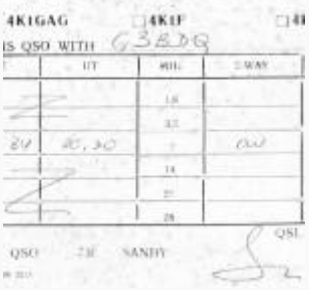
Images of John Heys G3BDQ

June 20, 2015 Written by **Steve (2E0GHX)**

John D. Heys G3BDQ is a long standing member of the Hastings Electronics and Radio Club and may be better known as the amateur who published the popular “Practical Wire Antennas” book. John’s interests in amateur radio have spanned his entire life and he continues today operating CW, and sharing his knowledge with others.



THIRTY-SEVEN-YEAR-OLD John Heys, treasurer of Hastings and District Amateur Radio Club, who teaches at Elphinstone Junior School, Hastings, has just heard that he has won the premier award of the International Radio Hobbies Exhibition, recently held in London.

"I showed an 18-valve receiver of pretty advanced design," he says.

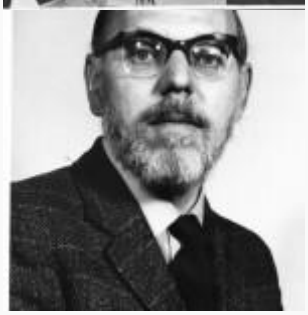
"It took me five months to build. It was constructed from Government surplus parts. They cost me around £30.

"If you wanted to buy a comparable set from a radio firm it would cost £400 easily."

The set has received signals from


ENGLAND
JOHN D. HEYS
14 EASTERN STREET
Nr. HASTINGS - SUSSEX
confirms contact
on 144MHz SS
Time
Date
RST
Power
Antenna
Home made


3W3CW
N300F/T5




ZS8MI
MARION ISLAND
IOTA AF21

Return to the HERC image gallery archive.

John Heys G3BDQ – A brief biography

May 24, 2015 Written by **Steve (2E0GHX)**

John D. Heys, born 23rd February 1923. A brief biography.

Education

1928 – 1934 Mill Street Elementary School, Macclesfield.
1934 – 1939 Macclesfield Boy's Selective Central School.1947 – 1949 College of St. Mark and St. John, Chelsea.
1969 – 1970 One year course – University of Sussex, concerning mentally and physically handicapped children.

My specialist subject at Training College was Advanced Geography which included Geology, Maps, Economic Geography (I had the highest marks in London for this!).

Employment

1939 August – 1941 October Macclesfield County Borough Education Office
1941-1946 Royal Air Force. Servicing secret Radars carried on bomber aircraft. Last year of service spent in India servicing radar on Dakota transport aircraft. All on 77 squadron.

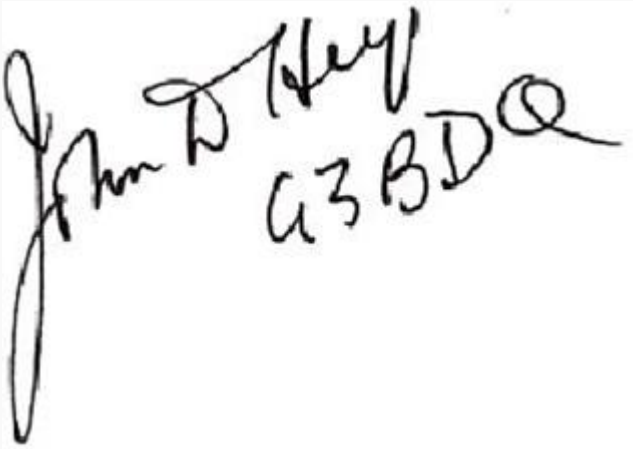
1946-1947 Acting registrar for the Hastings School of Art
1949 – 1981 Primary school teacher.

Other items of interest

President for one year of the Hastings Teachers Association N.U.T.
Appointed Justice of the Peace 1976.
Governor of many Hastings Schools (on their respective Governing Committees).
Obtained G3BDQ callsign in 1946.
Winner of the First Class Operating Club Contest 1948/1949.
Won a number of RSGB 2m contests – CW and phone.

Obscure and unusual talents!

Author of Practical Wire Antennas and Antennas for Beginners.
Pitmans shorthand 120wpm.
Winner of many picture postcard competitions, winner of several philatelic competitions.
Won many drawing and painting competitions set by local newspaper when aged 9 to 11 years old.
My collection of amateur radio QSL stamps is now The Reference Collection held at the British Library.
I like winning!



You may like to view some of the many articles written by John D. Heys G3BDQ which he has kindly granted exclusive permission to re-publish on this website. You may also like to take a look at a selection of G3BDQ's rare QSL cards.

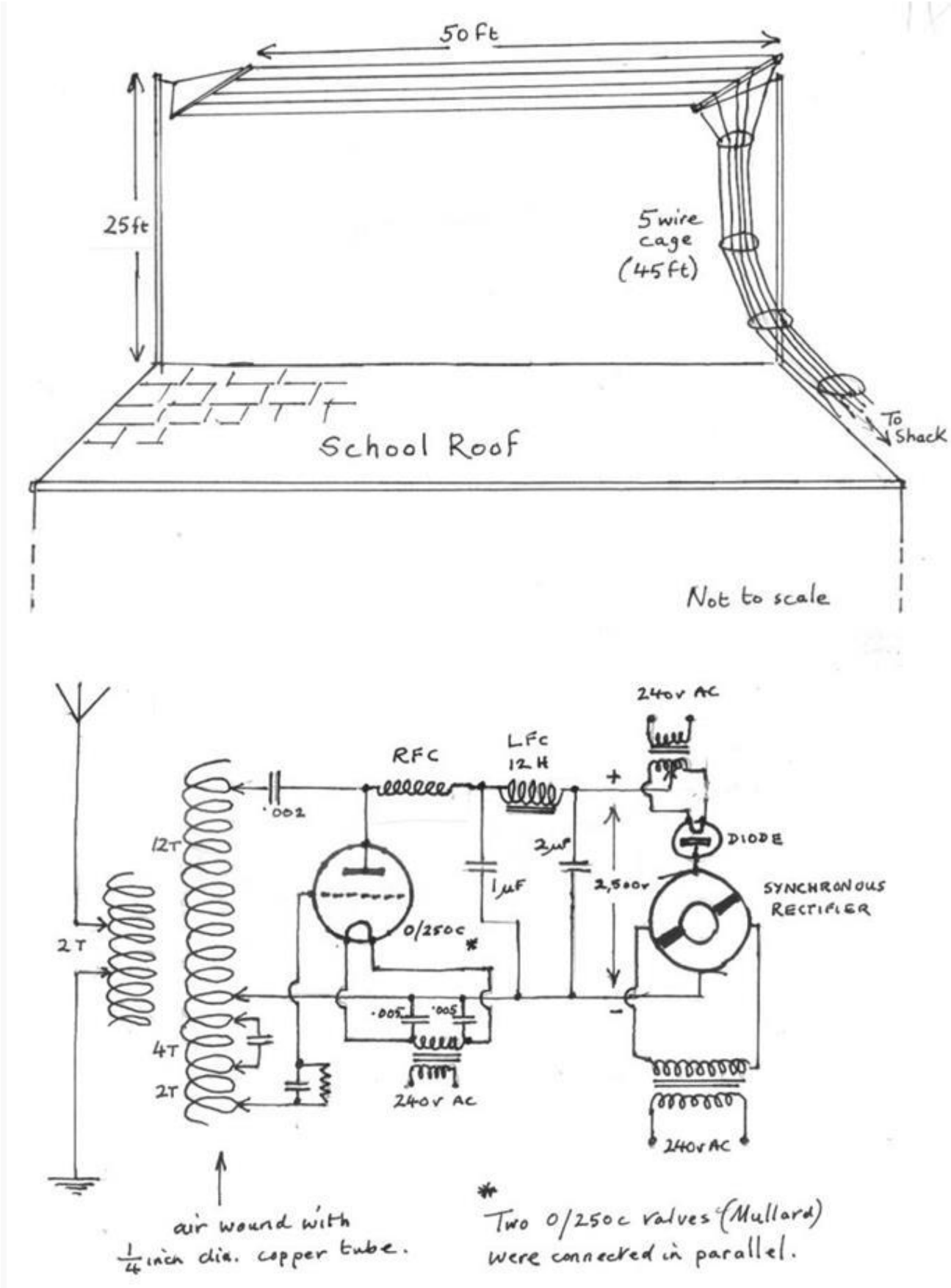
From 2SZ to Z-4AA October 18/19th Part 2 – By John Heys G3BDQ

May 19, 2015 Written by **Steve (2E0GHX)**

The amateur radio scene in 1924 centered around simple regenerative receivers, and self excited power oscillators which coupled into Marconi antenna systems. Most of the distance record breaking stations used input powers of more than 250 watts.

Cecil Goyder's transmitter at Mill Hill was no exception and for his record breaking contact with New Zealand he employed a pair of Mullard 0/250 triodes in parallel working as a Hartley oscillator on a wavelength of about 90 metres. To get the high voltage power supply needed, a sychronised motor driven mechanical rectifier together with a valve diode was used. His smoothing circuit had just a 12H

LF choke with a couple of capacitors. There was a 2 uF input capacitor and just 1 uF of final smoothing. In 1924 Goyder had no way to properly monitor his output signal for tone, stability or chirp and relied upon the RF current meter in the antenna lead to tune up for ‘maximum smoke’. A rather poor photo of the transmitter reveals that there was no meter to measure the current to the oscillator valves. He cleverly avoided the use of a wide spaced high voltage tuning capacitor by having a fixed capacitor which could be connected across various turns on the oscillator coil. This coil was made with quarter inch diameter copper tubing and had 18 turns. No chassis or breadboard was used to construct the transmitter; components being fixed to the bench or positioned up above on a small shelf.



The synchronised rectifier was on a small stool standing close to the transformers

of the high voltage power supply. To get the best output into his antenna Goyder had to select seven coil tapping points before starting operations, a procedure which must have taken up a considerable time. Keying the transmitter and getting a side tone to help his Morse sending would have been quite a problem. I feel that the only way to key his transmitter was to key, via a suitable relay, the AC mains input to the high voltage transformer. This relay could also have additional connects that could switch in a buzzer to operate when the key was pressed.

One can only imagine what the 2SZ signal sounded like, and Bell (Z-4AA) wrote "UR QSA RAC sigs" (Raw AC tone) on his QSL card confirming the historic contact. The frequency drift during and between overs must have been considerable and his simple TRF receiver had to be switched off when the transmitter operated. This send/receive switching must have made quite lengthy intervals between overs. Goyder's power output can only be guessed at, but was perhaps quite low and at best between 25 and 30% of the input power. His valves had low purveyance and despite using an anode voltage of 2,500 would at best only draw about 200 mA of anode current (500 watts) so I think the output power was little more than 120 – 170 watts and possibly less.

Just a few years after this notable contact, Goyder was using and advocating the use of quartz crystal frequency control and the use of CO-PA transmitter circuits. This revolution in transmitter stability allowed the use of narrow bandwidth receivers like the superhet. The normal 10 watts input power imposed upon most British operators became enough to then allow long distance working when conditions were favourable, something that was impossible when employing free running oscillator transmitters.

The antenna used at Mill Hill by 2SZ was a typical amateur Marconi, for resonant Hertzian radiators were not being used at that time. At the School a couple of 25ft masts were arranged with one at each end of the building which allowed an antenna height of 45 ft. British Licence conditions then (and even for a short time after WW2) only allowed the use of 100 ft long aerials. This included any top wire or wires and the down lead. At Mill Hill there was a top made up with five parallel wires fixed to 12 ft wooden spreaders and a 5 wire 'sausage' using circular spreaders which descended for 45 ft to the radio room. The earthing system included an 8 wire counterpoise which also had a cage lead in. The 2SZ transmitter was not directly connected to either earth or the counterpoise. This is not like present earthing practice. I think Goyder was afraid that his counterpoise arrangement would be jeopardized if a real earth was connected to his antenna circuit.

By John Heys G3BDQ – Vital Spark April 2013.

See to the index of other Articles.