



**An Association for Retired Professional Engineers**

# **NEWSLETTER      August 2012**

## **PROGRAMME OF EVENTS    2012 - 2013**

|                              |                                  |   |
|------------------------------|----------------------------------|---|
| <b>Tuesday</b>               | <b>11<sup>th</sup> September</b> | <b>Visit 14.30 to High Salvington Windmill</b>  |
| <b>Thursday</b>              | <b>16<sup>th</sup> September</b> | <b>Coffee - at Spotted Cow, Angmering</b>   |
| <b>Tuesday</b>               | <b>18<sup>th</sup> September</b> | <b>AGM and Talk, Field Place, Worthing,<br/>Jetliners – Why do they look alike?</b>                                     |
| <b>Thursday</b>              | <b>30<sup>th</sup> September</b> | <b>Coffee - with Partners the Swallows Return, Worthing</b>   |
| <b>Tuesday</b>               | <b>9<sup>th</sup> October</b>    | <b>Talk, Field Place, Worthing, “Brighton Power Station Installed<br/>Plant 1954 - 1978.”</b>                           |
| <b>Thursday</b>              | <b>18<sup>th</sup> October</b>   | <b>Coffee - at Spotted Cow, Angmering</b>   |
| <b>Thursday</b>              | <b>25<sup>th</sup> October</b>   | <b>Coffee - with Partners the Swallows Return, Worthing</b>   |
| <b>Tuesday</b>               | <b>13<sup>th</sup> November</b>  | <b>Talk, Field Place, Worthing, Cooch Memorial Lecture: “The<br/>Mary Rose”</b>   |
| <b>Thursday</b>              | <b>15<sup>th</sup> November</b>  | <b>Coffee - at Spotted Cow, Angmering</b>   |
| <b>Wednesday</b>             | <b>28<sup>th</sup> November</b>  | <b>Outing: 13.00, Tangmere Military Aviation Museum</b>   |
| <b>Thursday</b>              | <b>29<sup>th</sup> November</b>  | <b>Coffee - with Partners the Swallows Return, Worthing</b>   |
| <b>Tuesday</b>               | <b>11<sup>th</sup> December</b>  | <b>Talk, Field Place, Worthing, “The Butterly Company 1792 to 2009<br/>– The rise and fall of an industrial giant.”</b> |
| <b>Thursday<br/>Worthing</b> | <b>13<sup>th</sup> December</b>  | <b>RCEA Christmas Lunch, 12.00 for 12.30 Windsor Hotel,</b>   |
| <b>Thursday</b>              | <b>20<sup>th</sup> December</b>  | <b>Coffee - at Spotted Cow, Angmering</b>   |
| <b>Thursday</b>              | <b>27<sup>th</sup> December</b>  | <b>Coffee - with Partners the Swallows Return, Worthing</b>   |
| <b>Tuesday</b>               | <b>8<sup>th</sup> January</b>    | <b>Talk, Field Place, Worthing, “Cecil Pashley - Pioneer aviator and<br/>joint founder of Shoreham Airport.”</b>        |

|                  |                                 |  |
|------------------|---------------------------------|--|
| <b>Thursday</b>  | <b>17<sup>th</sup> January</b>  | <b>Coffee - at Spotted Cow, Angmering</b>                                    |
| <b>Thursday</b>  | <b>31<sup>st</sup> January</b>  | <b>Coffee - with Partners the Swallows Return, Worthing</b>                  |
| <b>Tuesday</b>   | <b>12<sup>th</sup> February</b> | <b>Talk, Field Place, Worthing, "Capturing the sun - the thermal story."</b> |
| <b>Thursday</b>  | <b>21<sup>st</sup> February</b> | <b>Coffee - at Spotted Cow, Angmering</b>                                    |
| <b>Thursday</b>  | <b>28<sup>th</sup> February</b> | <b>Coffee - with Partners the Swallows Return, Worthing</b>                  |
| <b>Tuesday</b>   | <b>12<sup>th</sup> March</b>    | <b>Talk, to be announced, Field Place, Worthing,</b>                         |
| <b>Thursday</b>  | <b>14<sup>th</sup> March</b>    | <b>Lunch at Northbrook College, 12.00 for 12.30, date to be confirmed</b>    |
| <b>Thursday</b>  | <b>21<sup>st</sup> March</b>    | <b>Coffee - at Spotted Cow, Angmering</b>                                    |
| <b>Thursday</b>  | <b>28<sup>th</sup> March</b>    | <b>Coffee - with Partners the Swallows Return, Worthing</b>                  |
| <b>Wednesday</b> | <b>9<sup>th</sup> April</b>     | <b>Visit, to be announced</b>  |
| <b>Thursday</b>  | <b>18<sup>th</sup> April</b>    | <b>Coffee - at Spotted Cow, Angmering</b>                                    |
| <b>Thursday</b>  | <b>25<sup>th</sup> April</b>    | <b>Coffee - with Partners the Swallows Return, Worthing</b>                  |
| <b>Thursday</b>  | <b>16<sup>th</sup> May</b>      | <b>Coffee - at Spotted Cow, Angmering</b>                                    |
| <b>Wednesday</b> | <b>22<sup>nd</sup> May</b>      | <b>Outing: 14.00, St Mary's House and Garden, Bramber</b>                    |
| <b>Thursday</b>  | <b>30<sup>th</sup> May</b>      | <b>Coffee - with Partners the Swallows Return, Worthing</b>                  |
| <b>Wednesday</b> | <b>19 June</b>                  | <b>Outing, 12:00 – 15:00, Pub Lunch and Skittles, Henfield</b>               |
| <b>Thursday</b>  | <b>20<sup>th</sup> June</b>     | <b>Coffee - at Spotted Cow, Angmering</b>                                    |
| <b>Thursday</b>  | <b>27<sup>th</sup> June</b>     | <b>Coffee - with Partners the Swallows Return, Worthing</b>                  |
| <b>Wednesday</b> | <b>July</b>                     | <b>Outing: to be arranged</b>  |
| <b>Thursday</b>  | <b>18<sup>th</sup> July</b>     | <b>Coffee - at Spotted Cow, Angmering</b>                                    |
| <b>Thursday</b>  | <b>25<sup>th</sup> July</b>     | <b>Coffee - with Partners the Swallows Return, Worthing</b>                  |
| <b>Thursday</b>  | <b>15<sup>th</sup> August</b>   | <b>Coffee - at Spotted Cow, Angmering</b>                                    |
| <b>Thursday</b>  | <b>29<sup>th</sup> August</b>   | <b>Coffee - with Partners the Swallows Return, Worthing</b>                  |

All Talks and Meetings will commence at 2.30 pm and be held in the Chichester Room, Field Place, Worthing, unless another venue or time is indicated.

Timings for visits and outings will be as printed in the detailed description of the activity.

Coffee mornings commence at 10.30 a.m.

## **Website for the RCEA**

For latest information, log into [www.rceasussex.org.uk](http://www.rceasussex.org.uk)

## Membership

### Subscriptions 2012/2013

These are due on 1<sup>st</sup> October; can you please send your cheque for £12 to the Hon.. Treasurer, J H Underwood, 168 Alinora Crescent, Goring by Sea, BN12 4HW  
(Reply slip at end of newsletter.)

### New Members

G.C. Harris, BSc (Eng), MIET, C.Eng  
25 Friar Road, Brighton, West Sussex, BN1 6NG  
Geoff & Jean 01273556008 gch100@ntlworld.com  
LSI design, Special purpose instrumentation, flight simulator visuals, Information Technology  
*Interests* : Singing, Shooting clays, Walking, Travel, motoring, photography, DIY

### RCEA Insurance.

Members need to be aware that the insurance policy that the Association holds is solely for the protection for the assets and liabilities for the Association as an entity. The policy does not provide cover for personal injury or loss to individual members. Members therefore attend any of the Association's events at their own risk, although under some circumstances there may be some cover from the insurance arrangements of the venue owner.

### IET Connect - The IET Benevolent Fund

*(The following information may be of interest to IEE/IET members and past members. Similar arrangements exist for several of the other Engineering Institutions.)*

IET Connect is for past and present members of the Institution of Engineering and Technology and their dependants. It offers advice, support and financial assistance in times of need.

Confidential services include:

- Free Legal helpline (includes employment, personal, family and consumer law)
- Redundancy support - legal advice, short term financial assistance
- Individual outplacement if unemployed to help increase success in the jobs market (sessions include face-to-face coaching to identify suitable career options and on-line support)
- State Benefits Advice
- Financial assistance for a wide range of purposes including emergency needs, essential household items, care costs, disability equipment and independence at home
- Someone to talk to and a listening ear
- Signposting to other useful organizations and welfare specialists

If you are an IET member and need to get in touch, or you know of a retired member or dependant who might need a little help, please contact the IET Connect Helpline:

0845 685 0685 020 7344 5498 (Monday to Friday 9.30am – 5.30pm)

Email [ietconnect@theiet.org](mailto:ietconnect@theiet.org) Visit [www.ietconnect.org](http://www.ietconnect.org)

If anyone approaches the IET, who does not qualify for their help they would do their best to signpost them to the most appropriate organization that could help.

## **Brief Detail – Talks, Outings and other activities September – December**

### **Visit:**

**High Salvington Tuesday 11<sup>th</sup> September 14:30**

#### **Visit to High Salvington Windmill**

A guided tour of High Salvington Windmill. A working post mill dating from approximately 1750. The mill has been extensively restored and restarted milling in 1991. The Trust have promised us that they will have the mill turning if the wind conditions are sufficient and if they are really good they will demonstrate milling.

Cost £3:00 per head includes a cup of tea and a cake in the cafe at the end of the visit.

30 members maximum. Booking Form to Richard Norton by 3rd September

High Salvington Windmill, Furze Road, High Salvington, Worthing  
West Sussex, BN13 3BP

### **AGM followed by Talk.**

**Worthing Tuesday 18<sup>th</sup> September 14:30**

#### **Talk, “Jetliners – Why do they look alike?”**

Mr Ken Wheeler RCEA

Ken will unravel a story of bewildering technological complexity and mind boggling sums of money expended in developing jetliners.

### **Talk.**

**Worthing Tuesday 9<sup>th</sup> October 14:30**

#### **“Brighton Power Station Installed Plant 1954 - 1978.”**

Ray Parsons RCEA

Ray will cover the axial and radial turbines, retort stoker, chain grate and pulverised fuel boilers.

### **Talk.**

**Worthing Tuesday 13<sup>th</sup> November 14:30**

#### **Cooch Memorial Lecture: “The Mary Rose”**

Mr Trevor Sapey, Mary Rose Trust

Trevor will detail the discovery, raising and preservation of the Mary Rose and look at life aboard a Tudor warship. The discovery, raising and preservation of the Mary Rose has vastly increased our knowledge of life in sixteenth century England as well as knowledge of ships at that time. Trevor Sapey will give a PowerPoint presentation of the history, sinking and the raising. He will then discuss clothing before handing round many artefacts to describe life on board through the eyes of the cook, gunner, navigator and barber surgeon.

**Venue: The Barn, Field Place,**

### **Outing.**

**Tangmere Wednesday 28<sup>th</sup> November 13.00 .**

#### **Tangmere Military Aviation Museum.**

Tangmere Military Aviation Museum is situated in a corner of the old RAF Tangmere airfield, famed for its illustrious service from 1916 through to the post-war years. It was opened by a group of aviation enthusiasts in 1982 to promote public awareness of the United Kingdom’s military aviation heritage, educate present and future generations in military aviation and serve as a memorial to airmen and airwomen who gave their lives in the service of this country. The Museum is home to an impressive display of historic aircraft and a unique collection of aviation memorabilia stretching from the First World War through to the Cold War. Amongst the many attractions, are numerous interactive displays and several aircraft simulators for visitors to experience. The museum opens at 10:00am and closes at 4:30pm

The Museum's cafeteria, otherwise the 'NAAFI' after the 'Navy, Army and Air Force Institute', serves a selection of hot and cold lunches, sandwiches, cakes and a wide range of snacks, plus fairly traded coffees and teas, available to eat in or take away. PLEASE NOTE THAT THE NAAFI DOES NOT HAVE CARD PAYMENT FACILITIES.

We will be met on arrival and be given an introduction to the museum and a talk and tour of the aircraft which lasts about 45minutes. The plan is therefore to meet at 1:00pm, have the talk and aircraft tour, afterwards we are free to explore the remainder of the museum on our own.

For those planning to use the NAAFI the museum uses a labelling system for all visitors who have paid. Members can use the NAAFI, until the rest of the group arrives, then all will be issued with a label.

Cost : £6:00 per person

Full visit details will be supplied to attendees nearer the date.

**Location**

Tangmere, Nr Chichester, West Sussex, PO20 2ES.

Tel 01243 790090

[www.tangmere\\_museum.org.uk](http://www.tangmere_museum.org.uk)

Contact: Randall Keir 01903 785952 or email [randallkeir@btinternet.com](mailto:randallkeir@btinternet.com)

**Talk.**

**Worthing Tuesday 11<sup>th</sup> December 14:30**

**“The Butterly Company 1792 to 2009 – The rise and fall of an industrial giant.”**

Mr Gwyllim Roberts RCEA

Gwyllim will chart the rise and fall of the Butterly Company, whose projects included 'old' Vauxhall Bridge, St Pancras Station and the Spinnaker Tower Portsmouth.

**Christmas Lunch**

**Worthing Thursday 13<sup>th</sup> December. 12.00 for 12.30**

**RCEA Christmas Lunch, . Windsor Hotel, Worthing**

Following the highly successful 2011 Xmas Lunch held at the Windsor Hotel we will be holding our next lunch there again. The menu is as below and early booking is advised due to the limit of numbers catered for.

Applications should be received by 30<sup>th</sup> November 2012 to ensure places. The cost this year is held at last year at £25 per person..

“Resident's Only” type tickets can be obtained at reception if hotel parking is full.

Handicap parking can be arranged by including car registration number with booking application.

**Lunch Menu:**

Roasted Root Vegetable Soup, with cumin and thyme  
Spicy melon curls with honey and cinnamon yoghurt  
Pan fried fishcakes set on rocket salad and citrus flavoured salsa  
\*\*\*\*\*

Roast Sussex Turkey and honey roasted ham With bacon wrapped apricot stuffing and Cumberland chipolata  
Pork Escalope Coated in fresh sage crumb and finished with a lemon sauce  
Fillet of Salmon set on a creamed leek fricassee  
Winter vegetable and cheddar oat crumble (V)  
All served with seasonal vegetables  
\*\*\*\*\*

Christmas pudding with brandy sauce  
Mango Parfait with passion fruit sauce  
Chocolate and Raspberry mousse with chocolate chip cookie  
\*\*\*\*\*

Coffee Served with a Baileys Chocolate Truffle

## REPORTS

### **Visit: Bluebell Railway Carriage and Wagon Works and preserved Mechanical Signal Box 15<sup>th</sup> May 2012.**

A party of 31 members, ladies and visitors enjoyed a visit to the Carriage and Wagon Works and the preserved mechanical signal box of the Bluebell Railway, both located at Horsted Keynes. Most of the party started the visit by having a tasty lunch in the main restaurant at Sheffield Park Station.

After lunch we joined together to catch the 1 pm train to Horsted Keynes Station. Even the bluebells were in bloom on the embankments !

Horsted Keynes Station is used a lot by film and TV companies for location shots of old-time railways. On arrival we split into two groups to visit the venues in turn. At the Works our guide was a Chartered Engineer who has been a volunteer there for many years.

In the works, three 19<sup>th</sup> century carriages were being rebuilt. They comprise wooden bodies which are completely stripped and rotten timber replaced before re-upholstering and painting to return to service. The body of one of the three had been recovered from a farm where it had been used as a pigsty, but it was to be a “marriage” as a longer under-frame from a wagon had been shortened in the loco works to receive it. We also saw under repair a 1920’s Pullman Car which had suffered timber rot on its western-weather- side and an all steel Bulleid carriage from the 1950’s.

At the signal box, the Signaller on duty, a retired British Rail signaller, explained in detail the lever and bell communication systems. The second group to visit the box were fortunate in that a train went through whilst we were there.

At the end of the visit, most of the party retired to the Refreshment Room to enjoy a cup of tea, shelter from a tropical rain storm and await the train back to Sheffield Park.

The consensus was that we had had a worthwhile and instructive visit.

Richard Norton (Photographs by David Jones)







**Outing:**

**Sussex Wildlife Trust, Henfield. Wednesday 20<sup>th</sup> June**

13 Members and wives visited the Sussex Wildlife Trust at Woods Mill in Henfield. The weather was perfect with wall to wall sunshine.

Mike Russell, the training and education officer hosted the event which started with a talk from him on the work of the Trust in Sussex. Alf Simpson, a warden at a neighbouring reserve gave a fascinating talk on his experiences with the Trust over many years. He followed this by showing us various moths that he had caught under UV light the previous night.

After a welcome cup of coffee or tea with biscuits we had a guided tour of the reserve. To watch a pair of buzzards enjoying themselves as they rose on the thermals rounded off an interesting and enjoyable outing.

Colin Pilling

**Visit:**

**Brookhurst Wood MBT Waste Processing Depot, Horsham. Wednesday 18<sup>th</sup> July**

This facility is still under construction and our party of 20 members and guests were able to both learn of the background to this project via a presentation by the operator, BIFFA, and to tour the extensive site afterwards where the majority of the facilities are already in place.

When complete in 2013 (a 6 month commissioning period commences late 2012), the facility will process all of the 'black bag' household waste generated in West Sussex, which currently goes to landfill. Processing of household 'recyclables' such as garden waste, paper, plastics etc. is currently handled by another waste processing company, Viridor, from various sites around Sussex.

We learnt that collection and disposal of household waste is a major problem: in 2010/2011 some 390,000 tonnes of household waste was generated in West Sussex, of which some 44% was recycled, leaving 56%, or 218,000 tonnes, for landfill (picture opposite). Whilst landfill may have been an accepted method of disposal in the past, Government are clearly intent on making this method prohibitively



expensive in the future through the landfill tax, which is currently £64/tonne, increasing by £8/tonne annually. Furthermore they (the Government) have set a ceiling for West Sussex's landfill of 130,000 tonnes by 2020.

It is clear from the above that the proportion of West Sussex's household waste ending up as landfill has to be drastically reduced – hence the development of the Brookhurst Wood treatment facility. In 2010, BIFFA was awarded a 25 year contract worth £1.2bn to build a treatment facility adjacent to the existing landfill site.

Once delivered to site, the waste will be shredded to reduce particle size and then mechanically separated into a number of material streams. **Metals** will be removed by magnetic and eddy current methods. Organics (mainly food waste) will be sent to one of the 6 Anaerobic Digesters which will both generate **Biogas** as feedstock for an on-site CHP unit, and ultimately produce a compost-like material, **Digestate**, intended to cover the adjacent landfill site. **Refuse Derived Fuel** (mainly paper and plastics) will be sent off site, possibly to an incinerator. **Residues** (what is left) will go to landfill. There will also be some waste material, **Rejects**, which cannot be processed.

Although the exact constituency of the incoming waste (and therefore the output streams) will vary, BIFFA currently anticipate that the output stream will consist of **Metals** 2.4%, **Biogas** 5.2%, **Refuse Derived Fuel** 41.9%, **Residues** 27%, **Digestate** 18.4% and **Rejects** at 5.5%. This will represent a considerable reduction in the amount of 'black bag' waste destined for landfill.



During our tour of the site we saw the Anaerobic Digesters, where organic waste is held, and the main processing hall (pictured opposite) where incoming waste is put through one of 3 shredders before mechanical sorting.

Air pressure in this building will be maintained slightly below atmospheric, the exhausted air being chemically cleaned before exiting to reduce odours. We also toured the visitor centre which will be used to provide local schools, colleges and interested groups with lectures and educational material about the facility. Visitors will also be able to see processing taking place in the main hall from a viewing gallery reached through an underground tunnel some 100m long. The picture opposite shows our party inside the partly completed tunnel.







At the end of our site tour we were fortunate to meet Dagger about to go on shift. Dagger is one of 4 peregrine falcons who 'patrol' the landfill site to repel gulls. Dagger gave us an impressive flying display, much to the annoyance of the gulls, and the picture opposite shows our group with Brian, Dagger's handler (unfortunately Dagger was camera shy).

Overall this was an extremely interesting visit, thanks to the efforts of BIFFA, and many of our members have asked if we could return once the facility is in full operation.

Malcolm Hind

**SUBSCRIPTION REQUEST: (2012/2013)**

**To: Treasurer, J H Underwood, 168 Alinora Crescent, Goring by Sea, BN12 4HW**

**Full name:**..... **Telephone No** .....  
**Address**..... **e-mail**.....  
.....  
.....

I enclose a cheque made payable to RCEA for £.....(£12.00)

**Please return this reply slip by 1<sup>st</sup> October 2012 (Separate cheque please)**

.....

**REPLY SLIP 1**

**To: Richard Norton, 106 Wallace Avenue, Goring by Sea, West Sussex, BN12 4SW**  
Tel: 01903 242204 or email rwnorton@iee.org

Can you please reserve me ..... places to attend the **Visit, 14:30, Tuesday 11<sup>th</sup> September to High Salvington Windmill**

**Full Name**..... **Telephone No** .....  
**Address**..... **e-mail**.....  
.....  
..... **Number of Persons**.....

I enclose a cheque made payable to RCEA for £.....**£3.00 per person**  
**(Separate cheque for this event please)**

**Applications by 3<sup>rd</sup> September**

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**REPLY SLIP 2**

**To: R Keir, 16 Shirley Close, Rustington, West Sussex BN24 5PD**  
*Tel 01903 785952, or email randallkeir@btinternet.com*

Can you please reserve me ..... places to attend the **Outing, 13.00, Wednesday 28<sup>th</sup> November to Tangmere Military Aviation Museum**

**Name:**.....(Block capitals)  
**Address**.....  
.....  
.....

Telephone Number  
E mail address.....

I enclose a cheque made payable to RCEA for £.....(£6.00 per person )

**((Separate cheque for this event please))**

**Applications by 1<sup>st</sup> November 2012**

.....

**INTENTIONALLY**

**BLANK**

REPLY SLIP 3

To: **Brian Buckroyd, 6 Fosters Close, East Preston, BN16 2TL Telephone 01903 784926**

Can you please reserve me ..... places to attend **the Christmas Lunch at the Windsor Hotel, Worthing on Thursday 13<sup>th</sup> December. 12.00 for 12.30.**

**Full name:**.....(Block capitals)

**Address**.....

.....

.....

Telephone Number.....Name of guest/s .....

E mail address.....

I enclose a cheque made payable to RCEA for **£.....(£25.00) per person**  
**(Separate cheque for this event please)**

**Applications by 30<sup>th</sup> November**

**Menu choices**

| Name 1 | Name 2 | Menu choice  |
|--------|--------|--|
|        |        |  |
|        |        | Roasted Root Vegetable Soup, with cumin and thyme  |
|        |        | Spicy melon curls with honey and cinnamon yoghurt  |
|        |        | Pan fried fishcakes set on rocket salad and citrus flavoured salsa                                     |
|        |        | *****  |
|        |        | Roast Sussex Turkey and honey roasted ham With bacon wrapped apricot stuffing and Cumberland chipolata |
|        |        | Pork Escalope Coated in fresh sage crumb and finished with a lemon sauce                               |
|        |        | Fillet of Salmon set on a creamed leek fricassee   |
|        |        | Winter vegetable and cheddar oat crumble (V)   |
|        |        | All served with seasonal vegetables  |
|        |        | *****  |
|        |        | Christmas pudding with brandy sauce  |
|        |        | Mango Parfait with passion fruit sauce   |
|        |        | Chocolate and Raspberry mousse with chocolate chip cookie  |

**(Please keep a note of your requests)**