

# CRANKING

*The Wessex Stationary Engine Club's Monthly Newsletter*

July  
2012

Thirty fifth year  
of publication

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

## From the Sump

I am in a bit of a bind. In September, I am down to talk about the 1000 Engine Rally at Astle Park, showing a number of photos that I was assuming I'd take at said function. Alas, the best laid plans of mice and men are as naught to the call of the Unexpected Family Crisis. Therefore, I have no photos! I ask everyone who was at the rally this year and took digital photographs of the stationary engines to be kind enough to send me a selection – or all of them! – to help me out. Without the generosity of the members I shall be upon my own resources for a subject.

I could talk about anecdotes of Viking Age, stories of battle and seafaring when, sword in hand, powerful men in smelly clothes set out to plunder the coasts of Europe. That sort of stuff .....

What a washout of a year for open air events! Good Lord, will it never end? Of course, I am doubly involved as my Other Hobby finds me spending weekends in moist fields across the UK. Last weekend was the Festival of History at Kelmarsh Hall in Northamptonshire. It is the biggest, most complex event of its kind in Britain with traders and participants attending from all over the world. On Friday night it rained torrentially, the river along the site burst its banks and washed out the participant's camp site. The event site was several inches deep in water so English Heritage cancelled the event at 5.00am on the morning of the event. This is one of the many, many shows cancelled this year and one cannot readily foresee the difficulties that will flow from 2012 into the future of open air events. Gather your rosebuds whilst ye may ....

Tom Bishop's extensive collection of stationary engines, tractors, old farm machinery, fairground equipment and old motorcycles will be sold by auction at Limebrook Farm, Toghill, Wick, South Gloucestershire BS30 5RZ on Saturday the 8<sup>th</sup> September 2012.

The auctioneers will be David James and Partners Ltd, Hartley House, Badminton Road, Old Sodbury, South Glos. BS37 6LX, phone 01454 320144.

An auction catalogue is not available as we go to press, but will be closer to the date of the auction. Please apply to David James direct.

## Moving the Metal

### For sale

**Lister Junior.** Runner, nice condition, original trolley.  
**The David.** Small belt driven Compressor.

Phone Mike Upton 07595 421409 £280 the pair

**Lister 'D'** on good trolley. Fair runner. £75 ono  
**Petter A1** on good trolley, partial restoration. All complete with good Magneto £55 (**prices reduced!**)  
**Petter A1** parts. Block/Crankcase/ Flywheel/ Casings & Brass plate /Fuel tank £30

**Pulley 12" Dia 4" Wide 1.425" (36 mm) Bore.** £15

All above Phone John Light 07885 466464

### Farmborough

**JAP 55.** The very unusual air cooled twin cylinder engine. As far as I can see, it has never been more than test run. Rare one to rally! £100 ONO. Swaps with smaller engines considered.

Phone Kim Siddorn 0117 964 6818

### WANTED

Wanted; Wiko or Lucas RS1 Magneto, counter-clockwise on cog drive end.

Phone Terry Williams 07845 137796

**No. 52 Steel Detachable Chain** as used on conveyors. Looking for 10 yards, but any quantity will do.

Phone Gerald Atherton - 01934 852670

**Stuart Turner R2Y** cylinder side plate with "STUART" cast into it.

Phone R. Champion 01275 892944

**Tilley lamps – WHY?**

Phone John Ivens 07812 385536

**Vincent** industrial engine powered compressor.

**Pultra lathe or parts.** 1510 Or 1710 considered.

**B T-H Competition magneto.** For my cammy Norton. Anticlockwise from the points end. Thick base preferred although not essential. Good price paid for the right magneto!

**Audio reel to reel tapes.** 7" preferred, any size considered – WHY?

**Nagra** open reel tape recorder – anything considered.

Above, phone Kim Siddorn 0117 964 6818

**This column works!** Let's have your engine and similar stuff that you have for sale up here for a month before putting it in SEM – you might see it at rallies if sold locally!

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 No. 67

### The Vincent Lifeboat Engine

*By Stephen Brewster Daniels*

Vincent's principal competitor for the airborne lifeboat project was the Austin Marine Engine. It had half the range of the Vincent and had several major faults, a few of which were its weight and spark plug insulation breaking down at the screening sleeves. The magneto was found to be in good condition although the splash shield was not satisfactory and the two lower gauze vents were blocked with paint. The starting handle grip was criticised as being too small and liable to seize solid.

The report makes very sorry reading indeed. But, design and manufacturing faults apart, it must be appreciated that there are difficulties in providing an engine which would be able to operate successfully in all parts of the world; overcooling may be a good trait in the tropics but deadly in temperate or sub-arctic zones; add humidity and salinity ranges and it is asking rather too much from a standard engine; especially as flight conditions could freeze the sump oil, which would not have time to thaw out before an attempt might be made to start the engine. So, all in all, one can realise why there could be problems with Airborne Lifeboat engines, apart from the inexperience, exhaustion or injuries of the survivors whose need was often desperate.

The Mark III Lifeboat was conceived originally with the Pacific Ocean 'island hopping' campaign in mind. The lifeboat would need a range of up to 1000 miles at a speed of at least 5-6 knots and be self-supporting for extended periods. The engine specification set limits on weight and size, and emphasised easy starting, radio screening, temperature and humidity adaptability as well as, possibly, being submersible. The prototype finally chosen was the Vincent 500 cc Twin, T5AM/X.

The engine had two horizontal power cylinders with an induction cylinder mounted between them, the whole block being placed athwartships to drive two hollow, three-throw crankshafts running in pressure lubricated white metallised bearings. The crankshafts were coupled by a roller chain so that the pumping crankpins were in phase and operated a pair of double-acting pistons. The cast iron pumping cylinder had two sets of drilled ports which acted as inlet ports to supply the two outer spaces or the inner spaces between the pistons according to their direction of motion. After the ports closed, the mixture was partially compressed and then delivered to one of the power cylinders when its transfer ports opened: the space between the pumping pistons supplied No. 1 power cylinder, and the two spaces behind them supplied No. 2; the difference in displacement by the presence of the half-inch piston rods was disregarded. The piston rods were sealed against leakage by a combination of piston rings and lipped rubber seals, connecting rod side thrust being taken by integral crossheads. Although no oil was added to the fuel, wear on the cast iron pumping pistons and liner was negligible after hundreds of hours running. The power cylinders also consisted of grey-iron liners with drilled transfer and exhaust ports communicating with scroll chambers in the block. The main exhaust ports were on top of the block and fed into a fully water-cooled silencer. The Amal type 30 HVL marine carburettor was also on top and protected by a water shield containing a small flame trap. Scavenging was, of course, on the uniflow system with no exhaust resonance.

To provide asymmetrical timing of the power cylinder ports, the exhaust crankshaft had a lead of 24° over the transfer crank, and as can be seen in the table of dimensions, this furnished a blow-down period of 33°, while the exhaust

ports closed 14° before the transfers. The transfer ports were angle drilled to provide a small amount of swirl, but the exhausts were drilled radially and chamfered externally to make them self-cleaning. Beside the usual top rings, each piston had one plain ring and one slotted scraper ring in the skirt. The crankshaft coupling chain also ran over a layshaft sprocket giving a forward propeller speed reduction of 2.04 to 1. A five pinion reverse gear was housed in the sump, ahead or astern being engaged by multi-plate clutches running in oil. Starting was either by Rotax direct electric starter or, initially, by a spring assisted lever. All electrical gear, including the BTH type KD2-SS4 magneto, was shielded in itself and then enclosed in a watertight metal cover. The block and all major castings were of corrosion resistant magnesium-aluminium alloy anodised and sealed with potassium dichromate, and all exposed ferrous parts were either stainless, or cadmium plated.

The block was water-cooled by gear pump, but kept empty when the boat was in flight (thus saving weight and eliminating possible freezing) and the slight delay in the waterjacket being filled by the pump when the engine was started assisted in a rapid warm-up without the danger of cracking which might occur with a cast iron block. It was essential that the engine would accept full throttle and develop good power immediately on starting. As the propeller, designed to run in a tunnel, could only absorb 15 hp before cavitation occurred, the engine was developed to give maximum economy at or below this power, and fuel consumption was reduced to 0.71 pints/bhp/hour at 11 bhp, with only a small increase at 14 bhp. On test this proved sufficiently low to give the lifeboat a still air range of 1020 miles on 50 gallons of fuel at 5.3 knots, well within the specification.

In November 1946 tests were carried out by the Marine Aircraft Experimental Establishment at Felixstowe. It noted that the lever type starting was 'tricky' and needed a pull of 75 pounds at an awkward angle on a traverse from horizontal to 45° past vertical. An incomplete 'pullover' could result in a 'kickback' with the chance of a broken wrist for the operative. Survivors might be of light physique, or not be in good enough physical condition, due to injury, cold, fatigue or seasickness; to cope with such a task. The testers recommended that an electric starter be incorporated in spite of the additional weight and complications of a generator, extra wiring, larger accumulator and cut-out. The fuel pump was found inadequate, not being self-priming even with a perfectly airtight fuel line, if the line were long and ran for most of its length above the tank level.

It was not until September 1953 that the MAEE actually carried out trials with the Mark III lifeboat fitted with the Vincent engine. It was found that 'Top speed 6.6 knots; maximum range with all-up load in calm weather 1100 nautical miles at speeds between 4.7 and 5.2 knots'. The production engines fitted to the Mark III Airborne Lifeboats designed for the RAF and supplied for Shackletons of the South African Air Force.

One very important item was the installation of a heater in the sump, to prevent the oil solidifying whilst the lifeboat was in flight. "Conceived in good time but born too late" (as LJK Setwright said of the Napier Nomad!), less than fifty were reported as leaving the factory, however, the editor has indications that at least 53 were built.



## Calendar of Events

Key. CN = Club Night. CU = Crankup E = Event

**Aug 20<sup>th</sup> CN.** *Early due to holiday.* In house quiz.

**Sept 2<sup>nd</sup> (Sun) Claverham Vintage Engine Show**

Claverham Village Hall, BS49 4NF. You may arrive Saturday and camp. Info, Margaret 01934 822466.

**Sept 24<sup>th</sup> CN "Engines at the 1000 Engine Rally"** by Kim Siddorn

**Oct 6<sup>th</sup> (Sat) Skittle Match** at South Parade club, Frome.

**Oct 13<sup>th</sup> E. Wessex Autumn sortout** at Cranmore Station Yard.

**Oct 29<sup>th</sup> CN. Other Hobbies evening.**

Bring stuff along to illustrate a table display or talk about it!

**Nov 12<sup>th</sup> (Sat) Autumn Enstone Sale.**

info: Anne Harris 01367 810415

**Nov 26<sup>th</sup> CN. Photo presentation** by the members.

Bring along ten photo's or slides. Prize for best effort.

**Dec 2<sup>th</sup> (Sun). CU. Antifreeze Crank Up** at Nunney.

**December** – No meeting this Month.

**Dec 27<sup>th</sup> CU. Mince Pie Crankup** at The Court Hotel

All events are listed in good faith. You should always ascertain if an event is taking place before you go. If in doubt, ring Brian Baker on 01749 342671

## Chairman's Monthly Report

by Brian Baker (*printed as received*)

The monthly meeting at the Court Hotel on Monday 25th June had guest speaker Bill Moore give a talk on "The Mary Rose. This was a talk supplemented with a digital projector on the discovery and the recovery of the remains of the Mary Rose. The Mary Rose was a carrack – type warship of the English Tudor navy of King Henry V111. After serving for 33 years in several wars against France, Scotland and Brittany, and after being substantially rebuilt in 1536, she saw her last action on 19th July 1545. While leading the attack on the galleys of a French invasion fleet, she sank in the Solent, the straits north of the Isle of Wight. The wreck of the Mary Rose was rediscovered in 1971 and salvaged in 1982 by the Mary Rose Trust in one of the most complex and expensive projects in the history of maritime archaeology. The surviving section of the ship and thousands of recovered artefacts are of immeasurable value as a Tudor – era time capsule. The finds include weapons, sailing equipment, naval supplies, and a wide range of objects used by the crew. Many of the artefacts are unique to the Mary Rose and have provided insights into topics ranging from naval warfare to the history of musical instruments. Since the mid 1980s while undergoing conservation, the remains of the hull have been on display at the Portsmouth Historic Dockyard. An extensive collection of well preserved artefacts is on display at the nearby Mary Rose Museum.. This was a very well presented and researched talk by Bill, and was certainly a history lesson for the members present.

The usual raffle followed the talk which was well supported by the members.

Due to the fact that so many of the events this summer has been cancelled, the committee has decided to include an extra crank-up which hopefully will be blessed with fine weather. Our treasurer Keith is the owner of a large industrial estate at Evercreech Junction, just south of the Bath and West site. He has kindly offered us a site for a crank-up which will take place on the 7th of October, 9am to 3pm. This will be organised by committee members Herb Gane and Brian Coles. This is the site that Ray and myself many years ago put on the first of the Mince Pie crank ups which was famous for the refreshments and the "Naafi Ladies". Details will appear in the newsletter, but if anyone has any queries they can ring me on 01749 342671. Any exhibits will be welcome, Stationary engines, tractors, cars, motorcycles, goods for sale etc, make a note of the date and just turn up.

## The Wessex Midsummer Vintage Gathering

June 16th & 17<sup>th</sup> By Eric Gay

As you all know, the Vintage Gathering at Semington did not take place and the decision to cancel the show was not a taken lightly.

The year's event would have been the biggest event ever staged by the Wessex Stationary Engine Club as organised by the Gathering sub committee. The team had worked their socks off to give you the members a show to remember. Just to be beaten by the rotten weather and, as you must know, we are not the only ones to suffer. But that is little comfort to my band of dedicated friends and club members that have given up countless hours of their time over the last year from the time we closed the 2011 show till Sunday the 10th June. It was after a very long discussion with the land owner and other members of the crew that we were forced to cancel the event.

But it was not the end of the work. We now were faced with the task of informing all our exhibitors, Jamie Coates in Devizes he had just over a hundred stationary engine exhibitors to contact. Jason with the fair ground rides, "The Westerners" Group, bar and catering, the Water Board, ice cream and some of the craft entries - this was my bit. Pauline and Gary contacted all the Craft entries they had, Brian down in Cheddar contacting the motor cycle entries. Gary Chambers dealt with all the Tractors, Horticultural exhibits and a great deal more as Gary had arranged a good many thing to help this year's event. Then there was Geoff in Glastonbury contacting all the commercial boys to tell them the bad news. Kim's Vikings without which no Wessex Midsummer Vintage Gathering would be complete without the blood and guts along



with the battle cries of battling Vikings. Karen at Westbury ringing round to tell all her car and military exhibitors. Well we did it and only one exhibitor turned up and he had been left a message but unfortunately this he did not get, so the team did pretty well.

I would like to take this opportunity to thank my fellow sub-committee members for all the hard work and dedication they all put in to making the show the largest we never had. I was touched by all those Club members that rang me to say how sorry they were after all the work put in to the event, and thanking me for taking the brave decision to call a halt to this year show.

Yes, we have spent money on this event but very little and mostly on assets that will be used in future years.

Yes, I am still going to start organising the show for next year so if you want to join our happy band give me a ring. So to Pauline & Gary, Karen, Brian Verrall, Geoff Davis, Gary Chambers, Pete & Sue Gear for taking trade entries, to Don, Mike, & Linda and to Gordon Gully for the loan of his pick up and all his help with putting up the sings around the Melksham Bypass.

Last but by no means least Isabelle Compton from Bradford -on-Avon. Isabelle worked all year to get us five live bands to perform over the weekend this was a task on its own but not content with all that this entails (one band coming back from a European tour yes just for US! Then she went chasing raffle prizes from local companies, shops and supermarkets so to Isabelle thank you so very much I hope that I can persuade you to do it all again in 2013.

So to you all (and I just hope I have not missed anyone out) **My sincere Thanks to every one of you for all your hard work**, and et hope for better luck in 2013.

### Meeting report – “My life on the River Severn”

*By Eric Gay*

Our speaker for the evening of April 30th was Chris Witts, with a talk and film of his life on the river Severn. Chris started his talk by telling us that in all that in all his working life on the Severn he had never seen it with so little water> Well that was till two days before he came to us, for on that evening he drove through Tewksbury only to find that the river had broken its banks.

I never knew that the river served as a reservoir for over six million people, I be glad I don't live up the<sup>y</sup> by the river as all the times I have passed by it it don't look none too clean. I s'pose they do clean it up a bit with some oh that modern tecmacology stuff to make it safe to drink.

Now, I did not know that the Severn rose in Wales, and back before I were a boy (that were before the last ice age) the river did flow

the other way and went to the Atlantic. It starts from a lake in Wales and all along its length it has probes sunk into the river to measure the amount of water flowing.

In the early days when the river first became a commercial waterway, barges were pulled by gangs of men, oh blessed day some clever devil invented the steam engine, and the traffic on the river increased. Many of the barges carried loads of 150 tons plus.

Chris started work on the river at the age of 16 working most of his life on oil tankers, sailing from Wales to oil terminals at Sharpness. The river has been a commercial water way for a great many years but guess what? the government wants to take away the commercial rights so the river will not have to be maintained as a navigational water way. Well, would you believe it just something else that will be left to go to rack and ruin in our fair country, Tiss time fer a revolution so who do want to join I in the starting the revolution, names on the back of a ten pound note so as we can get started.

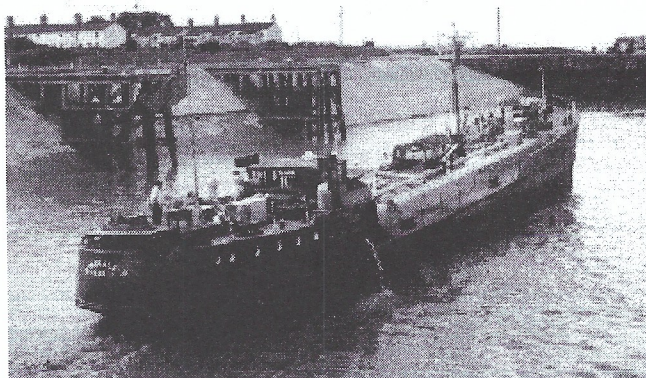
Well, that's a short insight into the River Severn and I know all those that attended the meeting had a very enjoyable evening.

### Stolen Caravan

*By Eric Gay*

Luck was not with us this year. The Wessex Midsummer Vintage Gathering had been offered a very nice Caravan to use as show office and public address control, but a week before we were due to collect and pay for the caravan some low life stole the caravan! Not only this, but the lady also had a garden shed near by and the thieving so & so's broke into this and stole her garden tools as well. So if you know anyone in the area of Norton St. Philip that has acquired a caravan recently perhaps it is the one we should have.

How I hope that the police catch the people responsible and if anyone should hear of a good caravan going for a song please please let me know.



The Winsdale H on which Chris served.