



# CRANKING

*The Wessex Stationary Engine Club's Monthly Newsletter*

June 2014  
37 years of publication!  
**MUST SEE**  
[www.wessexsec.org](http://www.wessexsec.org)  
**NEW!!!** With forms,  
photos, info, latest  
stuff. Archive.

## From The Sump

The committee feel that over the years the club have had the same format for too long at our meeting and we need a change. We intend to make our 2015 evening meeting different from past years and we are asking you what you would like to see and hear.

Here are some possibilities. More talks on engineering subjects, talks on restorations and presentations by companies like Castrol oils. We could have more social events such as a BBQ with a few engines for good measure. What about you ladies? I want your input too please so tell me what you would like but I draw the line at male strippers.

The Wessex SEC is your club and if you want it to thrive, we need to hear FROM YOU. Please let any of the committee know your ideals or myself, write, phone 01225 754374, or E-mail [petegear@hotmail.com](mailto:petegear@hotmail.com)

By the time you read this, the Club website will be up to date, with many features for you to use. A gallery so your photographs can be posted on the site, your news & views plus a full listing of our own and others events. The archive of the Newsletter will continue and will now be updated each month – but this will not supersede the postal delivery, of course.

This has all come about by the many hours worked by your new committee member Peter Gear, and his good friend Debbi to get this site up and running. Bringing it up to date has taken over forty hours work.

Information on the club, events, news, entry forms for the Midsummer Vintage Gathering - both exhibitors and traders - along with an application form for new members are available from the web site. Please use our new site and tell all your friends to do the same. This has been set up for our member and to promote the club. Please do what you can to spread the word and to promote the website wherever you can.

Some club members may not know what our Logo represents. The mythical creature is The Wessex Wyvern (not a dragon) and he stands upon a five spoked wheel representing the five counties of Wessex.

**Eric Gay, chairman.**

## Moving the Metal For sale

**Trailer by Nova.** As new, all galvanised steel construction 3' wide by 5' long, drop down tail board with safety chain. 16" wheels with spare. Lights all work. Extras! 2" tie down straps, strong Ali ramps. £15.00 Phone 01373 464982. Ask for Tony Davis (Frome)

**Ruston Hornsby Model PB 4 HP,** Phone David Eyres on 01985 840239 for price, (Warminster Area)

**Petter "M" 1.5 hp.** Rugby Ball Hopper. Also **United 2.5hp 1912 Type "C".** Both dry stored and not used for past 12 years. Please Contact Ray 01747 840835.

**Kerrison Predictor Generator.** Scott PAB engine, some instruments missing but mostly complete. Rarely advertised! £350. located in Salisbury. Keith Winch [k.winch@virgin.net](mailto:k.winch@virgin.net)

**Lauson engine** on steel frame. This interesting lightweight Canadian engine dates from WW2 and is driving its own petrol pump (underslung tank) and a small air compressor. Light, easily fits in the boot. Painted and ready to rally! £165.

**Power Hacksaw.** Five feet long and tall, Free standing and an impressive lump begging to be driven by your engine! £175 (reduced) or swap either for something small and interesting.

**Watermota K2.** Mid thirties twin cylinder marine engine. Complete with square bodied ML magneto, manifolds and original frame. Standing many years and is seized but is just stirring! £175. (reduced for last time otherwise it can go back in its corner!) Tel; Kim on 0117 964 6818

## Wanted

**Screw cap filler petrol tank** for Lister D. Other cap fittings considered! ;-))

**Box Trailer** approx 6ft x 4ft to carry upwards of half a tonne, with ramps if possible. Or information leading to the purchase of same Please help your new chairman Eric on 01225 754374

## Suppliers

**Recommended Bearing Supplier – very helpful!**

Solent Bearings, Unit 20&21, Test Valley Business Centre, Test Lane, Nursling, Southampton, SO16 9JW Phone - 02380 667100. [www.solent-bearings.co.uk](http://www.solent-bearings.co.uk)

**Fuel Tanks and Crank Guards made.**

Tel John Hedges 01635-268359 or 07831-410473 (Newbury Area). Robin Says – "I have known John for over 30 years and he is a good engineer. He has sold all his engines and thought he would have a go at Tanks & guards and is doing quite well, "

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

Phone - 0117 964 6818

J. Kim Siddorn, 9, Durleigh Close, Bristol. BS13 7NQ or by e-mail to [kim.siddorn@blueyonder.co.uk](mailto:kim.siddorn@blueyonder.co.uk).



### Featured Engineer Number 3

**Sir Harry Ricardo** (26 Jan 1885 – 18 May 1974)

*From Internet Research*

*Part Two .....*



The compression swirl chamber design was called a "Comet" design and was subsequently licensed to a large number of companies for use in trucks, buses, tractors and cranes, as well as private cars and taxis. A Comet combustion chamber was used in the first Associated

Equipment Company (AEC) Diesel buses operated in 1931 by London General Omnibus Co, later part of the London Passenger Transport Board/London Transport. A later development of it featured in the world's first volume production Diesel passenger car, the 1933 Citroën "Rosalie". Britain led the world in the field of high-speed Diesels for road transport. This advantage was lost to the United Kingdom as a result of the heavy tax imposed on Diesel fuel in the 1938 Budget.

Ricardo designed the 1921 T.T. Vauxhall engine which was described by *Motor Sport* as a *tour de force*. Later developed by Mays and Villiers, the engine in its supercharged form was still a force to be reckoned with 15 years later!

In 1922 and 1923 Ricardo published a seminal two-volume work, "The Internal Combustion Engine."

In 1927, he formed Ricardo Consulting Engineers (now known as Ricardo plc) in Shoreham-by-Sea, which has become one of the foremost international automotive consulting firms.

In 1929 he was elected Fellow of the Royal Society.

Ricardo's work on the sleeve valve affected the development of British aircraft engines in the thirties and during the war, something we shall return to in a moment. He even enhanced the Mosquito's performance by designing an oxygen enrichment system to improve its performance.

Ricardo's work exerted influence all around the world. While his work guaranteed England a supply of fuels of ever-increasing power during the 1930s, it also helped Germany to develop synthetic high-octane aviation fuel, for the Focke-Wulf Fw190. Likewise, Ricardo's research on the detonation-inhibiting qualities of water injection was exploited by German engineers (MW 50) to provide their aero-engines with a particularly powerful special emergency power rating.

Although Ricardo did not invent the sleeve valve, in 1927 he wrote a seminal research paper that outlined the advantages of the sleeve valve, particularly in respect of supercharged aero-engines. The paper indicated that poppet valve engines would not be able to offer power outputs much beyond 1500hp. A number of sleeve valve aircraft engines were developed following this paper, notably by Napier, Bristol and Rolls-Royce. Bristol produced the Perseus, Hercules, Taurus and the Centaurus, Napier produced the Napier Sabre, and Rolls-Royce produced the Eagle and Crecy, all using sleeve valves. Of these three major companies, only Bristol were able to overcome the difficulties of rapid wear, uneven sleeve expansion and lubrication. Both Rolls-Royce and Napier went to Bristol in an attempt to sort out their difficulties, but only the latter went on with this type into peacetime operation. In their factory on the northern outskirts of their city from which they took their name, they produced the Centaurus and Hercules sleeve valve Radials. The Centaurus 661 having the highest in-service life of any piston aero engine and led the field until the gas turbine

overtook the piston engine once and for all. He also assisted in the design of the combustion chambers and fuel control system of Sir Frank Whittle's jet engine. During 1941-5 Ricardo was a member of the War Cabinet engineering advisory committee.

In 1944 Ricardo was elected president of the Institution of Mechanical Engineers. In 1945 he and his wife moved from Shoreham-by-Sea to Graffham, also in West Sussex. In 1948 Ricardo was knighted in recognition for his work in the field of internal combustion engineering.

In 1964 Ricardo retired from active work in Ricardo Consulting Engineers but kept in touch with various engineers within the company.

In 1974, at the age of 89, Ricardo broke his leg in a fall. He died on 18 May six weeks later.

On 16 June 2005, a blue plaque was placed outside the house where he was born in Bedford Square, London. On 1 July 2010, the Institution of Mechanical Engineers bestowed an Engineering Heritage Award on Sir Harry Ricardo in recognition of his life and work as one of the foremost engineers of the twentieth century. During the 1960s a second round of development of the Comet system was started, now armed with considerably more powerful test apparatus. The refined design was immediately used in several cars, and the pre-combustion system remains in use in most diesel engines today. Ricardo Consulting remains committed to the diesel, considering it to be nowhere near its development potential even in the most advanced of today's engines.

In 1978 the US Department of Energy hired Ricardo Consulting to research the Stirling engine as a car engine. A series of engines, eventually forty-five in total, were built to test this system and showed very low emissions, but the efficiency was compromised by the need to operate under transient conditions—the design was best running at a single speed, making it less than useful as a car engine. The Stirling may make an excellent engine for (particularly series) hybrid cars and has recently generated some interest in this role.

In 1986, the Voyager was the first aircraft to fly around the world non-stop and without refuelling. Ricardo Consulting redesigned the otherwise "stock" Teledyne Continental engine to incorporate a highly efficient combustion system and water cooling, thereby dramatically reducing drag and improving fuel economy.

Ricardo worked on petrol (or gasoline) engines throughout his career, including pioneering work on direct injection gasoline engines for aircraft engines in the 1930s, but his best-known work was in the development of high-speed diesel engines for cars. He was responsible for designing the combustion-chambers for the first two diesel car engines produced in quantity — the Citroën Rosalie and Mercedes-Benz 260D — in the mid-thirties. Later, various versions of Ricardo's Comet pre-combustion chamber for car diesels were deployed in countless engines over four decades, and the Comet remains one of Ricardo's best-known personal achievements in automobile engineering.

Today several stratified charge engines are in use in the automobile market. Stratified charge is a technology that has come of age relatively recently, as a result of advances in manufacturing and electronics, but it was a feature of the first engine that Harry Ricardo built, while still in his teens, in the early years of the 20th century.



## Calendar of Events

key. CN = Club Night. E = Event

July 6<sup>th</sup>. **Bristol & SG SEC.** Annual one day rally at Frog Lane Farm, Woodside Road, Coalpit Heath, Bristol. BS36 2QT

July 5/6<sup>th</sup>. **The Bath Motor Pageant** — Vintage, Historic transport show at the Walcot Rugby Club, Bath BA1 9BJ. For all enquiries please email [hildegard.e@btinternet.com](mailto:hildegard.e@btinternet.com)

July 19/20<sup>th</sup> E. **West Oxen Steam & Vintage Show.** Ducklington, Whitney, OX29 7TY (off junction of A40/A415) Info: Gary Leach 01993 700716

July 19/20<sup>th</sup>. E. **Much Marcle Steam Rally.** Rye Meadows near Ledbury. HR8 2LX Phone, Richard & Gareth Hall, 01452 840862

July 28<sup>th</sup>. **CN. Crank Up At The Court Hotel**

Aug 18<sup>th</sup>. **CN. Engines At Wessex Events Slide Show.** *Early Because Of Bank Holiday.*

Sept 29<sup>th</sup> **CN. Quiz.** Anne Kempson As Quizmaster.

Oct 11<sup>th</sup> Sat. **Wessex Autumn Sortout** At Cranmore Station.

Oct 27<sup>th</sup>. **CN. Engines at the 1000 Engine Rally** by Kim Siddom

Nov 8<sup>th</sup>. E. (Sat) **"Enstone" Autumn Sale. \*\*\*NEW VENUE\*\*\***

Oakley Airfield. HP18 9JX. The new venue is 22 miles east of Enstone Airfield. Check the distance for you before you set off! info: Mrs. Anne Harris 01367 810415

Nov 24<sup>th</sup>. **CN. Decoys On Mendip, World War 11.**

Talk by Mike Chipperfield

**Dec No Club Night.**

Dec 7<sup>th</sup> Sun. **Anti-Freeze Crank-Up** at Nunney Catch

Dec 27<sup>th</sup> Sun. **Mince Pie Crank-Up** at The Court Hotel.

*This events calendar is prepared by the editor based upon the Wessex SEC calendar produced by Brian Baker.*

## Engines Wanted

The Wessex SEC has been invited to take part in the The Bath Motor Pageant — Vintage, Historic and Classic Car and Motorcycle Exhibition on the 5 and 6 July at the Walcot Rugby Club, Bath BA1 9BJ. There is plenty going on and they raised really good money for their chosen charity: "For all enquiries please email or [hildegard.e@btinternet.com](mailto:hildegard.e@btinternet.com) Peter & Hildegard Edwards, Wingfield Court, Arnolds Hill, Wingfield, Trowbridge, BA14 9LB. Tel. No: 01225 752025. We are delighted that you and a number of your members will be coming to the Pageant and very much look forward to seeing you".

## Social news

Browsing through my monthly Camper Magazine I spotted an article that may be of use to our club members who use 13kg Calor Gas bottles. A fellow reader had exchanged his empty gas bottle for a full one at his local gas supplier and found it was too tall to fit in the compartment as it was over an inch taller. So when replacing your gas bottles in future, make sure (if space is critical in your gas locker), look for the older style Cylinder.

## Chairman's Report

Monday the 31st March was my first club meeting as Chairman, fighting off the fear of a nervous breakdown, I set off for the Court Hotel.

Arriving at around 7-30 my first job was to set out the raffle prizes for the evening then to have a

few words with - I hope - a new club member Mr. Jerry Coles, Jerry had seen the club write up in the Midsomer Norton and district Journal and had come along to join us for the evening I hope you had an enjoyable time with us Jerry.

The evening's programme started with a few announcement's one being that there will be no crank up at Nunney in December this year, have no fear. I am on the case looking for a alternative venue more on this later.

**October 26th** Coach trip to Coldharbour Mill, Uffculme Devon, if you are interested, give me a ring and let me know, Full Details Later.

Now onto our evening's entertainment, a talk by Mike Chipperfield on his life in the Metropolitan Police Force, and what a life it was! Mike had many roles in the force from bicycle beat officer, noddie bike rider in the transport division (Velocette LE200 motor cycle) then to being part of the Queen's protection force. This ended his time with the Metropolitan bomb squad, stopping them nasty terrorist from blowing us up. All this told to us in detail with a great deal of humour that had us all rolling in the isle A totally enjoyable evening. If you were unable to get along, you did miss a very entertaining evening. The evening came to an end with the usual club raffle and thanks must go to all the good folk that donated prizes on the evening thank you all very much.

Well, we now come to Sunday the 6th April, the day of the Nunney Crank up. I arrived at 8-30 on the dot but some very hardy souls beat me and were already up and running. The weather was not very kind to us and we only had around 15 engines. What a difference to our crank up at Nunney last December, but being cold and wet with light drizzle off and on I can't blame you staying home with your feet up in front of the fire with the wife bringing you a nice cup of tea, and a hot cross bun every now and then. That was certainly better than stood out in the cold. With regret, by around 12-30 most people were heading for home, the cafe did not do too well this time I just hope we may be able to do better for them in the future.

**Club Meeting Monday 20th May.** I would like to express my sincere thanks to those club members that brought along collections and models for our alternative hobbies night. We had a wonderful display of die cast models, mainly by Dinky. A very small part of a very large collection of - I believe - over three hundred models.

~~tel. 07787507100~~ (Brian Munt) brought along a fine steam powered train bought from the internet but he built most of the rolling stock.

Brian's friend Roger had a magnificent steam launch that has taken around 3 years to build and the workmanship was a joy to look at.



Our Tony brought along some of his collection of die cast tractors, that he has collected over the years.

Robin had a quick rummage in the kitchen draw and found a tin of Ruston starting cartridges, some small build yourself dynamos the sort you may have bought as a kit of parts from boys own magazine possibly in the late forties or fifties. I myself brought along a couple of model steam engines that I bought in bits and I hope have running in the near future to.

It would have been nice to see a few more than the eighteen members who turned up, as we had a good evening.

I spent a most wonderful weekend at the Three Oekfords rally at Shillingstone, down in darkest deepest Dorset, or just tother side of Shaftesbury. I won't bore you with lists of exhibits, but I was so pleased to see in the line up of 109 engines, our Club had over 20 members present. This rally is now a must for me and Maureen as it has such a wide variety of exhibits along with a vast array of stalls containing all sorts of bits and bobs, so why not give it a try next year you won't be disappointed.

We would like to wish a speedy recovery to three of our club members who have been in hospital recently. To Brian Baker, John Paget, from Midsommer Norton and Kim Siddorn - Good luck and hope to see you soon back with us at the Court Hotel. *Kim said ...I had my operation on 12<sup>th</sup> June in the end as I type it is day fourteen post op. I'm doing well and cant wait to get driving again at the end of July!*

## Book Review

By Robin Lambert

While at the Shillingstone rally I purchased an excellent book that has just become available, **"Maggs and Hindley, two families, two hundred years, an industrial heritage at Bourton Dorset"**. Written by stationary engine friend "Bob" Robert Mullins after 25 years of gathering information on the amalgamation of these two Bourton based industries, Bob has at last achieved his goal and put all his research into a superb 128 page book on the growth and demise of these Wilts /Dorset border based companies. Club members will recall our recent club visit to Sherborne Pumping Station where we viewed the large E.S. Hindley steam engine in all its glory working under live steam. Some years ago on a visit to Kew Pumping Station, we looked at a water wheel and pump made by Hindley that had spent its working life near Longleat. This book is full of photos depicting engines, lorries, staff, machinery, buildings, and old views of the works and the Stourhead area, many of which are over a hundred years old.

Priced at £10. It is excellent value. Bob can be contacted at 36 The Venn, Shaftesbury SP7 8EB.

### For Sale – Special inclusions

Bill Coombs (Radstock Area) is selling up. He has a lot of stuff to get rid of and far too much to list. He asks that interested parties ring him in the first instance on 01749 841220. He asks that you ring him before 7.30 in the evening. Callers after that time may well find themselves leaving a message!

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**Pat Cifford** is having a big sale too. He has asked me to print this list. This is a garage clearance sale coupled with a waning interest! Prices deemed to be realistic but would accept reasonable offers, but no time wasters.

Address:- Pat Clifford, Woodvale, Brookend,  
Luckington, Chippenham. SN14 6PJ. Landline  
01666-840 666 Mobile 07979061644. e-mail  
patangclifford@aol.com

**Bamford Type EG1 Engine Number BH4080.**

**Bamford Type EGT Engine Number 211555.**  
Complete but not an easy start. On Trolley. £130.00  
NY No. NC1263

**Broom Wade Compressor Type NX No. NC1363**

( Was connected direct to the Lister D as below )

**Crossley 2.5 BHP Enclosed Crank. Engine  
number 103973.**

All complete and reasonable condition, Mag needs slight attention though it sparks ok.Engine oil filler repaired several times and needs a replacement.  
Price £200.00

**Lister D Spec 26 DH Number 163147.**

This Engine was Ex GWR and has Brass GWR plate on the top of the water hopper. Starting handle has a brass handle grip (This was typical of BR ) Complete with engine bed plate.

Engine is complete but needs slight attention to the governor springs. A rare Engine. Price with the compressor £250.00

**Lister L Spec 76 L 5HP Engine number 67266.**

Absolute original condition and used very little.

All complete with original bed plate timbers and water tank box with all the fittings. Engine will start and runs well. £350 to £400

**Lister D Spec 28DH Petrol/Parafine, Engine number 175971.**

All complete and running on a trolley. Price £120.00.

**Lister well Pump Price £50.00.**

**Large Lister Pump.** Needs overhaul. Price £50.00

**Wolsley WD1 2.5HP Engine number 11609.**

Complete and will start. Price £75.00.

**Iron Wheels.** All at £10.00 each.

**STOPPRESS!**

Robin says that the rally went very well, lots to see with all sections well supported. The weather made a big difference and the scorching sunshine helped bring the public through the pay gate on both days. For our club members exhibiting, it was once again nice to park up and camp to the rear of their engines, all under the control of El Supremo Steward Don Rogers. Eric and his sub-committee should be very proud of how the weekend went after all the hard work put in by them, Well Done.