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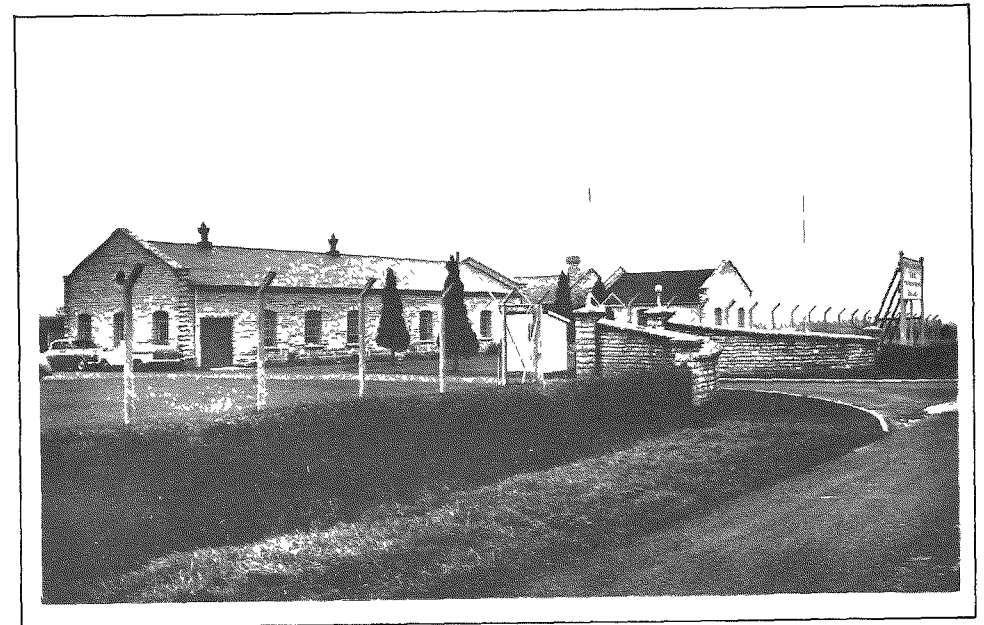
Somerton Radio Station

1927~1977

Golden Jubilee

Somerton Radio Station

Somerton Radio Receiving Station in Somerset, nine miles north of Yeovil, occupies a site of 560 acres between 100 and 200 feet above sea level.

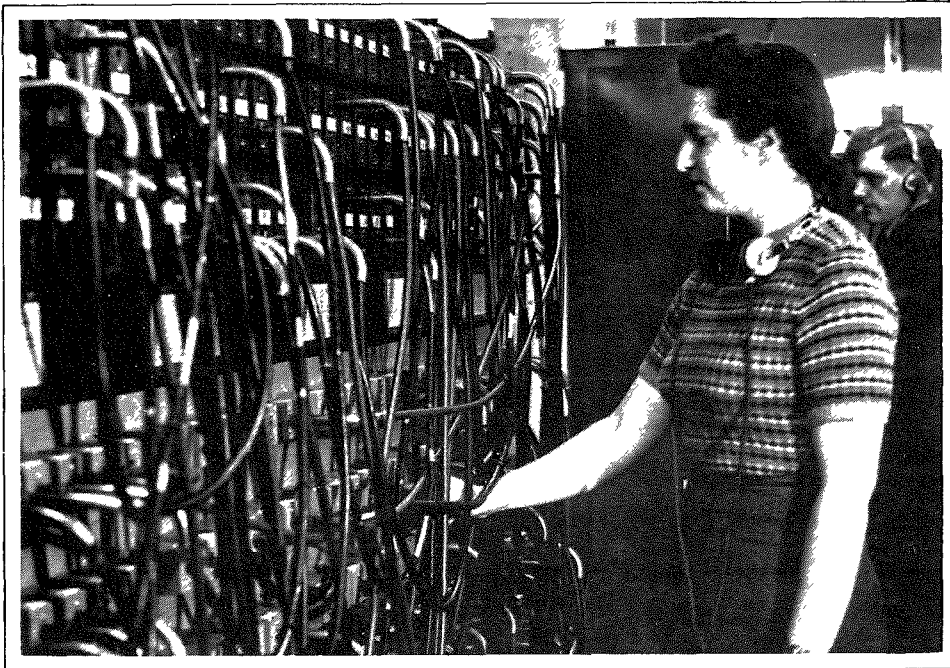


General view of Somerton radio station in the 1960s

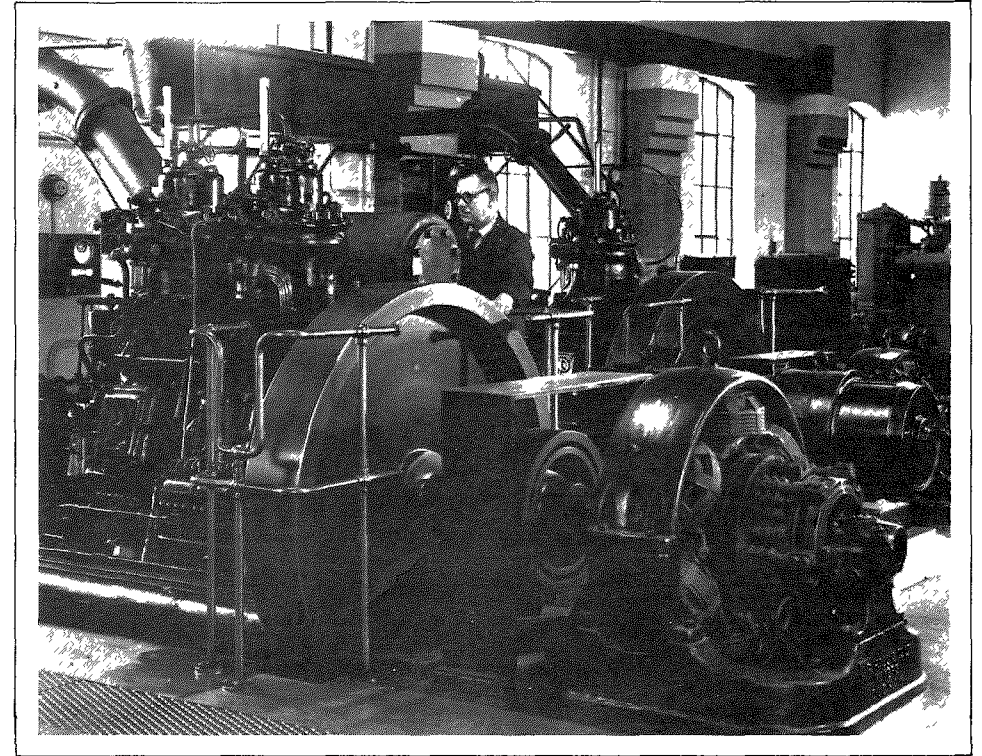
History 1927-1950

Opened on 16 December 1927, the station owes its existence to the establishment of the Marconi Beam Wireless Services, which had high grade directional receiving aerials designed by C S Franklin and receivers designed by G A Mathieu, using wavelengths between 16 and 80 metres.

The first services operated through Somerton were on telegraph routes to New York and South America in 1927, closely followed by Japan and Egypt.



Aerial distribution, pre-1950



Power room before 1950

The beams were an instant success and offered a highly efficient and profitable world wide communication system.

The effect of the beam services upon the traffic receipts of the cable companies was very serious. So because of the importance of the cable system to the British Empire from the strategic point of view, the Government called cable and wireless interests together to secure the continuation of both cable and radio circuits. This resulted in the Imperial Beam Services being reverted to private enterprise under Imperial and International Communication Ltd in 1929, and ultimately to the formation of Cable and Wireless Ltd in 1934.

Somerton continued to expand over the years, increasing its traffic and the numbers of routes served. In 1941/42 the beam receiving stations at Skegness and Bridgwater were closed, when the Indian, Australian, South African and Canadian services were transferred to Somerton.

After 1950

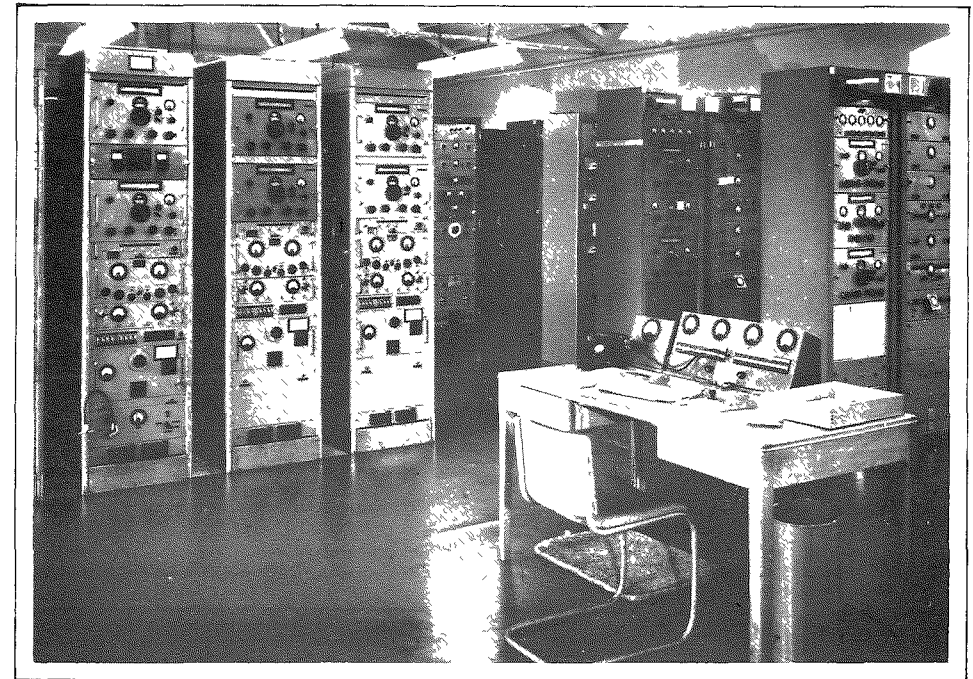
In 1940, when the Moorgate office of Cable and Wireless was bombed, operators came to Somerton for several months and dealt with the traffic at the station, sending the message forms in bulk by train to London each day.

During this period the number of circuits handled increased steadily, and more advanced keying systems were introduced. Morse and Double Current Cable Code (DC3) were replaced by unprotected teleprinter and later by error correcting systems such as TED, TOM and E/MUX. Facsimile services at that time, the only quick method of transmitting pictures, were provided on many routes.

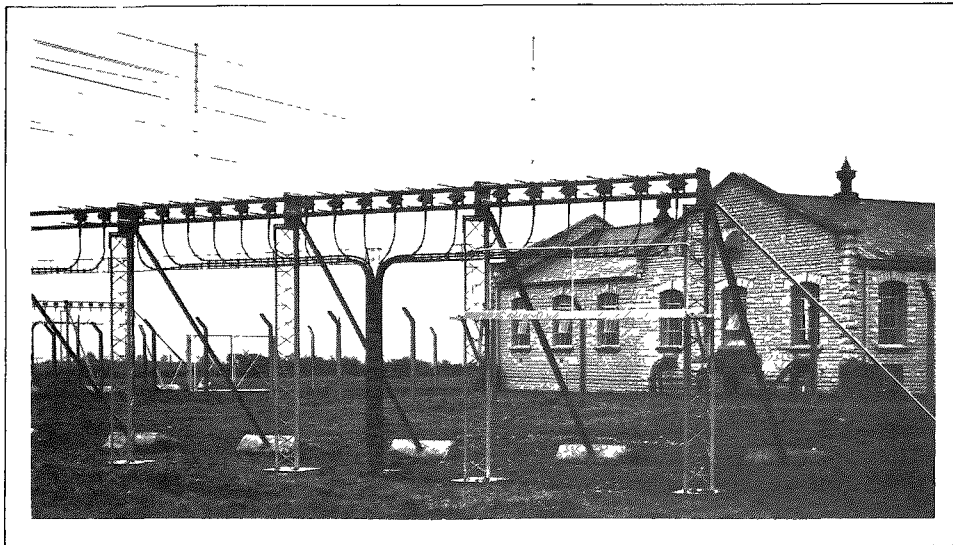
Somerton did, however, have its problems. In March 1947, all the main aerials were damaged by severe weather conditions and icing; some 37 arrays were involved and 970 'uniform' vertical elements had to be replaced. Nevertheless the repair work was completed by station staff in only 69 days.

The station was taken over by the Post Office on 1 April 1950 as a result of the Commonwealth Telegraph Act 1949, which integrated the United Kingdom radio services of the Post Office and Cable and Wireless Ltd.

During the latter part of the 1950s a major re-equipment programme was begun internally, the RC64, HSR and CR150 receivers being replaced by Marconi HR91/93/24 and the SL60, a double diversity ISB receiver based on the Post Office W22 design.



The main receiving room, about 1959



Aerial gantry — new rhombic aerial system, introduced in the early 1960s

The aerial and distribution boards were replaced and 1960 saw the start of the aerial reconstruction. The Franklin beams, excellent though they were on the bearings and frequencies for which they were designed, were replaced with stacked rhombics which gave greater flexibility and had lower maintenance costs.

Somerton reached its peak in the mid 1960s when main routes tended to use 96 baud or 192 baud error correcting systems carried on multi-channel frequency division multiplex systems, each channel being regenerated to eliminate propagation distortion.

An interesting feature of this period was the London — Osaka service, which operated a highly efficient system using two synchronised 192 baud (4 chan) systems on one F6 (Diplex) emission.

From 1965 onwards, the number of circuits started to fall, due to the shift of traffic first to repeatered trans-oceanic cables, and later to satellites.

The closure of Brentwood receiving station in 1968 and Baldock in 1971 temporarily increased the loading, and for the first time Somerton took over some telephony working. Later it reverted to wholly telegraph operations. The inevitable decline in international circuits continued, and it is expected that by 1980 few will remain.

The Maritime Role

Before 1976, the only maritime circuit handled at Somerton was the Autospec/Plessey circuit from the QE2, but in 1976 a maritime telephony station was opened, staffed by Radio Officers from Burnham Radio Station. Six consoles have been provided as an interim measure to allow an extension of the Burnham radio-telephone facilities, prior to the completion of the new building there.

Each Radio Officer can handle ships telephone calls using 36 Rhombic aerials and one omni system covering maritime bands between 4 and 25 MHz. Calls can be extended over the UK telephone network, using non-STD high grade circuits, and internationally via London using International Direct Dialling or international operators.



New maritime service positions

The first fully flexible remotely-controlled receiver is in use on one of the Burnham Radio teleprinter circuits. This uses a simplex error correcting TOR system with selective calling facilities, enabling ships to be called individually and offering them the facility of calling a designated coast station. This is a rapidly expanding service which will shortly require additional receivers at Somerton.

There are also twenty fixed-frequency receivers with remote aerial selection which will be used to answer ships calling the UK.

By 1981, it is expected that about one hundred and ten remotely controlled receivers will be operational at Somerton.

Over the past fifteen years the role of Somerton has changed from entirely international to international maritime working. In the future, it will become almost entirely devoted to maritime operations.

External Telecommunications

Post Office International and Maritime Telecommunications

11/77