



# NEWSLETTER

**RETIRED CHARTERED  
ENGINEERS ASSOCIATION  
WORTHING**

**Hon. Secretary: S. Oliver, Elphin, North Drive, Angmering, BN16 4JJ ☎ 01903 787116**

## FORTHCOMING EVENTS

27th Dec	Thursday	Coffee - with Partners at Highdown Towers
2nd Jan	Wednesday	Coffee - at Albion Inn, 110 Church Road, Hove
8th Jan	Tuesday	<b>Talk</b> - "Gas Turbines, past present and future" by Prof.A.B. Turner, Sussex University, at 2.30 p.m. Chichester room, Field Place
15th Jan	Tuesday	<b>Visit</b> – Worthing Civics at 2.30. p.m. Town Hall, Worthing (see page 3)
17th Jan	Thursday	Coffee - at The Spotted Cow, Angmering
31st Jan	Thursday	Coffee - with Partners at Beach Hotel, Worthing
6th Feb	Wednesday	Coffee - at Albion Inn, 110 Church Road, Hove
12th Feb	Tuesday	<b>Talk</b> - "The role of the Airworthiness Surveyor" by G. Rourke, guest, at 2.30 p.m. Chichester room, Field Place
19h Feb	Tuesday	<b>Visit</b> - Ford water treatment plant. (see page 3)
21st Feb	Thursday	Coffee - at The Spotted Cow, Angmering
28th Feb	Thursday	Coffee - with Partners at Beach Hotel, Worthing
6th Mar	Wednesday	Coffee - at Albion Inn, 110 Church Road, Hove
11th Mar	Monday	Copy date for next Newsletter
12th Mar	Tuesday	<b>Talk</b> - "The Channel Tunnel rail link" by M. Gambriell, Guest, at 2.30 p.m. Chichester room, Field Place
14th Mar	Thursday	<b>Lunch</b> at Northbrook College catering school 12 for 12.30 p.m. (see page 3)
19th Mar	Tuesday	<b>Visit</b> – Ford Motor Co., assembly plant, Southampton (see page 6)
21st Mar	Thursday	Coffee - at The Spotted Cow, Angmering
28th Mar	Thursday	Coffee - with Partners at Beach Hotel, Worthing
Every	Monday	Coffee at <b>Denton Lounge, Worthing Pier</b>

Coffee mornings commence at 10.30 a.m., except at The Beach, which is from 10.45 a.m.

## Membership

We welcome the following new members:

<p>2001 <b>TOWNSEND, R.P.</b>, B.Sc.(Eng), M.I.E.E., A.C.G.I. <i>58 Hill Brow, Hove, BN3 6DD (01273 551423)</i> <b>Reginald</b> 1940-46 Army 1948-66 North Eastern Electric Supply Co. 1966-72 Merz &amp; McLellan consulting engineers - Iran &amp; UK 1974-85 Ewbank Preece 1985-88 Consulting Engineer <i>Interests: Cine &amp; Video photography</i></p>	<p>2001 <b>BUCKLAND, E.C.N.</b>, F.I.E.E., F.Inst.M.C. <i>5 Maines Farm Road, Upper Beeding, Steyning, BN44 3TH (01903 815770)</i> <b>Jim and Audrey</b> 1946-55 The Rank Organisation, Dev. Eng., motion picture sound equipment 1955-60 M.B Metals, Chief Res. Eng., military &amp; industrial nuclear systems 1960-80 K.D.G. Instruments, Eng. Dir., Industrial, military &amp; nuclear instrumentation 1980-88 B.S. Instruments, M.D., gas flow metrology <i>Interests: The Sussex theatre organ trust</i></p>
--	--

Will new members please check the above data and inform the Hon. Sec. of any errors or omissions so that the information can be incorporated correctly into next session's handbook.

**Gas turbines, past, present and future** - talk by Prof. A.B. Turner, University of Sussex, in the Chichester room at Field Place, on 8th January, 2002 at 2.30 p.m.

In order that the historical development of the gas turbine can be understood, the talk will first describe the basic operating principles of this type of engine, together with some elementary theory. Then, the history of the gas turbine from the earliest times will be presented: from Hero's reaction turbine of 120BC, through the early trials of shaft power gas turbines during the late industrial revolution to the appearance of competent jet engines during the Second World War.

Frank Whittle and Hans von O'Hain were jointly credited with the invention of the jet engine but recent evidence throws doubt on the von O'Hain claim. Their parallel stories will be told in the historical context of the war. The far-reaching effects of their pioneering efforts on the eventual development of the military jet engine and the civil turbofan in Europe and the USA will be discussed.

The current position of the gas turbine in its various roles will be briefly outlined, from very large gas turbines of over 250 MW for electrical power generation, pure jet engines for

supersonic aircraft of Mach 3 or so, civil aero turbofan engines with thrusts of over 50 tonnes force to small high speed turbo generators of only 50 kW.

Some modern theoretical aspects of jet engines and industrial gas turbines will be briefly presented with reference to the various issues of thermodynamic constraints, materials limitations and the environmental pressures that exist.

Finally, probable and possible future developments of the gas turbine for powering aircraft, large-scale industrial power generation and small-scale distributed cogeneration will be discussed

**Visit to Worthing Civics**, Town Hall, Chapel Road, Worthing on Tuesday, 15th January, 2002 at 2.30 p.m.

This visit is a special invitation from the Mayor and Consort, Cllr Mrs Valerie Sutton and Honorary Alderman Stan Moore. The talk will be in the Council Chamber, re Mayor's robes etc, followed by a drinks reception in the Parlour. Meet at the Town Hall.

Please fill in the application form and return to D. Matthews (see page 7). The numbers are limited to 20. Cost £2.50 per person which will be donated to the Mayor's charity. Ladies are welcome.



President D. Matthews and the Mayor of Worthing Cllr Mrs Valerie Sutton

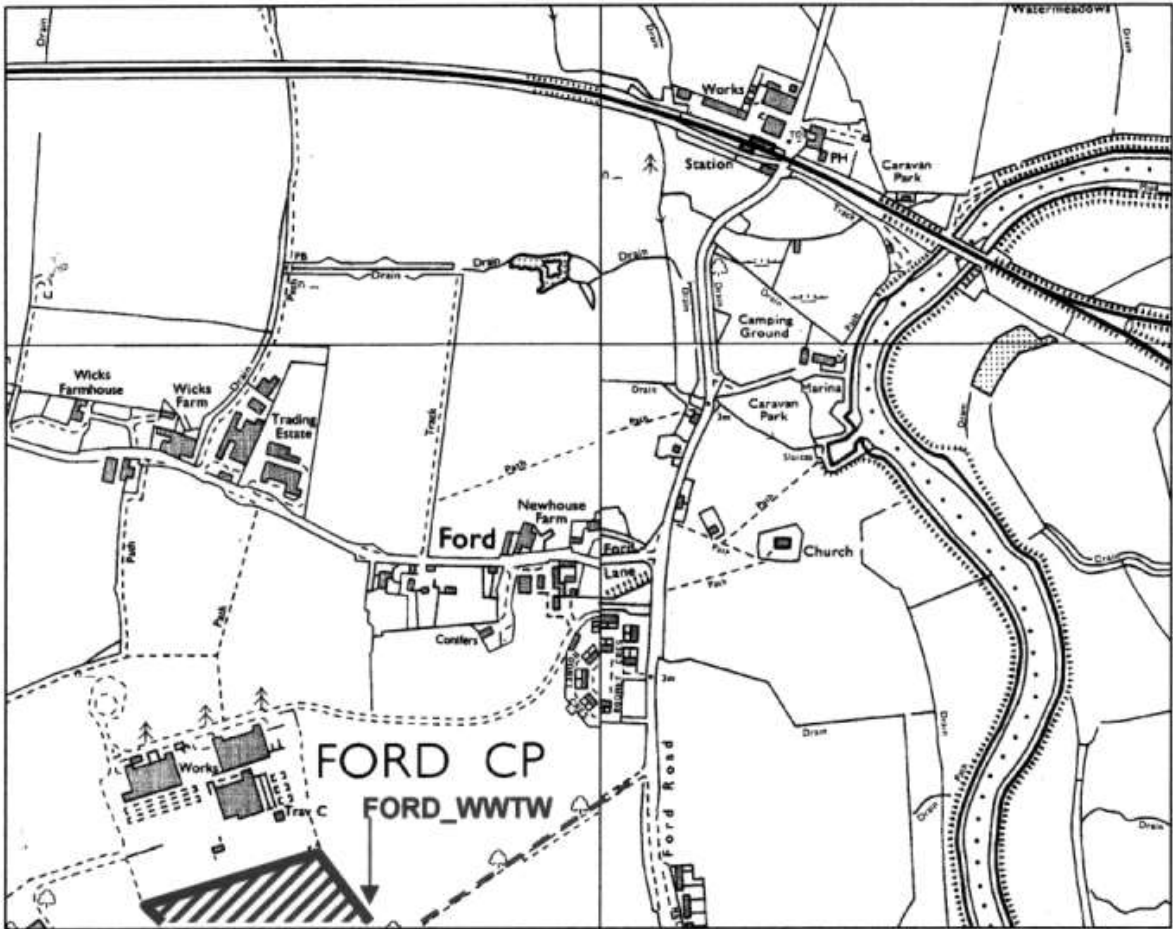
**The role of the airworthiness surveyor** - Talk by G. Rourke, Civil Aviation Authority, in the Chichester room at Field Place, 2.30. p.m. on 12th February, 2002.

Mr. Graham Rourke is the deputy manager of the Applications and Certification Section of the Civil Aviation Authority based at Gatwick Airport. He will speak about aircraft

maintenance schedules, certificate of airworthiness, monitoring schedules of equipment and general civil aviation safety topics.

**Visit to Ford water treatment plant**, Ford, on Tuesday, 19th February, 2002 at 2.00 p.m.

The entrance is off Ford Road with the start of the access road by a pole-mounted full size Hawker Hunter jet fighter. See map over. The visit is limited to 30 persons. Please send your application forms (page 7) to Dave Matthews by 12<sup>th</sup> February, 2002

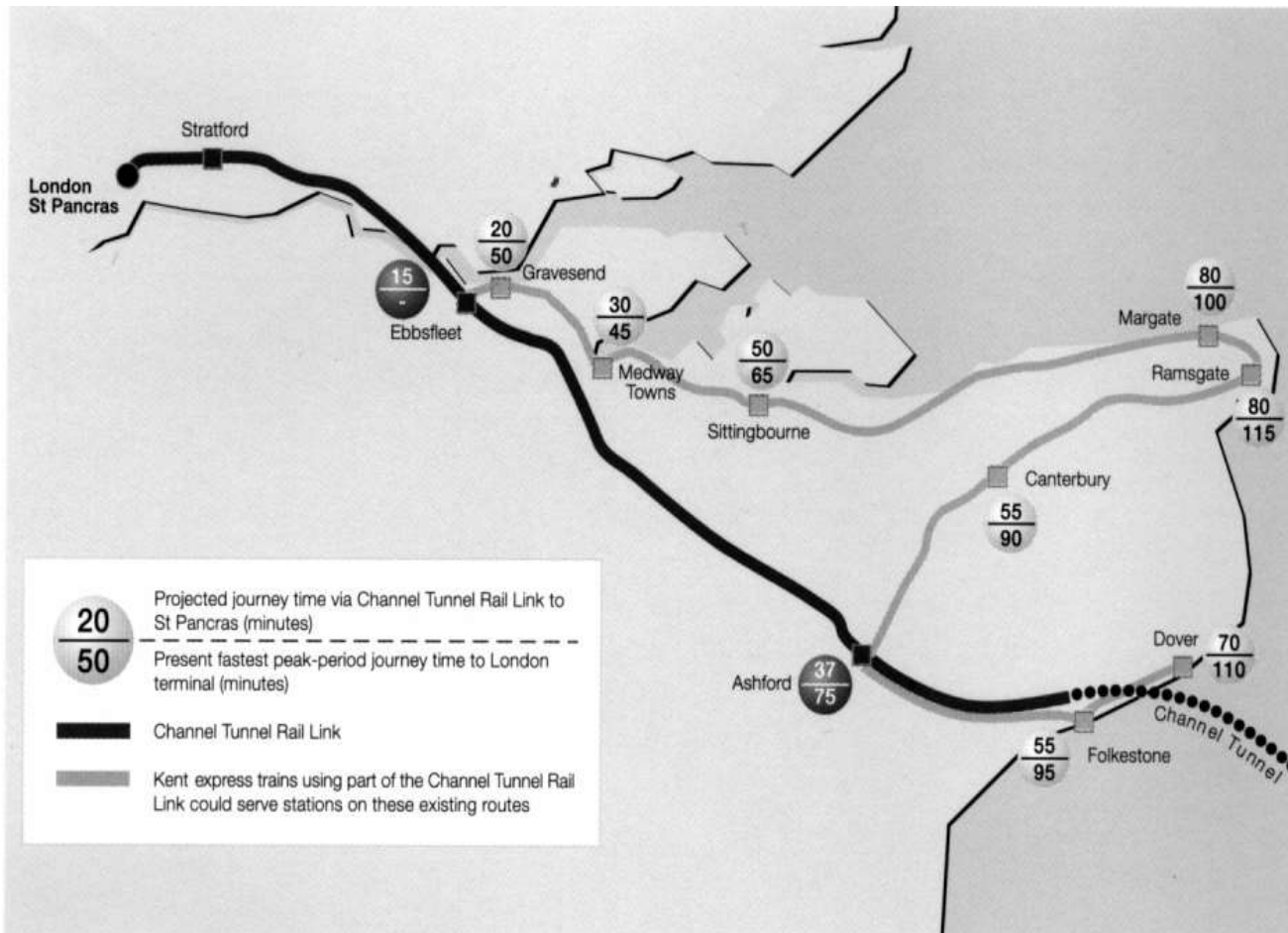


FORD AERODROME  
OFF FORD ROAD  
FORD  
ARUNDEL  
WEST SUSSEX  
  
BN18 0HY  
  
01903 734417 PHONE  
01903 732401 FAX



**The Channel Tunnel Rail Link.** Talk by B. Gambrill, guest, in the Chichester room at Field Place, on 12th March, 2002 at 2.30 p.m.

The Channel Tunnel Rail Link is being built by London & Continental Railways Ltd in association with Railtrack. It will be Britain's first major new railway for over a century - a highspeed line running for 109km (68 miles) between the Channel Tunnel and St Pancras station in London. The project was authorised by Parliament with the passage of the Channel Tunnel Rail Link Act, 1996. The new railway will be opened in two sections - initially from the Channel Tunnel to Fawkham Junction on the existing Railtrack network in north Kent, and subsequently beneath the Thames and through east London to St Pancras.



**Lunch at Northbrook College, Worthing** - Thursday, 14th March, 2002 at 12.00 for 12.30.

The college is situated on the Littlehampton Road at the roundabout with Goring Street, which leads from Goring-by-Sea railway station.

The cost of the lunch is £8 per person for the three-course meal and coffee. Drinks are available at extra cost.

The numbers are limited to 50 persons. Please return the reply slip, on page 7, with payment, to Dave Matthews, by Monday 4th March, 2002.

## **Visit to Ford Motor Co., assembly plant**, Southampton, on Tuesday, 19th March, 2002 at 2.00 p.m.

Due to the events of September 11<sup>th</sup>, the assembly plant is closed to visitors. This ban could be lifted at any time, therefore members who would like to make the visit should fill in the application form on page 7 and return it to D. Matthews. Applicants will be notified as to the details of the visit and where to meet for a pub lunch beforehand. The works are accessed from Junction 5 of the M27 (Southampton airport exit)

## **50<sup>th</sup> Anniversary Dinner** – Wednesday, 21st November, 2001

76 members and guests sat down to dinner at the Beach Hotel, Worthing



Presidents from left to right: H.B. Calverley, K.J. Wheeler, J.L. Fowler, D.M. Lewis, C.W. Newberry, D. Matthews, L.D. Bannister, Mayor of Worthing, S.M. Butler, E. Markwell, S.R. Renew, T.J. Morgan.  
*Photograph courtesy Peter Mills*

**Cooch Memorial Lecture “20 million Therms under the Sea”** by Ken Reid, Asset Commercial Manager Transco, held at the Worthing Library Lecture Theatre, on Friday, 24th November, 2001 at 2.30 p.m.

A tape cassette recording of this excellent lecture was made by the kind services of Eric Roubaud. The tape and a set of copies of the accompanying slides can be had on loan from the Hon. Sec.

To: D. Matthews, 9 Larchfield close, Aldwick, Bognor Regis, PO21 4RB Tel: 01243 263898

I wish to participate in the visit to **Worthing Town Hall** on Tues, 15th Jan 2002 at 2.30 p.m.

Full Name .....(Block capitals)

Address .....

Phone No.....Name of Partner.....

I enclose a cheque payable to RCEA for ..... ( £2.50 per person)

**Applications by 7th January, 2002**

---

---

To: D. Matthews, 9 Larchfield close, Aldwick, Bognor Regis, PO21 4RB Tel: 01243 263898

I wish to participate in the visit to **Ford Treatment Plant** on Tues, 19th Feb, 2002 at 2.00 p.m.

Full Name .....(Block capitals)

Address .....

Phone No.....

**Applications by 11th February, 2001**

---

---

To: D. Matthews, 9 Larchfield close, Aldwick, Bognor Regis, PO21 4RB Tel: 01243 263898

I wish to participate in the Lunch at **Northbrook college** on Thursday, 14th March 2002 at 12 for 12.30 p.m.

Full Name .....(Block capitals)

Address .....

**Applications by 4th March, 2002**

Phone No..... My partner will be.....



I enclose a cheque payable to RCEA for.....( £8 per person)

=====

To: D. Matthews, 9 Larchfield close, Aldwick, Bognor Regis, PO21 4RB      Tel: 01243 263898

I wish to participate in the visit to **Ford Motor Co**, S'ton on Tues, 19th Mar, 2002 at 2.00 p.m.

Full Name .....(Block capitals)

Address .....

.....

Phone No.....

**Applications by 4th March, 2002**

I would like to participate in the pub lunch. Number of persons.....