Flying the flag for Morse

Number 65 – September 1999

Morsum Magnificat

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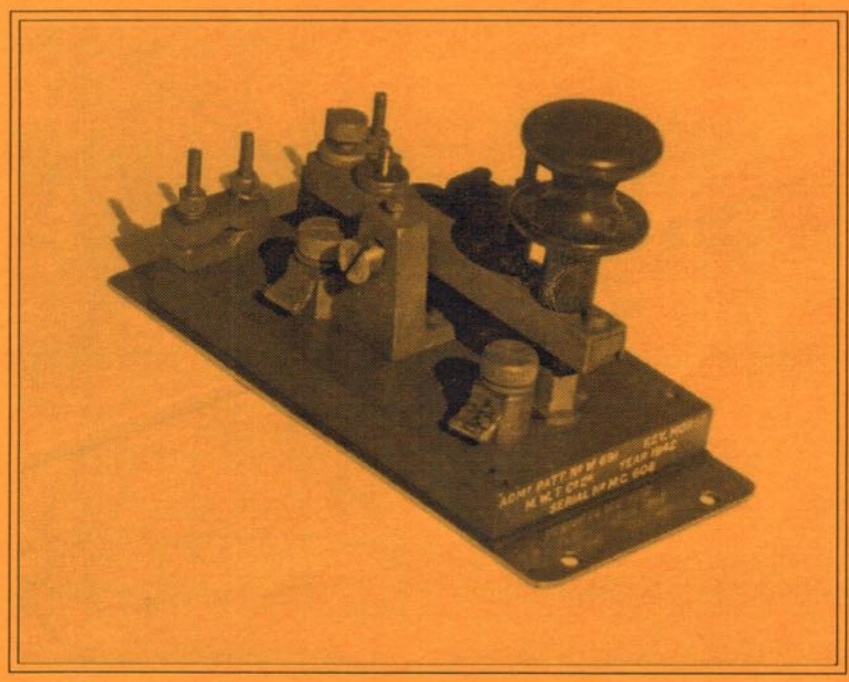
The Morse Magazine



Admiralty Pattern - W691 Key

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Morsum Magnificat

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MORSUM MAGNIFICAT was first published as a quarterly magazine in Holland, in 1983, by the late Rinus Hellemons PA0BFN. 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.

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"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. **31, 34–36** and **38–64** available from the Editorial offices (see top of page). Price including postage £2.50 each to UK; £2.70 to Europe; £2.85 Rest of the World by airmail. Deduct 20% if ordering 3 or more.

FRONT COVER

Admiralty Pattern A.P. W691 key similar to one Wyn Davies donated to the British Antarctic Heritage Trust's Historic Site at Port Lockroy (SeeArticle inside). This one was made by the Marconi Wireless Telegraph Co.in 1942.

Photo/Collection: Wyn Davies

Comment

It seems like every week now another country announces a new 5 wpm radio amateur licence. Some of those licence holders will be enthusiastic but struggling CW users, who need no more than a little encouragement and patience on the part of experienced users, to improve their performance and become Morse devotees. I am reminded of a recent phone enquiry for MM from one of first new M5 callsigns, which have been issued in the UK since 1 August. He was very keen to use Morse but despite every effort, failed the 12 wpm test.

Practice and experience is the solution to his problem and so, in possession of the crisp new licence, decided to put out a CQ. To his great relief - no one replied! I have distant memories of those sort of feelings. There is more than just a speed barrier to the newcomers to Morse. At the same time there other procedural things, mixed up with fears that the other station will send too fast, leading to that 'admission of defeat' - PSE QRS. Add to that a new dimension created by the 'Code No-Code' debate - the sense of perhaps being regarded by some as a sort of 'poacher'.

Well, with a little persistence, every new operator quickly realises the sense of fellowship of CW users and that all the fears are groundless. Whatever the regulatory arguments might be, they are not with the new operators. They are to be welcomed and encouraged.

Stemming from an early interest for tapes of MM, volunteers were sought to provide this service. One came forward but unfortunately since then there has been no demand for the service. My sincere thanks to Jim O'Keefe, WE6V, for the considerable time he devoted to creating tapes of MM63 and MM64.

Zyg Nilski G3OKD

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DARC to Propose New Amateur Bandplan

According to the *W5YI Report*, Germany's national amateur radio society, Deutscher Amateur Radio Club (DARC), has set up a FASC Working Group to consider the position of DARC on the recommendations of the IARU's *Future of the Amateur Radio Service Committee* due to be discussed at the IARU Region 1 Conference in Norway in September.

The Working Group's report apparently says, in part: "The number of amateurs in and outside the DARC will fall dramatically within the next years. We will not be able to stop this, we can only slow it down. If this trend continues, the DARC will no longer exist 10 or 15 years from now.

"Today, no doubt, we will have to do everything to abolish Morse telegraphy as a prerequisite for HF, even against all loud pro-coder votes, and even against the rest of the world. The DARC has to bundle all its forces to break up the screen of pro-coders. CW is just one of many modes of operation."

It is understood that the DARC position on this matter will be released at the IARU Region 1 Conference. It is also understood that DARC will formally propose to the conference the adoption of their *HF Band Plan 2000* in Region 1, and request that it be adopted in Regions 2 and 3 also so the allocations would be world-wide in scope.

This plan makes provision for the new modes and, as an aid to resolving frequency disputes, suggests more emphasis on legally binding frequency use rather than generally accepted (optional) band plans. It is based on typical band widths, rather than on modes of operation, by classifying three transmitting categories, namely:

Telegraphy Modes (Narrow Bandwidth - NB - bandwidth of 0.5 kHz or less) such as CW.

Machine Modes ((Medium Bandwidth - MB - between 0.5 and 1.5 kHz) which include all digital modes which are produced by machines (ie, computers) such as Baudot/RTTY, AMTOR, PACTOR, CLOVER, ASCII, Packet Radio, and

Voice Modes (Wide Bandwidth - WB - more than 1.5 kHz) which include all modes in this form of transmission. (Up to 10 MHz, LSB should be used; above 10 MHz, USB.)

The proposed allocations are:

160m

1810 - 1838 (NB)
1838 - 1842 (MB)
1842 - 2000 (WB)

75/80m
3500 - 3580 (NB)
3580 - 3620 (MB)
3620 - 3800 (WB)

40m
7000 - 7035 (NB)
7035 - 7045 (MB)
7045 - 7100 (WB)

30m
10100 - 10140 (NB)
10140 - 10150 (MB)

20m
14000 - 14070 (NB)
14070 - 14112 (MB)
14112 - 14350 (WB)

17m
18068 - 18100 (NB)
18100 - 18110 (MB)
18110 - 18168 (WB)

15m
21000 - 21080 (NB)
21080 - 21150 (MB)
21120 - 21150 (NB)
21150 - 21450 (WB)

12m
24890 - 24920 (NB)
24920 - 24930 (MB)
24930 - 24990 (WB)

10m
28000 - 28050 (NB)
28050 - 28150 (MB)
28150 - 28200 (NB)
28200 - 29200 (WB)
29200 - 29300 (MB)
29300 - 29510 sat. down link
29510 - 29700 (WB)

(Info: *W5YI Report* July 1, 1999)

HA-QRP Contest 1999

The editorial of the magazine *Radiotechnika* on behalf of the Hungarian Amateur Radio Society organises the annual HA-QRP contest. Radio amateurs around the world are invited to take part in this contest which aims to demonstrate that it is possible to make two-way contacts with low power equipment. Details are as follows:

Dates/Times: 1st November, 00.00 UTC to 7th November, 24.00 UTC.

Frequencies: 3500-3600 kHz.

Type of Emission: CW only.

Call: CQ QRP.

Contacts: Contest exchanges shall consist of both callsigns, RST reports, both QTHs, and the names of both operators. The time recorded in the respective logs shall not differ by more than 3 minutes between the two stations.

Scoring: For every complete two-way contest QSO with own country - 1 point. With EU and DX stations - 2 points. Contacts with the same station can be taken into account in the contest on one occasion only. The sum of the points scored is multiplied by the number of DXCC countries worked.

Power Used: The p.a. of the transmitter used in the contest shall have less than 10 watts input power.

Logs to Include: Date and time of each contact, signal reports, callsigns of stations worked, QTHs and names of operators worked. Also the type of the active element of the p.a. used by the entrant. Logs should be postmarked not later then 21st November 1999, and be

sent to: Radiotechnika, Szerkesztosege Budapest, Pf.:603, H-1374, Hungary.

Awards: All contestants who send logs will receive a Special Participating Award as a memento of the contest. Outstanding scorers will receive the magazine *Radiotechnika* free of charge for one year.

(Information: Editorial of 'Radiotechnika')

The Spanish Ham Radio Union 50th Anniversary

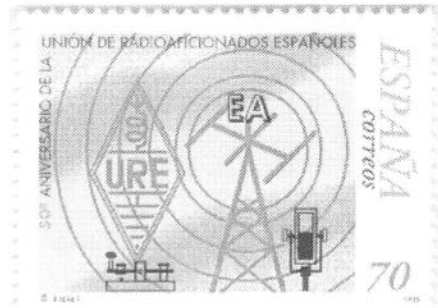
The Spanish Radio Ham Union (URE) was founded on April 1, 1949. It is a country-wide association and is a member of the International Amateur Radio Union (IARU). Its forerunner was the Radio Club "Spain", founded on October 1, 1922.

This year, the URE is celebrating its 50th year since being formed. HM King Juan Carlos I, its president of honour, is a renowned radio ham who has his own station at the Zarzuela Palace.

Nowadays, the URE has 20.000 members spread all over the country. It is organized into territorial councils, one for each Autonomous Community, except Las Palmas and Santa Cruz de Tenerife which have their own provincial council.

The URE has an important role in organising Spanish radio amateurs to be available as a national resource when called on by the Red Cross, rescue and other emergency services.

In recognition of its service to the community, the Spanish Post Office has



URE - 50th Anniversary Stamp

issued a 50th anniversary commemorative postage stamp.

(Jon Iza, EA2SN has offered to arrange shipment of this stamp to anyone interested. One stamp per person please while stocks last. He can be contacted by post at A. Gasteiz 48-7, E-01008 Vitoria-Gasteiz, Spain, or e-mail: ea2sn@arrl.net.)

WWSA CW Contest Updated Rules

The World Wide South America CW Contest is now sponsored by Liga Brasileira de Radioamadores (LABRE Confederation), with the cooperation of Distrito Federal CW Group (CWDF) and Argentine CW Group (GACW).

Please note that the date for June 2000 contest has changed and will now be the first full weekend of June (3-4) and starts at 0000 h UTC Saturday, ends: 1600 h UTC Sunday. It's a 40-hour competition. The full set of the rules will be published closer to the event.

(Information - Alberto U. Silva, LU1DZ, GACW Co-ordinator)

SOS
Save Our Souls

Earlier this year in the village of Badsey, Worcestershire, England, a Church committee met in St James' Church to discuss the organisation of future events. It must have been an interesting meeting because when it finished they discovered that everyone else had gone home and they were locked in the Church.

After half an hour one member of the group had the idea of sending SOS on the Church bells. That particular evening was normally practice night for the bell-ringers and so most people took no notice. Luckily one passer-by recognised the Morse signal and raised the alarm, shortly after which they were released. No one in the village seems to know who the passer-by was - an *MM* reader perhaps!

Switzerland to Abolish Morse Test?

According to a report in the *W5YI Report*, USKA, Switzerland's national radio society is to conduct a 'consultative survey' of its members on a proposal to abolish the existing amateur Morse test and replace it with examination questions on electro-magnetic interference. The Swiss OFCOM (Federal Office for Communications) has confirmed to the *W5YI Report* that the issue has been discussed with USKA, but that nothing will be decided until after further meetings with USKA in November.

Cyfeillion Marconi Commemorates the 'Carnarvon Station'

A Welsh association called Cyfeillion Marconi (Friends of Marconi) has been formed to erect and maintain a commemorative monument on the site of the old Marconi Long Wave Transatlantic Transmitting Station situated on Cefn Du Mountain near Waunfawr, Gwynedd, Wales, known by Marconi as the 'Carnarvon Station'. Members also plan to exhibit the history of the Station in part of the newly opened Heritage Museum in Waunfawr, near Caernarfon, Gwynedd.

Work commenced on the transmitting station in 1912 specifically for message traffic to New York. Transmissions were started in March

1914, but the station was taken over by the government during the 1914-18 war when many experiments were conducted. Commercial traffic resumed in 1920 and the station was in operation until 1939, when it was dismantled. During its lifetime use was made of spark, arc, alternators and finally water-cooled valve transmitters. Many wireless 'firsts' are associated with the Carnarvon Station including the first direct message to Australia in September 1918 and the first direct press report to Australia in December 1921.

An open meeting will be held on Friday, 29th October 1999 at 7.30 at the Community Hall in Waunfawr, which will include a talk by Professor David Last, GW3MZY of the University of Wales, Bangor on the "Great Welsh Wireless Station". Visitors and new members will be very welcome.

(The Secretary, D. E. Roberts, GWØABL would be pleased to hear from anyone who has photographs, records or any anecdotes regarding the old station, which could be included in the exhibition. His address is 23 Lon Hedydd, Llanfairpwll, Anglesey LL61 5JY. Tel: 01248-713647.)

Free Morse Program for Beginners & Experts

Another free Morse training program that is worth trying is 'MorseCat' by DK5CI. In addition to the normal functions of such software, it has some very interesting features including the ability to analyse your dot/dash ratio for sending and a filter to include only plain text which contain characters already known. Receive and send modes are available by connecting the key across the joystick button. The program is copyrighted freeware which means it may be freely distributed as long as this is done free of charge and no charges made for it. It can be downloaded from DK5CI's web pages at http://www.qsl.net/dk5ci/

(Information from Josef Morko, DL1NJM)

Sweden Reduces Morse Speed

HF Manager, Lars Olsson, SM3AVQ of the Swedish Radio Amateur Society (SSA), and Board member Stig Johansson, SMØCWC, advise that their Post & Telecommunications Agency has now reduced the Morse exam from 12 words-per-minute (60 characters/minute) to a top speed of 5 wpm (25/char./min.).

In addition, the four class licence structure (Class A. B and C, plus a no-code VHF/UHF T Class) is now reduced to two: Class 1 (all bands with 5 wpm code and no sub-bands) and Class 2 (no code VHF and higher.) One KW power level is authorized on all ham bands except on LF (135.7-137.8 kHz), the 30 metre band and 13-cm band. (It is understood that Denmark also lowered the code speed.)

(Report from the W5YI Report, August 15, 1999)

Two New Morse Books

Two new books have been announced which may be of interest to Morse specialists.

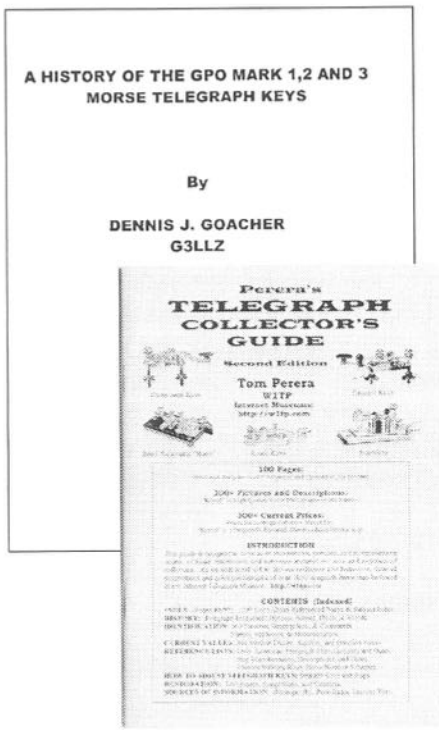
Perera's Telegraph Collector's Guide - 2nd Edition, by Tom Perera

This book brings together Tom Perera's 45 years experience of collecting keys. It is an essential reference guide for collector and historian, designed to fit in the pocket. The second edition has 100 pages packed with illustrations and information for identification of telegraph keys from around the world. It includes advice on buying keys, an historical background, reference material on lever shapes, manufacturer lists, dates, restoring and adjusting keys, further reading, internet sites and special sections on bug keys. There are over 300 illustrations, many taken from his cyber-museum on the internet (http://w1tp.com), where they can be viewed in colour. A price guide for North America is included, cross referenced to updated lists on the internet.

A History of the GPO Mark 1, 2 and 3 Morse Telegraph Keys, by Dennis Goacher, G3LLZ

Dennis Goacher's book is a definitive work on the history, detailed technical design, construction and maintenance of this series of keys. It explains the need for single and double current keys, cicuit diagrams, test & repair schedules, and lists the codes used to identify manufacturers of the keys, cordage threads, wires,cables and mouldings. The Book is well illustrated with 22 (5 in colour) diagrams, photographs and engineering drawings. For owners of any of this range of keys, or the would-be owner, this book is a 'must'.

(Both the above books are available from the MM Bookshelf - see p46)



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

KPH/KFS Last Messages

The following was received from Coastal Radiotelegraph Stations KPH (formerly RCA Global Communications Station San Francisco) and KFS (formerly ITT Mackay Marine San Francisco Radio) during the closing transmission:

WE NOW CLOSE THE RADIOTELEGRAPH OPERATION OF STATION KPH. SINCE 1904, STATION KPH HAS DISTINGUISHED ITSELF AS ONE OF THE MOST WELL KNOWN AND RESPECTED CALL SIGNS IN THE WORLD, AND WILL CONTINUE TO DO SO AS PART OF THE GLOBAL RADIO NETWORK OF HF STATIONS = NW CL DE KPH -30-

CQ DE KFS = THIS IS THE FINAL CW TRANSMISSION FROM STATION KFS - THE LAST COMMERCIAL RADIOTELEGRAPH STATION IN NORTH AMERICA. APPROPRIATELY, WE CLOSE CW AND EMBARK ON A NEW ERA OF COMMUNICATION WITH SAMUEL F. B. MORSE'S WORDS OF 155 YEARS AGO

NW CL 73

WHAT HATH GOD WROUGHT

DE KFS -30-

Radio Officer's note: It was thought appropriate to transcribe the prosignal SK or VA as the original American Morse translation of 30 which is and was the END.

David J. Ring, Jr., N1EA

For Marine Morse / American Morse / CW links see http://www.qsl.net/n1ea David J. Ring Jr., a former Coast Station operator and Merchant Marine Radio Officer is collecting recordings of military and commercial CW. He wishes to obtain spark, arc, CW and MCW recordings of Navy and Merchant Navy Morse transmissions throughout the years to archive them on CD. Please send anything you have on audio tape, cassette, CD-ROM or e-mail to P.O. Box 9, Green Harbour, MA 02041-0009, USA. E-mail:n1ea@gis.net

Radio Programme on End of Maritime Morse

On Wed., July 14, the programme 'All Things Considered' broadcast by National Public Radio in the USA had a 7 minute piece on the last 4 North American maritime CW stations.

Adam Hochberg presented a very sympathetic view of it all with great interviews and the programme included some original recording of spark transmission.

The whole piece is available on the internet at:http://www.npr.org/programs/atc/ Then do a SEARCH on 1999 July 14. Alternatively it can be heard in Real Audio at: http://www.npr.org/ramfiles/atc/19990714.atc.09.ram

(Information - FISTS Reflector)

The End of Maritime Morse in N. America

Dick Dillman
W6AWO

THE END CAME on 12 July, 1999. We knew it had to come. But the end had been predicted so many times for so many years while Morse soldiered on, paying no attention, providing good, reliable service for decades after it was declared dead... Maybe some of us thought the day would never come. But when KPH/KFS signed off the air for the last time it was the end of commercial Morse in North America.

It was a sad day but one I knew I couldn't miss.

Last Morse Position

Tom Horsfall, WA6OPE and I were invited along with many others to be present at the Half Moon Bay master station of Globe Wireless from which the final messages would be sent. I held in my hand two messages I hoped to have transmitted. They were messages of greeting and farewell from the Maritime Radio Historical Society and the San Francisco Maritime Historical Park - typed of course with a mill on historically correct Mackay Radio radiogram blanks. I secretly dared hope that I myself might be permitted to send these messages. I brought along my favorite straight key in its carrying case and my radiotelegraph license just in case.

I have visited KFS many times over the years. On my first visit the operating room had nothing but Morse positions. Over the years the number of computers steadily advanced as the Morse positions retreated to the west end of the building. When we walked in yesterday both sides of the operating room were lined with racks holding sleek black computers and monitors. And way down at the end was the one remaining Morse operating position.

Green Eyeshade

Tom spotted him first... Paul Zell, the Morse operator on duty. We knew him by his green eyeshade. All real radiotelegraph operators seem to wear green eyeshades. Pictures I have taken at KFS and KPH decades ago show men in green eyeshades at the key or the Kleinschmidt. Pictures taken at those stations decades before that show the same thing. I am convinced that there is a secret ceremony of the green eyeshade in which the distinctive headgear is carefully placed upon the head of the operator newly welcomed into the fraternity. This is of course a

ceremony we have not been permitted to witness, a ceremony that will never again take place.

I sat down next to Paul Zell as we listened to Russian and Cuban ships calling their respective coast stations. I realized that true to its nature, Morse will carry on in other parts of the world even after the keys in North America are finally silent. I had to ask Paul the question... "How are you feeling about today?" An impossible question to answer but he answered it. "CW was my life," he said and turned back to the receiver.

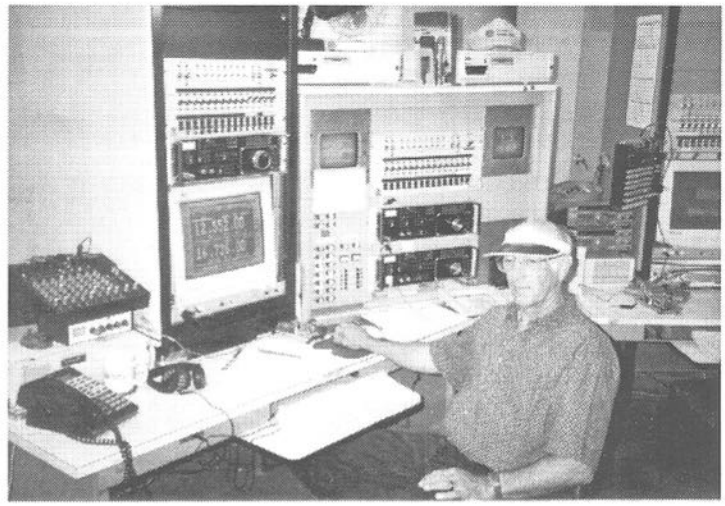


Photo: Dick Dillman, W6AWO

A sad but memorable day for Paul Zell, Chief Morse Operator at KFS/KPH.

The Real Dignitaries

More people started to arrive, a surprising number of reporters among them. But the real dignitaries in my eyes were the radio men and women who knew they had to be there on this day. Jack Martini, manager of KPH when it shut down (he intentionally left the receivers on when he left). Ray Smith, the operator who sent the farewell message when KPH at Bolinas/Pt. Reyes shut down. John Brundage, manager of KFS in its golden age of Morse. Denise, the first female coast station operator on the west coast. Rex Patterson, chief engineer at KFS in its glory years. And many more. We swapped stories and I showed them my photo album. We ate from the delicious spread of food provided by Peter Kierans of Globe Wireless. But our eyes kept glancing at the clock. It was now less than two hours to the end.

I finally screwed my courage to the sticking place and asked Tim Gorman, Director of Operations, if my messages might be sent and if, perhaps, I might be permitted to send them. Tim had met me only that day. I might be a fumble-fisted lid for all he knew. And he was busy with the press and with all the details of the ceremony. "We'll see...", he said. And that was enough for me.

Final Transmissions

Now the final transmissions from WCC/WNU began. We copied them off the air. The room fell silent. I noticed

one man in particular. He was probably the oldest person there but had a presence that we used to call "spry". He had a quick laugh and twinkling eye. I watched him now. He stood leaning forward, eyes closed, as the sound washed over him.... drinking in... the Morse. He was a pioneer operator, the genuine article, no doubt about it. I wanted to meet him, to ask his name at least. But of course I couldn't possibly interrupt his reverie.

Paul Zell sent the first of the KFS/KPH sign off messages from the local position. Again we were all silent and when he finished... there was a round of applause! Applause for a radiotelegraph operator! Well deserved applause, deserved by every radiotelegraph operator everywhere, applause unheard for 80 years. Paul made a small, embarrassed nod of his head, accepting the tribute for himself and for all the operators on all the ships and at all the coast stations over the years.

"On 600"

Then he copied the last commercial message KFS would receive, from the Liberty ship Jeremiah O'Brien/KXCH on 500kc. The op on the O'Brien said he would standby until 15 past the hour. Zell replied "better make that 18 past, OM." The operator on the O'Brien understood and said that yes, he would observe the silent period - which of course is no longer required by regulation but is absolutely required by tradition. Then Paul said that he'd standby "on 600". The crowd got a big kick out of that - 600 meters instead of 500kc. Subtle, but all the more meaningful for that.

Get Your Key

I saw Tim approaching me across the room. "Get your key...", he said. Get your key! Holy mackerel, they were going to let me do it! So I got out the key, gathered up my messages, and plugged in. But then I realized: the best Morse operators in the country... the best Morse operators in the world, probably... would be listening to every dot and dash I sent! They would be too polite to say anything if I flubbed it of course... but they and I

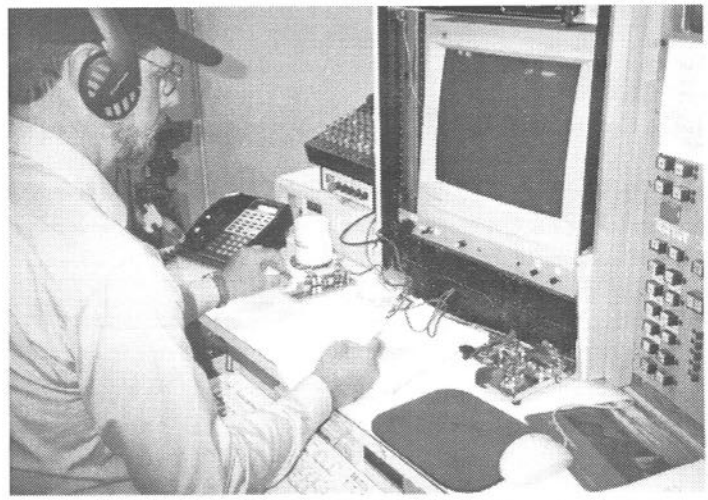


Photo: Tom Horsefall, WA6OPE

Dick Dillman at the key of KPH/KFS sending a farewell message from the Maritime Radio Historical Society.

and everyone else in the room and all the ships at sea would know! My palms started to sweat at that thought but there was no turning back now. I took Paul Zell's seat. I sent a couple of Vs to see if there was sidetone in the 'phones. The knob on the key was loose! I tightened that up... and began to send.

I sent the first message from the Maritime Radio Historical Society and all went well. Then I signed the station calls.. "de KPH/KFS". Tom and a few others noticed that I sent KPH first and understood why. Then the second message from the San Francisco Maritime Historical Park. And the calls again... followed by my "sine"... and K. I had gotten through it! And there was a round of applause for me! Thoroughly undeserved but very much appreciated. Someone even said, "Nice fist". High praise indeed in that crowd.

What hath God Wrought

Then the final messages from KFS/KPH began. Paul Zell sent the first ones. Then Tim Gorman sat down and proved himself to be much more than just a competent manager. He sent the final message in meticulous Morse using the chrome-plated Vibroplex, signed off with "What hath God wrought"... then SK... and it was over.

There were wet eyes in that room, mine among them. I heard more than one tough-looking old timer mumble, "I didn't think it would get to me, but..." and then turn away.

I had one further item on my agenda: to get my license endorsed showing me as an operator at KFS/KPH on the last day of North American Morse. Once again Tim Gorman showed himself to be a gracious and understanding man as he took pen in hand to write "satisfactory" in the blank provided for operator evaluation on the back of the license and add his signature.

One Helluva Day

Finally it was time to go. I gathered up my key and my photos and my papers and shook hands once more with all the great men and women who were there. And finally we were heading north on Highway 1 with the beautiful Pacific sunset on our left and the green coastal hills on the right. "That was one helluva day," Tom said. "Yep," I agreed.

(Dick Dillman, W6AWO is Chief Operator at K6KPH of the Maritime Radio Historical Society.) ***MM***

Wartime Radio Operations at Port Lockroy in the Antarctic.

Alan Carroll*

ON A DISMAL DAMP November evening in 1943 we stood huddled together on the deck of the deep-laden wooden ship 'Bransfield' as she nosed slowly out of dock into the London river, leaving half a dozen official well-wishers behind. How did I come to be here? Fourteen years earlier I had joined the British Merchant Service as a wireless operator. After six years, I 'came ashore' to find a land job, as I had failed in my ambition to visit either the Arctic or Antarctic regions. Soon afterwards I learned of the 'Discovery Investigations' and my application for a job on one of the Committee's ships was eventually accepted. Thus I became a wireless operator of RRS 'William Scoresby' from 1935 to 1938, for three commissions in Antarctic Waters. On our return to the UK in 1938 the threat of war caused 'William Scoresby' to be laid up. I entered the service of the Aeronautical Inspection Directorate in the belief that I had seen Antarctica for the last time. Five years later at Metropolitan Vickers in Manchester, where I was working on a top-secret project connected with radar and beam navigation, I was summoned to a secret interview in London. It was then that I learned of Operation Tabarin from [Lieutenant Commander James] Marr who invited me to return to Antarctica for another two years.' ('Memories of an Operation Tabarin Wireless Operator' by JEBF Farrington)[1]

Secret Operation

Concerned about the possibility that German commerce raiders might be based in the Sub-Antarctic Islands during the Second World War, the Royal Navy set up secret operation 'Tabarin' in 1943. The aim was to establish two bases in the Antarctic during the following summer: one on Deception Island and a second on the mainland, to maintain a visual and radio watch on any enemy activity and to do survey and scientific work when time permitted. The intention was to set up the second base at Hope Bay, at the northern end of the Antarctic Peninsula, but concern for the safety of one of the ships brought about change to the original plan. The two expedition ships, HMS *William Scoresby* and SS *Fitzroy* then steamed south to Port Lockroy, which was occupied on 11 February 1944, just forty years after it had been first charted and named. The

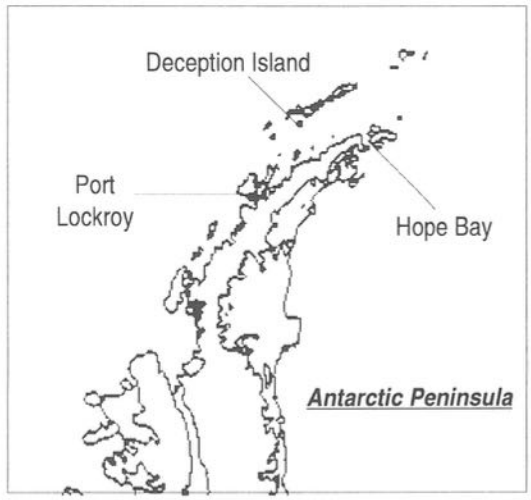
following year, on 10 February 1945, Hope Bay was established as the third 'Tabarin' base.

Equipment

Stations were equipped with a B28 (Marconi CR100/4 modified for Navy use) receiver and one Navy 5G CW transmitter, (807 PA, driven by a 6V6, producing 30 Watts output on crystal fundamentals and 20 Watts when 'doubling up.') This transmitter was powered by a Villiers 'Chore Horse' petrol generator, while the receiver could be powered by a 220W rotary converter fed from 6.3V accumulators for daily listening watches. A wavemeter of a type unknown to the writer was also in use. An Army No. 18 set was supplied for use by survey teams when working away from the base. As the photograph shows, there was insufficient mains power available for lighting purposes.

Original Clandestine Use?

There is much evidence to suggest the 5G transmitter was originally designed for clandestine use and certainly many were used by secret agents in occupied Europe during the latter part of World War Two. The contents-list of the issued accessories box tends to confirm this fact. It contained spare valves and spare resistors and capacitors plus a soldering iron, a pair of pliers and a screwdriver, tinned copper wire, 'Systoflex' sleeving and twelve spare fuses. Earth fittings, stand-off insulators and a lead-in tube were enclosed, together with a length of aerial wire and a gimlet and rat-tail file for piercing window-frames etc. Just in case the PA meter should ever fail a pea lamp with clips, to bridge the defunct meter, was also included.



No Military Activity Reported

Being a covert operation at this time, traffic with NOIC Port Stanley was encrypted and kept to a minimum, except for weather reports. As it happened, neither James 'Fram' Farrington, the W/T operator at Port Lockroy, nor his colleague Norman Layther at Deception Island, was to report any German military activity. During the first ten months at Port Lockroy, 170 official messages, 350 weather reports and 66 private signals were transmitted, and 261 official messages, 603 reports and 65 personal messages received. Fram Farrington certainly worked into England occasionally with this equipment when conditions were good.

After the bases were relieved at the end of 1945, they

were handed over to civilian authorities and a more comprehensive programme of scientific and survey work could begin. For most of the next sixteen years, Port Lockroy was manned almost continuously for ionospheric soundings and latterly also for ELF research (below 19KHz.) The ionospherics antenna comprised a 90-foot high, 180-foot long inverted rhombic pair and ten years after the base was established a large aerial farm had grown behind the radio room, carrying various dipoles covering from 80 metres up to 10 metres. The original 'Tabarin' aerial was an inverted 'L' running North-South as an 'end-fire' rig; all the later dipoles were set up running East-West. Good aerial maintenance was necessary, as winds over 60 knots were common; with occasional gusts over 100 knots. All aerial feeders were air-spaced balanced lines. By 1955, the number of signals being handled was well over ten times that of 1944. With the problems associated with Antarctic HF communications, having ionospheric sounding equipment on site after 1948 was invaluable, as a reading of the critical frequency was taken automatically every hour.

Communications Centre

During the mid-1950's, Port Lockroy acted as the main communications centre for nine other British bases, using a Navy 89M transmitter (RCA MI 7175B, with an 807 driving an 813 and the option of plug-in crystal or variable frequency oscillators) and a pair of B28's. Outgoing signals were transmitted to station VPC in Port Stanley, and all incoming signals were logged in case of non-reception at any other base. In 1956, to reduce airtime

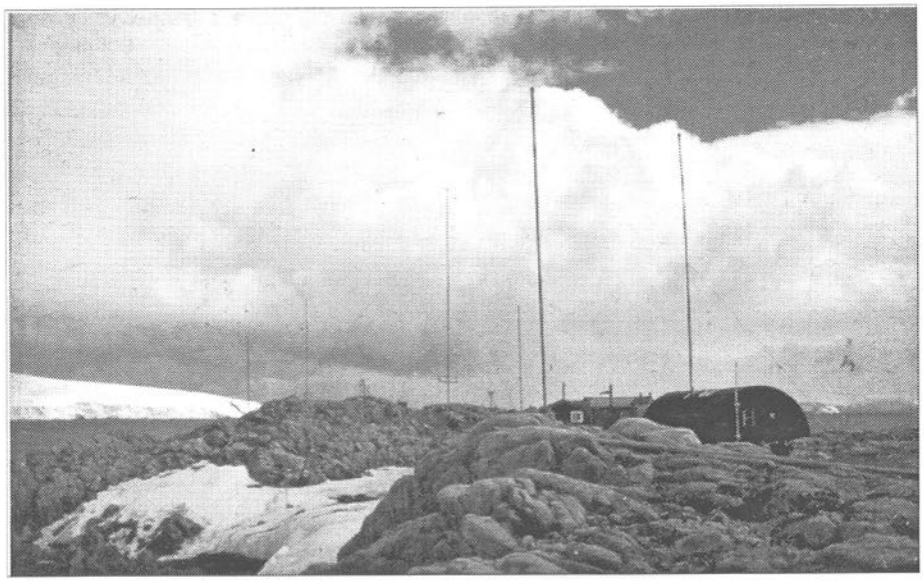
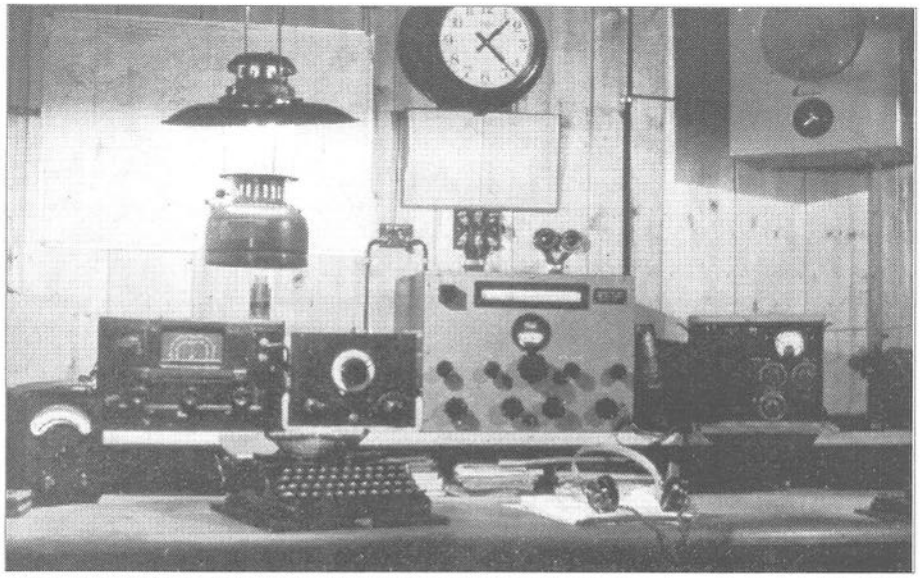


Photo: Alan Carroll

Port Lockroy and the aerial farm in 1955



The original 1944 Operation 'Tabarin' radio room with the unidentified equipment to the left of the B28 CR100/4 receiver. Immediate left - the presumed wavemeter and next to it, the unknown receiver. (The photo is by kind permission of the British Antarctic Survey, Cambridge)

when handling large numbers of signals, a Creed 5455 perforator/tape reader was used, which permitted duplex operation.

Closure

By 1962, all functions of this base had been transferred to newer scientific bases which, by now, had been established at higher latitudes. The buildings at Port Lockroy were closed, and for the next thirty-odd years the base was unoccupied and consequently slowly deteriorated until some of the roof collapsed and an old Nissen hut that had been used for storage was found to be completely flattened. In the 1970's tourists were beginning to arrive in ever-increasing numbers and Port Lockroy became the prime site for a 'run ashore.' In line with modern thoughts on the preservation of historic sites in the Antarctic, it became important that this original base hut should be preserved. This was particularly significant because, of the three original 'Tabarin' bases, only Port Lockroy remains. The old whaling building originally occupied at Deception Island in 1944 was destroyed by fire in 1946 and a third wartime building, eventually located at Hope Bay in early 1945, was also destroyed by fire three years later with tragic loss of life.

Trust Formed

The UK Antarctic Heritage Trust was formed in 1993 and, following a survey of the base condition, a team was sent to Port Lockroy two years later. The empty buildings were refurbished and the site was tidied up and checked to ensure no materials were left lying about which could damage the environment.

Because of its historical importance, Port Lockroy was designated Historic Site and Monument Number 61 under the Antarctic treaty. When its significance as a tourist hub was recognised, the base was manned every summer, providing the opportunity to present Antarctic history, science and conservation to visitors. Wardens now occupy the hut during the tourist season to ensure the security and maintenance of the site, and Port Lockroy is providing useful data on the environmental impact of tourism. Last summer a total of 5782 tourists came ashore to see both the buildings and the Gentoo penguins and all the other birds, nesting 'in the front garden.'

Search for Identical Equipment

As most of the radio equipment had been removed when the base was closed, all that was found in the radio room in 1995 was a cannibalised B28 and a few loose components. This year, a hunt began for identical equipment to be put on display, so that visitors could obtain an impression of 'how things were done in the old days.' The Royal Navy Communications and Radar Museum at HMS Collingwood responded magnificently by providing most of the equipment and this is now being made ready to ship down to Port Lockroy. Two problems remained – the first was identification of the correct key issued with the 5G transmitter. A request for help was made to Zyg Nilski and, on the following day, Wyn Davies responded. With his expert guidance, this puzzle was soon resolved - it was an Admiralty Pattern X691 one of which he kindly donated to the Trust from his collection.

Unidentified Equipment

The final problem is the identification of the 'domestic' receiver and the wavemeter, in the hope that they can be obtained to include in the display. The only guide to identification is the photograph taken in the radio room in 1944. The 'domestic' HF receiver can be seen on the extreme left of the shelf and has a plug-in coil sitting on top of it. The wavemeter is next to this, above the typewriter, on the left of the B28 receiver: it is believed that it may be a Royal Air Force model W1191A. I am still unsure about these as, although all the larger items of equipment are on record, I have yet to find a listing of the two unidentified items in the official archives. It is, of course, just possible that they were the personal property of Fram Farrington. If anyone can provide assistance in identifying these items, the writer would be very grateful. The ambition is to have a complete commemorative display of authentic equipment on show at Port Lockroy, which now receives more visitors than anywhere else in Antarctica.

[1] *Extracted from 'Memories of an Operation Tabarin Wireless Operator' by JEBF Farrington. Originally published in the British Antarctic Survey Club Newsletter No 14, pp.52-58, 1983*

Alan Carroll was Base Leader of Port Lockroy from November 1954 to March 1957 and is ex-VP8CL, ex-MP4BCM. He is currently researching the history of Port Lockroy. Anyone with information on the unidentified equipment please contact him on 01295 730475, e-mail: acarroll@thecomputer.co.uk or the editor. For a photo of the key see Showcase.* **MM

Slow Speed Wire

The Key to Getting Back to Using (American) Morse for Fun

by John Barrows

(John Barrows is Editor of ***Dots & Dashes****, journal of the Morse Telegraph Club. This article originally appeared in Dots & Dashes for the benefit of members of MTC. With the agreement of the author, it has been specially edited to provide MM readers with detailed information about the intriguing Dial-Up activities of MTC.)*

ALTHOUGH THERE HAS been a 'slow speed wire' on the Dial-Up Morse Telegraph Club's Hub office on Saturdays for years, it now has a new 'user-friendly' look and feel. This includes a new addition, an Internet web page to help introduce people to the fun of Dial-Up Morse, and to answer all sorts of questions for beginners.

The slow wire is open at 2 p.m. EST on Ace Holman's Hub office, working out of Malvern Pennsylvania, and a faster wire for more experienced operators starts at 4 p.m. The hub, however, is available for use 24 hours a day for MTC members who have the appropriate Morse equipment and the electronics to use with it.

Much of the recent activity on the slow wire is due to the efforts and enthusiasm of MTC member Derek Cohn, WB0TUA, of the Alton Chapter, St. Louis, Missouri. Cohn, who never worked American Morse before, is a ham operator who has worked hard to learn and improve his American code on the slow wire. The best way to learn the skill of sending and receiving code, or to polish it up after years of being far from a Morse wire, he says, is to actually do it!

"If you're lucky enough to have a retired telegrapher near you, you could practice the skill by taking turns sending and receiving on the same equipment. However, it may not always be convenient to visit a local telegrapher. In addition, learning from a single teacher may not teach you all the skills that a telegrapher needed when working the wire. A wonderful solution to this situation is to send and receive Morse the same way that it was done professionally - on a telegraph wire.

"But there aren't any telegraph wires any more are there?"

"Indeed there are, using the existing phone lines in your home." Using your existing telephone line, Derek explains, you can 'dial-up' a virtual Morse telegraph wire. As you can imagine, this is a much more practical alternative to restringing telegraph wires across the country!

Telegraph Hubs

Talented MTC members have created a mechanism so that anyone with

access to a phone line can send Morse code to anyone else with a phone line. This is called 'Dial-Up' Morse. Using computer modems and existing phone lines, members connect to each other's homes. When two or more are connected, they can send Morse back and forth just as was done in the railroad depots and Western Union offices many years ago.

However, while Dial-Up Morse with one other person is enjoyable, the real fun starts when you put more than two people on a virtual telegraph wire. This is possible because of the hard work of MTC members Ace Holman of Malvern, Pennsylvania, and Ed Trump of Fairbanks, Alaska.

Instead of just two telegraphers connecting directly to each other, several telegraphers can dial one of two telegraph hubs that exist in the U.S. Up to six different telegraphers can connect to the 'Knickerbocker' or 'KB' hub in Malvern, and each will be able to hear the others. It's as if all were on the same circuit.

For smaller groups, Ed Trump's 'Fairbanks' or 'FB' hub will accommodate two telegraphers (three if Ed's on the wire too!). In this way, everyone who dials in to a hub can join a round table discussion. A third North American Telegraph Hub is in Toronto, Ontario, Canada and serves the many Canadian members of the Morse Telegraph Club.

Need to Help Newcomers

Since many of those who use the telegraph hubs are experienced telegraphers, the Morse sent on the hubs can sometimes be pretty fast. Some members will have a difficult time with this if they are learning telegraphy for the first time, or if they are retired telegraphers who have been off the wire for a long time.

MTC member Greg Raven of Tampa, Florida, realized that a special effort was needed to help such members. He came up with the idea of offering a gentle introduction to landline Morse. Every Saturday afternoon at 2 p.m. EST a group gathers on Ace Holman's hub which is dedicated to helping newcomers learn and practice the code. The speed is much slower than at other times of the day and the operators will slow down to a crawl if necessary to help a beginner.

In addition to general discussions on any topic, Slow Speed Wire participants practice actual telegraph work to learn and experience how the professionals earned their living. Each week, one or more participants send a telegraph message using the traditional format. Telegraphers on the wire copy the message and check their accuracy by viewing the actual message text on the Internet.

Help in Finding the Equipment

MTC members, whether newcomers or 'old hands' are invited by the group to join them on the telegraphwire. Non-members will be very welcome to join MTC and join in the fun also.

The group will help you find the necessary equipment and will guide you through learning the code. They will slow down to your speed and help you learn to receive Morse at a good pace. If you already know International Morse, as used by amateur radio and military

operators, you are welcome to use that until you learn the real thing (the original Morse!)

The equipment needed to participate is simple and easy to obtain. The first things needed are a key and a sounder, plus a relay and local power supply if the sounder is a low resistance type (4 or 20 ohms).

Derek Cohn can help members obtain the telegraph equipment for a Dial-Up office of their own, as well as helping them secure the electronic gear needed to make it work on the telephone lines. This includes a specialized modem and converter board designed by Ed Trump which takes the output of the telegraph instruments and tells the modem what tones to send over the wires.... then converts them back into dots and dashes at the other end.

Continuing Improvements

If you would like to participate in Dial-Up Morse or would like to learn more about it, contact Derek Cohn, 8141 Stratford Drive, Clayton, MO 63105-3707. Tel: (314) 725-2333, or e-mail him at keymaster@stlnet.com. The web site for the slow wire is http://home.stlnet.com/~keymaster/slow/home.html

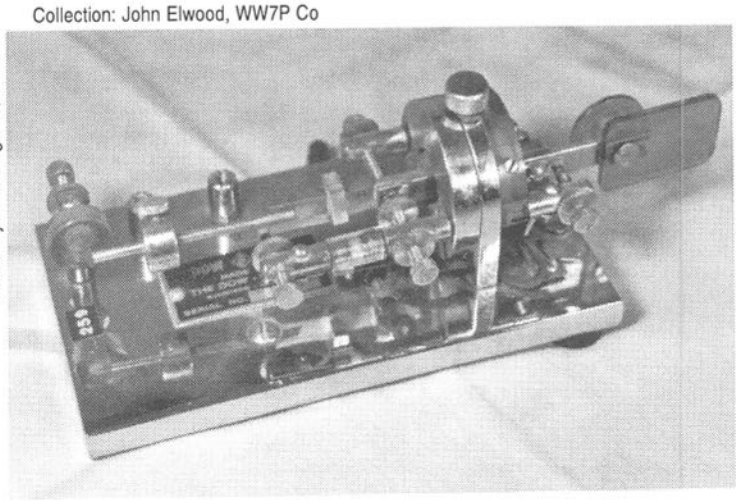
Continuing improvements are the rule on the hub and, according to Cohn, work is being done on developing a 'one-stop shopping' facility to acquire the electronics needed for the circuit.

Thought is also being given by some members to find a way to use the Internet, and avoid long distance charges too! ***MM***

Showcase

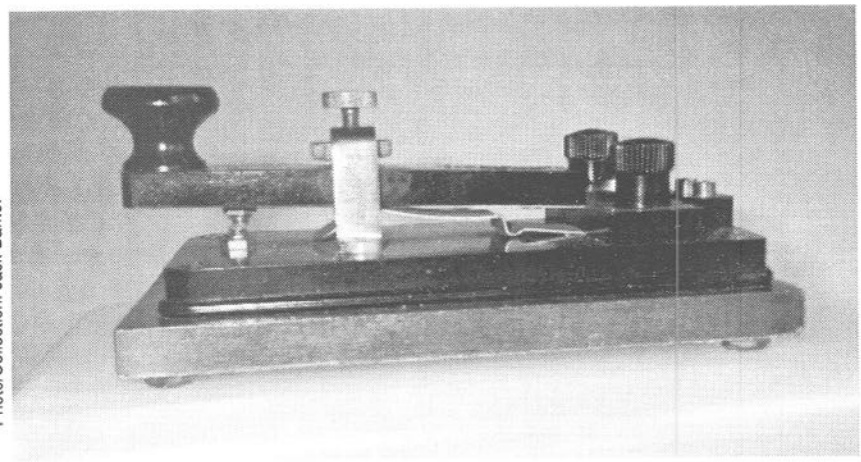
Collection: John Elwood, WW7P Co

Photo: Lynn Burlingame, N7CFO



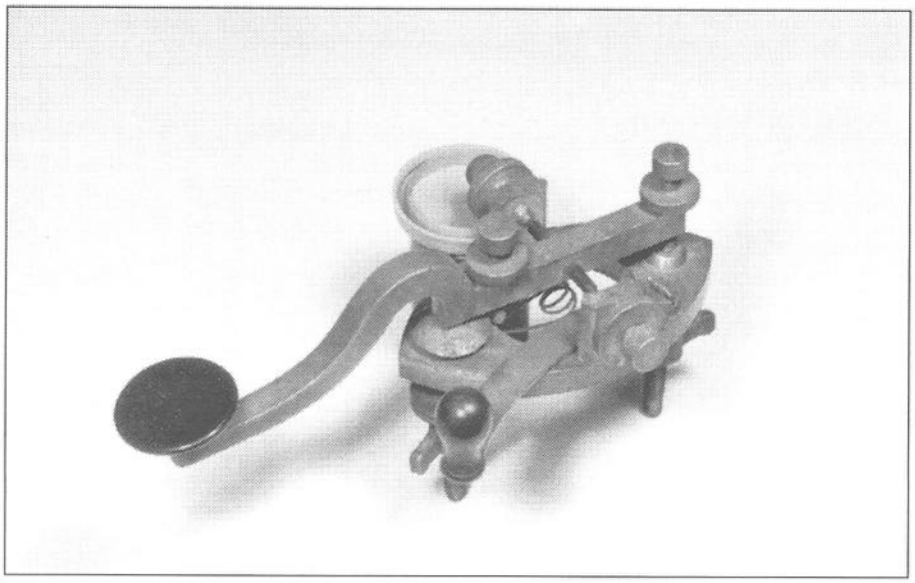
The Dow Key by the Dow Key Co., Winnipeg, Canada

Photo/Collection: Jack Barker



Strap key marked "BREVETTO ARGÈA - ROMA". The thin brass strap is screwed down in a bakelite 'sandwich' between the terminals and is screwed up to the lever back to the top contact. The gap control is on the brass bridge and the tension control is under the base bearing up to the kink in the leaf spring. A very neat and clever design but its specific use is unknown.

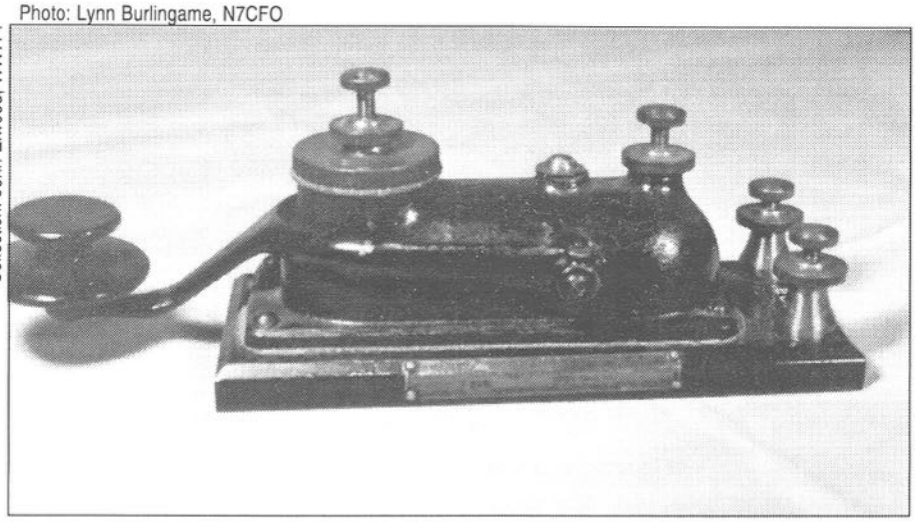
Photo/Collection: Robert W. Betts, N1KPR



Camelback key marked "G. M. Phelps. Maker" on the side of the arm and "W.U. TEL. CO." on the top of the lever. All bronze construction.

Photo: Lynn Burlingame, N7CFO

Collection: John Elwood, WW7P



U.S. Navy key - Machinery Division, Boston Navy Yard

Morsum Magnificat

Index to issues Nos 59 - 64

August 1998 to July 1999

Key:
FC - Front Cover IBC - Inside Back Cover BC - Back Cover

LEARNING MORSE

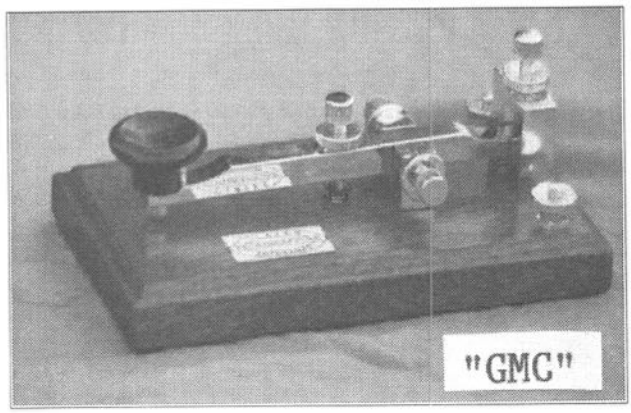
LICENCING

LINE TELEGRAPHY

MARITIME (SEE ALSO 'NAVY')

MM Competition

The Winner & the Answers



We received a very good response to the competition and there were probably even more readers who simply enjoyed seeking the answers to the questions but did not send an entry.

Entry forms were numbered as they arrived and on the closing date (20th August). Numbers were drawn at random and the first entry with all the correct answers was determined the winner. Congratulations go to Barrie Brokensha, ZS6AJY, whose entry was the first drawn with all the correct answers. The Waters & Stanton Watson W-GMC gold plated key is in the post to him. The answers to the questions are:

1. What was the date of Samuel F.B. Morse's historic telegraphic demonstration between Washington and Baltimore?

   May 24, 1844.

2. The first message sent was "What Hath God Wrought!" Where does this phrase come from? -

   Old testament, Numbers, ch.23, v.23.

3. What distress call(s) were used by the "Titanic" as it was sinking on the night of April 14, 1912?

   CQD, SOS.

4. Who was the Chief Radio Officer on the "Titanic"? - ***John (Jack) Phillips. (either first name)***

5. Name five countries where the Key WT 8 Amp was made. - ***Australia, Britain, Canada, New Zealand, USA. (Probably also South Africa, but not confirmed).***

6. What is the Australian name for a semi-automatic key (bug)? - ***Jigger.***

7. Which side of the paddle of a sideswiper (double-speed key) is pressed for a dot? - ***Either side.***

8. What was the British Army's field telegraph instrument which

effectively prevented enemy interception of WWI forward communications?

The Fullerphone.

9. What nationality was the inventor of the Chinese Morse system? - ***Danish.***
10. Who became world champion hand key operator in 1942 with a speed of 35 wpm? - ***Harry Turner/W9YZE.***
11. What does GMDSS stand for?

Global Maritime Distress &Safety System.

12. How often are the International Amateur Radio Union's High Speed Telegraphy World Championships held? Is it a) every year, b) every two years, c) every three years?

Every two years.

13. When did Scheveningen Radio/PCH close down? Was it: a) 1 December 1998, b) 1 January 1999, c) 1 February 1999? - ***1 January 1999.***
14. Which famous criminal was captured as a result of a Morse message sent from the liner "Montrose" sailing for Canada in 1910? - ***Dr Crippen.***

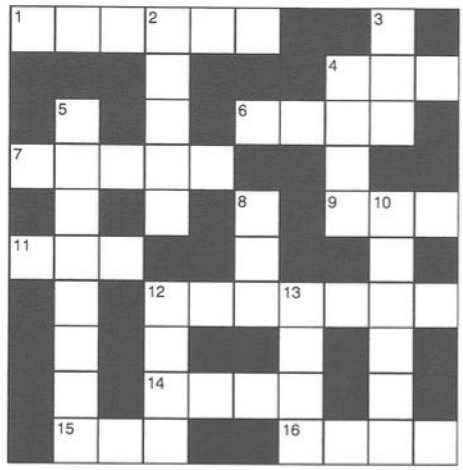
A special thanks to Tony Smith who designed the questions and to Waters & Stanton PLC. for donating the prize. ***MM***

MM64 Searchword - *by Tony Smith*

(Find the answers to this puzzle in MM64)

Across

1 1860 US Army signalling code (6)
4 Combined instrument set (3)



6 Inventor of 1. (4)
7 A beta code? (5)
9 Torpedo carrier (3)
11 Telephotos single dot (3)
12 Following his footsteps (7)
14 Encourages low-power operating (4)
15 Last to go in North America (3)
16 Key auction house (4)

Down

2 High speed coordinator (5)
3 Navigational aid (3)
4 Electronic Keyer Kit (4)
5 MM "Q & Z" is one (8)
8 President Roosevelt (3)
10 Listing boat roll (6)
12 Offers free Morse tapes (4)
13 Telegraphs severely damaged by war in this Colony (4)

Solution on page 48

The Telegraphic and Wireless Products of A.W. Gamage Ltd

by Tony Smith

GAMAGES WAS A LARGE departmental store located in Holborn, in the City of London. Amongst other things, it catered for the needs of model makers, and it was a natural step for it to become one of the first firms in Britain catering for the wireless experimenter in the early part of the 20th century.

In 1913, the company published what was probably the country's first amateur radio callbook, "A Directory of Experimental Wireless Stations in the United Kingdom licensed by the Postmaster General".

The cover illustrated an unidentified array of equipment, thought to be the 250 watt station of Charles Willcox, WUX, of Warminster, Wiltshire. Details were included of 405 transmitting stations, with the three-letter callsigns allocated at that time (for example, LUX, MXA, RKX, TXK), together with the names and addresses of 360 licensed receiving stations. When the London Wireless Club was formed that year, a notice was displayed in Gamages wireless department drawing attention to the aims and objects of the club.

The firm's managing director, Mr A.W. Gamage, no doubt with an eye to future business, offered the club the use of two rooms in the offices of the company at 107 Hatton Garden at a greatly reduced rent of £10 a year. Before the lease was taken up the Club became "The Wireless Society of London", an organisation that eventally became the Radio Society of Great Britain.

Gamages nearly had a high power transmitter on its premises. The Post Office was prepared to grant an experimental licence to the new club for operation on a wavelength of 850 metres. However, before the licence could be issued the Admiralty insisted that a trial be carried out using the full power of 500 watts to confirm that no interference would be caused to the reception of signals at its own station in Whitehall, about a mile away. Due to delays in making the test, leading up to the outbreak of World War I, the licence was never issued, and the station at Gamages never came on the air.

The Wireless Society of London probably occupied the premises at Gamages until the end of 1915 when it suspended all activities for the duration of the war. A year previously it was reported at the first Annual General Meeting that the club rooms at Hatton Garden were open daily from 7 p.m. to 11 p.m., that a library had been started, and that good progress had been made with the instrument room until the outbreak of war, when everything of importance had been impounded by the Post Office.

Gamages Advertisement, 1925

Catalogues

Gamages was a general departmental store, which issued regular catalogues, lists, bulletins, and magazines covering all of its many departments and products. These ranged through Alpine Sports, Baby Carriages, Bees & Poultry, Bicycles, Clothing, Conjuring, Drapery, Furniture, Guns, Horticultural, Labour Saving Devices & Household Requisites, to Motor Accessories, Motor Cycles, Musical Instruments, Photographic, Scout equipment, Theatrical, Tools, Toys, and much more. In fact, they claimed to sell "everything", and all of their goods could be ordered by post except ammunition and explosives.

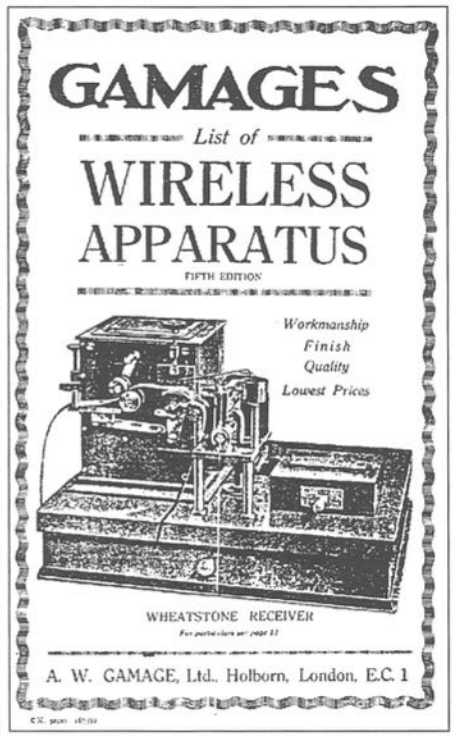
In 1904 the store took the whole of the front page of "The Daily Mail" as an advertisement to announce further extensions to its existing 2+ acres of floor display space and twice as much again for offices, stock rooms, staff rooms, kitchens, canteens and mail order department. By 1930, annual sales exceeded £1M, and the firm had 2000 employees.

Mr Gamage, early benefactor of the fledgling Wireless Society of London, who had opened his first shop, selling hosiery, in 1878, died on 5th April 1930. According to press reports at the time, he was laid in state in his motoring department with members of staff mounting guard, day and night, at the catafalque.

Apparatus for Radio Telegraphy

An advertisement for Gamages *Home Scientist* Model and Wireless catalogue, in the 1914 General Catalogue, claimed: "A.W. Gamage Ltd., specialised in the design and manufacture of Apparatus for Radio Telegraphy years before the General Public took any interest in what is now admitted to be the greatest invention of all time. During the last twelve months quite a number of 'Firms' have come into existence who claim to be pioneers and specialists in the manufacture of Wireless Instruments. Having regard to the tactics of some of these 'Firms' it behoves us to warn intending purchasers that Instruments manufactured by us are not obtainable elsewhere."

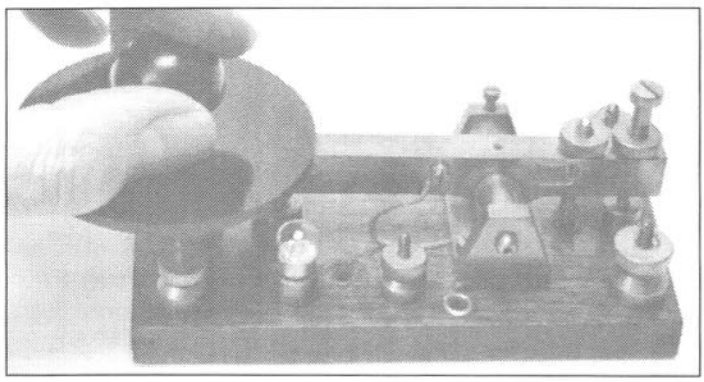
1922 saw the publication of Gamages *List of Wireless Apparatus*, Fifth Edition, promising "Workmanship, Finish, Quality, Lowest Prices", with an illustration of a Wheatstone Receiver on its front cover.



Cover of 'List of Wireless Apparatus', 1922

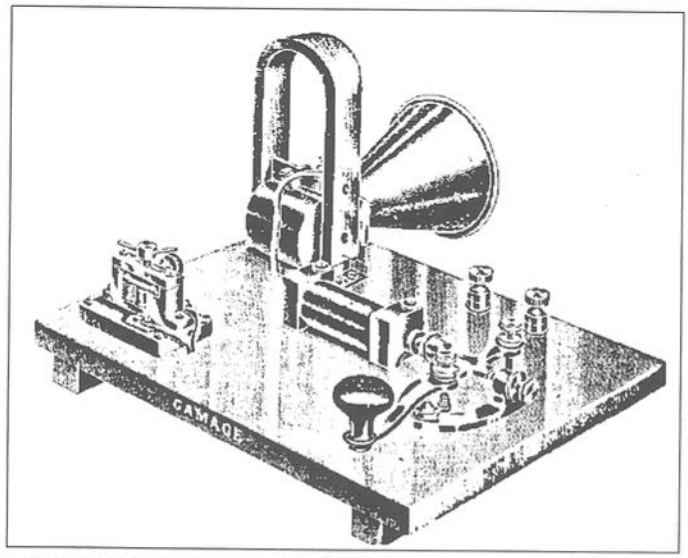
Large Range

These catalogues contained a large number of telegraphic products, ranging from transmitters and receivers to Morse keys, spark coils, relays, sounders, KOBs, galvanometers, signalling discs, Morse learning records, buzzers and buzzer learning sets, and even an



Photo/Collection: Murray Willer, VE3FRX

Key marked GAMAGE LONDON 2528. Finger disk 2¾" diameter, appears tp be original. Extra terminals allow light on base to be keyed



Vibratory Telegraph Instruction Set with telephone receiver and amplifying horn, single current key, buzzer and induction coil. Designed for instructors of telegraphy or for practice. It can be heard loudly throughout a lecture hall.

Omnigraph marketed as the "Dictamorse", a selection of which are illustrated in this article.

They advertised their wireless products extensively. In Wireless World, in 1920/21, for example, they illustrated Receiving Sets "For CW, Spark and Telephony"; a Battery Box for use with them; a Variometer, and a range of Variable Condensers.

Other advertisements covered a range of Morse keys and Practice Sets; and a complete Receiving Outfit, requiring "simple" assembly. In 1921, a number of the latter were offered free of charge by the "Sunday Illustrated" to newly formed "wireless 'phone clubs", and the paper carried articles describing the construction and manipulation of these sets.

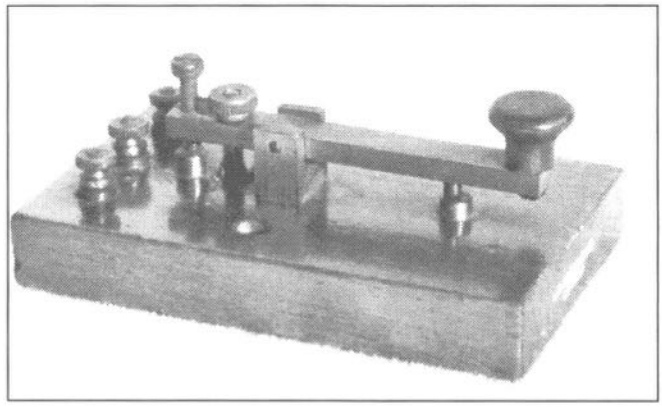
It is often thought that such companies had their products made for them by specialist suppliers, so it is interesting to note in one advertisement a reference to Gamages ability to make any "Special Instruments or Parts" in their own factory.

Morse Records

The Morse learning records are interesting. The 1919 catalogue says: "SPEED UP YOUR MORSE, sending and receiving by purchasing a set of Gamage Morse Buzzer Gramophone Records. The Records (8) are graduated from beginners' rate to regulation speed, and in all cases each letter is sent at top speed, but the 'spacing' varies, which governs the rate of transmission. The records are perfect examples of Morse transmission, being recorded from Buzzer signals sent from an automatic transmitter. Price per set of four double-sided discs, 6/- (six shillings). New set of 12 records (24 lessons made specially for the Military Authorities for training). Three speeds - four, eight, and twelve words per minute.

1/6 each. 17/- set."

According to Norman Field G4LQF, Gamages had their own record label before World War I, with their records produced for them by the Vocalion Company. Their first Morse record (see illustration) was possibly issued at that time. The "new set" of 12 records advertised from 1919 onwards was possibly the largest single set of 78 rpm Morse records ever made.



Photo/Collection: Dennis Goacher, G3LLZ

Gamages "Tapping Key"

End of an Era

Gamages closed in 1972. The building was demolished and the site redeveloped. It was an extraordinary store where one could get virtually anything, and its role as an early supplier of wireless and telegraphic instruments makes it of special interest to Morse enthusiasts. It is not known when they stopped selling such items, but MM reader Dave Locke GW3TKG, remembers going there in 1947: "I made my first and last visit to Gamages that year. On the first counter I inspected, they were selling Marconi type 365A Morse keys. These were brand new and complete with a spare set of contacts for just ten shillings (50p), a real bargain, even in 1947!"

If other readers have memories of, or further information about, Gamages as a supplier of wireless and telegraphic equipment, or have good illustrations/photographs of Gamages instruments, etc, not shown here, please contact MM. ***MM***

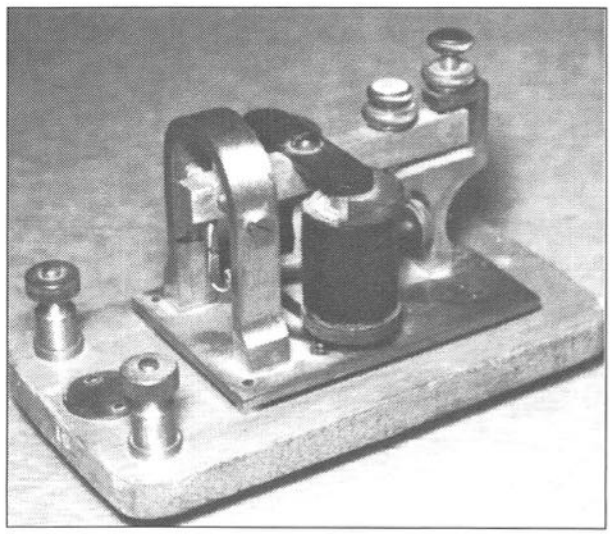


Photo: GØHTR

Gamages Sounder

Aubrey Keel

WØAKL

-Silent Key-

Richard L. Thomas

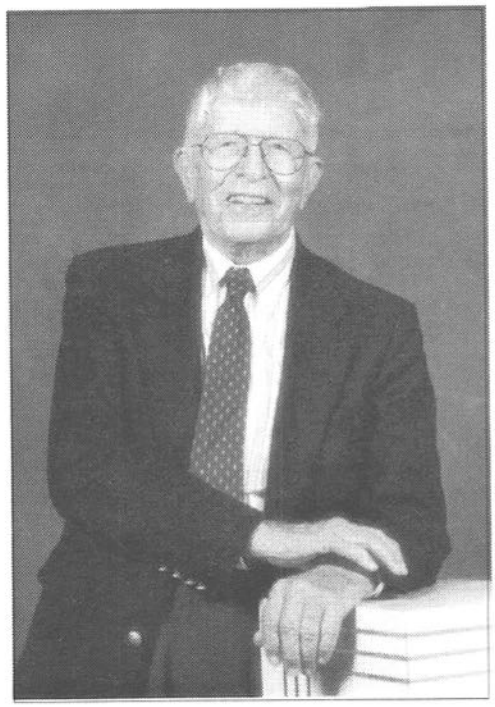
AUBREY E. KEEL, one of three surviving Associated Press (AP) telegraphers and one of America's oldest World War II veterans, died June 25 in Kansas City, Mo. He would have been 98 on July 3.

Friends say Keel, a ham radio operator for 51 years, enjoyed remarkably good health until a few months ago when lymphoma was detected during a routine physical. He is survived by a daughter, Mari McElyea, and a granddaughter, Tara McElyea, 13. His wife Alcia, to whom he was married 44 years, died in 1994. He lived alone and regularly operated a tractor lawnmower to mow grass and control weeds on five acres he owned in south Kansas City. Twice in the last two years he drove alone to visit friends and relatives in Texas, a round trip of 1,500 miles.

Keel, who retired from AP in 1966 with 40 year's service, was the second oldest retiree of the news-gathering organization. On AP's 150th anniversary last year, he was guest of honor at a board of directors' dinner in Washington, D.C. At the dinner, at which Vice President Al Gore spoke, Keel demonstrated Morse telegraphy, used by AP to disseminate news for 85 years. He drew laughter and applause when he told the gathering he was ready for Y2K. With a sly grin, he said he would stand by with his telegraph key at midnight on December 31, 1999, in case the AP's computers fail.

He was born July 3, 1901. At age 17 he learned telegraphy at the Santa Fe Railroad station at Goldthwaite, Texas, to help relieve a World War I shortage of operators. He worked for the railroad for eight years, and then was hired by the AP in 1926 to copy the news at several Texas newspapers. Greater skill as a telegrapher was required to hold down an AP job than was necessary on railroads. In making the change his salary was increased to $32 a week, five dollars more than the railroad paid.

His telegraphy service was all in Texas, and he remained with the AP after the Morse wires were replaced by teletypes in 1933. He was then assigned to the New York office as a technician. Later he was promoted to chief of communications at Des Moines, Los



The late Aubrey Keel, WØAKL, aged 97. Taken at his Church last October.

Angeles, Milwaukee, and Kansas City. After retiring from AP, he pursued a successful career in real estate for the next 10 years.

Keel was a thoroughly modern person and eagerly embraced new technology as it developed. He owned two computers and communicated with friends world-wide on e-mail; he also had his own web page on the internet.

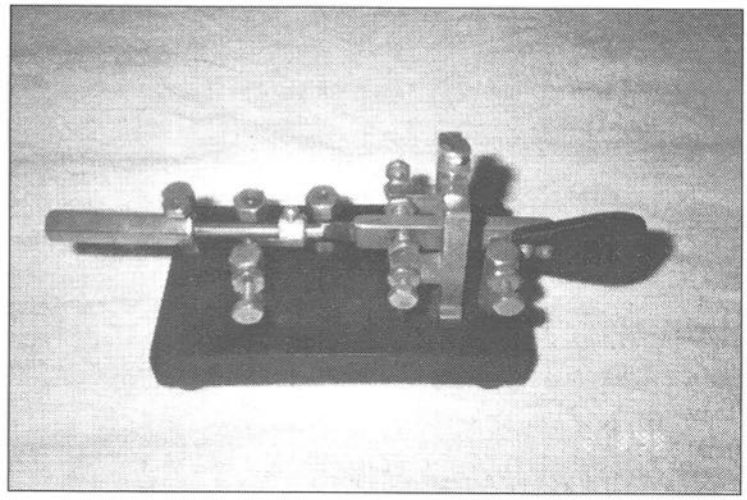
Although landline telegraphy became obsolete, Keel never lost his love for Morse code. At the time of his death, he had served several years as president of the Kansas City chapter of the Morse Telegraph Club, Inc., an international organization of former Morse operators. He also held membership in several amateur radio organizations, including the Queen Bee Network, the Quarter Century Wireless Association, the Old Old Timers Club, the Society of Wireless Pioneers, and FISTS. He also communicated with a group of former AP employees who are hams. For the last five years, and until recently, he used his Vibroplex bug to send code every day to Macalee Hime AB5TY as well as to other hams on the Queen Bee Network.

(Aubrey was also an MM reader. In "Morse in the AP", in MM32, he wrote about his career as a telegrapher and described the last few years of Morse in the AP before the coming of the Teletype. He kept in touch with MM through me, and even though he was ill I had an optimistic e-mail from him a month before he died. Like his many other friends, I am greatly saddened by his passing. ***Tony Smith.*** *)* ***MM***

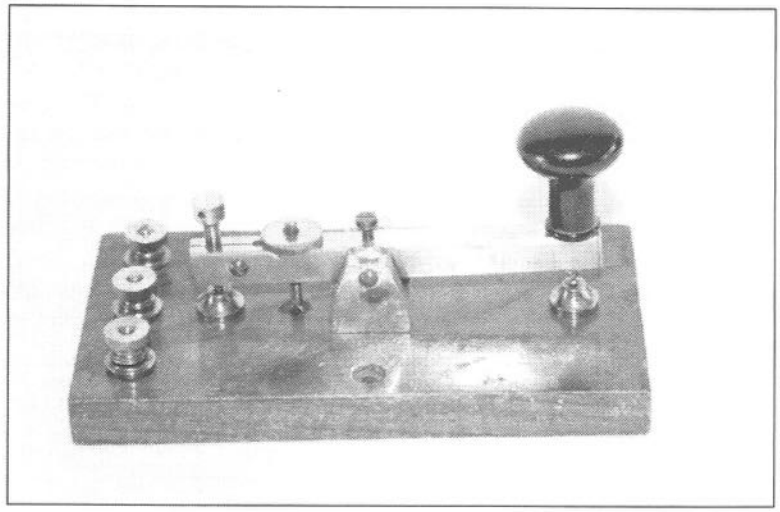
Info Please!

Please send all information to the Editor, Morsum Magnificat so that readers can share the information

This bug (jigger) could be home made and is of a build quality. The base is ebonite and all the fittings, six sided. It does not have the usual round finger piece for dashes.



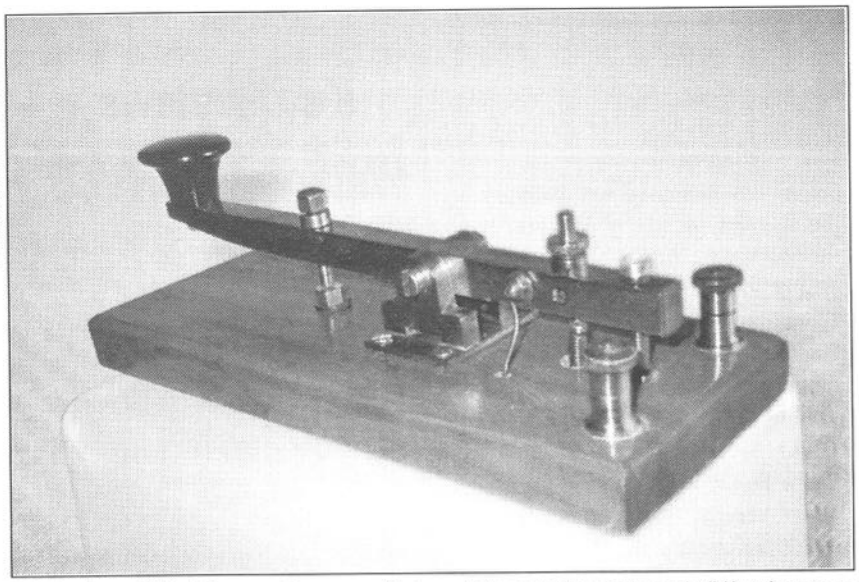
Photo/Collection: Ron McMullen



Photo/Collection: Jean Le Galudec

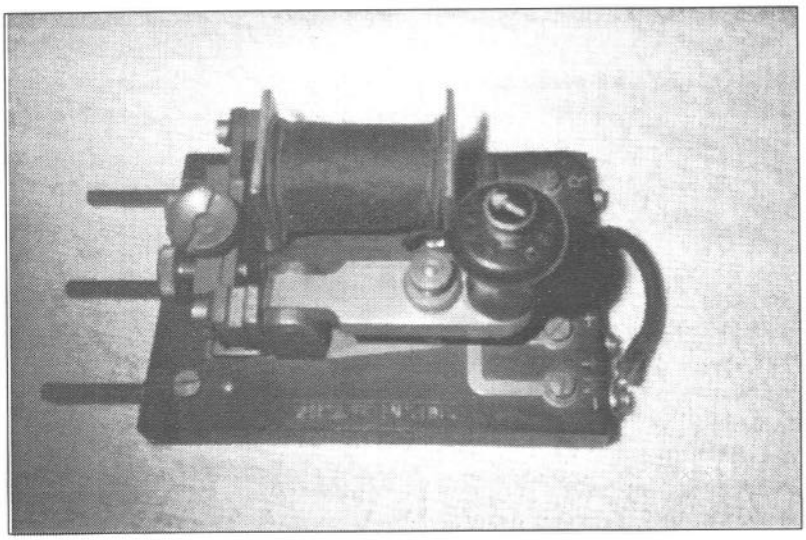
Possibly a key of British make. Any information please.

Photo/Collection: Jack Barker



This key has a 7½ inch lever and an unusual fulcrum. The rest of the key is a rebuild but there were no markings on the original. Does anyone have infomation on the lever and fulcrum?

Photo/Collection: Ron McMullen



An unusual key with "The International Electric Co. Ltd., London N.W." stamped on the side of the base. The opposite side is stamped "4428 Made in England" and an arrow. On the top is stamped "23171 Patent 1911" The 3 rear terminals are marked 'L E CL' and the front five '-M+ + /M - R. The kob rotates through 180° to engage either of two contacts.The knob is marked 'Extra cells', 'off' and 'on'.

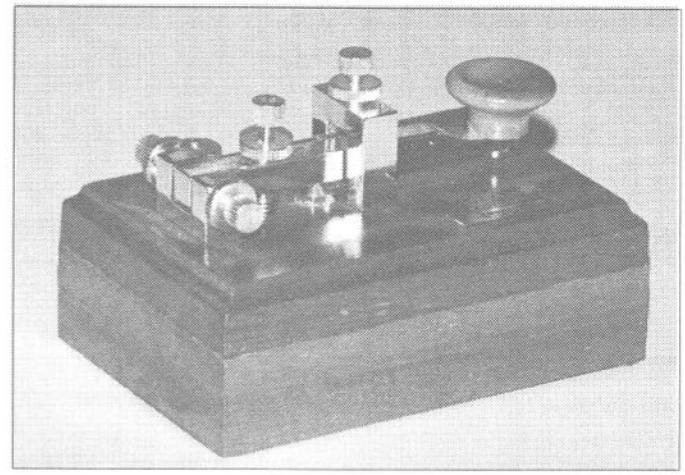
Key Reviews
Watson W-CRVOT and W-CRIOK Keys

by Zyg Nilski

TWO NEW KEYS have recently been announced by Waters & Stanton PLC, Essex. They are the Watson W-CRVOT 'straight' key with built-in oscillator and the W-CRIOK iambic twin paddle key with the electronic circuits built into the base. Both are manufactured in the Balearic Islands.

The Watson W-CRVOT

This 'straight' key comes with a built-in oscillator in a matching hardwood compartment attached to the key base. The overall base dimensions are 8 x 12 x 4 cms and it weighs 380 grams. The key is of brass construction, gold plated to give a very pleasing finish. The knob is ebony, mounted on a 9 cm arm to an end-pivot with the usual knurled locking nuts. Gap adjustment is achieved by a screw on an overhead bridge and there is a base contact which makes connection to the arm itself. Terminals for the key are mounted on the wooden base. Inside the base there is a 750 Hz oscillator driving a small loudspeaker and a connector for an internal 9V PP3 battery. A connector is mounted on an end-plate for an external 9-12 volt power source. I used a PP3 battery which makes it a very portable practice oscillator . The oscillator is internally wired to the key terminals and if the key is to be used with



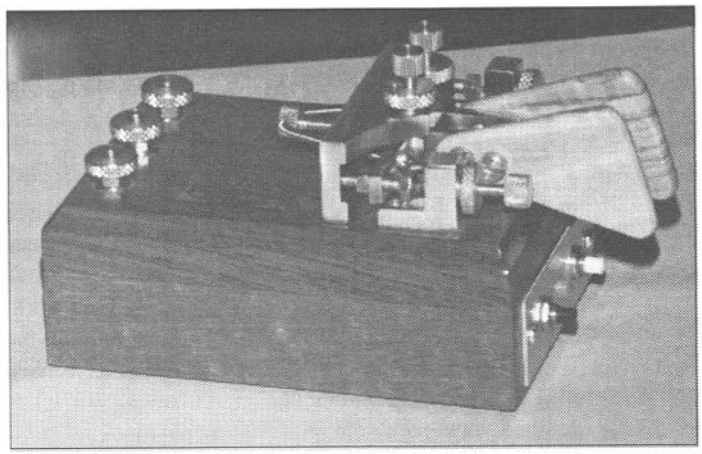
The Watson W-CRVOT Key with buit-in oscillator

radio equipment it is necessary to open the base and remove the oscillator wires from the key terminals. A switch to perform this change would be a useful addition.

Every operator has a different personal preference when it comes to the 'touch' of a key. I found it easy to adjust and use with a positive tactile response. This visually pleasing key is especially useful for the beginner who can learn Morse using the built-in oscillator and then, by disconnecting this circuit, use the key for operational purposes.

The W-CRIOK

This twin paddle key is mounted on the same type of hardwood base as the W-CRVOT and this contains the keying circuits. The dimensions of the base are exactly the same and the whole unit weighs 520 grams. As might be expected, components are of the same design and finish as the W-CRVOT - gold plated brass and hardwood finger plates. The paddles are pivot mounted, and the tension is achieved by a coil spring. Mechanically the key is easy to adjust to suit most operators. As regards the electronics it utilises the PIC2 Keyer integrated circuit and if you have not used this type of device before, follow the instructions carefully. Once mastered a range of very useful features opens up, achieved through a combination of two buttons and the paddle. Speed is adjustable from 5 to 50 wpm and there are two memories for recordable messages each triggered by buttons on a front panel. One of these messages can be set to be repeated periodically to send, for example, an auto-CQ. Another setting provides continuous PTT for tuning purposes. All settings are memorised when the power is off and the circuit can be reset to its factory settings. There are two output circuits, one for keying purposes and the other for connection to a side-tone monitor, essential for picking some settings from a menu which is listed in CW. An attractive, well finished key with some very useful features



The Watson W-CRIOK Keyer

The price of the W-CRVOT is £49 and the W-CRIOK, £99, available from Waters & Stanton PLC, 22 Main Road, Hockley, Essex SS5 4QS. Tel: +44 (0) 1702 206835. E-mail: sales@wsplc.demon.co.uk ***MM***

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

Locating Zeppelins

I read with interest Jim Richards' letter in MM64. For some strange reason, the German Admiralty required all Zeppelins to report their progress to the Admiral of the German High Seas Fleet every hour. In addition the airships requested DF position reports quite frequently so a British DF station would have had plenty of traffic to take bearings on! I imagine 6 MHz is more likely than 6 metres.

Hunstanton was one of about 19 DF stations in Britain and France and the best of them could plot bearings with an accuracy of about 1½ degrees. The positions obtained were good enough to alert the air defences in plenty of time before a raid. Finding the Zeppelins was one thing - shooting them down quite another!

An intercept station was also set up at Hunstanton, in the old coastguard hut, operated by Col. Richard Hippisley, former Director of Telegraphs in South Africa, Amateur callsign HLX, and Russell Clarke, callsign TLX.

Stan Barr, GØCLV
Merseyside

Same Keys

With reference to John Elwood's letter in MM64, p44, the IMR key to which he refers is the same as the NSN 5805-99-580-8550 but in a different case etc. IMR, Price Edwards, Fleming Industries Ltd. and Marconi made the NATO Naval keys. Price Edwards and Fleming Industries also made the later version with a fibreglass cover (5805-99-541-1439).

Earlier arms had the spring-type rear contact and the later versions, the solid arms, which had a clumsier feel. Their parentage must be from the early Swedish Ericcson keys as are the following:

Current Swedish key

Danish Marine key (MM50. p41)

Norwegian Marine (MM54 cover)

Marconi PS 213A (MM62 p41)

Coast station keys made by GPO Rugby

Modern Canterbury Super Silent key (MM21, p18)

Swedish Army keys

Another IMR key (MM63, p24)

Wyn Davies
Wrecsam, Wales

Sad Times - Good Memories

MM gets more valuable as other sources of CW encouragement decrease. Not an amateur myself, I find I go to the amateur bands quite frequently simply to get some Morse to read. It seems to me that we get faster Morse now than we ever did when I was in the profession - except, that is, for the high speed point to point circuits which were faster than I could read even in my head. I note that the Russians, to take one country, are consistently in the high bracket. Of course, I am talking about computer generated code. That's something I never knew in my working days.

I was very sorry indeed to read that KFS will cease on 12 July and that it is the last North American CW coast station. I am afraid that, unlike Dick Dillman W6AWO, I couldn't face listening to any more last CW transmissions. I copied the USCG final one and got a certificate for it. but it was just like being in on a death and I confess that I found it upsetting.

I listen occasionally to 500 kHz, hoping someone might still come up. It doesn't seem very long ago that OST, OXZ and the Spanish and Italian stations were still about, not to mention others. But now there seems to be nothing but the dread silence. I loved 500 kHz and I particularly remember how it came alive when, on a voyage home from West Africa, say, round Cape Verde the continuous static of the tropics dropped away. Then, as you got within range of Land's End, the seas and the skies got greyer and GLD was seldom without something to do with distress or safety. It was the fine, solid W/T work of GLD that inspired me eventually to join the British coast station service and spend the rest of my career in that sphere.

Tom St John-Coleman
Braintree, England

Aviation Morse

I read with interest but no surprise the article by VE3HVY on the use of Morse code for the identification of aeronautical radio directional finding beacons. My own introduction to communications, subsequent to learning the rudiments of ' flag wagging' with the Navy League Sea Cadet Corps way back in the 1940s, was when I studied for my RYA Yachtmaster's Certificate, when the requirement was proficiency in the reception of Morse at the rate of 5 wpm, solely for the purpose of (I think) the identification of marine navigation RDF beacons.

In 1988, as a somewhat mature individual, I eventually acquired an Amateur Radio Certificate, after the second attempt at the Morse test. Following retirement in 1990, I practised Morse from my QTH in Shropshire and from various maritime mobile locations aboard a 'home brew' Eventide yacht named TARKA based at Penarth in the Bristol Channel

A pathetic attempt to acquire my Private Pilots Licence which was 'scuppered' by the medical examiner, also required a Morse code proficiency as indicated by VE3HVY.

Still on the key (but LID) with a confirmed belief that Morse will live on for a long time yet.

Ron Pangborn
Bridgnorth, England

Ergonomic Iambic Keying

Browsing through MM 64 I found the interesting article by GM4FH about Ergonomic Iambic Keying. The idea of rotating the underarm instead of using the 'normal' way to use the wrist and hand muscles, in order to reduce or eliminate "telegraphists fatigue" will appeal to many of us I think.

I used a similar approach to keying when I had to improvise at a radio-camp. I had forgotten to take my (excellent) Kent Iambic key with me and I needed something to key my IC 706. At a car boot sale there I obtained a computer mouse (having a light touch) and a 6.3 mm stereo jack-plug for just a few guilders. I removed the electronics out of the mouse and wired the micro-switches to the plug. I was very proud that I had devised the 'invention of the century', as I thought. Later Dick, PAØSE told me that it already existed.

People watching me keying laughed their heads off - but it worked! I used it without difficulty up to 15 wpm, which is about the limit of my CW proficiency.
I now keep this gadget permanently in my mobile box as a spare.

Bert van Kleef, PAØGVK
GK Huizen, The Netherlands

A.M. Sounders, Relaying

With reference to Tony Smith's article "Remote Control of W/T Transmission & Reception", in MM63, p.21, I have a type 'A' Air Ministry Sounder Relaying in mint condition which has not been tampered with at all.

Referring to figure (b) "Tone Keying" on p.23, this was used in controlling the T1509, 400w transmitter. The Air Training Corps HF control stations had T1509s and the associated control units (tone control), and worked very well.

My (238 Squadron Control, ATC) T1509 transmitter went into a museum when SSB took over from AM and CW on the ATC's channels. The set is still in working order c/o Jim E. Cookson G4XWD (a very appropriate callsign!) at Ludham in Norfolk.

I would like to know how the connections were made to **S T M D D U U**. I haven't yet metered the connections but will look into the details.

Vic Reynolds G3COY/G4ATC
Stoke-on-Trent, Engalnd

(The lettered connections follow the old Post Office telegraphic nomenclature. D is intended to connect to the "down" line and U to the "up" line, according to definitions of the service concerned as to which is up or down relative to the station in operation. As explained in the article the two coils can be connected in parallel or series as required. S T M are local connections for keying the equipment, equating to Space, Tongue and Mark. - Tony Smith)

Royal Navy Museum of Radar & Communication

Whilst reading a recent edition of Navy News I came across one particular article concerning an almost unknown museum of Radar and Communication. This museum is situated in the shore base of HMS Collingwood located at Fareham near Portsmouth, thereby being in naval terminology, 'behind the wire'.

This historic repository of naval communication artefacts was in fact established in 1946. It is situated in three single storied buildings at present but it is hoped that as the collection of artefacts grows it will be able to move to much larger premises in the future - possibly to the Portsmouth Historic Dockyard.

Although a reasonably small museum, it contains some rare and very early communication and Radar equipment which was fitted into HM ships and others. One piece I will mention is the wireless transmitter invented by Captain Henry Jackson, who later became an Admiral of the Fleet and First Sea Lord at the time of the Battle of Jutland.

Whilst captain commanding the torpedo school ship, HMS Defiance, Jackson evolved his highly successful transmitter and receiver. 1896 saw trials being held of the equipment, taking part was the elderly gunboat HMS Scourge. These trials were completely successful with a message being transmitted over a distance of approximately three nautical miles, the speed of transmission attained being ten words per minute.

All of this development work carried out by Captain Jackson was without any knowledge of similar work embarked upon by Marconi. Only when the two men finally met and compared research notes did they find that their work was on similar lines. Though Captain Jackson's equipment was less sensitive than Marconi's it was found to be more reliable and easier to maintain. By 1899 a version of Captain Jackson's set had been installed into a number of HM ships. 1903 saw the installation into HM ships of the first standardised transceiver equipment. It was an amalgamation of the best features of both Captain Jackson's and Marconi's equipment. Captain Jackson is held by the British Royal Navy to be the father of their electronics.

One other artefact worth a mention at this particular museum is the complete W/T office of the fleet repair ship HMS Resource. This dates from the early 1930's and shows quite clearly how W/T had evolved from the early years.

For those who wish to view this repository of very early and rare communication equipment, it must be remembered that this museum is part of a shore establishment of the Royal Navy and therefore subject to their regulations. Visitors are extremely welcome but access to this repository is strictly by appointment, whether individuals or groups.

To make an appointment either write to the curator, Lt Cdr Bill Legg, HMS Collingwood, Fareham, Portsmouth, or telephone +44 (0)1329 332 535.

Anthony Beetlestone
Birmingham, England

The Art of 'Zogging'

I have recently come across the following item of information and would enquire if any of our members have any further information on this arcane activity?
"During WWII, Coastal Command Aircraft developed the art of 'zogging'. This was a form of semaphore but it used Morse code and needed only a hand and forearm, a dot was a short flick of the wrist and a dash was a movement from the elbow. Crewmen of adjacent aircraft could communicate very well using this method."
I would be particularly pleased to have amplification of the wrist and arm movements before I dare demonstrate it at my radio club!

Ron Wilson, G4NZU
Nottingham, England

(There is also a letter from R. A. Parrot, G3HAL in MM26, p39. It refers to 'Zogging' on the North West Frontier of India, 1934-36)

CW Bands

At the moment, with the exception of the beacon sections, we can legally and morally use CW anywhere in the HF amateur bands. Superficially it may seem a good idea to have legally defined CW bands but the devil is in the detail. For example, 5 kHz CW bands would not be good for us, especially if this was the only place where CW could be used on HF. Also, once the idea of legally defined CW bands was accepted it would be relatively easy to further reduce them.
Am I being unduly pessimistic? Well just look at how the A/B licence has come about. What happened to those early surveys at showed overwhelming support for retaining the 12 wpm Morse test? Remember how the idea of an 8 wpm test somehow got lost. Who can we trust? We must be vigilant.

Gerald Stancey, G3MCK
Rutland, England

World's First YL Radio Amateur?

In Albert Heyes' article in MM63, 'A Key With a History' it is suggested that Barbara Dunn, G6YL was Britain's first lady radio amateur. In the way that we know amateur radio today this is probably true but in the Directory of Experimental Wireless Stations published by A. W. Gamage in 1914, a Mrs C. E. Ingram, located in Ilford is listed with the callsign IXI. The address is "Ingram's Commercial and Wireless School" with a note "used chiefly by pupils at Ingrams W.T.S., Ilford"

On the face of it Mrs Ingram used her experimental licence for business purposes. Does any MM reader have any further information?

David Pye, G3EV
Birmingham, England

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

Clubs & Societies

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

The JARL A1 Club

The Japan Amateur Radio League Inc. (JARL) A1 CLUB was established in October 1998 with 11 founder members. This continues to rise and currently stands at 80 members. Anyone who enjoys CW is welcome to join provided they are a member of JARL and have a 3rd class or higher amateur radio license or equivalent. The basic aim of the club is to promote enjoyment of CW and to spread the fun of CW to others who do not know Morse.

The Spirit of Japanese CW

The Spirit of Japanese CW Enthusiasts is 以心電信 "I Shin Den Shin". This word is frequently used among Japanese CW enthusiasts and originally comes from a Chinese proverb 以心伝心 . In Japanese it is pronounced "I Shin Den Shin" and means to communicate heart (or mind) with each other by means of their heart (or mind). In other words, to communicate with each other's mind without speaking any words.

The first two characters 以心 "I Shin" means "by means of heart (mind)" and the last two characters 伝心 "Den Shin" means "to communicate one's heart (mind)".

There is another word which is pronounced the same as "Den Shin" - 電信 meaning "Telegraph" which is a way of communicating with each other without speaking any words. Moreover, in case of frequently worked stations, an operator's personal 'fist' is recognizable from the keying! Therefore, 以心電信 is frequently used to express CW's fantastic potential.

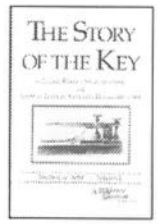
Fun CW Contest

A fun CW contest for beginners is planned called the "Lets A1 Contest". Stations will report RST plus the last two digits of the year first licenced for CW. Only hand-keying is allowed (no electronic keys), with a recommended maximum power of 50 watts. Further information is available from the General Affairs Officer of JARL A1 CLUB, Atsu Taniguchi, JE1TRV e-mail je1trv@jarl.com

Bookshelf

Specialist Books on Telegraphy by Mail Order

ALL WORLD ORDERS ARE SHIPPED BY AIR MAIL UNLESS OTHERWISE STATED



The Story of the Key
by Louise Ramsey Moreau

This is The Best of MM Vol. 1. It is a reprint of a series of articles which appeared in *MM6 - MM11*. It covers the history of telegraph key from 1837 - 1900 and includes a list of American telegraph instrument makers for that period. 77 photos/ illustrations, 60 pages, 5¾ x 8¼ inches (14.5 x 21 cms), S/B.

£4.25 UK - £4.50 EU - £5.00World

	UK	EU	WORLD
The Phillips Code - a reprint by Ken Miller *(MM61)*	£10.00	£10.20	£10.50
Vibroplex Collectors Guide by Tom French	£15.00	£15.80	£17.60
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Keys, Keys, Keys by Dave Ingram	£8.50	£8.90	£9.80
Marconi's Battle for Radio (children's book) by Birch & Corfield	£5.85	£6.00	£6.80
Radiotelegraph & Radiotelephone codes - Prowords & Abbreviations by John Alcorn	£13.20	£13.90	£16.00
A History of the GPO Mark 1, 2 and 3 Morse Telegraph Keys by Dennis Goacher *(MM65)*	£6.00	£6.50	£7.20

Payment welcome by Mastercard or Visa (quote your card number and expiry date), or by cheque/ bank draft drawn on a London bank). Please make cheques payable to 'Morsum Magnificat' and send to:

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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.

FOR SALE

FOR SALE OR TRADE: Beautiful Signal Electric 20 ohm KOB. Laquered brass hardware on a well-preserved wooden base. Clean, complete and original $75 plus postage. Vibroplex 'Lightening bug. Black wrinkle painted base in exc. shape. WW-II era $125 plus postage. Other keys, bugs sounders, relays etc. available. SASE for list. Dave Pennes WA3LKN; 4607-C Santa Cruz Drive; Indianapolis, IN 46268-5354, USA. Phone (317) 461-9605. E-mail: dpennes@hotmail.com

KEY SWAPPING: I have 2 different Air Ministry (WWII) lighting control boxes (each has dual keys), namely, 5C/3023 & 5C/3108 which were used on TBR (Torpedo-Bomber-Reconnaissance) and ABR (Amphibious Bomber-Reconnaissance) aircrafts respectively, for swapping with vintageBritish telegraph keys. Raymond Lee, VR2UW, P O Box 62316, Kwun Tong Post Office, Hong Kong.
E-mail: VR2UW@netvigator.com

TO REDUCE COLLECTION the following keys are for sale: telegraph tape perforator model 1553 C - 79FRH with full spool of new tape in very good condition - photo if required £25; 2 new Fullerphone superimposing units in cases £15 pair; RAF Morse key Type D £140; RAF 'bathtub' key new condition £35;Walters 5KK Mk.IV 12 ozs / WR 427 very nice key £75; unknown old Morse key on base £25; pair of field telephone sets complete with the small keys £50 the pair; Morse key and plug assembly No, 19 ZA 28656 new and unused £35. Telephone Peter on +44 (0)1771 623 654. for details.

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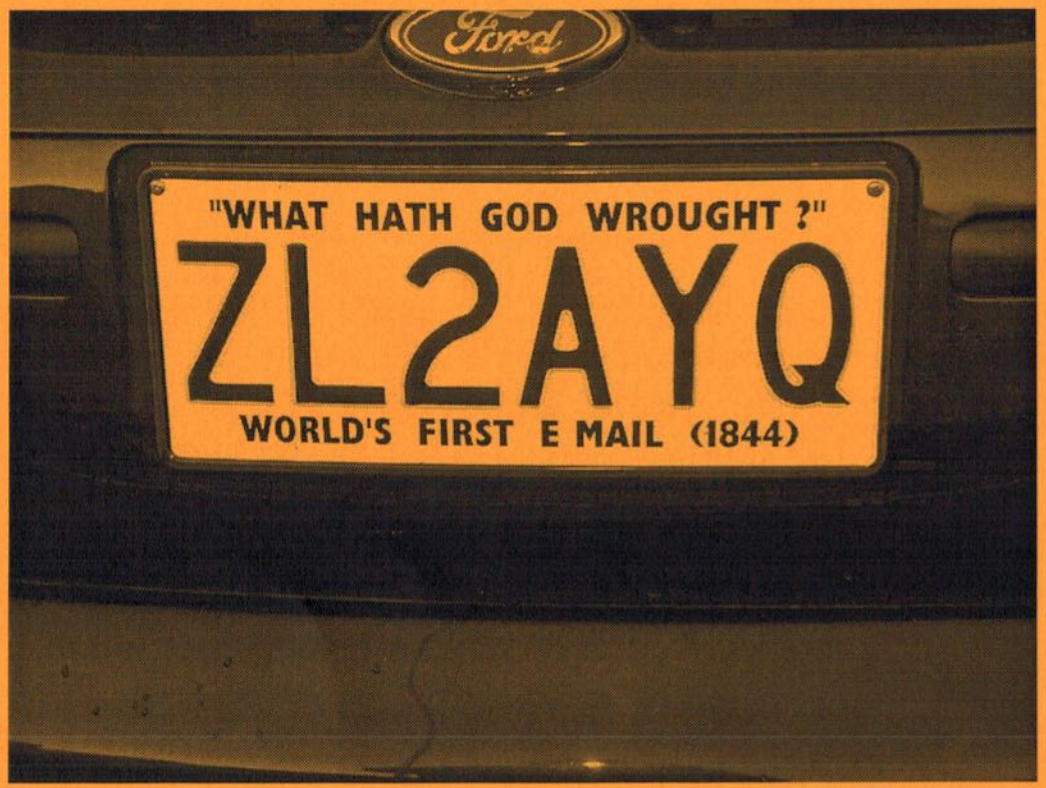

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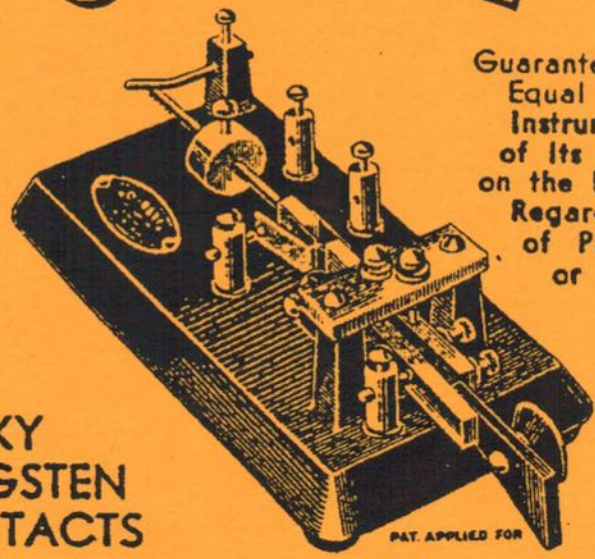

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