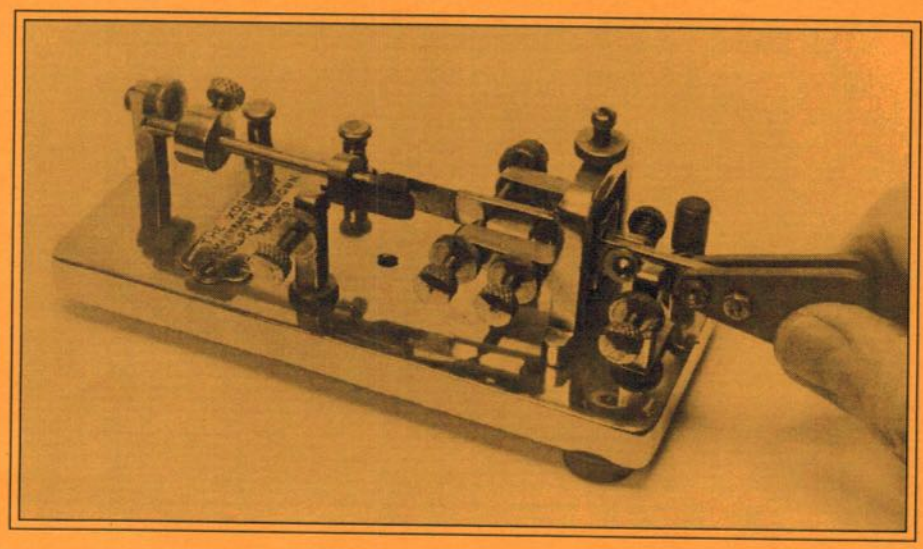
Flying the flag for Morse

Number 44 – February 1996

Morsum Magnificat

The Morse Magazine



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Morsum Magnificat

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MORSUM MAGNIFICAT was first published as a quarterly magazine in Holland, in 1983, by the late Rinus Hellemons PA0BFN. Now published six times a year in Britain, it aims to provide international coverage of all aspects of Morse telegraphy, past present and future. MORSUM MAGNIFICAT is for all Morse enthusiasts, amateur or professional, active or retired. It brings together material which would otherwise be lost to posterity, providing an invaluable source of interest, reference and record relating to the traditions and practice of Morse.

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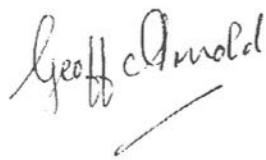
ON OUR FRONT COVER
Canadian semi-automatic key, the Xograph, manufactured by Rolph H. Brown, Toronto.
Photo/Collection: Murray Willer VE3FRX

Comment

THE SERIES OF QSL CARDS with a Morse theme, which we've been featuring on the inside back cover of each issue since No. 24 – Summer 1992 (goodness, how time flies!) have produced some interesting and sometimes entertaining designs, and I hope that you've enjoyed them. However, we've reached the stage where those remaining on file were either near-duplicates of designs we'd already published, or else were not really suitable for reproduction on the coloured card which we use for the cover.

So Tony and I decided that it was time for a change, and so we are introducing a new series beginning with this issue, which we've entitled 'Morse Ephemera'. We've defined this as being anything intended for a non-Morse purpose, but which has some form of Morse illustration on it.

We're rather sticking our necks out in calling it a series; whether it will justify that description really depends on you, the readers, coming up with some suitable material for future issues! Without your support, the whole idea may come to a premature end later this year!! So what about it? Rout around for anything suitable which you might have acquired, and keep a look out for any new items you may come across.



G3GSR

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IARU FASC

As reported in MM43, p.10, the last World Radio Conference (WRC-95) decided to include the following item on the preliminary agenda for WRC-99:
'2.2 Consideration of Article S25 concerning the amateur and amateur satellite services.' (Article S25 is the new number for the previous Article S32 which contained Radio Regulation 2735, relating to the amateur Morse test).

As a result, the International Amateur Radio Union has set up an ad hoc committee called The Future of the Amateur Service Committee (FASC), to assist the IARU in formulating its position on the above WRC-99 agenda item.

The members of FASC are:
Chairman: Michael Owen, VK3KI
Members:

Larry Price, W4RA
David Sumner, K1ZZ
John Bazley, G3HCT
Tom Atkins, VE3CDM
Terry Carrell, ZL3QL
Dick Baldwin, W1RU, ex-officio.

The Committee's Terms of Reference are as follows:
'The Committee is asked to
(A) Examine the international regulations governing the Amateur Service and Amateur-Satellite Service (other than frequency allocations) with a view to formulating the changes, if any, that are desirable to properly reflect the objects, needs, obligations, and privileges of these services for the next century, so that the services remain viable and valuable, meaningful and relevant to both the community and to those licensed in the services, having regard to:
• the definition of the services,
• the nature and content of transmissions of stations licensed in the services,
• the provision of emergency communications,
• the means to facilitate the international recognition of amateur licenses,
• the technical and operational qualifications for licensees in the amateur services,
• and any other matters considered by the Committee to be relevant,
(B) Undertake its task:
• encouraging full discussion of these matters by preparing discussion papers providing background information, identifying issues and proposing possible solutions,
• inviting comments from individuals, groups, member-societies and regional organizations,
• participating as appropriate in international and other meetings, and taking into account the comments it receives,
• preparing reports, recommendations and proposals for consideration by the Administrative Council, member

societies, and regional organizations and ultimately preparing such material as is necessary to ensure that administrations accept proposals adopted by the Administrative Council, all of the foregoing being an ongoing task bearing in mind the regional conferences and the likely agenda for WRC-99.'

The committee will be active during the three-year IARU regional conference cycle. As a first step, all IARU member societies have been invited to send opinions to the chairman of FASC as to how the Radio Regulations might be modified or improved to meet the challenges of the 21st century.

The first regional conference to consider recommendations from the committee will be the Region 1 conference to be held in Israel in September 1966. Other regional conferences will be held over the following two years.

RA Seeks RSGB's Views on Morse Test

In the UK, the Radiocommunications Agency (RA) has asked the Radio Society of Great Britain 'as the national representative for radio amateurs in the UK', to consider formally the proposal to delete Radio Regulation 2735, which was referred from last year's World Radio conference (WRC-95) to WRC-99, and to give their views on it.

This request is in direct contrast to the action of the RA last year when, prior to WRC-95, it developed a policy favouring the abolition of the amateur Morse test without consultation with the RSGB.

In a letter to *RadCom*, journal of the RSGB (January 1996), Roger Louth, the RA's Director of Mobile Services, says 'We need to consider what the UK's position should be and to have done this well in advance of WRC-99, but this cannot be done in isolation. Fundamentally, we need to give thought as to whether there should be two classes of licence and, if there should, whether the Morse Test is a relevant means of differentiation ...

'It is clear that this is an issue on which there are differing and strongly held opinions. It is now timely to reconsider this issue and to decide whether the Morse requirement is one which radio amateurs see relevant to the next millennium.'

RSGB Survey

The RSGB has decided to conduct a survey of all radio amateurs, listeners and other interested parties, to ascertain their views on the qualifications and licensing structure necessary for the United Kingdom Amateur Service.

UK readers of *MM* who are not members of the RSGB, are urged to make sure they take part in this survey when it is announced to ensure that their views on this important matter are not overlooked.

This is particularly important as the RSGB did not make it clear that its previous survey on the question of a codeless licence (in 1993) was conducted at the request of the RA, and was intended to include all amateurs and not just RSGB members.

As a result of that omission (revealed exclusively in MM27, p.2) many radio amateurs did not realise the importance

of the survey and did not take part in it.

This time there can be no misunderstanding. ALL UK amateurs should be aware that the future structure of amateur radio is under discussion, and that they can express their views through the forthcoming survey whether they are members of the RSGB or not.

UFT-VP Calls for Action

In an editorial in *La Pioche* (4/95), journal of the Union Française des Télégraphistes, F6IIE, vice-president of UFT, comments on the decision of WRC-95 to defer consideration of proposals relating to the amateur radio service (and in particular the Morse test) to 1999.

He writes ' ... there is no misunderstanding, the proposals ... did not come from NZART, the ZL national association, but from a small group of people calling themselves "ORACLE", who are totally opposed to CW ...'

He continues, 'However, if we think that for the two or three years ahead we can sit back without a care, be under no illusions, they will return prepared to do battle! I take as proof the behaviour of those "crocodiles"(*) who trample all over 40 metres using fone ... in the CW segment ... This year will have been the worst ever with SSB as far as 7.020MHz (is concerned), foreshadowing what can happen if we do not remain vigilant and combative ...

'Therefore, I make an appeal to all of you to mobilise against a situation which will only get worse if we don't take action! Let those who are against the CW exam not delude themselves, they risk having something other than CW to learn. Those who are in trusteeship will not do away with (overnight) a "filter" so efficient for controlling access to the HF bands. That must be our cast iron argument to convince them that the CW examination is not really so difficult and that it opens up horizons certainly more interesting than all the data-processing systems, (which are) useful indeed, but which one tires of quickly and which render communication more and more impersonal.

'In conclusion, everywhere and all the time, enjoy and value CW, use the sub-bands and respect them ...

'Oh, I almost forgot: (*) CROCODILE: a little animal with a big mouth, two tiny ears ... and nothing between the two ... !'

(Translated by Ken Quigg, GI4CRQ, and edited by MM. *Space does not allow the full editorial to be reproduced. – Ed.)*

Farewell from DAN

Norddeich Radio, DAN, ceased W/T operation on 500kHz on 31 December 1995. This famous coast station originally opened for traffic on 1 June 1907, using the callsign KND.

Monika Pouw-Arnold, PA3FBF, copied DAN's last traffic list, on 525kHz, at 2130 UTC on the 31st, and recorded its farewell messages on 500kHz from 2250 to 2300 UTC.

At 2250 DAN sent a last announcement that it was closing down its CW transmissions on MW. It was then called in sequence by EAF, OXB/OXZ, FFU, SDJ, EAS, OST/DHS, SPE, IDC, LGQ, IAR, GCC, and several others.

The following are some of the transmissions heard:

OXB: DAN DAN DE OXB/OXZ TKS FER FB DURING YEARS AND HAPPY NEW YEAR DE OXB/OXZ AND SRI K
DAN: OXB/OXZ TU 2 SEE U (above mentioned other stations followed)
DAN: OXB OXB OXB DE DAN DAN DAN = PLS OVERTAKE NOW WATCH ON 500 FOR GERMAN SAR AREA AR
OXB: DAN DAN DE OXZ/OXB OK TKS WILL DO OUR BEST TKS SEE U
DAN: TV (TU) NW CQ DE DAN NW CL CL FOR EVER SK E E E T E T 73 TZ AR SK
OXB: 73 E E
DAN: E
(TZ = initials of DAN operator?)

UCWC Morse Contest

All licensed radio amateurs are invited to take part in the annual contest celebrating the birthday of Samuel F.B. Morse organised by UCWC (The Morse Radiotelegraphy Club).
Date: 27th April;
Time: 0000 to 2400 UTC.
Bands: 3.5, 7, 14, 21, 28MHz (10–50kHz on each band).
Call: CQ UCWC. **Mode:** CW only.
Classes: A – UCWC members; B – Non-UCWC members; C – Club stations; D – Short-wave listeners.
Exchange: UCWC members – RST/UCWC; Non-members – RST+name.
Scoring: Each QSO within same continent = 1 point; Each QSO between different continents = 3 points; SWLs reporting both calls and both reports from a QSO = 1 point.
Multipliers: Each UCWC member worked = 1 multiplier point on each band. No multipliers for working non-UCWC members.
Cups and awards: Special MORSE cup for the winner in each class, and in each continent. Other stations receive a MORSE Award.
Logs: Send logs by registered mail, postmarked not later than 27 May 1996, to: UCWC HQ, 250000 Chernigov-Postamt, P.O. Box 28, Ukraine. To obtain the results of this contest, please request a copy of the results in the log and enclose 1 x IRC.

Membership of UCWC is open to all amateur radio telegraphers, world-wide. Its rules require from its members correct CW operation, purity of CW signals, a helpful attitude on the amateur bands, integrity in observing all licence requirements in everyday activity and in contests, and reliability in exchanging QSL cards. The club has a programme of 19 awards available to members. For full information about UCWC, send a self-addressed envelope and two IRCs to: Foreign Secretary UCWC, Czeslaw Grycz DJ0MAQ, Sigmaringer Str. 33, D-10713 Berlin, Germany.

(Information from UCWC)

Polish Club Applies for EUCW Membership

The European CW Association has received an application for membership from the Polish Telegraphy Club (SP-CW-C).

This club was founded in 1995 to promote the use of amateur CW in Poland. Foreign members are welcome, including both licensed operators and

SWLs. Membership requirements are proof of at least 5 CW contacts with SP stations who are members of the club, or proof of at least 300 CW contacts with any other stations during the previous calendar year.

Enquiries or membership applications should be sent to the president of SP-CW-C, Sylwester Jarkiewicz SP2FAP, PO Box 18, 82-312 Elblag 13, Poland.

Biggest Key in the World

French hams came on the air with the world's biggest key on 15/16 September 1995. Length of the key 2.63m, width 0.95m, weight 140kg (one hundred and forty kg!). The call was TM2RDS. The QSL cards on which this key is shown, are handled by F6AUS.

(Translated from DL magazine funk, *12/95, p.80, by Monika Pouw-Arnold PA3FBF. Can any of our French readers provide more information? What was the key made from? Why was it made? Where was it used, and how was it operated? – Ed.)*

Museums of Interest

1. Deutsches Museum, München. This is one of the world's largest technical/scientific museums. Virtually everything man has ever invented can be seen here. Of interest to *MM* readers is the telecommunications section, including a room where DARC (German Amateur Radio Club) exhibitions are mounted. There is also a coherer spark station, and a demonstration amateur station, DL0DM, on-air daily from 1100–1200 local time.

The museum bookshop has many specialised books, many available in English. There are catering facilities on all floors; and good toilet facilities, including access for the handicapped. However, parking is bad and public transport is recommended when visiting the museum. On all S-trains: alight at 'Isartor'. On underground lines 1 and 2: alight at 'Fraunhoferstrasse'. On tram 18: alight at 'Deutsches Museum', and on Tram 20: alight at 'Isartor'.

The museum is open daily, 0900 to 1700 (closed on some public holidays). Admission is DEM 9 for adults (children under 6 free). Address: Deutsches Museum, Museuminsel 1, D-80538 München, Germany. Tel: +89-21791. If you want to enjoy all the non-telecommunication subjects as well, allow a lot of time for your visit, and be prepared to miss out whole departments! For those interested in aircraft, there is a separate aviation branch at Oberschleissheim, near München.

2. Deutsches Rundfunkmuseum am Funkturm, Berlin. This museum is situated in low buildings around the foot of the West-Berlin broadcast tower, the 'Funkturm', not to be confused with the East-Berlin 'Fernsehturm' (TV tower) where there is no museum.

The museum covers the development of German broadcasting, since it began in 1923, up to the present day. There is much to see and hear (including audio-video presentations), and there are wireless sets from the earliest times. Exhibits also include clandestine/spy equipment, etc., from WWII.

There are no catering facilities in the museum, but there is a snack bar at the entrance to the Funkturm, and a res-

taurant 55m up the tower, with panoramic views of Berlin.

Car parking is bad in Berlin, and it is best to use public transport. The museum is open 1000–1700 every day except Tuesday. Address: Deutsches Rundfunk-Museum am Funkturm, Masuren-Allee, D-14057 Berlin, Germany.

3. Postmuseum Berlin (West). This museum covers the development of posts and telegraph services from late medieval times to the present, and includes both landline and wireless telegraphy. When we visited the museum a 2m amateur station was in operation, and we enjoyed a nice chat with the operator. I seem to remember visitors walking round with wireless headphones providing commentary in several languages.

Address: Postmuseum Berlin, An der Urania 15, D-10787 Berlin, Germany. Hours, Monday to Thursday 0900-1700, Weekends 1000-1700. Closed on Fridays. Admission was free when I visited in 1991, but there may be a charge now.

4. Postmuseum Berlin (East). This museum is located on the 4th floor of a building originally used for PTT landline offices. There are a number of old hand keys to be found and tried. There is a department for philatelists in the basement.

There was a modest fee for admission when I visited, which I can't recall. Refreshments are available in nearby cafes. Location of museum: corner of Leipziger-Strasse and Mauer-Strasse.

(Our thanks to Monika Pouw-Arnold, PA3FBF, for the above information. We welcome news about museums with some element of Morse interest from around the world. As well as being of general interest, this information is for the benefit of MM *readers visiting other countries who like to include visits to such museums in their itineraries. – Ed.)*

Morse Birthday at MEGS

The Morse Enthusiast Group Scotland is holding a 205th Birthday Party for Samuel Morse at the Greater Glasgow Scout Group Activity Centre, Auchengillan Scout Camp, Blanefield G63 9AU, on Saturday, 27 April 1996, between 10am and 8pm.

The site is about 9 miles northwest of Glasgow, off the A809 Glasgow to Drymen Road. Talk-in on S22. All amateurs will be made welcome for a coffee and birthday cake. Bring your own pet key. If you can't look in, call the special event station GB4SAM on 20, 40 or 80 metres.

The N2DAN Mercury Paddle

A review

by J. Bruce Prior TA2ZO

WHAT MAKES a collector's item? If its quality is excellent and it is scarce, it will always be in demand. When CW historians look back on the present mechanical iambic paddle era, the little-known Mercury paddle, hand-made by Steve S. Nurkiewicz, N2DAN, will be a standout.

You won't find the paddle advertised in any magazine. Steve has retired to Florida, and only occasionally does he take time off from important things like fishing and working CW to fashion another one. Mine bears serial number 241.

The Mercury is the culmination of a long period of development. Steve published an article in the April 1968 issue of *QST*, detailing his experiments with substituting magnets for springs in paddles. That, and the superb design and craftsmanship are the open secrets that make the Mercury so special. Once you've tried one, you won't be satisfied with anything less.

The range of gap and tension adjustment is very wide, accommodating a great variety of operator preferences. I prefer quite close spacing and light tension, especially on this paddle whose solid smooth bearings give it a very pleasant feel. The adjustments are made on non-moving parts, so they will not change their settings after long periods of hard use.

The Mercury is heavy. It weighs 3 lb 10 oz (1.64 kg). (No. Don't take it along on your next backpacking trip!) Its cork base helps it refuse to walk around your operation desk.

Custom Made

It is hard for we who surround ourselves with so many mass-produced items to grasp the implications of a custom-made product. Steve really means it when he says that he makes each Mercury for each customer.

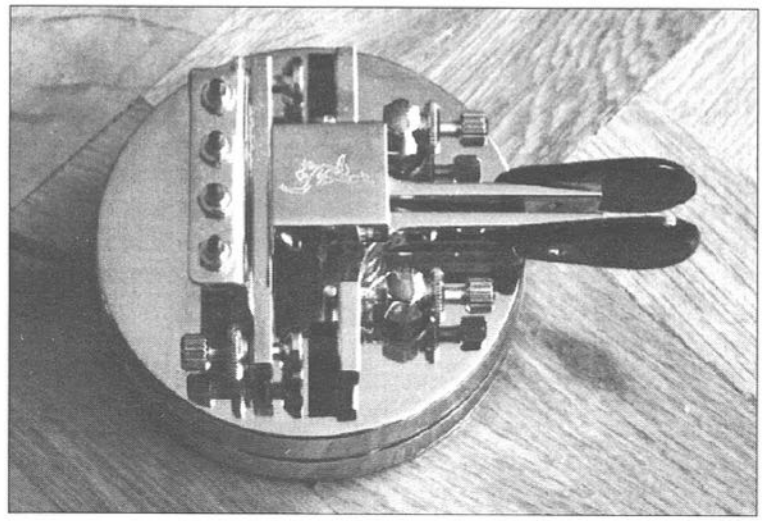
At last count, he offered ninety different finger tip colours. I chose 'deep burgundy flex' after a phone call to find out what 'flex' means. (It's impregnated with metallic sparkly things!) You could even order different colours for the right and left finger tips.

If you want Steve to drill a special hole for a flag or a music stand, just let

him know. Two standard options are a clear plastic cover for the paddle and a 4-button external keyer memory panel. That is designed to accommodate Steve's favourite Kansas City Keyer. The four buttons work with the Morse-Machine by AEA as well. Would you prefer a 10-button panel? Just tell Steve what you'd like.

ences, and what you like to do away from the ham shack. It would help you get on his good side if you also enclosed a dollar for postage.

He'll send you some details about how to order a paddle. He will try to ship it four to six weeks after he receives an order. If you want him to speed it up, you might try sending him your



The N2DAN Mercury Paddle

Photo: J. Bruce Prior, TA2ZO

Of course he'd be happy to engrave your name or callsign on the paddle base. I chose to leave mine blank, since I'm a globe-trotting nomad, frequently changing callsigns.

A Lifetime Investment

Acquiring a Mercury paddle is, appropriately, a bit of a process. The first thing you have to do is write Steve a letter: 1385 Abner Street, Port Charlotte, FL 33980, USA. Tell him a bit about yourself and your CW operating prefer-

favourite fishing lure. Come to think of it, that's a bad idea, since it will only make him spend more time fishing!

What about the price? The standard Mercury costs $390 plus shipping. That sounds horrendous, but think about it. That's only a bit over one dollar a day for one year, and the Mercury will certainly outlast all of the transceivers and computer gear now sitting in your shack. It is truly a lifetime investment. Don't expect to find one in a flea market for a very long time. ***MM***

Chinese Morse

by Stanley Read G2ATM

AS A TEENAGER just before WWII, when I was learning Morse code by copying a German press station, I remember wondering how the Chinese sent their characters in code. Little did I realise that in a few years time I would find myself in India with Force 136 (SOE) teaching non-English speaking Chinese to operate the B MkII set, to send and receive Morse and to encode and decode messages in Chinese.

I'd been on courses to learn Roman Urdu and Roman Malay and knew there was no acceptable form of Roman Chinese, as it was not possible to show the difference between the tonal variations of the same word when written in Roman letters.

A little research revealed that Chinese Companies had been sending messages using Morse for years with the aid of the Chinese Commercial Dictionary. The compilers of this dictionary had selected the most commonly used Chinese characters and, using a method based on the number of strokes used in the writing of each character, given each character a four digit number.

The Chinese characters, now in the form of four-figure groups, were ideal for converting into 100% secure five-figure group messages using a One-Time Pad.

For Example

If, using the Commercial Dictionary, we find that the four-digit numbers representing the four Chinese characters of a message are 1234 5678 9012 3456, the message to be sent in Morse is produced as follows.

The four-digit numbers are written under the next four five-figure groups on the One-Time Pad and added numerically (but without carrying), e.g.

	72130	15283	61297	04318
+	1234	5678	9012	3456
	73364	10851	60209	07764

= coded message sent

When the message is received, the four five-figure groups of the One-Time Pad are subtracted (again without carrying) to obtain the original message in the form of four-digit numbers.

	73364	10851	60209	07764
–	72130	15283	61297	04318
	1234	5678	9012	3456

= decoded message

As the four-digit numbers are arranged in numerical order in the Chinese Dictionary, it is now a very simple matter to find the original message in Chinese characters. ***MM***

Speed-X Keys

THE SPEED-X LINE of keys has had several proprietors over the last 60 years or so, but little is known about the earliest days (probably the early 1930s).

Lynn Burlingame, N7CFO, has been investigating and reporting on Speed-X in the N7CFO Keyletter. The following is a summary of his findings, together with a listing of the Speed-X models by John Elwood, WW7P.

THE SPEED-X MANUFACTURERS

Early 30s: Speed-X Radio Manufacturing Co.

In 1937, when Les Logan bought a partnership in Speed-X from Stewart 'Red' Johnson, the company was at 646 Jessie Street, San Francisco. Earlier addresses were 206 Sanchez St., San Francisco, CA (noted from adverts in *R9* magazine, 3/33, and 12/33), also 30 Ninth Street, San Francisco. (from advert in *R9* 11/34). It is likely that Red Johnson was involved in the manufacture of the Electro-Bug, and founded the Speed-X Radio Manufacturing Company, though we have no evidence of this.

1937–47: Les Logan Company

Les Logan's oldest (and last surviving) child, Betty, worked for years at the Speed-X plant, and provided the following information:

Les Logan in the late 1930s or early '40s

Samuel Leslie Logan was born in Chickopee Falls, Massachusetts on 25 January 1899, one of 13 children. He was a tool and die maker, and served his apprenticeship at the Stevens Armory in Massachusetts. He later worked at the Remington Arms Company.

He did not go into the military during WWI because he was in a defence industry and his services were required in manufacturing. After the war he made his way to San Francisco via merchant ship, working as a radio operator. He worked in the Bay area, and at one time was involved in manufacturing crystal radio sets.

He married Florence Herbert in 1924, and over the next fourteen years they had five children. None of the Logan family were amateur radio operators.

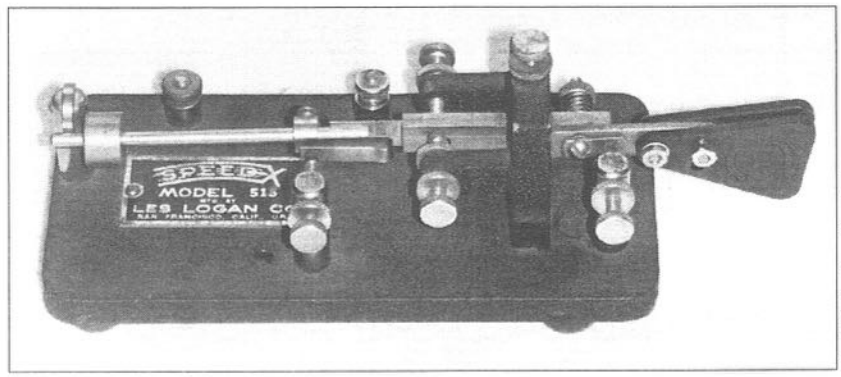
In the 1920s or early '30s, he opened a salvage electronics store on Market Street, The store was owned by Ira Offenbach who had a retail merchandise store next door. He worked for Offenbach on a percentage basis. Victor Zachariah had a store (Zach Radio) next door to the Offenbach Salvage shop run by Logan.

In 1937, Logan left Offenbach and bought a partnership in Speed-X (then located at 646 Jessie Street) from Red Johnson. At about the same time, Logan started a business as a manufacturers' representative for electronic parts, etc., under the name of Logan Sales Company. Red Johnson ran the Speed-X operation, and Logan was a salesman.

Several years later, Logan bought out Red Johnson and became the sole owner. In the early 1940s the Greyhound Company bought the property on Jessie Street for a bus terminal, and the Speed-X Company moved to 530 Gough Street in San Francisco.

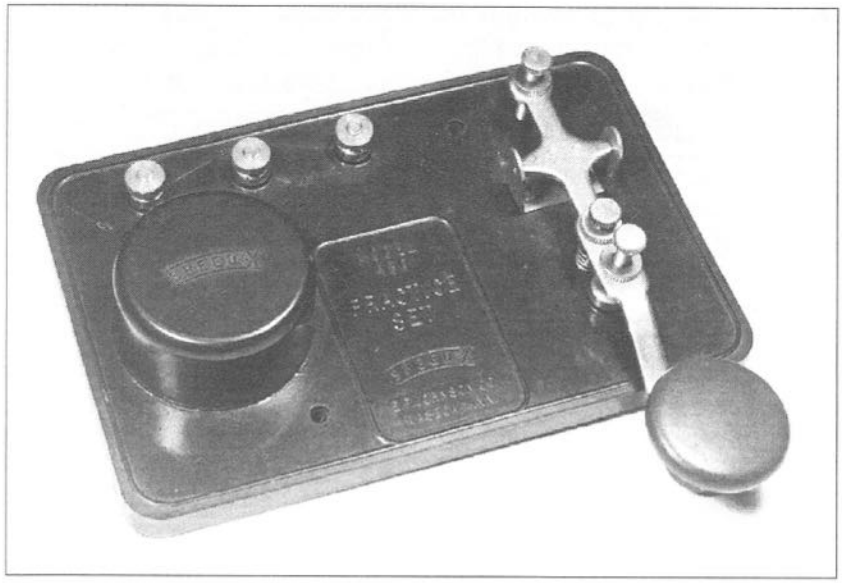
Les Logan did all of the design work on his keys. The factory operation was small, employing a dozen people at most. Metal plating was done off-site, and moulding was done in the shop for buzzers and inexpensive plastic keys.

During the war, Speed-X sold to the military, and stores continued to carry their products. They kept up production



Photo/Collection: Wyn Davies

Les Logan Co. Semi-automatic, Amateur Model 515



Photo/Collection: Robert Betts N1KPR

E.F. Johnson Co. Practice Set, 114-450

by hiring older women for the assembly work. They had one man that was 4F (medically unfit for military service) to run the moulding press and grinder and to do the shipping. Les Logan set up the jigs for the drill presses and did final testing nights, weekends, and whenever time was available.

All of the Logan family worked in the shop at one time or another during school vacations assembling, running drill presses, etc. Later on, all of the brothers worked as salesmen for Logan Sales Co. Each eventually quit to start their own businesses.

The Logan Sales company was very successful, and Logan semi-retired in 1961. His son-in-law James Burres ran the company and his daughter Betty worked as book-keeper. Burres died in 1964 and Logan sold the company to four of his salesmen in 1965. Betty continued working for a year after the sale. Les Logan died on 28 August 1983. His remains were cremated, and his ashes were scattered over Lake Shasta, CA.

1947–72: E.F. Johnson Company

Logan sold the Speed-X line to the E.F. Johnson Company, Second Avenue SW, Waseca, Minnesota, in 1947. He had been a sales representative for that company for several years, and continued to represent them after the sale. Logan Sales Company also represented Drake, Rohn, Central Labs, and the Mark Simpson Company.

1972 to present time

The Speed-X line is now made by William M. Nye Company Inc., originally at 1614 130th Avenue NE,

Bellevue, Washington 98005 (from advert in *QST* 11/74); 12031 Northup Way Suite 101, Bellevue, Washington 98005; and PO Box 1877, Priest River, ID 83856 (present address).

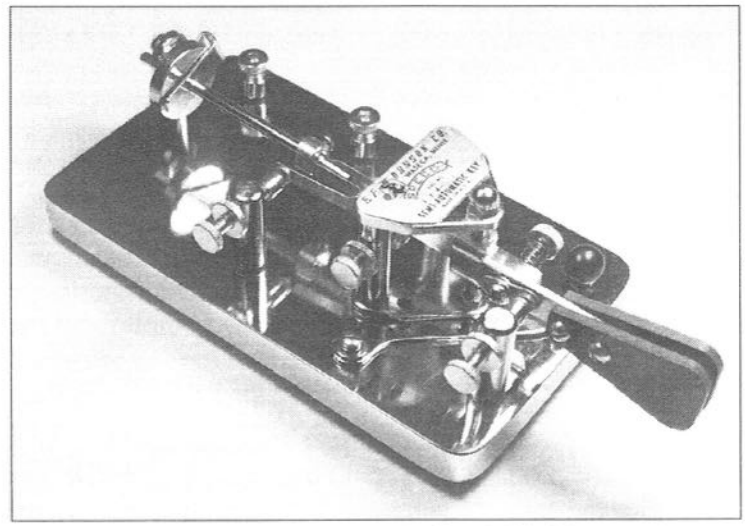
Bill Nye, Jr., (WB7TNN) and his wife Sally operate the company, and they employ a part-time key assembler and an electronics technician.

The company was founded in 1972 by William Nye, who retired in 1986. He was born in North Dakota in 1912 and moved to the Seattle area in 1924. He has been an amateur radio operator (W7DZ) since the age of 12. He owned a business machine company until he sold it and retired in 1971. He established the William M. Nye Company in 1972 as a retirement business.

The Nye Company bought the Speed-X trademark from the E.F. Johnson Company in the fall of 1972. They bought tooling to manufacture keys, low pass filters, matchboxes, and sounders. Bill Jr. does not believe that they bought the tooling to manufacture bugs.

Nye's present line of keys are manufactured on site, though casting, painting, and some machine functions are contracted out. Small parts are manufactured on site using a variety of stamping and drilling machines. Many of these machines have been modified by Bill Jr. to power them with air or hydraulic pressure. He is an inveterate tinkerer, and does most of the manufacture of small parts himself. Screws are bought from vendors, and key assembly is done by a part-time employee.

The entire operation was moved to Priest River Idaho on 1 May 1995. Bill had planned this move for some years, and the cause was a burning urge to get away from city life. He pulled out of Seattle in a 45-foot van on May first, and was up and operating in Priest River



Photo/Collection: Dave Pennes WA3LKN

E.F. Johnson Co. Semi-automatic, Special Model, 114-520

within a week. He considers Nye Viking to be a retirement business and plans to continue indefinitely.

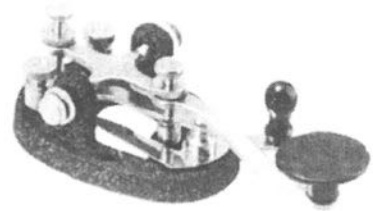
Original Moulds

Nye is using the same casting moulds that were used by the Les Logan and E.F. Johnson Companies. These moulds were re-worked in 1972 by a machine shop. This involved polishing, milling and filling them. They were acquired from the Johnson Company, and it is doubtful that new ones have been made since the 1930s. The key bases are cast in zinc by a subcontractor in the Seattle area. Zinc is used because of ease of casting, low cost, and solid weight.

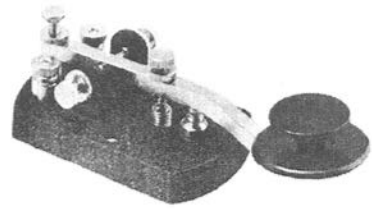
Nye is set up to manufacture a full line of keys, and subcontracts for OEM manufacturers. The following are some of the significant orders they have met:

- Their first order was to the Graybar Electric Company for 250 sounders.
- In 1985, they shipped 800 sounders to Sargent Welch, the school supply company. Bill Jr. has no idea what they did with them, but suspects they were sold to a third world company.
- In 1978 they shipped 300 leg strap keys (Model KY-116) to Pakistan. They are mounted on a curved metal base with Velcro leg straps and an aluminium hood over the key.
- The last sounders they made were built for the Smithsonian Institution. They make several other items, notably wattmeters, phone patches, low pass filters, and antenna tuners. These items are manufactured wholly in their shop, other than painting, and all of the components, including the switch decks, coils, and capacitors are hand built.

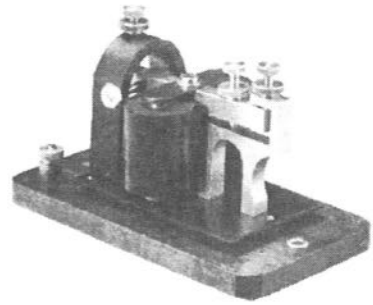
From a brochure of keys and sounders issued by the Wm. M. Nye Company soon after they acquired the Speed-X trademark



Standard key Cat. No. 114-310-003. Black wrinkle base, with switch



Heavy Duty key Cat. No. 114-322-001. Navy knob, black wrinkle base



Nye Viking Sounder Cat. No. 114-112. 4Ω coil standard; 50, 150 or 200Ω to order

Summary of Speed-X Models

Made by:	Speed-X	Logan Radio Mfg. Co	Johnson	Nye	Notes
STRAIGHT KEYS					
Practice Key	-	300	114-300	-	Bakelite base
Amateur Key	-	301	114-301	-	Bakelite base
	-	301-L	-	-	L = 1/4" contacts Later called 302
	-	301-S	-	-	S = With switch
	-	301-SL	-	-	With S + L. Later called 302S
General Purpose Key	-	302	-	-	Previously 301-L
	-	302-S	-	-	Previously 301-SL
Metal Hand Key	-	305	114-305	-	Black wrinkled enamel metal base
Metal Hand Key	-	306	114-306	-	Lacquered brass base
Standard Key	-	310	114-310	114-310-001	Black oval die cast base
	-	310-L	-	-	1/4" contacts
	-	310-S	114-310-S	114-310-003	Johnson later 114-310-3
	-	310-SL	-	-	With S + L
	-	-	-	114-310-004 GP	Gold plated
Standard Key	-	311	114-311	-	Chromed die cast base
		311-L	114-311	-	1/4" contacts
		311-S	114-311-S	-	With switch. Johnson later number 114-311-3
		311-SL	-	-	With S + L
Amateur's Practice Key:					
Early Model	-	312	-	-	Black oval key base mounted on mahogany wood base
Later Model	-	-	114-312	-	No wood base. Grey wrinkle finish key base
	-	-	114-312-S	-	Same with switch
	-	-	114-312-SL	-	With S + L

Summary of Speed-X Models (continued)

Made by:	Speed-X	Logan Radio Mfg. Co	Johnson	Nye	Notes
Amateur's Practice Key: (continued)					
Latest Model	-	-	-	312-001	Black base, brass plated hardware
				312-003	Same with switch
Transmitting key	-	-	-	114-315-001	Same as 312.001 plus painted steel base
				114-315-003	Same with switch
Standard key	-	316	114-316	-	Brass finish (Logan lacquer, Johnson wrinkle)
	-	316-L	114-316-L	-	1/4" contacts
	-	316-S	114-316-S	-	With switch
	-	316-SL	-	-	With S + L
Heavy Duty Key	-	320	114-320	114-320-001	Navy type knob, black rectangular base
	-	-	-	114-320-003	Same with switch
Heavy Duty key	-	321	114-321	-	Same as 320, but chrome base
Heavy Duty key	-	-	-	114-322-001	Navy type knob, black rectangular base, brass hardware
	-	-	-	114-322-003	Same with switch
Heavy Duty Key	-	326	114-326	-	Rectangular brass finish base, chromed hardware
Practice Set	-	450	114-450	-	Key & buzzer on base

(**Note:** An advertisement in *R9*, 11/1934, indicates that Speed-X Manufacturing Co. also made a range of six manual keys. These could possibly be the same as six of the Les Logan manual keys, but no further information about these keys has been found so far. If any reader has found adverts for Speed-X manual keys from pre-1937, please contact *MM*).

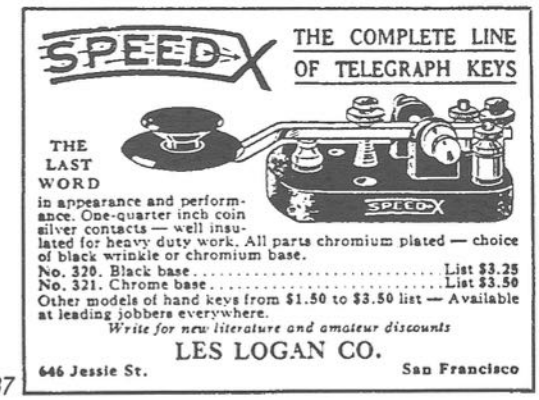
Summary of Speed-X Models (continued)

Made by:	Speed-X	Logan Radio Mfg.Co	Johnson	Nye	Notes
SEMI-AUTOMATICS					
Hi-Speed Standard	500	500	114-500	-	Early Johnson c.1948
			114-500	-	Later Johnson c.1959
	-	500L	114-500-L	-	Left-handed model
Professional	-	501	114-501	-	Early Johnson c.1952
	-	-	114-501	-	Later Johnson c.1959
	-	501L	114-501-L	-	Left-handed model
Hi-Speed Junior	510	510	114-510	-	
Amateur Model	-	-	114-513	-	
Amateur Model	-	515	114-515	-	
	-	515L	114-515-L	-	Left-handed model
Special Model	-	-	114-520	-	Chromed hardware
Hi-Speed key	No Number	-	-	-	Goose Neck Design

Note that early Nye models continued the Johnson '114' reference (e.g.,114-320-001) while current models (e.g., 320-001) no longer have this prefix).

Information based on key advertisements early 1930s to present time, and researched by John Elwood WW7P

A selection of advertisements placed in *QST* by the Les Logan Company in 1937 and 1938
(continued opposite)

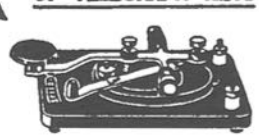


12/37

SPEED-X

THE COMPLETE LINE OF TELEGRAPH KEYS

Model 312 Key



A new amateur's practice key mounted on a mahogany finished wood base. Black enameled metal key base. Arm black Oxidized and all other parts finished in natural brass. Includes circuit closing switch. ¾ inch silver contacts.

No. 312 Key.....List Price $2.25

Other models of hand keys from $1.50 to $3.50 list. Available at leading jobbers everywhere.

Write for new literature and amateur discounts

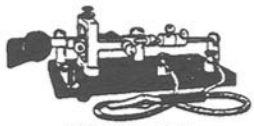
LES LOGAN CO.

646 Jessie Street San Francisco

3/38

SPEED-X

The Complete Line of Telegraph Keys



Model No. 510

"HI-SPEED" Semi-Automatic Key

— adjustable to give plenty of pep and life. Black wrinkle base and casting — all machine parts nickel plated. Complete with switch cord and plug. List price $10.75.

Other models from $9.25 to $17.50. Available at leading jobbers everywhere. Write for new literature and Amateur Discounts.

LES LOGAN COMPANY

646 Jessie Street San Francisco

4/38

SPEED-X

THE COMPLETE LINE OF TELEGRAPH KEYS

A new and outstanding development — A general purpose type — Moulded Bakelite Base. Pigtail connections eliminate insulation problems — No current on bearings — Coin silver contacts. All Metal parts nickel plated.

Type 301 Key

No. 301. Bakelite Key. List Price..$2.15

No. 301S. With Switch. List Price.$2.50

No. 302. ¼-inch contacts. List Price. $2.40

No. 302S. With Switch. List Price.$2.75

Other models of Hand Keys from $1.50 to $3.50 list — Available at leading jobbers everywhere — Write for new literature and Amateur Discounts.

LES LOGAN CO.

646 Jessie Street San Francisco

5/38

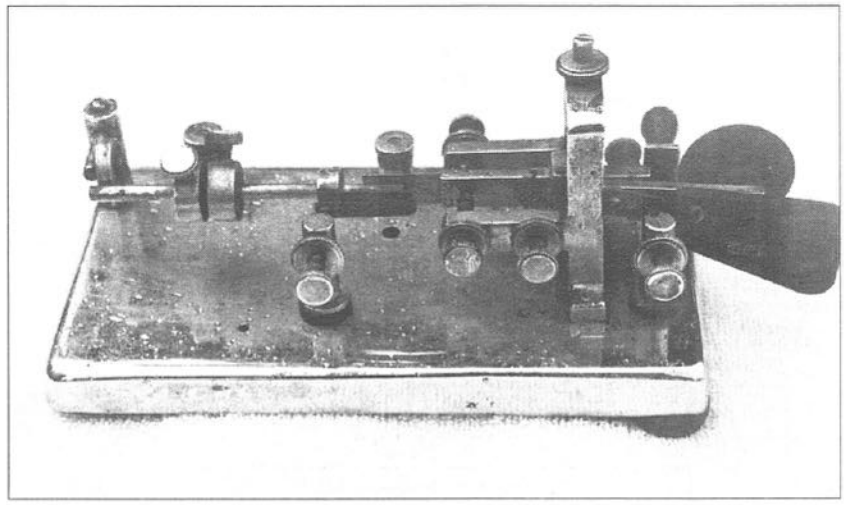


Photo: Lynn Burlingame, N7CFO

Early Speed-X bug? No documentation found to otherwise identify this key. Engraved 'SPEED-X' on the thumb piece; no other marking. Noted in Tenino (Washington) depot museum

Mystery Solved?

We have long speculated that the mysterious bugs with no markings were early Speed-X keys.

In June 1994 I visited the Tenino (Washington) depot museum and found a well-made bug with 'Speed-X' on the thumb piece. It had no other markings. The paddles are usually the first thing to go on bugs, and these were not particularly substantial. It makes sense that it would be easier and cheaper to engrave a brand name into the plastic paddles than it would be to make a label.

MM

Short Breaks

The Mitchell-Christie Method

'I suggest you learn Morse code by my own special method ... Using dots alone, E, I, S, H, and dashes alone, T, O, but not M, and using one dot and one dash, A, N, then adding R, we have nine easy letters. These letters are the most used. Add M to make 10.

'Make up as many words and sentences as you can out of these letters. Within an hour you will know 10 out of 26 letters and by adding D, L, F, and C you will know four more. Then add P, Y, W; then B, V; then K, X, and finally J, Q, Z. At each stage make up words and sentences including the added letters.'

Condensed from Signalling without Words, *by Lt. Commander Mitchell-Christie, published by Woolworths.*

(G and U don't seem to be included. Perhaps that's why this particular method is not as well known as some others! – Ed.)

Contributed by Alex Henderson G0EJF

The Story of a Very Special Telegraph Key

Translated by
Jens Henrik Nohns
OZ1CAR

IN 1986, THE CITY-MUSEUM of Holstebro in the western part of Jutland, Denmark, received a very interesting telegraph key which today is considered to be one of the outstanding exhibits in the museum. It was donated by Jens Toldstrup, who during the war worked at the Resistance headquarters of North Jutland.

Toldstrup told the following story about the key:

According to London sources, this was the key which sent most letters from German occupied Europe to the Special Operations Executive (SOE).

One of Toldstrup's radio operators, Poul O. Nielsen, using the codename 'Moses', sent 33 795 five-letter groups with this key during the period 26 July 1944 to 4 May 1945 . At the liberation of Denmark, 5 May 1945, 'Moses' gave the key to Toldstrup, as a memory of the last part of WWII. The key was engraved 'TAK FOR GODT SAMARBEJDE, MOSES RADIOHOLD', which translates as 'Thanks for good co-operation, Moses radioteam.'

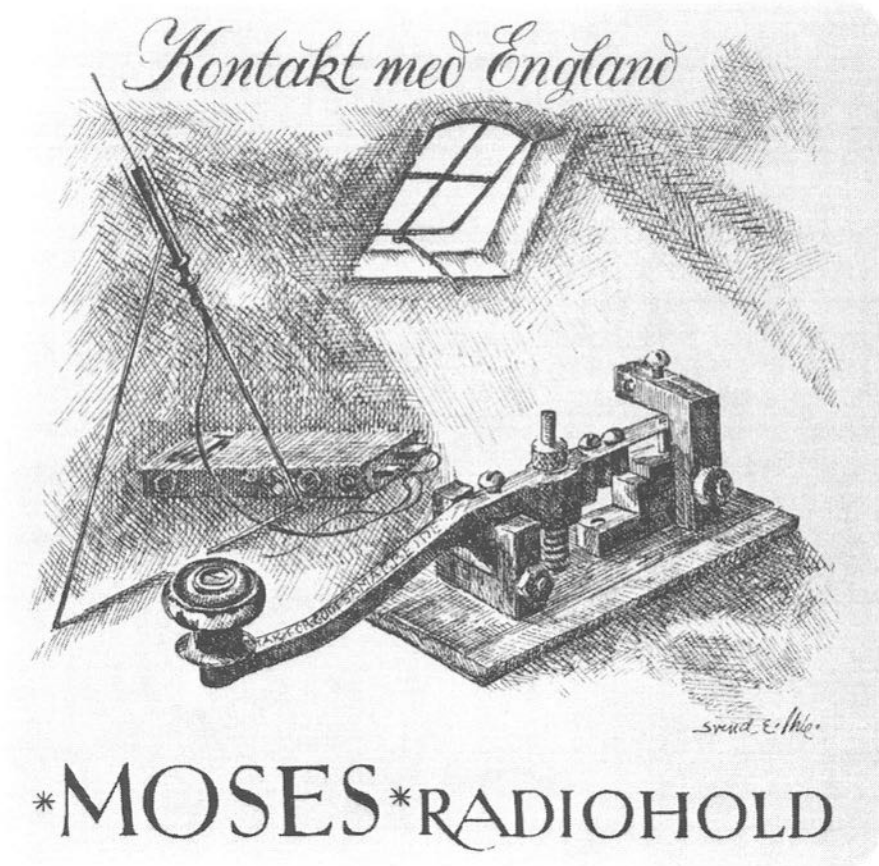
Other operators of that team who can be mentioned were 'Cain', 'Borge' and 'Hermes'. 'Cain', whose name was Jorgen G. Berg, sent 10 622 letter groups with the key between 3 November 1944 and the end of the war.

Because of the danger of detection by Gestapo direction finding units, orders from London were that operators should only transmit for a maximum of 15 minutes from any one place. However, because of the overwhelming number of groups to be sent, that order could not always be obeyed. On one occasion, 'Moses' sent for two hours from the same place, which of course required stronger lookout arrangements and a better warning system.

But things could go wrong

One evening in April 1945, 'Cain' had just started transmitting to London, and 'Karl' stood at the window watching the street. Suddenly, without any warning to the operators, the street was full of German soldiers.

Karl ran to the attic to hide the transmitter, while Cain coolly lit a cigarette, and went into the street without being stopped. For Karl, however, the situation was hopeless and he hid himself in



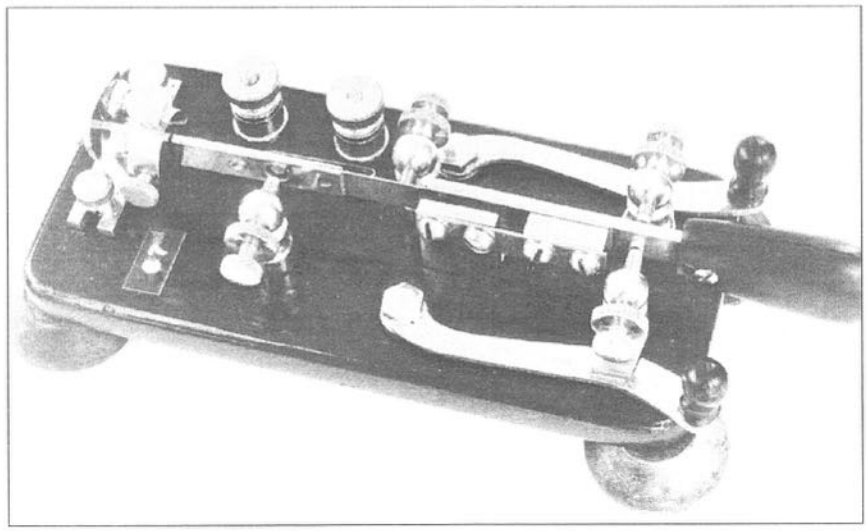
the attic, his pistol ready. He shot the first two Gestapo who entered the room but the third threw a grenade and Karl died.

A few days later a piece of paper was found on which Karl had written.

'Dear Father and Mother
Now I am going to die, and I am a little afraid, but I believe God will give me strength to die like a Christian Dane, fighting for Denmark.
I will ask him to bless you and give you strength.
I did my best, and I would rather die than be caught.
Now they are outside, and I will fight. God bless. Karl.'

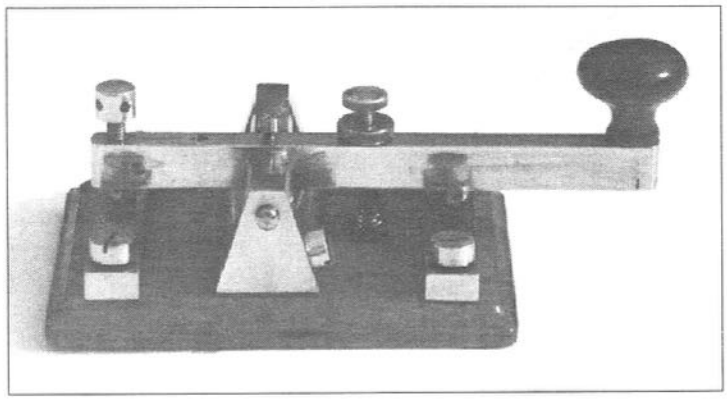
(This moving story is taken from the 1986 Yearbook of the Holstebro Museum. The illustration of the key is from the yearbook. During a recent visit to the museum, Jens was unable to examine the key closely but, he says, 'it looks exactly like the drawing'. – Ed.)

Showcase



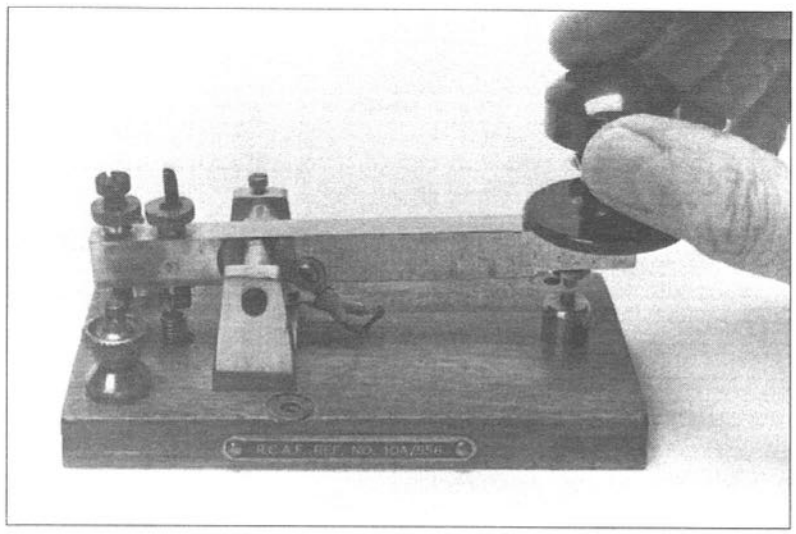
Signal Electric 'Sematic' key

Collection: John Elwood WW7P. Photo: Ray Nelligan



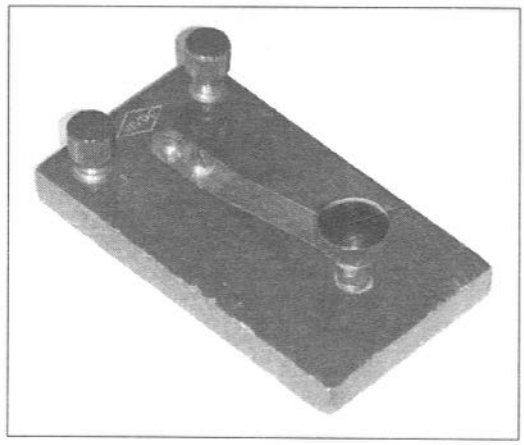
Siemens Halske key

Photo/Collection: Wyn Davies



Royal Canadian Air Force key 10A/556, 1930

Photo/Collection: Murray Willer VE3FRX



Strap key, made by Nivoc

Photo/Collection: Wyn Davies

Featuring keys and other collectors' items of telegraphic interest.
If anyone can add to the information given please contact
Tony Smith, 13 Morley Road. Sheringham, Norfolk NR26 8JE

Observations on

Telegraph Instrument Use in Circuit

by L.E. 'Ed' Trump AL7N

MAINLINE telegraph instruments with 100 to 150Ω coil windings obviously introduce a high amount of inductance into any circuit they operate in. For this reason, circuits using these instruments (particularly if several are in the circuit) should use a high value of voltage. Upwards of one hundred volts is not too much.

Resistance is then added to the circuit to regulate the operating current to the desired value – nominally 45 to 50mA, with limits of 30 to 60mA or so. Commercial practice for landlines was to use a 130 to 160 volt terminal battery at each end of a single wire ground return circuit.

Snappy Operation

The reason for the use of these high voltages is that the high 'open circuit' voltage somewhat overcomes the inductive characteristic of the circuit and speeds the rise-time of current flow when the circuit transitions from 'open' to 'closed'.

This results in clean 'snappy' relay and sounder operation. An additional advantage is that each telegraph instrument comprises such a small percentage of the total circuit resistance that several instruments in the circuit can be cut in or out without materially affecting the value of the operating current – or the operating adjustment of the remaining instruments in the circuit.

Voltage the Main Factor

Telegraph circuits can be set up using lower values of voltage, but when more than one or two instruments are in circuit the relay or sounder action tends to get sluggish and the instruments become very difficult to maintain in proper adjustment, especially if other instruments are cut in or cut out.

This is true regardless of the operating current used. In other words, a circuit with three or four 100 to 150Ω mainline instruments in it and a supply voltage of 24 volts will work much poorer than the same circuit with 100 volts supply and additional 'ballast' resistance to obtain the same operating current. The instruments in the circuit with the higher supply voltage will have a wider range of adjustment with varying operating current values.

Rule of Thumb

This is something to keep in mind when setting up telegraph circuits for such purposes as demonstrations, museum exhibits or a home telegraph office. The rule of thumb is to use as high a voltage as possible for the supply and in any case not less than 100 volts or so for circuits with more than two instruments, and then add appropriate series resistance to regulate the operating current to 45–50mA as desired.

Circuits connecting low resistance practice sets of 4 to 20Ω should be operated at high current values of around 200 to 250mA. The supply voltage can be lower than that used with the high resistance instruments because there is less inductance in such a circuit to cause problems with current rise time as the circuit is keyed.

In general, all instruments on a given circuit, regardless of its length or the number of instruments used, should be of like resistance value whatever other differences in instruments may exist.

(In the next issue of MM, *the author discusses power sources for telegraph circuits.)*

Readers' ADs

FOR SALE

MORSE KEYS, Swedish hand made (boxed) and h/m Canterbury keys for sale. Offers to: Reg Stockwell G0GZJ, 49 Beech Way, Basingstoke, Hants RG23 8LS. Tel: 01256 412270.

J51, 45, 38, etc. – 16-page illustrated list of telegraph items surplus to needs, $3.00 (refundable). Dr Joe Jacobs, 5 Yorktown Place, Fort Salonga, NY 11768. Tel: 516-261-1576, fax: 516-754-4616, E-mail - Joekey @ AOL.COM.

WANTED

T.R. McELROY MORSE EQUIPMENT, catalogs, memorabilia, correspondence. Tom French, 'the McElroy Collector', 151 Barton Road, Stow MA 01775, USA.

SPECIAL TELEGRAPH EQUIPMENT. Single needle; Undulator; also Marconi multiple tuner. Can be collected in the UK. Exchange items (telegraphy, telephony, radio) also available. Fons Vanden Berghen, Lenniksesteenweg 462/22, B-1500 Halle, Belgium. Tel: Office +32.16.38.27.21. Late evening: +32.2.356.05.56.

RAF 'BATHTUB' KEY, also Morse sounder. Phil Beckley GW6CDO, Church Farm House, Bettws Hill, Bettws, Newport, Gwent NP9 6AD. Tel: 01633 853906.

DRAWINGS and other information to make a replica of the MELEHAN VALIANT automatic key. All information, including photos, will be welcome. Jean-Philippe Claude F6FSQ, 2 Rue Schliffweg, F-67530 Ottrott, France.

BACK ISSUES OF MM, Nrs 1-12, 14, English or Dutch, to buy or to borrow. G. Ulsamer DL1BFE, Logumer Str. 66, D-26723, Emden, Germany.

Beginners' Corner

Making Sure You're Understood

by Wm.G. Pierpont N0HFF

COMMUNICATION FAILS unless our message gets across and is understood. Weak signals and poor conditions during transmission (static, interference, fading) all contribute to partial failure to get through.

In all of these conditions, telegraphic communication is vastly superior to voice because its energy is effectively concentrated within a narrow band. Yet it pays a cost for this by taking more time to communicate the same words.

In addition, it too can suffer partial loss due to transmission conditions as well as from just plain accidental misunderstanding. How can we reduce these losses to a minimum?

FROM THE ORIGINATOR'S STANDPOINT

Let's start with the originator's use of the words themselves (by 'words' we include the use of abbreviations and Q-signals).

Feedback and Redundancy

We rarely think much about how we speak when we are conversing. When we speak face to face we can generally tell whether we are being understood or not by feedback through the reactions and responses of the listener.

But when our communication is remote, by voice over a wire or the radio, the visual clues to the hearer's understanding are missing. When the telegraph code is the link, auditory clues (tone of voice of a comment or reply, 'uh-huh', 'yeah', etc.) are also missing.

Relatively awkward break-in is the only possible direct feedback while transmitting in code, and it is an ambiguous interruption, until the receiving operator explains his problem.

When we speak, whether face to face or by remote means, most of us tend to use more words than the bare minimum necessary to be understood: this is called redundancy. The degree of redundancy varies from person to person and from situation to situation.

When we write we generally are much more careful how we express things that are important than when we speak. We give more thought to the choice of words and the way we write them: we become more circumspect and precise in order to minimise the reader's possible misunderstanding of what we

mean. Since we have no feedback at all, we generally tend to use more words than the minimum necessary in order to make up for that lack.

In telegraphic communication the tendency, largely because of the time required to transmit, is to eliminate every word which does not seem to be absolutely necessary. We abbreviate in various ways – generally down to bare bones: the minimum required to express the thought. First we leave out words, and then we abbreviate what is left as much as we dare and still have it understandable. (This is especially true when paying on a per-word basis for commercial transmission.)

Time v Intelligibility

What we have been saying is this: redundancy helps to insure adequate and accurate communication. That is, we normally use more words and expressions than the bare minimum required to get our meaning across.

Time, however, is a factor working against telegraphic communication. It is not as rapid as speech in terms of words per unit time. In order to balance the time factor against the intelligibility factor, the originator of a telegraphic message generally weighs more carefully exactly what words to use and how to put them together.

If he is wise he will also consider the effect of possible mistakes or distortion during sending and receiving which might produce ambiguity.

Repeating and Counting Words

What can we amateurs do to minimise misunderstanding or complete failure of our communications? One of the commonest things is simply to repeat each word or words, or the whole message. We just repeat critical words or numbers two or three times. (Numbers are particularly critical because there is no context to help out.)

Another form of repetition is to ask the receiving station to repeat the message back to the sender word by word. This nearly assures perfection. But this, like repeating each word as it is sent, requires at least twice the original time on the air.

Counting the words in a transmission has long been common commercial practice, but is not generally used except for message type traffic. It does not assure complete accuracy (exact words and spelling).

Using Redundancy Intelligently

We can often prevent misunderstanding by adding a word or two to a short communication. For example, to confirm a scheduled QSO later in the day, to say 'CUL this afternoon,' or 'CUL in pm' instead of just 'CUL' helps ensure that the other operator knows that you mean today, and that you are not cancelling it (as he might assume otherwise due to some interference, etc.).

When conditions are rapidly deteriorating this may be our only hope to get across before further communication become impossible. A little forethought along these lines on the originator's part can help avoid unfortunate misunderstandings. Especially when we just must get through, and conditions are poor, we should choose our words and expressions carefully.

AT THE RECEIVING END

Here we ask 'Will I be able to copy (or read) it?' and if I can't, 'What is the problem?' – 'What can be done to improve the quality of this material I am receiving,' or 'What can be done to make sense out of this somewhat garbled transmission which is all I have?' – 'What is the nature of the problem?'

During communication, speed of transmission is an important factor, one directly controlled by the sender. Both too fast and too slow sending can cause trouble in receiving – here the receiving operator must tell the sender to slow down or speed up to meet the receiver's needs.

Quite naturally, speed of transmission must set be within the receiving operator's capability. It may be that the weighting of the dits is too light and I'm missing some of them. If so, can the sender make them a bit longer (heavier)?

Maybe the sharpness of the pulses has been rounded off too much to remove 'clicks' and the signals sound mushy. At higher speeds, perhaps the dits are too heavy and confusing the ear. These are things which the sender may be able to modify on the spot, but he must be told.

(Reprinted and specially edited for MM *from Bill Pierpont's book* The Art and Skill of Radio-Telegraphy*).*

Short Breaks

A Weighty Subject

I have noticed that some members use keying which has light weighting, and some use heavy weighting. I find that keying which is excessively light or heavy is not as easy to copy as keying which has more nearly a 1 to 1 dot to space ratio.

There is a method of measuring the weighting of the on-the-air signal, and I thought that it's possible some members might not be aware of it. The method uses any analogue meter related to RF output, such as the meter of an SWR bridge or relative output detector. If the meter sensitivity is set for full scale deflection under key-down conditions (using a dummy load of course), a string of dots should produce an average value of 50 per cent of full scale when the dot to space ratio is 1 to 1.

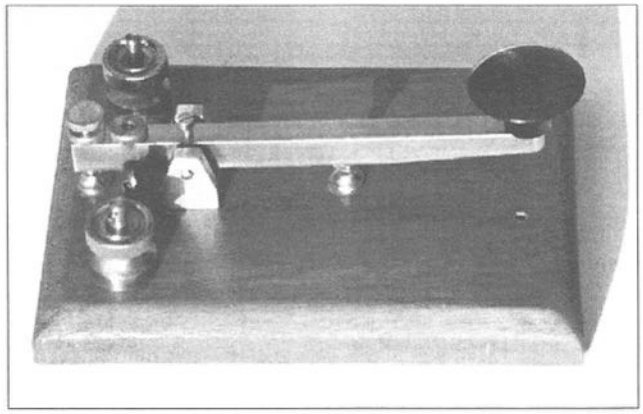
If a 1 to 1 ratio is not desired, a keyer's weight control can be adjusted for the desired weight by ear, and the meter reading noted for future reference. Also, by changing the keyer's speed control, variations of weighting as a function of speed can be detected. Even if there is no weight control, these are very interesting checks to make to see if the keyer's 1:1 dot/space ratio is distorted by the transmitter.

Further, this method can also be used to set the spacing of a bug's dot contacts. In the absence of any distortion in the transmitter, however, a 1 to 1 space to dot ratio should be achieved if the dot contacts just touch when the bug's dot lever is against its stop, and the lever's dot contact is not vibrating.

Tony Berg W1OT

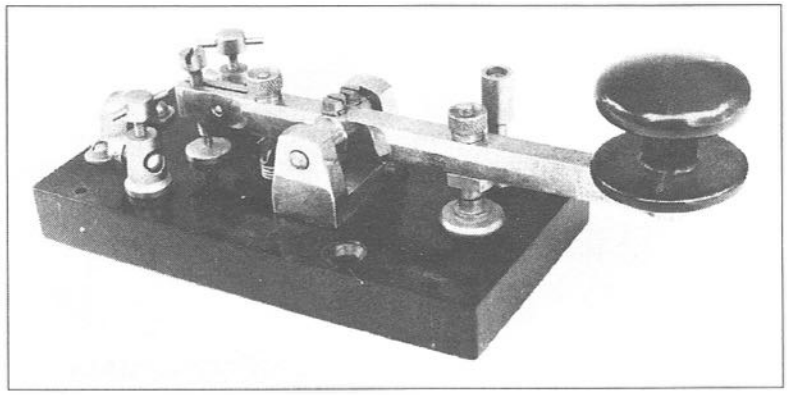
(Reprinted, by arrangement, from FOCUS, *journal of the First Class CW Operators' Club, Winter 1989.)*

Info Please!



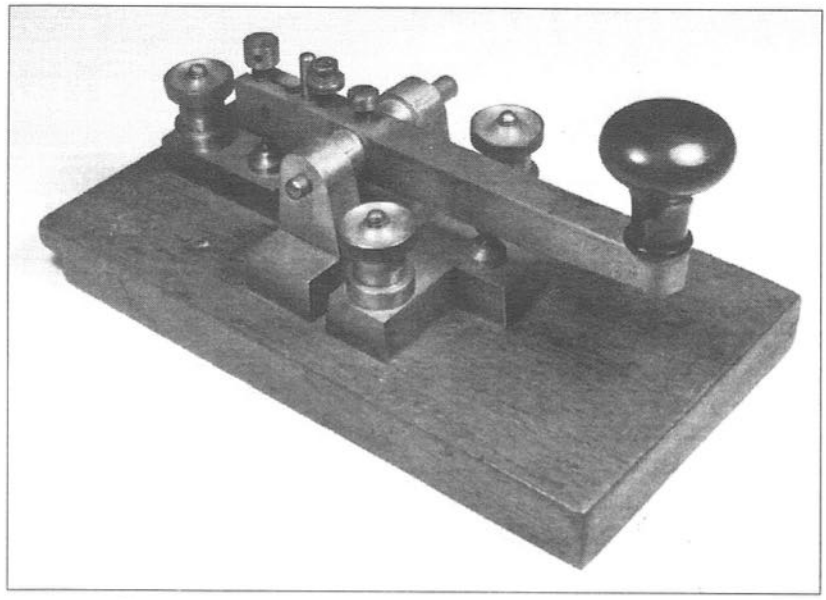
Unknown key. Probably on new base.
Any information welcomed

Photo/Collection: Wyn Davies



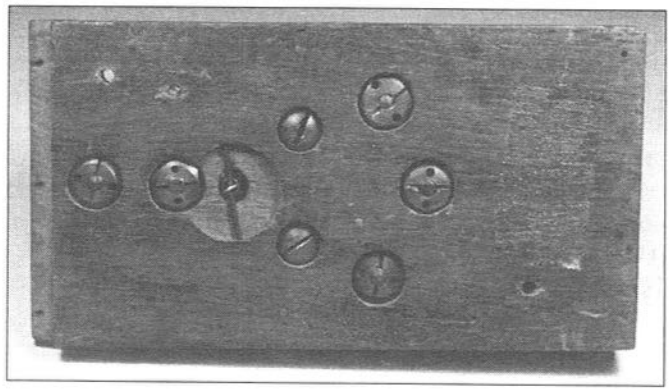
Unknown key. Info requested

Collection: John Elwood WW7P. Photo: Ray Nelligan



British Post Office Type Key. Possibly Walters type 1K, but no markings to confirm this, and terminals not same style as catalogue. Note cut-away underneath and across end of base; also 'key holes' in securing screws underneath base (see below). Any information welcomed please

Photo/Collection: Dave Pennes WA3LKN



Readers require further information on the keys, etc., featured here.
Please write to Tony Smith, 13 Morley Road, Sheringham, Norfolk NR26 8JE if you can help.
All useful information received will be published in MM *in a later issue*

The Dwindling Morse Tribe

by W.F.C.

(reprinted from *AP World*, Spring 1964)

For 87 years the Associated Press used the Morse telegraph, wholly or mostly, for movement of its news reports. In 1925 it had 1500 Morse men in its ranks. AP delayed putting full trust in teleprinters until thoroughly convinced of their dependability after years of tests. Former AP telegraphers still on the payroll *(i.e., in 1964. – Ed.)* but doing other work have dwindled to 52. In seven years all probably will be retired.

"WHY," WRITES CAL MANON from KX, "don't we have a story about the old Morse man? Very few AP employees now are old enough to remember the Morse telegrapher or what this business was like in those days."

He said he had fond recollections of telegraphers on the old *Kansas City Journal* and in the AP bureau at KX.

Well, since Calvin has twisted our arm we shall undertake a few final observations to supplement what we said about the Morse in the issue of Winter 1961–1962 *(see 'Morse and the Associated Press'. MM43 – Ed.)*

Abolished Three Decades Ago

First of all we must tell the youngsters outright that AP abolished Morse three decades ago and never has missed it. Morse couldn't have lasted beyond 1935. 'Twas most amazing that it didn't disappear soon after its invention.

Almost from the beginning Morse faced the competition of automatic printers. Indeed, what we now know as Western Union, almost as old as Morse itself, began life as the Mississippi Valley Printing Telegraph Co. and prospered for years without access to the Morse patents.

It used the House printer invented by a Kentucky school teacher – a machine that worked fairly well on shorter circuits.

Utterly Dependable

But the Morse telegraph was as simple as a collar button, and it was utterly dependable so long as the wire held together – even a very long wire. Some men who had worked AP Morse circuits for 10 years or longer could not recall a single moment of wire failure.

This reliability is what kept Morse alive for more than 80 years.

And, like the steam locomotive, Morse had a built-in aura of romance that would not die. Even now AP men too young to remember Morse will express interest in it.

A former Morse man who hasn't touched a telegraph key in 30 years may absent-mindedly look for one on any cluttered desk; or listen for code signals in the clicks of teleprinters or typewriters. Telegraphy is like riding a bicycle: the reflexes remain for ever.

Affection from Association

What about the old-time editors, who didn't know a dot from a dash? Their affection for Morse, if they had it, came from association. Sounds of a Morse wire coming through an open newspaper window on a summer evening, boosted by the resonance of a battered old Prince Albert tobacco can, were pleasant sounds.

On small papers the image of the operator himself was inseparable from his wire. AP telegraphers who remained in one place long enough often endeared themselves to editors they served. Now and then one attained a local social status almost institutional. The editors loved him as they loved the smell of printer's ink.

Unique Position

"The Morse man," writes Manon, "was more than just a telegrapher. His unique position as a representative of the AP gave him an opportunity often to be a good public relations man."

True, and the AP *knew it*. In assigning men to newspapers, AP traffic chiefs in those days commonly gave advice like this:

"Go over there and make yourself a member of the family. Turn out clean copy. Study the paper's style – its capitalisation, abbreviation and punctuation. Make yourself useful in every way possible, and always keep in mind that to the newspaper editors *you* are the AP. They rarely see any of us in the bureau but they see *you* all the time."

Former AP Engineer, Harold Carlson, now retired, recalls that when teleprinters were first installed, newspaper editors were happy over the expanded news reports but saddened over the loss of their operators.

Different Styles

Morse telegraphers who had moved from place to place had kept switching from style to style. Some papers had an extreme 'up' style; others a drastic 'down' style. And between these there were many variations. This problem disappeared with the arrival of the teleprinter, which printed everything in capital letters, but reappeared with a bang in 1952 when wiretypeset came along. After much debate a common typographical style was agreed upon. It is set forth in the AP Style Book.

No Learners at AP

Practically all AP telegraphers were recruited from Western Union, Postal Telegraph or (a few) from the railroads. AP wires were simply too fast for learners to practise on. Besides, AP Morse transmissions involved Phillips Code abbreviations for words and

THE CODE USED

American Morse was used to move AP news reports for eight decades. It is not the original code devised by Samuel F.B. Morse and Alfred Vail in 1837. It was drawn up in 1844 to give the shortest signals to the most frequently used letters, and it was used on US and Canadian landlines.

It was truly a 'fast' code, suitable for humans but no good for automatic equipment, due to the spacing inside some letters, and the long dashes for the letter L and the figure 0, which required delicate handling. Extra punctuation was added in 1875 by Walter P. Phillips, the AP official who invented the Phillips Code of abbreviations.

International Morse, 113 years old *(i.e., in 1964, – Ed.)*, is still a going thing. Millions of people have some familiarity with it, so it may last for generations yet.

For a long time the AP used this code in foreign distribution. Its old Havana and Mexico City circuits out of New York were truly hot channels. (Once, after the Havana cable broke down for three days, HV said, 'Just repeat all the baseball scores we missed.') In 1951 AP switched its foreign channels to radioteleprint.

phrases, and a man couldn't master this without first becoming a good straight receiver.

However, a notable few copy boys managed to learn without leaving. Among these were Paul Loeffel and Walter Soergel at Chicago, Dave Wilkie at Detroit and George Galli at San Francisco.

The best telegraphers were adults, of course, but with rare exceptions they had started in their teens. How did kids learn telegraphy? Practice, practice, practice. Tens of thousands of times a youth would pound each letter of the alphabet into his cranium until finally he reacted to it as naturally as he responded to his own nickname.

Ask any old telegrapher the code for G (dash dash dot) and it may take him several seconds to tell you. But if he *hears* the signal he senses it instantly from the top of his head to the tip of his big toe.

Why did kids learn Morse? They were inspired, at least those who learned on their own without formal training. It is doubtful if any of them thought much about earning power. Some learned in a spirit of competition with other kids. Others did so in imitation of persons they admired.

At least one thought the local Katy railroad agent was the greatest and cleverest man in the world, with the possible exception of Woodrow Wilson. At any rate it was the youngsters who learned Morse. And for every one who followed through, dozens dropped out.

Numbers

Telegraphers never were as numer-

ous as they appeared – probably no more than 75 000 at peak. Any US community on a railroad had at least one Morse operator; larger cities had about one per 2000 of population. In 1925 the railroads had 60 000, Western Union 6500, the AP 1500 and the remaining 7000 worked for brokers, the governmental agencies, UP, INS, Postal Telegraph and various industries.

Many of these telegraph jobs existed because long distance telephone hadn't developed to a satisfactory stage, though it had grown at a mighty pace. As early as 1910 AP had telephone pony circuits, devised by Kent Cooper, and these moved copy cheaply and at frightful speed – sometimes averaging more than 100 words a minute – but they took up too much of an editor's time. As soon as a paper could afford to do so it went over to a Morse wire.

The picture is different now. Long distance telephone is perfected but no longer used for news distribution. Teleprinter and wiretypeset have taken over. The AP has no Morse men working as such, but it has 52 on other types of work. The last of these will probably retire in 1971. Western Union has 234 former Morse men, most of whom rarely touch a key any more. Thousands of present railroaders are called telegraphers, but except on a very few remote branch lines, the click of the Morse is gone for ever.

Hard Grind

So far we have referred to the telegrapher as 'he'. Most of them were. But there were some fine women operators. Most likely all were either daughters of telegraphers or products of formal school training. Some may have been tutored by boy friends – but not by husbands. Offhand, we'd say about as many women learned telegraphy from their husbands as learned how to drive a car.

AP telegraphy was a man's game because it was a hard grind six days a week – sometimes with a double shift on Saturdays. Nevertheless, AP had nine good women operators in 1920.

A sizeable city with one daily newspaper was likely to have one AP operator: if it had two papers it had two operators, one on the day shift, the other on nights. These were the first men in town to hear news from the outside world. If there was a Sunday edition involved, then the night operator was off Saturday night and the day operator, always off Sundays, worked two shifts on Saturday – and was glad to get the extra money.

Everyone On the Line

What happened if the city had only one AP operator and he became too ill to work? Well, it seldom happened. Unless he was flat on his back and couldn't climb out of bed, he came to work because so much depended on him. If he felt he couldn't carry on he asked for relief and another man was 'shipped in' from somewhere.

Even tardiness was a rarity. When the wire opened the sending operator in the control bureau called the roll and every telegrapher on the line answered up on the dot – you'd better believe it.

From then onward the wire went like a bat out of hell. Or at least it seemed that way, thought the cruising

speed was only about 35 words a minute. At that rate the day's wordage should total 15 050, but it rarely passed 14 000 due to various interruptions such as messages and schedules.

Conversations with editors rarely delayed the wire. Telegraphers could talk a blue streak without missing a lick at work. Receiving operators could run to the fountain for a drink of water, shake hands and pass a couple of pleasantries with a visitor, or hurry a bulletin over to the editor's desk, without loss of a word from the wire.

A few seasoned men could fall 25 words behind the sender and yet catch up: such is the amazing nature of human memory. But if 30 seconds later you asked the operator to repeat those words again – he couldn't do it. The moment he committed those words to paper the memory cells involved were wiped clean, like a recorder tape.

THE OLD NUMBER CODE

When Samuel F.B. Morse invented his telegraph it probably didn't occur to anyone that the signals could be transcribed by ear. Instead, the dots and dashes were inked on a crude tape recorder.

To conserve space and time, a set of number signals from 1 to 99 was devised. Each of these represented not just a word or two but a complete standardised sentence.

The tape recorders soon disappeared but the number signals endured, with substitutions from time to time. The following were still in general use 40 years ago *(i.e., 1924. – Ed)*:

4 - Where was I? (used after an interruption or when the sender had lost his place).
9 - Wire chief calling! Drop everything and do what I tell you.
13 - Do you understand?
17 - The following is for all stations on the line.
25 - I'm busy now; call me later.
30 - That is all for today (or tonight).*
73 - My best regards to you, sir.**
95 - The following is very urgent.***

* Several theories have been advanced as to the origin of '30', which some newsmen use even today to signify the end of a particular story. But we regard this old number code as the true source.

** Telegraphy was a man's game, but in 1920 the AP had nine fine women operators.

*** In 1928 the AP invented a new urgent signal – 97 – for hot messages pertaining to stock market lists. This has survived more or less as a symbol for the AP Business News Department.

'Take 10!'

Actual working time for the day was 7 hours, 10 minutes. The wire was shut down 30 minutes for lunch. And twice a day the sending operator said 'Take 10' – a welcome command.

During those 10 minutes the telegraphers did the same thing teleprinter operators do with their 'tens' today. Any man who couldn't run across the street, put down a hot cup of coffee, gobble two doughnuts and get back to his wire in ten minutes was in the wrong business.

Simpler Life

As we look back on the Morse days – days when very few newspapers had more than one AP wire – life appears to have been simpler. The telegraph editor sometimes was also the city editor; editions were fewer and the spread of deadlines narrower.

New tops, adds and inserts were less numerous too, because state wire filing editors, mindful of the small wire capacity, held breaking stories back until they had shaped up.

Wire editors on single circuits still strive to do that, of course, but at great risk of having their judgement impugned.

Breaks Noted

Let's see what we can recall about the Pennsylvania night single wire in 1926. It was filed out of Pittsburgh and Herb Barker was its editor. Copy was lean. Any word that didn't carry its weight was weeded out. John Bradley was the sending operator – a particularly fast one.

There were some operators, such as Joe Sussman at PG, who sounded slow but, by clever use of Phillips Code, worked the receiving operators like mad. But Bradley really *sounded* fast. The net effect in either case was about the same – a little over 14 000 words a night. The operator at the *Johnstown Democrat* had a counter on his typewriter. Every time he hit the space bar it counted for a word, and at the end of the night he gave PG the word count, which was duly recorded.

Bradley, like all sending operators, also made a notation each time any man out on the line asked him to back up a few words and repeat. At the end of the month a mimeographed list went out showing how many times each man had fumbled.

Sometimes an operator would go an entire month without breaking at all, but others would have as many as 25 or 30 'breaks' chalked against them. Such fumblers were called 'lids'. The term 'lid' is of unknown derivation. It still survives in the lingo of teleprinter operators, and connotes failure to measure up.

'30, 30, GN'

The Pennsylvania night wire started at 6 p.m., and the first 'Take 10' came at 8 p.m. By that time all the financial items, produce markets, Chicago grain table and the baseball or any other sports were cleaned up. Only three baseball box scores, those of the two Philadelphia teams and the Pittsburgh Pirates, could be accommodated; other games were covered with brief lead and line score.

Mind you, here it was 8 o'clock in the evening and no news page matter had yet cleared, except maybe a bulletin

to show a big story was in the making. The 5 hours and 10 minutes of remaining wire space was devoted to general news.

In those days there was no AMs or PMs budget. The newspaper editors had no idea what the news report would contain – they just took it as it came. The Johnstown paper had *two* front pages – page 1 for out-of-town news and the last page for local news.

At 10 p.m. Bradley would say, "All take lunch!" and every man hurried to the nearest restaurant. At 10:30, without any roll call, Bradley would say "All in, all in," and then thunder into the next news item. You can be jolly well certain every man was right there, taking it down. The last 'Take 10' came at midnight. After about 1 a.m. one newspaper after another on the line would reach its deadline. At 2 a.m. Bradley would say "30, 30, GN" and all hands got ready to go home.

Unwritten Law

Why were the operators so punctual with those lunches and tens? Well, it was a sort of unwritten law, pleasing to all including the editor. We can't say for sure, but we think it was traceable to Kent Cooper's administration as the AP's first traffic chief.

Cooper took over Traffic in 1912 and found the men low-spirited and disgruntled. Until then the telegraphers had been hired and fired by the news chiefs and it hadn't worked out well. Cooper solved the problem by creating a separate Traffic Department with a traffic chief in each control bureau. That separation between News and Traffic still stands, and both sides like it.

Punctuality of lunches and tens seems to have been an outgrowth of KC's reform movement. Anyway, the punctuality survives in this machine age where possible, and the periods are somewhat lengthened. But where relief operators are available the wire keeps going.

Flash!

Our favourite story from the Morse days has to do with this spirit of punctuality.

In 1923, the newly employed sending operator on the Kentucky state wire out of Louisville transmitted:

'FLASH - PRESIDENT HARDING DEAD... ALL TAKE LUNCH'!

In a few seconds every operator along the line was scooting downstairs toward the nearest lunch counter.

We are told that although no real harm was done – no papers were near deadline – the bureau chief, H.M. Sheppard, was in a living rage for 30 minutes before the wire was started up again and the bulletin and bulletin matter were cleared.

(Reprinted, with permission of the Associated Press, from AP World, *Spring 1964. A further article, 'Wirespeak', will appear in a future issue of* MM.*)*

Bookshelf

A mail order book service for selected telegraphy and radio titles. The letters *MM* or *RB* followed by a number after each title indicate the magazine and issue in which a review appeared.

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A recent addition to the Bookshelf

Saga of the Vacuum Tube *by Gerald F.J. Tyne*
First published in 1977, this book has recently been reprinted in the USA. It deals with the developments in valve and vacuum tube technology up to 1930, with a mass of detailed history and many photographs and drawings.

The various sections cover: 'Electrical Developments Prior to 1880'; 'The Engineer Enters the Picture, 1880-1900'; 'The Beginnings of Thermionics in Communications, 1900-1910' (UK, USA, Continental Europe); 'Entrance of Industrial Laboratories and Military Demands, 1910-1920' (USA - Western Electric, De Forest, GE & independents; France, UK, Germany, Netherlands, Russia, Australia, Italy, Denmark, Japan); 'Early Days of Broadcasting, 1920-1930' (USA - WE, De Forest, GE/Westinghouse/RCA & independents; UK, France, Netherlands, Germany, Norway, Sweden, Austria, Hungary, Australia, Japan.)

Each chapter includes an extensive list of references for further reading and research. The book is rounded off by a comprehensive index of tube types and a general index.

496pp, 5½ x 8½in, softbound

£14.30 (UK): £15.20 (Eur/Sur)

TELEGRAPHY BOOKS, etc. *Detailed descriptions of the titles listed below available on request*

Railroad Telegrapher's Handbook by Tom French *(MM22)* ..... £6.75 (UK): £7.05 (Eur/Sur)
McELROY, World's Champion Radio Telegrapher by Tom French ..... £14.70 (UK): £15.40 (Eur/Sur)
History, Theory & Practice of the Electric Telegraph by George B. Prescott ..... £12.75 (UK): £13.65 (Eur/Sur)
The Story of the Key by Louise Ramsey Moreau *(MM38)* ..... £3.95 (UK): £4.25 (Eur/Sur)

RADIO & AUDIO BOOKS

Radio Art by Robert Hawes *(RB16* ..... £14.50 (UK): £15.00 (Eur/Sur)
Wires, Wheels and Wings by Harry Reddin *(MM42)* ..... £19.00 (UK): £19.65 (Eur/Sur)
Early Radio – in Marconi's Footsteps by Peter R. Jensen *(MM38)* ..... £28.00 (UK): £28.75 (Eur/Sur)
Dawn of Australia's Radio Broadcasting by Philip Geeves ..... £3.95 (UK): £4.40 (Eur/Sur)
Communications Receivers – the Vacuum Tube Era by Raymond S. Moore ..... £15.00 (UK): £15.85 (Eur/Sur)
The RACAL Handbook by Rinus Jansen ..... £13.00 (UK): £13.75 (Eur/Sur)
The Golden Age of Radio in the Home by John W. Stokes ..... £17.50 (UK): £18.00 (Eur/Sur)
More Golden Age of Radio by John W. Stokes ..... £25.00 (UK): £25.50 (Eur/Sur)
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Valve Amplifiers by Morgan Jones *(RB38)* ..... £26.50 (UK): £27.30 (Eur/Sur)
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Credit card orders welcome by phone or fax on 01202 658474

The Last Great Telegrapher

by Dr Gary Bold ZL1AN

KEN, ZL1BLK, LENT ME his copy of a recent book, *McElroy, World's Champion Radio Telegrapher*, by Tom French W1MQ. Old timers, and students of telegraph history will know the name McElroy well.

But if it means nothing to you, know that Ted McElroy won the last World Championship Code Tournament ever held, at Asheville, North Carolina, on 2 July 1939, taking down hard copy of newspaper text at an official speed of 75.2 wpm.

This record still stands. An astonishing feat! To see how astonishing, run the program FSEND I distribute with my Morse teaching software, and send a file at that speed. Could anybody really copy that?

Scepticism

So, 55 years later, there is often scepticism. Is the computer Morse we can send today REALLY like what Ted would have heard? How was his speed computed? (Several different standards were in use in those times.) And if he could, what was it about this remarkable man that enabled him to do this? Was he born gifted, or did he have some secret learning technique?

Tom's book answers those questions, and more. Ted McElroy was born in 1901, and grew up in a tough neighbourhood in Massachusetts. As soon as he was 15, he left school to become a Western Union messenger boy, delivering telegrams.

In those days, all such lads aspired to become telegraphists themselves. Ted wrote later 'Good Morse operators in the old days came into existence by the laws of economics. They simply HAD to be good at about 1 or 2 cents per message to make money, and good Morse operators were the elite of working people.'

American Morse

They DID make money – remarkable money for the times in which they lived. In those times, 'Morse' meant American Morse, the original dialect that was used exclusively in US landline telegraphy. Now almost extinct, it was supplanted everywhere else by 'Continental' (now 'International') Morse.

US telegraphers used it exclusively

until their last manual telegraphy line closed down. Unfortunately for us, Ted had no revolutionary code-learning method. He learnt, as thousands of others had done, only from obliging telegraphers giving him code practice during their breaks.

Later, he was quoted in Candler's advertisements as 'owing everything to this code learning method' but there is no evidence that he was ever a pupil of Candler. He apparently agreed to this in return for Candler's endorsement of his own products.

First Record

He effortlessly became a fast operator, learned Continental code too, and had a succession of telegraph and radio jobs using both. By the time he was 20, he was a VERY fast operator indeed.

Hearing there would be a code receiving contest at the Boston Radio Exposition on Saturday night, 6 May 1922, he talked his boss into giving him the night off, as it 'might be fun to enter'. At the time Ted was a landline telegraphist, working exclusively with American Morse, reading on a sounder. But this was a CONTINENTAL code contest, received on phones, sent as audio tones.

Ted said later he hadn't heard any Continental code for about a year. Nevertheless, after working all day, he set a new world record of 51.5 wpm (the previous record, 49.5 wpm, had been set by Jose Seron in New York, two months previously). Thus started a kaleidoscopic life of contests, (not all of which he won) exhibitions, and business exploits.

First Mac Key

In 1934 he started producing the 'Mac Key', a bug which, as he said later was 'Not as good as the genuine Vibroplex, but it did work, and it was within the Ham's price range'. Sales were, of course, helped by the fact that he advertised himself as the 'World's Fastest Radio Telegrapher', and stamped this on the bottom of his keys.

In 1925 he qualified as a Radio Amateur, holding the callsign W1JYN, but despite the fact that he was known and revered by thousands of US Hams from tournaments and exhibitions, there is no evidence that he ever operated on the air himself.

Throughout his life he awed and astounded all who watched him take down code. His ability to copy behind was extraordinary. He sometimes listened for 15 seconds at 'word per second' speeds before even starting to type!

Ultimate Achievement

A cunning competitor, on one occasion he distracted other contestants by drinking a glass of water in mid-test – giving the impression he had dropped out – only to start up again when their concentration lagged!

But it's for his ultimate achievement on that evening in Asheville, in 1939, that most remember him. The background and description of that last contest, recounted in detail by Tom French, is fascinating.

Good as Ted was, there were others – a very few – who were almost as good. And one, Levon MacDonald W8CW, stayed with him almost to the end. At the finish, the judges declared McElroy

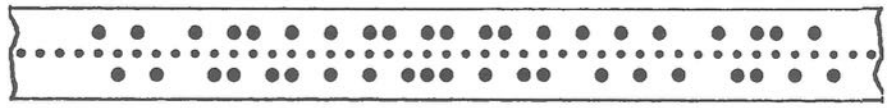


Fig. 1 - Wheatstone tape spelling out the word 'McElroy'

to be the winner at 75.2 wpm. And his record has never been broken.

Wheatstone Tape

The code came from a Wheatstone tape machine, and probably keyed a General Radio audio oscillator at a frequency of 1000Hz. Punched half-inch paper tape was pulled through the Wheatstone reading head by a motor-driven sprocket which engaged in a row of centre punched holes – one hole per dot-time.

A short section is shown in **Fig. 1**. Dots have two in-line holes, above and below the centre sprocket holes. For dashes, the lower hole is offset one sprocket hole to the right. One sprocket hole separates letters, and 3 holes separate words. The section shown spells 'McElroy'.

How was the speed computed? The number of sprocket holes passing through the machine in the test were counted, and divided by 24 to give the total word-count. This method, and the speed Ted attained, are confirmed by all contemporary accounts.

Copied Whole Words

He really did what they said he did. EXCEPT that – here's the interesting bit – dividing by 24 specifies the standard word PARIS followed by a 5-dot word-space, not the 7-dot space universally used now. Neville, ZL2AKV confirmed in the last column that a 5-dot word space was also used in New Zealand landline telegraphy.

To convert Ted's speed to the modern standard, a simple conversion is to multiply by 24/25, giving 72.2 wpm. This is still, of course, extraordinary.

But it might not be the whole story. There is no doubt in my mind that Ted, and those other strangely gifted men didn't copy letters, they copied WHOLE WORDS. They listened to individual staccato blasts (which is what Morse words sound like at those speeds) and put down what the word sounded like.

For example, on one occasion Ted typed 'inefficient' for ineffective and HE thought of that as one error. WE would think of it as 5 errors, with 5 characters wrong.

Could it be that if Ted's mind had had slightly longer to crystallise the words using the modern, longer, word-space, he might have copied just as fast, even though the words themselves would have been slightly faster?

Computer Keyboard Faster?

I ponder this because Bill Eitel, W6AY, founded the '5 Star Operator's Club' in the 1970s. To get in, you had to demonstrate ability to converse at 80 wpm, and there were many members. It is documented that an elite few could do 100 wpm.

Of course, this was 'head copy', which is easier than hard copy – but even so, they could do it. I personally

heard QSOs at 60–80 wpm in the USA in 1977, and talked to the operators involved (at more reasonable speeds).

Ted used a mechanical typewriter. Modern computer keyboards are much faster with their easier action and shorter key-throw. It is known that at those speeds, competitors DID experience mechanical typewriter limitations. What might Ted have achieved had he been whanging the text in with this magnificent PC keyboard I'm using, with word-wrap and auto-scroll? We will never know.

Compulsive Reading

Maybe, one day, the great speed-copying contests will come again, and new giants will rise to eclipse Ted's record. May I be there to see it!

If, like me, you have been intrigued by this extraordinary man, get this book. It's compulsive reading!

(Extracted and adapted for MM *from Gary Bold's 'The Morseman' column in* Break-in, *journal of NZART, June 1994.)*

Short Breaks

Dis-Encouragement

One of our members tells me that, at a local rally, a friend met a number of FISTS members who suggested that he join the CW brigade. He pointed out that his maximum speed was about 12 wpm but, instead of encouragement, he found himself subjected to some cruel and ill-considered jokes. No callsigns were offered but please, whoever it was, were you ever put through an ordeal like that yourselves?

We look to you to further the cause of CW, and you can hardly do this by extracting the water from those who have yet to take up the mode. Most of you are fortunate that Morse came easily, intuitively even, so spare a thought for those who do not find it so easy.

Few of us can say, hand-on-heart, that their licence came easily, and even fewer can say that they assimilated Morse with no pain. I count myself lucky that CW was swallowed without the need for the added sugar; perhaps a natural sense of rhythm or a musical inclination helped me, but whatever the case, I am grateful in the extreme for such good fortune and my only desire is to put back into the hobby a small part of that which I have gratefully taken.

Geo Longden G3ZQS in FISTS Newsletter, *September 1990*

Your Letters

Readers' letters on any Morse subject are always welcome, but may be edited when space is limited. When more than one subject is covered, letters may be divided into single subjects in order to bring comments on various matters together for easy reference

Slanted Keys

General reaction to the idea of angled keys ('A New Look at Morse Communication', by Hideo Arisaka, MM41, p.19) seems to be "It's true! How come we haven't seen this before?"

Playing about with the paddle, I notice that the necessary angle reverses when you change the position of the paddle on the desk from right to left – consequently changing the angle of the forearm relative to the front of the desk.

There is, therefore, a position somewhere in front of your body, with the forearm at about 45 degrees, where the optimum angle for the paddle is zero degrees (i.e., flat on the desk).

However, although this is true for a bug or for normal automatic keying, it is more difficult to send iambically in this position. The thumb works OK but the forefinger does not.

Bob Eldridge VE7BS
Pemberton BC, Canada

(Bob reviewed MM41, including Mr Arisaka's article, in his 'QUA' column in The Canadian Amateur, *November 1995. – Ed.)*

Why Not 'CH'?

It seems a pity that 'CH' (– – – –) is not widely used in English language contacts since, apart from English, it appears in many other languages as well.

On one occasion I heard it used by an operator called 'Sacha' from a country behind the former Iron Curtain. His Western counterpart couldn't understand the – – – –, and Sacha was at a loss as to how to respond to the several requests he received to 'pse rpt ur name?'

Monika Pouw-Arnold PA3FBF
Mijdrecht, The Netherlands

Early AP 7681 Key

I have acquired an AP 7681 key dated 1941. This means that the 7681 was made concurrently with the 691 and one did not replace the other. The base and knob of this 7681 is a brownish colour, like my 691, not black like the other ones.

Wyn Davies
Brymbo, Clwyd, Wales

(In MM40, p.41, Wyn described an Admiralty Pattern Key 691, dated 1942, and suggested this could be the key remembered by operators who used AP keys during WWII. This arose following a suggestion by Jim Lycett (inside front cover, MM32) that the AP 65485 was the key remembered, rather than the AP 7681. We now have notes of a 7681 dated 1941, a 691 made by Marconi dated 1942, and a 65485 made by AGI dated 1946. We know, from Jim's letter in MM21, p.40, that the 7681 was also made later, from 1952 to 1964, by Goodburn Engineering. We will welcome

further reports of AP keys from the WWII period. – Ed.)

Morse and the AP

I particularly liked the article 'Morse and the Associated Press' in MM43, p.26, because I was employed by that agency during the transition from Morse telegraphy to Teletypes (printers).

The AP had about 1500 telegraphers at the time I started with them in 1926. Within a few years, however, the operators were being replaced, state after state, with automatic printer systems.

I recall the time when 30 operators were let go in Texas, retaining only two who were required to learn how to maintain the printers. I was fortunate in being one of those retained. Some of the displaced operators were sceptical about the printers, saying 'Those things won't work; they'll have us back in a week.' Needless to say, that didn't happen. Sadly, progress won the battle.

Of the 1500 telegraphers serving when I started, there are now only four survivors. At 94 years of age I am the eldest of that small group, but they are not far behind. So you can see that a wonderful chapter in the history of AP telegraphy is about to be closed.

The 'inconvenience' of having a former telegrapher as the wire editor, mentioned in the article in MM43, came home to me. In my younger days I was sending an AP wire filed by an elderly gentleman across the desk with the nickname 'Cap'. After transmitting the story I started to chat with one of the distant operators.

After a couple of minutes I remarked (on the wire) "I guess I'd better start sending again before the editor wonders what's going on." Imagine my surprise and chagrin when a little later 'Cap' informed me he was a former telegrapher and knew what was going on. We had a laugh about it, but I didn't engage in any more side chats when he was within earshot.

Regarding the Phillips code, I have tried without success to find out if Phillips was ever used by the English and Continental telegraphers in press service. Of course, in any language other than English it might not work. With all its advantages, however, surely that code could have spread to England?

Aubrey Keel KB0ZE
Kansas City, Missouri, USA

(Does any reader know if press telegraphers in the UK or Europe ever used the Phillips code or some other specialised code for their work? Aubrey Keel's interesting career with the Associated Press was described in MM32, p.6. – Ed.)

New Exclamation Mark?

I like the − − · · · − − · · · − − exclamation mark suggested by AGCW-DL (MM41, p.41). It has impressive rhythm and length, and both features would focus one's attention to the signal, even if listening in only by accident.

Monika Pouw-Arnold PA3FBF
Mijdrecht, The Netherlands

There has been recent discussion about a suitable Morse symbol for the exclamation mark. May I suggest · · · · (II unbarred). I'm new to Morse, and maybe this symbol is already in use for some

thing else, but if it's available I feel it would be just right.

It is sufficiently close to, yet rhythmically distinct from, HI to indicate some emotional feeling, and has that peremptory note that an exclamation mark should have. What do others think?

Keith Stammers G0SXG
Appleton, Oxfordshire

(Some old-timers use II instead of the eight-dot erase signal. Others use it as a 'pause' signal while they are deciding what to send next. This last usage more or less agrees with the 1937 Stationery Office Signal Card, *B.R.232, and* The Morse Code – Learning and Practice *by R.G. Shackel (1942) where II is identified as the procedure signal for a Short Break or Separative Sign. Does anyone know if this signal has any 'official' current meaning? – Ed.)*

British, not German!

The Lorenz style key with a British Army reference No. (ZA 54574), described and photographed by Jim Lycett on page 44 of MM23, is in fact a British key.

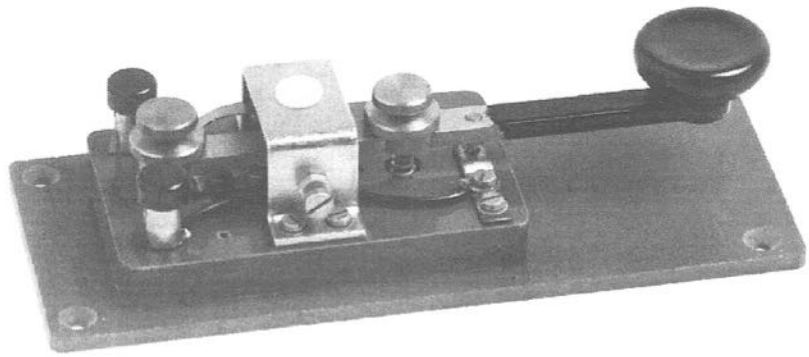
It was used with the post-war (1960s) agents'/special forces portable station Mk.128. The transmitter was crystal controlled with an output of 1 watt RF, CW only, covering 2–8MHz. The set was housed in a wooden case, carried in a canvas pack, and powered by dry batteries.

The Mk.128A and Mk.128B were other versions, having a different case, and a different key was used with the Mk.128B. Both keys are depicted on page 8 of the Antique Wireless Association's Review, Volume 8, 1993, in an excellent article 'Unusual Military Morse Keys' by Louis Meulstee PA0PCR.

While the style of ZA 54574 is typically German, I am told that the screw threads are BSF (British Standard Fine). Some of the Mk.128B keys were on sale at the Leicester and Three Counties Rallies in 1995.

Wyn Davies
Brymbo, Clwyd, Wales

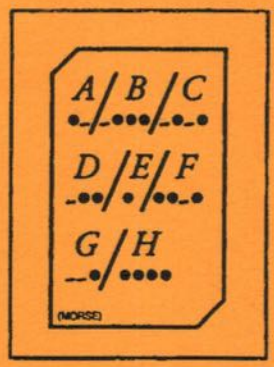
I purchased one of the Mk.128B keys (pictured below) at the Leicester show. I was intrigued by how 'cheap and nasty' it looked, with its Paxolin base and a thin vacuum-formed black plastic cover, secured by a single self-tapping screw into a plastic bush, but yet how sweetly it handled. – Ed.

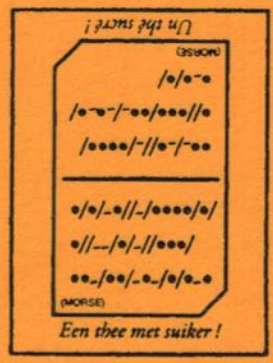


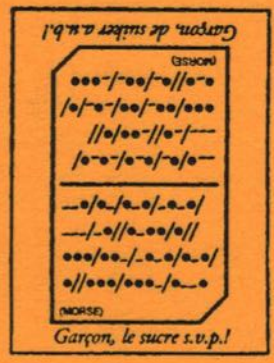
Morse Ephemera

A complete collection of six individual portion sugar packets from Belgium. Sent by Guido Roels, ON6RL, who asked the sugar company if there was any special reason why they used Morse code on the packets. 'No', they said, it was just for fun, to entertain the customers while they drank their coffee.
The text (in Flemish and in French) on the two messages translates as 'Tea with sugar' and 'Waiter, the sugar please.'

MM will welcome other examples of Morse ephemera – anything intended for a non-Morse purpose, but which has some form of Morse illustration on it.







John Davies G4ETQ received this certificate from Scheveningen Radio/PCH for working their 90th Anniversary stations on CW on 18 October 1994