



DULWICH COLLEGE

EMINENT OLD ALLEYNINIANS

Peter Twinn

Born 1916 Died 2004 School No. 11622 At Dulwich 1928-34

Peter Frank George Twinn was the son of a Post Office Official and came to the College from Dulwich College Preparatory School. Showing portents of successes to come he won the Junior School Maths Prize in 1928 and the senior prize in 1932. He spent a short time at Manchester Grammar School before returning to Dulwich from where he won a Mathematics Scholarship to Brasenose College, Oxford. In 1938 he was awarded the Senior Hulme Scholarship to study Physics. In the middle of his postgraduate studies he answered an advertisement for mathematicians to work for the government so becoming the first mathematician recruited as an Enigma cipher-breaker into the Government Code and Cipher School (GC&CS) before the Second World War. He was appointed assistant to the eccentric, but brilliant Alfred Dilwyn (Dilly) Knox who was heading the team of code breakers.

The Enigma machine, which dated back to 1919, had a keyboard into which the message was typed. Each letter then passed through a series of rotating wheels until the enciphered letter appeared on a "lamp board" above the machine. The British code breakers had devised systems to break the cipher, but could not work out which letter on the keyboard was wired to which letter on the initial part of the encipherment mechanism. Their problems were increased when the Germans added additional rotors. Fortunately, in July 1939, Polish code breakers, who had managed to break the Enigma ciphers but were now encountering difficulties, invited the British to a conference near Warsaw to discuss techniques that could be used to break the ciphers. They told Knox that the Germans had not, in fact, jumbled up the letters. They had wired A to A, B to B and so on, something the British had never thought possible. "I know in retrospect it sounds daft," Twinn said. "It was such an obvious thing to do, rather a silly thing, that nobody, not Dilly Knox, ever thought it worthwhile trying." When Knox came back from Warsaw, he immediately went on leave, so it fell to Twinn to try out the Polish technique. "The first thing I did when he was on leave was to see if it worked in the machine, and, of course, lo and behold, it did." So Twinn was credited with being the first British cryptographer to break an Enigma cipher, something that always embarrassed him and led him to dismiss its significance. Twinn said: "It was a trifling exercise, but I repeat for the umpteenth time, no credit to me."

Twinn also worked on the Abwehr Enigma when Dilly Knox fell ill with cancer. Abwehr was one of the hand codes used by the German military secret service.

Breaking this code helped to deceive the Germans about the Allies plans to invade Normandy in June 1944.

Peter Twinn wrote music and played the viola and clarinet. Through music and the concerts at Bletchley Park he met Rosamund Case who played the 'cello and worked in the registry. They married in 1944 and had three daughters and one son.

After the war ended Twinn worked for the Ministry of Technology, becoming director of hovercraft. He served in other government departments before being appointed secretary of the Royal Aircraft Establishment, Farnborough. He also developed an interest in entomology, gaining a PhD in the subject from London University. His doctorate was on the jumping mechanism of the click beetle, which he studied using the ultra-high-speed cameras available at Farnborough. In 1999 Twinn published, with PT Harding, a study of the distribution of the longhorn beetle, *A Provisional Atlas of the Longhorn Beetle (Coleoptera Cerambycidae) of Britain*; it records the present and past distribution of 63 species.