

The Communications Museum Trust



Newsletter

Issue 21

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One day last autumn one of the volunteers at Avoncroft brought round to the team at the National Telephone Kiosk Collection a number of photographs another volunteer had brought in that had belonged to her late father. Having looked through the photographs I could see there was a story here that would be of interest to our readers. I asked her if we could include the photographs in one of our Newsletters and she agreed offering to put together some information about her father. The article below is Heather's own work and I have included photographs of some of the documents she lent to us. After the article I have added some of the photographs we first saw with comments from on what I believe to be where they were made for and when.

I would like to thank Heather for the article and the supporting documents and associated photographs. We both hope you enjoy them all.

A Cabinet Maker's history for the GPO



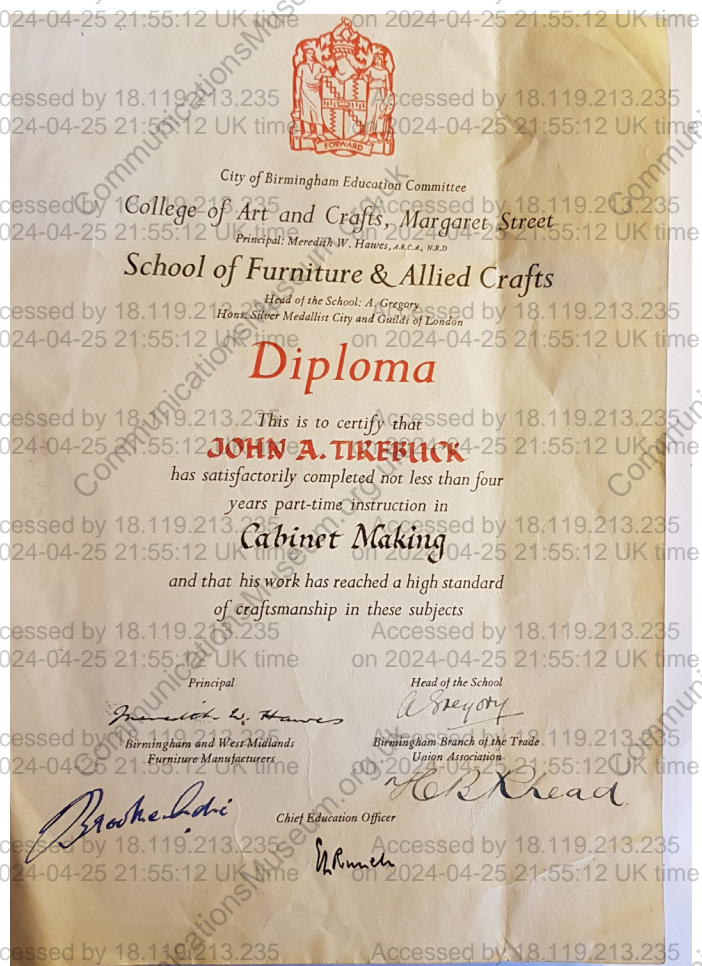
John Alfred Tilebuck

The old photographs of telephone kiosks were given to the National Telephone

Kiosk Collection at Avoncroft Museum by me, Heather Costello, a gardening volunteer, because I wondered if they might be of some historic interest. They belonged to my late father, John A. Tirebuck who worked at the GPO Factory, Fordrough Lane, Birmingham and were part of his personal belongings along with his certificates of his cabinet making qualifications and skills. My father was born on 17th December 1930 in Birmingham. After leaving Senior Boys school in Cockshut Hill in February 1945 with a School Certificate stating he was "very honest, steady, keen worker who has proved himself to be very reliable" (where he met my mother, Joan Baker), he began work at Fordrough Lane at the age of 14 on the Machine Shop in the Tool Room because at the time there were no vacancies for training to become a Cabinet Maker. He spent the next 15 months there, after which he was given the opportunity join the cabinet shop floor at the age of 15½ where he began his scholarship as a Cabinet Maker. It was here he worked 'on the bench' and learned numerous skills behind the construction of the original telephone kiosks, telephone switchboards, repairs, varieties of woods, tools and jigs. As an infant I witnessed my father carving labour intensive tongue and groove joints, applying French polish, putty glass windows and viewing a host of cabinet maker's tools too numerous to mention. A fraction of the selection of the type of tools he used can be seen in the display cabinet in the Introductory Exhibition building at Avoncroft. Dad's first piece of crafted work towards his Diploma was a solid English oak Dressing Table with two bedside tables made for his parents in 1948 at the age of 18 as part of a bedroom suite and remained his pride and joy.



His hard work and high standard of craftsmanship paid off as he was awarded the following qualifications: -
 A Diploma by the School of Furniture and Allied Crafts in Cabinet Making in 1950.
 Sir Cornexions Cup (Cabinet Making) 1953
 O.N.C. 51 Mechanical 1959
 O.N.C. 52 Mechanical 1961
 City & Guilds Final in Cabinet Making 2nd Class 1962.



He married my mother on 3rd April 1954 and continued with his scholarship at night school in Garrett's Green, Birmingham. During his time working at the GPO dad was promoted to Assistant Foreman and finally Foreman where he left the shop floor and worked in the offices buying timber, planning and overseeing work produced on the shop floor and visiting Sherlock Street and Garrison Lane, both Post Office Factories. My recollection of one of dad's early cars also involved the G.P.O. as it was an old Morris van before it had been painted! (the same as the green Morris van on display at Avoncroft). Dad took great pride in his car and had it converted to accommodate two seats in the back so that I could join them on trips out. His next car was a new Morris Traveller with

wooden trim, which he lovingly maintained with varnish, polish and various wooden additions inside. He enjoyed working with the men on the shop floor who he had trained with and remained friends with many of them, either attending the Post Office Flower Shows, fishing with them ever Sunday at various venues in the West Midlands as a hobby with in the G.P.O. He enjoyed G.P.O. functions at Sedgemere Road and for a few years he also rented an allotment at G.P.O.

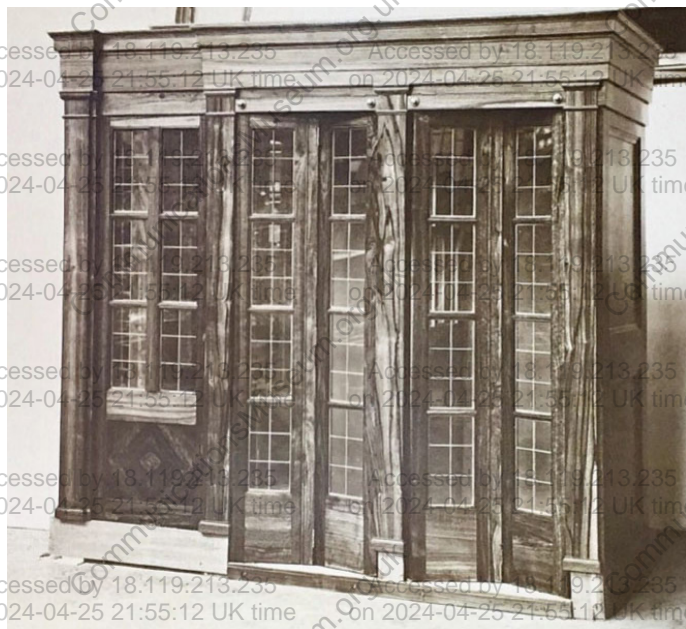
Bordesley Green G.P.O. Allotments, where he enjoyed more 'fruits' of his labours. He took early retirement in 1982 to move away from the 'office' but returned to happier days working with timber at Moffatt and Wittal's until he finally retired at 60. Sadly, Dad lost his battle for life on 11th April 2013 with Pulmonary Lung Fibrosis, a disease unfortunately related to his long hours working in wood dust and fought with every last breath he took.



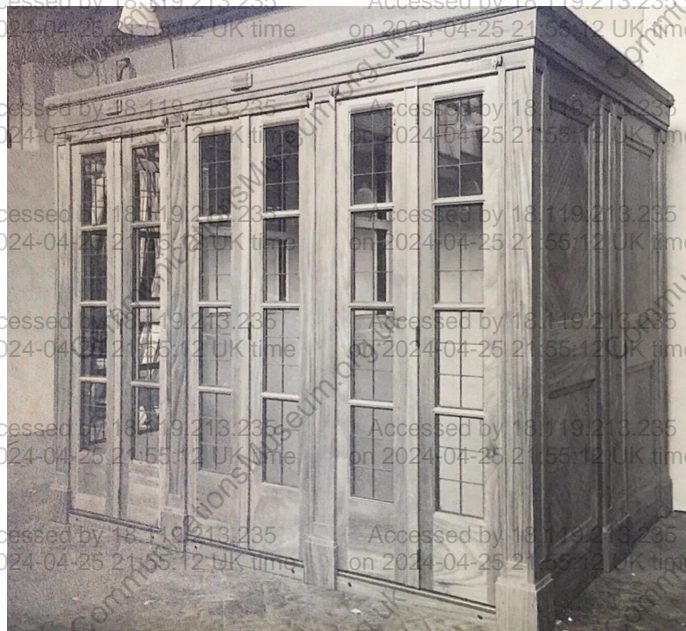
John with colleagues from Fordrough Lane Heather Costello (nee Tirebuck)
 A very proud daughter of the time John seems to have been a typical G.P.O. member of staff. Professional, skilled craftsman totally involved in the G.P.O. family.

Editor Some of the pictures that Heather gave us at Avoncroft are shown below. The writing by them is copied from the back of the photographs. There is a total of 14 available in pdf file if you want one message n

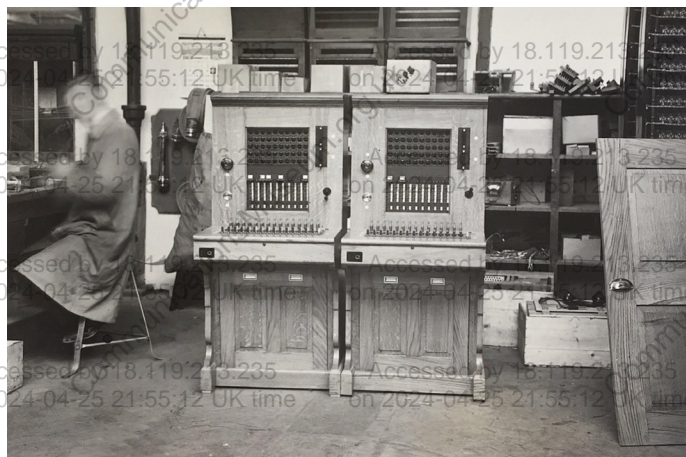
ewsletter@comms.org.uk



Suite of 2 with screen Birmingham HPO Sept 1935. Indian Laurel.



Suite of 3 Pinfold Street Birmingham Electro-Copper Grill Burma Mahogany 20.5.35



Pair of Switchboards in English Oak for Private Firm. Light colour sprayed very effective.



Monument Place Liverpool, 2 Singles in Teak veneered and flush doors "Argo-Boardplinth and kicking plates 22 Oct 1936.

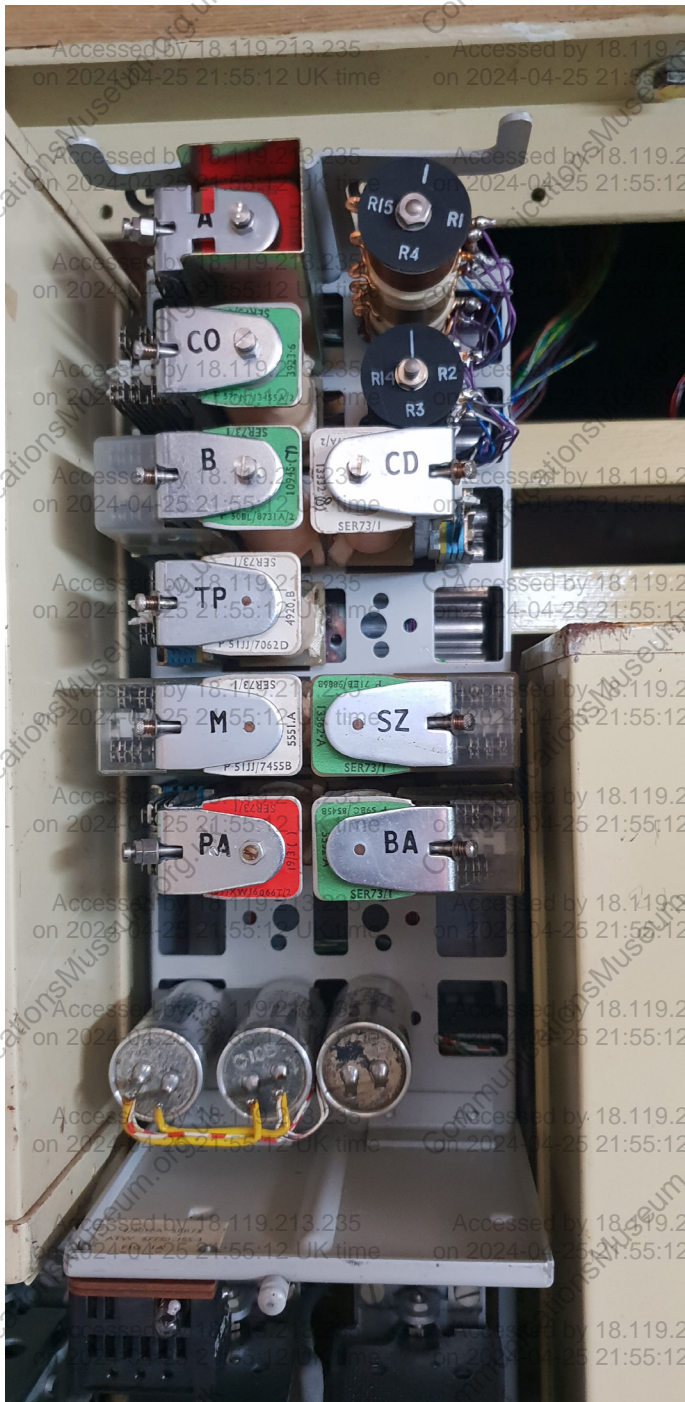
Director Demo Unit Autumn 2018 update

It's hard to believe that it's been twelve months since I provided an update on my Director Demonstration unit. At the end of 2017 I had added and tested a second A Digit Selector and Director and completed the basic switching equipment, complete with ringing current and tones. Towards the end of 2017 I was fortunate to acquire five type three uniselectors including the correct LR and K relays which would enable me to build five-line circuits. I was also fortunate to gain access to a very butchered and tatty UAX 13 A unit which yielded some angle iron, suitable to mount the uniselectors and relays on. Space is at a premium on the rack, so I was forced to look at mounting the line circuits at the rear, just behind the First Code Selectors (C1st). The first job was to carefully remove all of the unwanted wiring off the uniselectors and relays, whilst retaining what could be reused.

I was then ready to mount the five uniselectors and line relays before the time consuming job of wiring them all up could begin. This took several weeks in between other commitments, and at this point decided to rig up a test circuit as once the frame was mounted on the rack it would be difficult to deal with any wiring issues or faults. The test rig comprised of a group selector and telephone, so that I could test each of the five circuits and ensure that the holding earth was returned to keep the K relay operated. I also needed to ensure that the 1300 ohm battery from the K relay was there which was used by the P wire of the final selector to confirm whether the called number is free. After a few minor snags I was in a position to mount the line circuits in the back of the rack and wire and lace everything up before final testing could be carried out. I have also made the provision for metering and also a third C1st Selector in the future. During 2017 I had kept a look out for some 711 wall phones, and thanks to one of the THG members I was able to purchase a very nice example, followed by a second one off a certain internet auction site. I have wired these up and have made up some suitable labels of MUSEum 4444 and 7010, which utilise two different Second Numerical Selectors (N2nd) and Final Selectors. With the completed line circuits and telephones, I was able to dial MUS (687) 4444 and see the Director provide the translation, which was a single digit required to step the C1st and repeat the MCD & U digits. I did have a few snags to sort out, as ringing current was not being provided from the final selectors, but was proved back to a slightly lose screw on the ring return battery fuse. The second main task completed for 2018 was the forced release for the C1st's, A Digit Selectors and Directors. Each of these pieces of equipment require a 30 second S & Z pulse to release the A Digit Selector and Director if the calling sub either doesn't dial any numbers after picking up the handset or part dials the number. The reason for the forced release is to stop Directors being held up unnecessarily and leaves the calling sub with NU tone. I had already checked that the wiring was correct by first dabbing the S lead onto an earth followed by the Z lead. I had intended to use my clock to provide the 30 second pulses, but managed to pick up an S & Z pulse generator off eBay.

The generator comprised of a number of 3000 type relays, a carpenter relay and a thermionic valve. On inspection of the relay set I noticed that the 250 ohm spool resistor used to drop 50 volts to 6 volts required by the valve heater had cooked some of the wiring, which took an hour or so to replace. The generator is able to provide pulses from 2 ½ seconds to 6 minutes, although on initial testing it didn't do much at all. After some adjustment to the relays and a new valve I was able to get the correct pulses generated, although the 250 ohm resistor gets very warm after a few minutes. As a precaution I have wired the relay set to be operated by a key switch and lamp to show that it is switched on, which also adds something for the observer. One of the biggest problems that I have faced on the Director Demo Unit has been relay coils going dis and for some unknown reason both B relays went dis in the A Digit Selectors within a week of one another. The fault placed on the exchange was very odd as it locked the C1st and A Digit Hunter (ADH) up. The A Digit Selectors are effectively a 100 outlet group selector but with five wire switching (+ve, -ve, P, PU & FR) instead of the usual three (+ve, -ve and P). The relays on seizure are A, CD and B which again differs slightly from other Strowger selectors. Fortunately, the B relay has a 1300 ohm coil which is one of the more common coils, of which I have a good selection of spares. I have taken the precaution of checking the spark quench circuits to ensure that there were no voltage surges. What doesn't help Strowger equipment is where it's sat in a damp shed or garage for years and then get 50 volts applied to it. I have found that once a selector has been working for a while the problem reduces. At the Milton Keynes Swap Meet I was able to pick up five really good 200 outlet group selectors and a 2000 type Director. The Director is in very good condition, with little wear, but was missing the wiper assembly for the Units unselector which has an unusual five banks comprising of two bridging and three non-bridging wipers. Fortunately, another very helpful THG member was able to provide the correct assembly. The remaining bits were sourced from a job lot of unselector spares that I picked up from Avon Croft a couple of years back. A quick check round, clean of relay contacts and some oil enabled me to test it out, which was

probably the first time in some forty odd years it had seen any power on it. Apart from having to adjust the Units uniselector and an erratic release it worked well and would both store and send out the required digits. Once that garage has warmed up again next year, I shall give the uniselectors a clean and check the release circuit, which passes through all six uniselectors and the associated BC switch. I have a number of outstanding tasks to complete for 2019, which are the release and fuse alarms, 11 and over final selector and the 11th step on the A Digit Selectors. A tandem unit is also planned which will enable me to link up to my non director demo unit and UAX13 A unit. During the summer I acquired a six second delay which uses a type four uniselectors, which I shall use for the Director Release circuit, and will provide some more action

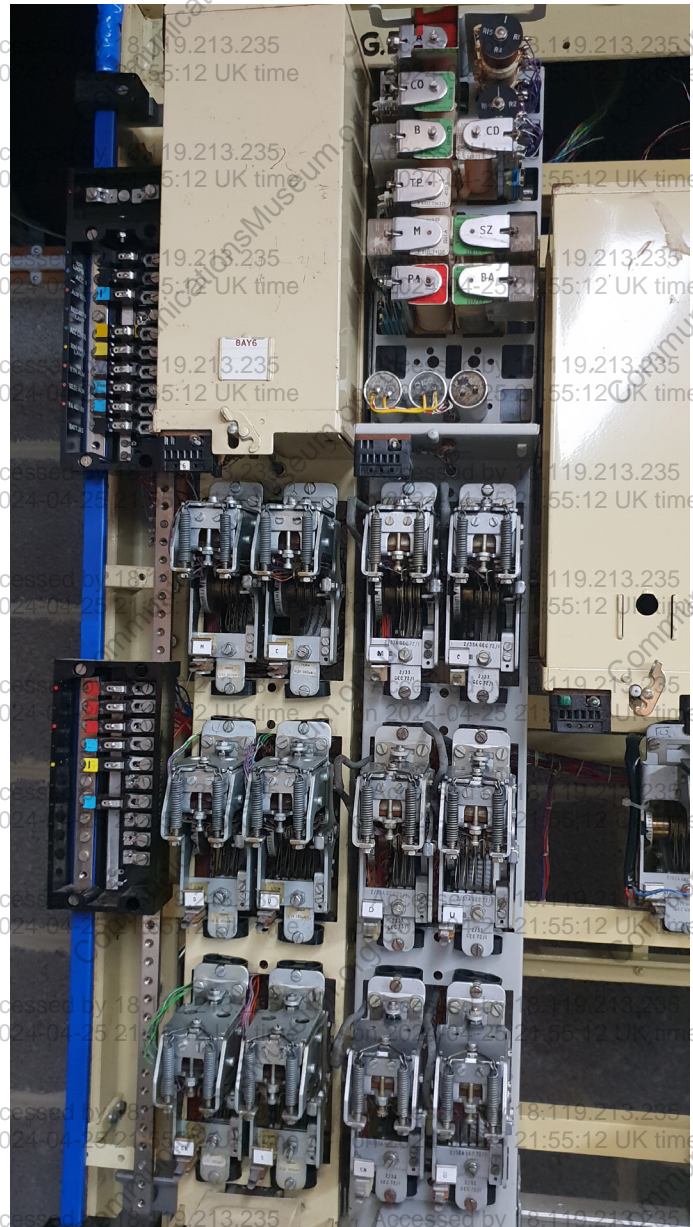


New Director Relay Set



Type 3 Subs. Uni

Brenden Hill November 2018



Directors

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Below is a list articles in past Newsletters.

Winter 2013

What is the Communications Museum Trust?

Impressions of a Comms 'Newbie'

Telephone Kiosk Challenge

Spring 2014

"Come quickly – I need you!"

William Sturgeon 1783 – 1850

Summer 2014

Private Enterprise to Government Monopoly
(and back again) - The birth of the phone network in the UK

Autumn 2014

The TXE2 at Avoncroft Museum

Things to celebrate in 2015

Winter 2014

No dumb questions

Spring 2015

The TXE2 at Avoncroft
Marconi – Inventor –Scientist – Technologist

Summer 2015

The Director

The TXE2 at Avoncroft - Part 2

Autumn 2015

Ernest Philip Elwin

Synopsis of 'PLEASE WIPE YOUR BOOTS'

Winter 2015

Single Cord Switchboard

Skynet 2 – Bob Fastner

Spring 2016

Switchboard, Magneto, Wall Pattern, Single Cord, National Telephone No. 3

Summer 2016

Western Electric number 317 - magneto wall phone

HMTS Monarch (3)

Vacuum Tube Repeaters

Autumn 2016

First Mobile Telephone Exchange

The Speaking Clock

Winter 2016

More clocks

50th Anniversary of the TXE2

The Telephone Kiosk Number 6

The Cable House Newbiggin by the Sea

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Director Demonstration unit by Brenden Hill

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80 Years of 999

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Hull Telephones

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Volt, Ohm and Ampere 110 years old in October.

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Dos and Don'ts

Reconstruction of a TXK1 Crossbar rack at Work-
sop IBTE Museum and subsequently at Milton
Keynes Museum
Part 1

Issue 19

Dos and Don'ts

Reconstruction of a TXK1 Crossbar rack at Work-
sop IBTE Museum and subsequently at Milton
Keynes Museum Part 2

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The UK Air Attack Warning System
Middlewich

Issue 21

John A Tirebuck

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