

CAREER OF SIR BRUCE WHITE, K.B.E.

My earliest education was at a preparatory school in Hampstead which I left at the age of 13 in order to go to Marlborough College in Wiltshire where I joined the junior class and was eventually transferred to the main school.

On leaving Marlborough College and prior to my entering my training as an engineer I went to New Châtel in Switzerland and entered the Ecole de Commerce which was a part of the university devoted to foreigners who attended courses of elementary education conducted in French. Classes were run 6 days a week starting at 7.30 a.m. with a break of 2 hours at midday finishing at 5 p.m. and at 7 p.m. on two evenings of the week.

From my early days I decided that I would become an engineer and therefore sought the advice of my father who had been a partner of George Barclay Bruce and subsequently formed the partnership of Robert White and Partners of 3 Victoria Street, Westminster. My father's firm practised in civil and mechanical engineering but there had been a recent incursion of electrical work about which his firm was not knowledgeable.

His advice was that I should first serve a pupillage with a consulting engineer which would be followed by scientific and technical training in an engineering college and by practical training with a firm engaged in the design and manufacture of electrical machinery. My father approached a great friend of his, Sir Frederick Bramwell who had a practice in Westminster which embraced civil, mechanical and electrical engineering. Bramwell therefore undertook to take me as one of his pupils.

Bramwell was a great engineer, a baronet, an FRS and a past President of the Institutions of Civil and Mechanical Engineers, head of the firm of Bramwell and Harris in Great George Street, Westminster. He had great concern with the welfare of those in his charge and made a practice of explaining the reasons for undertaking anything. Under his influence I learned the standard of conduct of consulting engineers and this standard has been my guiding principle throughout my life.

As an illustration of the force of his personality, I would recall an incident which I still remember so clearly. That was when Sir Frederick Bramwell was engaged in an arbitration regarding the sewage in London. He had one of the senior assistants and many of his pupils to inspect a sewer and I happened to be one of them. We came to London, took off the cover of the sewer pit and one by one we climbed down. The smell was absolutely terrible. In due course Bramwell turned up and he too came down the ladder. Then the senior assistant Tregoning pulled out his cigarette case and lit his cigarette right down in the pit. Bramwell turned to him and being a non smoker himself said "Tregoning, put out this cigarette. Don't you think there is enough stink down here without you making it worse!" The man promptly extinguished his cigarette upon the severity of this command. With firmness and authority Sir Frederick Bramwell would have his way most of the time and he was highly respected for it - an example to those who were fortunate enough to have known him.

My training as a pupil involved working with other members of the staff on a great variety of civil works including arbitration and the survey of a tramway in a Welsh valley and also civil works connected with many of the major industrial firms in the Midlands and elsewhere. Bramwell's firm was also concerned with the civil works of a great number of electrical undertakings which before the introduction of the grid system were independent supply companies adopted by the counties, cities and other interests.

Following completion of my pupillage with Bramwell & Harris I entered the Central Technical College in South Kensington (now part of Imperial College) and completed a three years course specialising in electrical engineering which was followed by practical experience with Siemens Brothers Dynamo Works at Stafford where I was employed on the test bed dealing with all classes of electrical equipment. Subsequent experience was as a shift engineer on the power house of the Derby & Notts Supply Company at Ilkeston. As a result of my engineering training I was elected to corporate membership of the Institutions of Civil, Mechanical and Electrical Engineers.

Following this training I joined the firm of Robert White and Partners of which I became a partner dealing with the placing of contracts for a number of Indian Railways for which the firm were consulting engineers. Inevitably at the approach of war the practice of the consulting engineers was generally declining and in response to a request by the Deputy Chairman of the British Electric Traction Company I joined that company in Kingsway, London and became one of the directors of 13 companies engaged in bus and electric undertakings. I was thus employed at the outbreak of war and was given leave of absence on my being mobilised with the Territorial Army.

At this point it is necessary to mention the training which I had received in military duties up to that date. This consisted in joining the Marlborough College OTC when I formed part of a band and played the clarinet. On leaving Marlborough College and being employed in London I immediately joined the ranks of the Artists Rifles as a volunteer, at that time a volunteer organisation, and eventually embodied in the Territorial Army. Service in these respects totalled 10 years up to 1912 when I resigned and was transferred to the reserve. During my service in the Artists Rifles I attended a course of training by the Guards Brigade at Chelsea Barracks at which instruction on drill was given to members of the Territorial forces. I also attended a course of instruction on the maintainance of maxim machine guns at Erith.

On mobilisation in August 1914 I was posted to the second battalion of the Artists Rifles which did many duties in London on the Scots Guards proceeding to France. These duties included Guard on the Tower of London and various other guard duties, eventually proceeding to quarters in Gidea Park, Essex where I held the rank of Company Sergeant Major.

At this time the various military commands in the UK reported to the War Office that they had received complaints from Territorial regiments that whilst the rank and file were well trained, many officers had obtained commissions without any experience of military duties. It was therefore the wish of the War Office that the Officer in Charge of the Artists Rifles at Gidea Part, Colonel Shirley, should establish one month courses of instruction for Territorial officers in batches of four hundred.

In view of the experience which I had gained during my attendance at Chelsea, Colonel Shirley nominated me as his regimental Sergeant Major and left me with the responsibility of organising the courses. I asked and obtained sergeants from the four regiments of guards and appointed them as drill instructors and nominated other sergeants in the Artists Rifles who were competent to give instruction in other fields.

Having completed 3 of these courses Colonel Shirley informed me that he had orders from the War Office to demobilise me for service in the USA as a member of the staff of the British Purchasing Commission, the agency for obtaining supplies, headed by Sir Ernest Moir. This was no doubt due to my knowledge of maxim guns for which a contract had been placed in the USA and also for the fact that my family and Moir's family were personal friends.

On demobilisation I joined the Dutch vessel 'Rotterdam' at Falmouth and met with Reith who had been wounded in France and was therefore only available for home service. Reith had been on Moyer's staff in the firm of Samuel Pierson which built the Dover harbour, and later became the Head of the BBC.

Owing to the transfer of the contract for maxim guns to the Russians I found myself relieved in 4 to 5 months. I came back to England and was gazetted as a second lieutenant in the Royal Engineers and posted in the earliest days of the formation of the Mystery Port at Richborough.

Considering my military service from joining the Artists Rifles in 1902 and later joining the Territorials, I accomplished 10 years' service before resigning in 1912 and being placed on reserve. I was mobilised on 4th August, 1914 and served until 1918.

It is of interest to note that I held what may be considered a record from being posted with the Territorials and gazetted with the Royal Engineers making a total military service of some 18 years during which time I occupied every rank of the army from Private to Sergeant Major in the Territorial Army and gazetted as an Officer in the Royal Engineers rising from second lieutenant to full colonel and finally brigadier.