



## **An Association for Retired Professional Engineers**

# **NEWSLETTER                      August 2014**

### **President's Message**

We open our new season on September 16th and start with the AGM followed by a presentation by fellow member Mike Wooldridge entitled "Meccano to email - My career in Engineering".

The AGM besides reporting on the year's events and the status of your association also gives you, our members, an opportunity to air your views as to the direction of our activities. Please don't be shy your views are important. We also need to replace two retiring committee members. Brian Buckroyd who has served the association for the past 14 years in various capacities, including 7 years as treasurer and one as president. John Harding has also decided to step down after 8 years. For the past 5 years John has been our Minutes Secretary besides organising and keeping a watchful eye over our meetings and coffee mornings. We thank both Brian and John for the contribution they have made to the associations activities.

So we require nominations for two new committee members at the AGM. For the first year you will only be expected to attend committee meetings, normally about four for the year unless, of course, you feel able and willing to undertake additional tasks. This will allow you to get a feel for how you could best contribute.

For the remainder of 2014 we have created a varied programme of presentations and visits of which, I am sure, will prove to be of great interest to all. The details and booking forms for all of these events can be found in this newsletter.

Our Christmas lunch will be at the Windsor Hotel, Worthing on December 10th. Please make a note of this date in your diary. The lunch is an ideal opportunity to meet with other members and partners in a convivial atmosphere. It again will be laid out in round tables, each seating 8 persons. Every effort is made to mix our community with at least one committee member to each table. We do this to ensure that members, especially our newest, can readily converse and acquaint themselves with each other. I do hope to see as many of you as possible to make it a truly memorable occasion.

Included with the delivery of this newsletter you will find a flyer designed to encourage recently retired engineers to visit us and consider membership. Our current membership stands at 90, we would like it to be around 100 and this flyer is intended to help with recruitment so please, if you are attending events attended by likely candidates, offer them a flyer or leave copies in a prominent position where they are likely to attract attention. Further copies can be obtained from Glyn Mathias or any committee member.

Additionally our website is, finally, to be modernised. Work has started and is expected to be completed by the New Year. It is being designed to give a better view of what we do and to make our programme readily visible especially with respect to up and coming events.

David Thomas

## **PROGRAMME OF EVENTS 2014-2015**

<b>Tuesday</b>	<b>16<sup>th</sup> September</b>	<b>AGM and Talk, Field Place, Worthing. Meccano to e mail – my career in engineering.</b>
<b>Thursday</b>	<b>18<sup>th</sup> September</b>	<b>Coffee - at Spotted Cow, Angmering</b>
<b>Thursday</b>	<b>25<sup>th</sup> September</b>	<b>Coffee - with Partners at Highdown Vineyard, Littlehampton Road, Ferring, BN14 6PG</b>
<b>Tuesday</b>	<b>30<sup>th</sup> September</b>	<b>Visit, Tangmere Military Aviation Museum – Behind the Scenes</b>
<b>Tuesday</b>	<b>14<sup>th</sup> October</b>	<b>Talk, The History of London Bridge and the Demolition and Reconstruction of the present Bridge.</b>
<b>Thursday</b>	<b>16<sup>th</sup> October</b>	<b>Coffee - at Spotted Cow, Angmering</b>
<b>Thursday</b>	<b>30<sup>th</sup> October</b>	<b>Coffee - with Partners at Highdown Vineyard</b>
<b>TBA</b>	<b>November</b>	<b>Outing. Glyndebourne Backstage Tour.</b>
<b>Tuesday</b>	<b>11<sup>th</sup> November</b>	<b>Talk, Development of Flight Simulators</b>
<b>Thursday</b>	<b>20<sup>th</sup> November</b>	<b>Coffee - at Spotted Cow, Angmering</b>
<b>Thursday</b>	<b>27<sup>th</sup> November</b>	<b>Coffee - with Partners at Highdown Vineyard</b>
<b>Tuesday</b>	<b>9<sup>th</sup> December</b>	<b>Talk, Surface Roughness and Topography Measurement</b>
<b>Wednesday</b>	<b>10<sup>th</sup> December</b>	<b>R.C.E.A. Christmas Lunch, Windsor Hotel, Worthing</b>
<b>Thursday</b>	<b>18<sup>th</sup> December</b>	<b>Coffee - at Spotted Cow, Angmering</b>

## **2015**

<b>Tuesday</b>	<b>13<sup>th</sup> January</b>	<b>Talk, TBA</b>
<b>Thursday</b>	<b>15<sup>th</sup> January</b>	<b>Coffee - at Spotted Cow, Angmering</b>
<b>Thursday</b>	<b>29<sup>th</sup> January</b>	<b>Coffee - with Partners at Highdown Vineyard</b>
<b>Tuesday</b>	<b>10<sup>th</sup> February</b>	<b>Talk, Title TBA (President Schlumberger)</b>
<b>Thursday</b>	<b>19<sup>th</sup> February</b>	<b>Coffee - at Spotted Cow, Angmering</b>
<b>Thursday</b>	<b>26<sup>th</sup> February</b>	<b>Coffee - with Partners at Highdown Vineyard</b>
<b>Tuesday</b>	<b>10<sup>th</sup> March</b>	<b>Talk, TBA</b>
<b>TBC</b>	<b>March</b>	<b>Spring Lunch</b>

Thursday	19 <sup>th</sup> March	Coffee - at Spotted Cow, Angmering
Thursday	26 <sup>th</sup> March	Coffee - with Partners at Highdown Vineyard
Thursday	16 <sup>th</sup> April	Coffee - at Spotted Cow, Angmering
	30 <sup>th</sup> April	
Thursday		Coffee - with Partners at Highdown Vineyard
Thursday	21 <sup>st</sup> May	Coffee - at Spotted Cow, Angmering
Thursday	28 <sup>th</sup> May	Coffee - with Partners at Highdown Vineyard
Thursday	18 <sup>th</sup> June	Coffee - at Spotted Cow, Angmering
Thursday	25 <sup>th</sup> June	Coffee - with Partners at Highdown Vineyard
Thursday	16 <sup>th</sup> July	Coffee - at Spotted Cow, Angmering
Thursday	30 <sup>th</sup> July	Coffee - with Partners at Highdown Vineyard
Thursday	20 <sup>th</sup> August	Coffee - at Spotted Cow, Angmering
	27 <sup>th</sup> August	
Thursday		Coffee - with Partners at Highdown Vineyard

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. We are trying out Highdown Vineyard, Littlehampton Road, Ferring, BN12 6PG as a new venue. Coffee or tea, and biscuits £2.50

## Membership

### Subscriptions 2014/2015

These are due on 1<sup>st</sup> October; can you please send your cheque for £15 to the Hon. Treasurer, Tony Tompkins, 2 Badger Drive, Haywards Heath, RH16 1EP (Payment slip at end of newsletter.)

## Website for the RCEA

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

## New Members and Speakers for Talks

The RCEA needs new Members to ensure that we can continue as a thriving organisation. Please think of appropriate people you know and encourage them to join the RCEA.

We need more volunteers to give talks to us on Tuesday afternoons from September to March. Speakers from outside organisations are harder to find and often seek payments for the services. We are aware that many Members have the knowledge from their working careers to provide interesting talks. If you are willing to give a talk please let us know.

## New Member

F. Ahmed, C.Eng, MIMechE, MCIBSE

## **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.

## **Newsletter Entries**

If you would like to provide an article for inclusion in a future newsletter it would be most welcome. We are always looking for new material. As a guide an article should be prepared as a Microsoft Word document, preferably in font size 10 and font style Times New Roman but this is not essential since all text will be 'standardised and formatted' when composing the newsletter. Pictures can be included in the newsletter but are best supplied as JPEG images in their own separate files and not as part of the text. (Word documents incorporating pictures can sometimes be very large files and are often not easy to manipulate into a suitable format for the newsletter.)

## **SOUTHERN RETIRED CHARTERED ENGINEERS**

*Events are arranged by the SRCE to which our members have a standing invitation.*

*We have not received a current list of events in time for this newsletter. We hope to include a list in the next one.*

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

### **AGM and Talk.**

**Tuesday 16<sup>th</sup> September 2014, 14.30**

#### **Meccano to e mail – my career in engineering.**

Mike Wooldridge RCEA

The talk will cover Mike's career; initially with Allen West (electric motor control gear, and especially cargo handling cranes), then with the Ministry of Technology advising government departments and other public sector bodies on selecting and installing computers (novel things at the time). **Visit.**

**Tuesday 30<sup>th</sup> September 2014, 11.15 Tangmere Military Aviation Museum – Behind the Scenes** 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. For those planning to use the NAAFI the museum uses a labelling system for all visitors who have paid. **PLEASE NOTE THAT THE NAAFI DOES NOT HAVE CARD PAYMENT FACILITIES.**

*The purpose of this visit is to view those engineering areas not normally open to members of the public. This will include workshops, maintenance of key airframes, building new exhibitions/artefacts (e.g., the SE5a replica cockpit built for the 2014 WW1 start anniversary and the Lightning Simulator. There is a maximum of 20 places but depending upon numbers the tour may be repeated on Thursday 2 October.*

**Programme:** We are to meet at **11:15am** when will be split into two teams. Team 1 will undertake the engineering tour with the Team 2 exploring the museum. We will then break around 12:30pm for lunch then reconvene at 13:30pm when the Team 2 will undertake the engineering tour. Afterwards we are free to explore the remainder of the museum on our own.

**The maximum number of visitors is 20 so attendees will allocated on a first – come, first - served basis.**

**Cost:** £7:00 per person.

**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.**

**Tuesday 14<sup>th</sup> October 2014,**

**The History of London Bridge and the Demolition and Reconstruction of the present Bridge.** Frank Duggan  
RCEA

Frank was employed on London Bridge from 1968 - 1970 and will use his experience of working on site as the main part of his talk covering the demolition of the old bridge and the construction of the present London Bridge. He will cover the Design, Planning and the Construction of the new Bridge. He will also discuss the demolition of the old bridge and its reconstruction 4300 miles away in Lake Havasu City Arizona.

The site of London Bridge has a history of nearly 2000 years of river crossings from the time of the Romans to the 20th Century. Frank will also spend a little time talking about the history and fate of the various bridges which have existed on this site.

**Outing.**

**November (date and time to be confirmed)**

Glyndebourne Backstage Tour. Glyndebourne, Lewes, East Sussex, BN8 5UU.

A guided tour of the theatre, backstage, dressing rooms, rehearsal spaces and the historic Old Green Room.

Cost: £12:50 per person, including tea and coffee

Contact: Randall Keir. Reply Slip 3 is at the end of this newsletter.

There is a maximum number of 20 for the visit. Full visit details will be sent out by email once known.

**Talk.**

**Tuesday 11<sup>th</sup> November 2014, Cooch Memorial Lecture, Development of Flight Simulators**

Mr David Parkinson, ex R&D Manager, Singer, Link, Miles (SLM)

The development of the flight (and other vehicles) simulator' a talk by David Parkinson, C.Eng, FRAeS. As a newly qualified electronic engineer, David joined what was then Link-Miles in Lancing in 1972, and rose to become Director of R&D. He is now an independent consultant trading under the title Training Systems Engineering. His talk will cover early flight simulators (using wood and real manpower) up to the present day, and touching on other vehicles such as tanks and submarines. **Talk.**

**Tuesday 9<sup>th</sup> December 2014, Surface Roughness and Topography Measurement** Alistair Sharp  
RCEA

Alastair will discuss his business's move further into non-destructive testing by picking up representations for optical methods of measuring surface topologies and characterising them. He will discuss the general applications which require such measurements and the advantages and disadvantages of various methods of achieving these. Finally, he will go into some details of ordinary and exotic uses of the technologies involved.

**Christmas Lunch**

**Wednesday 10<sup>th</sup> December 2014**

**RCEA Christmas Lunch, Windsor Hotel, Windsor Road, Worthing BN11 2LX.**

The menu is as below and early booking is advised due to the limit on numbers catered for.

Applications should be received by 20<sup>th</sup> October 2014 to ensure places. The cost this year is £28 per person. Reply form is at the end of Newsletter.

'Resident' parking tickets can be obtained from reception if hotel car park is full.

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

Spiced Carrot and Lentil Soup - with roasted croutons
Potted Mushrooms – in Leek, Bacon and fresh Thyme sauce
Smoked Salmon – set on a Beetroot salad with a Horseradish dressing
*****
Roast Turkey and Honey Roasted Ham - With bacon wrapped apricot stuffing and Cumberland chipolata
Roasted Rump of Lamb - Slow cooked and set on roasted vegetable with a rosemary gravy
Salmon Fillet - Baked and served with watercress and crème fraiche sauce
Vegetable Curry (V) – Medium spiced with basmati rice, garlic naan and a mango dip.
All Served with seasonal vegetables
*****
Christmas Pudding - with brandy sauce
Warm Chocolate Brownie – with honey and ginger ice cream
Cranberry , White Chocolate and shortbread mousse

Coffee and mints

## Reports

### Outing:

#### Tuesday 8<sup>th</sup> April, Southwick House, the D-Day Wall Map Rooms and the Royal Military Police Museum

Twenty eight members and guests attended the visit to Southwick House, just north of Portsmouth. Richard Callaghan, Curator for the Royal Military Police Museum on the site gave us a conducted tour of the part of Southwick House and the D-Day War Rooms, an excellent and entertaining talk on the history and events leading up to D-Day and the months after, and concluded with an introduction to the Royal Military Police Museum located in the old stables of the house. The highlight of the visit was Richard's witty and informative talk, interspersed with anecdotes relative to the D-Day period. His presentation lasted for well over an hour and a half and then as we looked around at the exhibits and the wall map he was on hand to answer the many, many questions members wanted to raise. We were free to walk around the RMP Museum after a short explanation of what we would see and again Richard was on hand to answer our questions.

The RMP Museum traces the history of Britain's Military Police from its origins to current operations in support of the United Nations UN) and the North Atlantic Treaty Organisation (NATO). Artefacts range from Napoleonic medals to an illicit still from a Displaced Persons (DP) Camp in Hamburg. Special displays include Close Protection (CP), the role of the Special Investigation Branch (SIB) and operations in both World Wars and from 1945 onwards.

The following is an extract from The D-Day and Normandy Fellowship website, it gives an illustration of just some of the content of Richard's presentation.

For more information log on to:- [http://www.ddnf.org.uk/about/southwick\\_house.php](http://www.ddnf.org.uk/about/southwick_house.php)

### **“The Supreme Commander's Decision**

One of the most momentous decisions of the Second World War was taken in the old library at Southwick House in June 1944.

As D-Day approached, the Supreme Allied Commander, General Dwight D. Eisenhower, moved his advanced headquarters to Southwick House, which had been taken over by the Royal Navy in 1941.

The invasion of Normandy had been set for Monday, 5 June, but the weather forecast was bad, so Eisenhower ordered a 24-hour postponement. Then, later in the day, the senior meteorologist, Group Captain Stagg, announced to the senior commanders gathered in the old library at Southwick House that there would be a short interval of fine weather on Tuesday, 6 June.

The decision rested with the Supreme Commander. 'OK, let's go,' said Eisenhower. Fortunately the weather forecast proved to be correct. By the end of D-Day the Allies were ashore and successfully embarked upon 'the Great Crusade' that was to culminate in May 1945 in the unconditional surrender of Nazi Germany.

### **The Wall Map Room**

In April 1944 Admiral Ramsay, the Allied naval commander-in-chief for Operation NEPTUNE, the naval assault phase of OVERLORD, moved his headquarters to Southwick House.

To plot the progress of the invasion, a large plywood map of the English Channel, big enough to fill the entire wall of the old drawing room, had been commissioned from the firm Chad Valley Toys. In the interests of security, they were asked to construct the entire coastline of Western Europe, from Norway to the Pyrenees. The two men who brought the Wall Map to Southwick House were asked to install only one section in Ramsay's operations room – the coast of Normandy. This meant they knew the crucial secret of D-Day, so they were detained at the house until the invasion was under way.

Admiral Ramsay moved his headquarters to France in early September 1944 and activity ceased in the operations room at Southwick House. Fortunately the historical importance of the Wall Map was recognised at the end of the war. All the pins, tapes and other markers representing the invasion forces were reset to how they would have looked at the moment when the landings began on the British and Canadian beaches on D-Day. Admiral Ramsay had been killed in a plane crash in 1945, so the Wall Map was unveiled in August 1946 by Admiral Sir George Creasy, who had been his Chief of Staff for Operation NEPTUNE.

This extract, describing the scene in the Wall Map room just before D-Day, is taken from the book 'Operation Neptune' by Commander Kenneth Edwards RN, published in 1946.

“During the night of June 4th, 1944, the operations room at the battle headquarters of the Allied Naval Commander-in-Chief [Admiral Ramsay] presented an historic scene. In the long, high room at Southwick Park there were about forty people. Most of them were naval officers or Wrens plotting positions on charts and dealing with the stream of signals, which were carried in on the endless belt which came through a hole in the wall from the cypher office. There were also air liaison officers, military liaison officers, and American naval officers.

One end of the room, the walls of which were papered in white and gold, was covered by an enormous blackboard chart of the English Channel. Up and down in front of this moved a travelling step-ladder, used by the Wrens for plotting on the map the hour to hour positions of all units at sea. There were already plenty of these, for convoys had already sailed from the east and west coasts of Britain towards 'Piccadilly Circus,' while some of the blockships for the 'Gooseberry' harbours and the first tows of the 'Mulberry' harbours were already at sea. Several minesweeping flotillas were also at sea, ensuring the safe passage of the convoys. In 'Neptune' as in so many other operations, the work of the minesweepers began first and did not end until after the enemy had been decisively defeated.

In front of the big blackboard wall map, and to one side, sat the signal officer. Level with him, but near the centre of the room, sat Rear-Admiral George Creasy, Admiral Ramsay's Chief of Staff.

These two desks marked a line across the room about four yards from the wall map. That space was the 'holy of holies', reserved for the Commander-in-Chief, his immediate staff and those who operated the wall map. There Admiral Sir Bertram Ramsay spent many long hours, his quick mind tirelessly and calmly taking in the full import of every signal and every report and weighing its effect upon the problem to which he was applying all the lessons of his long experience and his tremendous singleness of purpose and moral courage.”

Southwick House remained part of the naval base, HMS Dryad, until its closure in 2004. Southwick Park is now the home of the Defence College of Policing and Guarding.”



Southwick House

(Also try <http://tourguidegirl.wordpress.com/2012/06/06/southwick-the-d-day-village/> for an interesting description of the history of the site and the D-Day story.)



**Ray Wort Outing:**

**Tuesday May13th 2014**

**Mary Rose Museum, Portsmouth Historic Dockyard Outing: Wednesday  
13<sup>th</sup> May 2014 – Mary Rose Museum.**

A party 20 members and guests visited the new Mary Rose Museum located in the Portsmouth Historic Dockyard.

The visit was split into two parts. First Mr Robert Lapraik the Deputy Chief Executive Officer (DCEO) gave an overview of the engineering challenges faced in building and operating the museum. We were then free to explore the museum at our leisure.

**Background:** The Mary Rose is the only sixteenth century warship on display anywhere in the world. The Mary Rose was built in 1510, was in service for 34 years and sank on 19<sup>th</sup> July 1545 in full view of King Henry VIII while leading the attack on a French invasion fleet during the Battle of The Solent. The final recorded crew list contained 185 soldiers, 200 mariners and 30 gunners. Only about 25 to 30 of the crew survived the sinking. Most people on board were in their late teens or early twenties

The hull was discovered in 1971 and raised in 1982 following one of the most complex marine archaeological ‘digs’ undertaken. The excavation and salvage of the Mary Rose created a milestone in the field of maritime archaeology and remains the largest underwater excavation and recovery ever undertaken in the world.

The £35 million heritage project to build the new museum and complete the current conservation programme on the ship and her contents was started in October 2010. The opening of the new museum in 2012 marked the 30<sup>th</sup> anniversary of the hull of Mary Rose being raised from the Solent in 1982.

**Engineering Challenges:** Several factors drove the main design and construction of the museum:

- The Mary Rose was contained in a temporary building that was sitting over two docks that are Grade 1 Listed.
- The Mary Rose was too fragile to be moved the museum therefore had to be built around the hull of the ship.
- The footprint of the new museum was slightly smaller than the building the ship was housed in.
- The Mary Rose is very fragile and during the build only low levels of vibration and shock could be allowed.

**Operation Challenges:**

- The hull is still in the final stages of preservation. Having been sprayed for the last 30 years with Polyethylene Glycol (PEG) to replace the water in the cellular structure of the timbers, the hull is now being air dried under tightly controlled temperature and humidity conditions.
- Air drying will continue until 2016 when the 34 year hull conservation programme will be completed
- The hull has to be continually monitored in three dimensions for movement. This is achieved using a scanning laser system.
- Many artefacts have to be kept within environmentally controlled display cabinets to prevent them disintegrating.

**Museum Tour:** The new museum finally reunites the ship with the many thousands of the 19,000 artefacts raised from the wreck. Each object in the new museum – from human fleas to giant guns - was raised from the seabed and carefully conserved through a groundbreaking process that is still ongoing.

The building takes the form of a finely crafted wooden ‘jewellery box’ with the hull at its centre and galleries running the length of the ship, each at a level corresponding to a deck level on the ship. Artefacts are displayed in such a way to provide an insight into what these decks would have looked like moments before the ship sank.

The Mary Rose Museum website [www.maryrose.org](http://www.maryrose.org) contains a wealth of information.

**R Keir**

August 2014

**Outing:**

**Monday June 9<sup>th</sup> 2014 Worthing Wurlitzer Organ**

The report on this outing is held over until the next Newsletter.

**Outing:**

**Wednesday July 30<sup>th</sup> 2014 South Downs Planetarium, Chichester**

A party of 26 members, wives and friends made their way to the South Downs Planetarium to learn about it and to see a typical "show".

We were greeted by one of the volunteers who guided us to the Richard Bunker Hall where we were invited to help ourselves to a cup of coffee and take a seat. As soon as we were all seated he gave us an introduction to the planetarium. He explained how it came to be in Chichester, including the people who were behind the project, how long it took and how it now operates as a planetarium and science centre. The building is on the site of an old farm building within the grounds of the Chichester High Schools, the "projector" came from a planetarium in Northern Ireland and the seats from a British Airways Jumbo Jet. One of the supporters of the project was of course Sir Patrick Moore. Most mornings in term time are reserved for school groups, which is why we had to defer our outing until the school holidays.

After the talk we moved into the Planetarium's auditorium where the show was to be seen and we could try out the First Class Jumbo Seats. Our host was Dr John Mason who told us a little more about the projector which is optical and not digital and why what we were about to see is so different to what we are used to seeing when we look at the sky. The show started with us looking at the sky over Chichester and showed how little we can see because of light (and atmospheric) pollution. We then moved to being north of the South Downs and saw how many more stars were visible to the naked eye. The "show" lasted more than an hour and covered constellations, super novas etc. etc. and finished with questions and answers.

We then moved back into the multi-media lecture room (Bunker Hall) where our volunteer explained that after the show the children are given a presentation on a science based topic and then asked do further research on it back at school. As an example he gave us the presentation he usually gives to the school children which was the first landing on the moon. This was quite interesting and took us all back to the sixties. For the children (and not us) the research question was "How did they get back to Earth?".

The outing finished with an opportunity to visit the Sales Kiosk to pick up literature or make a purchase.

A thoroughly good outing, very good value and worth the wait to get a morning slot. **Glyn**

August 2014

SUBSCRIPTION REQUEST: (2014/2015)

To: Treasurer, A J Tompkins, 2 Badger Drive, Haywards Heath, RH16 1EP

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

I enclose a cheque made payable to RCEA for £..... (£15.00)  
Please return this form by 1st October 2014 (Separate cheque please)

REPLY SLIP 1

To: Randall Keir, 16, Shirley Close, Rustington, West Sussex. BN16 2EG  
Telephone 01903 785952 or email [randallkeir@btinternet.com](mailto:randallkeir@btinternet.com)

Please reserve me ..... places to attend the **Visit to Tangmere Military Aviation Museum on Tuesday 30th September commencing at 11:15 am.**

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

Address.....

.....

.....

.....

Phone No..... e-mail address .....

Cheque enclosed for £7:00 per person, made out to the RCEA.

**Applications by 15th September 2014**

REPLY SLIP 2

To: Randall Keir, 16, Shirley Close, Rustington, West Sussex. BN16 2EG  
Telephone 01903 785952 or email [randallkeir@btinternet.com](mailto:randallkeir@btinternet.com)

Please reserve me ..... places to attend the **Outing in November to Glyndebourne.**

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

Address.....

.....

.....

.....

Phone No..... e-mail address .....

Cheque enclosed for £..... at £12:50 per person, made out to the RCEA.

**Applications by 10th October 2014**

August 2014

# Intentionally Blank

August 2014

REPLY SLIP 3

To: Brenda Whitmell, 12, Brook Way, Lancing, BN15 8DG email [bcwhitmell@uwclub.net](mailto:bcwhitmell@uwclub.net)

Can you please reserve me ..... places for the Christmas Lunch at the Windsor Hotel, Worthing on Wednesday 10<sup>th</sup> December. 12.00 for 12.30.

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

**Address**.....

.....

.....

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

E mail address.....

Car registration number for disabled parking .....

I enclose a cheque made payable to RCEA for £.....(**£28.00**) per person  
(Separate cheque for this event please)

**Applications by 20<sup>th</sup> October**

If possible, I would like to be seated with.....

**Menu choices**

Name 1	Name 2	Menu choice
		Spiced Carrot and Lentil Soup - with roasted croutons
		Potted Mushrooms – in Leek, Bacon and fresh Thyme sauce
		Smoked Salmon – set on a Beetroot salad with a Horseradish dressing
		*****
		Roast Turkey and Honey Roasted Ham - With bacon wrapped apricot stuffing and Cumberland chipolata
		Roasted Rump of Lamb - Slow cooked and set on roasted vegetable with a rosemary gravy
		Salmon Fillet - Baked and served with watercress and crème fraiche sauce
		Vegetable Curry (V) – Medium spiced with basmati rice, garlic naan and a mango dip.
		*****
		Christmas Pudding with brandy sauce
		Warm Chocolate Brownie – with honey and ginger ice cream
		Cranberry , White Chocolate and shortbread mousse

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

August 2014

