

# CRANKING

37 years of publication!

**MUST SEE** 

Sept 2015

www.wessexsec.org **NEW!!!** With forms. photos, info, latest stuff. Archive.

# The Wessex Stationary Engine Club's Monthly Newsletter

From the Sump!

The Television programme Timeshift: Series 15-3 "The Engine That Powers The World" shown on BBC4, late in the evening of 23rd September. Did you see it? No? Well, you missed a real treat but its still on Iplayer for those of us not actually clinging to a frame of a Jacquard Loom!

Much of it was filmed at The Internal Fire Museum, our own Paul Evans (looking very badgery now) did his usual thing of starting any engine that you happen to pause by and show above average enthusiasm for. The presenter obviously knew a fair bit about engines too which helped to grease the televisual wheels. Of course. Paul having the oldest running Diesel engine in Britain (and possibly the world) was a great draw. Turn this, suck on this pipe, twiddle that wheel, turn on the air and it was running. Of course it was ;-)) that said, Paul did tell me once that it was not an engine to be taken lightly and the man starting it might be killed if he got it wrong!

The programme moved on from Rudolf Diesel's untimely death to Harry Ricardo's Comet combustion space, the most vital step forward in compression ignition engines - and so much more. If you like engines, you must go and find it.

# Obituary

By Robin Lambert

It is with sadness we learn of the death of Brian White, affectionately known as "Chalkie".

Brian had been a member of WSEC for a very long time, he lived just north of Southampton and took a great interest in our club and he often travelled to our jumbles at Cranmore and always enjoyed the Crank Ups at Nunney Catch.

Many of our members will remember him as the engine steward at the Netley Marsh rallies some 30 years ago, a position he held for many years.

Brian was at the Beaulieu rally just a few weeks ago, exhibiting his treasured Ruston Hornsby and looked fine in himself, very much enjoying the event.

Our condolences go out to his wife and family at this very sad time and myself and all who knew Brian have lost a very good friend.

# **Moving the Metal** For sale

Electric Laminator Type X11/29 plus 6 pouches. No need to cover up exhibit sheets next time it rains at a rally. £10 Record 24" Stilsons. Good condition. £16

Trolley Jack, 2,000kg, as new condition, in plastic case. £18 Short 3/4" line shaft with 4 pulleys 2" 4" 5" 8 3/4" on cast iron stand and belt. £6

Record bolt cutters 30", heavy duty, good condition, £14 Norton Villiers Type C12A Stationary Engine –. Manufactured in Australia, Ballaharat, Victoria. Restored and put on small trolley. 2 years dry stored. £160

Furnace/Forge heavy duty blower. No.0 BF Sturtevant Co. Boston, USA. Early 1900 on hardwood stand, dry stored. Has unique oiling system. £90

Tony Davis, Frome. Tel: 01373 464982

Hercules 1.5hp. Hit & miss. Nice engine on rough small wheeled trollev. £950

Detroit 1.5hp. On trolley. Turns over but I've never had it running. £300.

Petter 1.5hp "Rugby ball". On trolley, runs, ready to show £550 Hartop. Believed 1.5hp. Not on trolley, no water tank. New exhaust goes with it but not fitted £300 ono

Stuart Turner with waterpump. On a trolley with wooden box for battery and coil. Ready to show. £300 ono

Arthur Watts, Andover. Phone 01264 350630

**Trailer, flat bed**, size 8'6" x 4'6" with hand winch. 2 mini wheels,no brakes but two more indespension units can be fitted. Condition, not bad but floor boards need some TLC, ideal for mounting an engine. Two spare wheels. £180, Will Haggle.

Alan Rogers, Calne. 01249 813 890

Clarke Water Pump (electric) Model HSEC 400A. £100 Go-Kart (Dale Cadet) fitted with Aspera engine £100

R.M.A. Roller Corn Mill —£75

Honda Generator (5 hp) 2.5 with 23 Oac/ 11 Odc outlet £100 Thanking you in anticipation. phone Gerry Brice 01761 241713

Troy AGR Utilities Ltd. Single plough and set of cultivators. Large cast iron wheels. Engine turns over, open gear box. £150.ONO Phone Richard Cowell, 01747 824102 (Dorset)

Believed Ruston Hornsby trolley. Four good wheels, axles and steering head but wood U/S! £80.00 ONO Lister L bottom end, more or less complete timing gears etc £70 ONO. Set of trolley wheels - offers

Bosch flick mag, appears in good ortder £60

01225 766211 Phone Bob Alexander

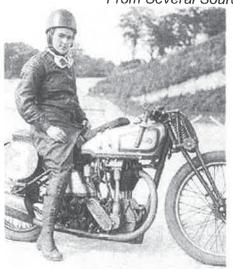
Petter 5hp M type. Built 1915 this is a very early model and is the only one known that has the words War Finish on base tank. Dismantled. Would make a very rare exhibit. Magneto checked serviced I am open to offers £250 for this very rare old

Phone Eric Gay 01225 754374

Articles, cartoons, photos etc are always very welcome - this is not a one-man band, but an expression of all our thoughts and experience. Submissions should be preferably typed or word-processed or even handwritten, (if brief), - it is the content we're after, not the grammar or spelling, so please don't feel your efforts will be ignored. The editor reserves the right to change, edit, augment or lessen your Deathless Prose and asks all to note that opinions expressed in this newsletter may or may not represent club policy

## Featured Engineer Number 14

Beatrice Shilling OBE PhD MSc CEng (8/3/1909 – 18/11/1990) From Several Sources



Beatrice Shilling was a celebrated aeronautical enaineer and successful motorcycle racer. She made her mark in the male dominated world of engineering by correcting serious defect in the Rolls-Royce Merlin engine during the Second World War. Once

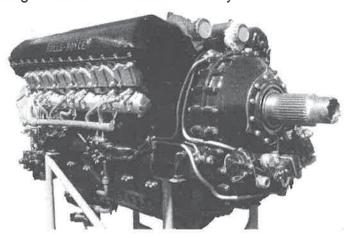
described by one of her colleagues as 'a flaming pathfinder of women's lib', Beatrice fought against anv suggestion that as a woman she might be inferior to her male colleagues.

Beatrice Shilling was born in Waterlooville in 1909 where her father was a butcher and moved to Surrey with her family in 1914. After leaving school in 1926 Beatrice became an apprentice electrical engineer in Devon, in itself something of a rarity for a young woman at that time. She worked for an electrical engineering company for three years, installing wiring and generators. Her employer, Margaret Partridge, encouraged her to study engineering at the University Manchester; she received a bachelor's degree in 1932 and stayed on for a year to get a Master of Science degree in mechanical engineering. Jobs were hard to find in the late twenties.

In 1929 she began a degree in Electrical Engineering at the Victoria University, Manchester, graduating in 1932 and went on to complete a Master of Science in Mechanical Engineering degree by the end of 1933. In the depressed job market of the early 1930s, Beatrice initially struggled to find a permanent position but worked for a time as research assistant to Dr Mucklow, who was investigating the behaviour of supercharged single cylinder engines.

Beatrice ioined the Royal Aircraft Establishment at Farnborough in 1936 and soon became the leading specialist in aircraft carburettors. During the Second World War, she worked on a serious problem affecting the Rolls Royce Merlin engines which were used in the allied Hurricanes and Spitfires. German engines fitted to many of their fighters benefited greatly by being fitted with direct fuel injection, unlike the Merlin which was fitted with gravity-sensitive carburettors. When inverted in combat, Merlins, unlike the German engines, would raced automobiles. misfire or cut out altogether when a pilot was diving steeply. This was costing allied lives and Beatrice and her husband owned, tuned, and raced an Austinand her team worked tirelessly to find a solution.

Eventually she came up with the design for a simple but ingenious device, a small brass disc with a hole in the middle, which fixed into the engine's carburettor and was able to reduce fuel deprivation to the engine. Acting as a baffle, it held petrol in the float bowls for the vital few seconds in negative G. It was immensely popular with the young pilots who affectionately named it 'Miss Shilling's orifice' or simply the 'Tilly orifice.' It continued in use as a stopgap until the introduction of the pressure carburettor in 1943. It drastically reduced engine cut out but Beatrice continued to improve and develop the design in order to eliminate it entirely.



She married George Naylor, in September 1938. He also worked at the RAE. According to anecdote, she refused to marry him until he also had been awarded the Brooklands Gold Star for lapping the circuit at over 100 mph, faster than any other woman on two wheels. During World War II he was a bomber pilot with No. 625 Squadron RAF and reached the rank of Wing Commin the 1930s, Shilling raced motorcycles to good effect, beating such well known names as Noel Pope, and was awarded the Gold Star for lapping the Brooklands circuit at 106 miles per hour on her Norton International.

Beatrice Shilling worked for the Royal Aircraft Establishment until her retirement in 1969 reaching a senior post and receiving an OBE for her efforts during the war. She held a doctorate from the University of Surrey, a CEng and was a member of the Institution of Mechanical Engineers and the Women's Engineering Society.

After the war, Shilling worked on a variety of projects including the Blue Streak missile and the effect of a wet runway upon braking. Shilling was once described by a fellow scientist as "a flaming pathfinder of women's lib"; she always rejected any suggestion that as a woman she might be inferior to a man in technical and scientific fields. However, her brusque manner and contempt for bureaucracy led to an uneasy relationship with management. Shilling worked for the RAE until 1969, but never achieved high rank within the organization, and after the war

Post-war, she raced cars. In the 1960s, she Healey Sebring Sprite.

Calendar of Events key. CN = Club Night. E = Event

Oct 10<sup>th</sup> . **Vintage, Bygone & Antique Sale** - East Somerset Steam Railway, Cranmore, BA4 4QP

Oct 18<sup>th</sup> E. Robert's Open Day. 11-4. Stationary Engines, Tractors, Motorcycles. Visiting exhibits. Museum and Displays. Manor Farm, Sevenhampton. GL54 5SW. Phone 01242 820408. Oct 26<sup>th</sup> CN. My Life In The Fire Service - John Bullock Nov 7<sup>th</sup>. E. (Sat) Autumn Sale. Oakley Airfield. HP18 9JX. info: Mrs. Anne Harris 01367 810415

Nov 30th CN. Lights At The Old Down Inn-(TBC) - Bring an engine driving dynamo or genny In the afternoon and then model show in the evening with silver soldering demonstration & supper Dec Christmas Party — Venue and exact date to be confirmed. Dec 27th No Christmas Crank Up

All the above dates are subject to alteration and changes will be announced in the newsletter.

# **Engines Required!**

Robert's Open Day. Sunday 18<sup>th</sup> October. Details above. An event not to be missed! It is based at a working farm with many traditional events taking place. In the past there have been heavy horses working, tractors, vintage vehicle and much more. Chip van catering! If you've not been before, I thoroughly recommend this event with dozens of engines in store, running in the field and the occasional giant to surprise us.

### **Social News**

Printing this first item gave me very real pleasure and I would be delighted to receive as many of these as you can send me! - Ed

### By Herb and Wendy Gane

We would like to congratulate Kevin House on his marriage to Katie Uphill. The wedding took place at St Cuthberts Church in Wells on Saturday 29<sup>th</sup> August.

Kevin was a Junior Member of the club and is currently an Adult member. He is also known for his cider making skills which have been much appreciated by many club members. We wish them both every happiness — a cheerful sentiment which l'm sure we all share! — ed.

retired from the committee after our last event in June. You are a great loss to us all Geoff, look after yourself and we all hope to see you soon.

As you would have seen advertised in the news letter, The West Wilts Society of Model Engineers were holding a Gala Day, at

# By Eric Gay

It was good to see Adrian Grant with us at Westbury for as you may know Adrian suffered a heart attack the day after what we now realise was the last ever crank up at the Court Hotel. Look after yourself Adrain as we have a lot of events planed for 2016 and we all want you to help us when our engines won't go 8-). Take care and keep well.

# Chairman's Report

This month I have been very busy, as I went to The Great Dorset Steam Fair (GDSF). I had not intended to attend this year as we were finding it so expensive to stay in bed and breakfast, that it was decided to give it a miss. Well,

out of the blue I was offered accommodation for the five days. Now who can resist living in a tent for the five days of the show? I was certainly not going to turn the offer down and my thanks must go to Sue and Pete for all their hard work in taking the accommodation and putting up with methank you both.

My dear friend Garry Sainsbury came with me and we had intended to share my exhibit between us, so as we could both go walk about and see the rest of the show. Garry could look after the Bamford & Mill one day and me another. But this was not to be as on Wednesday afternoon Garry collapsed, and was rushed into Salisbury Hospital. I can not thank The GDSF's medical team enough. Believe me, they had more equipment than some NHS hospitals, and they looked after Garry for around 2<sup>1</sup><sub>2</sub> hours carrying out a number of tests, and then monitoring him every 15 minutes. Their care could not have been better. I am glad to report that Garry is now on the mend but with some way to go as yet. I know you will all want to wish him a speedy recovery, as do I. I need him back not only on the main committee but his help with the Semington Rally is vital. I will not take up space now with a detailed report on the GDSF I will do this at some time in the near future.

It was not till I returned from Dorset that I learned that Geoff Davis had suffered a stroke. This has resulted in poor Geoff losing the sight in one eye which I'm sure you'll join me in hoping that it's a temporary loss. I know that all you who know Geoff not only from club meetings and events, but all that attend Semington will want to wish Geoff a speedy recovery to full health, and as many of you know Geoff was a great supporter and help to us all at our rally, Geoff retired from the committee after our last event in June. You are a great loss to us all Geoff, look after yourself and we all hope to see you soon.

As you would have seen advertised in Model Engineers were holding a Gala Day, at the White Horse Country Park, Nr. Westbury Wilts on Sunday 13th September. I must say that the members that attended had a treat, not only did we have a display of stationary engines, our members were entertained by model boats on the lake, both electric and steam powered. The steam trains on both tracks ran all day, the display of miniature tractions engines giving rides to the children and adults kept us all busy throughout the day. There was also a road train taking visitors from the entrance gate to the main display area all day. The two large marquees housed models and traders from right across the area and beyond, attracting Wales. Birmingham, entrants from Salisbury, Bristol and further afield. We all had a very enjoyable day, so we hope that the West Wiltshire Model Engineering Society does it all again next year.

It is now with great regret that I must inform you all that we can no longer use the Court Hotel, as I received a phone call from Sue our host for many years at the Court. This was on the afternoon of the 14th of September telling me that the hotel has been sold, a bit of a shock as Sue had said we were alright at the Court till the end of September.

The decision has been taken to return to our old home the Old Down Inn at Emborough, I have had a meeting with Maxine the owner of the Old Down Inn and an agreement has been reached that we may return there. Our first meeting will be held on the 28th September. Our first meeting will be in the green room this will no doubt be a little crowded, so please bear with me over this first meeting. We will be in the main function room in October. Now I have to tell you all that if we do not support the Old Down Inn, our stay will be very short!

The committee and myself have put in a lot of time and trouble finding a new home for us since we had the news that the Court Hotel was to be sold. I hope we may once again have a long and enjoyable association with Maxine, but this will depend on you the club members giving your support to the new venue.

Now as you will no doubt remember at our last meeting, I asked for help with the running of our main annual event, the Semington Show. The job is not going to take all your free time just a couple hours once a month for a few months and some help on the weekend. Remember this event produces the income we need to print and post the newsletter and the other small but required items that we spend money on in the year. Without this event we would not be able to keep the club running in the manner in which we do.

We also need committee members so why not come and join us and help run the club for the future.

It is now time to start planning next year's calendar of events. If you know anyone that may be able to give a talk, film show, or have any request as to what you would like to have at an evening meeting or outside event, please let me or any committee member know and we will see what we can do.

Now one last reminder THE CHRISTMAS PARTY, first Monday in December if you want to be part of this evening of fun YOU MUST LET ME KNOW as I have to order the food for you poor starving souls. Give me a ring so as I may enter your name into the guest list. (yer that sounds poach but as thee all do know we Wessex members be proper poach anyway,

Now don't forget give me a call.

# Out and about with Robin and Jackie

By Robin Lambert

Now we are getting mid-way of our Rallying year its nice to look back at some of the events we attended and how things went from an exhibitors point of view.

Sedgemoor Rally 11&12 July went very well, a nice laid back event, with plenty of exhibitor space and the helpful

stewards who do their utmost to make you welcome even allowing you to keep a space for a friend or two in the line.

Blessed with fine weather and only a stone's throw from the coast. the event had plenty to offer the paying public with some interesting exhibits to view and all the usual stalls to browse over. Plus, of course, the hospitality tent, which had entertainment laid on in the evenings. What I thought was a nice touch was the organising chairman came around and thanked all exhibitors for their support and looked forward to seeing us all again next year.

Ducklington Rally 18 &19 July, We have been going here for a few years now and have watched this show almost double in size, This years event coincided with Fairford Air tattoo which was great for those of us who enjoy watching Aircraft as although Fairford is a few miles away just a few fields away is RAF Brize Norton Airfield which plays host to some of the shows displays.

Once again blessed with fine weather our event sprang into life with lots of visiting public streaming through the pay gate viewing all that was on offer and this years stall area was huge with a good cross section of goods on offer and a nice lot of Vintage Jumble to quench our thirst. The rally field is just a couple of miles from the quaint town of Witney which is well worth a visit. It's also only a ten minute walk from Ducklington Village which has a nice Pub and what looks like a outdoor Skittle Alley. However, it's rather odd as instead of using balls, the players use heavy pieces of wood about the size of a Policeman's truncheon to lob at a single pin!

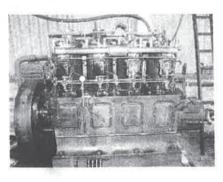
You can pull into the Show field two days before the event which will give you time to look around the area.

**South Cerney Rally** 31st July to 2nd August, Set up on an old airfield with part still in military use, this is an ideal location for what is a large event. The exhibitor entrance is via some very narrow and twisty lanes, so you need to be on your guard when driving.

Our route to the Show takes us past the aircraft grave yard at Kemble and there must be a least 30 Craft being cut up ranging from Jumbos to Cargo planes and there are several laybys and a large pull-in where you can view what's going on.

Back to the rally! Lots here to see all the usual exhibits with a lot of Wessex Members here , not all taking Engines along as Carol & Kevin Phillips demonstrated by showing their vintage caravan all immaculately restored with many hours of TLC, The catering tent usually set up and run by the Army was only half size this year. This caused long queues for people wanting hot food but it was well worth the wait as the meals were excellent and good value.

The model aircraft display here is fascinating to watch. Some are huge and some have jet engines! Many perform at night and are lit up giving remarkable viewing during the darkness.



I have never seen such a long line of stationary engines it almost went out of sight! I am sure all who exhibited here had a great time and I had a bit of luck finding an unusual piece of machinery on a stall!