

# Guglielmo Marconi, Entrepreneur **Nobel Prize for Physics 1909**

Barbara Valotti Museo Marconi Fondazione Guglielmo Marconi www.fgm.it

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It all started when Annie Jameson, grand-daughter of the founder of the famous whiskey company, went to Bologna in 1859 to study "bel canto." She was 19.

She stayed with the de Renolis family, whose son-in-law was Giuseppe Marconi

It was love at first sight; she abandoned the "bel canto" and went home to ask permission to marry Marconi.

Her parents refused, because she was too young.

But Giuseppe and Annie kept in contact...





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From Giuseppe Marconi's notes: Miss Annie Jameson's address



When she was old enough, Giuseppe and Annie married 16 April 1864 in Boulogne-sur-Mer and went to live in Bologna.

Their first son Alfonso was born the following year.

Guglielmo was born on 25 April 1874.









# Villa Griffone, near Bologna, Italy.



His mother was very attentive...







...and encouraged his experiments with wireless...













*"I owe what success I have had more than anything to the encouragement and inspiration of my mother.* 

I learnt from her my first words in Italian and in English, too."





His father felt his experiments were a complete waste of time...

"Perdità completa di tempo," he said.

The Italian Minister of Post and Telegraph thought it was a complete waste of time...

So in January 1896, Gugliemo and his mother went to England...



"I resolved to go to England with a view to launching the invention on a large scale. I chose England for various reasons chief among them being the fact that I possessed numerous relatives and friends there and that Great Britain at that time was at the very summit of its financial and industrial development."





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His cousin, Henry Jameson Davis, arranged a meeting with Sir William Preece, Chief Engineer of the General Post Office, and demonstrations of his invention began.





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He founded the Wireless Telegraph and Signal Company in 1897...







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Most of the investors were Irish grain merchants...













He came to Ireland in 1898...

...and made the world's first live broadcast of a sporting event...







### "Dearest Papà,

now I am in Dublin to install my apparatus aboard various yachts that have to take part in the regattas on the 19th , 20 th, and 21st of this month, and I am sure that everything will go wonderfully. My Irish relatives are all kind to me, and they asked me to say hello to you and Mamma... I am always very busy and my work keeps increasing as the practical applications of my invention grow. Say hello to everybody at Griffone and in Bologna."

[Letter written by Guglielmo Marconi to his father on July 13, 1898]











He came to Crookhaven, Co. Cork in 1901...

# Crookhaven was the last/first safe port for ships crossing the North Atlantic







## Why Crookhaven?

Reuter opened a telegraphic agency in London in 1851, and in Queenstown (Cobh) in 1853.

The "Telegraph Dispatch," based in Cork, carried reporters out to ships arriving from America, who then took the train back to Cork to file their stories.

Reuter got a four-hour head-start by putting a telegraph station in Crookhaven, 80 miles west, and building a telegraph line to Cork...





The Cork Examiner denounced Reuter in 1863 as "a clever foreign speculator" who wanted to monopolise the foreign news.





Reuters and Lloyd's worked together on a station at Brow Head, Crookhaven, signalling to passing ships with flags by day and lights by night.

Marconi brought wireless in 1901...





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The local newspaper reported:

"Last evening, Mr. Marconi, the inventor of wireless telegraphy, and some engineering assistants, travelled from Cork to Skibbereen by the 4PM train on his way to Crookhaven, where we understand a number of experiments are to be conducted in connection with the establishment of a receiving station at Brow Head for the transmission of messages to and from the liners."





"Mr. Marconi was absolutely frank and stated he really had no information to impart and that he was going to Crookhaven to inspect the Marconi station which had been established there.

Mr. Marconi was rather surprised that his visit to the southwest should have been known..."











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Proof of Concept: The "225 mile" experiment...







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Poldhu Kotel, Mullion, 29 June 1908. G. Marconi Cegr plear S ir many thanks for your Wire a letter duly received I I am bleased to Know that

You can allow me a little

more time with the mastr.

I am cleased to say the To zono of gailway metals are at the Station, but the Deople of Alston cannot-Cut them for one, consequently I have get timber wageout to carry them out here 9. hope to cut up some of them This evening with the help of The & ellar Black ameth. have but received & Logo of Puch Pine which are more or less crooked & showing signo of dry rot. I have wired The Spice to Know what is to be done with Mem, for I





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when in get the Aerial out to its proper d'lace I am d'haved to Know youlike Crookhaven a tope for will have a great- enccess a stre hest- I health helpe spu leave

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With the concept now proven, Marconi left Crookhaven on 1 Nov 1901, and returned to Poldhu...





# On 12 December 1901, a message was successfully transmitted from Poldhu to St. John's, Newfoundland.






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#### 12 December 1901:

Marconi receives in St. John's Newfoundland the first transatlantic radiotelegraphic signals. It was the most important success of his career.





## WIRELESS SIGNALS ACROSS THE OCEAN

Marconi Says He Has Received Them From England.

Prearranged Letter Repeated at Intervals in Marconi Code.

The Italian Inventor Will Now Leave St. John's, N. F., and Will Go to Cornwall to Continue the Transatlantic Experiments from

His Station There.

ST. JOHN'S, N. F., Dec. 14.—Guglielmø Marconi announced to-night the most wonderful scientific development of recent times. He stated that he had received electric signals across the Atlantic Ocean from his station in Cornwall, England.

Signor Marconi explains that before leaving England he made his plans for trying to accomplish this result, for, while his primary object was to communicate with Atlantic liners in midocean, he also hoped to receive wireless messages across the Atlantic.

The Marconi station in Cornwall is a most



In 1905, he built a station at Clifden, Co. Galway...





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### The Marconi wireless station, Clifden.





...from which the first commercial wireless telegrams were sent 17 October 1907...



#### TRANSATLANTIC MARCONIGRAMS NOW AND HEREAFTER

N THE morning of October 18, 1907, a young man sat at a telegraph key in a lonely station at Glace Bay, Nova Scotia, and "talked" to Clifden, Ireland, not by a cable under the ocean, but through the air, as a man might talk with his friends across an alley. That marked the beginning of a new era in communication. Perhaps it will be regarded as an economic event as great as the opening of the first cable. At any rate, even though the wireless should not soon become a commercial competitor of the cable, to-day we must regard it as another link to bind the Old World to the New.

The mere wireless bridging of the Atlantic is no new thing. The new thing is the opening of a wireless "line" to the business of the world, the statement that some press messages will be accepted for transmission at the rate of five cents per word, and the sending of 10,000 words in one day at that rate. These things made the transatlantic wireless a servant of commerce.

The romance of this new marvel culminated on December 12, 1901, six years ago. On that day Mr. Marconi sat at a little flat table in an old barracks on Signal Hill, Newfoundland. He held a telephone receiver to his ear and listened. The wire ran out to another wire that ran from the earth to a kite flying four hundred feet in air. The man at the receiver was quiet, contained, placid. For many minutes he sat unmoved; then a smile crossed his face. He handed the receiver to his assistant:

"See if you can hear anything, Mr. Kemp!" he asked.

The other man took the receiver and listened, while Mr. Marconi watched him closely. Suddenly a faint sound, like a distant echo, came over the wire. It might have been merely an accident, the flight of an insect against the suspended wire, or some little atmospheric disturbance. But it came again, still faint, but clear — the three dots that in the Morse code make the letter S. The thing was done.

A year later, December 16, 1902, the first long message was sent from the station at Glace Bay to the station in Great Britain, addressed to the London *Times*, from its own correspondent on the ground. Many other messages followed. In January, 1903, the station at Cape Cod sent greetings from



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# Alcock and Brown (first non-stop transatlantic flight 14-15 June 1919)













#### Nobel Prize in Physics 1909 to

#### Guglielmo Marconi



#### and Karl Ferdinand Braun



*"in recognition of their contributions to the development of wireless telegraphy"* 





A far greater importance attaches, in my opinion, to the possibility offered by radio of *exchanging* communications wherever the correspondents may be situated: whether in mid-ocean, or on the icepack of the pole, or in the water of a desert, or above the clouds in an airplane!"

Marconi, 1937



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"With all our friction, jealousy and antagonism... the ideal of peace and fraternity remains unabated in us: we all yearn for a better life, based on a better understanding of one another...

In radio, we have a fitting tool for bringing the people of the world together...

a wide channel for the improvement of our mutual relations is available to us; we have only to follow its course in a spirit of tolerance and sympathy, solicitious of exploiting the achievements of science and human ingenuity for the common good."

Marconi, 1937



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In a few years of manic activity, Guglielmo Marconi managed to transform an obscure piece of maths into a social upheaval."



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He did not really make any fundamental discoveries, and radio was mostly a matter of assembling parts created by other people."



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No intellectual, Marconi earned his Nobel prize the hard way by dragging a great chunk of physics out of the lab and holding it up for the world to see, approve and, more importantly, buy."



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### www.marconicentenarionobel.it



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