Number 69 – May/June 2000

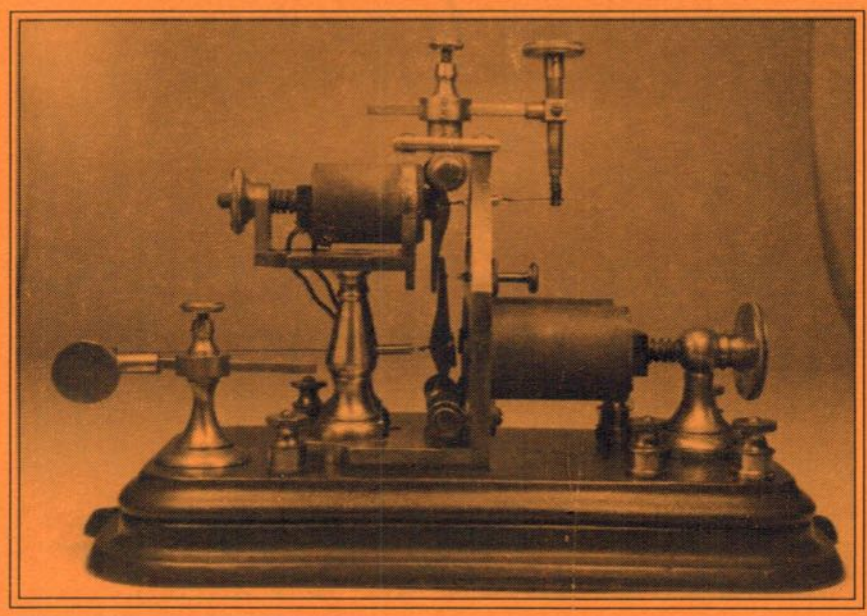
Flying the flag for Morse

Morsum Magnificat

ISSN 0953-6426

£2.50

The Morse Magazine



Milliken-Hicks Repeater

The International Journal of Morse Telegraphy

Flying the flag for Morse

Morsum Magnificat

EDITORIAL AND SUBSCRIPTION OFFICES:
Morsum Magnificat,The Poplars,
Wistanswick, Market Drayton,
Shropshire TF9 2BA, England.
Phone: +44 (0) 1630 638306
FAX: +44 (0) 1630 638051

MORSUM MAGNIFICAT was first published as a quarterly magazine in Holland, in 1983, by the late Rinus Hellemons PA0BFN. It has been produced four, then six times a year in Britain since 1986, and up to January 1999 was published and edited by Tony Smith, G4FAI and Geoff Arnold, G3GSR. 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.

EDITOR Zyg Nilski G3OKD

e-mail: MorsumMagnific@Morsemag.com MM home page – www.MorseMag.com

Printed by Hertfordshire Display plc, Ware, Herts

ANNUAL SUBSCRIPTIONS (six issues):

UK £13.00 *Europe* £14.00 *Rest of the World* £17.00 (US $30 approx)

All overseas copies are despatched by Airmail

* Prices in US dollars may vary slightly withcurrency exchange rates and commission charges

MasterCard VISA

Make all cheques payable to 'Morsum Magnificat'

"When does my subscription expire ...?"

This is printed on the top line of the address label.
Also, we shall jog your memory with a renewal reminder included with that final issue.

MM Back Issues

Issues Nos. **34,35** and **38–68** available from the Editorial offices (see top of page). Price including postage £2.50 each to UK; £2.70 to Europe; £2.85 (US $5) Rest of the World by airmail. Deduct 20% if ordering 3 or more.

FRONT COVER

A Milliken-Hicks Repeater, circa 1870

Photo/Collection: Dave Pennes

Comment

The news pages of this issue contain more announcements of new radio amateur licence structures which put a lower emphasis to Morse skills. It seems the world has pretty well made up its mind. Interesting though, in the USA a petition has been filed to retain 20 wpm for the Extra Class licence.

Sadly, but not unexpected the final closure of Portishead Radio for maritime MF/HF/VHF services on 30th April. Special arrangements were made for special farewell event when radio amateurs could work cross-band to GKB. Portishead Radio will be remembered as one of the great maritime stations of the world.

Many thanks to all readers who informed us of the delivery date of MM68. They were all given to the Royal Mail on 6th March. UK copies are mailed 2nd class and the rest are mailed air mail/ priority. Based on the 73 replies the delivery service for MM is satisfactory. Copies arrived on the doormats of the UK and Europe in 2-3 days and the East coast of mainland America (North and South) in 3-4 days. Deliveries to the mountain zone and West coast of the N. America took 8-10 days (except Washington State - 3days). Delivery to all other places was 8 - 10 days.

The index of all MMs, produced in English since 1986 through to issue 64 (July 1999) is now available on the Morsum Magnificat web pages at http://www.MorseMag.com.

Please note that BOTH our old and new internet addresses will continue for the foreseeable future.

The annual index is published in the September issue and will also be incorporated in the consolidated version.

Zyg Nilski G3OKD

Contents

Adverts

OK1CZ

On page 24 of MM68 Petr Doudêra, President of the OK-QRP CLUB, was referred to as "she". My apologies for this error - Ed.

News

Portishead Radio Final Farewell with Maritime/Amateur Radio Cross-band Event

At the time of preparing this news item the following message was being transmitted by Portishead Radio GKB:

CQ DE GKB = BT REGRETS TO ANNOUNCE THE CLOSURE OF GKB AND ALL UK VHF SERVICESAT 1200Z SUNDAY 30 APRIL 2000. MF STATIONS WILL CLOSE AT 1200Z ON FRIDAY 30 JUNE 2000. WE SEND OUR THANKS AND BEST WISHES TO THE MARITIME COMMUNITY, WHICH WE HAVE SERVED FOR OVER 90 YEARS = BT MARITIME RADIO SERVICES, LONDON, 30 MARCH 2000 +

By the time you read this, it will be all over. Portishead Radio and all British Telecom (BT) VHF coast stations closed at 1200 UTC Sunday 30 April 2000. MF stations Stonehaven GND, Humber GKZ, Wick GKR, Portpatrick GPK and Land'sEnd GLD will close at 1200 UTC on Friday 30 June 2000.

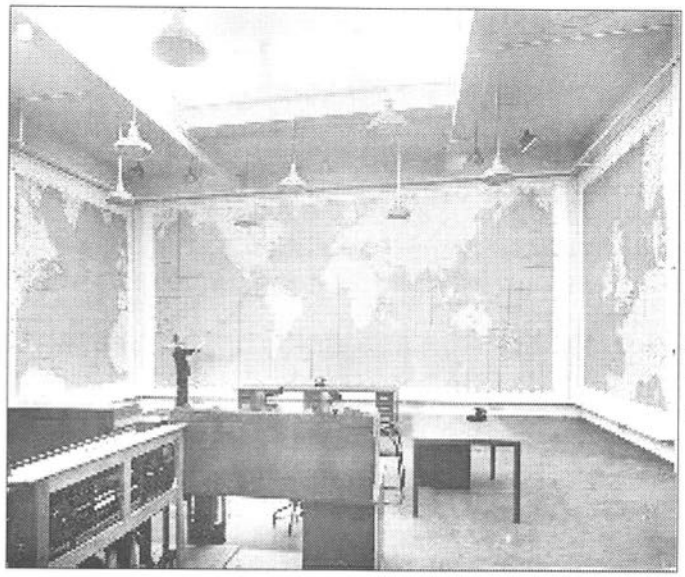
Portishead Radio the United Kingdom's long range maritime radio station and one of the world's most famous names in maritime communications used its transmitters at Rugby and its remote receiving array at Somerton as part of the final farewells, working cross-band to the amateur bands on Saturday 29th April 2000. The CW-only event operated from 0700z to 1900z as follows

Callsign	Frequency	Amateur Frequency
GKB2	4274	3525
GKB4	8559.5	7025
GKB5	12835.4	14050
GKB6	17113	18075
GKB7	22448.7	21050

Three stations were operating at any one time - subject to the commercial requirements of the station. Special efforts were made to beam towards Commonwealth countries at appropriate times. Additionally Portishead sent farewell broadcasts at the closure time of 1200 UTC on 30 April 2000.

BT appointed the Radio Officer's Association to handle the amateur side of this operation and the liaison officer was David Barlow, G3PLE. Amateurs are asked to note that, following closure,

there will be no surplus equipment for sale. Any other enquiries from radio amateurs should be routed through: David Barlow, G3PLE PO Box 50, Helston, TR12 7YQ.e-mail (for this event): dbarlow@u.genie.co.uk Event Website: http://you.genie.co.uk/dbarlow



Reproduced by kind permission of British Telecommunications plc

The old control at Portishead Radio in the days of the Area Scheme

David Barlow said, "We are very grateful to BT Maritime Radio Services for allowing this unique opportunity to make contact with Portishead Radio - in its time the largest radio station in the world."

BT Maritime Radio Services allowed this day as a celebration of 100 years of maritime radio and to mark the end of the terrestrial service. For historic as well as commercial reasons it will be CW only."

A special QSL card will be available to all amateurs and SWL's. Send a report to: GKB, PO Box 50, Helston, TR12 7YQ.

Cards will be sent via the RSGB bureau unless an s.a.e. is enclosed. Please note cards will not be printed until numbers are known. Please do not send QSL cards.

(Information: Bruce Morris, David Barlow, Tom St John-Coleman)

Proposed New Amateur Licensing in New Zealand

Radio Spectrum Management Agency of the Ministry of Economic Development in New Zealand has informed NZART that it will be some time before new Radio Regulations are in place to make possible any changes to the regulatory provisions for amateur radio in New Zealand.

The Ministry has given consideration to new Amateur qualifications and licensing provisions, having regard to NZART proposals, changes overseas and to current trends. The Ministry sees a number of changes as desirable to promote and to encourage the further development of Amateur

Radio in New Zealand as follows:

1. Three levels of amateur radio operator qualification and radio licence to be retained, with Novice and Limited grades renamed Entry and Technician to better reflect their purpose. Callsigns to no longer be grouped to indicate licence grade or need to be changed with change of grade.

2. A pass at the present Novice level in the new combined Regulations and Theory Examination to give immediate access to the present Novice band above 30 MHz (i.e. 144 to 148 MHz) at existing power levels. Access to be extended to all the current Novice bands below 30 MHz when credited with a Morse test pass at 5 words-per-minute.

3. As at present, a pass at the present Limited/General level in the new combined Regulations and Theory Examination to give immediate access to all the amateur bands above 30 MHz with full amateur radio privileges. Access to be extended to all the current amateur bands below 30 MHz with full privileges when credited with a Morse test pass at 5 words-per-minute. A Morse test pass obtained at Novice level to be a credit.

4. The present 12 words-per-minute Morse test to be retained meantime and to be voluntary for reciprocal licensing purposes if required.

No change is proposed to the power limits for radio amateurs. These are to remain as at present for the three grades of licence.

These proposals are not firm and may of course change as a result of public consultation.
(Information: Fred Johnson, ZL2AMJ, NZART)

Petition Filed To Reduce US Code Allocation

On March 9th Dennis Kippa, KW5G of Hawkins, Texas and David J. Hill, W5XK of Mount Pleasant, Texas filed a *Petition for Rulemaking* with the FCC. They request that the amount of Amateur high frequency spectrum reserved for CW operation only - be reduced by about 50 percent. They state:

"Whereas the Amateur Radio bands have historically had large portions of the radio spectrum reserved for and devoted to the CW mode of communications and whereas this mode of communication is archaic and abandoned by all Federal Agencies except Amateur Service the Commission can no longer justify the broad reservations of the radio spectrum for CWonly."

They say, "A study of the following chart shows the CW reservation is totally unjustified and that the phone bands are proportionally disadvantaged."

Band	CW band	Percent
10 Meters	300 kHz	17.7%
12 Meters	40 KHz	40%
15 Meters	200 KHz	44%
20 Meters	150 KHz	42.8%
30 Meters	50 KHz	100%
40 Meters	250 KHz	50%
75/80 M.	250 KHz	50%
160 Meters	200 KHz	100%

The petitioners believe that "...due to advances in radio communications and license upgrades phone band crowding cannot be justified any longer. A more realistic approach would be:"

Band	CW Spectrum	
10 Meters	28.000 - 28.100	6%
12 Meters	24.890 - 24.910	20%
15 Meters	21.000 - 21.100	22%
17 Meters	18.068 - 18.088	34%
20 Meters	14.000 - 14.100	28%
30 Meters	10.100 - 10.120	40%
40 Meters	7.000 - 7.100	33%
80 Meters	3.500 - 3.600	20%
160 Meters	1.800 - 1.820	10%

"This change of the CW only bandwidth will help to alleviate the chaotic overcrowding on the voice portions of the amateur bands. This is especially true of the 80, 40 and 20-meter bands."

"It is expected that a large portion of Amateur Radio operators will will be or are upgrading to higher-class licenses and to more phone privileges. A large phone spectrum is needed to accommodate the expected increase in activity."

(Information from W5YI Report)

Petition to Retain 20 wpm for US Extra Class Licence

Alan Wormser, N5LF, Frederick Adsit, NY2V and Michael Dinelli, N9BOR have filed a very professionally completed Revised Petition for Partial Consideration of the Report & Order (R&O) that restructured, the Amateur Radio Service in the USA. They say their goal is "To ensure that the Amateur Radio Service remains a fundamentally technical service in the 21st century as it has remained throughout the 20th century."

The petition includes an address to retain the 20 wpm telegraphy test for the Amateur Extra Class, and not allow code waivers;

"The petitioners are all active, licensed amateurs who serve their communities through the Amateur Radio Service," the document reads. A common thread is that they are all members of FISTS, a large organization of CW enthusiasts.

The petitioners take issue with the R&O which states that telegraphy is a hindrance to those that might enter the Amateur Service or attempt to upgrade skills. "...the Amateur Extra Class, with the 20 wpm telegraphy exam, remains the fastest growing class of license after the Technician." Telegraphy skill "...is only a barrier to unmotivated individuals. As the ARRL Handbook states, 'learning Morse code is as easy as learning about 40 words in a foreign language.'"

"Almost all HF emergency communications in amateur radio ... use SSB voice supplemented by telegraphy. Reduction of telegraphy skills will severely hamper the ability of the Amateur Radio Service to respond to regional and national emergencies."

"The R&O states that the across-the-board 5 wpm speed was chosen, in part to avoid the need for a code waiver. ...We believe that the 5

wpm General Class is reasonable accommodation ... to give disabled persons the opportunity to fulfil the basis and purpose of the Amateur Radio Service."
The petitioners recommend that"... the Amateur Extra Class telegraphy examination be maintained at 20 wpm [and] eliminate the waiver."
(From W5YI Report)

Fullerphone Mk IV Manual on the Web

In June 1999 Lyn Burlingame, N7CFO, publisher of the N7CFO Keyletter, took a trip down the Oregon coast and found an Operator's manual for the Mark IV Fullerphone in a small bookstore in Nehalem, Oregon. This was an interesting find because there are many Fullerphones still around, but this was the first manual that has turned up. It is a 4 3/8" X 7 1/8" (11 cm x 18 cm) paperbound manual of about 40 pages.

Lyn used to sell copies of this manual at cost, but recently was able to scan it into Adobe Portable Document Format (PDF), so anyone who would like a copy, can download it from his web pages at:
http://www.qsl.net/n7cfo/fuller/fuller.htm

These are high resolution scans so the files are very large. They are broken down into more manageable sections, but they still take a long time to download - please be patient. Please note that pages 17 through 24 are all blank. These are the "Notes" pages for the use of the operator. The last page is an amendment that was loose in the manual.

The files are Pages 1 - 5, Pages 6 - 10, Pages 11 - 16, Pages 25 - 30, Pages 31 - 34 Pages 35, 36 and amendment.

If you do not have the Adobe Acrobat® Reader, you can download it free of charge at the Adobe Website at http://www.adobe.com

Lyn would appreciate a quick e-mail with your comments on the download process. If you are not satisfied with the PDF copy, drop him a note and he will provide cost and address information for a photocopy.
(Information N7CFO web pages)

New Version of Morse Tutor Announced

Black Cat Systems (http://www.blackcatsystems.com) announces that Morse Mania version 1.7.0 has been released and is now available.
Morse Mania is a Morse code tutor for the Macintosh. The software package helps you learn Morse code at speeds ranging from 5 to 30 words per minute. Morse Mania is ideal for amateur radio operators who desire to learn or improve their Morse code proficiency, especially in order to upgrade their license class.

In addition to drills to help learn the various characters, Morse Mania also allows complete text files to be sent, so that "real life" messages can be used for practice.

It also supports the Farnsworth mode, which increases the speed of the dots and dashes, and lengthens the pause

between letters sent, allowing the student to learn Morse code at higher speeds more easily.

This version adds the ability to send the commonly used abbreviations AR, AS, BT, SK, and ERROR.

Morse Mania is shareware. A fully functional copy of Morse Mania may be downloaded from the Morse Mania web site. The URL is http://www.blackcatsystems.com/software/morsemania.html

Black Cat Systems creates and distributes Macintosh software, with a specific emphasis on programs for the scientific, amateur radio, and health markets.

Information about Black Cat Systems entire line of products can be found at:
http://www.blackcatsystems.com
(Chris Smolinski, N3JLY, Black Cat Systems)

Australian Vote for 5 wpm

By a unanimous vote of all states and territories, the Wireless Institute of Australia - the world's oldest radio society formed in 1910 - is on record as officially favouring the reduction of the Morse test requirement from 10 wpm to 5 wpm.

A letter of notification was sent to ACA, the Australian Communications Authority, by WIA.

In its reply the Australian Communications Authority (ACA) has agreed in principle to implement changes to Australia's Amateur licensing arrangements regarding the Morse code requirement. At present, Australia has two telegraphy examination speeds, 5 words-per-minute for the Intermediate license and 10 wpm for the unrestricted (full privilege) license.

The reply includes the following statement, "Given the overseas trends in relation to this matter, the ACA agrees in principle to implement changes to Australia's amateur licensing arrangements in relation to the requirements for Morse code."

An ACA press release on the matter is posted to the VK4 website at <http://www.wia.org.au/vk4>.
(From W5YI Reports)

American Morse Alive and Well

The Morse Telegraph Club Inc., which includes many retired railroad and Western Union telegraphers, but also members who are ham radio operators, demonstrates American Morse on sounders at various events around the USA and Canada.

There are chapters in many cities in the United States and Canada. On May 28, the Lone Star Chapter will have a table at a train show in Fort Worth, Texas and will demonstrate Morse code sending and receiving.

The Spokane Chapter of the Morse Telegraph Club has put up their own website. They have a great recording of American Morse as sent on a telegraph

sounder. It can be heard at:
http://members.aol.com/sktelegr/WELCOME.WAV

New members, world-wide are always welcome. Members receive Dots & Dashes, a quarterly newspaper full of fascinating articles and reminiscences of the days of the American telegraph. Contact: Steve M. Fried, Grand Secretary-Treasurer, 409 Savoy Ct., Schaumburg,Illinois, IL 60193, USA. Tel: 847-985-5766
e-mail: K2PTS@home.com
The MTC web site is at:
http://members.tripod.com/morse_telegraph_club

CD of Coast Station Farewells

Sylvester Föcking, DH4PB has produced a double CD of coast station farewells. The price is DM 15,- including post & packaging within Germany of which DM 7,- is contributed to the Seefunker-community who try to keep old things like CW alive! The Seefunker web site is at www.Seefunker.de

For more information e-mail: foecking@main-rheiner.de
or write: Sylvester Föcking, Wormser Str. 16, 55276 Oppenheim, Germany.
(Information: Monika Arnold, PA3FBF)

Israel New Licence Class

The Israeli Ministry of Communications has introduced a new licence class that gives all HF band access for those who pass a 6 wpm Morse code test - but it does not include HF phone privileges.

The new licence is called the "D Plus". It is an enhancement option for holders of the existing "D code free" licence grade. These licensees on passing a 6 wpm test will now get full HF band privileges to operate on CW, as well as their existing all-mode privileges above 50 MHz.

Existing tests of 16 wpm for the "A grade" licence, 12 wpm for the "B grade" licence, and 6 wpm for the "C grade" licence remain unchanged at this time.
(Information from W5YI Report)

Art & Skill of Radio-Telegraphy Third Edition

An excellent translation of the book "The Art and Skill of Radio-Telegraphy" by William Pierpont, NØHFF, is now available in French. It was done by Maurice Golombani-Gailleur F6IIE. It is in downloadable format at his WEB site at: http://f6iie.free.fr

There are several Web sites which have the new third edition in English including:
Jim Farrior W5FOK This is part of his excellent Code learning and speed building program "The MILL" at Web Site:
http://www.net-magic.net/users/w4fok/
Dr. Jon Oates at:
http://www.joates.demon.co.uk/megs/
Dave Clarke at :
http://www.raes.ab.ca/book/index.html

This edition has additional material to make it more attractive to young people.

The CW Centre

UK Price List

R A Kent Keys and accessories

· Hand key, kit	£43.50
· Hand key, assembled	56.50
· KTI Professional key	65.50
· Twin paddle, kit	56.50
· Twin paddle, assembled	69.50
· Single paddle, kit	48.50
· Single paddle, assembled	59.50
· The Dual Key	99.90
· Morse trainer	44.95
· Practice oscillator	18.50
· Practice oscillator kit	7.50
· EK4 keyer	47.50
· EK4/ M memory keyer	73.50
· EK4 memory upgrade kit	29.50
· Touch twin keyer kit	27.90
· Electronic keyer kit	15.00

Bencher keys and paddles

· BY1 Twin, black base	£79.95
· BY2 Twin, chrome base	89.95
· ST1 Single, black base	79.95
· ST2 Single, chrome base	94.95
· RJ I Pump, black base	69.95
· RJ2 Pump, chrome base	74.95

Swedish Pump Key

· Pedersen DK1000	£89.95

Logikey keyers

· Logikey K3 keyer	£129.95
· Superkeyer 3, kit	59.95

Samson keyers

· ETM9C X3, with paddles	£139.95
· ETM9COG X3, no paddles	109.95
· ETM SQ Twin paddles	39.95

Schurr keys and paddles

· "Profi" twin paddle	£129.95
· "Portable" twin paddle	119.95
· Twin mechanism, no base	74.95
· ditto for ETM keyers	79.95
· Hand key, mahogany base	139.95

DK1WE

· "Minky" miniature pump	£74.95
· "'Twinky" miniature twin	85.95

MFJ

· MFJ418 Morse trainer	£58.95
· Soft case for 418	8.50

Spares stocked, **Repairs** undertaken.
Please 'phone for details

Postage & Packing extra. Payment welcome in cash, cheque (UK £), Visa or Mastercard

G3TUX

The QRP Component Company

PO Box 88 Haslemere GU27 2RF, England

Tel: +44 (0)1428 661501 Fax: +44 (0)1428 661794

e-mail: g3tux@aol.com

Maritime Memories

by Albert Spaans

SOMETIMES WHEN READING *MM* I tend to get depressed. That is when it is rubbed in that I know just only one kind of Morse: the Morse I was taught at the Radio-Holland school in Rotterdam. That is when I realize that I have never set a world speed Morse record, that I have never owned - or even used - a bug. That is when I realize that I have never managed to take the Tokyo synoptic weather with my left hand, quietly tapping out a stack of cables with my right, and in the meantime preparing and lighting up my pipe or having a witty chat with the Old Man. When, come to think of it, I have never even smoked! And I never wound my own transformers, nor did I build miniature transmitters in matchboxes or excel at other similar technical achievements.

But then, when I think how dull and almost useless my days at sea must have been, the sun usually breaks through. Dull life? What about having done my job as a R/O on 20 vessels (and one oilrig), under 7 different flags. And did not old Captain Scriven on my first non-Dutch flag vessel introduce me to a new Master with the words, "and this here's your Sparks, and a damned good one", then turned away, leaving me speechless. I knew I did my job well, but such praise coming from his lips...

Speed record? My forte was quality, not quantity. Did not I once send a long, an endlessly long, cable through Portishead Radio ordering a complete inventory of British Admiralty (B.A.) charts, and did not my colleague ashore break in when I wanted to confirm all those figures, telling me, "well done om, vri well done, QSL nr ..". How proud I was of those few words!

OK, I was never quite ambidextrous. But on some vessels I was the only one who could draw a proper weather chart. (I found one day that some Mates from, let's say, a Mediterranean country had never even seen one being made on board...). A rather handy thing, though, especially during the typhoon season in the South China Sea. And after crossing the Pacific, approaching the Japanese coast with the Decca radar on the blink, I was the one to climb the radar-mast, take out the blasted transmitter unit from the blasted scanner unit, when the blasted disc, together with its whole collection of carbon-brushes was soaking wet again. (A particularly challenging job in the dark, or when raining or windy, or a combination of those). When luck was on my side the electrician would lend me

a hand, otherwise an A.B. (able-bodied seaman) would have to help me, heaving the transmitter unit up to the scanner platform, trying to keep it from slamming into the ladder and keeping a piece of tarpaulin around us, in an attempt to keep the rain out whilst putting the TX back in). But I always managed, and I felt quite pleased when the Old Man would look at the radar-screen, smile with relief and say "Yofi Sparks, thank you". (Yofi = hebrew, meaning good, nice).

Speaking about water in the radar transmitter: On one specific vessel I used to have a problem that really puzzled me. Sometimes, when the radar had not been used for some days, when switched on it would work flawlessly. And then, suddenly, even in bright beautiful weather, when switched on it performed very poorly. Everything worked, but there was no picture, or it was very weak. When all other possibilities had been eliminated I came to the bottom of the checklist, "water in the waveguide".

Indeed, so it was and having dried it out, checked whatever I could check, no clear cause was discovered. Some weeks later the same fault arose and the same remedy resolved it. Checked again all flanges, scanner foundation at the crosstrees - nothing! I asked the Bosun to rig up a bosun's chair to check the waveguide all the way along the foremast, up to the point where it disappeared into a junction-box at the fo'cs'le deck, together with a whole bunch of cables, neatly sealed with a layer of concrete - no sign of any mechanical damage, whatsoever.

Then I found out, by tasting, that the water was salty, and so condensation was eliminated. I took a deckhose, turned on the water and washed down the wageguide, checking the transmitter unit in the fo'c'sle for signs of a leak - Nothing! I gave up, asked for shore assistance in the next port, but the result was the same. The technicians could not find anything either. Drying out the waveguide became quite a routine job for me, but it was not a situation I could live with so, in Durban I asked again for shore service.

After explaining the whole story, the two technicians and I went through all the possibilities but they were as baffled as I was. Then, one of the two gentlemen slipped on the wet deck and, as he fell, grabbed the waveguide which, by the shock of his weight, tore free from the concrete bed in which it had been corroding away for some years....This put an end to months of frustration. ***MM***

Mysterious Morse - and More

by Dr Gary Bold ZL1AN

WITH 10 SPARE MINUTES this morning before leaving for the Halls of Learning, I fired up the rig for a fast DX QSO on 20 metres before the D region rose with the sun. Far away in Europe, a lone CW station called CQ with impeccable, 25 wpm Morse on an otherwise empty band. I replied. When he came back to me, everything had changed.

Now his callsign was a single, spaceless dit/dah string. So was the report, but there's plenty of redundant information in 3 numbers, and I decoded it as 579. Things got worse. The name came across as "Alf97am" which I subsequently decided was probably "Alfonzio". With creative listening I think I followed about 10% of what came next. Making appropriate fervent wishes to CUAGN, we parted after a short QSO.

Driving to work, three things bothered me. Firstly, I felt a hypocrite. I did not actually want to see this joker again, since I could not understand him. Yet I had not told him that his Morse was unreadable. Should I have done this? Would he have been offended? Would he have thanked me and gone off to a Morse clinic for remedial sending practice?

Secondly, I felt inferior. Am I the only person who cannot read this operator? Is senility overcoming me faster than I thought? Or does everybody else do what I did when faced with such inscrutability - terminate the contact politely and sign off?

Thirdly, I felt baffled. How could this operator, after sending an impeccably spaced CQ, suddenly start producing such mysterious rubbish? Had I worked a Jekyl and Hyde personality? Did Dr Jekyl send the impeccable CQs to entrap the unwary, then subside, overpowered by Mr Hyde's sinister, humiliating gibberish?

This is probably what had happened: The CQ came from a memory keyer, but the subsequent Morse came from the operator's fingers - I quite often operate that way myself. Maybe the operator's sending had slowly deteriorated over the years without him noticing it, and without anybody having the heart to tell him. I put this down to the universal, inherent good nature and kindness of CW operators all over the world.

We very rarely tell anybody that their Morse is bad. Should we be more honest? What do you think?

Morse Typewriters.

In one of my "Morseman" columns in 'Break-In', I mentioned that Charles Yetman had patented a mechanical "Morse typewriter", the forerunner of Morse keyboards, in 1902. I said that this was used in a few telegraph offices but rapidly became extinct.

Bob, VK6BE, made this comment: "The Morse typewriter mentioned by Gary was used in Australia for many years on the Flying Doctor network before the advent of two-way speech operation.

"The outback radios were built by Traeger, himself a VK5 amateur, and were pedal-powered. Signals were sent from them in Morse code using this Morse typewriter, while the base station replied by voice.

"Thus, the outback keyboard users (pastoralists and their wives and children) only needed to be able to type. They didn't need to be able to read Morse, nor to send it on a conventional key. Only the trained base station operators needed these skills.

"I guess the main advantage of this setup was the simplicity of the radio gear needed for sending Morse.

"Incidentally, I saw one of these Morse keyboards demonstrated by the late Wally Coxon, VK6AG, for many years the radio engineer for the Flying Doctor Network in Western Australia. He brought one to a WIA meeting somewhere around 1957 or 1958. He was still building the transmitters for the WA RFDS network at that time but the keyboards had gone out of use by then."

QRM in the USA

Because we ZLs are so few, and so far away from high Ham-population areas, most of us assume that everyone in the rest of the world respects band-plans the way we do. In particular, it's believed that the increasing numbers of SSB and digital ops respect, and will continue to respect the "CW only" allocations.

It wasn't until I operated in the USA myself recently that I found how untrue this has become. I've just queried my mate Jess, W8MCP, about the current situation. This is what he emailed back:
"Hi Gary:
"I can tell you that there is an increasing amount of data and single sideband on the CW portion of the 40 meter band here and it is mainly coming from SA. I was on 7030 last Saturday night in QSO with a friend of mine in Las Vegas and we had to move three times to run from the SSB in the CW portion! They were strong and right on QRG so that even the 250 Hz filter could not reduce their effect. We finally managed to get on a QRG that didn't get jammed. It is getting bad here with both digital and SSB in the CW band. There is also a lot of RTTY from SA there too.

"As you may know, Canada has allowed SSB in our CW band for a long time but they usually stay above 7050. I am not sure what their legal band limits are for SSB but I have heard them in the CW portion many times. The SA stations are really bad though. They seem to be everywhere and no one asks if the QRG is QRL. You can forget that."

Most US CW ops can relate similar stories. I can see how some of this arises. The CW bands may seem to be full of empty spaces, because many CW ops use low power and wire antennas - this is why

they're often fanatical filter-freaks. Non-CW people may not even hear them, and it's temping to drop into what seems to be a hole for an almost certainly unpunishable, but illegal, QSO. The SSB allocations are becoming so jammed up in the Northern hemisphere that this is increasingly common.
(Unfortunately, since this was written, my dear friend Jess has become a silent key. A great loss to the Morse fraternity)

Forked Lightning with the Trident

I spent a couple of days at Easter staying in a family holiday cottage above Lake Tarawera. I'd packed (naturally) the Trident mobile whip, a recently acquired Kenwood TS50S, the K8+ keyer, the MFJ-945D transmatch, and a couple of 12 volt gel-cells. The TS50S has the optional CW filter fitted, and I looked forward to some night-time paddle-work.

Woe. Everything had grown since I was last there, and there was no way I could mount the whip on the wagon roof without fouling the trees. However, there was a clear area in front of the cottage, and a serviceable, 4 pronged garden fork amongst the tools.

Mid-afternoon, I drove the garden fork right into the ground. I clamped the mounting plate I use for the whip on top of the fork's foot-rest with a g-cramp, and screwed in the whip. That mounted the whip with its base only about 10 cm above the ground. A very odd place for a mobile whip.

Rain came down. I connected the coax, retired into the cottage with the electronics, and fired up. The transmatch easily loaded on 40 metres, and I immediately broke into an SSB QSO between Charles, ZL2HS, and Boyd, ZL2AE, who reported my signal as 5 and 5.

The sun went down, and I found that the whip also loaded easily on 20 metres. Relaxing in an armchair that night, I worked all over Europe and the USA on CW. Nobody gave me less than 559! Roy, W7VR, was intrigued to hear of my antenna arrangement. "Don't move the fork!" he said.

Moral: You don't have to mount a mobile whip on a vehicle. In a pinch, it will probably work quite nicely mounted on all sorts of things.

A Chat with Tom

The HF bands are coming back, but 20 metres is not getting down into my valley too well yet, so I've mainly been working DX on 40. Last night I was delighted to hear Tom, W4BQF, calling CQ, and I grabbed him. We've chatted extensively by email, but had never worked each other on CW before.

I printed email exchanges between me and Tom dealing with high-speed CW in my October 1997 column. Tom can read "conversational" Morse in his head at 122 wpm, and "enough to answer questions" at 140 wpm.

Tom's comments about this created a lot of interest, so I print them again: "Many years ago I had a speed wall. As much as I wanted to copy high speed CW, I could not get over the 40-45 wpm barrier. My wife bought me a code reader which I used for about two years. When you first start using one, you rely on it completely, but as you continue using it, you suddenly realize that you're

over that 'hump' and don't need the code reader any more.

"When you are trying to copy higher speeds, if your mind loses the 'flow' of the CW, it panics, and you lose concentration.. and it's darned hard to catch up again.. With a code reader, you can glance up at the screen, see the word you missed, and your mind continues the even flow of copying. I went from 45 wpm to 60 wpm, without actually realizing it. For those 'nay-sayers' who will comment on code readers, I can tell you that when you hear hams having a QSO at 70 wpm or better, they are NOT using code readers, principally because code readers are not worth a hoot above about 65 wpm and they can not copy CW in the presence of QRN. I can copy in excess of 100 wpm, of plain English, normal conversation, in my head; it's just the same thing as speaking in another language."

Last night, we stayed at a modest 30 wpm because I was getting SSB QRM from the Asian gentlemen who infest the bottom end of 40 now, and Tom had QRN and QSB. Also, I can't read anywhere near that fast.

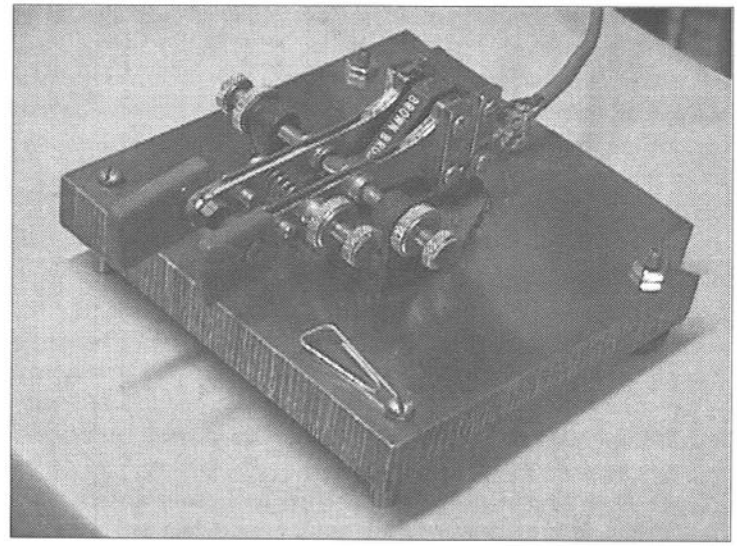
Tom was using a Ten-Tec OMNI VI+ rig, but he told me that its QSK becomes unreliable about 60 wpm. For operating above that speed he uses a YAESU FT1000MP.

But Tom calls CQ on 40 metres at about 20 wpm, and as a gentlemanly operator, if you come back at some other speed, he'll adjust to that. And of course he sends with a keyboard, so his Morse is perfect. If you hear him, give him a call.

The Brown Brothers Paddle

I've often mentioned this paddle, which I've had and loved since 1977. At that time, they were considered the Rolls-Royce of paddles by the US CW ops I talked to. They're rare now, and I've often been asked what one looks like. There's mine in the photo.

I know of no other paddle constructed like this. There are no bearings. The two shafts are attached to



Gary Bold's Brown Brothers Paddle

the insulated back-post by thin springy metal shims which flex as the shafts move. You may be able to see the four screws holding the shims just in front of the cable at the back. The two gold-tipped screws with locknuts at the shaft centres adjust the gaps. These both make contact with the same grounded cylindrical post between them. The front screw and locknut adjust the tension of the single spring (I have never found this to be a disadvantage, and it's simple) which rests on an insulated plate at one end for electrical isolation between the shafts.

You may also see that the base is canted upwards slightly towards the front, with front legs that are longer than the back legs. This is to raise the finger pads to the height at which my finger and thumb rest naturally on the table, Most keyers place these too low. Ted McElroy, the last great "World Champion Telegrapher" was very definite about this. He believed that anything that forced the hand, arm, or body into a slightly unnatural position affected your sending and caused fatigue faster.

One thing I didn't like were the finger pads the paddle came with, which flexed too much for my taste. I replaced them with thicker and smaller perspex ones. I experimented a lot to find the shapes that suited me best, and you can see that they are different. The left (dit) paddle projects 6 mm further than the right, since the thumb naturally rests further back from the mechanism than the forefinger. This reflects the pad geometry that Horace Martin considered "right" in the first of his legendary Vibroplex bugs, and which has been copied ever since. But I know of no keyer paddle that has been produced commercially like this. I wonder why?

This paddle is very solid and very simple. When the Brown Brothers died, production stopped. Recently, I heard a rumour that somebody had obtained the dies and was going to produce them again, but nobody can definitely confirm this. A pity, because many paddle-lovers would like one. I know that a used unit changed hands recently at a US Hamfest for $500 (US).

(Extracted and adapted for MM by Tony Smith from various issues of Gary Bold's 'The Morseman' column in 'Break-In', journal of NZART, 1998/1999.) ***MM***

Job Opportunity

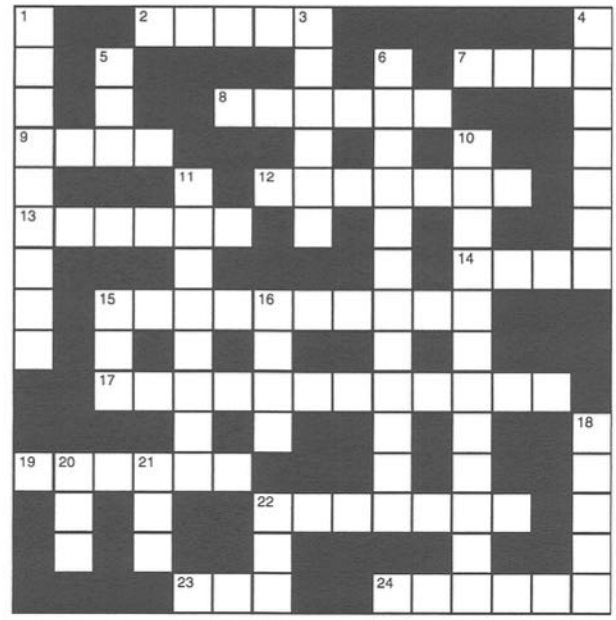
Job opportunity owing to the depression in the shipping industry, more than 2,000 competent marine wireless operators are unemployed. On the other hand, there appears to be a shortage of operators in the Royal Air Force. In the latter service all wireless operators will be given the rank of Leading Aircraftsman or Aircraftsman (First Class) as soon as the attestation test has been passed, according to the skill shown. This carries with it pay at the rate of 5s.2d or 4s.6d a day. All operators are fed and clothed. By attaining the rank of first-class sergeant-major it is possible to obtain pay at the rate of 15s. a day.

(From the Experimental Wireless magazine, March, 1924. Contributed by Ted Jones.)

MM68 Searchword

by Tony Smith

(Find the answers to this puzzle in MM68. Solution p.48)



Across

2 Spanish language Morse learning program (5)
7 One destination of "via Indo" telegrams (4)
8 She wrote "The Story of the Key" (6)
9 Argentine Morse club (4)
12 Author of a history of the GPO Mk1, 2, & 3 keys (7)
13 Much info on codes, from Q to Myer, from this chap (6)
14 Australian telegraph pioneer (4)
15 French club has protested to it about SSB intruders(10)
17 Town named after wife of 14 (12)
19 Employer of the first woman telegrapher (6)
22 State at war with France, 1870 (7)
23 Protestor in 15 across (3)
24 One maker of AP16001 signalling torch(6)

Down

1 Miss Bagley had a "fair knowledge" of this subject (9)
3 Awarded an RSGB special certificate of appreciation (6)
4 WU and Postal Telegraph had workable wires from here in 1906 earthquake (7)
5 American regulatory body (3)
6 Messages from the giant Cunarders (12)
10 They issued a wide variety of frank stamps for many years (12)
11 1940 author of book on the Associated Press (8)
15 J.H. Bunnell quick adjustment relay (3)
16 Light colour of base of new dual key (4)
18 Another destination of "via Indo" telegrams (5)
20 Telegram that sparked a war (3)
21 Their Board of Directors unanimously favour a 5 wpm code test (3)
22 Government controlled telegraph and other communications services (3)

"Off Again, On Again, Gone Again - Finnegan"

by James Burt

PINE ISLAND TODAY is a bedroom community for nearby Rochester, Minnesota. Other than the Douglas Trail, the blacktopped bicycle trail terminating at the south end of town, there is scant evidence that the CGW (Chicago Great Western) and C&NW (Chicago and North Western) ran through Pine Island. And even less evidence of telegrapher James Finnegan, who as the sender of "Off Again, On Again, Gone Again - Finnegan," brought fame to his village in the 1890s.

For 140 years, Pine Island has been a small farm town in the rolling hills of southern Goodhue county. Situated where the middle and south forks of the Zumbro River join, a forested island in the stream gave its name to Pine Island. From its earliest days it was the market town for nearby Swiss, Irish, and Norwegian settlements.

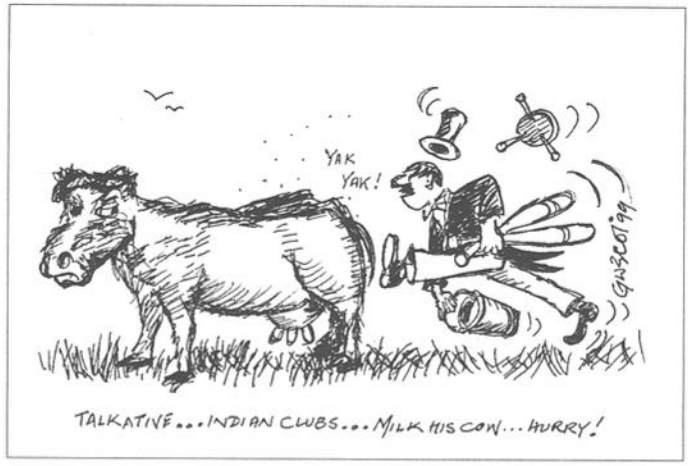
Pine Island's fortunes brightened in 1878 once the R&NM (Rochester & Northern Minnesota) pushed 23 miles of track north from Rochester Junction through Douglas, Pine Island, and New Jerusalem to Zumbrota. At Pine Island the R&NM built a station and a freight house. The C&NW assumed the road immediately after the track's completion.

Jim Finnegan

The R&NM also built a small station at Douglas, halfway between Pine Island and Rochester, to which the Finnegan family moved from Chatfield, Minnesota, in 1883. Jim, one of six sons and daughters of John and Margaret Finnegan, was born in Chatfield in 1865. Jim hired on the North Western (Chicago and North Western) in some capacity at age 18 and in a few years became its agent. By 1893 he ran the agency at Pine Island. His spinster sister Anna became the CGW agent at Douglas once that road built through Zumbrota to Rochester in 1902.

A glimpse of his character and behavior can be had from local items in the newspaper and old acquaintances. He juggled Indian clubs. He was a careful dresser, congenial, talkative, and always in a hurry. One Pine Islander remembered him scurrying each morning to the barn near the depot to milk his cow, sometimes riding his bicycle. He had brief, early aspirations as a writer, but his penmanship was so deficient that he signed railroad checks by typewriter. A wheelman in the 1890s, he energetically cycled on his

days off with his current fiancee of choice to visit the family at Douglas. Once safetly married to Myra Bolles in 1896, Jim placed an ad in the newspaper offering one bicycle in exchange for a good team.



Jim and Myra had no children. Even so, Jim was tolerant of boys hanging about the depot in summertime looking for excitement. He offered to teach telegraphy to any kid so interested.

Telegram Inspired Poem

The exact circumstances prompting the telegram are not known. But Pine Island tradition maintains that the Dispatcher had mildly reprimanded James Finnegan for being too wordy and tying up the wire in reporting the derailment of a work train. Taking the criticism to heart, Jim pondered his misdeed and crafted his telegram for the next derailment.

The new telegram sent, telegraphic news services picked it up to spread it far and wide as a novelty item. That's how it came to the attention of Strickland Gillilan, a cub reporter at the New Richmond, Indiana, Palladium.

Gillilan was an Ohio farm boy, born in 1869 and a recent graduate of Ohio University at Athens.

It was a dull spring day for news in New Richmond when Gillilan wrote his poem to relieve the tedium. He published it in the Palladium, then revised it a few months later for submission to Life, a humor magazine which published it in 1897. His poem was extremely popular, an instant hit. It made Gillilan's career as a writer, humorist, and lecturer. He died in 1954 having recited it from stage thousands of times.

Uneventful Life

Fame passed by James Finnegan. He never profited from his telegram and seldom mentioned it in later years. But his two sisters, Anna and Olive, fiercely and proudly defended his authorship.

Jim's life remained uneventful until C&NW embargoed the Rochester-Zumbrota line in 1933. He then worked out of Rochester and a few other stations on the mainline until he reached retirement age at 70, with 52 service years. With the railroad gone, C&NW sold the station to the Gospel Tabernacle Church which moved it to South Main Street. It's still there, hidden deep inside the present day Assembly of God Church.

After retirement, Jim and Myra stayed in their house at 300 N. Main until his death in 1943. Myra died 12 years later. Both are buried in the Pine Island Cemetery across County Highway 11 from the Douglas Trail.

(The author thanks Cheryl Finnegan and Rachel Morris for their help with this article.)

(Our thanks to Ralph Reinhold, AF4EZ, for drawing our attention to this article, which originally appeared in North Western Lines, journal of the Chicago & North Western Historical Society).

FINNIGIN TO FLANNIGAN

Superintindint wus Flannigan;
Boss av the siction wuz Finningin;
Whiniver the kyars got offen the thrack
An' muddled up things t' th' divil an' back
Finnigin writ it to Flannigan,
Afther the wrick wuz all on again;
That is, this Finnigin
Repoorted to Flannigan.

Whin Finnigin furst writ to Flannigan,
He writed tin pages—did Finnigin.
An' he tould jist how the smash occurred;
Full minny a tajus, blunderin' wurrd
Did Finnigin write to Flannigan
Afther the cars had gone on agin.
That wus how Finnigin
Repoorted to Flannigan.

Now Flannigan knowed more than Finnigin—
He-d more idjucation—had Flannigan;
An' it wore'm clane an' complately out
To tell what Finnigin writ about
In his writin' to Muster Flannigan.
So he writed back to Finnigin:
"Don't do sich a sin again'
Make 'em brief, Finnigin!"

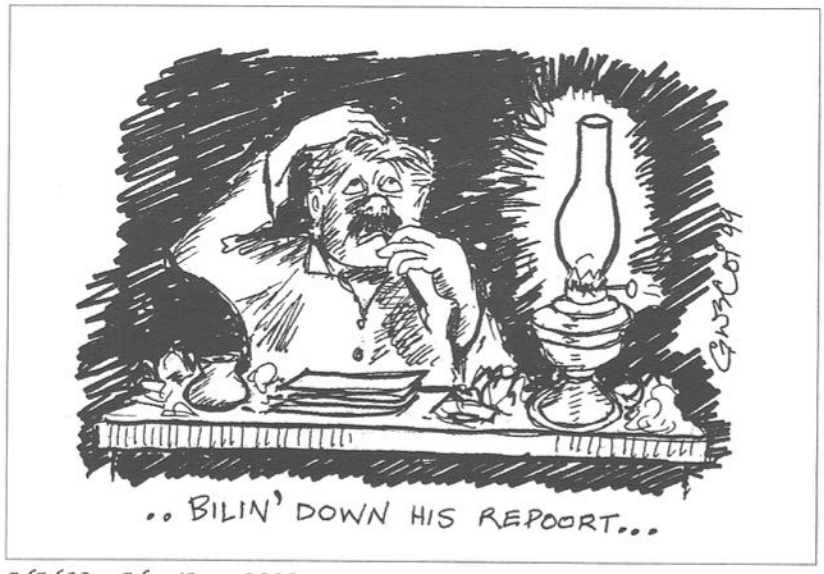
Whin Finnigin got this from Flannigan,
He blushed rosy rid—did Finnigin;
An' he said: "I'll gamble a whole month's pa-ay
That it will be minny and' minny a da-ay
Befoore Sup'rintindint, that's Flannigan,

Gits a whak at this very same sin agin.
From Finnigin to Flannigan
Repoorts won't be long again."

Wan da-day on the siction av Finnigin,
On the road suprintinded by Flannigan,
A rail give way on a bit av a curve
An' some kyars went off as they made the swerve.
"There's nobody hurted," sez Finnigin,
"But reports must be made to Flannigan,"
An' he winked at McGorrigan,
As married a Finnigin.

He wuz shantyin' thin, wuz Finnigin,
As minny a railroader's been agin,
An' the shmoky ol' lamp wuz burnin' bright
In Finnigin's shanty all that night—
Bilin' down his repoort, was Finnigin!
An' he writed this here: "Muster Flannigan:
Off agin, on agin,
Gone agin,—Finnigin"

S.W. Gillilan



Learning Morse in the US Navy

by Hans Brakob, KØHB

(Ex - Master Chief Radioman, US Navy)

I LEARNED MORSE BY MYSELF as a kid, trying to decipher all that "secret" stuff between the Short Wave broadcast stations on the farm radio and didn't get a ham license till years later.

When I joined the Navy in the late 50's, already knowing Morse, I was automatically plugged into the Radioman rate and sent to radio school. In that era the Navy had three radio "A" schools, at Bainbridge, San Diego, and Orlando. All were run the same, and each graduated about 50 new radiomen every 2 weeks.

The course was nominally 12 weeks long, and you needed 22 wpm to graduate. Four hours of each day were spent on Morse training, (three hours receiving, and one hour on a "net" so you also practiced your sending) the rest on procedures, equipment tuning and operation, voice procedures, teletype, security stuff, etc.

Morse training started out with learning the alphabet and numerals, which were introduced to you in related groups, like EISH5, AUV4, NDB6, TMO0, etc. This was a rate of 4 wpm, and took you about a week or two usually. Training code was sent by paper-tape machines, similar to a Boehme keyer, and speed was increased (or decreased) by changing the capstan pulley on the machine, in two-WPM increments.

Military communications only used two punctuation marks at the time — the slant sign and the hyphen — so we were not taught periods, commas, or question marks. In fact, in military comms., there was a prosign "IMI", which meant "repeat". Sounds just like a "?" on the air, but was used completely differently. For example, if I were sending a really oddball word like "XYGGISTROM" I would make sure you copied it correctly by sending "XYGGISTROM IMI XYGGISTROM". The prosign for a question was "INT" - for example if I wanted to ask my signal strength I would send "INT QSA" rather than "QSA?".

But I digress! Back to how we were taught Morse - The students sat at a desk with a communications typewriter ("mill"), a key, and a jackbox with several jacks for headphones. In another room were several tape machines, each running at a different speed, and connected to the jackboxes at the students desks. The students would plug into whatever speed they were pursuing at the time, and it was all "straight speed", not Farnsworth.

All copying was on a mill, not by pencil. For the first 10 weeks, all copying was 5-character coded groups, not plain text. This made it impossible to "think" about what you were hearing, and trying to anticipate the next character. After a

while you got in a "zone" and the code went directly from your eardrums to the keyboard as a completely automatic subconscious response, without any action by your conscious brain. Very few students got stuck at any "plateau" like you hear hams talk about, and when it did happen it was almost always at 18 wpm.

While it was some advantage to already know the code, coming into the school, it was really kind of difficult to re-learn to copy on the mill, as opposed to "head copying" and just jotting down pencil notes as I had as a ham. Many experienced hams simply couldn't make that transition, as military operating was not "conversational" like ham radio, and the copying techniques were so completely different.

At the end of 4 weeks came the first speed test. At that point you had learned the characters and had been practice copying for quite awhile. The first test at 4 weeks was 6 wpm. Then every week you were expected to be at least 2WPM better. Copying tests were 10 minutes in duration, and you were allowed 2 errors for a passing grade. Sending tests were 5 minutes in duration, and you were allowed no uncorrected errors (you could make an error, but had to catch it yourself, and go back and correct it using proper procedures). If you failed a given speed you were dropped back one week in training to the class behind you. If you failed two weeks in a row, you were washed out and sent to the fleet, probably to become a deck hand, although a lot of guys who dropped out of radio school found their way up to the Signal gang using flashing light and yardarm flashers at about 10 wpm.

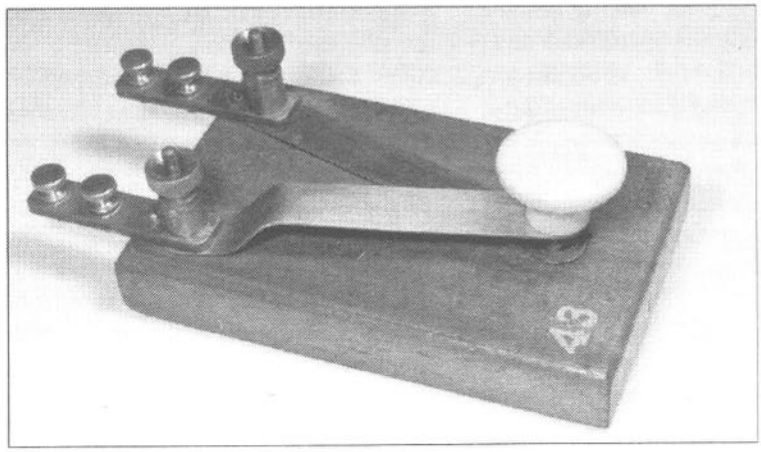
You could "test out" at any higher speed, up to the final 22 wpm requirement, but still stayed in school to learn the other things. Students who completed their 22 wpm early got extra study time for other subjects during code-practice hours, or acted as "junior instructors" to help out the staff.

When you got into the fleet your first duties were probably copying the "fox" broadcast. This was a real confidence builder, because it normally only ran at about 16 or 18 WPM, so was really easy to handle, and perfect machine code. You sat an eight hour shift, just typing 5-letter coded groups, and really got into a "zone".

The tales you hear about copying 20-30 seconds behind, drinking a cup of coffee, and carrying on a conversation all at the same time are absolutely true. Then just when you were getting cocky about your skills and felt like a "real" radioman, they stuck you on the ship-to-shore circuit to send outgoing traffic but that can be the subject of another tale! ***MM***

Showcase

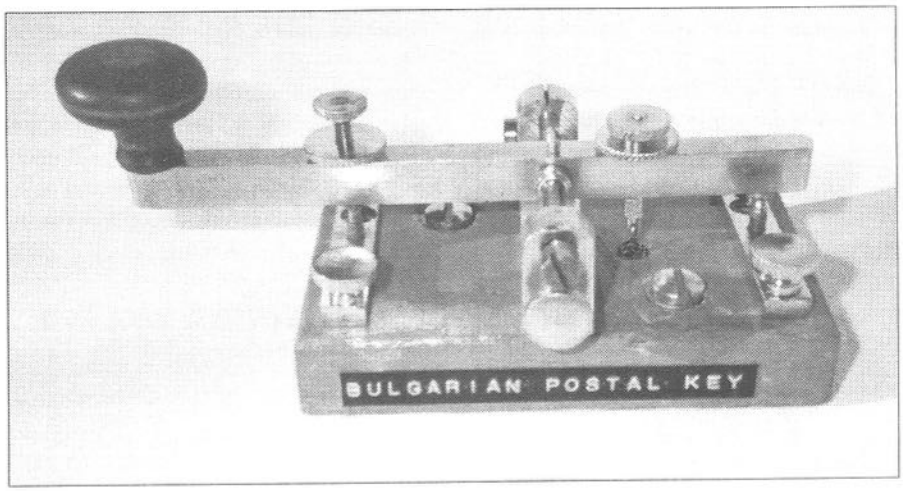
Readers are invited to contribute any additional informationand stories, no matter how minor, to the Editor, Morsum Magnificat. There have been thousands of designs of keys & telegraphy instuments. Information will be lost unless it is compiled in one place and shared with other readers.



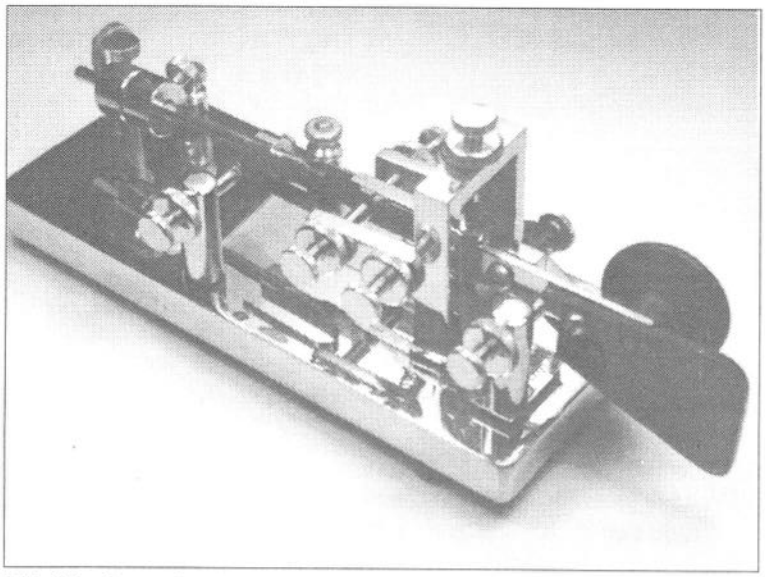
Photo/Collection: Robert W. Betts, N1KPR

Strap key marked "Queen & Co. Makers, Phila." and "USMA" (US Military Academy) removed from service at West Point, NY. The meaning of #43 is not known.

Photo/Collection: Wyn Davies



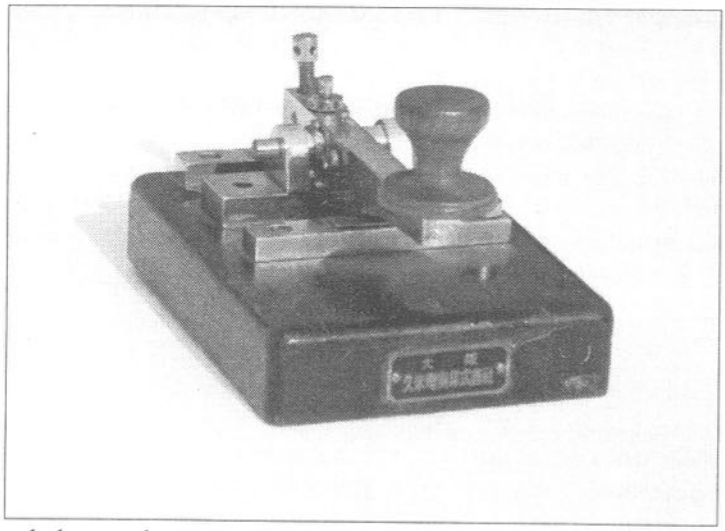
Bulgarian Postal Key



Photo/Collection: Dave Pennes

This little chrome bug is a Les Logan 'amateur' model, the economy line made by the company in the 1930's and 1940's. Much more scarce than the Les Logan 'professional' (Speed-X) line, the amateur bugs were lower quality and cheaply put together. The chrome is usually pitted and bubbly because the cast iron bases were not copper plated under the chrome. This one is unusually well preserved. Les Logan amateur line bugs were sold by mail order retailers such as Sears Roebuck and others. There was never any ID on the bugs. The paddles were a characteristic 'drooping' shape.

Photo/Collection: Wyn Davies



Key Manufactured by the Kume Electronic Corporation, Osaka, Japan

Testing on Open Wire Telegraph lines

by L.E. "Ed" Trump AL7N

It will not be long before there is no-one left who has had experience of testing open wire landline circuits. The author did this work for a number of years and was always fascinated by it. If you ever wondered what a "Wirechief" did, here's the answer.

SINCE THE RANKS OF THE Open Wire Testboardmen are thinning, and Open Wire Telegraph lines are almost non-existent today, it may be of interest to describe some of the testing techniques employed by those who did such work.

Western Union, the railroads, AT&T and other companies had extensive open wire plants spanning the U.S. up until the 1960's. Technological advances largely supplanted the open wire lines and overcame their vulnerability to disaster.

Interesting Job

The old-time Testboardman or Wirechief had an interesting job, especially when the weather was less than ideal and rain, sleet, snow and ice wreaked havoc on the lines. Then, too, Lightning often walked about, seeking arbitrary paths to Mother Earth, and what better place to go than a nice fat telegraph wire strung high on wet poles. "Atmospheric" electricity was something to be reckoned with indeed, and it caused many a Wirechief to tear at his hair.

When the weather was fine over his district, the Wirechief usually did routine tests once a day which were intended to determine the basic "health" of the wires traversing his territory. Routine measurements at one end of the line, with a distant office assisting, were conducted to measure the leakage to ground or "insulation resistance" of each wire, continuity of same, and the working current in the circuit assigned to the wire if any.

These measurements were usually recorded at intervals perhaps daily, or weekly or even monthly depending on the particular Company's policy. These records were kept for reference, and could be referred to as a "standard" or benchmark when things went wrong.

VMA Primary Test Instrument

This testing was service-interrupting, so it was normally done during the "low usage" part of the day when the wire was idle. If this was not possible, service would be maintained by "patching" the circuit carried by a given wire off to a known good spare wire while the testing was done.

The primary testing instrument on a typical telegraph switchboard was

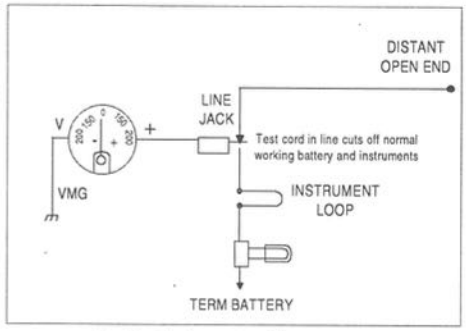
the Volt-Millameter (VMA). The Switchboard Volt-Millameter was a special "zero center" Galvanometer (microammeter) that was calibrated to 200 units each side of center. A special set of shunt resistances, along with a jack and plug arrangement allowed the meter to be quickly set up as either a voltmeter or a milliammeter, with a full scale reading of 200 volts, or 200 milliamperes either side of center, as desired.

When set up as a voltmeter, special testing potentials up to plus 200 volts, minus 200 volts, or ground, could be connected to one side of the meter, with the other side of the meter connected to a test cord with a plug to fit the line jacks on the board.

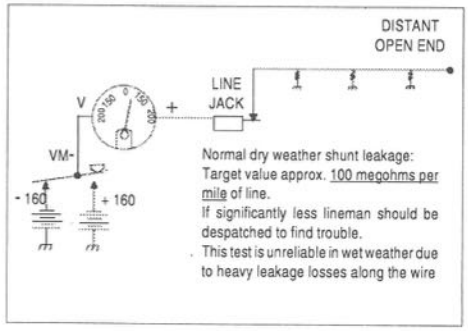
A strap key was also provided that could reverse the testing battery potenial applied to the meter. When set up as a milliammeter both sides of the meter were connected to the test cord. Current value in milliamperes and direction could then be easily observed by plugging the test cord into a series jack in the switchboard jack circuit of any given wire.

Insulation Resistance Tests

Insulation resistance tests were carried out with the distant end of the wire under test known to be open at a given location. The switchboard meter was set up as a voltmeter, and connected to the wire under test at the line jack in such a manner as to open off the normally assigned office equipment and working battery. First ground, then both potentials of the testing battery were applied in turn and the meter readings observed. On a clear wire, on a dry day, with no crosses or grounds, and testing battery applied through the meter, the voltmeter reading would settle to a steady value of only a few volts, indicating a high value of insulation resistance.



Test for foreign potential, crosses etc.



Basic Insulation Test

Leakage Resistance

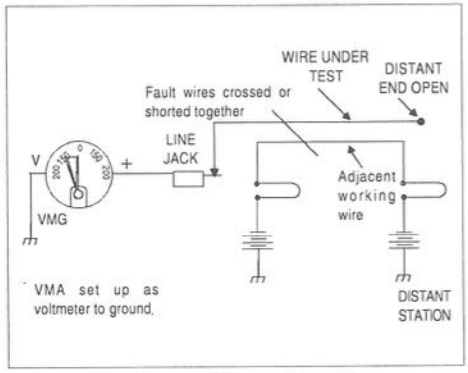
The voltmeter reading was recorded, and the value was used to calculate the leakage resistance of that section of line, using Ohm's Law. The relationship of testing battery voltage and voltmeter resistance, both known values, aided in this calculation.

Normally a leakage resistance of 100 megohms per mile of line was the

target value. In practice, once this calculation was completed, and the value recorded, it was not often repeated unless major changes to the wire occurred, such as changes in length, or repair of major damage, or something of that nature that would materially change the characteristics of the wire.

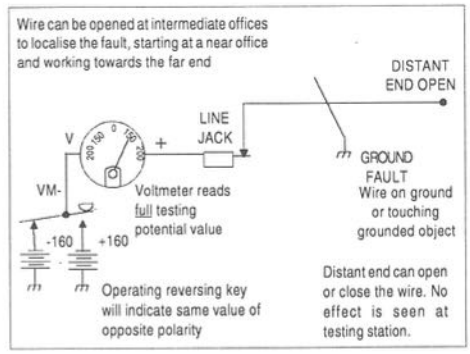
Grounded Wires

If the wire was "crossed" with an adjacent wire, or grounded, the meter reading would indicate a higher value than normal, reverse polarity, or possibly would fluctuate in unison with the working of the other wire. The meter was observed while each of the other wires on the line was opened in turn until the "cross" was determined.



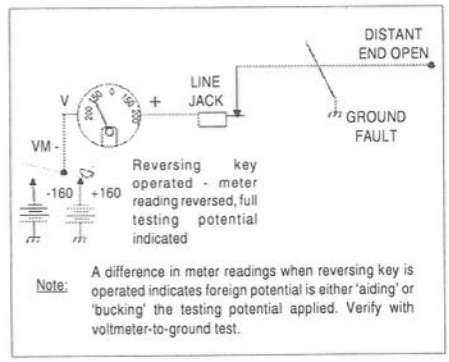
Cross with a working wire

In the case of a grounded wire, intermediate offices would be contacted to open the wire under test until the trouble was localized between two offices. This was also done to determine the location of a cross. Once a ground or a cross was so localized, a lineman was dispatched to investigate and clear the trouble.



Test for grounded wire "A"

Similar tests would be repeated while the lineman was in the area of the trouble, if necessary, to assist him in locating the trouble. A competent Wirechief familiar with his district and working with a good lineman could usually pin the problem down to within a span or two fairly quickly.

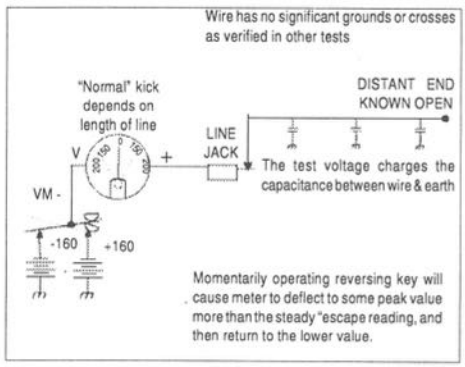


Test for grounded wire "B"

Static Kick Test

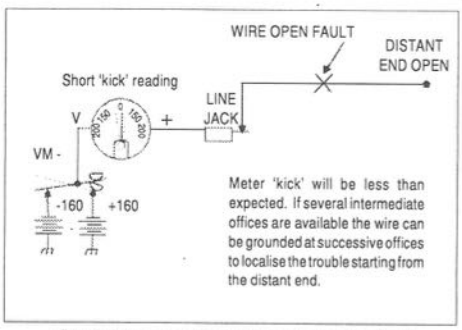
One other test performed with the wire open at the distant end was the "static kick test". The testing battery applied to the voltmeter was reversed with the strap key, and the action of the

meter needle observed. On a clear wire, open at a distant point, the meter indication would swing to a value of several tens of volts, and settle back down to its normal reading.



"Dry Day" Static Kick Test for dry weather only

The peak value of this "kick" (due to the capacitance of the wire to earth), was noted and recorded. With the wire open at a known location, this meter reading was a coarse indication of the length of the wire. In the case of a wire being open at some intermediate point, the kick would be of less value, and so a rough estimate of how far out a wire was open could be obtained.



Static Kick Test to locate open wire fault

For example, a wire known to be good, and open at the distant end gives a kick of 60 volts, and a similar wire adjacent to it, also known to be open at the distant end, but suspected of being open at some nearer point, gives a kick of only 30 volts. It is a fair assumption that the location of the open is about half way between the testing office and the far end. This would give the Wirechief a place to start the lineman out, at least.

One last test of the wire would be to have the distant office ground it, and verify that the voltmeter (with testing battery connected to it) indicated full testing battery potential. This indicated that the wire was at least continuous to the distant office.

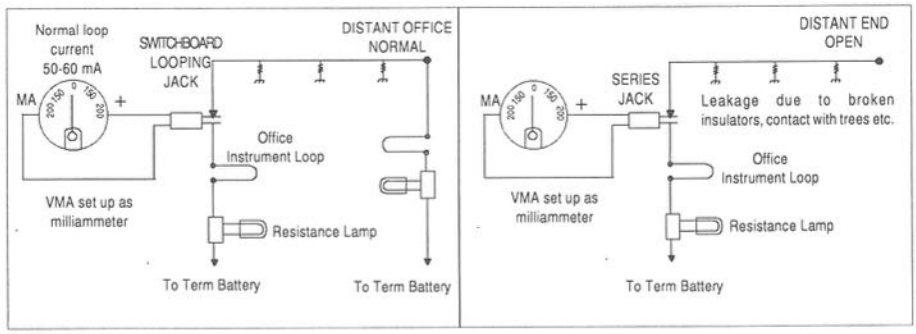
High Resistance Joint

Once the voltmeter testing was completed, the switchboard meter was set up as a milliammeter, and plugged into the wire with normal working battery applied.

This gave a current indication of roughly half the normal working value to the distant ground, and anything significantly less than this could indicate a possible high resistance joint or splice somewhere in the wire. The distant office was then requested to "put it regular" or take off his ground and the normal working current measured. With this being satisfactory, the wire was returned to service.

Magnet Gap Adjustment Necessary

In practice, on complaint of trouble on a wire, the switchboard VMA would be plugged in and cursory checks of current/voltage from each end etc, would



Working Margin Test - idle current with distant office normal minus leaking current with distant office end open

be quickly done and then more thorough tests would be performed as the troubleshooting effort went forward, depending on what was found in the process.

During periods of wet weather, the insulation resistance of any wire decreased owing to imperfect insulation. The various leakage paths to ground along the line were accentuated by the moisture, and voltmeter tests as described above would be virtually useless because the increased leakage would cause a full scale meter deflection.

Most wires would still be capable of working in this situation, but the amount of current change in the various instruments along the line would be less than that on a dry day. This would result in the operators along the line having to readjust their relay or sounder magnets away from the armatures so as to compensate for it.

The leakage to ground of the working current tended to hold the relay armatures up, unless the magnets were backed away, allowing signals to be read. This is why most Morse relays and Mainline sounders have a quickly and easily variable magnetic gap adjustment.

Now a Lost Skill

This "working margin" on wet wires could not be detected with the VMA used as a voltmeter, but could be determined by setting it up as a milliammeter and having the distant office open the wire under test.

The VMA was then plugged into the circuit with regular working battery applied. The resulting current measurement represented the leakage to ground and the difference between this value and that obtained with the wire closed up would be the available current to work the instruments.

Given the vulnerability of any open wire pole line to troubles caused by broken wires, insulators, crossarms, poles, and the likelihood of the wires on it coming in contact with foreign voltages, grounded surfaces, lightning, etc. you can see that the old-time Wirechiefs had a challenging job. There was a never-ending variety of things that could and did go wrong. Wirechiefing is a skill that has followed the Landline Morse Telegraph operator into history. ***MM***

American Morse Code vs. Continental

by Don deNeuf WA1SPM (SK)

AMERICAN MORSE was always confined to the US, Canada and Mexico* because the spaced-dot letters and the long L were not suitable for submarine cable operation and the early needle type instruments in Europe. The Continental Code was adopted at the first International Telegraph Conference in Berlin in 1851.

Efforts were made at the turn of the century to induce American Code operators to adopt the renamed International (ie, Continental) Code but they steadfastly refused to do so. However, in the early days of wireless, American Code operators aboard ships were forced to learn Continental in order to communicate with European shore stations and other foreign ships.

With equally skilled operators, the use of American Morse will provide somewhat faster transmission of information than will Continental (International) Code. The late Dr. Ivan S. Coggeshall KA1AVG made an exhaustive study of this subject in comparing two speed contests - one champion using American and the other Continental - both using as a text the 'Command of Gideon'.

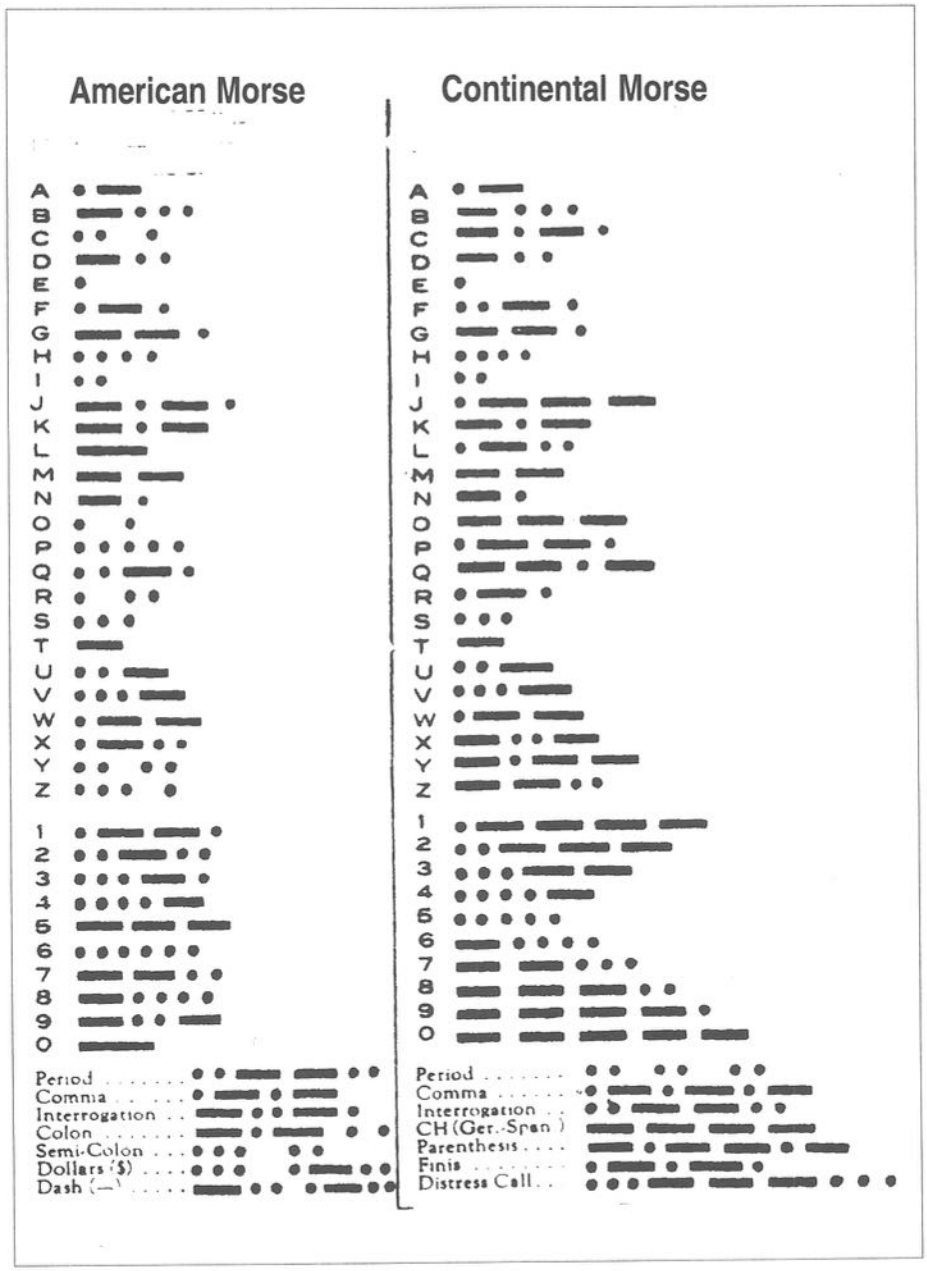
Considerable Difference

He computed it took only 7978 pulses to send it in American but 9076 in Continental. Spaced dots in American, instead of the dot and dash combinations in Continental, make a considerable difference. However, the actual speed of letters in American Morse is often not constant since most skilled operators have a practice of slightly slowing down and emphasizing uncommon or difficult combinations of letters.

Some words sent in American Morse can be made up solely with dots. For example 'SHE HOPES ERIE ICE CO SHIPS HORSESHOE ZIPPER SCOOPS'. Try it in both codes and time yourself.

Very Weak Lion

The spaced dots used for the letters C, O, R, Y, and Z, and the long dash for the letter L in American Code sometimes got careless operators into trouble. In 1846, President Polk dispatched Gen. Zachary Taylor to Texas to seize disputed land from Mexico. A press telegram arrived in Washington reading



A comparison of American and Continental Morse Code

'GENERAL TAYLOR SEEN IN NEW ORLEANS'. A move was about to start to oust him for deserting his post until another telegram arrived which corrected the message to read 'SON' instead of 'SEEN'.

In another case, a contractor sent his foreman to another city to inspect a building scheduled for renovation. The contractor received a message from him reading 'FOUND A LION VERY WEAK IN BASEMENT WHAT SHALL I DO?'

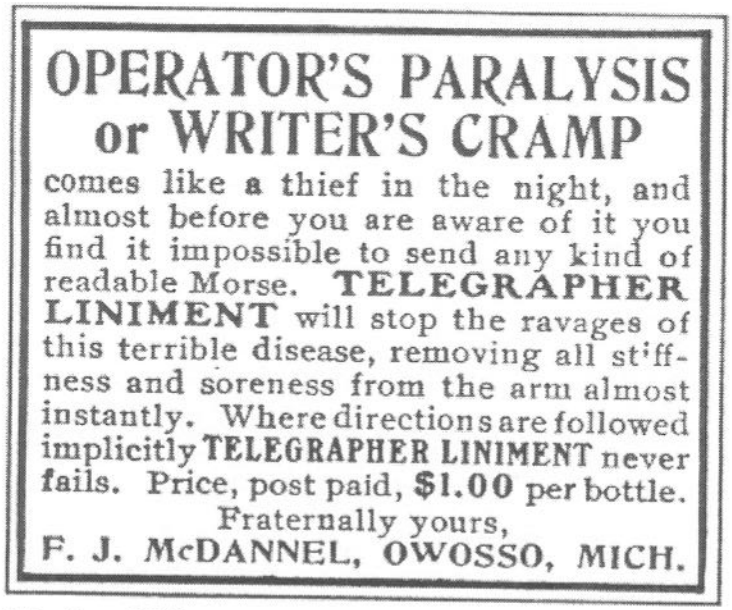
Confusion reigned when the foreman received a reply 'CALL LOCAL ZOO ASK FOR ASSISTANCE'. His original message was supposed to read 'FOUNDATION VERY WEAK IN BASEMENT WHAT SHALL I DO?'

No Mind-wandering

If you were to transmit, say, a military message in cipher in which the word 'OTLO' had to be copied exactly per the original, just how would you safely send it in American Morse, and how would the receiving operator assure you that he'd copied it correctly? Ambidextrous bi-code operators found that error-free handling allowed no mind-wandering or absent-mindedness in the transmission of cipher words.

One signal indicates a certain letter in American but the same signal when used in the Continental Code may indicate a different letter as is readily disclosed in comparing the two. Pity the operator who caused a disaster in copying a million dollar financial transaction cipher word as 'CRFX' instead of 'JFQL'!

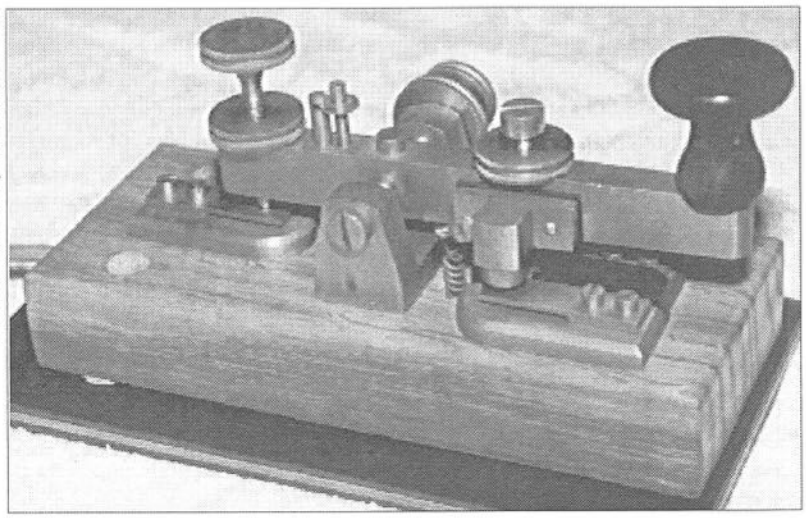
*(*Early telegraphs in Australia also used American Morse. Ed.)* ***MM***



Info Please!

Readers are invited to contribute any additional informationand stories, no matter how minor, to the Editor, Morsum Magnificat. There have been thousands of designs of keys & telegraphy instuments. Information will be lost unless it is compiled in one place and shared with other readers.

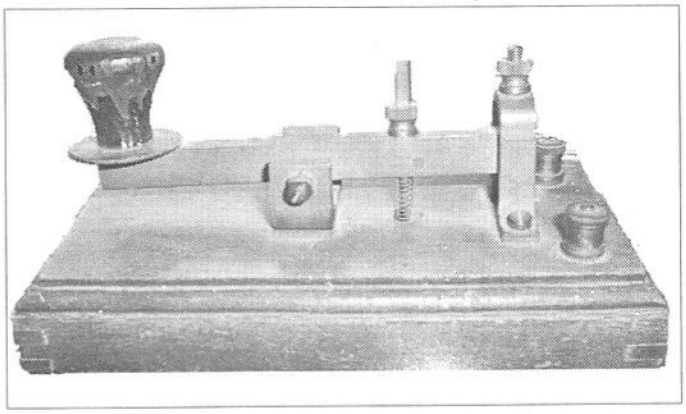
Photo/Collection: Raymond Lee, VR2UW



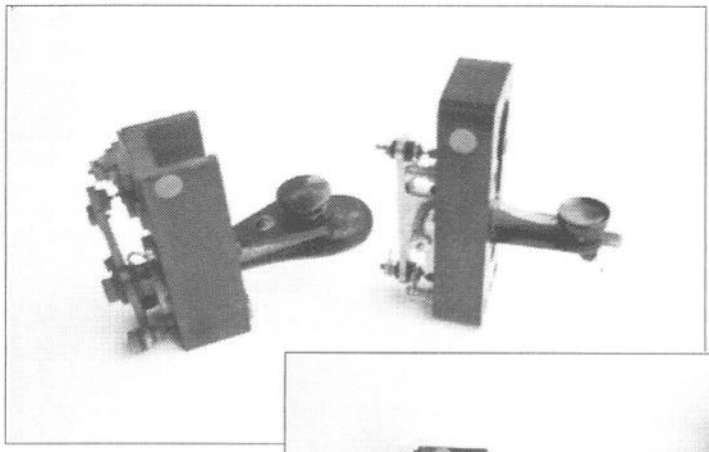
A wooden-based Swiss telegraph key measuring (overall) about 15cms (L) x 6.3cms (W) x 8cms (H). It is a nickle-plated brass key that equipped with dual contact points near the knob end ofthe key arm. Info please on it's maker, year of manufacture and it's usage.

Photo/Collection: Nigel Collier Webb.GJ0VJP

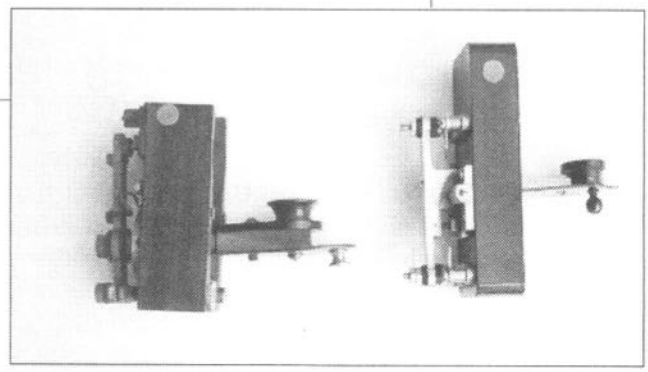
This key is believed to be of British origin of 1910 -1930. It has a wood base, Navy knob also made of wood. All metal parts appear to be brass. Note the unusual way the spring pulls the armature down. Info please on the maker, date and history.



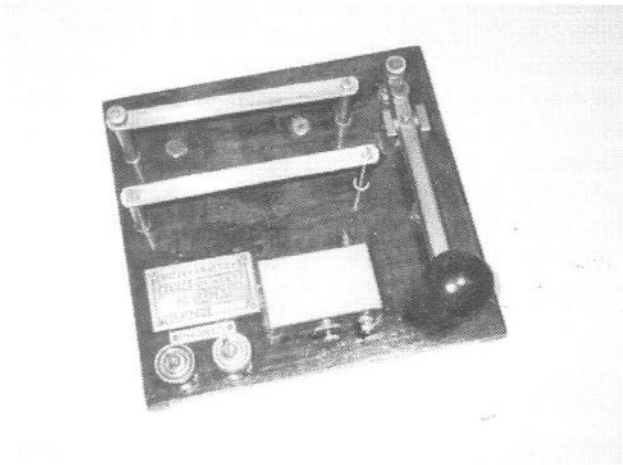
Photo/Collection: Wyn Davies



Two folding keys on which futher info. is sought. The one on the right looks like part of 'WWI W.T. Set, Trench, Continuous Wave' and if this is correct, it was known as 'Key, W/T, Folding'



Does anyone recognise these keys, especially the one on the left of the picture.



Photo/Collection: Jack Barker

Air Ministry 10F/4067 - Buzzer Practice Board. Quite a number of these boards have been turning up over the past two or three years. There are a number of subtle differences which are interesting. Some boards have a brass A.M. plate with a clear or blacked background. Some of the keys have square pivot blocks and others are tapered. Most have a square section 5 inch lever but one has a nicely shaped lever tapered back to the knob. Some have large terminals and others small, all with 'D' rings. Although these A.M. boards appear similar to the ESL No. 1261 boards made by Merit of Potters Bar there appears to be no evidence that they were made by this firm. Does anyone know who made the A.M. boards and if they were made by more than one firm.

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. Please note that the views in readers letters are not necessarily those of MM

Keyboard Characters Morse Equivalents

Over 30 years ago I was taught that UK (- - — - —) sent together as one symbol preceding and following a piece of selected text meant that the text should be underlined or written in capital letters. I don't remember ever hearing it on air although I used to use it when sending the front page of the Daily Telegraph (quite appropriate really!) to my older and wiser fellow operators many years ago at PLYMOUTH RESCUE (GFO/MQD). I had to send every letter and character including all the uppercase sections (bracketed by 'UK') at a steady 20wpm and no uncorrected errors allowed. I remember that dollar ($) was sent as - - - — - - — - (s/) but can't think what the pound symbol was - probably just an 'L'. My reward after this mammoth task, using an RAF Type D Morse key (which I still use), at 0300 on the night watch was "OK Son - but you messed up that bit in the middle, didn't you? - Go on, put the kettle on!"

Strange thing was I actually considered it a pleasure to get even such faint praise from operators who had done their time at sea or in aircraft when I was just starting out on mine, although I would never have admitted it. I suspect they realised though and were quite pleased at having their own apprentice who listened intently to their tales of trying to get through to Portishead or 'zogging' between Wapiti aircraft over what is now Iraq. I was delighted to read about the practice in MM because no one ever believes me when I tell them

of this early air-to-air communication, or of the penalties for forgetting to wind in your aerial before landing!

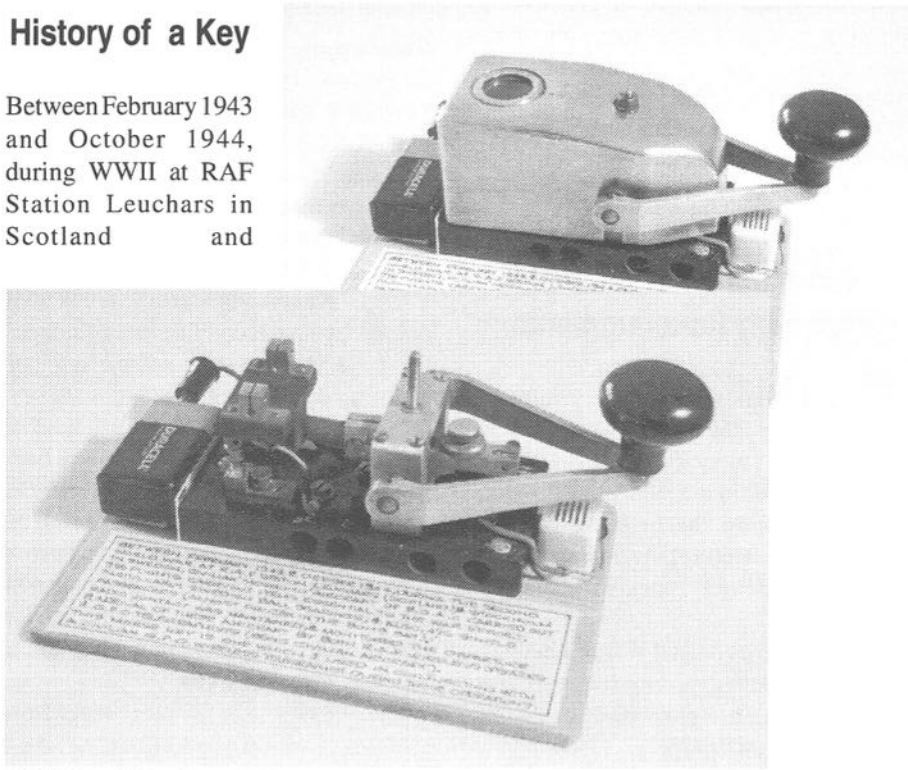
I can never understand why there is no Morse symbol for an exclamation mark although SN (- - - — -) is used by many including me for exactly that. The 1968 edition of the GPO Handbook for Radio Operators Appendix 1 (p.154) lists - - - — - as "Understood" and I have heard this sign being used by amateurs before the callsigns are sent at the start of an over.

Dave Lane, G4MUY
Lincoln, England

History of a Key

Between February 1943 and October 1944, during WWII at RAF Station Leuchars in Scotland and Stockholm in Sweden, civilian versions of the 'Mosquito' aircraft of B.O.A.C (British Overseas Airways Corporation) carried items essential to the war effort, particularly Swedish ball bearings and occasionally a single passenger in what was the bomb bay in RAF versions.

Radio contact was maintained from Leuchars. Departure and arrival of the aircraft was monitored by both RAF wireless operators and, being civilian aircraft, GPO wireless telegraphists. I was an RAF wireless operator at the time and the Morse key shown on the enclosed photographs was given to me by one of the GPO telegraphists on my departure from RAF Leuchars.



It is a most unusual key and I've often wondered where historically the key originated, (i.e. design, manufacture and other uses). I am particularly interested to know the purpose of the circular window in the cover situated over the contact points.

Tom Nunn
Derby, England

Wehrmacht Miniature Key

The Wehrmacht miniature Key (MM68 p25) is a "Mouse Key". There are two styles, the one illustrated, in black, and another, brown coloured with a press stud on the underside (female) and a half-moon shaped knob, maybe for clandestine (in pocket) use. I think that they were sub-contracted to a number of manufacturers. Junker was certainly one of them as I have seen both keys there in the company's small museum.

Clive Redfern W6/G4CZR, California

Volunteers Wanted For Telegraph Re-enactments

MM subscribers who receive copies of Dots & Dashes, the quarterly publication of the Morse Telegraph Club, may have read the articles in the Winter 1999-2000 issue concerning the growing interest relative to re-enacting the American Civil War in the United States with the use of telegraph.

American Civil War re-enacting also occurs and is gaining in popularity on the British Isles and over on the continent of Europe.

Could we possibly conspire with you to generate interest among operators on your side of the pond in potential involvement with telegraphic set-ups at such events? I currently have re-enacting contacts in England and across the Channel eagerly awaiting support. The European contact is Vic Farrer, 27 Essex Drive, 41179 Mönchengladbach, Germany. Tel/Fax +49 2161 551588
e-mail: HFarrer476@aol.com

Walt Mathers
Signal Corps Association Reenactors' Division (SCARD).

(There is a report on SCARD in MM64, p.4. - Ed)

Troublesome Morse

I am writing about two letters in your no.68 issue. The first is that from G4SSH. I am sorry about his trouble, caused by the 2K, callsign and loss of important QSLs and I expect he is now resigned to the errors his callsign creates. I too have had the same problem with the last letter of my callsign over the last 53 years.

Receiving errors are easily caused by shack conditions and not on-band QRM, domestic noises, e.g. xyl shouting etc. My antidote is to make the Q signal QTR? which is not often heard on the bands. If your contact comes back immediately with the time then you can guess he can read you pretty well. If he ignores your request then it is best to terminate the QSO. Often I used to persist and hope to have my correct callsign received but after one repeat it is better to 'switch' off so to speak.

Coming to the other letter from G4GMZ I would suggest that having a

Morse character for all those internet symbols would be easy enough to make up but there would be many mistakes made. Most folk learn the alphabet and figures plus the odd punctuation mark and mistakes are made in plenty by the majority without adding to them. For instance after using the code daily I still find the use of apostrophes - — — — — - upsetting. There are quite a few who use it quite unnecessarily and one wonders whether they appreciate how it can 'stop the flow'.

Not having a PC myself (what! - is this man still here in 2000?) I understand from friends that one needs absolute accuracy when imparting an internet address etc. but it would be best achieved by using simple words to impart a particular symbol. Of course, we have simple Morse characters for oblique stroke, full stop etc. but not many of us use them as they seem rather 'affected' to the daily ragchewer!

John Worthington GW3COI
Abersoch, Wales

Morse Signalling Torch

In MM67 page 38, the signalling torch picture from Wyn Davies, is virtually identical to the one I have on my desk awaiting restoration. My example carries an Admiralty Pattern number on the end cap - stores/part No. A.P. 16001 together with a broad arrow. On comparing it with the photograph, I would say it is the same item and basic design but from a different manufacturer, the differences being as follows:

1) Name plate would appear to be of a poorer quality, it is now just a plain steel plate the information having worn off.
2) The operating knob is different shape (may not be original).
3) The part of the conical head that is attached to the main body tube is different in detail, the smaller diameter cylindrical portion is much shorter and the larger diameter portion longer. The overall dimensions are the same.

I believe you have had sight of another similar torch with a more elaborate head, the property of Ray Bullock GOEML, which was from yet a third manufacturer. As they say the plot thickens, I had a feeling before seeing Ray's example that it might possibly have been part of the survival equipment from a lifeboat. I am now not so sure, but as it seems to be a relatively common item I am sure a definitive answer will quickly be forthcoming. I will sit back and wait.

Derek Stillwell
Shrewsbury, England

Morse Clickers and Telegraph Codes (MM68)

In the film The Longest Day, a Morse clicker (Andrea Gaeta MM68) is used by an American Airborne Division for identification when they have landed. One paratrooper mis-identifies the bolt action of an enemy rifle with fatal consequences.

As regards numeric telegraph codes, the possible origins of 55 are discussed in MM38,39 and 40 and the views expressed by most writers is that it has nothing to do with HH.

The Railroad Telegrapher's Handbook by Tom French lists a number of numeric codes including 73 - 'accept my compliments'. It does not list 88.

Gerald Stancey, G3MCK
Rutland, England

MM66 P.42 Info on Key

Following on from the letter and photo of Jack Barker in MM66 (p.42), I own a key exactly the same as in the photo which is wired under the base in exactly the same way.

The base is made of a "sandwich" of two layers of high quality wood, mahogany and a lighter wood.

The most important feature is that there is an inscription under the base, "R.F.C. 1916" which stands for 'Royal Flying Corps. This became the Royal Air Force in 1918.

My key is in very good condition and I use it for ham radio (F6AOU) because it has a very nice feel and sound.

Henri Heraud, F6AOU
Ris Orangis, France

First CW QSO

I liked the article on hints for your first QSO, which brought back memories of my first CW OSO in 1969, with G3GNS who was also the local RSGB Slow Morse station at RAF Locking just over the Bristol Channel. I could read Morse at about 15 WPM but couldn't think and send at the same time. So I wrote some notes such as my name, QTH and rig (Panda Cub borrowed from my neighbour and BC 348 receiver) and a message of thanks to G3GNS for helping by sending the slow Morse transmissions. It worked out very well until he asked me a question. I had to send QRX, write down my answer and then send it to him! All good fun HI!

Neil Little, GW3YVN
Carmarthen, Wales

Morse From Balloons 1862

The United States Postal Service currently sells a series of lightweight 'Aerogrammes' for airmail messages. They are illustrated , and one of them commerates the work of "Thaddeus Lowe (1832-1913) American Balloonist".

I thought the name Lowe sounded familiar and one of the pictures on the cover rang a bell. "The Telegraph - A History of Morse's Invention and its Predecessors in the United States" by Lewis Coe, page 59 reads, "..other events of the war also foreshadowed the future of electrical communication. Professor T. S. C. Lowe, an enterprising balloonist, had made numerous ascents in captive balloons to observe the enemy. His ultimate achievement came at the battle of Fairoaks, May 1862. A telegraph instrument was taken up in the balloon, connected to the military telegraph network by a trailing wire. The operator in the balloon observed enemy activity and transmitted the information directly to the military commander."

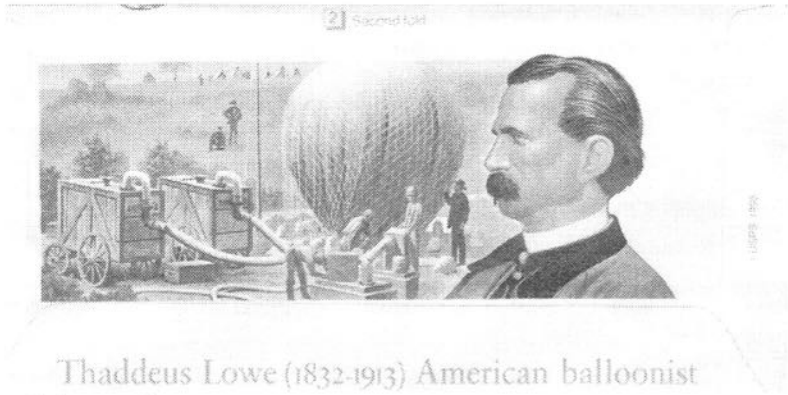
JohnElwood, WW7P
Phoenix, Arizona

Use Morse on the Internet

In doing research for a book on the history of the first telegraph company in Texas (Texas and Red River Telegraph Company; 1854) I have met many railroad and/or wire-service telegraphers. When I began my research, I subscribed to "Dots and Dashes," read Morsum Magnificat, and talked to many of these great folks on the air from my amateur radio station. At a recent Morse Telegraph Club meeting I was introduced to 'Morse Dialup' and felt like an old timer when invited to work the line.

Amateur radio works well for those telegraphers who are hams and many of them even send American Morse over the air. When one is not a ham, however, she/he is forced to use Morse dialup and that means a long distance call for someone. The World Wide Web, originally a system of telegraph wires, may provide a nearly-free Morse telegraph system that would be available to any telegrapher who has a key, and owns a computer that can be connected to the WWW.

Recently, I became aware of a free



long distance telephone service that uses a person's computer and the WWW. There are several such systems in use, each with it's own set of advantages and disadvantages, but they all work and there are no long distance charges. Lea Hime, AB5TY, just informed me that there is at least one free world wide system. These "lines" currently carry voice from one computer and/or telephone to another. Why not use them to carry Morse?

Here is where the Morse community needs a person or group of people to put together the software, if it doesn't exist already, and design a simple modem that will convert the current-loop of a telegraph set to whatever is needed to plug into a computer. Through the use of such a converter, the Morse signal could then be sent, just like voice, over the WWW for free to all other computer and telegraph sets that are "logged on" at that time. With the graphics programs available today it would even be possible to have an "active" virtual sounder on the computer screen with realistic clicks from the computer speakers as the armature responded to the Morse signal. Anyone out there who is up to the challenge?

I will be talking to some local engineers and computer folks about such a system in the coming months, but I would like to see a discussion of ideas from the rest of us Morse folks in the mean time. Please e-mail to roth@onr.com

Duie Roth, K5KZQ
Austin, Texas.

The 'Code Quick' Method

I wonder if readers have heard of the CW teaching method called the "Code Quick" course by W6TJP.

The object of the method is to help students to recognise the Morse code alphabet by means of short phrases, which have a rhythm and sound like the Morse character, not dahs and dits - for example 'DOG DID IT'. There are also pictures to describe the phrases and advice on mental and physical means of assisting the recall.

I have not got any original material about this method and would be very interested if it is still available. I have never seen it advertised and very few people seem aware of its existence.

I feel that this method of teaching should be widely available because I have found that, after the initial sniggering at the sound-alikes and pictures has worn off, people are amazed at how well they can identify the alphabet in a very short time.

It's great for getting started and particularly for youngsters and older folk who have struggled and given up after trying to count dots and dashes as so many do.

I think that raising awareness of this method might encourage some to continue who would otherwise fall by the wayside.

Ken Evans, MØAQQ
St. Helens, England

Wanted - articles and tips on making and restoring keys - contact MM

Clubs & Societies

Clubs, Societies and Associations with an interest in Morse are welcome to introduce themselves on this page

AGCW-DL (Telegraphy Activity Group - Germany)

Membership and Aims

AGCW-DL has approximately 2000 members and was founded by DJ5QK in 1971. It has its own managing body, while co-operating closely with the German national IARU society, DARC. The principle aim of the club is to promote "in any conceivable way" the use of CW on the amateur bands. Its current Chairman is DL5XL, Felix Riess.

Contests

There are many internationally open contests or CW parties throughout the year. The Happy New Year Contest is on January 1st. The New Year's contest is also held on VHF/UHF. The Winter QRP Contest is on the first complete weekend in January. The 80m Straight Key Party is on the first Saturday of February.

A Semi-Automatic Key Party (mechanical bugs only) is on the third Wednesday of February, the YL-CW Party is on the first Tuesday of March, and a VHF/UHF contest on the third Saturday of March. A QRP/QRP Party is on May 1st, and another VHF/UHF contest on the 4th Saturday in June.

The Summer QRP Contest is over the third weekend of July, with a further VHF/UHF contest on the 4th Saturday in September. The 40m Straight Key Party is on the first Saturday in September, and AGCW also co-organizes a national contest (foreign participants are welcome) together with the two other major German CW clubs HSC and RTC on October 3rd.

Activity Week

A yearly activity week is held Monday through Friday in the week before Whitsun. During this week, it is recommended that operators consider the possibility of using F2A mode.

Awards

AGCW issues nine different awards, open to all licensed amateurs and SWLs. CW 2000/1000/500 awards are for the stated number of CW QSOs achieved within any one calendar year on all bands.

QRP CW 500/250/100 awards are

for the stated number of QSOs, during one calendar year, using a maximum of 5w r.f. output on the bands 160 - 10m.

VHF CW 250/125 awards are for the stated number of QSOs, during one calendar year, achieved on the VHF/UHF bands, 144 MHz and above.

There is also a long term award for those who work several of the above mentioned year awards.

The W-AGCW-M award is for QSOs with AGCW members only, scoring 1 point for contacts with members in Germany, 2 points for EU stations, 3 points for Dx, YL/XYL QSOs count as 3, QSLs from AGCW QTC station 5 points, and VHF/UHF contacts count as double. The basic award requires 100 points. A bronze sticker is awarded for 200 points, silver for 300, and gold for 500.

An *AGCW-DL Wall Plaque* is awarded to any amateur or SWL who has acquired at least six CW awards and has been placed among the first ten contestants in at least three different CW contests, including at least one AGCW award and one AGCW contest. Last but not least there is a new Millennium award for QSOs held in the Y2K.

News from AGCW

The club magazine, "AGCW-DL INFO", published twice a year, is in the German language. CW news bulletins are broadcast on Mondays at 1800 GMT (QRG appr. 3573 kHz).

Other Activities

Every Spring AGCW and other CW clubs hold an international CW Meeting at "Fuchskaute" in Germany. CW operators and "CW minded" SWLs from all countries are encouraged to attend. All relevant information can be retrieved on the internet (www.agcw.de). There is also an AGCW mailing list (see web site). Via the agcw.de domain most AGCW officials are reachable by e-mail to the address format call@agcw.de, e.g. the chairman's address is dl5xe@agcw.de.

AGCW is a founder member of the European CW Association and encourages participation in EUCW events (EUCW Fraternizing Party, EUCW SKD) and support of EUCW in general.

Membership and Further Information

There are three classes of membership. Full members pay an enrolment fee of EU 5.00, and an annual subscription of EU 10.00. They have voting rights, and receive the club magazine. Family members pay no fees. They have voting rights but do not receive an additional copy of the club magazine. Associate members (foreigners only) pay no fees, have no vote, and do not receive the magazine which is written entirely in German. Associate members receive a membership certificate on joining the club.

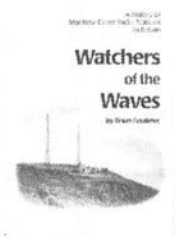
Applications for membership and all enquiries about AGCW-DL should be addressed to: Lutz Schröer DL3BZZ, Am Niederfeld 6, D-35066 Frankenberg, Germany. Email: secretary@agcw.de

(This profile of AGCW-DL, which originally appeared in MM20, Summer 1990, has been updated with the latest available information by Martin Zurn, IK2RMZ, on behalf of AGCW-DL, April 2000.) ***MM***

MM Bookshelf

Specialist Books on Telegraphy by Mail Order

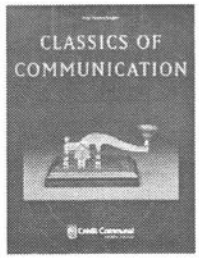
ALL WORLD ORDERS ARE SHIPPED BY AIR MAIL UNLESS OTHERWISE STATED



Watchers of the Waves *by Brian Faulkner*

A history of maritime coast stations in Britain, from Marconi's early experiments and through the days of spark, valve, and automatic W/T and R/T to the computer-controlled systems of the 1990s. Profusely illustrated with 24 drawings and over 80 photographs -128 pages, 21 cms x 29.5 cms (8.25 in x 11.6 in).

£15.00 UK - £15.50 EU - £17.10 World



Classics of Communication (English Edition) *by Fons Vanden Berghen*

A book of exceptional quality produced originally to accompany a Brussels Exhibition sponsored by a Brussels bank. Illustrated with 240 high quality photographs, 140 in colour, including many rare telegraph instruments. The text includes the history and technology of electricity through to wireless and early television, but a large section of the book is devoted to telegraphy. Without sponsorship, a book of this size and quality could not have been economically possible for such a limited readership - 107 pages, 24.5cms x 29.5cms (9.7in x 11.6in). **£16.95 UK - £18.25 EU - £21.00 World (US $36)***

Perera's Telegraph Collector's Guide *by Tom Perera*

An essential pocket-size reference guide for collector and historian, designed to fit in the pocket. 2nd edition, 100 pages, 300 illustrations, information for identification of keys from around the world. Advice on buying keys, price guide, historical background, reference material on lever shapes, manufacturer lists, dates, restoring and adjusting keys. Special sections on bug keys. **£7.60 UK - £8.10 EU - £8.90 World**

	UK	EU	WORLD
The Phillips Code - a facsimile reprint by Ken Miller *(MM61)* Telegraph codes for press reports	£10.00	£10.20	£10.50
The Story of the Key by Louise Ramsey Moreau The Best of MM Vol. 1. 77 photos/Illustrations, 60 pages.	£4.25	£4.50	£5.00
Wake of the Wirelessman by B. J. Clemons A true story of an early maritime wireless operator	£14.20	£14.70	£17.00
"Q41" and Beyond by Shirley Lawson The story of a Wren (Womens Royal Naval Service) telegraphist	£6.20	£7.20	£7.90
McElroy: World's Champion Telegrapher by Tom French The life and times of T. R. McElroy, telegraphist & key maker	£15.30	£16.00	£18.00

CONTINUED OVERLEAF

	UK	EU	WORLD
Railroad Telegrapher's Handbook by Tom French Old-time telegraphy on the American railroads	£8.00	£8.30	£9.00
Bunnell's Last Catalogue with notes by Tom French Illustrates and describes the company's many telegraph instruments	£5.50	£5.70	£6.00
History, Theory & Practice of the Electric Telegraph (facsimile reprint of 1866 edition) by George B. Prescott	£13.95	£14.95	17.50
The Victorian Internet by Tom Standage *(MM63)* The story of the early telegraph pioneers	£8.30	£8.40	£9.30
Keys, Keys, Keys by Dave Ingram A visual celebration of the Morse key	£8.50	£8.90	£9.80
Marconi's Battle for Radio (children's book) by Birch & Corfield Illustrated story book. A present for the grandchildren	£5.85	£6.00	£6.80
Radiotelegraph & Radiotelephone codes - Prowords & Abbreviations by John Alcorn	£12.85	£13.70	£15.50
A History of the GPO Mark 1, 2 and 3 Morse Telegraph Keys by Dennis Goacher*(MM65)*	£6.00	£6.50	£7.20
Marconi's Catalogue of Receiving & Measuring Instruments (circa 1912) A high quality facsimile of the 1912 book with photos, circuits and specs	£4.70	£5.25	£6.60

ReadersAds

Readers advertisements are free to MM subscribers. The number of insertions should be specified, otherwise it will be assumed that it is required in the next issue only. Non-subscribers are welcome to advertise in the Classified Ads section. Please contact MM for styles available and rates.

New - Ads can include one photo free of charge

FOR SALE

FOR SALE, WT 8 AMP KEY COLLECTION: 50 keys. The earliest model is dated 1938. They are all different including an upside-down version and models from USA, Canada and Australia. - £1000 plus carriage/postage. Please reply to Box Number 1 at MM.

KEY & PLUG ASSEMBLIES (WT 8 AMP KEYS) Type 2B (UK), Type 2B (New Zealand), Type 8, Type 9 Mk 1/1 ZA 26291, Type 9 USA-Bunnell, Type 9 Canada-Westclox, Type 19 ZA 28656 PCA, Type R 11950. £25 each plus carriage/postage. Please reply to Box Number 2 at MM.

WANTED: PADDLE KEYS such as Nikey, Autronic, Ham-key HK1 and HK2 etc. Write or phone Ray Bullock, 40 Little Harlescott Lane, Shrewsbury, Shropshire SY1 3PY, England. Tel: +44 (0)1743 245896.

16+ PAGE ILLUSTRATED LIST all kinds of telegraph related items surplus to my needs including straight/semi-automatic keys, sounders, relays, KOBs, military items and many miscellaneous items (e.g. WU dolly gram - 1950s'-code learning machines. $3.00 plus equivalent of 4US stamps ($5.00 refund on $25 purchase). Dr. Joseph Jacobs, 5 Yorktown Place, Fort Salonga, NY 11768, USA. Phone: 516-261-1576. Fax: 516-754-4616. E-mail: joekey@aol.com

BOOK: "Radiotelegraph and Radiotelephone Codes, Prowords and Abbreviations." 2nd Edition. AUD$16 posted within Australia. 90 Pages. Q,X,Z Codes, 97 Phonetic, 20 Morse Codes. Phillips, Myer, 10,11,12,13 Codes. Much other info. Probably world's best listings. Internet: http://www.nor.com.au/community/sarc/phonetic.htm. Also via MM. VK2JWA, John W.Alcorn. QTHR. +61 02-66215217. jalcorn@nor.com.au VISA, MASTERCARD, BANKCARD (Aus, NZ) accepted.

THE MM Q & Z CODEBOOK, a comprehensive 82-page list of the Q-codes and Z-codes, including a one-page list of the original Q-codes of 1912. Available from Dick Kraayveld PA3ALM, Merellaan 209, 3145 EH Maassluis, Holland. Price £5 UK, or US$10.00 outside UK, including postage in both cases. Payment accepted in cash only.

Wanted - articles and tips on making and restoring keys - contact *MM*

ReadersAds

FOR SALE - continued

EXCHANGE MMs, numbers 36 to 67 inclusive for Vibroplex double-paddle or bug. Phone Keith, at +44 (0) 1827 56825 evenings or weekends.

WANTED

WANTED: Early paddles such as the Nikey, Autronic, Ham-key HK1 & HK2. Ray Bullock, 40 Little Harlescott Lane, Shrewsbury SY1 3PY, England. Tel: +44 (0) 1743 245896.

BOOK WANTED: Original or photocopy of the book 'A Telegraphic Code for Fingerprint Formulae' by Superintendent C. S. Collins, published in 1921. Contact Geoffrey Walsh, 64 Liberton Drive, Edinburgh EH16 6NW, UK. Phone: (0) 131-664-3046. e.mail: Geoffrey.Walsh@ed.ac.uk

WANTED TO BUY: Telegraphic Code Books, as used to reduce the costs of telegrams by replacing common phrases with codewords. Would be interested in both originals of photocopies. I am a hobbyist in Cryptography and am facinated in different ways data is and has been represented for different purposes (e.g. speed, economy, confidentiality etc.) Also interested in related items. Letters to Mark Darling, 132 Knowlands, Highworth, SN6 7NE, United Kingdom or e-mail: darling@patrol.i-way.co.uk

WANTED: TELEGRAPHY ITEMS (esp. land-line). I am looking for somewhat special telegraphy apparatus: Single and Double Needle, Wheatstone etc. Buy or swap. I can swap for early electricity (e.g. tubes from Crookes, Röntgen and Geissler; Ruhmkorff; Wimshurst;..), very old radiovalves, some telephony and of course telegraphy. Who else collects telegraphy ?? All letters answered. Fons Vanden Berghen; Lenniksesteenweg 462/22; B-1500 Halle, Belgium.
Tel. +32.2.356 05 56 (home: after 8 pm my local time) or office: +32.16.38 27 21 or e-mail: fovabe@telindus.be

SOLUTION TO MM68 SEARCHWORD

(Page numbers in MM68 shown in brackets)

Across: 2 CwLab (4), **7** Java (b/cover), **8** Moreau (45), **9** GACW (4), **12** Goacher (46), **13** Alcorn (47), **14** Todd (5), **15** CQ Magazine (3), **17** Alice Springs (5), **19** George (26), **22** Prussia (29), **23** UFT (3), **24** Santon (41).

Down: 1 Geography (26), **3** Barlow (6), **4** Oakland (35), **5** FCC (2), **6** Marconigrams (23), **10** Western Union (17), **11** Gramling (38), **15** CQA (47), **16** Grey (5), **18** Japan (b/cover), **20** Ems (29), **21** RAC (8), **22** PTT (15).

MORE AUTO-DOTS TO HAND

FURTHER IMPROVEMENTS.

FASTER MICS. METAL BASES.

By its use LOST SKILL is RESTORED, and to the EXPERT SENDER it is a certain insurance against breakdown.

The only MECHANICAL TRANSMITTER with a DOUBLE-CONTACT.

APPROVED AND BOUGHT BY THE DEPARTMENT.

Machines Sent on Trial. Satisfaction Guaranteed.

Auto-Dots used at
MELBOURNE SYDNEY
ADELAIDE BRISBANE
EASTERN EX. TELEGRAPH.
Adelaide and Sydney.
BALLARAT CLARE, S.A.
KATHERINE, N.T.
MENZIES, W.A.
NORTH ADELAIDE
PORT DARWIN
TOOWOOMBA, Q.
WILUNA, W.A., etc., etc.

Price, £2 10s. Post Free. Terms, £1 Deposit; 10/- Monthly.

FULL PARTICULARS FROM

W. R. LANGSFORD, Broken Hill Chambers, King William Street, **Adelaide, S.A.**

Sole Agent for the Commonwealth.

Advertisement for the Auto-Dot - 1907

THE "SNAPPER KEY."

A complete set of Telegraph Instruments without a battery, that can be carried in the pocket.

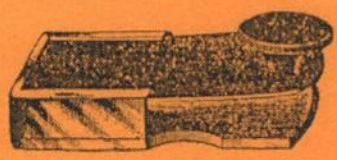
It takes the place of a learner's set, where a battery can not be used; can be listened to the table, and is a perfect Key and Sounder combined. Try one!

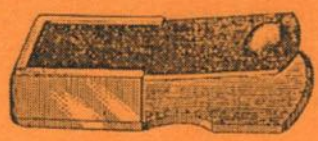
SENT BY MAIL ON RECEIPT OF PRICE, $1.00.

This price includes postage.

THE IMPROVED "SNAPPER" SOUNDER.

A Compact Pocket Telegraph Instrument, Made in 3 Styles.





Snapper Sounder, plain, with Book	$0 25
Snapper Sounder, plain, with Book, ½ doz	1 20
Snapper Sounder, plain, with Book, per doz	1 75
Snapper Sounder, nickel-plated, with Book, each	60
Snapper Sounder, with Rubber Knob	75
Snapper Sounder, Frog Pattern, without Book, each	10
Snapper Sounder, Frog Pattern, per dozen	75

SENT BY MAIL ON RECEIPT OF PRICE.

The "Snapper Key" and the "Snapper Sounder" . An 1886 advertisement for these mechanical devices used for training purposes. They removed the need for batteries. See also letters in MM68, p.42 and this issue p.40