

Marconi and Weston-super-Mare: a critical examination of the legend that Marconi once stayed in the town

Monty Ellis

By the time he came to make the tests which are the subject of this article, Guglielmo Marconi had already grasped the significance of the results of a recent rash of laboratory experiments with electro-magnetic waves.

At home in Bologna, using an assembly of novel components, he was able, in 1895, to transmit signals over a distance of a mile and a half - the length of the family estate.

He was always a devoted citizen of Italy but was unable to interest the Italian government in the practical potentialities of his work. So in 1896 he moved to London where one of his Irish cousins helped him to prepare a patent application. Once it had been granted, he went along with it to the British Post Office. This article summarises the author's thorough search for evidence relating to Marconi's 'Weston' connection,

Introduction

All seaside resorts would like to enhance their reputation by an association with some celebrated personality. Brighton has its Prince Regent, Captain Cook was born at Whitby, and Joseph Parry was professor of music at Aberystwyth. It need cause no surprise, therefore, that Weston-super-Mare should lay claim to Guglielmo Marconi, who, it is asserted, stayed in the town during the course of the trials of wireless telegraphy which the Post Office carried out across the Bristol Channel in May, 1897.

The 1897 Post Office Trials

It is undoubted fact that Sir William Preece, Engineer-In-Chief to the Post Office, presided over trials at Lavernock Point, near Penarth, between 6 and 29 May 1897 in which Marconi gave his full co-operation. This site was probably chosen because Sir William had used it earlier in 1892, when he used electro-magnetic induction between a circuit carried on poles along the shore and a parallel circuit on Flat Holm island, 3.1 miles distant, to transmit signals using a telephone receiver.

During the 1897 trials, Marconi made his headquarters at the Penarth Hotel. Until 16 May, the experiments were between Flat Holm and Lavernock Point and there was no reason whatever for anyone to cross to the other side or the Bristol Channel. It was then decided, apparently on the spur of the moment, to see if the range could be extended from Lavernock to Brean Down, a promontory eight miles distant on the south side of Weston-super-Mare. Masts somewhat over 100ft high had been used to hold up the aerials at Lavernock and Flat Holm. For signalling from Lavernock to Brean Down, the aerials were supported by kites.

George Stephen Kemp was a Post Office engineer who, from the very beginning in 1896 had been fascinated by wireless telegraphy. Following the biblical dictum that 'no man can

serve two masters', he left the Post Office in November 1897 to become Marconi's chief assistant. He played a leading part in the May trials and recorded his principal activities in a pocket diary, which is now the only known authentic contemporary day-to-day record of what took place. It disappeared some time after parts of it had been photographed by Mr G.R.M. Garratt, who became Deputy Keeper of the Department of Telecommunications at the Science Museum, South Kensington in 1949. Mr Garratt made his copies in 1938, at which time the diary was in the possession of Kemp's elder son, Leslie. George himself died on 2 January 1933 but, about 1930, he had expanded his diaries. It is this edited or expanded version which is best known but, because of the lapse of time, it can hardly be considered to be as authentic as the original. Mr Garrett died in April 1989, but his daughter, Miss Susan Garrett, made a thorough search of his effects and succeeded in finding the copies of Kemp's original diary.

Mr Thorn's Testimony

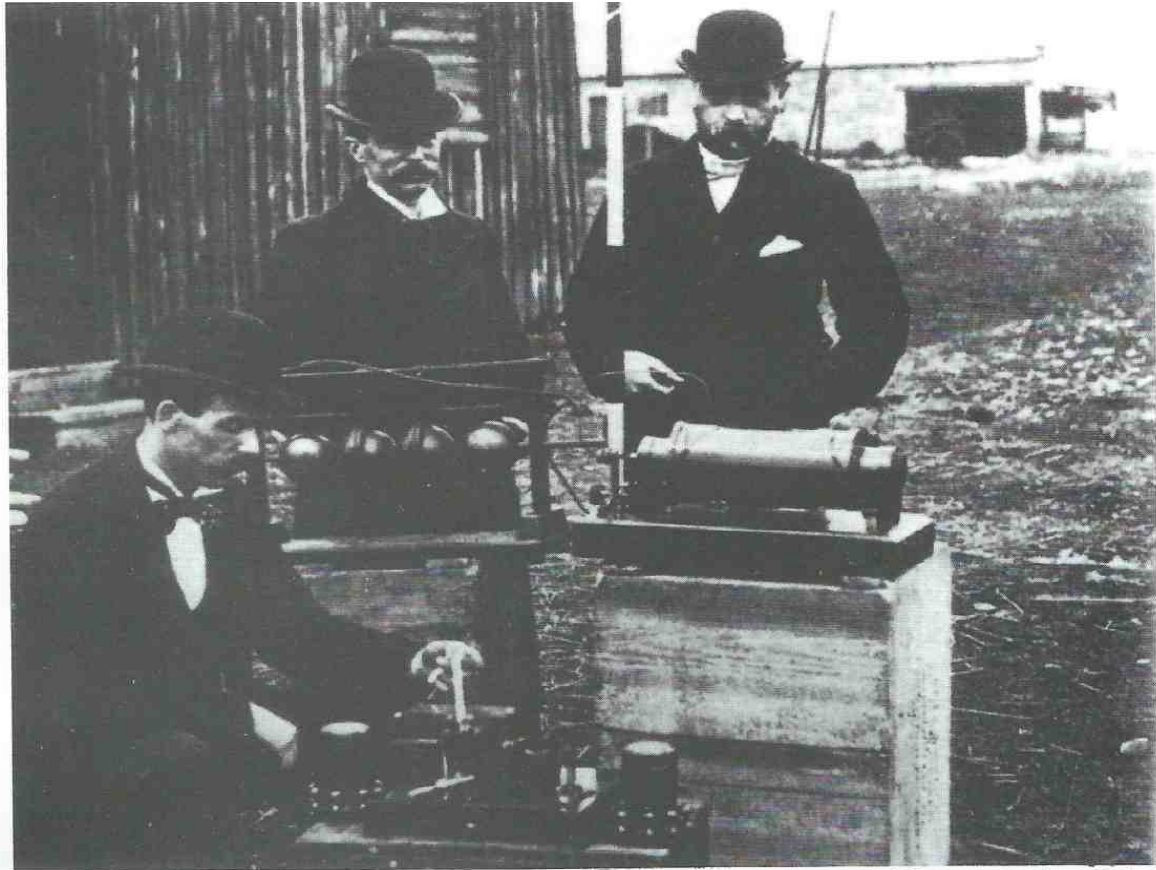
The scene now changes to Weston-super-Mare. Mr Erskine Pollock, a firm believer in the Marconi story, made it his business to collect statements in support of it. The most convincing of these was provided by Mr John Thorn who, in January 1986, deposed:

'I have been a member of the Weston-super-Mare Radio Society, afterwards the Radio Club, since 1950 and I well remember an address being given about 20 years ago by Mr W.J. Badman a well known Electrician in business at Weston-super-Mare. He told us that he used to collect from Brean Down Marconi's wet-cell batteries, with a trolley, take them to his father's workshop at Uphill where they would be recharged and return them to Brean Down next day. He was then a schoolboy. He would collect the price of this from Marconi who was living in Coastguard Cottages, then in three parts. He also said that there were three elderly gentlemen in bowler hats, probably they were observing on behalf of the Post Office.'

The spark transmitter used in these tests required about 80 watts to drive the induction coil and power of this order would have required the use of accumulators. On the other hand, the receiving equipment needed much less power; a few dry primary cells would easily have met the needs of the coherer, relay and trembler bell. The Morse printer which recorded the signals was driven by clockwork. If Mr Badman's account is correct, it therefore follows that a transmitter must have been used at Brean Down.

Unfortunately for the Marconi legend, all accounts of the trials between Lavernock and Brean Down agree that attempts were confined to the two days 17 and 18 May and that the transmitter was at Lavernock. George Kemp's original diary reads:

'17th. Monday.But as they had difficulty to land at Brean Down & could not work the Kite we got no message through on Marconi system...



Post Office inspectors checking Marconi's equipment. (by kind permission of GEC-Marconi Communications Ltd., Chelmsford)
(L to R): Mr S.E. Hailes (linesman), Mr H.C. Price and Mr G. N. Partridge (engineers).

18th. Tuesday. Did the same at Transmitter on Lavernock Point & estimated Height of Kite as follows

They reported ready at 2.3 0 pm. & we sent

2.50 V's to the Right & Left...

4.10 to 4.20. Sky R & L.

Reported Received Signals.....'

This was the climax of the experiments and thereafter operations were confined to the Welsh side of the Channel, finally ending on Saturday 29 May 1897.

On this evidence, it would seem very doubtful whether the legend could have any real foundation; and one might well feel justified in discounting it, were it not for the following remarkable story.

John F. Kemp's Account

On 29 July 1937 an article appeared in the *Western Mail*, under the name of John F. Kemp. John Frederick Kemp, then 89 years of age, was the brother of George Stephen Kemp and lived in Cardiff. In 1897, his son, Herbert John Kemp, was an engineering student at University College, Cardiff and during the trials he helped his uncle, George, from Friday 7 May 1897 until Thursday 13 May 1897 while he was preparing the equipment on Flat Holm. While there is no definite evidence on the point, it is reasonable to surmise that when on the mainland, George probably stayed with his brother and that John was well-informed about what went on. At the least it would be unwise to discount his testimony lightly.

In his article, John gives a précis of the trials in diary form. This differs from the account given in George's diary, which makes it very doubtful whether John drew from this particular source.

It could be that John kept a diary at the time, but equally possible that he merely used the diary form. At any rate, John's article certainly puts fresh life into the Marconi legend, for it contains the following startling statements:

'Friday 21 to Monday 24. For the purposes of the experiments carried out over the next six days, Signor Marconi made flying visits to London and to the Royal Needles Hotel, Alum Bay, in the Isle of Wight.

Tuesday 25 and Wednesday 26. During these intervals Mr Kemp erected a corresponding mast on Brean down, Weston-super-Mare and got excellent signals across to Lavernock, a distance of eight miles over the sea. The Morse slip recording the first signal across the Bristol Channel, signed by Signor Marconi, is now in the National Museum of Wales.'

If these statements are true, Marconi *could* have been on the English side of the Bristol Channel on 24 May 1897, which makes it that much more plausible to suppose that he found it convenient to return to Weston-super-Mare rather than to Penarth. Transmissions were made from Brean Down to Lavernock on the following two days, thus substantiating Mr Badman's account of hauling accumulators to Brean Down.

The Conundrum

Unfortunately, the two brothers' accounts are not only com-

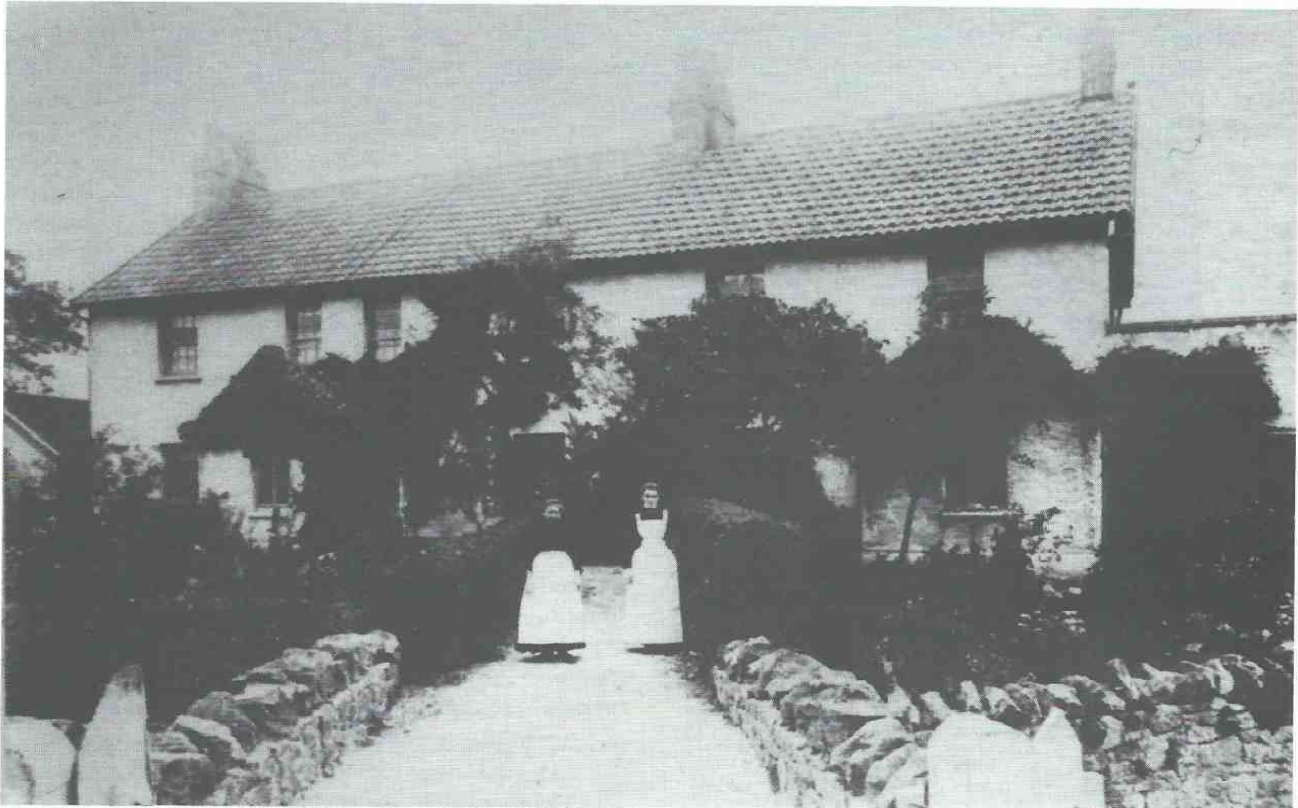
pletely at variance as regards the events of 25 and 26 May, but in respect of other matters as well. Two questions Spring to mind:

- i) What would have been the point of transmitting from Brean Down at all? It had already been established that signals could be received eight miles across the water in the one direction and it would have added practically nothing to ascertain that they could also be transmitted in the opposite direction.
- ii) When kite aerials had already proved satisfactory on 18 May, what point would there have been in going to the trouble of erecting a tall mast at Brean Down?

how was it that John Kemp and Mr Badman concur in implying that signals were made from Brean Down?

It is likely that both gentlemen testified in good faith and that the explanation is to be found in a second series of trials, which the Post Office carried out without Marconi's official participation between October 1899 and April 1900.

Marconi was granted a patent on 2 July 1897 and on 20 July the Marconi Company was formed to exploit it. This led to a rift between the Post Office and Marconi, since the Post Office took the view that it would be improper to use public money to develop an invention, the rights to which were held by a private



Coastguard Cottages, Uphill (Courtesy of Mrs E.M. Sutton)

John Kemp was 89 years of age when he wrote his newspaper article - some forty years after the event. He refers to 'my research work into Senator Marconi's early experiments in South Wales' which implies that he did not have a diary - or for that matter any other material - by him as his source material when he embarked on this project. The very fact that he writes as if Marconi had run the trials, when in fact they were basically Post Office experiments, also betokens a lack of familiarity with his subject.

Of the two accounts, it seems that George's is the more reliable, bearing in mind that he was actually present when the events which he recorded took place and his record was made at the time.

If this is correct, John's story of transmissions from Brean Down collapses and with it doubt is cast on Mr Badman's account. Nevertheless, an awkward question still remains:

company. The Engineer-in-Chief was formally instructed that: *'for the present, Mr Marconi could not take part in any Post Office experiments whatsoever'*.

However, in 1899, the Post Office realised that it was failing to keep abreast of developments and the second series of trials was undertaken. It is these trials that are referred to in an article in the *Weston Mercury* of 18 September 1926 by 'R.G.M.'. Mr Erskine Pollock established that these were the initials of Mr R.G. Masaroon, who lived at 3, Ashcombe Gardens, Weston-super-Mare. In 1928 he moved to 33, Logan Road, Bishopston, Bristol where, subsequent to Mr Masaroon's death, the next-door neighbour told Mr Pollock that he used to speak of his association with Marconi.

Mr Masaroon's Evidence

Robert Gardner Masaroon was born on 26 January 1864 and, after two years at sea, joined the Post Office just prior to his

eighteenth birthday. He served with the Royal Engineers and declared himself in 1900 as 'Company Quartermaster Sergeant in Royal Engineers employed as Sectional Engineer in Post Office Telegraphs'. He returned to the Post Office in 1904 until his retirement in 1926. Masaroon is clearly a trustworthy witness and was aged 62 when he wrote his *Mercury* article. He subsequently died at age 91.

In his article in the *Western Mercury* he refers to an incident which is known to have taken place in August or September 1897 when he took part in experiments in wireless telegraphy sponsored by the Army. Attempts were made to signal from Salisbury Plain to Lansdown, Bath. The kite used to support the aerial at Lansdown broke loose in a gale, which involved him in a cross-country chase close on six miles before it was recovered from some cottagers who had hidden it in an out-house. Even at this early stage, he must therefore have been a member of the unit within the Army which was investigating the potential of Marconi's system. He then refers to an occasion on which he:

'had gone over to Brean Down to make some changes and was told by the ferryman at Uphill that he would be on duty at the ferry until 7 o'clock. Shortly before 7 I arrived at the riverside, but neither boat or ferryman were to be seen. Enquiries at the farm nearby went to show that the ferryman had knocked off for the night and that if I wanted to get to Weston I would have to walk round by the bridge'.

The distance was about 14 miles and it was past midnight before he completed his journey.

The point was made earlier that, during the 1897 trials, Brean Down was only visited on one day, 18 May, by a party which sailed across from Penarth. There was no occasion for anyone to go there from Weston-super-Mare. It follows that Masaroon cannot be referring to events in 1897. But there were only two sets of trials in the neighbourhood. He must therefore be referring to the later trials in 1899-1900. Elsewhere in the article he writes:

'It was believed at the time that signals could be carried further across water than overland surfaces and to test this idea arrangements were made to try to exchange signals across the Bristol Channel from Weston-super-Mare to the Welsh coast at Lavernock. As kite supporting aerials would be inconvenient and it had been proved that very long aerials were unnecessary, the aerials were supported by poles erected on each side of the Channel, the pole at the Weston side being placed at the Knightstone Baths. The apparatus was fitted up at the Baths and after several trials, signals were satisfactorily exchanged between the two points - about seven miles apart.

Attempts were then made to signal over a greater distance and tests were made from Brean Down Fort (then occupied by a detachment of the Royal Artillery) to the Welsh Coast. Success being achieved, the venue was shifted to Ilfracombe, where a pole about 150ft high was erected on the rocks near the harbour and signals exchanged with the opposite shore near the Mumbles.

Chevalier Marconi was present at all these tests and was able to satisfy the P. O. engineers that the new system of

communication promised great things and was an enormous advance on any previous method of signalling without wire.'

If Masaroon is accepted as an unimpeachable witness, the final sentence of the foregoing quotation is incontrovertible proof of Marconi's presence at the 1899-1900 trials. True, it does not prove he actually stayed in Weston, but it does make it very likely, since he was 'present at all these tests'. The fact that a transmitter was established at Brean Down Fort now corroborates Mr Badman's story about the batteries.



Robert Gardner Masaroon (left) with his brother Edward (courtesy of the late Mr John Masaroon)

But what would Marconi have been doing there at all, if the Post Office now wished to distance itself from him? He had been in the United States and did not return to England until the middle of November. We know that he went to various places between then and the end of April and also places which George Kemp visited. Weston is conspicuous by its absence in both cases.

The Conclusion

One explanation does suggest itself. Marconi could not have taken any official part in the trials but, if we accept Masaroon's statement that he was present, then it must have been unofficially. He must have made many acquaintances, if not friends, among the Post Office engineers and soldiers with whom he had worked, shared the excitement of the experiments and braved the weather during the preceding four years. He could

have taken it into his head to turn up to see how things were going in the Post Office camp and presented himself informally at Weston. Had he done so, it is hard to believe he would have been given the cold shoulder. After all, he was still the principal performer on the stage of wireless telegraphy and a figure who was bound to command respect.

This intriguing theory certainly adds an unexpected piquancy to the Marconi legend, but it does have one small flaw. Badman said that he was a schoolboy when he conveyed the batteries to and from Brean Down. On 22 August 1970 he was featured in an article in the magazine *Ad Lib*, when he was 92 years of age. This means that he must have been born at some time during the year August 1877 - August 1878. In May 1897 he could not have been older than 19 so that he could well have been a schoolboy. But, by October 1899 he would have been at least 21 and certainly past his schooldays. He gave the talk which Mr Thom attended about 1966 when he would have been in his late 80s. Could the old gentleman's memory have played tricks with him or was Mr Thorn's recollection defective on this point?

Masaroon's Testimony Seems Crucial

Not only was Masaroon personally involved in the 1899-1900 trials, he was a gentleman whose integrity must be regarded as beyond question. Also, his evidence is disinterested. It seems reasonable to suggest that Marconi was present at these trials without official sanction as this is consistent with the evidence. Of course, no hypothesis is better than the evidence on which it is founded and the material part of Masaroon's testimony is contained in no more than one single sentence. However, it seems most likely that the legend of Marconi's presence in Weston-super-Mare is rooted in truth.

As a result of continued experiments, Marconi was at the forefront of developments in 'radio' communication. In 1901, in his enthusiasm to forestall any competitors, he sailed for Newfoundland to replace his new large receiving antenna, which had blown down, with a kite-borne antenna and on 12 December 1901 he received the first transatlantic wireless communication, from Poldhu in Cornwall.

From 1902 he devoted more of his time to managing his companies, exploiting and developing a series of discoveries by his teams of highly professional consultants and employees, amongst others.

He died, in Rome, on 30 July 1937.

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