

Harbour Grace and the 'Direct': the amazing story of a telegraph cable

The establishment of the first trans-Atlantic telegraph links between Heart's Content and Valentia island in Ireland is well-known and has effectively overshadowed the histories of other cables that were subsequently landed at different places in Newfoundland. This is in part due to the monopoly that one company held (and exercised) for fifty years. The original grant of exclusive rights to land cables had been made to Cyrus Field's Newfoundland Telegraph Co. in 1854 and somewhat dubiously passed to the Anglo American Telegraph Co. (AATC), owners of the Heart's Content cables. This they jealously guarded to the bitter end. With only a short time to run and much to the disgust of the Newfoundland people, they even prevented Marconi from working his wireless out of St Johns.

Our story here concerns one of the few attempts to challenge the exclusive landing rights of the Anglo. The first trans-Atlantic telegraph created great possibilities for enterprises which depended on the interchange of information. However, the Company was unreceptive to pressures to reduce tariff rates. It was therefore natural that this should quickly generated competition. The first company to seriously take up this challenge was the Direct United States Telegraph Co, (DUSTC) which was formed in 1873. The had strong support from the press who were clamouring for reduced tariffs. They were also supported by the German electrical company Siemens, whose British arm wished to break the cable manufacturing monopoly enjoyed by the Telegraph Construction and Maintenance Co. The Company was formed with a capital of £1.3m. The original subscribers included bankers, and stockbrokers, but also a politician, Henry Labouchere, one-time President of the UK Board of Trade and better known as the author of the 'Labouchere Amendment' to Britain's homosexuality laws that was used to imprison Oscar Wilde.

Siemens, having had bad experiences with chartered ships commissioned their own, the *Faraday*, which had many revolutionary features. These included twin screws, a bow rudder, twin super-structure with a through deck as well as similar cable laying gear fore and aft. This meant that it could lay or pick up a cable with equal facility. It was launched on 17 February 1874, was fitted out during April and was on her way by 16 May of that year.

It was originally intended that the cable should be connected directly between Ireland and the United States and for that reason Siemens designed a special highly conducting cable. However, in spite of this, it was soon realised that the excessive length would result in an uneconomical operating speed (measured in words per minute) and that a nearer land-fall would be needed.

Papers in the Centre for Newfoundland Studies at Memorial University show that as *Faraday* approached Conception Bay its intentions were challenged in the courts by the AATC manager in Newfoundland, Alexander M. Mackay. On 6 August 1874 The DUSTC was subject to an injunction which they opposed, claiming that the cable landing monopoly claimed by the Anglo was void for a variety of reasons. The matter was pursued through the Supreme Court of Newfoundland and eventually through the Imperial Privy Council. The initial injunction was removed on 26 October 1874, but reissued on 27 November 1874. It was overturned again on 3 February 1875, but that ruling was overturned again on 3 January 1875 and the original ruling was to stand. In parallel with this Labouchere and colleagues pushed hard on the question of the

Newfoundland Government exercising its right of 'pre-emption', a take-over of the telegraph operation, which right formed part of the original agreement with Cyrus Field. By creating uncertainty in the public mind, it was possible to damage the stock market value. The architects of this attack were able to buy Anglo shares at a knock-down price and sell them when it became obvious that the Newfoundland Government never had any intention of exercising its rights of pre-emption.

Once it became clear that it was not going to be possible to break the monopoly, *c.s. Faraday* was forced to divert the cable to Tor Bay near Halifax. The cable was tested by Sir William Thomson (later Lord Kelvin) on 16/17 September 1875 and found to be in excellent condition and the forecast of 9 words per minute was confirmed. The line from Halifax was extended to Rye Beach, New Hampshire, although it seems that there was no specific permission for this landing. It was then connected to New York by landlines leased from the Franklin Telegraph Co and everything was ready.

The Anglo American Telegraph Co. was jealous to guard its hegemony and reacted to fend off the newcomer. In 1873 it had moved from the message rate (minimum 20 words) to a word rate and charged 4/= (four shillings or 20p) per word. When the Direct Co opened for business it dropped its tariff to 2/= (10p) per word to counter the special press rates offered by the Anglo. It then went to 1/=, but when there was an interruption on the Direct cable it immediately raised its tariff to 3/= (15p), which caused US President Grant to complain to Congress about this behaviour. Upon restoration of the line, both companies retained the higher tariff.

In its first year of operation the Direct earned £143,610 gross income on its capital. During the same period the Anglo and its French partner (whose cable landed on St Pierre) grossed £490,910 on a capital of £7m. The Direct was quite clearly a very profitable operation and therefore presented a very serious threat to the share value of the Anglo. At this point a man named John Pender stepped in. He was one of the leading sources of funding for the original Anglo cables and was now directing the Eastern Telegraph Co which was connecting all points of the Empire. In 1873 he had established the Globe Telegraph and Trust Co, an early form of unit trust company which helped telegraph cable investors to spread their risk in what was a volatile market. Pender used funds from the Globe Co to buy a majority shareholding in the Direct and against much opposition, he forced a merger into what was effectively a price-fixing cartel. The Western Union Telegraph Co joined the cartel in 1881 and by 1883 the relative share of traffic on the Atlantic was as follows: Anglo + French Co (cable to St Pierre) (49%), Western Union (23%), Direct (16%), PQ; the 2nd French Co (12%). This means that the Direct cable was by that time handling approximately 3,200 words per day.

It is also useful to note that during this time the various termini acquired acronyms as identifiers. Heart's Content (HC), Valentia (VA), St Pierre (SP), Duxbury (DY), Sydney Mines (Z). The call sign for Ballinskelligs, which was the Irish end of the Direct Cable was ID.

In 1885 a new competitor arrived. It was the Commercial Cable Co and it had highly efficient cables between Waterville (WV) in Ireland and Hazel Hill, near Canso in Nova Scotia. They never joined the cartel and made every effort to have the US Government break it up under their anti-trust laws. Competition between the Commercial and the cartel known as the Joint Purse

Group was stiff and in an effort to reduce transmission costs the Direct cable was removed from Tor Bay and diverted into Halifax in October 1887 by *c.s. Britannia*.

The AATC monopoly on cable landings in Newfoundland ceased in Newfoundland in 1905 and the government there immediately saw a source of revenue. Each cable landing on its territory was taxed. St Johns intimated that it would add its own surcharge and this prompted companies to seek alternative landing sites. The Direct cable was diverted to Harbour Grace (HG) in 1910 and the engineer's record of this diversion is in the Maritime History Archive at Memorial University. This rerouting effectively doubled the transmission speed for traffic on the Atlantic cable. Signals were then relayed from HG to Halifax (HX) and thence to Rye Beach.

Cable and Wireless documents in Britain include a copy of the Agreement between the Government of Newfoundland and DUSTC (11 March 1911), which granted cable landing rights and stipulated the following conditions and privileges amongst others

- DUSTC must not compete with the NF govt. system nor transmit or receive business from or to NF provided that nothing shall prevent the transfer or exchange of through traffic by the Company to, from or with any other cable or telegraph Co.
- A rent of \$4,000 annually payable on 30 June each year in respect of each cable landed
- Any through cable shall be viewed as two cables.
- Allowed free access to lay trenches and to erect station houses and cable houses provided not more than 50 acres in area.
- All necessary equipment will be admitted free of duty.
- Access rights except in St Johns for laying trenched cables.

However, this was soon to be turned upside down by outside events. In 1911 the US Government indicated its intention to pursue Western Union under its anti-trust laws, in particular, that it was party to a British-based price-fixing monopoly. This did not phase the communications giant, whose President, Newcomb Carlton decided on a tactical move. Western Union provided the rest of the Joint Purse Group with land-lines for onward transmission of its messages from Newfoundland. It now threatened to withdraw these so as to comply with the US Government demands. This which would have been disastrous for the British dominated group, who had no alternative means for relaying its traffic. The Anglo and the Direct were given one option: to lease their entire operation to Western Union for 99 years. This they did and Western Union was able to claim that there was no longer a British monopoly on Atlantic cables.

The first world war was a very close run thing for international telegraph communications and for the Allied Governments who depended on them for secure transmission of their messages. There was heavy censorship. Business messages took up to 3 weeks to get to the top of the queue for transmission. Station staffing levels were increased; the station at Valentia in Ireland had over three hundred working twelve hour shifts. When cables failed there were major problems. Repair was extremely dangerous because of the possibility of attack by U-boats and a repair expedition required a naval escort. As the war came to an end the British Government clearly realised the dangers inherent in leaving its communications to the free-market. So, anxious to acquire a trans-Atlantic cable of their own, they found Western Union receptive to their overtures. The Direct cable had not been reliable for some time and WU had been paying an annual rent of £65,000 to its owners on the basis that the company was to have laid a new

cable at its own expense. This had not happened, so that Western Union were at liberty to terminate the agreement. In 1921 the UK Postmaster General purchased the operation, including the stations (HG and ID) as well as the cable. The Ballinskelligs station comprised

- Superintendent's house

- Station, equipment and accommodation for 8 – 10 men

- Four semi-detached houses in pairs

- Four terraced houses

- One small detached house

- Four small residence of corrugated iron converted for married members of staff

- Gas (acetylene) house and fire plant

The sale was reported in the Daily Telegraph for 18 March 1921. It mentioned that the Company had been purchased for £570,000. A new cable would have cost the Government £1m.

The Direct cable was intended to act as a reserve and was designated *Imperial No 2*. As it was not immediately required it was leased back to Western Union and during the period of the lease, which terminated on 30 June 1922 the Post Office paid for repairs and replacements. After June 1922 temporary staff were employed by the Post Office but the cable was not brought into operation. The *Electrical Review* for 3 March 1922 reported that Western Union staff at Rye Beach had been transferred to other stations and the station had been closed. The HX-Rye Beach section was not included in the original sale. At this point the Directors of the Direct United States Telegraph Co. held their last AGM which was reported in *Telephone & Telegraph Age* for 16 May 1923. There had been suggestions to continue as an investment company, but it was felt best to go into voluntary liquidation and realise the assets. The previous year's profits, £27,902 represented an interest dividend of 4% paid.

During the summer of 1922 events in Ireland sent shockwaves through the telecommunications industry and had an impact on all aspects life that had come to depend on cable telegraphs. During the period 1918 – 1922 there was a war of attrition between Government forces and those in Ireland who sought independence. In this conflict overland lines were continually cut as a means of preventing the transfer of information that might have been of value to the military. Independence came at a price, namely the partition of Ireland and during 1922 a civil war erupted between those who accepted this price (the Free State forces) and those who did not (the Republican forces). County Kerry, where the cable stations were based, was staunchly republican and the stations were soon attacked and put out of order. The IRA were unaware that the superintendents at the different stations were able to temporarily lash up cables so that Valentia and Waterville (12 miles apart) communicated via two transits of the Atlantic. Waterville had a cable to Weston-super-Mare in Britain and so when the Government forces eventually arrived (the first sea-born invasion of the 20th century) they had the first ever internet connection to keep them in contact with Dublin (via London).

During this terrible conflict many cable were diverted from Ireland into Penzance, so that international communications could continue. As normality returned they were reconnected in late 1922. However the Post Office did not view events as being consistent with the interests of a secure Imperial cable network and were prepared to sacrifice operational speed for security. In November 1922 the cable was removed from Ballinskelligs and diverted into Mousehole. The temporary staff, with the exception of one, who was to act as caretaker were dismissed. The

caretaker was discharged in October 1924 and the Irish Free State Department of Posts and Telegraphs was requested to instruct him as to the disposal of the equipment.

In 1929 with the threat to cable investment from the new technology of wireless, there was a rationalisation of the Empire's communications and the ownership of the DUS cable passed from the Post Office to what was originally John Pender's Eastern Group and now called Imperial and International Cables. This company later became known as Cable and Wireless and is still in business today. In the context of this transfer there are two items of interest in Cable and Wireless Archive which related to His Majesty's Post Master General (HMPMG):

HMPMG to Imperial and International Communications
Conveyance of land and premises at HG, NF 4 Sept 1929.

For and in consideration of the sum of £1566 + assignment of the Agreement of 11 March 1911

HMPMG to Imperial and International Communications 4 Sept 1929.

Assignment of Lease from year to year of office premises in the Dennis Building, Granville St, Halifax, Nova Scotia

108 Granville St. First acquired by BPO on 1 August 1925 at annual rent of \$3000 (Canadian)

The new owners diverted the UK end of the cable into Porthcurno (PK), the work being completed during September/October of that year. There is then little to report from the records until the outbreak of the second world war. On 25 September 1939 a landline was leased from Harbour Grace to Brigus Junction for a rent of \$1500 per month. This provided a landline to St Johns. In 1941 there was an arrangement to rent a teletype line between the HG office and the Naval Office in St Johns. The agreement between Cable and Wireless (HG) and The Avalon Telephone Company Ltd specified that the circuit ran from Newfoundland Hotel, St Johns to HG office at a rental of \$500 per month. This was acknowledged by G.S. Tuck Manager of Harbour Grace Branch for Cable and Wireless Ltd.

The main (HG – PK) cable was interrupted on 6 October 1943. There was an attempt to repair it before D-Day, but it was not successful. Nevertheless, there was an important link from HG to HX (and from there to Bermuda). The Cable and Wireless house magazine (*Zodiac*) for November 1944 records that on 17 August there was a major fire in HG and according to the manager Mr F.C. Websper, the station escaped due to the heroic efforts of the staff.

Cable and Wireless archives have an Finance Index for Harbour Grace which covers the period 1911 – 1948. It includes conveyances and other costs mentioned elsewhere in this article. It also mentions the letting of their field to the Hockey Association and for grazing. Between 1943 and 1945 the navy had the letting as an ice hockey rink, but this reverted to the Ice Hockey Association on 1 January 1946. In 1947 Manager R.V.C. Middleton signed the agreement which permitted the Harbour Grace Ice Hockey Association the non-exclusive use of the field at a nominal rent of \$1 per annum to be paid in advance. Mr Middleton retired in 1949 after 37 years with the company (not clear whether this was with DU or with Imperial Cables). He had been Manager in Newfoundland since January 1945.

The 1949 Cable and Wireless Schedule of Properties gives a useful description. Harbour Grace had a cable office with manager's flat at a value of £1566. It was described as having 2

bedrooms, 3 servants' bedrooms in attic: a total of 10 rooms including kitchen and bathroom. The manager was the only resident and there were 5 local clerks. The cable hut had been built of concrete in 1936 and was valued at £78. The total land amounted to 3 acres.

In 1947/48 there were plans to renew 800 miles of the PK – HG route, which was to be part of a Cable & Wireless ten year renewal plan and a survey of the route was commissioned. As part of the planned restoration there was a move to divert the cable from HG to St Johns. In attempting to obtain a landing license, the Canadian Department of Transport questioned the ability of Cable and Wireless to obtain the necessary authority, as it was not a company within the meaning of the telegraph act; in fact it was under UK Government control and did not become an independent company until many years later.

Cable and Wireless Archives reveal that the restoration required the repair of four breaks as well as the renewal of 800 miles on PK – HG. The repair to the main sections were undertaken by the Post Office cable ship *HMTS Monarch*, under charter to the Company. The replacement cable used a new form of electrical insulator based on polythene. *Monarch* also undertook to replace 400 miles on HG – HX and HMTS landed a new shore-end at Porthcurno. The total cost of the operations was £1.9m. Direct contact on PK - HG was achieved on 6 August 1952 and through traffic to HX was completed on 21 August.

The cables were diverted into St Johns in 1953 and the lands and station at Harbour Grace were sold to the Canadian Overseas Telecommunications Corporation on 1 July 1954. An exchange of messages (in Cable & Wireless Archives) confirms the end of Harbour Grace at a trans-Atlantic cable station:

Decode of telegram Cable and Wireless GM/Montreal to MD/London (1 July 54)
"LAND AND CABLE STATION BUILDING HARBOUR GRACE NOW SURPLUS TO CORPORATIONS REQUIREMENTS WERE EXTENSIVELY ADVERTISED FOR SALE. MUCH DIFFICULTY IN OBTAINING BIDS. HIGHEST OFFER SEVEN THOUSAND FIVE HUNDRED DOLLARS WHICH WE PROPOSE TO ACCEPT. PRICE INCLUDES CABLE HUT. AS A RESULT COTC ACT CORPORATION MAY ACQUIRE CABLE HUTS. KINDLY SAY HOW MUCH PREPARED SELL HUT TO CORPORATION. ALSO PLEASE SAY HOW MUCH PREPARE SELL CABLE HUT HALIFAX."

On 13 July 1954 a draft response was prepared for coding from MD/London to GM/Montreal
" . . . DO NOT PROPOSE MAKE ANY CHARGE FOR CABLE HUT HARBOUR GRACE AND PREPARED SELL CABLE HUT AT HALIFAX FOR EQUIVALENT OF SIX HUNDRED POUNDS"

It is strange to think that summer 2004 will represent fifty years since the closure of the Harbour Grace station, just two years before TAT-1, the first trans-Atlantic telephone cable between Scotland and Newfoundland sounded the death-knell of the entire telegraph era.

Dr Donard de Cogan is a chemist, turned physicist, turned engineer who now teaches in the Computing Sciences Department at the University of East Anglia at Norwich (the closest UK university to mainland Europe). His researches include a computer model for human digestion and the simulation of noise emitted from Lotus sports cars. His 'other' job is history. His wife can claim four generations of links to Newfoundland. Her great-great grand-daughter was the first superintendent at Valentia and her great grand-father was the second. For Donard, access to the archive of family papers is a responsibility and a pleasure and the extension of these researches has provided some interesting results. A paper, co-authored with the meteorologist, John Kington *Ireland, the Irish Meteorological Service and 'The Emergency'* which appeared in 2001 in volume 56 of the Royal Meteorological Society's magazine *Weather* was concerned with the flying boats between Foynes (Ireland) and Botwood (Newfoundland). A paper, co-authored with a retired Irish army officer, Sean Swords. *Fort Shannon a case-history in Anglo-Irish cooperation during the second world war* appeared in *The Irish Sword* (Journal of the Military History Society of Ireland) Vol XXII No. 90, Winter 2001, pp 432 – 455. Together, these two papers call into question the popular perception of Irish neutrality during the second world war. This now seems to have been much closer to the Portuguese interpretation of neutrality, but has been concealed for all this time by the smokescreen of the Churchill/deValera rancour.