

THE GIBRALTAR GROUP OF PROFESSIONAL ENGINEERS

60th ANNIVERSARY

11 July 1958 / 2018

COMMEMORATIVE BOOKLET



The Diamond Celebration of the GGPE. Congratulations to all members



The Bicentenary Celebration of the Institution of Civil Engineers
The GGPE offers best wishes.
The ICE200 logo included as homage.



ORIGINS OF THE GIBRALTAR GROUP OF PROFESSIONAL ENGINEERS

During the 1950s the developments in engineering caused a group of local like-minded engineers to form an association to expand knowledge and share experiences.

Thus, what we now call The Gibraltar Group of Professional Engineers, was constituted on the 11 July 1958 under the Chairmanship of Captain J G Watson, Royal Navy.

At the time it was called the **Joint Group of Chartered Engineers.**

The Constituting Committee was formed by:

Chairman:

Captain J G Watson RN, MIEE AMICE Vice Chairman:

E V Andlaw, Esq. MBE MIMechE MIEE **Secretary**:

Lt. Col. R A Lindsell MC RE Committeee Members:

A M Baird, Esq.

Lt. Col. G N Preston REME

The **Inaugural Event** organised by the Group took place on the **30 September 1958**, at the then Calpe Institute. The event was recorded by the Gibraltar Chronicle.

Extract from The Gibraltar Chronicle of the 1st, October 1958

H.E. inaugurates new Engineering Group

SAYING that Gibraltar probably owes more to engineering skill than any other place in the world, H.E. the Governor, General Sir Charles Keightley, formally inaugurated a newly-formed Group at the Calpe Institute last evening.

The Governor thought that the new Group, which is called the Joint Group of Chartered Engineers, would be of great benefit not only to its members who are corporate members, graduates and students of the three Institutions of Civil, Mechanical and Electrical Engineers, but to Gibraltar as a whole.

H.E. said he regarded engineering as the key profession in the world, and paid engineers the compliment of saying that like doctors, they do all in their power for the good of the world, irrespective of race or creed.

The inaugural meeting was presided by Captain J.G. Watson R.N., Superintending Electrical Engineer H.M. Dockyard and Chairman of the new Group, who called upon the Vice-Chairman, Mr. E.V. Andlaw, the City Electrical Engineer, to thank H.E. the Governor for such an "auspicious send-off".

Mr. Andlaw regarded the foundation of the Group as an historic event in the Colony, and as coming at a time when the needs of the Services and civilians were never more closely interwoven.

After the inaugural speeches the theme of the meeting turned to WATER, or better, to Gibraltar's devices for overcoming the lack of it.

Mr. P.J. Coombes, Assistant City Engineer, started off by describing the City Council distilling plant, to be followed by Captain M.A.L. Cooper R.N., Chief Engineer H.M.Dockyard and Major P.W.E.Kidner R.E., who described the installations of the Royal Navy and the Army respectively.

Later in the evening the 50 members and guests - who included the Deputy Fortress Commander and His Worship the Mayor – paid a visit to all three plants.

The words by H.E. still ring true today.

Informal Discussion took place on the **9 December 1958** at the Calpe Institute, Gibraltar, on "The Training of the Professional Engineer". This was considered a very important subject as it still is today.

The Secretary Lt. Col. R.A. Lindsel wrote to the Secretary of The Institution of Electrical Engineers to seek recognition and the reply dated 29 May 1959 confirmed the official recognition from the three sponsoring Institutions, namely The Institution of Civil Engineers (ICE) The Institution Mechanical of **Engineers** (IMechE) and the Institution of Electrical Engineers (IEE). By agreement amonast mutual the Sponsoring Institutions, the Group was taken under the wing or "fathered" by the Institution of Electrical Engineers (as from 2006, the IEE became the Institution of Engineering & Technology IET). This agreement still persists to date.

The name The Gibraltar Group of Professional Engineers was officially adopted by the local committee on the 15 July 1960.

Under the **Guidelines** issued by the three Sponsoring Institutions, any member belonging to the said Institutions could automatically join the Group.

Additionally, members of

professional Institutions, affiliated to the Engineering Council of the United Kingdom, could qualify upon application for membership of the Group.

Additionally, the Group welcomes all such professional engineers from any branch of employment who might be temporarily be based in Gibraltar.

The Group is registered as a nonprofit making Cultural Organisation in Gibraltar. It is governed by the Guidelines issued by the three Sponsoring Institutions.

The main objectives of the Group are:-

- To promote and encourage the acquisition of knowledge relevant to the Engineering Professions.
- 2. To establish friendly exchanges between members
- To arrange meetings and organise visits of Engineering interest.
- 4. To promote the Sponsoring Institutions locally.
- To provide a focus for all engineers in the area of the Group in matters pertinent to the Sponsoring Institutions.

FIRST LOGO OF THE GROUP



Despite its long history, the first Logo for the Group was produced in time for the first major event called Engineering Week which took place during **November 1994**. The designer was Mr. A G Ryman MBE MCSO, who was then responsible for designing most of Gibraltar's postage stamps.

The Logo combined the "animal" features which at the time adorned the logos of the respective Sponsoring Institutions.

They surround the Gibraltar City Coats of Arms represented by the Castle & Key. Below, it included a banner with the acronym of the GGPE. It was drawn with black ink on a white background. The original is still safely retained.

The Beaver represented the ICE – for its dam building qualities. Stands to the left.

The Horse represented the

IMechE – as a sign of mechanical horse power. Stands to the right.

The Royal Leopard represented the IEE – holding a winged staff of Mercury, symbol of communications – Sits on top.

The current logo, shown on the front page of this booklet, was an innovation of the first logo and colour was added. This was done using current design technology

by EASI-PRINT designers in **2009** following a brief from Xavier Pons. It took into account the new slightly modified "animal" features which had been developed by the Sponsoring Institutions.

Presently, the Sponsoring Institutions have completely changed their logos as can be seen on the back page of this booklet following the trend in Corporate Imaging.

OUR FOUNDING CHAIRMAN

Rear-Admiral John Garth Watson CB DSc BSc(Eng) FICE.

The founding Chairman of the Gibraltar Group of Professional Engineers was the then Captain John Garth Watson RN who held the first constituting committee meeting of the Group on the 11 July 1958 whilst he was stationed in Gibraltar. During his naval career he achieved the rank of Rear-Admiral.

He was Secretary of the Institution of Civil Engineers from 1967 to 1979.

He passed away in 1992 and a Service of Thanksgiving was held in St. Margaret's Church, Westminster Abbey on the 3rd. November 1992.

Amongst his works, he wrote a history of the Institution of Civil Engineers – entitled "The Civils: the story of the Institution of Civil Engineers" published by Telford 1988.



VISITING PRESIDENTS

In connection with the celebrations of the 60th Anniversary, the Group is honoured by the joint visit of the Presidents of the three Sponsoring Institutions.

INSTITUTION OF CIVIL ENGINEERS (ICE) Professor Lord Robert Mair,

CBE, FREng FICE, FRS



Robert was appointed Professor of Geotechnical Engineering at Cambridge University in 1998. He is now the Sir Kirby Laing Professor of Civil Engi-

neering. In 2011 he became Chief Engineering Adviser to the Laing O'Rourke Group and Chairman of their Engineering Excellence Group. As well as working on many international tunnelling and deep excavation projects, Robert has been closely involved with the Jubilee Line Extension for London Underground, the Channel Tunnel Rail Link (now HS1) and Crossrail.

Robert was Senior Vice-President of the Royal Academy of Engineering 2008-11 and was awarded the ICE Gold Medal in 2004 and the President's Medal in 2013.

He was Chairman of the Royal Society/Royal Academy of Engineering

Report on Review of Shale Gas and Hydraulic Fracturing for the Government, published in 2012. More recently, he became Chairman of the newly formed Science Advisory Council of the Department for Transport.

In October 2015 he was appointed to the House of Lords as an independent crossbencher. As a crossbencher, Robert will owe no allegiance to a political party and will maintain the ability to take part in legislative debates free of party considerations.

INSTITUTION OF MECHANICAL ENGINEERS (IMechE)

Mr. John Wood, MBE MA CEng FIMechE

John Wood was President in 2010, becoming the 125th President of the Institution, Chairman of the Engineering Heritage



Committee, and was Chairman of Formula Student for 10 years. John read engineering at Cambridge and

spent the early part of his career in the Army in the Royal Electrical and Mechanical Engineers.

After field appointments in BAOR and the UK, he attended Staff College and then held a number of appointments in military vehicle procurement, test and development.

He retired from the Army in 1987 as a Lieutenant Colonel to join RAC Motoring Services as Technical Director and Chief Engineer. From there, John joined MIRA Ltd in 1991 as Managing Director and Chief Executive. MIRA grew out of the Motor Industry Research Association and

is an independent company providing design, test and development services to the automotive and other industries worldwide and has offices in the US, China, Korea and India.

John joined the Institution in 1973, becoming a Member in 1978 and a Fellow in 1987. He served as Chairman of our Automobile Division in 1993. In 1998 John was elected a Member of the Council, a Vice-President in 2001 and Deputy President in 2008.

In 2012 he was awarded the MBE for his services to mechanical engineering.



Aboard HMS Defender

INSTITUTION OF ENGINEERING & TECHNOLOGY (IET)

Mr. Mike D Carr OBE FREng BSc(Eng) HonDTech CEng FIET

Until 2008 Mike Carr was BT's Chief Science Officer responsible for the company's world-leading



Research Labs and Commercial Exploitation Unit, starting as a Technician Apprentice in 1972. He studied Communication Engineering and joined the BT Labs in 1980.

With several patents to his name in the field of video compression and holding two prestigious BT awards; the Martlesham Medal for R&D (1992), plus the BT Gold medal (1994) for leading multimedia

product developments, in 1998 he was elected President of the Digital Audio-Visual Council (DAVIC), a non-profit association based in Switzerland.

From 1999 Mike was based in Silicon Valley, California, USA where he established BT's US Technology office and Corporate Venturing activity. He returned to the UK in 2001 to lead BT's Research & Venturing division, and was awarded an Honorary Doctorate of Technology from the University of Plymouth in 2009. Since leaving BT he has been a Council Member of the EPSRC and a Board member of Innovate UK and serves as a Non-Executive Director of Ordnance Survey for Ploughshare Innovations Ltd. He is also Chairman of Astigan Ltd (a start-up based in Wells) and a member of the Royal Academy of Engineering's Enterprise Committee.



Engineers visit to the Small Boats Marina, Coaling Island

60th. ANNIVERSARY CELEBRATIONS EVENTS

Schools Competition

A competition for school children involving the creation of essays, poster and models. This is aimed to bring awareness of engineering to pupils in our local schools. We are grateful to the Department of Education for organising this event.

The Hon. Prof. John Cortes MBE MP JP CBiol CEng, Minister for for Education, Heritage, the Environment, Energy & Climate Changes, has kindly accepted to present the prizes on the 27 June at the John Mackintosh Hall.

Gibtelecom Ltd. has kindly sponsored the prizes.

Meeting Local Representatives of Commerce

The Presidents will meet with local dignitaries representing the local commerce.

Presidents Public Talk

The Presidents will be delivering talks open to the general public. This will take place at the imposing King's Chapel on Wednesday 11 July at 18:00. Thanks to Fr. Mike Wagstaff, Command Chaplain.

Dinner

This will take place at the iconic Mons Calpe Suite, top of the Rock with magnificent views of surrounding seas and continents. The Group is honoured to host HE The Governor Lieutenant General Edward G.M. Davis CB, CBE, KStJ, Royal Marines and The Chief Minister of Gibraltar the Hon. Fabian R Picardo QC, MP.

The dinner will also be attended by the visiting Presidents and members of the Group and guests.

Many thanks to

Gibtelecom

Sponsors of the prizes for the Schools Competition

CURRENT COMMITTEE 2017 / 2018 SESSION

Chairman

Mr. E. Hermida MA B Eng(Hons) CEng MICE

Vice-Chairman, Website Administrator & Producer of The Ingeneer Newsletter

Mr. M. Perez BSc(Hons) MEng CEng FICE MCIWEM CWem

Secretary

Mr. A.J. Harrison MEng

Treasurer & 60th. Anniversary Event Organiser

Mr. F X Pons BSc(Eng) CEng FIET

Past Chairman

Mr. D. A. Orfila CEng MIStructE

Committee Members

Mr. L.A.S.Parody BSc(Hons) CEng MIMechE

Mr. R.J.A. Labrador MBE MSc IEng FIET CFIOSH

Mr. R. Khalilian BSc(Hons) CEng MIET MCMI

Mr. J.J. De-La-Paz CEng MICE

Mr. C.J.Gomez MEng CEng MIMechE CMgr MCMI

Mr. D. Cruz MEng

Mr. S.E Cooper BSc(Hons) MSc

CEng MICE

Co-opted Senior Royal Engineer

Colonel Frank Green Euring CEng MICE

(Traditionally the senior Royal Engineer serving in Gibraltar is Co-opted to the Committee)

CURRENT MEMBERSHIP

The current membership as at 24 January 2018 is made up as follows:-

Students 2
ICE 24
IMechE 9
IET 24
Other Institutions 20
Total 79



GGPE WEBSITE

www.ggpe.gi

This was established in 2009. It contains information on coming and past events, "The Ingeneer "and a gallery of photos. Please visit it to gain more information on the Group's activities.



THE INGENEER

This is a bi-annual Newsletter and contains articles on events and visits organised by the Group. It is circulated electronically to all members.

In case you think the title is a misspelling, it was deliberately chosen to highlight the element of Ingenuity required from Engineers. Ingenuity is the quality of being clever, original, and inventive, often in the process of applying ideas to solve problems or meet challenges.

MAJOR EVENTS OF THE GROUP

Engineering Week – 1994

From the 21 to 24 November 1994 at the John Mackintosh Hall with an exhibition of old and new technology and exhibits of essays, posters and models from the School Children's Competition. Prof. Phillip Secker from the IEE and his wife were guest of honours. The Hon. Joe Moss, Minister for

Education, presented the prizes to schoolchildren.

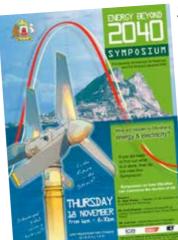
Centenary Display of Electric Light - 1998 On the 3 February

1998 a plaque commemorating the centenary of the

first display of electric light was unveiled by the Hon. Ernest Britto, Minister for Government Services. This can be found fixed on to a traditional double lantern lamp post in a most prominent location in Main Street, junction with Engineer Lane.

Symposium "Energy beyond 2040"

This took place on the 18 November 2010. Mr. Nigel Barton, President of the IET was the key note speaker, accompanied by Mr. David



Bingham from PB Power the lead Consulting Engineers involved in the then proposed Power Station at Lathbury and Mr. Juan Gari from

Atlantis Resources Corporation a leading company in under sea turbines.

Gibraltar Engineering Heritage

The first lecture in what has now become an annual event took place on the 29 November 2012 delivered jointly by Prof. Clive Finlayson,

Director of the Gibraltar Museum and Mr. Tom Finlayson former Archivist of Gibraltar. The Rt. Hon. Steven Linares, Minister for Heritage, opened proceedings.

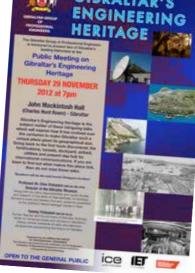
PARTICIPATION IN CAREERS FAIRS

Since 2009 the Group has set a stand at the bi-annual Careers Fair, firstly organised by the Gibraltar Students Association and later taken on by the Government's Department of Education, when it became huge. The IET provided

excellent Student Packs which were handed to students There has been good interaction between students and members of the

Group manning the stand.

Unfortunately, the number of students taking up Engineering and Technology as further education is disappointedly low as can been seen in the Government's Official Statistics for Graduates.



TECHNICAL VISITS and EVENTS

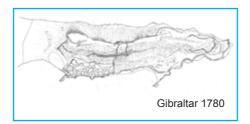
The Group has organised many successful technical visits within Gibraltar

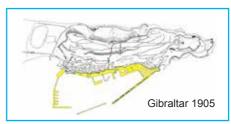
and neighbouring Spain. The aim is to organise an average of four technical visits per years and two talks, the Annual Heritage talk and the talk to close our Annual General Meetings.

Whenever possible, thanks to the MOD, visits to Royal Navy ships take place. This included HMS Tireless, the nuclear powered submarine which underwent repairs in Gibraltar during 2000. All events end with light refreshments which enable attendees to socialise.

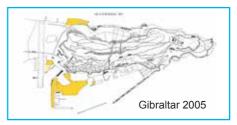
IMPORTANT ENGINEERING LANDMARKS IN GIBRALTAR

These maps show how through the years Engineers have changed footprint of Gibraltar











Despite its small physical size, with a population of approx. 34,000 and a surface area of some 6.8 km², the amount of engineering works far outweighs that of any other similar territory.

Gibraltar has been a major fortress

since it was captured by the British in 1704. Its unique strategic location meant it was at the forefront of military engineering developments.

It had to be defended and be self sufficient in a hostile environment.

The main military engineering features:-

The Fortifications

The Tunnels

The Dockyard

The Victualling Base

The Airfield

The Naval Communications

Centre

The Calpe Hole Power Station – inside the Rock

The need for Engineers and qualified technicians is paramount if we consider what has to be maintained.

Gibraltar Infrastructure, Utilities and Industrial / Commercial undertakings:-

The Water Works.
Potable Water Production &
Distribution Network.
Sea Water Distribution Network.
Sewage & Storm Drains
Networks.

Roads and Highways, Cliffs and Tunnels stabilisation, Sea defences.

Electricity Generation and Distribution.

Public Lighting, Floodlighting & Traffic Control Signals.

Telecommunications.

Satellite Control Centre Base Station.

Radio & Television Stations. St. Bernard's Hospital- Technomedical Equipment.

Gibraltar Airport.

Commercial Ship Repair Yard & Dry Docks.

Bunkering of Fuel to Ships.

LNG Terminal.

I.T. Hub for On Line Gaming Companies.

I.T. Data Centres.

Gibraltar Stock & Blockchain Exchange.

HM Armed Forces Base – providing support to the Royal Navy, the Army and the Royal Air Force.



HE The Governor Sir Jim Dutton with Committee - at the Convent 2014

HISTORICAL NOTEBOOK

PREVIOUS VISITS BY PRESIDENTS & SENIOR OFFICERS OF THE SPONSORING INSTITUTIONS

Mr. Robin Lee Wilson, CBE BSc (Eng) FR Eng FICE President ICE 1991 to 1992. During his visit in May 1991 presented the award of Life President of the GGPE to Mr. Francis (Paco) Gonzalez, C Eng. FICE.

Prof. Phillip Secker, B.Sc (Eng), PhD CEng FIEE, Deputy Secretary IEE. During his visit in November 1994 he presided over the Engineering Week activities.

Prof. Sir David E N Davies, CBE DSc F Eng FRS, President of the IEE 1994/1994. During his visit in June 1995, he delivered a talk to members and called on

His Excellency the Governor of Gibraltar Field Marshall Sir John Chappel.

Sir Michael Moore, KBE LVO Director General and Chief Executive of the IMechE from 1998 to 2006. During his visit in October 2001 he gave a talk to members and engaged with local dignitaries.

Dr. Nigel J Burton, BSc (Eng) PhD President of the IET from 2010 to 2011. During his visit in November 2010, he addressed the Symposium entitled "Energy beyond 2040", and paid a courtesy call on the Chief Minister



Chief Minister Hon, Fabian Picardo QC MP visits GGPE stand - Careers Fair 2015

SOME NOTABLE ENGINEERS WITH A GIBRALTAR CONNECTION

of Gibraltar Mr Peter Caruana QC. **General Sir William Green 1**st. **Baronet.** Senior Engineer during the Great Siege of Gibraltar. Created the Soldier Artificer Company, later the REs. Chief Engineer of Great Britain 1786.

The Corps of Royal Engineers – (RE)

In 1772 a Soldier Artificer Company was established for service in Gibraltar which then became the Royal Engineers. Granted the Freedom of the City of Gibraltar in 1972. **Sir William Henry Preece**, in 1890, laid the foundation of the electrification of Gibraltar. He was both ICE and IEE Presidents. A student of Sir Michael Faraday.

Guigliemo Marconi, On the 5 March 1907, the first long distance wireless connection between the Naval Bases in Gibraltar and Portland were made.

William George, Baron Lord Penney prominent nuclear scientist born in Gibraltar in1909. A building in Gibraltar bears his name.



Engineers afloat, Cadiz bay



Engineers and solar power



Engineers on the rise





Kind sponsors of Roll-up Banner and Posters



THE SPONSORING INSTITUTIONS



The Institution of Civil Engineers was formed in 1818, the first President was Thomas Telford www.ice.org.uk



The Institution of Mechanical Engineers was formed in 1847, the first President was George Stephenson.

www.imeche.org



The Institution of Engineering and Technology came into being in 2006. Its origins are the Institution of Electrical Engineers (1871) and the Institution of Incorporated Engineers (1884).

The first President of IEE was Carl Wilhelm Siemens in 1872.

The IEE took the GGPE under its wings and remains the main contact and support.

www.theiet.org