



WIRELESS TELEGRAPHY ACTS, 1904—1926

LICENCE TO ESTABLISH WIRELESS TELEGRAPH STATION FOR EXPERIMENTS IN WIRELESS TELEGRAPHY

Mr. Alfred Hayward Vaughan of "Woodmeade" Socketts Heath, Grays, Essex.

hereinafter called "the Licensee" is hereby authorized to establish, for experimental purposes only, a wireless telegraph receiving station and to use "non-radiating" wireless sending apparatus, as defined overleaf, at the above address.

subject to the conditions overleaf and to the payment of a fee of 10s. on the grant hereof (the receipt of which the Postmaster General hereby acknowledges) and a fee of 10s. on the anniversary of the date hereof in each year.

This licence is subject to withdrawal or modification at any time, either by specific notice in writing sent to the Licensee by post at the address shown above, or by means of a general notice in the London Gazette addressed to all holders of licences for experimental wireless telegraph transmitting stations.

Failure to send the call signal, the use of unauthorized power or the connexion of the sending apparatus with any aerial other than an "artificial" aerial as defined overleaf, or any other breach of the conditions or non-payment of fees will render it necessary for this licence to be cancelled. In event of cancellation no part of any fee paid in respect of the current year will be returned.

Issued on behalf of the Postmaster General { James 12 November, 1938.

All communications should be addressed to The Engineer-in-Chief, Radio Branch, General Post Office, London, E.C.1, quoting Reference W2/A. 6125.

N.B.—Any change of address should be notified immediately

E-in-C 435 (Prior authority must be obtained before the apparatus is removed or installed at a new address) 13997/38

CONDITIONS

1. **Radiotelegraph Conventions.**—The Licensee shall observe the provisions of the International Telecommunication Convention 1932 and the Radiocommunication Regulations annexed thereto or those of any subsequent International Convention and Regulations which may replace them so far as they are applicable to experimental stations.

2. **Secrecy of Correspondence.**—The only messages received by means of the Station shall be those intended for receipt thereby or sent by a duly authorized Broadcasting Station (*see* also note (iii)). The use of the Station for advertising or business purposes or **for the reception of broadcast programmes for entertainment** is, without prejudice to the generality of this provision, expressly forbidden. If any message which the Licensee is not entitled to receive is unintentionally received the Licensee shall not make known or allow to be made known its contents its origin or destination its existence or the fact of its receipt to any person (other than a duly authorized officer of His Majesty's Government or a competent legal tribunal) and shall not reproduce in writing copy or make any use of such message or allow the same to be reproduced in writing copied or made use of.

3. **Non-interference.**—The station shall be used in such a manner as to cause no interference with other stations.

4. **Log.**—A running record shall be kept in a book of approved type (not loose-leaf) of all experiments with the sending apparatus, showing the date and time of each experiment and the frequency and system (e.g. continuous wave or telephony) employed. No gaps shall be left between entries in the log book.

5. **Inspection.**—The station shall be subject to the approval of the Postmaster General, and together with the record of experiments and this licence shall be open to inspection at all reasonable times by duly authorized officers of the Post Office, who will produce their cards of identity on request.

6. **Control in Emergency.**—(a) If and whenever in the opinion of the Postmaster General an emergency shall have arisen in which it is expedient for the public service that His Majesty's Government shall have control over the station it shall be lawful for the Postmaster General to direct and cause the station to be taken possession of in the name and on behalf of His Majesty and to prevent the Licensee from using it and for these purposes or either of them to cause any part of or all the apparatus forming the station to be removed to such place as he may think fit and any person authorized by the Postmaster General may from time to time enter the premises at which the station is maintained for any such purposes as aforesaid.

(b) The Licensee shall not be entitled to any compensation in respect of the exercise by the Postmaster General of the powers conferred by this condition which shall remain in force notwithstanding the withdrawal or modification of the licence.

7. **Transmitting Equipment.**—(a) The apparatus must be such that the radiation therefrom will not be perceptible outside the building in which the apparatus is installed, and no attempt shall be made to send signals to other stations. It is intended that the effects produced by the sending apparatus shall be ascertained by means of suitable detecting or measuring devices coupled with or used within a few feet of an "artificial" aerial.

(b) An "artificial" aerial means a closed, non-earthed, oscillatory circuit possessing inductance, capacity and resistance, and functioning in place of the usual aerial-earth system. It must be as nearly non-radiating as possible. The inductance should be in one piece and of small dimensions (as distinct from an inductance of large dimensions, such as a frame aerial). The maximum area formed by the turns of the inductance shall not exceed 1 square foot; and any lateral dimension or, in the case of a circular or oval inductance, any diameter, shall not exceed 1 linear foot.

8. **Power.**—The power used with the sending apparatus (measured at the anode of the valve delivering power to the aerial circuit) shall not exceed 10 (ten) watts, and the sending apparatus shall not be connected with any aerial other than an "artificial" aerial.

9. **Frequencies.**—Frequencies within the following bands only shall be used with the sending apparatus :—

Frequencies (in Kilocycles per second)	Approximate equivalent wavelengths (in metres)
1720 to 1995	174.4 to 150.4
7005 to 7295	42.83 to 41.12
14005 to 14395	21.43 to 20.83

10. **Call signal.**—The call signal 2 F S H (two f s h) which has been allotted to the station shall be sent three times, either telephonically, or by Morse telegraphy at a speed not greater than 20 words per minute, just before and immediately after each experiment or short series of experiments with the sending apparatus, and on every occasion when the wavelength is changed.

11. **Aerial for Reception.**—The length of the effective portion of the aerial and down lead shall not exceed 150 feet. An aerial which crosses above or is liable to fall upon or to be blown on to any overhead power wire (including electric lighting and tramway wires) must be guarded to the reasonable satisfaction of the owner of the power wire concerned.

NOTES.—(i) **Tuning ; Measuring Instruments, &c.**—*The use of a wavemeter, for the measurement of the frequencies used with the sending apparatus is desirable, but not compulsory under the terms of this licence. Any subsequent authority for the use of sending apparatus with a radiating aerial will be subject to the possession and use of approved apparatus for accurately measuring the frequencies of emissions.*

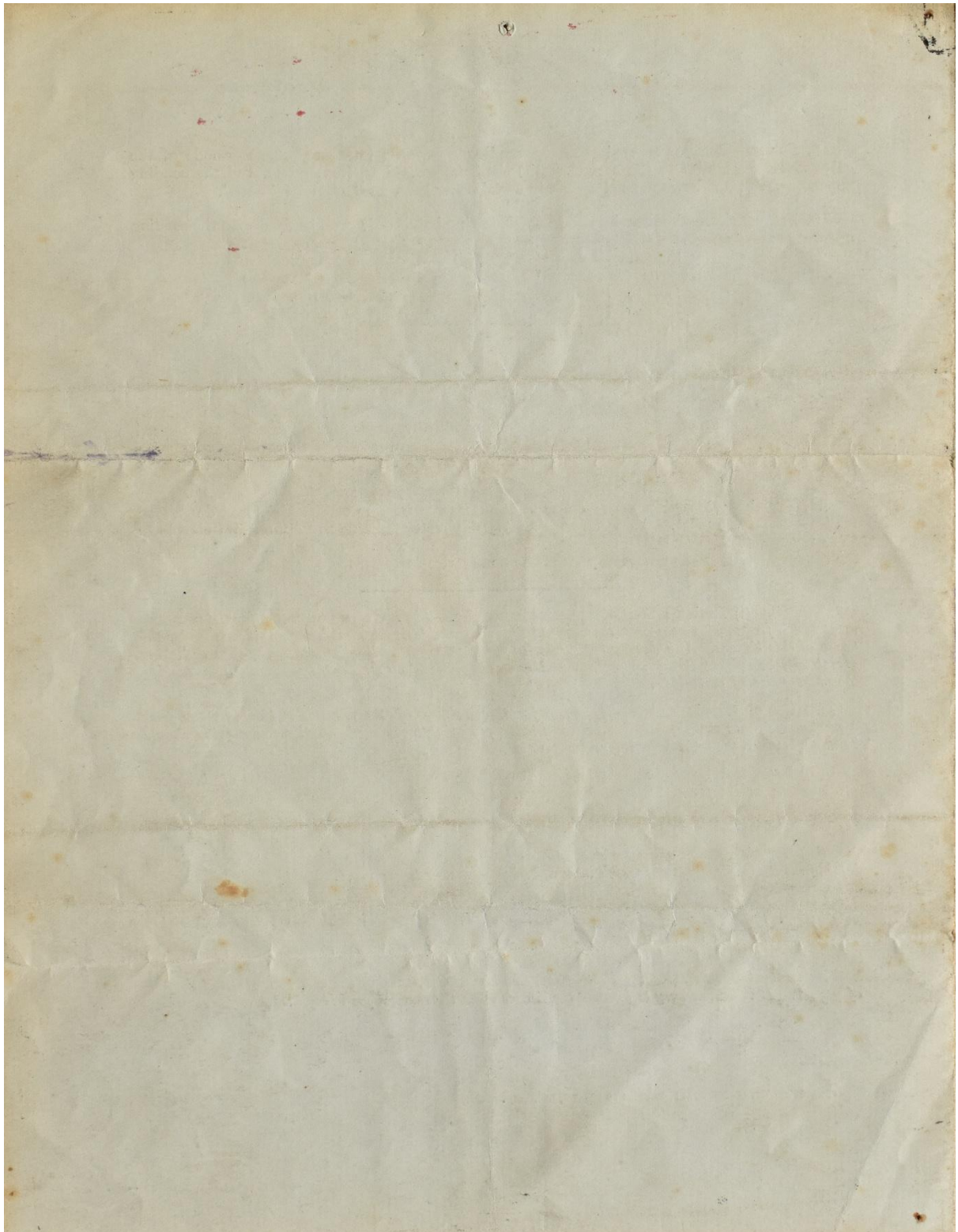
(ii) **Use of Supply Mains.**—*If power for the working of the wireless station is taken from a public electricity supply, whether or not a battery eliminator is used, no direct connexion should be made between the supply mains and the aerial.*

(iii) **Broadcast Reception.**—*This licence does not authorize the reception of broadcast programmes except for experimental purposes. For the reception of broadcast programmes for other than experimental purposes a separate licence is necessary and can be obtained—price 10s.—from a local Post Office.*

(iv) **Copyright.**—*This licence does not authorize the Licensee to do any act which is an infringement of any copyright which may exist in the matter transmitted.*

(v) **Return of Licence.**—*When this licence is cancelled or superseded by a new licence, it must be returned to the address given at the foot of Page 1, together with any letters authorizing additions or alterations to the terms of the licence.*

(vi) **Payment of Fees.**—*The annual fee should be forwarded on the due date to the Comptroller and Accountant General, General Post Office, London, E.C.1, quoting the reference given at the foot of page 1. It is unnecessary to forward the licence when the renewal fee is remitted.*



These images were provided by Chris Martin M1WCM and show the original Artificial Aerial Licence issued 12 November 1938 to his grandfather Alfred Hayward Vaughan. Although the licence allocated a callsign 2FSH it did not authorise the holder to radiate a signal.