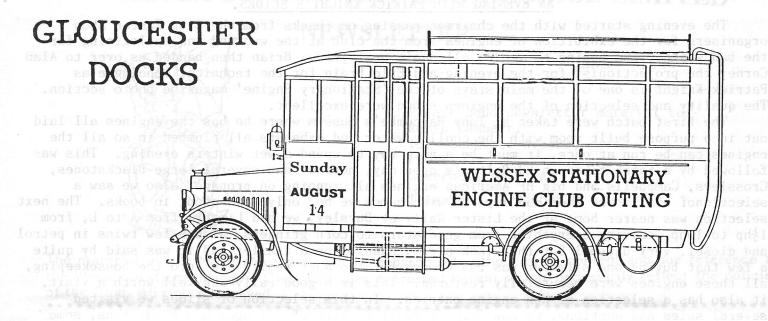
- FOR SALE Bedford CF Ambulance converted to a caravanette, very good condition MOT to Sept '94 W Reg. New tyres, new battery Fibre glass body. £1,300 ono.

 Contact 0425 270439 (Bournemouth area)
- FOR SALE 3hp International 'M' type £300.
 4 solid wheels for workshop use only. The wheels have bolt on brackets and brakes and will carry 2 tons. £20.

Two Chore horse engines, one with generator the other without is for driving a water pump etc. £100 ono.

For 3hp Ruston PB, crank shaft and two flywheels and one main bearing £20.

For the above 4 items contact - P. Holloway on 0935 840370.



ANNUAL CLUB OUTING this year is to Gloucester Docks on Sunday August 14th. The literature we have received from the Docks tells us that there is lots going on all day including The National Waterways Museum which has imaginative displays and brings to life the 200 year history through working engines, live craft demonstrations, workable models and machinery archive film sound recording and computer games. A collection of floating historic boats. Also a working replica canal maintenance yard, where traditional crafts such as blacksmithing are demonstrated. It was the Museum of the Year in 1991 - this Museum will be included in the price. On the docks there is a Regiments of Gloucestershire Museum, which tells the story of the counties two regiments, the Glosters and The Royal Gloucester Hussars. Colourful displays of militaria, archive film, photographs, life like reconstruction and sound effects show of how soldiers lived in the last 300 years at home and abroad, in peace-time and at war. The Gloucester Transport Museum has a small collection of preserved vehicles, also a Museum of Advertising and Packaging. These museums are not included in our trip price. Within the Dock area there are four floors of antiques to browse over, various gift shops and boutique plus a cafeteria and floating restuarant.

Now the important part, the cost of this trip will be £6.00 per adult, £5.00 OAP,

£3.00 per child under 14.

Please send your remittance and number of seats required to Jackie Lambert, 15 Beechwood Avenue, Frome, Somerset. BA11 2AX.

We shall congregate at the Old Down Inn at 9.00am leaving promptly at 9.15am arriving at the Docks approximately 10.30 ish. Club members who wish to make their own way there can meet up with the coach party and take advantage of our party rates into the Waterways Museum.

RALLY DATES.

JULY 2/3rd

- Westonzoyland Pumping Station Stationary Engines Weekend.

AUGUST 7th

- Mendip Crank-up and Car Boot Sale at Mendip Garage. Contact:Bill Coombs, Belvedere Cottage, Gurney Slade, Nr. Bath. BA3 4TG. Tel: 0749 840868.

AUGUST 20/21st

- Stanton Drew Steam Up at Curls Farm, Stanton Drew, just off the A37 Bristol to Wells Road on the B368 Weston-super-Mare Road. It will be well signposted. Stationary Engines conctact: Brian Verrall, 2 Norville Place, Lower North Street, Cheddar.

SEPT. 10th

Lackham Vintage Tractor & Agricultural Rally 11.00am to 5.00pm at Lackham College, Lacock, Chippenham, Wilts. A fun day out for all the family with various vintage machines on display plus Lackham's own country attractions, including Agricultural Museum, Rare Breeds, other farm animals, gardens and much more.

If anyone wishes to take part in this rally contact Mrs. A. Menhinick/

Mr. E. Williams at Lackham College, address as above.

SEPT. 25th

- Full Quart Crank-Up at Hewish. Contact: Roy Cox Tel: 0934 419826.

The evening started with the chairman passing on thanks from the Ston Easton Show organisers for the exhibition of engines from the club at the weekend and apologising for the bad weather and hoping to see us all again next year. Brian then handed us over to Alan Carney the projectionist for the evening and Eric Brain for the technical monologue as Patrick Knight is one of the main stays of the 'Stationary Engine' magazine photo section. The quality and selection of the engines shown were excellent.

The first batch were taken at Tony Harcombe's museum where he has the engines all laid out in a purpose built room with the cooling water and exhausts all plumbed in so all the engines can be run at once, it must be a nice way to spend a wet winters evening. This was followed by a batch taken at Ed Bolton's open day, here we saw several large Blackstones, Crossleys, Campbells and big HP American engines all running on propane, also we saw a selection of his latest American imports with names we had only read about in books. The next selection was nearer home at the Lister Rally at Dursley, we had Listers from A to L, from $1\frac{1}{2}$ hp to 10hp, driving everything from generators to corn grinders, also a few twins in petrol and diesel, very unusual but they look a real handful on a trailer and it was said by quite a few that buying one silencer was bad enough but two must really dig into the housekeeping, all these engines were beautifully restored. This is a good rally and well worth a visit, it also has a selection of non engine entries. In this selection of slides we visited several sales and auctions, we saw lots of rusty engines of all ages and conditions, some not all there and some complete but all looking sad and unloved, it made you want to reach for your cheque book and a wire brush. We were assured by Eric whose voice was by now beginning to crack that most of them went to a good home, so on this happy note we had a break and let the projector cool down. Eric Gay caught the last few for the raffle, "he's getting harder to dodge" ! prizes were as follows:- Bottle of Wine - Mr. D. Chinnock, Box of chocolates - Brian Baker and Beer for Ivor Yeo.

The second half started with pictures of various rallies showing some engines like a 12 mule Amanco, a small Blackstone, a line-up of Petters from 2hp to 6hp, hopper and tank cooled all well restored and running as engines should be. There was also some oddities - 1890 Inverted Otto Crossley vertical, a real museum piece, an 8 stroke Aero motor Jack pump from America used for pumping water from a well into a cattle trough on the Prairies, the petrol tank was just the right size to run the engine long enough to fill the trough then stop, now thats clever!! We went on to John Kytes garden to see a real home restoration, a 300hp to ylinder Brush engine, John is a collector so there were a fair selection of interesting 4 cylinder Brush engine, John is a collector so there were a fair selection of interesting bits and pieces to see. Anybody wishing to see the second wonders of Wiltshire our club has arranged an evening visit on Thursday 23rd June, come along, its a sight not to be missed.

And finally as with all photo and slides you finish with Stourpaine, probably the best mixed rally there is, we started with a selection of Japy Frere's brought over by a French contigent, these were put in for Eric's benefit as he has a "weakness" for engines French. It did show that although France is only 22 odd miles away they had a completely different idea of how a stationary engine should be built, they all had fixed starting handles and ran at a 1000rpm compaired to our 500-750rpm, we then toured the engine pens with Blackstone, Listers, Petters, open crank and Victoria's, we then departed nicely into early tractors which were like stationary engines on driven trolleys, then onto the Marshall exhibition showing the companies single cylinder tractors, a solitary stationary engine and then onto diesel rollers, steam rollers, traction engines, a binder and all manner of Marshall plant, finishing off with a selection of slides showing the fairground at night with organs, cancan girls, engines at full power all alight in the night sky. A fitting end to a very enjoyable slide show with 230 slides shown that night, Eric was stumped on only four engines, not a bad average, during the chat after the show it was decided that Patrick Knight has a weakness for American engines, but we can forgive him that because his slides were a treat to the eye and must be a good start towards an encyclopedia on engines.

The chairman thanked Eric and Alan for the show and we all went home to dream of our favourite engine. PS Do you think Patrick has ever taken a picture with the lens cap on like everybody else!!!!!

BRIAN REAKES.

CLUB EVENING - Monday July 25th - Crank-Up/Bring and Buy Evening, a good chance to pass some of those unwanted items and perhaps 'take home someone elses'.

WELCOME to new club members Mr. & Mrs. Keith Frampton of Ilminster, we look forward to meeting you at our club events.