

RICHARD EDMUND GRAY (1911-19)

He was born on 15 February 1902 and is the brother of **Air Vice-Marshal John Astley Gray CB CBE DFC GM (1911-16)**.



The following piece is taken from the Autumn 1999 OF Magazine :-

Richard Gray has his place in the history of aviation for his pioneering work in the development of modern air traffic control. During WW2 he was working for International Telephone and Telegraph (ITT) in America on the standardisation of radio aids between the RAF and USAAF, when he happened to hear about work being done at the Massachusetts Institute of Technology on a ground controlled approach (GCA) system for landing aircraft in all weathers. Astonished that so little interest was being shown by the Americans in the work, he went to MIT to see it for himself.

Immediately realising the importance of GCA for air operations in the bad weather conditions of the North West European theatre, Gray hijacked the equipment and had it embarked in a British warship. At the same time he whisked the GCA team and its leader, Luis Alvarez, to Britain by air on a priority so high that at Shannon, Bob Hope and Frances Langford, on their way to Britain to entertain the troops, were told that they could not board the GCA team's flying boat.

Gray and the team worked around the clock to bring the system into operation at British airfields. Once installed, it proved invaluable for guiding exhausted and wounded pilots to the vicinity of the airfields and talking them down on the glide path, whatever the weather and visibility. Many an aircrew which might have been lost was saved to fly another day thanks to GCA. In the aftermath of the war the system was used extensively during the Berlin airlift of 1948-9 to maintain the flow of vital supplies into the blockaded city in all weathers. In a prolonged and intensive period of take offs and landings the system proved its worth beyond all doubt and formed the basis of subsequent air traffic control systems.

He was born at Maiden Newton, Dorset, and educated at Framlingham College, Suffolk from where he went to study electrical engineering at Faraday House, London. In 1924 he joined the American company Standard Telephones and Cables, a division of ITT.

There he was involved in the establishment, carried out jointly by ITT and the GPO, of the first transatlantic radio telephone system, which was inaugurated in 1927. In 1931 he participated in the setting-up of the first microwave radio telephone link between Dover and Calais, the forerunner of all modern microwave radio communication systems.

He was working at the ITT laboratories in Paris in May 1940 when the Germans invaded and the French authorities decided to evacuate all the ITT radio equipment to Limoges. Gray and four colleagues left Paris in his magnificent Hispano Suiza, arriving in Limoges to be informed that they were to return to England in the first available British ship. They therefore drove to Bordeaux where they found a small collier, SS Falcon, just about to cast off. With no time to spare they got on board, Gray leaving the keys of his Hispano Suiza in the hands of a surprised and grateful dock worker.

Returning to England, Gray worked both at the Royal Aircraft Establishment and the Telecommunications Research Establishment at Malvern on instrument approach and navigation systems for aircraft. After his work on GCA he conducted blind bombing trials and during the North West Europe campaign went with his equipment to Belgium and Holland to advise air and ground forces on the use of radar for close air support of troops.

After the war he spent the rest of his working life in America, researching the propagation of electromagnetic waves at ITT and their application to a range of civil and military purposes.

His work was honoured by membership or fellowship of various electrical and electromagnetic institutes both here and in the US. He retired to Thorpeness in Suffolk. He never married and died in 1999.

For details on his brother see <http://www.oldframlinghamian.com/images/articles/AIRVICE-MARSHALJOHNASTLEYGRAY11-16.pdf>