

RETIRED CHARTERED
ENGINEERS' CLUB
EXETER

30
YEARS
1986 - 2016

R C E C
1986 - 2016

Commemorating
30 Years

INTRODUCTION

THE CLUB FOUNDER

PRESIDENTS and CHAIRMEN

CLUB HISTORY

ACTIVITIES

PROJECTS

THE FUTURE

INTRODUCTION

How does our Club, whose members are all of retirement age, continue to thrive for more than a quarter of a century?

Mainly because it provides a welcome opportunity for members to meet with like-minded colleagues who have achieved something worthwhile during their working careers. Experiences are exchanged, frequently across different engineering disciplines, between individuals who have made major contributions to the quality of life enjoyed, and sometimes taken for granted, by many in today's world.

A thriving Club can exist only with the efforts of those who work on the management committees. We have been fortunate to have had thirty different groups of engineers who willingly took on the many tasks essential for this on-going success.

The formal objectives of the Club are to provide a social venue for retired chartered engineers together with the means of keeping in touch with achievements and current developments in the engineering profession. Equally important are the further aims of encouraging young people to enter the engineering profession and co-operating with those responsible for their education and training.

To commemorate its Thirty Year Anniversary, the following pages record the Club's history and list the many activities performed by members in achieving its objectives.

It is an earnest wish that, in the future, there will be a similar booklet produced to celebrate the Golden Anniversary!

THE CLUB FOUNDER

Robert (Bob) Flux was born in July 1915 and received his engineering training at Portsmouth Technical College before joining the Metropolitan Vickers Co., Manchester. In 1946, he was recruited by the Central Electricity Board as a transformer engineer and a member of a team of plant design specialists. Following CEB's nationalisation in 1947, he was appointed transformer plant specialist at BEA headquarters where he worked until 1952 on major electrical reinforcement programmes and the early development of the 275kV network.

Moving to Edinburgh to join Bruce Peebles & Co. Ltd. he spent the remainder of his career there becoming export director responsible for promoting and marketing heavy duty transformers and generators. Bob travelled widely and was an excellent ambassador for British design and manufacture. A good raconteur, he “retired” in 1980 and travelled throughout the USA imparting his extensive experience and knowledge to clients and colleagues there.

As an enthusiastic member of The Institution of Electrical Engineers he was awarded a Fellowship and in 1976, became Chairman of the Power Division.

Bob settled in Exmouth where his enthusiasm for engineering and the company of his fellow engineers led him to establish the Retired Chartered Engineers' Club. Sadly, towards the end of his life his health deteriorated and he died on 10th July 2002.

In his honour the Club awards an annual “Robert Flux Memorial Prize” for the most effective oral presentation from a graduating student of the engineering class of the University of Exeter. It is a fitting tribute to the man who influenced and helped many, as well as contributing so much to his profession.

PRESIDENTS and CHAIRMEN

PRESIDENTS

- 1988 - 91 Robert Flux FIEE
- 1991 - 95 Reg Heynes FICE
- 1995 - 98 Harold Ewington MIEE
- 1998 - 00 Harold Masding FIEE
- 2000 - 02 Ernest Clear-Hill BSc (Eng), DIC, MRAeS, FBSCS
- 2002 - 04 Hugh Holman MA, MRAeS
- 2004 - 07 Michael Kavanagh BSc (Eng), FICE
- 2007 - 10 Geoffrey Banks FICE
- 2010 - 13 John Knivett BSc (Eng), MIMechE
- 2013 - 15 Bert Deboo MIMechE, MIEE
- 2015 - Neil Macaulay MIET, FCIBSE, Hon.MILE, FIEEIE

CHAIRMEN

- 1986 - 88 Robert Flux FIEE
- 1988 - 89 Walter Steedman FICE
- 1989 - 91 Reg Heynes FICE
- 1991 - 93 Harold Ewington MIEE
- 1993 - 95 Frank Heslop MIMechE
- 1995 - 97 Ernest Clear-Hill BSc (Eng), DIC, MRAeS, FBSCS
- 1997 - 99 Michael Kavanagh BSc (Eng), FICE
- 1999 - 01 Dr Geoffrey Pope CB, FREng, DIC, FRAeS
- 2001 - 03 Geoffrey Banks FICE
- 2003 - 05 Neil Macaulay MIET, FCIBSE, Hon.MILE, FIEEIE
- 2005 - 07 John Conolly BSc (Eng), FRINA
- 2007 - 09 Bert Deboo MIMechE, MIEE
- 2009 - 11 David Sly FICE, FCIHT
- 2011 - 13 Don Arthur MSc MIMechE, MIEE
- 2013 - 15 Stuart Yerrell MA, CPhys, MinstP, BCIBSE, FCIHT
- 2013 - Garth Flint BSc, ACGI, MICE, FASCE

CLUB HISTORY

In 1986 Bob Flux - retired electrical engineer - submitted an article to the Journal of the Institution of Electrical Engineers inquiring if any members of that organisation would be interested in forming a Club in Exeter specifically for retired chartered engineers; later a similar article was submitted to the Institution of Mechanical Engineers' Journal.

The overwhelming response surprised him and an initial meeting was arranged, taking place in the South West Electricity Board Conference Centre.

On 9th June 1986 this inaugural meeting established the main objectives of the Club then elected a chairman and a management committee. At that time, the joining fee was set at £3.00 with an annual subscription of £2.00. The first membership list comprised 36 electrical, 5 civil and 11 mechanical engineers.

In 1988 Bob was elected the Club's first president.

Social aspects of the Club were initiated with regular lunches and events and the president, with his wife, hosted monthly coffee mornings at the White Hart Hotel, Exeter.

By 1990 the membership had increased to 80 and because of this, and other reasons, the venue for meetings was changed to the Exeter Golf & Country Club.

Membership numbers continued to increase so in 1995 the meeting place was changed again, this time to the ISCA Centre, Exeter.

By 1996 the membership number had reached one hundred and has remained substantially at this level since that date.

In 1997 the Club's formal objectives were augmented to accommodate the aims of co-operating with the Engineering Faculty at the University of Exeter and encouraging young people to enter the engineering profession.

During 2006, perhaps influenced by the Club's professional standing in the community, the Exeter City Council approved the city's Coat of Arms being used on Club badges, regalia and documents.

A Club website was developed in July 2006 containing two areas – one for the general public and one for members only. Records and programmes are included and members find it a valuable source of information. (www.rcec.co.uk)

As an indication of how the Club has attracted members from a very wide range of engineering backgrounds the current members are from the various disciplines; electrical 35%, civil 25%, mechanical 30%, with chemical, gas, aeronautical, naval, medical, and others combining for the remaining 10%.

There is little doubt that engineers of the future will have to be trained not only in traditional disciplines but also in emerging inter-disciplinary ones. These engineers will make major contributions to society in increasingly important sectors such as the environment, energy, communications, health and medical care.

It is hoped sincerely that Club members of the future will have met these huge challenges with success and great personal satisfaction in their chosen careers.

ACTIVITIES

The main focus of the Club's activities is the monthly meeting where, during the past thirty years, members have been privileged to listen to nearly four hundred talks on a wide variety of subjects and projects with which the speakers have been personally involved - both in the UK and overseas.

Additionally, Club-arranged visits to many sites and businesses have been both interesting and informative, helping to keep members in touch with the latest engineering techniques and manufacturing processes.

Club activities enable members to learn not only about work being undertaken in a variety of disciplines, but also to keep abreast of new developments and to observe what the future holds for the profession.

Many other clubs for retired engineers exist, with varying objectives, but the RCEC was particularly pleased to be associated with the formation of 'The Professional Engineers' Club, Bristol. Encouraged by the success of our own Heritage project its members created a Trail in the centre of Bristol with plaques commemorating famous engineers associated with that city.

Another link was established with a Retired Engineers' Club in Adelaide, South Australia and it is hoped that this will lead to an exchange of ideas and information.

Early in the Club's life local TV Companies were offered the knowledge and experience of members when news items of a technical nature required some expert opinions to be broadcast. This initiative was welcomed by those agencies.

In addition to projects and activities organised by the Club, individual members have been involved, on a personal level, with other engineering endeavours in the South-west.

For a number of years members assisted with an annual inter-school competition, promoted by the Institution of Mechanical Engineers, which is designed to challenge the skills of the pupils and encourage an interest in engineering.

The Devon Education Business Partnership supports a youth education programme with 'STEM' Ambassadors [Science, Technology, Engineering and Mathematics]. Club members participated in this initiative, visiting schools to guide and help students on specific projects and to assist Career Advisors on job opportunities within the engineering profession.

Members are constantly alert to matters that impinge on the engineering profession and to any proposals that may affect its status. They support both projects aimed at preserving historical structures and artefacts and restoration schemes.

Action by individual members to persuade English Heritage to “List”, and thus preserve, the remaining structure of one of Brunel's pumping stations in Totnes was successful; the building is to be incorporated in an area redevelopment scheme.

One member fought a battle for two years with Network Rail for the removal of the walkways and ladders from the portals of Brunel's Royal Albert Bridge, Plymouth which, for many years, had obscured the iconic dedication “I K BRUNEL ENGINEER 1859”. The campaign finally met with success in 2006 when the offending structures were removed and the occasion marked by a ceremony at the Devonport end of the bridge. The dedication to Brunel is now clearly visible for all to see.

The Club also supported a scheme that Devon County Council promoted in 2006 to mark the bicentenary of Brunel's birth. This included the publication of a commemorative booklet and a public exhibition of the original drawings of the Exeter to Newton Abbot railway line.

A proposal by the University of Exeter to close its Chemistry Faculty was very strongly opposed; members lobbied vigorously for the authorities to reconsider this retrograde step that would affect students' technical education.

In addition to engineering-based activities there is also an important social side to the Club. Monthly coffee mornings took place at the White Hart Hotel, Exeter for many years and were well supported, providing an opportunity for members and guests to meet informally.

For a variety of reasons, these coffee mornings have been replaced by informal public-house lunches which are held every two months or so.

Other social functions are organised on an informal ad-hoc basis and have included Christmas lunches, an evening boat trip along the Exeter Canal, garden parties at a member's home, the Tumbling Weir Hotel and Escot House. A sail along the Jurassic Coast from Exmouth was another particular success.

The Club's social side has always played an important part in its programme and will continue to do so in the future.

PROJECTS

The Club has sponsored several projects connected with its constitution objectives. The principal ones to date have been;

- the publication of 'The Spirit of Engineering' book, and
- the creation of 'The Engineers' Heritage Trail'

“THE SPIRIT OF ENGINEERING”

To commemorate the Club's Twenty-year Anniversary members contributed to the production of a substantial book recording the achievements of both famous and lesser-known engineers, inventors and scientists of the West-country; lives of twenty-five individuals were featured in the chapters. The foreword was written by A Ives FIMechE, FIEE President of the Institution of Mechanical Engineers.

More than five-hundred copies were printed, most being distributed free to educational establishments throughout the region in the hope that students would be inspired to consider technical-based careers. Copies were also presented to local libraries, museums, technical associations and institutions. It received complimentary press reviews from many quarters including the Engineering Council. The Institution of Civil Engineers requested a printing re-run of another two hundred copies for distribution in support of its own campaign to raise the profile of engineering.

“THE ENGINEERS' HERITAGE TRAIL”

Although the names of Smeaton and Brunel probably spring to mind when one thinks of famous engineers associated with the West-country, there were other eminent engineers who were born, lived or worked in the region and made significant contributions to the country's development. Their connections with the area are not well known or have not been recognised.

In 1999 the Club decided to remedy the situation within its area of membership by placing commemorative plaques in suitable locations close to where these engineers had lived or worked. It was not the Club's intention to duplicate what Civic Societies or other recognised bodies had already done. It was known that plaques existed in Torquay that acknowledged the work of Oliver Heaviside, a famous electrical engineer and scientist as well as William Froude, a civil engineer who carried out important research work for the Admiralty. Another plaque on a building at Rowes Farm near Stoke Gabriel commemorates the life of George Jackson Churchward, for many years the chief mechanical engineer of the Great Western Railway.

The project commenced in 2001.

1. The first plaque was dedicated to James Green (1781-1849), the first County Surveyor of Devon. It was fixed on the side of the entrance to the Imperial Hotel, St David's Hill Exeter which was originally Green's home when it was known as Elmfield House. The plaque was unveiled by Edward Chorlton, Devon County's Environment Director on Monday 3 December 2001.
2. On Wednesday 3 July 2002, a plaque to commemorate the achievements of Sir Frank Whittle OM FRS (1907-96) developer of the jet engine, was placed on the north wall of the house known as Walland Hill, near Chagford where he lived for fourteen years. The plaque was unveiled by Ian Whittle, Sir Frank's younger son and the ceremony was attended by high ranking members of the Royal Air Force and the Deputy Lieutenant of Devon. These celebrations were made even more memorable by the over-flight of an R A F Jaguar as a tribute to Sir Frank's achievements.

3. George Parker Bidder (1806-78) was born in Moretonhampstead on the edge of Dartmoor and was so gifted with a calculating ability he became known as "The Calculating Boy". After an illustrious career he became President of the Institution of Civil Engineers 1860-61. The plaque to his memory was placed on the building in The Square in Moretonhampstead, and was unveiled on Thursday 29 May 2003 by Adrian Sheppard, Chairman, Institution of Civil Engineers South West.

4. James Meadows Rendel FRS (1789-1856) who became President of the Institution of Civil Engineers 1852-1853 was born at Thornbury Farm, Whiddon Down. The plaque was placed on the front elevation of the near-by Post Inn, and was unveiled on 9 June 2005 by Vardaman Jones, a director of High-Point Rendel, a leading firm of consulting engineers founded by J M Rendel.

5. Percy Carlyle Gilchrist FRS (1851-1935) was an engineer, chemist and metallurgist who was the co-inventor of the modern process of steel manufacture. He was born at Harville Cottage, Marine Parade, Lyme Regis and a plaque to his memory was placed on the nearby retaining wall at the east-end of Marine Parade. It was unveiled on Thursday 30 March 2006 by Councillor Barbara Austin, Mayor of Lyme Regis.

6. Joseph Locke FRS (1805-60) together with Brunel and Stephenson, was one of the leading railway engineers of the nineteenth century. He served as MP and Lord of the Manor of Honiton for thirteen years prior to his death. A plaque to his memory has been placed on the east wall of the old Angel Inn, High Street, Honiton. It was unveiled on Wednesday

11 March 2009 by Gwilym Roberts CBE a former President of the Institution of Civil Engineers.

By means of these Club projects, members hope that the public - particularly young people - will be made aware of the region's association with those engineers who contributed so much to the country's development.

THE FUTURE

The future of the Club is, of course, dependent on those who choose engineering as a career and continue to take an interest in their profession after retirement.

The thirty years since the Club's inauguration in 1986, have seen remarkable achievements in many technical areas - the world wide web has become universally available, space craft circle the globe, efficient compact computers and communication devices are common, impressive bridges, dams and many giant civil works have been constructed, tunnels driven through mountains and under the oceans, hydrocarbons re-covered miles beneath the earth's surface and sophisticated medical equipment used to save countless lives.

The future will present more challenges and it is vital that our policy-makers are continuously lobbied on the need, not only to encourage and promote technically oriented career paths, but to create a society that values and rewards those who choose to accept them.

As stated in the Introduction it is an earnest wish that, in twenty years' time, there will be a similar publication celebrating the Club's Golden Anniversary.