



RCEA (SUSSEX)

An Association for Retired Professional Engineers

NEWSLETTER

August 2020

President's message

Welcome to the August Newsletter.

I hope you have safely come through the last six months. It has been an unprecedented time.

From a personal perspective, I have been fortunate in getting back to some normality. First was to start playing golf regularly, then having trips out by train with the bonus of £10 off the cost of lunch, and now playing badminton again.

I am sure you will be hoping that we can restart our talks as soon as possible, within the government guidelines.

As you can read in this newsletter we have already had a successful and well supported visit to the Hovercraft Museum in early August and have also been able to hold a coffee morning at the Spotted Cow in July and August as advised in Mike's emails. The next coffee morning at the Spotted Cow is on 17th September. The Swallows Return have declined to host our coffee mornings with partners until the Government guidelines are eased.

The committee met on 6th August and agreed to cancel the September 15th meeting and defer the AGM. We planned to hold the October meeting subject to Glyn and I meeting the Field Place manager to discuss the Covid19 arrangements.

As a result of this meeting, which was held on 21st August, we have been able to move the October and December meetings to the Pavilion where there is much more space than the Chichester Room. November's meeting was already booked for the Pavilion.

We will use the side entrance to enter the Pavilion and exit from the front entrance. We can wait outside in the wedding garden before entering to 'network'. Pavilion staff will arrange for alternate 3 and 4 seating per row to give 2 metres sideways spacing and 1+ metres forward spacing. This will enable us to accommodate approximately 40+ members and visitors.

Face coverings will be required at the meetings unless government guidelines change. We will sign in as usual and will take a phone contact from visitors for tracing. Although we have not ordered our usual refreshments, they can be provided if we decide nearer the time that we do want them.

I hope that you will be able to get to future meetings in the knowledge that we are following the guidelines. We will hold the AGM in the New Year.

Derek Webb

August 2020

PROGRAMME OF EVENTS September 2020 – January 2021

17 th Sep	Thursday	Coffee – at Spotted Cow, Angmering
13 th Oct	Tuesday	Talk: HS1 Crossrail and HS2 - A Traction Power Perspective, Louise Moore, Vanda Engineering Ltd – please use the attached reply slip
15 th Oct	Thursday	Coffee – at Spotted Cow, Angmering
10 th Nov	Tuesday	Cooch Memorial Lecture - NovaSAR - A New Concept in Earth Observation Satellites, Martin Cohen, Airbus
19 th Nov	Thursday	Coffee – at Spotted Cow, Angmering
2 nd Dec	Wednesday	Christmas Lunch at Windsor hotel, Worthing Date to be confirmed - no further details yet available.
8 th Dec	Tuesday	Talk: The History and Technology of Submarines - by a Nuclear Submariner, Nigel Manger
17 th Dec	Thursday	Coffee – at Spotted Cow, Angmering
12 th Jan	Tuesday	Talk: Converting 160 tons of WW2 concrete into a 6 bedroom floating home, Mike Wooldridge. Note: We may hold the AGM with this talk.

All Talks and Meetings will commence at 2.30 pm and all of the above talks will be held in the Pavilion at Field Place in Worthing (rather than the Chichester room where we normally hold meetings). This will ensure that we can maintain social distancing as required by H M Government.

Coffee mornings commence at 10.30 am.

We apologise for only being able to publish a short list of our forthcoming events. This is simply due to the difficulties we now face in booking speakers and visits far ahead. As you know we sometimes have to cancel/rearrange talks and visits, often at short notice. We do try and inform our members of late changes to our programme by email but suggest that members should increasingly rely upon our website for up to date details of events.

Subscriptions

Subscriptions are normally due on 1 October each year, but this year we are delaying them until January 2021 at which time we will review the situation and either request them at that time or further delay them if we are unable to offer you a substantive programme of talks and visits. In any event please rest assured that your membership will be maintained, and you need take no action until you receive an email requesting you to renew your subscription.

Mike Wooldridge Membership secretary
Tony Tomkins Secretary and Treasurer

Website of the RCEA

Our website, www.rceasussex.org.uk carries the very latest information on all of our events.

New Members and Speakers for Talks

The RCEA needs new members and speakers to ensure that we can continue as a thriving organisation. Please think of appropriate people you know and encourage them to come along to our talks and hopefully join the RCEA.

We also need more speakers to give talks to us on Tuesday afternoons from September to March. 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. Speakers from outside organisations are increasingly harder to find and often seek payment for their services.

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 attend 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 very welcome as we are always looking for new material in addition to reports on previous talks and visits/outings. From feedback from our members we know that the newsletter is particularly appreciated by those who are no longer able to get to our meetings and visits, so if you are able to contribute in this way it would be much appreciated. Articles should preferably be Microsoft Word documents, although we can usually convert both text and pictures (even photographs) into a suitable format. Accompanying pictures are best supplied as separate files which will be embedded within the text during editing.

Brief Detail – Talks, Outings and other activities September 2020 – January 2021

Talk

Tuesday 13th October 2020 – HS1, Crossrail and HS2 - A Traction Power Perspective

Louise Moore, CEng MIET Vanda Engineering Ltd

From the UK's first high-speed railway to its latest and a bit in between!

This presentation will consider the new railways that have been (or will be) constructed over the last 20 years in the UK. It will cover the challenges encountered and solutions developed in terms of traction power for:

- High Speed 1 – which has now been operation for 15 years
- Crossrail – which is currently in the integrated testing and commissioning phase
- High Speed 2 – currently in the tendering stage for Railway Systems

An overview of each project will be given including high level scope and key requirements and then go on to discuss the various stages of a major project using traction power examples from the three projects.

The stages discussed will include scope development, through procurement, design, installation, testing, commissioning and handover.

Our speaker, Louise Moore, will be giving this presentation from an Engineer's viewpoint.

As this is our first talk under the new Social Distancing guidance from HM Government, we would like to have an indication of numbers likely to attend for planning purposes. The President's message contains details of the arrangements we have made at Field Place for the talk. Consequently, we would be very grateful if you could complete the reply slip at the end of the newsletter and return to us by 30/9/2020.

Talk (Cooch Memorial Lecture)

Tuesday 10th November 2020 – NovaSAR update – Launch campaign and in-orbit performance

Martin Cohen – Airbus Ltd

NovaSAR is a low-cost UK space radar developed for Earth Observation.

Our speaker will present his subject in a way that will give those unfamiliar with spacecraft design a picture of what can be achieved.

He will initially introduce his subject by describing the orbit of this satellite and the reasons why it was chosen. The launch campaign for the satellite that took place in September 2018, culminating in a successful launch will then be described.

Sample imagery from the mission will be shown illustrating the unique capabilities of Synthetic Aperture Radar, the flexibility of the operating modes of NovaSAR, and a taste of the types of applications that are enabled by the mission.

Our speaker is a popular lecturer on this subject and is willing to present a further talk on this topic, subject to demand, where he will go into much greater technical detail. We can discuss this during question time.

Talk

Tuesday 8th December 2022 – The History and Technology of Submarines – by a Nuclear Submariner

Nigel Manger

Our speaker will cover the history and technical developments of submarines from the 18th century to the present day.

He will provide us with an insight into the operating and living conditions on board, often for long periods of time.

Nigel will compare diesel submarines with modern nuclear-powered submarines and discuss the impact of the Cold War on technical innovations and the increase in the number of Russian submarines.

Talk

Tuesday 12th January 2021 – Converting 160 tons of WW2 floating concrete into a 6 bedroomed luxury houseboat

Mike Wooldridge (member)

A freehold mooring plus an associated houseboat came up for sale by auction in Shoreham Harbour (west arm) in 1997. After arranging a family loan, the speaker and his wife bought said lot as an investment and also an interesting project.

The talk will cover the assessment of the existing houseboat and the process of finding a replacement which took the form of a WW2 concrete barge capable of carrying 200 tons of petrol. The barge was moored in Torpoint Marina and had to be towed up the English Channel to its new home. Finding a suitable towing vessel, arranging insurance, opening the seized-up Shoreham footbridge, waiting for the right tide and weather window, and creating a suitable mooring system will all be covered.

Then followed the process of getting planning permission (since proven to be unnecessary), building a new top deck cabin, cutting port holes, casting window frames, fitting out and connecting to all mains utilities. The boat is now occupied by the speaker's youngest daughter and family.

The talk will also cover research, which showed that the barge was one of 200 built by the same engineers (Mouchel) and constructors (Marley, Wates) who also built part of the WW2 Mulberry Harbours.

Reports

Visit

Tuesday 4th August 2020 – Hovercraft Museum

A party of 13 members and 5 guests made a visit to The Hovercraft Museum on the Daedalus site at Lee-On-Solent on Tuesday 4th August.

On arrival we assembled in the grounds next to the Princess Anne SRN4 and had the attached photograph taken.

As can be seen from the picture, the visit was made on a very sunny warm day – a welcome relief from recent lock-down restrictions.





From here our guide led us into the engineering hangar where a large number of Hovercraft of all shapes and sizes are kept, repaired, and maintained.

Detailed explanations of each model were given by our guide.

A move outdoors enabled us to look at some military craft used by the Royal Navy and Royal Marines for ship to shore operations.

We then were taken aboard the Princess Anne SR.N4 (Saunders-Roe Nautical 4) which was the largest commercial hovercraft ever built and for over 30 years crossed the channel from Dover to Calais carrying 60 cars and over 400 passengers, and to this day holds the record for the fastest channel crossing at 22 minutes.



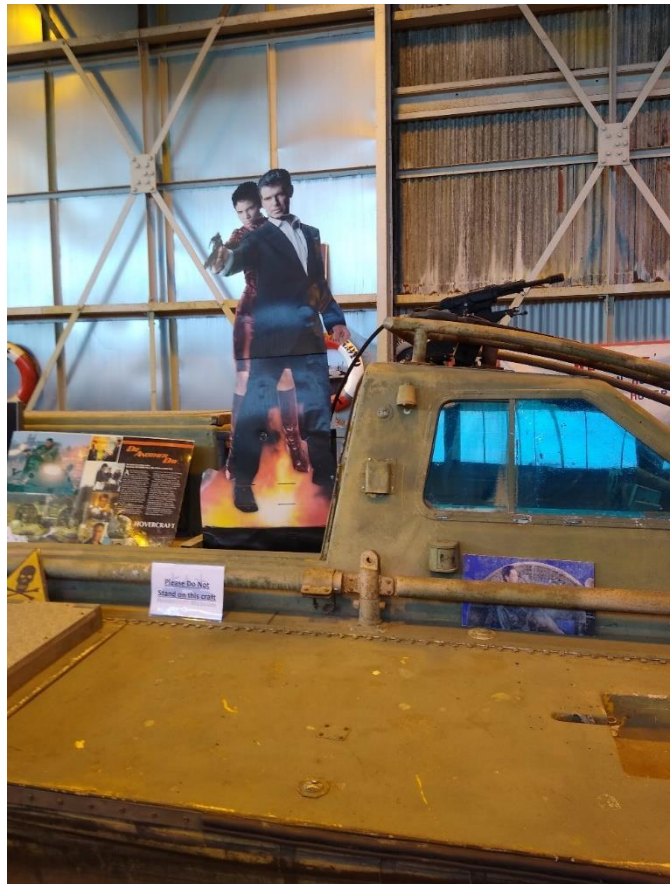


Here we see a view inside the hovercraft showing the extensive passenger seating.

Into another hangar and more craft to see. Here we learnt more about the invention of the hovercraft by Christopher Cockerell. We found out that his design of a vacuum cleaner and 2 tin cans in the mid 1950's lead to the machine we know today.

In this hangar we also came across the two actual hovercraft used in the James Bond film 'Die Another Day' the Osprey 5S and the Slingsby SAH 2200 with information on the filming.

A visit to the gift shop and a welcome cup of refreshment brought this informative and interesting 2 hour visit finally to an end.



George Woollard

REPLY SLIP

Talk - Tuesday 13th October 2020 – HS1, Crossrail and HS2 - A Traction Power Perspective

This is our first talk under the new Social Distancing guidance from HM Government and we would like to have an indication of numbers likely to attend for planning purposes. This will also simplify booking in at the Pavilions.

To: Malcolm Hind, 7 The Castle, Horsham, RH12 5PX or email: malcolmhind@msn.com

I/We would like to attend the above talk.

Member name

Member address

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Member telephone (mobile preferred):

Member email address:

Number of guests

(If bringing a guest please include their full name, address and contact details in the blank space below)

Applications by Wednesday 30th September 2020 please

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