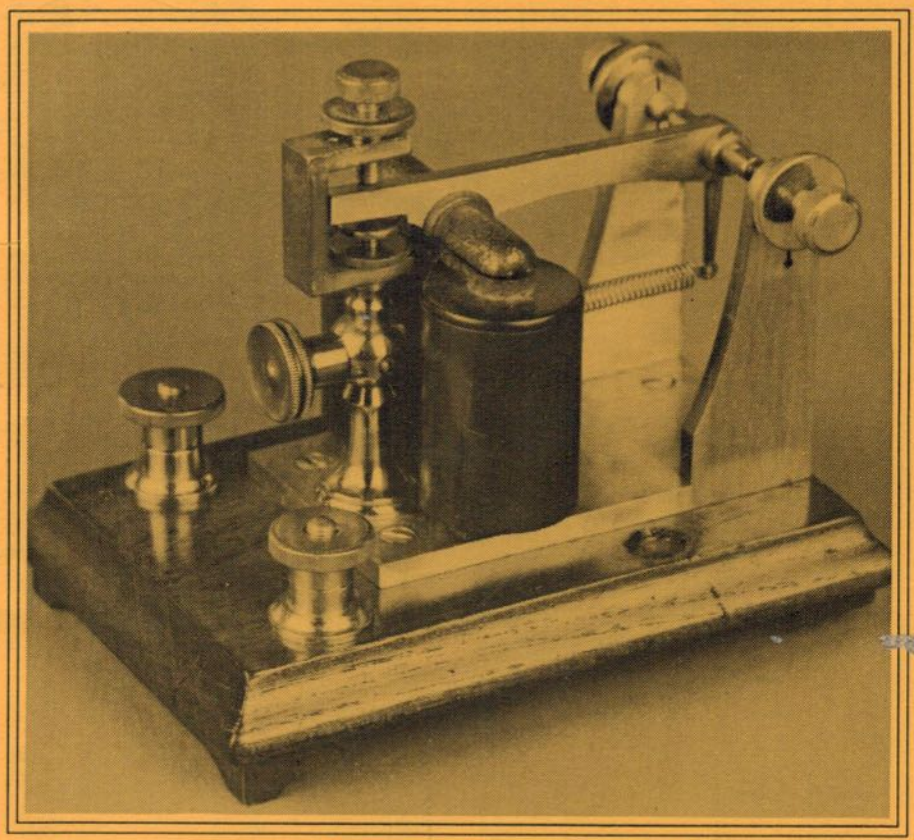
Number 20 – Summer 1991

# Morsum Magnificat



Magazine for Morse Telegraphy

# Morsum Magnificat

*magazine for morse telegraphy*

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

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***PLEASE NOTE CHANGE OF ADDRESS***

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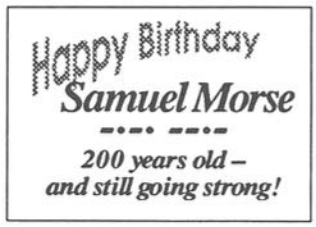
**ON OUR FRONT COVER**
Restored early GPO sounder, marked GPO 1444
Restoration/Photo by Ian Gurton G0CPN

# Comment

Readers will be sorry to hear that Tony Smith G4FAI has recently been involved in an argument with a London bus, which has left him somewhat battered and bruised, and with several cracked ribs. At the time of writing (end of June) he has been released from hospital and is now recuperating at home. I know that you will all join me in wishing him a speedy and complete recovery.

The various activities in celebration of the 200th anniversary of Samuel Morse's birth seem to have gone off very well. I was sorry not to have been able to get on the air on the day, or to get over to Maassluis, due to having been manning the *Radio Bygones / Morsum Magnificat* stand at the RSGB convention at the NEC in Birmingham that weekend.




However, we did mark the occasion in a small way with a large 'birthday-card' banner behind the stand (reproduced here), which drew considerable attention from the visiting crowds and featured in not a few photographs.

Due to recent heavy demand for past issues of *MM*, we have dropped the rule that all new subscriptions had to run from the autumn of one year to the summer of the next – we just couldn't supply the back issues to make it work any longer! New subscribers can now sign up at any time, but the subscription rates will still be reviewed each summer, which is the time when most of you will be due to renew.

This year, we've managed to keep increases down to around 6 per cent, which shouldn't make too big a hole in your bank balances, even in these straitened times. We look forward to signing you all up for a further year of your favourite Morse magazine!

*Geoff G3GSR*

# Contents

*MM Issue No. 20*



***PLEASE NOTE CHANGE OF ADDRESS FOR EDITORIAL AND SUBSCRIPTIONS DEPARTMENTS***
***(see opposite)***

# News

## Novice Morse Test Announced

Britain's Radiocommunications Agency announced, on June 14, details of the new 5wpm novice Morse test. A brief summary of the test is as follows:

| Test | Minimum No. of characters | Approx. duration of test | Max No. of errors | Speed of test |
|---|---|---|---|---|
| Sending | Letters 75<br>Figures 5 | 3 minutes | 4 corrected | Not less than 5wpm overall |
| Receiving | Letters 120<br>Figures 7 | 6 minutes | 6 uncorrected | 5wpm, with 12wpm character speed |

Full details of the new test will be included in the next issue of *MM*.

## Hungarian Successes in German Championships

Top three results in each class of the 1991 German Telegraphy Championships are as follows. (Full results available from T.S. on receipt of s.a.e.):

*Receiving letters (14 entries)*

1. HA3NU (Hungary) – 220 lpm, 4 faults.
2. HA3FO (Hungary) – 210 lpm, 2 faults.
3. HA3NS (Hungary) – 200 lpm, 2 faults.

*Receiving figures (15 entries)*

1. HA3NU (Hungary) – 300 fpm, 4 faults.
2. HA3NS (Hungary) – 290 fpm, 3 faults.
3. HA3OV (Hungary) – 270 fpm, 2 faults.

*Receiving mixed characters (9 entries)*

1. HA3FO (Hungary) – 170 cpm, 3 faults.
2. HA3NS (Hungary) – 150 cpm, 4 faults.
3. HA3NU (Hungary) – 150 cpm, 5 faults.

*Reading by ear (6 entries)*

1. DL6MAA (Germany) – 370 cpm.
2. DL1SBR (Germany) – 350 cpm.
3. DL8LBM (Germany) – 300 cpm.

*Keying (12 entries)*

1. HA3NU (Hungary) – 189 points.
2. HA3OV (Hungary) – 180 points.
3. HA9RX (Hungary) – 179 points.

Details of keying speeds not received.

*Info from DL2FAK via* EUCW Bulletin

**Propagation Data Bulletins in CW**

Regular bulletins will commence soon on 3.8123MHz, under the callsign GAM1, providing details of the current sunspot count, solar flux, magnetic index, etc., similar to the Ursigrams at one time emanating from the Meudon Observatory in France.

The service will be part of the National Radio Propagation programme. Data will be provided from the World Data Centre at the Rutherford Appleton Laboratory, and transmission will eventually be in both A1A (CW) and F1B (FSK).

Initially, transmissions will be from the QTH of G3DME at Crowborough in Sussex, pending the acquisition of a long-term permanent site. To enable the geographical coverage of the service to be assessed, reception reports will be welcomed by G3DME, QTHR.

**MEGS Formed**

An inaugural meeting of the Morse Enthusiasts Group Scotland (MEGS) was held in Glasgow on 31 January 1991, under the chairmanship of George Allan GM4HYF. The idea is to have a 'club of the air' to foster and encourage the use of Morse at all levels. The group applied for the permanent call GM0RSE, hoping to launch it during the Morse bicentennial year. They were advised by the Radio Amateur Licensing Unit, however, that this call is not expected to be available as a normal allocation until January 1992.

The four founder-members of MEGS provide slow Morse practice on 2 metres under the RSGB call GB2CW, Monday to Friday, and the group hopes to keep in touch with the Morse learners when they become 'A' licence holders. Towards this end, MEGS 'meets' informally as a net on 145.275MHz on Thursdays from 19.30 to 21.30 hrs local time.

Several members are QRP devotees, but while the group will be

encouraging this aspect of amateur radio it also hopes to appeal to a wider spectrum of CW enthusiasts, both licensed and unlicensed. Enquiries about MEGS should be addressed to the Chairman, George Allan GM4HYF, 22 Tynwald Avenue, Rutherglen, Glasgow G73 4RN, or to the Secretary, Stewart Spence GM3YCG, 90 Simshill Road, Glasgow G44 5EN.

### *QNC!* Launched

A group of amateur CW enthusiasts in Oregon, concerned about the effect of the new no-code licence in the USA, have launched a quarterly journal, *QNC!* to fly the flag for CW. Plans for the new journal centre around general CW activities, QRP, Elmering, and home-brew projects, without forgetting the adventures of earlier days. A QRP Autumn Challenge will be held later this year. See details below.

The first issue of *QNC!*, Jan-Feb-Mar 1991, is an interesting and readable mixture with articles on QRP; home-brewing (where to get parts in the USA); teaching CW; a book review; a keyer review; a 'miracle' antenna; a nice story about a 91-year old amateur who has just given his grandson his original key, a used key from the Civil War; and a tribute to the 'Elmer of the Quarter' (for those unfamiliar with this term, an Elmer is someone who teaches the skills of amateur radio, helping students in many ways along the path to success).

The Editor of *QNC!* is Scott Laughlin N7NET, 85000 Laughlin Road, Eugene, Oregon 97405, USA. Subscription for 4 issues is $7.75 USA, and $13.45 overseas (airmail). T.S.

### *QNC!* Autumn Challenge

*QNC!* announces its first annual 'QRP Autumn Alphabet Challenge', the basic objective of which is to encourage contestants to conduct QSOs with substance. The rules are simple: 1 – Maximum power output 5 watts or less. 2 – All letters of the alphabet (A to Z) must be represented on no more than 15 QSL cards from any part of the world. 3 – Each contact must have lasted not less than 20 minutes in duration.

The competition begins at 0001 GMT on the first day of Autumn and will cease at 2359 GMT on the last day of Autumn. Contestants need not be subscribers to *QNC!*, but a $4.00 fee is necessary to cover the costs of postage and certificates, reduced to $3.00 for registration in advance. Checks or money orders (US funds only) should be payable to Scott B. Laughlin.

The aim of this ingenious Challenge is to provide an adventure rather than a contest and everyone completing gets a certificate. *QNC!* comments 'Contests seem to focus on those who can afford the most up-to-date gear,

leaving out the youngsters who lack support on the home front. Our challenge is equally affordable to the paper boy as it is to the guy down the street who has it all. However, a telegraph key will be awarded to the earliest postmark. So, use your time well!'

Entries, and all inquiries about this event should be sent to *QNC!*, 85000 Laughlin Road, Eugene, Oregon 97405, USA.

**UCWC New EUCW Member**

The USSR Radio Telegraphy Club has joined the European CW Association. The motto of the club derives from the words of the late Ernst Krenkel, RAEM, 'Any amateur radio operator without proper knowledge of CW techniques is a radio-invalid'.

Requirements for membership of UCWC are:

Correct CW operation
Purity of CW signals
Helpful attitude on the amateur bands
Integrity within the licence limitations in everyday activity and during contests
Reliability in exchanging QSL cards.

Membership of the club is open to all amateur radio telegraphers world-wide. Full details are available from UCWC HQ, Vladimir Stepanenko UB1RR, PO Box 28, Chernigov-Postamt, 250000 Ukraine, USSR. (Send 2xIRCs)

*Info from* EUCW Bulletin

**Higher G–CW Power Confirmed**

The Radiocommunications Agency of the DTI (Britain's licensing authority) announced a number of revisions to the amateur radio licence on 5 April 1991. One revision relaxes the regulations for operating at 50MHz to permit mobile use, and horizontal polarization of base antennas.

As forecast in MM18, a further revision results in higher power being available to British CW stations. The previous limit on the 3.5 to 28MHz bands, for example, has been increased from 20dBW (100W) to 26dBW (400W). Permitted CW power output on all bands, which was previously measured by carrier power, is now measured in peak envelope power (PEP), making no distinction between SSB and CW transmissions.

The new authorised powers for the various bands are: 1.8MHz – 15dBW; 3.5 to 28MHz – 26dBW; 50 to 52MHz – 20dBW; 70MHz – 22dBW; 144MHz – 26dBW; 430 to 432MHz – 16dBW; 432MHz and above – 26dBW.

### RAYNET CW Procedures

Britain's Radio Amateur Emergency Network (RAYNET) is to include a set of procedures for handling messages sent by CW in its new manual. These include general operating notes and suggested working frequencies.

It is hoped that the adoption of these procedures by all groups will provide a common and practical basis for the exchange of traffic across the UK on occasions when CW is the most appropriate mode.

*Information from* Radio Communication, *journal of the RSGB, May 1991*

### Exit Heathkit

The Heath Company, a leader in high quality electronics for over forty years, is leaving the amateur radio marketplace and will no longer market most of their famous Heathkits at all. Their new direction will be products aimed at home automation and the self-study education market.

A 'Heathkit Sale' catalogue has just been published to close out the line. Among other products the entire amateur radio line is being offered at extremely low prices.

Technological advances combined with lower costs of assembled electronic products have reduced the kit-building market. More and more of today's consumers have less time for kit projects and are more interested in finished goods.

W5YI REPORT, *1 May 1991*

### Straight Key Week

FISTS CW Club' annual Straight Key Week will be held from 0001Z, Sunday, September 1, to 2359Z, Saturday, 7 September 1991. This event is open to non-members, and offers a good opportunity to work towards the club's Century Award. Nominations are invited for the best 'fist' worked during the week.

Further details and/or information about FISTS, from Geo Longden G3ZQS, 119 Cemetery Road, Darwen, Lancs BB3 2LZ, England.

### Sounder Drawings Available

Dennis Goacher G3LLZ has prepared a set of drawings of an original ATM polarised sounder (500 ohms) which is in the Great Western Railway Museum in Swindon, Wiltshire.

For those interested, he can supply a set of these drawings for £1.50 to cover cost of postage, etc. Photographs are also available at extra cost. Write to Dennis Goacher, 27 Glevum Road, Swindon, Wilts SN3 4AA.

**Code Exemption Extended**

Where they can legally do so, the FCC is relaxing its rules which require radio officers with Morse code proficiency aboard ocean-going vessels.

The Commission recently amended its rules to permit small passenger ships of under 100 gross tons to operate under the general exemption from the Manual Morse code radio-telegraph station requirements beyond the current 100 nautical mile limit.

W5YI REPORT, *15 June 1991*

**Controversy over Morse Examinations for Handicapped US Amateurs**

Following a recent FCC decision that handicapped amateurs may apply for exemption from the amateur Morse test, Dr Edward Ludin K2UK, president of the Medical Amateur Radio Council, Ltd, and two other doctors published the following letters in the March issue of *New Jersey Medicine*, journal of the New Jersey Medical Society.

'... For political reasons the FCC has decreed that 'handicapped' individuals may request waiver of the requirement to learn Morse code in order to achieve a certain class of license.

'Of course, he must submit a 'physician's certificate' stating that due to a severe handicap under the 1988 Developmental Disabilities Act, 29 USC 706 (15)(A)(III), the examinee is unable to meet the 13 or 20wpm requirement. Further, he must submit a release allowing FCC access to appropriate medical records.

'Aside from the obvious considerable controversy that this has created among the amateur radio community, the physician is now obligated to try to understand what this means. There is a large handicap organization based in Minnesota which, among other activities, encourages and trains individuals to become a licensed amateur radio operator, regardless of their handicap.

'Overcoming the handicap in order to achieve this goal is part of the individual's rehabilitation and life style. This organization, known as Handi-Hams, is very much against this waiver procedure.

'May I suggest that the average physician in the state of New Jersey does not know what the term 'severely handicapped individual' means in accordance with the above identified Act, nor could he be expected to know what effect these disabilities may have on learning the Morse code. Thus, the physician may feel that he will do his patient 'a favor' by signing such a certificate just to accommodate his patient's request.

'I strongly urge the physicians of the state of New Jersey not to summarily sign such a certificate. Rather, if you are asked about this, please request from a local amateur radio operator, preferably another physician, appropriate advice. Aside from myself, there are many licensed physician amateurs in this State...

'I hope that other physician hams will let their fellow physicians at the local level know of their availability to assist in this regard.

(Signed: Edward N. Ludin, MD, K2UK.)'

Under the heading 'Don't Sign the Letter', Dr Christine Haycock WB2YBA wrote in the same issue, 'Totally handicapped quadriplegics have mastered these requirements as well as blind or deaf individuals, and the psychological benefits of this achievement are immeasurable.

'There are, however, some rare instances where an individual cannot meet this goal, hence the FCC edict. Only a person familiar with both medicine and amateur radio can make this determination correctly.'

A further physician, Dr Morris Soled W2NXS, wrote, 'Ham radio is a popular hobby among physicians, and you should be able to find a member of your staff to answer further questions before being a 'nice guy' and signing a note you do not understand.'

W5YI REPORT, *15 June 1991*

**CW Activity Calendar**

While care has been taken in preparing this information it is offered as a guide only and prospective participants should contact the activity organisers to obtain the rules and check that the dates are correct. Readers are invited to send *MM* information about other CW activities for inclusion in this listing.

***July***

Second weekend. SARTS SEANET contest.
Third weekend. AGCW-DL Summer QRP contest.
Third Sunday. RSGB Low power field day.
Last weekend. RCV YV DX contest.

***August***

Second weekend. DARC WAEDC contest.
Third weekend (?). KCJ Keymans (JA) contest.
Last weekend. JARL All Asia contest.
Last Sunday. RSGB ROPOCO 2 contest.

***September***

1–7th. FISTS Straight Key Week.

First Sunday. BFRA LZ DX contest.
4th. RSGB 144MHz cumulative contest.
7th. RSGB 144MHz cumulative contest.
Third weekend. Scandinavian Activity contest (CW section).
20th. RSGB 144MHz cumulative contest.
22nd. RSGB 50MHz contest.
Fourth Saturday. AGCW-DL VHF/UHF contest.
Fourth Sunday. SARL ZS HF contest.
27–29th. OK QRP Group/G-QRP Club East to West QRP Weekend.
Last weekend. GPCW (Brazil) contest. Restricted to foreign stations.
Last weekend. CRRL CAN-AM contest (Nth Am. entrants only).

**CW Coherer Pills**

The Westlake Amateur Radio Club in Terabla, Australia, is marketing pills at 25 for 50 cents post paid. They have been tested by a qualified chemist and certified as completely safe when used as recommended. They taste quite nice, and when taken just before sitting down to receive Morse code the user's comprehension of the dots and dashes is increased tremendously. They work through a complex chemical reaction within the brain; the concept is quite common within the medical profession but this is probably the first time it has been applied specifically to improving reception of the code.

*From* The Canadian Amateur Radio Magazine, *April 1991*

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# Readers' ADs

**Can You Help?**

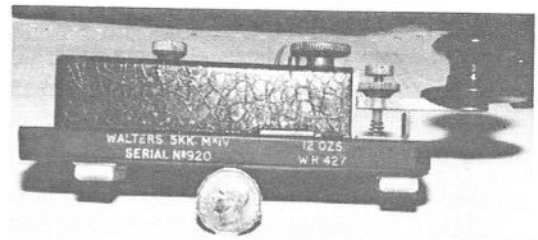
A reader wishing to complete his file of Morsum Magnificat asks if anyone can supply him with a number of back issues, which are all now unfortunately sold out. The magazines required are: Numbers 1, 3, 5, 6, 7, and 11–16.

If you're prepared to let your copies of these issues go, please contact Keith Dickens, 26 Knaves Castle Avenue, Brownhills, West Midlands WS8 7PN, telephone 0543 360372.

**Wanted**

Information on your Vibroplex keys. Need serial number, street address of Vibroplex Company on nameplate and model if known. Model is sometimes rubber-stamped on underside of base. John N. Elwood WW7P, 5716 North 34 Drive, Phoenix, AZ 85017-1911, USA.

# Comet Key




*Historic Walters Mk IV key used on prototype DH106 Comet Mk 1, G-ALVG*
*Photo: G4SIE*

The world's first jet airliner, the de Havilland Aircraft Company's DH106 Comet, was conceived in 1946 and the prototype Mk 1, G-ALVG, made its maiden flight on 27 July 1949. Nine Mk 1s were supplied to the British Overseas Airways Corporation and ten Mk 1A's to foreign operators.

In May 1952, BOAC introduced the world's first jet passenger service, from London to Johannesburg using 36-seater Mk 1s, halving the time taken by rival aircraft and offering unprecedented standards of comfort. As was common on long-distance routes of that time (see 'Flight Radio Officer', MM6 & 7), the Comets carried radio officers, and communications were by Morse code .

In May 1953 the first of a series of tragic accidents occurred which were later found to be caused by metal fatigue. All Mk 1 Comets were grounded and all airline orders for the new Mk 2, then under construction, were cancelled.

The Walters Mk IV Morse key, Serial No. 920, illustrated, was used in the prototype Mk 1 Comet (Construction Nr G51), G-ALVG, which was scrapped in July 1953. This unique and historic key is part of the collection of Lee Grant G3XNG, who was given it by the Airfield Signals Officer at Hatfield around 1971/72. Lee notes that the design of the rear pedestal appears almost identical to that of the early 1900s Walters key illustrated in MM15, page 27. It is, he says, 'a pleasant key to use.'

For the record, four modified Mk 1A's re-entered service, two with the Canadian Air Force, and two as Test Beds. Fifteen Mk 2 Comets were eventually completed. Thirteen of these were supplied to the RAF, ten of which replaced the long serving Valettas of Transport Command's No. 216 Squadron, to become the RAF's first jet-powered transports.

Much-modified Comet Mk 4s successfully re-entered passenger service in 1958 flying 27 000 000 miles and carrying 327 000 passengers in their first two years of operation, and the Comet finally went out of passenger service

with Dan Air in late 1980. The total production of all versions of the Comet was 113 aircraft.

It is not known if any complete Mk 1s have survived. The fuselage of Mk 1A, F-BGNX, the twentieth Comet built, and the first jet airliner flown by Air France, is in process of partial restoration at the Mosquito Museum, near St Albans, and complete Mk 2s and Mk 4s can be found at other museums including the Imperial War Museum's Duxford Airfield.

*Comet Mk 1A, F-BGNX (fuselage only), at the Mosquito Museum.*

Apart from various aircraft, including the first Mosquito (which was built on the site), this small friendly museum has an interesting collection of both army and air force radio equipment mainly from WWII It also operates amateur radio station GB3MAM from time to time.

The museum is at Salisbury Hall, London Colney, near St. Albans, Herts, and is open on Sundays and Bank Holidays, from Easter to October, and Thursday afternoons, July to September.

The Mosquito museum has a Standard Radio 4-LRU-50F transmitter, 'as used on Comets', on display within the aircraft, but not located in the radio position. It would be interesting to know if any museums display the original CW equipment of the Comet in its proper location, and at what point CW for communications was discontinued on this aircraft. Perhaps some of *MM*'s aviation-orientated readers could provide this information? ✚

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## Dummy Key

With reference to the Signallers' Dummy Key in MM15 (front cover and page 28), I recently acquired one of these at a local antique auction for £5. The key is marked as follows: KEY DUMMY SIGNALLERS MKII, Wm McGEOCH & Co LTD, 1916, No 15114.

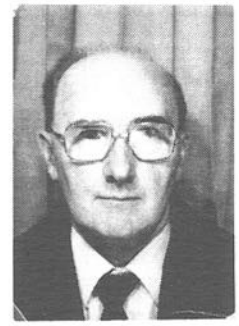
I saw a similar type of key for sale for £50!

*John Pears G0FSP*

# What became of

## 'INDIA NOVEMBER TANGO BARRED'?

*by Ron Wilson G4NZU*



I found the article 'What Became of EY EN TOC Barred?' by G3GMM (MM18, p.14) most interesting and informative, but it gradually made me hot under the collar, finally making me get my soap box out!

First, I thought 'K' was an invitation for ANY station to reply. In the examples given, however, a specific station was required to reply and KN would appear to have been more appropriate.

Secondly, would not the examples quoted have been better served by using the BK convention when asking for a reply to a specific question? This would avoid the necessity of going through the rigmarole of all the callsigns each time. Thus the last example given, under 'some amateur uses' (C/S de C/S INT UR NAME K), could be NAME? BK.

The article produces an overall reaction, 'What, another set of conventions?', and thus raises the whole question of procedures and the signs associated with them.

### *RAE Manual* Sufficient?

It should be remembered that those coming into amateur radio with no service training, a majority nowadays, and that includes me, have no 'bible' of operating procedures other than the RSGB's *Radio Amateur's Examination Manual* which, I maintain, is quite sufficient for the purposes of the Amateur Service.

As a result, these 'service forms' are unknown to us. We can pick them up and hopefully use them in the proper places when they are used by other stations or when some club member lays them down. Hence some pick up one set of 'conventions' and others pick up another from those trained in a different branch of the forces.

These 'conventions' are advanced with complete enthusiasm by their proponents as being the 'only' way, irrespective of whether they are correct in absolute terms, or indeed appropriate to the needs of the amateur. In this particular case, I ask why we have to warn the recipient that a question is

coming? As far as I am aware, the only language which does this is Spanish and it is certainly not a feature of English, the recognised language of amateur radio communication.

**No Agreed Procedures**

I suspect there is NO universally agreed set of signals which are appropriate to the amateur service. What we have at present appears to be an unorganised set of pseudo-conventions propounded by individuals over a period of time which have passed into the customs of the hobby.

We hear the dreaded $\overline{VE}$ at the beginning of an over; we get IMI implying 'I say again', instead of the shorter II, thus causing confusion with the code for the question mark. It is interesting to note that $\overline{IMI}$ has, in some areas of the UK, become synonymous with the error signal. Certainly it indicates that an error has been made and that a correction is coming next, but one has to ask if $\overline{IMI}$ is correct for this purpose when the 8-dit error signal is not only indicated in the *RAE Manual* but also in the instructions to candidates for the current amateur Morse test?

G3GMM's article also raises the question of exactly what I should be teaching the students in my Morse class. Should I drill them in a range of alternative procedures, a range which is not really necessary for amateur use? Surely not.

**Conglomeration**

It appears that the procedure signals heard on the amateur bands today are a conglomeration of signs perpetuated by operators who were trained in the Armed Forces and the Diplomatic Service, plus remnants from commercial telegraphy days.

G3GMM suggests the existence of a number of procedures, each peculiar to its own branch of the forces – together with the over-riding Allied Procedure. We may therefore presume that there were a number of different signals meaning essentially the same thing. Where, therefore, can we acquire information about the existence of various alternatives for individual operating procedures?

We must bear in mind that there are big differences between the needs of the 'professional services' and the amateur service. In our hobby we are communicating in a form of English, a language in which a high proportion of the words we speak are redundant to the essential meaning. I can say 'My name is Ronald and I live in Nottingham', but in CW this becomes 'Name Ron QTH Nottingham'. The CW has exactly the same information

content, but with economy of effort and time; moreover, missed letters can be rescued from the context. This is in complete contrast, I presume, to the situation in the forces with its emphasis on accuracy of code groups and so on.

**Who Decides?**

Does the amateur service NEED alternatives, and who is to decide which are to be the 'approved' ones? (At the time of writing it would appear that the RSGB will have to approach this problem shortly in order to promulgate an approved set of procedures, Q-codes and abbreviations for use in the new novice licence Morse test.)

Provided the intention of a message is clear, then surely that is sufficient. A critical consideration of the needs of the amateur service will reveal that there are only a limited number of procedure signs which are essential. Of course others may be useful but not essential. My own list of essentials would be as follows:

Any station to reply – K;
Named station to reply – $\overline{KN}$;
End of message – $\overline{AR}$;
End of work – $\overline{VA}$;
Error – 8 dits;
Stroke;
Question mark;
Break sign (=) or $\overline{BT}$ as a general punctuation sign standing for
a comma or full stop;
All received – R;
Repeat – II;
and (possibly)
Closing down signal – CL.

**How Many Q-codes?**

Additionally there would be a restricted list of Q-codes – how many does the amateur service really need? – plus one or two odd ones such as 3R5 with the R standing for the decimal point. I suspect this list may cause a few more soap boxes to be mounted!

Yes, I am stirring things up. While I am very interested in the variations suggested I do get somewhat frustrated by their various proponents expounding at great length without actually telling us why their pet methods are better than the rest, particularly those indicated in our only source – the *RAE Manual*!

In this matter I am as guilty as the rest, though in defence I suggest that my ideas have the merit of simplicity while retaining the ability to communicate with precision. ✚

*This article raises some important issues for the amateur CW fraternity, reaching far beyond the question of 'Ey En Toc barred', and* Morsum Magnificat *will welcome further views on the subject. If there is less need for Q-codes and other recognised abbreviations today, where does that leave CW's claimed advantage as an international language? Does the UK's* RAE Manual *contain all that is required in terms of abbreviations and procedures? Is there a need for a definitive International Amateur Radio Operating Manual? If so, who should prepare it, what should it contain and how could all the conflicting views be reconciled? Or are there so many different views now that it is, in fact, too late to obtain agreement on anything? – Ed.*

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# Bunnell Wasn't There!

Re 'Civil War Telegraphy' by Don deNeuf (MM18, p.21), Jesse H. Bunnell was never one of the operators in the telegraph office located on the second floor of the War Department. He was an operator with the Military Telegraph from 1861 to 1864, stationed originally as a telegrapher at one of the bridges leading into Washington.

He served later in the headquarters of the Army of the Potomac with Generals McClellan and Burnside, then with the army in the Cumberland with Generals Rosecrans, Thomas and Sherman, coming through the battles of Chickamauga and Missionary Ridge. He then became manager of the field headquarters of General Sherman's entire army. My authority for this statement is Plum, W.R., *The Military Telegraph during the Civil War in the United States*, published in two volumes, 1882.

The legend that Jesse Bunnell was frequently visited in the telegraph office at the War Department by President Lincoln to keep abreast of war developments is widely accepted, but was in fact created by the Bunnell Company, and used for advertising their products, in the 20th century.

My apologies to my old and valued friend, the late Don deNeuf (who had every right to believe the story), for having to put the record straight.

*Louise Ramsey Moreau W3WRE*

# IARU Region 1 HST Championships 1991

The IARU Region 1 High Speed Telegraphy Championships this year will take place at Neerpelt, Belgium, on October 4–6, organised by UBA (Union Belge des Amateurs-Emetteurs). Some of the rules were changed after the last Championships at Hannover in 1989, especially those for the Open Class competion, and a brief summary of the new rules is given below.

**Teams and Categories**

Each national team may comprise three to six members, with no more than two 'seniors' (males over 18 years); two 'senior YL's' (female over 18 yrs); one 'junior' (male, up to 18 yrs); and one 'junior YL' (female, up to 18 yrs). Each team will have a designated teamleader, who may or may not be a competitor. A team may also be accompanied by a trainer, an interpreter, and an HST International Class Referee serving as a member of the International Jury.

The Open class has five categories.

(a) 'Youngsters', up to 15 years of age. (b) 'Juniors', up to 18 years. (c) 'Seniors', male, older than 18 years, (d) 'Senior YLs', female, older than 18 years and (e) 'Veterans', 46 years of age or more.

**The Competitions**

The Championships consist of two competitions.

The HIGH SPEED competition comprising four tests:

(a) Reception of letter messages.

(b) Reception of figure messages

(c) Transmission of letter messages

(d) Transmission of figure messages.

Reception messages are sent at a progressively increased speed starting with '100 marks/min' for letters and '150 marks/min' for figures, with

competitors withdrawing as the speed becomes too high for them. Messages may be recorded by hand or by typewriter.

For transmission, either straight or electronic keys (adjusted to a dot/dash ratio of 1:3) may be used. Two letter messages and two figure messages are provided and a contestant may attempt each test twice by using the different messages, declaring the better attempt to be his/her entry for the test.

The OPEN CLASS competition comprises three tests:

(a) Reception, with copying by hand or typewriter, of plain English and mixed text messages of progressively increased speed starting at '100 marks/min'. Maximum 5 errors permitted. The winner in each category will be the competitor with the highest speed and the least number of errors.

(b) Reception, with memory copying, of plain English text about amateur radio activity, with progressively increased speed starting at '175 marks/min'. Text to be written down during 10 minute period immediately after transmission. One error only permitted. The winner in each category will be the competitor with the highest speed.

(c) Transmission of plain English and mixed text during a five minute period. Maximum five corrections permitted. Only one attempt allowed. Winner in each category will be the competitor who transmits the 'greatest number of marks' in the time allowed.

**Entering the Championships**

As mentioned in the last issue of *MM*, even if a national society does not organise a team entry it is still possible for individuals to enter the Open Class competition.

Those wishing to enter the Open Class should inform their IARU Region 1 national society of their intention to enter, and in which category, as soon as possible as societies are required to send this information to reach UBA before August 4, i.e., two months before the championships begin.

**Awards**

The national team gaining first place will win the title 'Regional Team Champion' and be awarded the Memorial Prize and Certificate. Members of the team will receive gold medals and certificates.

Teams gaining second and third places will receive certificates, and their members will be awarded silver and bronze medals respectively, together with individual certificates.

Open Class competitors gaining first places on their categories will win the title 'Regional Champion' and will be awarded gold medals and **20>**

# Club Profile – 2

## AGCW-DL
## (Telegraphy Activity Group – Germany)


**Membership, Aims and Definition**

AGCW-DL has over 1700 members. It is a founder member of the European CW Association, 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 President is DJ5QK, Otto A. Weisner, the founder of AGCW-DL.

The club defines radiotelegraphy as radio traffic by key, using Morse code, the encoding and decoding of which is not carried out by apparatus of any kind but directly by an operator, for which purpose an active command of the Morse code is an indispensable pre-requisite.

**Contests**

There are twelve internationally open contests or CW parties throughout the year. The Happy New Year Contest is on January 1 The New Year's contest is also held on VHF/UHF. The Winter QRP Contest is on the first complete weekend in January at present, although due to be changed to another weekend in the future. 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, and a VHF/UHF contest on the third Saturday of March. A QRP/QRP Party is on May 1 and another VHF/UHF contest on the fourth 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 has been changed to the first Saturday in September, and a Home-brew and Old-Time Equipment Party (HOT-Party) is on the third Sunday in November. A national contest, for German stations only, is on October 3.

### Awards

AGCW issues nine different awards, which are 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, 144MHz and above.

**The W-AGCW-M award** is for QSO's with AGCW members only, scoring 1 point for contacts with members in own country, 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.

### News From AGCW

The club magazine, *AGCW-DL INFO*, published twice a year, is in the German language with some 'reprint' items in English. CW news bulletins are broadcast on the first Sunday of the month at 0800 UTC, on 3.555–3.560MHz and on the third Sunday, at 0800 UTC, on 7.025–7.030MHz. 80m transmissions are in German and 40m in English.

The frequency ranges indicated are to allow the transmitting stations to find a clear frequency, but no transmissions take place on the internationally agreed QRP frequencies of 3.560 or 7.030MHz.

### Other Activities

Every Easter, AGCW holds an international CW Meeting at Budingen in Germany. CW operators and 'CW minded' SWLs from all countries are invited to attend this meeting which has been held annually since 1974.

There is an AGCW net every Monday at 1900 CET/CEST around 3.555MHz, and a YL CW Round Table on the second Tuesday of the month, at 2000 CET/CEST, on 3.550–3.555MHz.

**Membership and Further Information**

There are two classes of membership. Full members (radio amateurs in Germany only) pay an enrolment fee of DM 5.00, and an annual subscription of DM 10.00. They have voting rights, and receive the club magazine.

Associate members (foreigners only) pay no fees, have no vote, and do not receive the magazine. Associate members receive a membership certificate on joining the club.

Applications for membership and all enquiries about AGCW-DL should be addressed to: DJ5QK, Otto A. Weisner, Feudenheimer Str. 12, D-6900 Heidelberg, Germany.

*(Our thanks to DJ5QK, Otto A. Weisner, for providing* MM *with up-to-date information on AGCW-DL)*

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**HST Championships 1991** ***(continued from p.17)***

certificates. Those in second and third places in their categories will be awarded silver and bronze medals respectively together with certificates.

**Summary Only**

The above information is a very brief summary of the recommended Rules for the HST Championships and of necessity many details have been condensed or omitted. This summary should not be treated as an official description of the Championships. The full rules for competitors are obtainable from all IARU Region 1 national amateur radio societies.

**Costs and Further Information**

The competition will take place on October 4 and 5, with the day before and after reserved for arrivals and departures. The organising committee has tried to keep the costs for participants to a minimum. Cost will be Bfrs 5000 (US $150, DM 250, Hfl 275, or FF 850). This includes the entry fee and a single room for three nights and meals.

Further information is available from Anton Mandos ON6NL, Truyenstraat 26, B-3640 Kinrooi, Belgium (Tel: 32–11701349). Radio amateurs wishing to participate in the championships are asked to notify ON6NL as well as their IARU national society.

**Let Us Know How You Get On!**

If any reader of *Morsum Magnificat* attends or takes part in the Championships please send a report to Tony Smith as quickly as possible afterwards so that details of the results can be included in an early issue of *MM*. ✚

# From 'Sprog' to Morse Examiner

*by Mike Davidson G4WRU*

Along with many others back in the 1950s, at the age of 18, I was conscripted into the armed forces for two years National Service. I applied to join the RAF, having always been interested in aviation and having hero-worshipped the flying aces of the first and second world wars.

Eventually, after a medical examination and interviews asking why I had chosen the RAF, my posting and travel warrant arrived. I only allowed my parents to see me off from our front door. I made my way by Underground to a main-line station in London. Many other lads were standing around with suitcases, and rather forlorn looks on their faces. Unlike today's 18-year-olds, this was probably our first time away from home, and from Mum and Dad.

On the train journey we all got to know each other in our carriage, and soon arrived at Bedford. After some jostling about, and some shouting from RAF SP's (police), we were herded into a coach and proceeded to RAF Cardington (which had, and still has today, two large airship hangars) to start our military careers.

After a short stay, and kitting-out, we were sent off to initial training camps for our 'square bashing'. I went to RAF Hednesford, Staffordshire, where it was a very wet and cold September.

**First Morse experience**

During six weeks of hard physical and drill training, at the end of which I was as fit as a fiddle, we were invited to choose a trade. One of my choices was wireless operator. One afternoon I found myself in a hut with other aspiring ops, and had my first experience of Morse code.

We wore headphones and listened to a series of two Morse symbols. We had to say whether the two symbols were the same or different. I must have done fairly well, as my posting at the end of square bashing was to a training school at RAF Compton Bassett. I became a U/T (under training) telegraphist, promoted from the lowest of the low, A.C.2 (Aircraftsman second class), to the exalted heights of A.C.1, with a wage increase of about three shillings (15p) a week.

Compton Bassett was a pleasant camp overlooking high rolling hills, with a white horse carved in one of them, deep in the Wiltshire countryside. Our time was spent mostly learning Morse code, signals procedure, and some electronic theory. Our instructor was a kindly Irish corporal who lived in a very small room at the end of our billet.

**Fully-fledged W/op**

I soon realised I had an aptitude for learning Morse and took pleasure in receiving and sending at faster and faster speeds. I 'passed out' as a full fledged W/op with a nominal speed of 18 wpm, although my actual speed was nearer 20/21 wpm.

*Mike Davidson operating GB0RAF at the RAF Museum, Hendon, 12 July 1986. Photo: G4FAI*

I was then indoctrinated into the Y section of RAF signals. After further training as a high speed telegraphist, I reached a nominal speed of 25 wpm and was posted to 367 Signals Unit at RAF Little Sai Wan in Hong Kong, just across the bay from Kai Tak airfield. I spent a pleasant 11 months there before flying back to RAF Lyneham in a D.H. Comet of Transport Command. I was then demobbed back into civvy street to complete my apprenticeship as a compositor.

**Interest re-kindled**

From that time on I had a lingering love affair with Morse code. If I was tuning a domestic radio I always tried to pick up Morse, although this was only beacons, weather reports, etc. Some years ago we bought my son a CB rig for Christmas, and this whetted my appetite for radio again.

I purchased a kit and constructed a short-wave receiver, and became an SWL. I joined the RSGB and the G-QRP Club, and listened mainly to CW QSOs. My speed came back to me. I studied for the radio amateurs' examination. This was not very easy, but I persevered and passed the exam in December 1983 with, much to my joy and surprise, credits in both papers. I did not take out a 'B' licence but applied for the Morse test straightaway. I was tested by a DTI examiner who, I suspect, was more used to testing professional ships' radio officers.

There were about eight candidates, including myself. We had to wait rather a long time, and the examination was carried out very formally. Even with the Morse experience I had, it was nerve-wracking and it must have been worse for the others. I passed the test and received my new callsign and licence on 5 March 1984. I have been enjoying amateur radio very much since then.

**New Testing Arrangements**

I wrote to the RSGB after my Morse test, saying that I thought amateurs themselves should be running these tests. This letter was ignored. In 1985, I was pleased to read in *Radio Communication* that this was now being arranged between the DTI and the RSGB, and I volunteered to be an examiner. After an interview with the then Chief Examiner, Neville Ianson, and his deputy, Ric Edmundsen, prospective examiners were given a Morse test at 20 wpm, and I was eventually appointed as an examiner for the Greater London area.

As a Morse enthusiast I am happy to be an examiner. I am glad of the opportunity to put candidates at their ease, to get as many through the test as possible, and to encourage them to use Morse on the air.

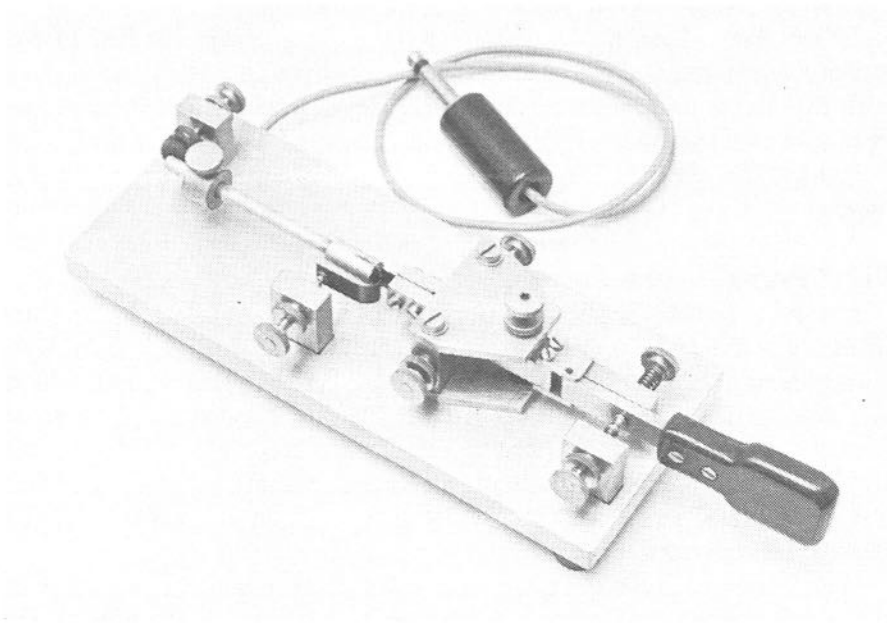
So that's my story – from 'sprog' wireless operator at 18 to RSGB Morse examiner at 49... **73, Mike**

*Mike officiated at his first testing session on 14 November 1986, when eight hopefuls took the new RSGB Morse test at Cambridge Park Methodist Church, London. True to his intention of putting candidates at ease, he even provided nervous aspirants with peppermints to suck during the test. Six passed the test and, he says, 'walked away with smiles of relief on their faces'.* ✚

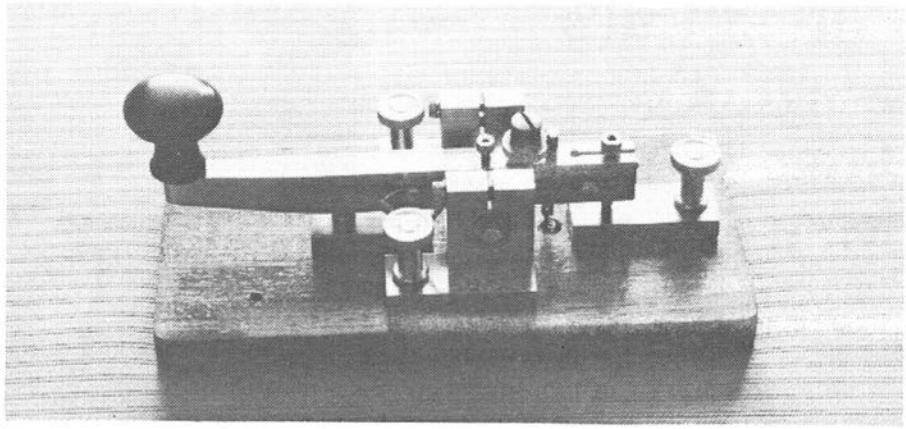
# Showcase

Featuring keys and other collectors' items of telegraphic interest.
If anyone can add to the information given please contact TS

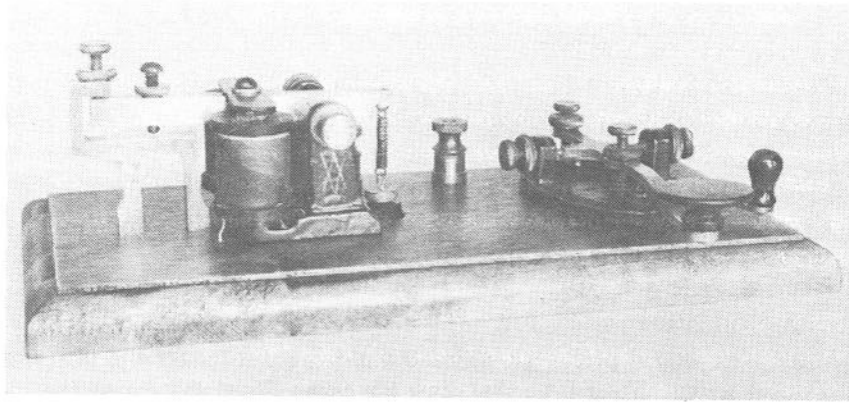
***You will find an extra helping of 'Showcase' photographs on the back covers of this issue***



*Home-made key from the mid sixties of all brass construction, apart from the paddle and contact springs. The contacts are from a P.O. relay. A good range of speeds can be obtained by adjusting the sliding weight position on the vibrating shaft. The base is 185x75x10mm, and the vibrating shaft is 80mm long. Most of the work was done using basic hand tools.*
*The key was in regular use for about 15 years 'until I was smitten by electronic keyers and paddles'*
*Maker/Photo: Reg Appleby G3INU*



*Home-made brass key, made from scrap brass. Base is mahogany, and the knob was turned from a piece of unknown but very deep brown wood by a local wood turner. All screws are stainless steel, and the tension adjuster is mild steel finished in a chemical black.*
*Contacts are silver, removed from a damaged circuit breaker. Total cost of key £3.00, plus 'a bit of scrounging', and not counting my time of around 20 hours. I cheated a bit on the centre bearing block, using a milling machine, but everything is hand finished and polished, then lacquered*
*Maker/Photo: Dennis Goacher G3LLZ*



*Restored MESCO (Manhattan Electrical Supply Co.) K.O.B. (key on base) practice set dating from the early 1900s*
*Photo/Restoration by Phillip Cleveland WT6P*

# Alfred Vail's Magnetic Friendship with Morse

## Part 1 – Partnership; development of invention; first public demonstration

*Alfred Vail*

### The Magnificent Machine

Samuel F.B. Morse is known as the father of the American commercial telegraph, but he would not have succeeded without Alfred Vail as his partner. History glorifies Morse but credits little, or nothing, to Alfred. The reasons are complicated, unfair and more than a little sad.

On 2 September 1837, Alfred visited his alma mater, the University of the City of New York, when he accidentally walked in on a private demonstration Samuel Morse was giving on his 'electro-magnetic telegraph.' Morse was transmitting a message, coded by numbers representing words, over one-third of a mile of wire coiled around the room. (See Alfred's own account of this demonstration, MM19).

Despite the awkward design and operation, he was quickly drawn to this 'magnificent machine' as if by its magnet. Fascinated by it, he persuaded his father, Judge Stephen Vail, and his brother George at the family's Speedwell Iron Works, in Morristown, New Jersey, to help him provide Morse with all the necessary assistance, mechanical advice, a workshop with tools and the money to perfect the telegraph.

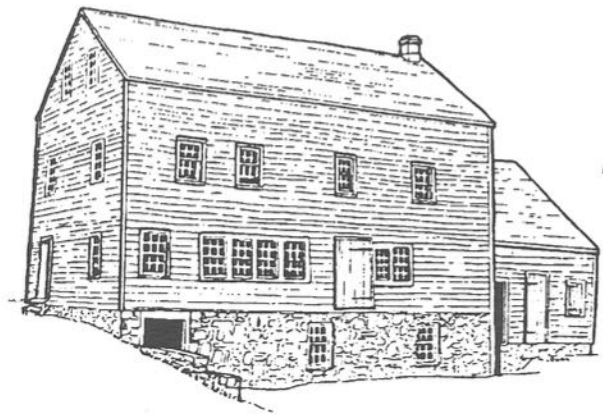
### Glowing Future

Morse, the skilful promoter, painted a glowing future for the telegraph. He needed $2000, a considerable sum for those days and an astonishing investment to request during a severe depression. Morse's own well-to-do brothers had refused to contribute. Yet the approval by Stephen and George is not as strange as it might seem.

Morse, after all, was the founder with his brother Sidney of the *Journal of Commerce*, which both the Judge and George read carefully. They were all Democrats, admirers of Andrew Jackson and his ideas, and Nativists, believing that the United States should rely on its own people's talents and resources instead of looking to Europeans for leadership. Furthermore, Stephen probably saw an opportunity to bring Alfred back to Speedwell after a long absence. George also backed the project with money and became Alfred's silent partner.

**Shipboard Talks**

The inspiration for the telegraph machine had come to Morse in talks with Dr. Charles T. Jackson while sailing from Le Havre to New York in 1832

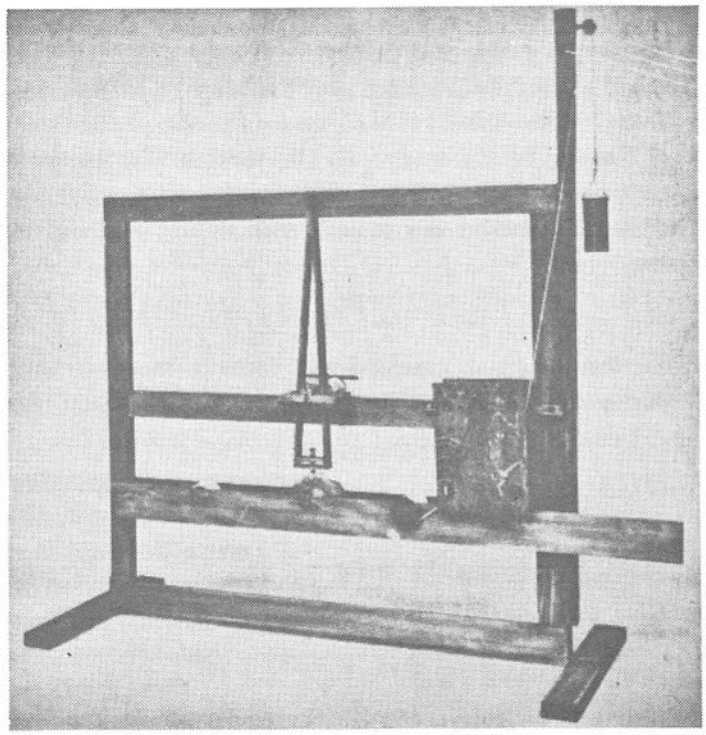


*The factory at Speedwell where Alfred Vail worked on the telegraph in an upstairs room, and where he and Samuel F.B. Morse gave the first public demonstration of Morse's invention on 11 January 1838*

aboard the packet *Sully*. This was the same year in which Joseph Henry, a science teacher at Albany (NY) Academy, set up an electro-magnet system using bells. However, Morse was unaware of this.

In the summer of 1837, he was still working on his invention with the help of Alfred's friend Dr Leonard Gale, professor of geology and mineralogy at the University. It was in Gale's lecture hall where Alfred saw Morse's demonstration.

Alfred and Morse had known each other as college student and professor. However their personalities were very different. Morse was artistic in taste and temperament; he was a natural leader and organizer of men, energetic, impetuous and unafraid of controversy. Alfred had what Morse lacked – mechanical genius, single-minded purpose now that his mind was captured, and loyalty, which would be sorely tried.



*A replica of Samuel Morse's original receiver (Register). See MM19 for Alfred Vail's own description of this invention*

**The Agreement**

On 23 September 1837, an agreement was signed between Morse and Alfred in which the latter promised to construct by 1 January 1838, 'at his own proper cost and expense' a model of the telegraph to exhibit before officials in Washington. The Vails were also to pay for all incidental expenses including the cost of the patent.

In return, Alfred was to receive one-fourth of all American rights, of which his brother George as silent partner would receive one-half. Alfred and George would also split one-half the rights in France, England, Scotland and Ireland if the Vails financed the patents for those countries.

All patents were to be 'taken out in the name and for the exclusive benefit' of Morse. The agreement was very specific about the treatment of all improvements and new inventions that might arise from the telegraph experiments:

'In case either of the said parties (Morse or Vail) shall make new discoveries... or any new invention... in any manner, he will, as soon as practicable,

communicate the same to the other, and it shall be the property of each, the same proportion as their respective rights in the whole.'

At about the same time, Dr Leonard Gale became a partner with another one-fourth interest. That left Morse with one-half the rights and an agreement that legally entitled him to the major share of the credit.

### Not Yet Completed

On October 6, Morse filed a caveat with the US Patent Office because 'the machinery for a full practical display of his invention is not yet completed and he therefore prays protection of his right till he shall have matured his machinery.'

The caveat specified the following inventions: a system of signs by which numbers and consequently words were signified; a set of type to communicate the signs; a port-rule for regulating the movement of the type; a register which records the signs permanently; a dictionary or vocabulary of words, numbered and adapted to this system of telegraph; and modes of laying the conductors. The document concluded: 'What I claim as my invention... is a method of recording permanently electrical signs, which by means of metallic wires or other good conductors of electricity convey intelligence between two or more places.'

In brief, Morse's idea was to employ the electro-magnet in a machine that would make a mark on a piece of paper each time a switch was operated. He proposed assigning numbers to words in a dictionary. To send a message one would write it out, go to the dictionary to find the numbers assigned to each word and then send these numbers on the machine by opening and closing a switch. The switch in effect operated the electro-magnet which was connected to a lead pencil that made marks on a moving paper strip.

The receiver translated these marks back from numbers into words using the same dictionary. All of this sounds simple in today's technology, but at the

| | |
|---|---|
| A | ·– |
| B | –··· |
| C | –·–· |
| D | –·· |
| E | · |
| F | ··–· |
| G | ––· |
| H | ···· |
| I | ·· |
| J | ·––– |
| K | –·– |
| L | ·–·· |
| M | –– |
| N | –· |
| O | ––– |
| P | ·––·– |
| Q | ·–· |
| R | ··· |
| S | ··· |
| T | – |
| U | ··– |
| V | ···– |
| W | –··– |
| X | –·–– |
| Y | ––·· |
| Z | ––··– |

*The alphabetical code used with the port-rule transmitter. This replaced the original numerical code in January 1838*

time there had been no practical application for electricity and Morse and his associates were pioneering.

**The Work at Speedwell...**

Alfred chose young William Baxter, an apprentice at the Speedwell Iron Works, to be his assistant and for nearly a year they worked on the top floor of the old cotton factory in a big room well fitted with tools. This project was conducted in great secrecy and behind locked doors until a patent was obtained.

In mid-October Morse wrote to Alfred, 'I long to see the machine you have been making and the one you have been maturing in the studio of your brain.' But there were many stumbling blocks to improving Morse's model. Baxter noted later:

'The mechanical difficulties of the undertaking can hardly be comprehended by the electricians of the present time, who are in the habit of finding all sorts of materials and appliances ready made. Our first battery was constructed of cherry wood, divided into eight compartments and lined with beeswax to resist the action of the acids.

'The form of the zinc and copper elements, and in fact, every detail, involved a new series of experiments. Conducting wire was not known in the market, and the best substitute obtainable was milliners wire, such as was used to give outline to the sky-scraper bonnets of the day.

'It was of copper, that it might be made to take and retain any form... and it was a good conductor, although the insulation of the cotton covering was somewhat imperfect. However, it was the best obtainable, and the market was drained for the experiment.'

**Dr Gale's Contribution**

Meanwhile, Dr Gale at New York City university provided invaluable assistance because of his chemical background and because he was familiar with the experiments of others. He constructed two Cruickshank batteries of 60 plates, each six inches square. Applying one of Joseph Henry's discoveries, he was able to increase the intensity of the current by increasing the number of turns in the magnets and the number of cells in the battery.

Morse compiled his code dictionary, assigning a number to each of some 5000 commonly use words. 'It is a most tedious, never ending work,' he wrote Alfred on October 14.

On October 24, wire reels made at Speedwell were delivered to New York and Morse again wrote to Alfred, 'The reels have arrived safely

and we admire the workmanship of them exceedingly; they are exactly right.'

**Avoiding the Judge**

However, the deadline of 1 January 1838 came and went without a completed working model. It was a trying time at Speedwell, especially since there was a genuine fear that Stephen would stop the experiment if success did not come quickly.

To forestall the fatal confrontation, Baxter was posted at the window to see when the Judge went home to dinner. Then Alfred would scurry across from the Factory to dine with his sister, who lived in what is now known as the Vail House, and return to work without meeting his father.

At last on 6 January 1838, the machine was ready to be demonstrated. The cotton-covered hat wire was coiled around the room on nails to equal a distance of two miles. Alfred sent Baxter to 'invite Father to come down and see the "Telegraph" machine work,' which sent the eager lad plunging into the cold afternoon without stopping to throw a coat over his shop clothes.

**First Public Demonstration**

Stephen quickly followed the assistant and after a short explanation wrote on a piece of paper these doubtless heartfelt words, 'A patient waiter is no loser.' Alfred confidently transmitted the proverb to Morse who correctly received it over the wire.

A few days later several hundred men and women crowded into Speedwell to witness the first public demonstration. The message this time had a practical cast: 'Railroad cars just arrived, 345 passengers', foreshadowing the connection between transportation and communications systems that the telegraph would have for the next 100 years.

**New Code**

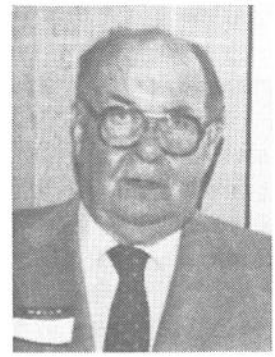
At the end of January 1838, Morse and Alfred exhibited the improved telegraph in New York at the University, using 10 miles of copper wire. Through Alfred's ingenuity, Morse's receiver now employed a vertical mechanism which embossed dents and lines in the paper, and Morse's numbered dictionary code, requiring double translations, was replaced by an alphabet code employing dots and dashes. Alfred had made the telegraph practical.

*(From* At Speedwell in the Nineteenth Century, *by Cam Cavanaugh, Barbara Hoskins, and Frances D. Pingeon, published by The Speedwell Village, 1981. Extracts reproduced and adapted for* MM *by kind permission of Historic Speedwell.)*

**To be continued...**

# A Captain and a King

*by Ero Erickson KA9DYS*



Have you ever met and talked to anyone who knew a real king, a ruling monarch, on a friendly basis? Unfortunately, my mentor on kings became a silent key recently, after a distinguished career in seamanship, and having been part of an event known the world over.

Back in 1953, I had lunch at the Chicago Yacht Club with Captain Kurt Carlsen, who related stories about the royal treatment he had received when he sailed to the Persian Gulf. He was invited to visit a king's palace. Most of the world is not aware that King Hussein I of Jordan is also an amateur radio operator, licensed as JY1.

Captain 'Stay Put' Carlsen got acquainted with King Hussein via ham radio while in command of the ss *Flying Enterprise*. His powerful equipment (1 kilowatt) was licensed under the call W2ZXM/MM.

Captain Carlsen became famous in 1952, when his ship developed a sharp list to the port side in a howling gale in the English Channel. He ordered the crew and passengers to abandon ship, but he remained aboard to keep the property from becoming salvage. He hung on for ten days during attempts to tow the disabled vessel while the seas moderated.

However the storm intensified, and it became obvious that it would capsize. Carlsen jumped overboard and was picked up, ending his 'stay put' effort. This term was coined by the British press, who titled him as 'Stay Put' Carlson. The whole event was covered daily by television on all newscasts and specials. Everybody knew about Carlsen.

Captain Henrik Kurt Carlsen worked on another ship while the Isbrantsen Line built a new ship, the *Flying Enterprise II*. When he sailed to Chicago via the Great Lakes, and docked at the Navy Pier (where cargo ships are no longer allowed), he was in charge of a replacement vessel. When visiting, I tagged along with a *Chicago Tribune* reporter and photographer at the suggestion of the day editor, Mr George Schreiber (W9YIX).

I asked Captain Carlsen what the large box in his stateroom was for. He said he had picked up a TV parts kit at the Heathkit radio store, which he would assemble during long ocean voyages.

He also stated that he had a commercial radio operator's license, as well as mate's papers, and that at one time he had held a job as a combination Second Mate and wireless operator. In distress situations he had used his amateur radio equipment to transmit medical messages, as well as to make emergency contact with rescue vessels when his ship was sinking.

He used a battery operated set, and had strung up a temporary antenna, on the final voyage of the first *Flying Enterprise* to keep in touch. Under normal circumstances, his kilowatt transmitter fed a ten metre beam which worked the world.

The Chicago radio amateurs were all excited about W2ZXM/MM coming to town. The SRO (Society of Radio Operators) had a special meeting to welcome him to Chicago (the meeting was co-ordinated by 'Ike' Ichorst W9RUK, who was in daily contact with the ship travelling the Great Lakes). Mrs Carlsen came from Woodbridge, NJ to take part. She sometimes accompanied the captain on long voyages.

One of the stories Captain Carlsen told was about a ham radio contact he made from the ship with King Hussein. The king invited him to visit his palace when in port. On arrival, a large Cadillac came down to the dock to the ship's gangway, followed by an entourage, that took Captain Carlsen and his daughter to enjoy what amounted to a real life fantasy land, comparable to Disney World.

One disturbing aspect of present day kids is the notion that there's nothing exciting in amateur radio, and that it is all dull stuff on FCC rules and learning the code. Kurt Carlsen, who died at the age of 75, didn't seem to think so. After all, he was a radio man who became a seagoing captain and travelled the world the 'old-fashioned' way. That beats television for excitement – any day! ✚

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## Admiralty Coding

Reader Jon Hanson G0FJT has two Admiralty keys marked 'ADMY PATT No 7681 KEY MORSE SERIAL No GDN 1079 YEAR JF' and 'ADMY PATT No 7681 KEY MORSE SERIAL No GDN 1758 YEAR JG. He asks if anyone can explain the year codes? One suggestion is that JF & JG mean 1916 & 1917, i.e., J = 10, F = 6, and G = 7. Confirmation of this, or any other explanation, will be very welcome. If anyone can help, please write to T.S.

**INDEX to MM, Nos. 17–20:** Owing to circumstances beyond our control, this has had to be held over until the next issue.

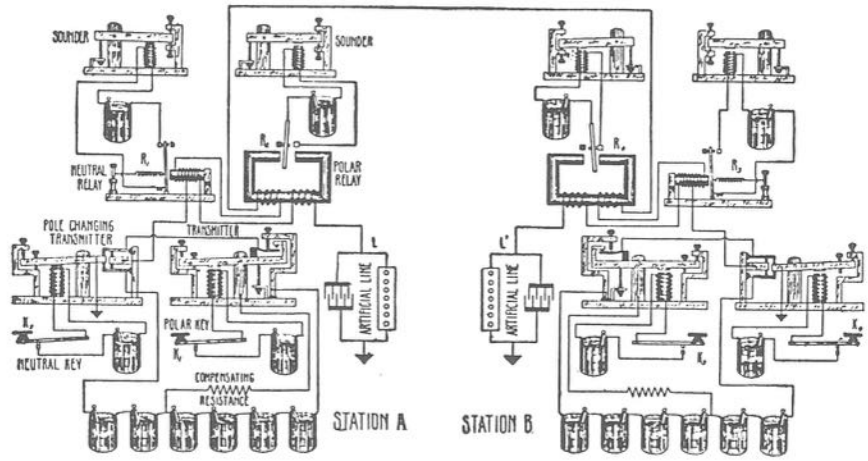
# Quadruplex

## How They Sent Four Messages Simultaneously Over a Single Line

*by Donald K. deNeuf WA1SPM (SK)*

The quest was on for finding a way to derive more than one unidirectional Morse telegraph circuit from one metallic wire and earth (ground) return, instead of having to build more and more long wire lines. Systems to permit 'duplex operation' over one line had come into being but it was Thomas Edison who developed the ingenious 'quadruplex system' in 1874.

This permitted two sending circuits in each direction to be operated over one wire line with ground return, all simultaneously. The feat of eight telegraph operators – four sending and four receiving – all working over one line at the same time was hailed as a major accomplishment. The illustration below with a simplified explanation attempts to show how the system functioned. The quadruplex system theoretically consists of an arrangement of two duplex systems employing artificial lines (Wheatstone bridges). In one of the duplexes transmission is made by increasing and decreasing current to which the neutral relays are adjusted to respond, irrespective of the polarisation of the received current.




The other duplex circuit operates with polar relays responding to changes in polarity, irrespective of the amount of current passing through them. The artificial lines permit incoming current to operate local relays while at the same time local keying does not operate them. ✚

# Book Review

VIBROPLEX®

*The Vibroplex Co., Inc. 1890 to 1990*

**reviewed by Colin Waters G3TSS**


*Two famous trademarks of the Company: The name coined by Horace Martin and the Bug logo*

Close on the heels of the *Vibroplex Collector's Guide* (reviewed in MM17), comes a quality publication from the The Vibroplex Company themselves, to mark their 100th anniversary. The book traces the history of the Company, originally founded in 1890 as a typewriter business by a former railroad telegrapher, James Eugene Albright, who saw a future in a revolutionary telegraph transmitting device designed by a struggling inventor, Horace G. Martin.

Guided by the shrewd business-like approach of the Albright family through the many courtroom battles of the early years, fighting off sometimes legitimate competition, the Company's name has, for almost a century, become synonymous with the mechanical speed key.

Author Bill Holly undertook five years of concentrated research, probing public, court, and company records, to chronicle every event that has been of sufficient significance to shape the Company to its present position.

His meticulous preparation provides, in most cases, documentary proof that will cause many collectors and historians to rethink their dating of events. Could it be that it was no less than the inventive John La Hiff who designed the Vibroplex No. 6 model and its offspring, and not Martin at all?

This book, as one would expect from the Vibroplex Company, has it all – quality printing on quality paper, superbly readable text, copies of advertisements from early railroad and other contemporary magazines. There are copies of all the original Martin, Coffe, and Boulter patents (some in full) held by the Company, and photographs of every type of Vibroplex model known to exist. There is no omission of the extremely rare c.1918 Midget model in this book, and no irregularities except one misleading caption.

The chapter on dating keys contains no less than twelve photographs of every Company nameplate used over the years, together with an accurate 40>

# Lamps and Whistles

## Another Morse Experience

*by Gus Taylor G8PG*

When WWII broke out the majority of British and Allied cargo ships used simple two-valve receivers with reacting detectors for MF and LF reception. By mid-1940 the Admiralty realised that these receivers presented a deadly hazard to wartime convoys. With the reaction turned up they radiated a considerable amount of RF, as the reacting detector fed straight into the antenna.

When 40, 50 or 60 ships in convoy were all keeping watch on 500kHz the result was a considerable amount of radiation on that frequency, which could be picked up on the sensitive direction-finding set aboard a U-Boat many miles from the convoy. Apart from the fact that this allowed U-Boats to detect a convoy from well beyond visual range, it also allowed them, under conditions of poor visibility, to fire a spread of torpedoes along the bearing with a fair chance of several hits on ships in the convoy.

Once the problem was known, steps were immediately taken to design an add-on aperiodic RF stage which could be placed between the antenna and the offending receiver (it also badly degraded the sensitivity of the receiver!). Designing such an RF stage was easy, but producing it in quantity and fitting it to hundreds of ships scattered around the seven seas was quite a lengthy process.

### Watch Restricted

As an interim measure wireless watch, except during enemy attack, was restricted to one or two ships in the convoy, usually the Commodore and Vice-Commodore, who were responsible for receiving any message addressed to a ship in the convoy and passing it on by visual means. The net result was that a large number of radio officers, normally three per ship, suddenly became available to take over visual signalling, a job which they tackled with both enthusiasm and success.

Visual signalling was by three methods, namely Morse, international

signal flag code and, to a much lesser extent, semaphore, which we will ignore. Most R.O.'s learned the international code flags in about 2 days on the job, and soon became very proficient in this method of signalling.

Hoists of flags were normally left flying until every ship in the convoy acknowledged receipt by hoisting the answering pennant. There was, however, rather more skill to the business than people ashore realise. Holding a telescope to your eye, aboard a pitching ship, trying to read 6 flags end-on to you, through the funnel smoke of 20 ships, at dusk on a north Atlantic winter evening, required both skill and cunning. (The trick was to be patient until a slight change in wind speed allowed the flags to flap, perhaps allowing you to identify the top three, then a further wait for the next flap when you got the bottom three).

### Faster Speeds

But it was in Morse that the Radio Officers really came into their own. Deck officers qualified in Morse by lamp at 6 wpm, but did not get much practice in peacetime, so naturally they were very slow. Their training was on a letter by letter basis so they could not read by words rather than letters, or store a short message in their heads then repeat it, as most R.O.'s could. The arrival of the R.O. on the bridge immediately pushed signalling speeds up from 4–5 wpm to 12–15 wpm.

For daylight signalling the Aldis lamp was used. This was a form of electrically operated heliograph using a 12V lamp, fed from a storage battery, as light source, and a moving mirror to produce dots and dashes. The lamp body was round, with a low magnification telescopic sight on top which was aimed at the receiver.

A pistol grip attached to the lamp body had a long trigger and a short trigger. The long trigger, held on with the second, third and fourth fingers, switched the lamp on, and the short trigger, operated with the forefinger, moved the mirror to produce the dots and dashes.

The lamp body was held by the left hand, and the pistol grip by the right. The whole assembly was very well balanced and comfortable to use. It also had a certain amount of built in security, as it was almost impossible to read the signals from the side of the lamp.

### Relayed Messages

Messages to individual ships were sent by sighting the lamp onto the bridge of the receiving ship, establishing contact and then passing the message. Each word received was acknowledged by the letter 'T' and the whole

message by 'R'. A message for all ships from the Commodore was passed by relay, first to the lead ship in each column, then down the column from the lead ship. Once the R.O.'s appeared it was often possible to copy the message as it was being passed down the column, so only an 'R' was necessary when the ship ahead called you. The Aldis lamp had a surprising range. My best 'DX' was 4 miles across Freetown harbour in bright tropical sunlight.

(As the Falklands conflict showed, the Aldis lamp is still of immense use. Once the Task Force went onto radio silence, pretty well all local communication was by lamp, thus completely avoiding signal interception. Perhaps that made those in positions of power realise that the 8 wpm to which the modern signalman is trained is far too slow for serious operational use. One hopes so!).

**By Night**

Night signalling by Morse in the WWII convoys was a different ball game, as bright flashing lights were a quick road to suicide! Instead, one used the Admiralty Night Signalling Torch. This was a large 3-cell torch with a blue lens and a tiny Morse key at the back of its body.

Its tiny blue flashes covered quite a few hundred yards, but were invisible at greater distances. Using it was a two-handed job, and I well remember being thrown off my feet in a North Atlantic hurricane, bringing down the Old Man and the Mate, with the three of us ending up against the wheelhouse in a tangle of arms and legs!

**In Fog**

One other method of Morse signalling was the ship's siren, already well-proven in ordinary navigation. It was occasionally used at night, though not often, but really came into its own in fog when lamp signalling was impossible

Apart from short orders, it was often used to get each ship to indicate its position by sending its position number in the convoy in Morse. This at least gave you some idea where the ships ahead, astern, and on either side were, as you groped through the clammy mist with an ever-present danger of collision.

**Who Will Replace Them?**

Later in the war the R.O.'s again spent much of their time in the Radio Room, but they were then officially available for the more advanced visual signalling work and were regularly called to the bridge to undertake it. If

(God forbid) the need ever arises again, there will be no Radio Officers. One wonders who will take their place? ✚

Like Gus Taylor, I too got roped in to visual signalling by light in my days at sea as a radio officer. The Captain of one ship tried to teach me semaphore as well, but I never could seem to get the hang of it!

The original Aldis lamps were around 4 inches in diameter, and had a direct coupling between the sprung and pivoted mirror and the signalling trigger. This meant that the beam was deflected upwards when in the resting 'space' condition, and so there was considered to be a risk of aircraft spotting the light. A modified version of the lamp followed, in which the beam was deflected downwards, being brought up to the horizontal for the 'mark' condition via a double-lever arrangement operated by pulling on the signalling trigger. This was quite a bit stiffer to operate than the original model, due to the design of the mechanism, and I personally disliked using them. The lamps were often supplied as part of a boxed kit, which included clip-on coloured filters for night-time use.

A more modern version of the Aldis lamp (though I'm not sure whether it still carries that name – apologies to the manufacturer if not) is around 6 inches in diameter and has a cylindrical sleeve around the bulb, cutting off light to the reflector in the 'space' condition. On 'mark', the sleeve is withdrawn behind the bulb by the trigger and the beam is revealed.

For daytime signalling over longer distances, there are daylight signalling projectors. Two sizes of these are produced for the Royal Navy. The 10 inch model has a 1500 watt 80 volt filament projector lamp, powered via a box-full of resistance mats on ships with DC mains, or from a transformer on AC mains. A shutter in the style of a Venetian blind at the front of the lamp is normally held closed by means of a spring. When the operating handle on the side of the projector is depressed, all the blind slats swivel to the horizontal to allow the light to pass. Ring-sights are fitted on top of the projector, along with clips for a telescope to be used when more accurate aiming of the beam is required. The 10 inch projector is often fitted on merchant ships as well as warships and fleet auxiliaries.

Larger warships were fitted with the 20 inch projector, which

had a high-pressure mercury vapour lamp. I never used one of these myself, but I understand that in signalling mode the lamp was keyed, consuming 200 watts when idling with the key up and 3kW with key down! It could also be run continuously as a searchlight, with a consumption of something in the region of 1.5 to 2kW.

I enjoyed visual signalling, though I found receiving quite difficult to cope with at first, due to the absence of sound. I found the same delight in reading a good flashing light as I do with audible Morse. A particular occasion which sticks in my mind was one evening in the 1950s when I was serving in a Royal Fleet Auxiliary tanker. We were berthed in Tampico, Mexico, where a detachment of the US Navy was also in port. A couple of the ships obviously had old shipmates on their signals staffs, for they spent almost two hours chatting to each other in beautiful Morse at something like 18 wpm on all-round flashing lights. These are small lanterns fitted near the mast-head, containing three or four 25 watt lamps wired in parallel and operated from fixed hand-keys in the bridge wings. The thin filaments of these low-power lamps light and dim much more quickly than the thicker filament of, say, a 100W lamp, allowing higher keying speeds. There is also the advantage that if one lamp fails, signalling can continue at reduced power without someone having to climb the mast immediately to replace a single bulb.

Although I have seen pictures of the Admiralty Night Signalling Torch, I've never come across one. Can anyone provide *MM* with photos/drawings/official information, etc, on it? – Ed.

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**BOOK REVIEW – *The Vibroplex Co., Inc.*** *(continued from page 35)*
dating list of all models. This book is destined to become, and will remain, the definitive work on Vibroplex keys. My only regret is that I did not purchase the limited hardback edition, surely destined to become a collector's item in its own right.

*The Vibroplex Co., Inc. 1890 to 1990*, by William Holly K1BH, is published by The Vibroplex Company, 98 Elm Street, Portland, ME 04101, USA. Price (softback) $29.95 (signed copy by the author, add $5.00), plus postage. Overseas payments by credit card acceptable. The limited hardback edition was sold out before publication! ✚

# Morse Bicentennial Celebrations Worldwide

*A round-up by Tony Smith G4FAI*

**Senate Honours Morse**

On Wednesday, 24 April 1991, The Senate of the United States of America entered the following resolution in the Congressional Record:

United States of America

## Congressional Record

PROCEEDINGS AND DEBATES OF THE 102d CONGRESS, FIRST SESSION

Vol. 137 WASHINGTON, WEDNESDAY, APRIL 24, 1991 No. 61

### *Senate*

**S. Res. 113**

Whereas Samuel Finley Breese Morse (1791-1872) was a pioneer in the development of electrical communications, the first practical use of electricity;

Whereas Morse and his partners invented the Morse Code and the electrical telegraph on which it was first used in 1838;

Whereas the Congress funded in 1843 construction of Morse's first operational telegraph line, from Washington DC, to Baltimore, Maryland, and the Congress also funded further development of this first practical instrument of communication;

Whereas on May 24, 1844, Morse transmitted his famous "What hath God wrought?" telegraph message from the Capitol to Baltimore, unleashing an ever-growing tide of electrical communications and forever establishing the leadership of the United States in the development of modern communications: Now, therefore, be it

*Resolved*, That the Senate recognizes, on the occasion of the 200th anniversary of the birth of Samuel F.B. Morse, the role of Samuel F.B. Morse in the revolutionary early development of electrical communications, and further recognizes Morse's momentous contributions to the economic, social, and industrial development of the United States.

### Capitol Hill Amateur Radio Society

To celebrate the Morse bicentennial, the Capitol Hill ARS planned a re-enactment on May 24 of the transmission of the historic message 'What Hath God Wrought!' from the Capitol Building to the Baltimore and Ohio Railroad Museum which houses the site where Alfred Vail originally received Morse's message.

It is hoped to include an account of this historically accurate event in the next issue of *MM*.

### A Very Special Call

The Radio Society of Great Britain was allocated a very special callsign for the Morse bicentennial. Using the UK prefix 'M' for the first time ever on the amateur bands, M0RSE was on the air throughout April, activated by a number of radio clubs, and over 25 000 CW contacts were made.

Credit for this superbly appropriate call goes to the Darwen (Lancs) ARS who cleared the idea with the DTI (Britain's licensing authority) and then applied to use it over the bicentennial weekend on behalf of FISTS CW Club (see report below). The DTI in the meantime decided to allocate the call to the RSGB, suggesting that a call of such rarity on such an occasion should be used by more than one club. The RSGB accordingly nominated a number of other clubs to use it during the rest of the month.

Due to lack of advance publicity, many operators initially believed it to be a pirate station. By the end of the month, however, there were few amateur CW operators who did not know about M0RSE and the significance of the event it was celebrating. There were constant pile-ups and operators around the world had the opportunity to mark the Morse anniversary through once-in-a-lifetime contacts with stations using this unique and imaginative call.

### M0RSE from FISTS at Darwen

The Darwen ARS were delighted to obtain authority to use the unique call M0RSE over the bicentennial weekend on behalf of the FISTS CW Club. We began operation at 2301Z on the April 25 (the RSGB schedule specified midnight BST), using a temporary G5RV antenna. The rig was an FT-101Z with some 80 watts output at maximum steam. A 60ft portable tower with a three element tri-bander was available next day but this was little used as most of our activities concentrated on 40 metres to give G-stations the opportunity to work the call.

We had eleven operators, many of whom had their first taste of pile-ups, and during the three day period we worked over 1500 calls and some 60

countries around the world. QSL cards are being printed and despatched by the RSGB. FISTS contacts, however, will receive their cards with the club's monthly newsletter. Cards will also be sent to a number of SWLs who have submitted reports.

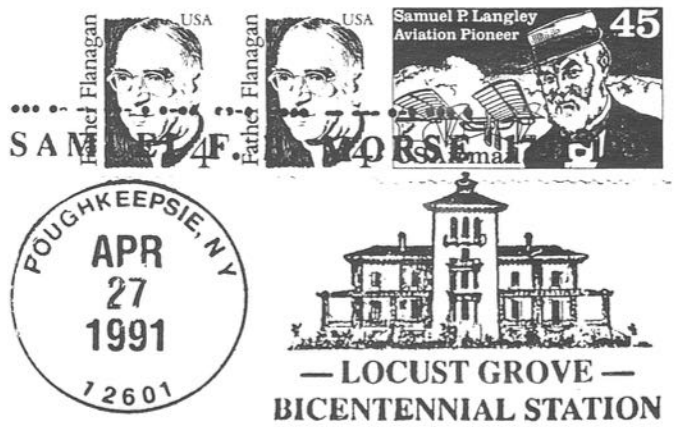
Surprisingly, the operation started quietly. Initially, we used 14.058MHz in preference to the RSGB's recommended QRG of 14.020, because there are many stations who are not permitted to operate below .050 on the bands. The pack, however, was clearly looking for us on .020 and when we eventually QSY'd to this frequency we had quite a pile-up.

The general standard of operating was excellent although, despite the fact that we were working contest style, a number of operators insisted on holding the frequency with name, QTH and (in a few cases) station details and weather reports, which must have been infuriating to those waiting their turn. A video of the operation will be available later and a copy sent to the RSGB for appropriate distribution.

*Geo Longden G3ZQS, Secretary, FISTS CW CLUB*

**Locust Grove Celebrations**

The Young-Morse Historic Site at Poughkeepsie, NY, Samuel Morse's country home, had a successful day on April 27, and was open to the public from 10 am to 4 pm, including guided tours of the mansion. The Poughkeepsie Amateur Radio Club mounted station K2KN, and the Post Office provided




mailing facilities with a special postmark (above) featuring Locust Grove, the bicentennial station and Morse's name in code. A birthday reception dinner was held in the evening at Vassar College Alumni House (Morse was a

founding trustee of Vassar College which was the first college for women in the USA). The celebrations received much local press publicity.

### Good Day at Maassluis

Dick Kraayveld PA3ALM reports a very successful Morse Memorial Day meeting at the Cafe Centraal in Maassluis, Holland. About 45 radio amateurs attended, including a number of 'ex-*MM* boys', i.e., readers of the earlier Dutch edition of *Morsum Magnificat*. A special display of equipment

included a home-made Morse Writer, keys, home-brew valved and transistorised QRP transmitters, and what must be the smallest key (5 x 5mm!) in the world.

Special station PA6MMD made some 60 contacts and visits were made to the ship of the Sea Cadet Corps and to the Maassluis Tug Museum. At the end of the day visitors QSY'd to Dick's home to consume soup and bread and chat about the events of the day. Dick reports, 'it was a very nice day.'

### Morsecodians International

The Sydney Morsecodians had a highly successful week at Alice Springs with 'landline' connections to the permanent telegraph station at the National

Science and Technology Centre, Canberra. On April 27 and 28 they also had 'dial-up' contacts with chapters of the Morse Telegraph Club across the USA, using international telephone routes courtesy of Telecom Australia.

Early Friday morning, April 26, *MM* readers John Houlder and Fred Ryan telephoned Tony Smith in London to give an on-the-spot atmospheric report of their activities at Alice Springs, including a short burst of sounder Morse, an historic first ever direct 'landline' Morse telegraph transmission from Alice Springs to New Southgate! It is hoped to include a full account of this latest exploit by the Morsecodians in a later issue of *MM*.

**Celebration Key Display**

In Wembley, Western Australia, noted key collector David Couch VK6WT, with the co-operation of an enthusiastic Head Librarian, set up a display of 25 different keys and two display boards at his local library for two weeks. David reports that during the anniversary weekend he worked M0RSE, GB200SM (Science Museum, London), VI91SM (Canberra), VI91AG (Alice Springs), and heard YL200SM (Latvia?).

**Happy Birthday in Phoenix**

The Phoenix, Arizona, Chapter of the Morse Telegraph Club held a birthday party in honour of Samuel Morse on April 27, including a huge birthday cake carrying the famous 'What hath God wrought!' message in frosted (iced) dots and dashes together with the printed message 'Happy Birthday Sam'. The event was attended by TV reporter Bill Leverton whose *On the Road* programme highlighted the meeting on Channel 10 news the following evening.

Dial-up Morse contacts were made with chapters in other cities via a 'hub' (conference call), and a telegram addressed to all chapters was received from the President of MTC. 'Warmest greetings from Grand Chapter as we proclaim once more, What hath God wrought! on this 200th anniversary of the birth of Samuel F.B. Morse. 73 to all and may we continue to communicate in this time-honored fashion for many years. (signed) Bill Dunbar.'

Chapter member Harmon Averyt of Yuma telegraphed from his home, via dial-up Morse (International on this occasion), with Sydney Morsecodians' operators at Canberra and Alice Springs. His new Aussie friends were amazed to learn that Harmon was a 17 year old railroad telegrapher in 1922 in Texas.

*Report from Dick Thomas KB7BAD, President, Phoenix Chapter MTC*

### GB0SMB from Leicester

Members of the Leicester Radio Society operated two stations with the call GB0SMB (Samuel Morse Bicentenary) from the Society's HQ on April 27. One station operated on 21MHz, the other on 3.5, 7.0, and 14MHz.

Most activity was on 7MHz (62 contacts), working G and near-EU stations, although NK2TK did pop up from Pennsylvania at 1012 GMT. Operating only from 09.00 to 18.00 BST, the station made 112 contacts in all. Sometimes we had 'rubber stamp' exchanges, and at other quieter times we stayed in contact a little longer. Eight contacts were made on SSB(!) advertising the CW frequency.

It was the first time some of us had been on the receiving end of a pile-up and good fun was had by all. As the club's HF beam was out of action, all contacts were made using wire antennas, i.e., a G5RV sloping from 90 ft to 30 ft, and a 15 metre dipole.

*Colin Blunn G0IFM*

### World Service Morse

On Saturday, April 20, the BBC World Service Waveguide programme commemorated the Morse bicentennial. In the studio, Ian Poole G3YWX talked about Morse's early days, and described how the Morse telegraph came into existence. For the uninitiated, he explained the structure of the Morse code, and demonstrated the use of straight and electronic keys. He emphasised that Morse telegraphy was still alive and well in amateur radio and explained its advantages in difficult conditions.

*Waveguide* also visited the headquarters of the Radio Society of Great Britain, 'to ask how the Society was celebrating this special anniversary'. The Society's Secretary, David Evans G3OUF, explained the significance of special event station M0RSE, which had made around 5000 contacts in the previous week, and mentioned that other special stations would be active on, before and after the bicentennial date, including GB200SM at the Science Museum in London.

He also described how the RSGB helps learners, firstly through classes and publications, and then through slow Morse broadcasts across the British Isles every day of the week, and demonstrated the test speed of 12wpm.

This excellent feature was repeated three times during the following week and was heard around the world. It is understood that as the BBC is not licensed for CW transmissions, special permission had to be obtained from the UK licensing authority to include Morse demonstrations in the programme.

**Samuel Morse Bicentenary Award**

In celebration of the Morse bicentennial, the Bromsgrove and District Amateur Radio Club is issuing a special operating Award to SWLs/Radio Amateurs world-wide for contacts heard/made during April and May 1991.

To qualify for the Award 200 points are required, obtained from contacts as follows: Special station M0RSE – 50 points; Bromsgrove & District ARC, G3VGG, or individual Bromsgrove Club members – 20; Special Event Morse celebration calls outside own country – 10; Special Event Morse celebration calls within own country – 5; Other CW QSOs world-wide during April and May 1991 – 1 point per QSO. Note: eligible special event calls do not include the International Marconi Day stations which were also active on April 27.

Contacts made on 27 April 1991, Samuel Morse's birthday, 0001–2359 GMT, count as double points. For example, M0RSE counts as 100 instead of 50 on that day only. Log extracts only required, i.e., no QSLs unless Award Manager requests proof of QSO. The Award Manager's decision is final on all matters relating to the Award. If all qualifying contacts were made on 27 April 1991, the Award Certificate will be endorsed accordingly if requested.

The fee for the Award is £2.00 or 8 IRCs or $5.00 USA/Canada. All enquiries/applications to the Award Manager, John Harvey G4IVJ, 38 Bodenham Road, Northfield, Birmingham B31 5DS, England. Telephone 021-477 7447. ✚

# *Just rambling...*

What a great day April 27 was! The reports in this issue show the enthusiasm with which Samuel F.B. Morse's bicentennial was celebrated. I got up early myself and made my first contact at 0343 UTC – with an enthusiastic Russian who excitedly told me he had just worked M0RSE!

The excitement is over, but *MM* continues, as before, as a permanent celebration of the wonder and achievements of Morse telegraphy. Back in 1986, when our first English language issue appeared, some cynics suggested that while it would be easy to fill the first few issues with Morse material it wouldn't be so easy after that; and that *MM* couldn't possibly survive.

**Double Celebration**

In contradiction of that opinion, our next issue will be a double celebration, our 21st issue and our 5th birthday! Please tell your Morse friends about it; and urge them to support *MM* themselves. Tell them what you know already. *MM* is not just a magazine. It keeps the proud flag of Morse telegraphy flying. It brings enthusiasts together from around the world, enabling them to share with each other their news, views, information sources, experiences, key collections, and their expertise in the many aspects of this amazingly varied field of activity.

**Colomb Flashing Signals**

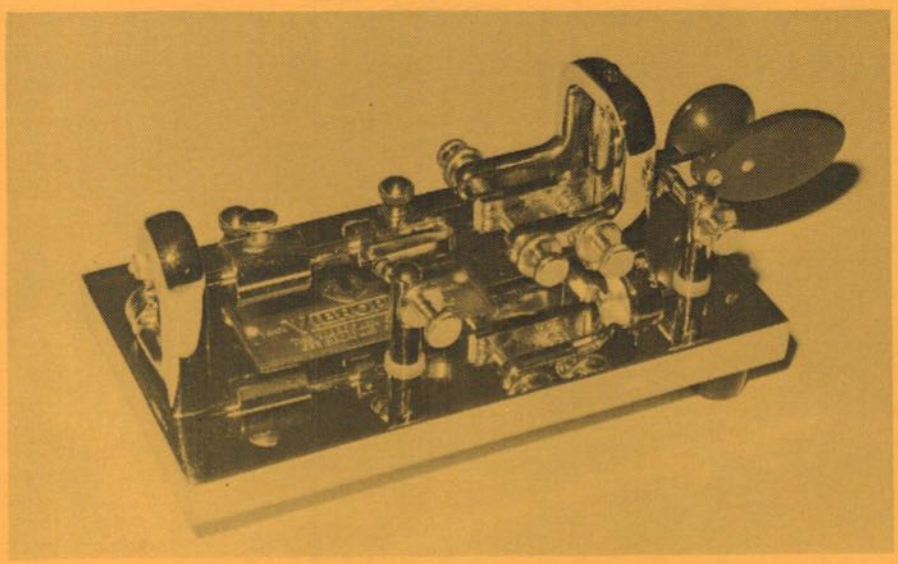
In the meantime, I am still collecting material for future features in *MM* and I welcome help, whether in the form of short 'snippets' of information or full articles on any subject of interest.

For instance, does anyone know about Admiral Colomb and his invention, in 1859, of flashing light signals at sea using Morse code? Can anyone send me more information, references, photocopies, etc? Or even an article on the subject? It seems to be a fascinating story and ideal *MM* material.

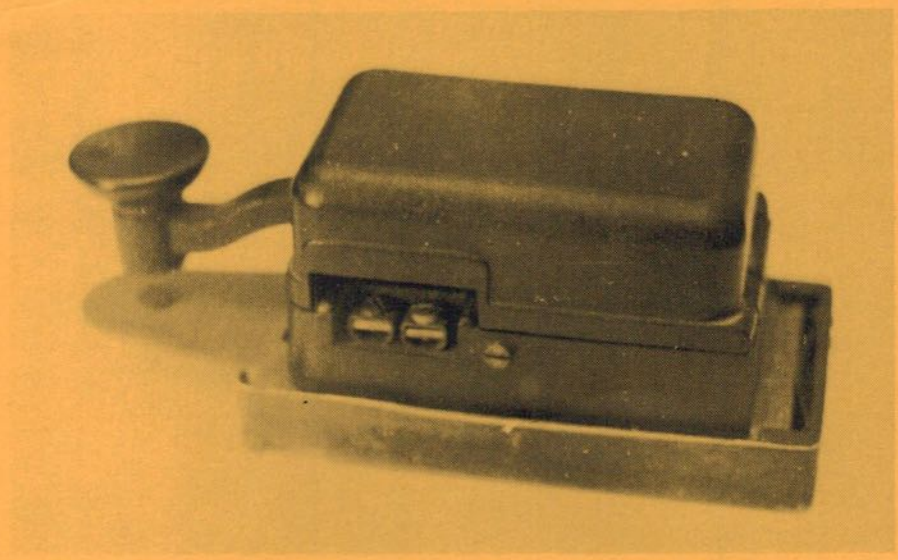
**Farnsworth Method**

I am also looking for information for an article about the Farnsworth method of learning Morse. Can anyone provide an authoritative or 'official' description of this system, also information about its inventor? Once again, references, cuttings, photocopies, etc., will be most welcome.

*73, Tony G4FAI*

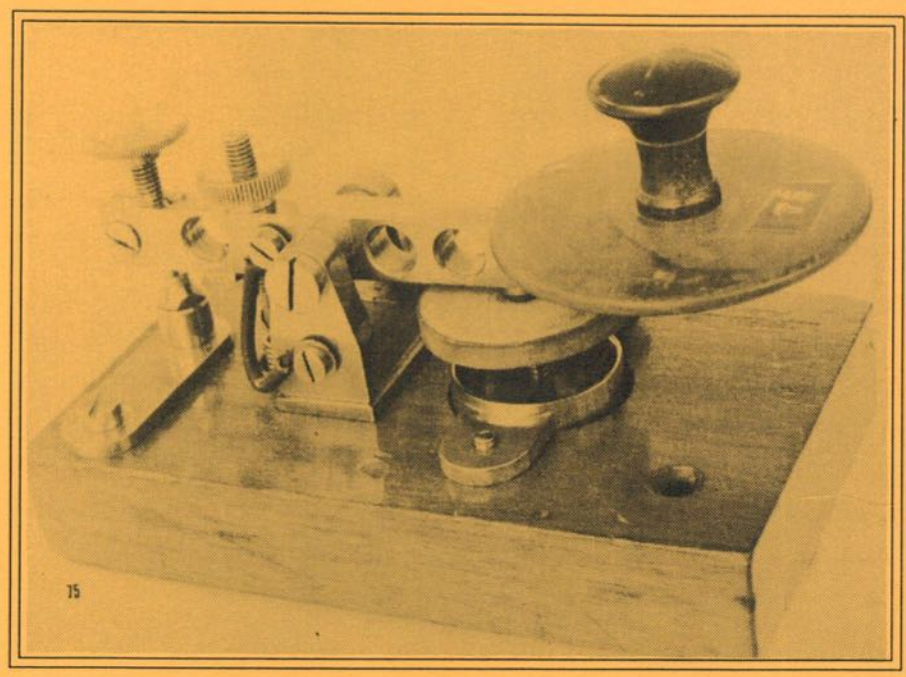


*Vibroplex 'Original' Deluxe, serial No. 262101. Mid 1960s style. Chrome base. Still in production. Collection/Photo: Colin Waters G3TSS*



*Key made by 'Lorenz'. Number on top cover LN 26907. Number on bottom SR 568932. The key itself has no number. Believed to have come from a German bomber shot down near Dordrecht, Holland, in 1940. Further information welcomed by TS*

*Photo from the late Rinus Hellemons PA0BFN*




*Ducretet & Roger – Paris. Oilbreak key. Further information required*
*Collection: John Elwood W7GAQ*