

# CRANKING

*The Wessex Stationary Engine Club's Monthly Newsletter*

April

2013

Thirty sixth year  
of publication

[www.wessex](http://www.wessex-sec.co.uk)

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## From the Sump

Many of you will not be aware that the Wessex Stationary Engine Club has a website on the Internet. It is basically a very good site, telling the reader this history of the club, has some photos, features the six years of newsletters that I've edited archived in PDF form and numbering nearly 75 editions. It contains information about the club, membership and the annual vintage gathering. Application forms are available to download. I send stuff to the chap that looks after it for us, who prefers to remain anonymous and his praises unsung. But with the best will in the world, I lead a busy life and things get missed. Frankly, it suffers by having no one in the Wessex SEC to love it, look after it and – most importantly – keep it up to date. It doesn't need a radical restructuring or (heaven forefend) the addition of a forum. It just needs perhaps an hour a month by someone with some webskills and a bit of common sense. It isn't yet a committee job, but it could be! In the first instance, contact me by email if you are interested and you might like to look at the current state of play here. [www.wessex-sec.co.uk](http://www.wessex-sec.co.uk)

Last month, I put forward - on behalf of the committee - the idea that our members could have their edition of our **Cranking** newsletter as an e-mail. It now costs around a £1.00 for stationary, printing and postage per copy. A worthwhile saving in quantity as I'm sure you'll agree. In the month since then, I have had a whole FOUR applications for this service. Even this small response will save the club over forty quid a year, so please do give it your earnest consideration. We must do all we can to drive down our expenses and a reasonable saving here could mean the difference between our subs going up next year or not.

It is not worth setting up a direct mailer for that sort of number, so I'll send them out individually for the moment.

Peter Craddock is disposing of his collection and has a large number of engines and associated equipment for sale. There is a long list of engines in **Moving the Metal** and I have resorted to a shorthand form of listing which I hope is pretty comprehensible to engine men. I have not seen them, the list is generated from a rather long phone conversation following an Eric Gay contact.

## Moving the Metal

### For sale

ALCO WW2 300 watt generator. In frame.  
BSA generator in frame.  
BSA powered winch.  
Bradford. On trolley  
Coventry Climax 4 cyl. WW2. Generator. Trolley.  
Coventry Victor Cub Diesel flat twin on road trailer.  
JAP powered. WW2. Lyon/Norman type in air drop frame. Switchboard  
Lister A or B ? (104/10?) Skids.  
Lister D x 3. Various conditions.  
Lister powered sawbench.  
Petter A1 x 3. One dismantled.  
Ruston Hornsby 8hp, PB type. (T8V41/2) Hopper cooled. Skids.  
Villiers x 2.  
Various sets of wheels and axles plus oddments.  
Water Pumps and vacuum pump.  
Full scale steam powered pump.  
Cromwell 3,5" Lathe, screwcutting with change wheels.

*I got the impression that whilst they are dry stored, it is a long time since anything was run. Prices by negotiation. Mr Craddock lives at Wedmore Farm, Pewsham near Chippenham. **Phone 07801539533***

**"Model Engineering"** magazines, about 200 odd, 1949 to 1952 - £20.00

**Wolseley** air cooled 1.5hp. On barrow trolley - £100  
Jon Ivens. Phone 07812 385536

**Petter AVI 5HP Diesel** Ser No 618657. Restore or spares. Some frost damage £35

**JAP 3A.** Two air-cooled engines, 1 complete, 1 for spares. £20

Call Brian Verral Cheddar 01934 743460 evenings

**Lister 1948 28 DH**, s/n 1/17438. Rocker gear dismantled but all parts available. Turns over with compression. Ex milking parlour, no trolley. Needs restoring but probably never been apart. Dry stored. With factory handbook. Frome area. Open to offers but £650 on as a starting point!

Phone John 07517 036026

**Milk Bottle** collection. One hundred and eleven 1980's bottles with adverts on Must sell as one lot. Photos, details – [p.lovering@btinternet.com](mailto:p.lovering@btinternet.com)  
Phone Paul Lovering, BoA Wilts. 01225 862100

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).

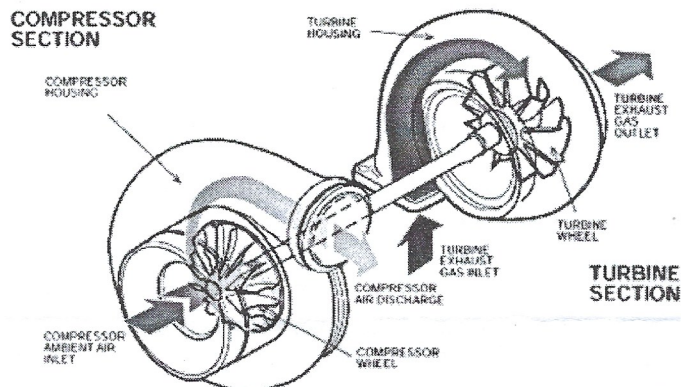


## Featured Engine 73

### Turbocharging – The Early Days

(from "Some Unusual Engines" by LJK Setright)

A turbo charger is now to be found under many bonnets in many road going vehicles and any car with sporting pretensions would find itself on the poor man's side of the tracks if it failed to have one whizzing along at 30,000 rpm when under power.



Briefly, the exhaust charge of expanding hot gas is put to driving a small turbine which is directly coupled to a compressor. This increases the pressure of the inlet charge to above atmospheric pressure.

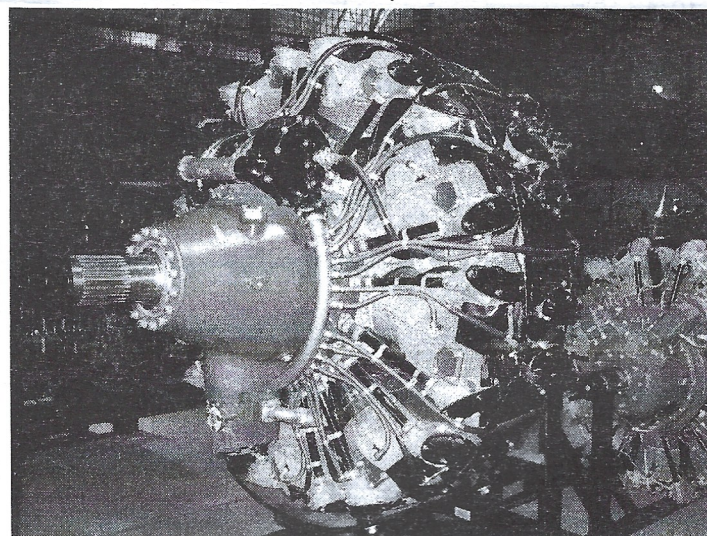
The history of the idea goes back to the 1920s, when the engine Division of the Bristol Aeroplane Company was experimenting with the turbocharger with more enthusiasm than had been displayed by any other aero-engine manufacturer. Of course, there had been exhaust turbochargers on aero engines before then, most of them significant failures due to the metallurgical shortcomings of the times; but by 1924 Bristol were actually flying a Jupiter radial with turbocharger, operating it successfully - and with great promise - at altitudes above 30,000 ft. For reasons that do not concern us here, work was then suspended until 1937, by which time they were well advanced with their sleeve valves. It occurred to Bristol that, since the sleeve valve was the more suited to operation at high exhaust back pressure, the objections sometimes raised against exhaust turbines were of less moment.

Thus encouraged, they began investigation of a turbocharged version of the sleeve valve engine, the idea being that boost could be progressively increased with back pressure. Contemplation of this relationship led to the realisation that ultimately a state of affairs might be reached where the exhaust turbine was as powerful as the engine. At that point it becomes logical and possible to transpose the airscrew and the compressor element of the turbo engine. Thus, the engine and compressor would constitute a gas generator unit, while the turbine would translate the gas energy into power for driving the airscrew. Already one can see here vivid analogies to a free-piston engine, which was virtually a gas generator feeding a power turbine. The only trouble with this design philosophy is that if you pursue it too rigorously you are in grave

danger of losing your pistons altogether and inventing the gas turbine, which might not be what you first intended.

That is what happened to Bristol: by 1939 they had already made plans for getting into the gas turbine business but the pressures of war production dictated otherwise. However, the idea of the compounded piston engine had been around for a long time and some manufacturers adopted it with great enthusiasm.

Most outstanding of these was the American aero engine giant Wright, who applied the principle to their R3350 Cyclone radial. At the time, this engine gave up to 2,800 hp at take-off and weighed 3,029 lb. The modifications adopted by Wright increased its performance considerably, while keeping the engine dimensionally so similar to the standard version (the diameter remained unchanged, the overall length grew by only a few inches) that no special installational difficulties were presented.



To cope with the greater power the crankshaft was stiffened and cooling fin area increased by forty per cent. The next step was to endow it with a two-speed gear-driven supercharger, a slightly unexpected stratagem which made boost and back pressure to some extent independent. The exhaust pipes from each of the eighteen cylinders were then led in clusters of six to three blow-down exhaust turbines which were linked to the crankshaft by fluid couplings. Between them these three turbines returned about 550 hp to the engine, sometimes more. The performance was so improved that the take-off rating was raised to 3,500 hp, or even 3,700 hp in a special version for the US Navy. Perhaps more important was that the specific fuel consumption during cruising was only 0.38 lb/hp hour. In real terms, this meant that the Wright Cyclone powered civilian Lockheed Super Constellation could fly 20% further on the same amount of fuel.



One of these beautiful aircraft can be seen in the at RAF Wroughton - if they ever have another open day!



## Calendar of Events

Key. CN = Club Night. E = Event

**May 20<sup>th</sup> CN.** Early Because Of Bank Holiday.**Alternative Hobbies Night.****May 25-27<sup>th</sup> E. Selwood Rally.** Southwick Nr Trowbridge.

Forms from Mrs Pearl Francis, 45, Stonebridge Drive, Frome, BA11 2TW.

<http://www.selwoodvintage.co.uk/page6.html>**June 15/16<sup>th</sup> E. Wessex Midsummer Vintage****Gathering.** Our club rally at Semington.**June 8/9<sup>th</sup> E. West Bay Rally.** Phone Matt Scadding 07948 579841**June 22/23<sup>rd</sup> E. 28<sup>th</sup> 1000 Engine Rally,** Astle Park.**June 24<sup>th</sup> CN.** In House Member's Quiz.**July 13<sup>th</sup> E. Chilcompton Funday.** Phone Andy Cassidy 01761 232862**July 20/21<sup>st</sup> E. West Oxen Steam & Vintage Show.**

Ducklington, Whitney, OX29 7TY (off junction of A40/A415) Info: Mrs. Anne Harris 01367 810415

**July 21/22<sup>nd</sup> E. Much Marcle Steam Rally.** Rye Meadows near Ledbury. HR8 2LX Phone, Dot Pullen, 01531 633664**July 28<sup>th</sup> (Sun) Crank Up** at Frank Nash's cider farm at West Pennard. Phone Brian for details**July 29<sup>th</sup> CN. Crank Up** At The Court Hotel**Aug 19<sup>th</sup> CN.** Early Because Of Bank Holiday.

Film show. "Morris Cars in the Early '30s" by Colin Baker.

**Sept 30<sup>th</sup> CN. "Engines at the 1000 Engine Rally"** by Kim Siddorn.**Oct 5<sup>th</sup> (Sat) Skittle Match** At South Parade Frome**Oct 12<sup>th</sup> (Sat) E. Wessex Autumn Sortout** At Cranmore Railway Station.**Oct 28<sup>th</sup> CN. Dorset & Somt Air Ambulance** by Colin Thomas.**Nov 12<sup>th</sup> (Sat). Enstone Autumn Sale.** info: Mrs. Anne Harris 01367 810415**Nov 25<sup>th</sup> CN. Photo Night.** Bring 10 Photos, hard copy or USB stick or CD rom.**Dec 1<sup>st</sup> (Sun) Anti-Freeze Crank Up.** Nunney Catch**Dec 27<sup>th</sup> (Fri) Mince Pie Crank Up** At The Court Hotel*This Calendar of Events is composed by the editor based first upon a list supplied by our Chairman. I've added to it things I think will interest the membership, but it is not cast in stone! You should always make sure an event is still on by contacting the organiser in advance. The responsibility is yours!***Chairman's Monthly Report**

by Brian Baker (printed as received)

The monthly meeting at the Court Hotel on Monday March 25<sup>th</sup> had for the member's entertainment a slide show of photographs taken at Sammy Millers Motor Museum by myself and Brother Colin. This was presented on our new digital projector by Oliver, who had compiled a program from over 300 photos, editing, adding special effects and music for our entertainment. I spent twelve years with motorcycles as service manager for Jim Alves who was a Triumph works rider in the sixties and some of the bikes in the museum I had never even heard off, and certainly never seen. With so many photos to choose from this was quite a long

programme which had a break in the middle for the raffle followed by the second half. The feedback I got from the members present was that they really enjoyed the evening's entertainment as quite a lot of our members are, or were motorcyclists, so many thanks to Oliver for presenting it and to Colin who took a lot of the photographs. The picture quality of the photos shown on the digital projector is really superb; I think the epidiascope is now redundant. Eric tells me plans for the rally is well under way with plenty of entries coming in for all classes. He would like to put out an appeal for helpers over the rally weekend so if you can help out please give Eric a ring. There is a change in the programme for the August club night. Instead of a slide show by me, it will be a film show put on by Colin Baker of the Morris Car Factory in the early thirties. This is another in the series that Colin showed club members some years ago, so please make a note of the change as I'm sure this is one not to miss.

**Social News**

By Earwig

Henry Simmons tells me that Wife Margret will be having a new knee fitted at Shepton Hospital on 25<sup>th</sup> April, so best wishes to her and may she soon be up and running again and helping Henry with their allotment.

Two of our senior club members celebrate their birthdays in April. Many happy returns to Rob Armstrong on the 21<sup>st</sup> and his good lady Frances on 22<sup>nd</sup> and to our esteemed Chairman Brian has his birthday on May 1<sup>st</sup>.

**Brian Baker adds.....**

The club would like to wish a happy birthday to Henry Baker who was 19 on the 23<sup>rd</sup> of March. Happy birthday Henry. A happy birthday also to Oliver Baker who will be 17 on the 26<sup>th</sup> of May. The drinks are on you Oliver.

The club would like to wish a speedy recovery to Margaret Simmons who has recently had a knee replacement at the Shepton Mallet Treatment Centre. Our best wishes and we hope to see you soon at the club events Margaret.

**Engines needed for -**

Engines and any other exhibits Wanted For Staverton Village Day June 22<sup>nd</sup>. Details Ring, Dave Yates on 01225 752919

Engines and Driven machinery needed for May 11<sup>th</sup>/12<sup>th</sup>. This unusual and pleasant event is held in the walled garden of the Historic Breamore Manor, Nr. Fordingbridge Hampshire, SP6 2DB. Free entry to the museum, manor house and blue bell woods.. Details, Ring Eric on 01225 754374

The Shillingstone Rally, this year on the 18/19<sup>th</sup> May. Anyone wishing to attend should phone Mr Burden on 01747-822834.

Club member Jim Miller will be running his Annual Vintage Event in the usual field under the Wesbury White Horse. Phone Bill on 01373 864166 for a form and further info if you'd like to go.



Chilcompton Funday, Just phone Andy Cassidy on 01761 232862 for full information.

Bristol & SGSEC Annual Rally is on July 7<sup>th</sup>. Frog Farm, Coalpit Heath. BS26 2QT. Application forms from Wendy Newton, 24, Rockside Gardens, Frampton Cotterell, Bristol. BS36 2HL

### **A Visit to Oakham Treasures**

By Brian Baker

On Saturday April 6th the club had a visit to Oakham Treasures organised by the committee. I was pleased that Colin drove because he has a sat-nav in his car, which was a big help as Oakham treasures isn't the easiest of places to find. We had arranged to meet at the museum at ten thirty. I think Colin and myself were the first to arrive, before the museum was open, but more cars started to arrive and the museum doors were opened. I found Keith Sherell the owner and told him the club were paying a visit again and I negotiated a deal with him for our members to be admitted for £5 each, the normal price being £6-50. I knew Keith from a couple of years ago when I sold him my collection of engines, these are now housed all together in the corner of his tractor collection. Because of our previous dealings myself, Colin and Justin were admitted free of charge, I told Keith that was the first time I had known a farmer refuse to take money. I'm sure members will agree with me that this is probably one of the best museums we have visited over the years for the variety of exhibits on display, which are being added to continually, Keith is a regular visitor to auctions, and he seldom gets out bid if he wants something. A steady stream of visitors came in and I counted around twenty five Wessex members who turned up, this is very pleasing to the committee who puts a lot of work into organising these events for members. After spending a considerable time looking at all the exhibits we found our way to the café, this has been enlarged since the last visit as they have done away with the farm shop and used that space for the café. With quite a good menu to choose from Colin, Justin and myself were suitably refreshed for the journey home, For the members who have never visited this museum I can assure you that you don't know what you have missed, the experience is absolutely wonderful.

### **Wessex Midsummer Vintage Gathering**

By Eric Gay

Our Gathering is now in its 5th year at our site at Semington Nr. Trowbridge on the A361 Trowbridge to Devizes Road.

We have many new attractions for the weekend of 15<sup>th</sup> & 16<sup>th</sup> June along with the vintage exhibits such as tractors, stationary engines, cars, motorcycles, commercial vehicles and vintage horticultural machines.

This year we have three re-enactment groups. The local Wessex group of Regia Anglorum (Kim's Vikings!) will be joined by the

"Westerns" group, reliving the old American West, the west of the hunter, trapper, frontier men and explorer, a native American Tipi - a real living history of that time so many years ago. The "Kennesaw Confederate Army", an American living history group portray 1860 American Civil War times. All these groups will be dressed in authentic costume with a great many artefacts from their periods of interest. There will also be a birds of prey mews and demonstration.

Our Friends the Shepton Mallet Drifters model boat club will return and you can try your hand at sailing a radio controlled model boat, the children can have a go too.

For the children we have mini quad bikes, bouncy castle/slide and fair ground rides, and some rare breeds of animals.

There will be Steam traction engines both full size and miniature, a vintage wood yard with drag saws, vintage saw bench, pole lathes, a treadle lathe and a collection of old wood working tools. These are just some of the attractions we have for 2013.

Our vintage show will raise funds for the Children's Hospice South West, so why not come along and join in a fun weekend and help the life limited children of the Children's Hospice South West.

The committee would like some help from club members over the weekend **PLEASE** help us with a hour of your time manning the car park we need your help,

Now I have another job that we need your help with. I need help in selling adverts in this year's Rally programme (No income no rally!) I can assure you that it is not arduous and will not take up too many hours of your time.

If yiu can help, please give Eric a ring on 01225 754374.

### **Moving the Metal - continued For Sale**

#### **Triumph Dolomite 1300 R.W.D**

Has been in Family since new, has only 14k on clock and is in excellent condition has M.O.T till Dec. Call Robin for more info and price, Tel 01373 463526.

**Bosch single cylinder** magneto A/C very good condition overhauled with new slip ring, £90 ono.

**Mills & Milling**, Museum Copy leather bound (Ministry of Agriculture fisheries food) full of lovely adverts for engines, steam en<sup>g</sup>ines, road transport etc. £80 ono. for both above ring Eric on 01225 754374.

### **Wanted**

**Ball Bearing Race 2.5" o/d X 1" i/d X 0.75".** Any reasonable condition. Also Chain guard (with integral chain tensioner) for diesel engined Howard GEM cultivator' Call Peter Civil on Bath 01225 874043.