wireless stations, all of which were to play a vital part in communications for the British and Allied forces in the war years [26].

7.2.2 Reuters and the news service

Alongside the Cable & Wireless system, Reuters Ltd and other news vendors began in 1923 to broadcast news in Morse code to European countries, renting wireless transmission facilities from the Post Office for the purpose [27]. At first the main transmitter used was the massive wireless telegraphy transmitter, GBR, broadcasting from Rugby on a frequency of 16 kHz. Later the service was extended to other geographical areas on HF using two transmitters at the Post Office station at Leafield. After 1933 most of the transmissions made use of a rapid telegraph printing system developed by Siemens & Halske and known as the Hell–Schreiber system. This was essentially a facsimile system in which the letter characters were built up from a series of marks displayed over a rectangular area comprised of seven or twelve vertical lines. This was a departure from normal Morse transmission, although the actual signals sent out were suitable for transmission by a keyed CW transmitter. The signal speed obtained with the Hell–Schreiber system may be defined as several hundred baud, equivalent to a Morse transmission rate of about 100 wpm. The Reuters European news service was extended during the war years to cover most of the globe, still using the HF transmitters at Leafield, but with a beamed aerial system requiring a daily schedule of frequency changes to suit the local times and locations of the recipient news distributors.

7.3 Maritime communication

The first two decades of the twentieth century saw the widespread acceptance of wireless installations, carried on board all passenger ships and most large merchant ships in fleets around the world. This was materially assisted by the performance of the new continuous wave or quasi-continuous wave stations, many of them beginning to employ valve receivers and transmitters towards the end of this period, and also to the siting of shore stations around the coasts of all the maritime nations to relay messages between ships and inland locations by wireless, cable or line communications. The Marconi Company established an early lead in the provision of maritime communications with the formation of Marconi Marine Company as early as 1900. It was initially extremely successful in fitting out the coastal stations installed by Lloyd’s and the major shipping companies. While nearly all the Empire coast stations installed Marconi equipment, this was not always matched with Marconi sets fitted to communicating ships. The coast stations were staffed by