FEEDBACK

MARCH 2001

VOLUME 46 NUMBER 3

MARCH MEETING

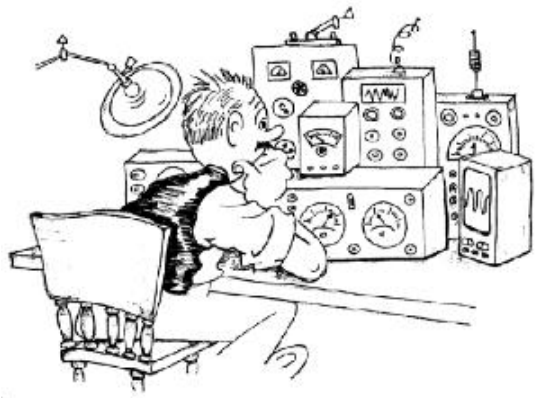
The meeting for the month of March will be held at the Massillon Senior Center on March 2, 2001 at 8:00 PM.

Want to hear something unique? Last February (2000) we had Mel Vye W8MV give a very informative program on St. Pierre & Miquelon Islands and of course he returned last month to give us a very great presentation on Midway Island operation that he made last year. The odd thing about the whole thing was that there was nothing published last year or this year and we had outstanding attendance both times! I am sure that everyone really enjoyed Mel's presentations, perhaps we could talk him into next February? He is planning on another DXing jaunt, perhaps to Europe this time, nevertheless I'm sure we will be anxiously awaiting the next Program!

Speaking of programs, I am sure you will not want to miss this month's meeting. We are looking forward to a presentation by Jeff Covelli. His call is WA8SAJ and he lives in Willoughby, Ohio

He was a service man for AES according to what I know and specialized in repairing Drake gear. He now does Drake equipment as a side business. He works at the Gas company, Dominion I think.

Jeff has been very active in fast scan TV and has done considerable building and operationing of Amateur TV equipment. He plans to do some show and tell, and may have a brief video showing TV equipment and operations.



- SHORT SKIP -

Sunspots guru's are say'n we're near the peak of Cycle 23. Work'em NOW 'cause the DX gets rare on the downside.

That new Grundig reciever featured in the ham magazines is in fact a collaboration between Grundig and our R. L. Drake Co. The desing is heavily based on the Drake SW-8. You might say it's Grundig on the outside, but Drake on the inside. To top it off, its made in China ! As they say, " life is full of suprises ! "

73 DE WB8OWM

DUES ARE DUE !!!

This is it! This is the last month that you have to pay the dues for the Massillon Amateur Radio Club . If the dues are not paid by the meeting night, March 2, 2001, we will be forced to drop you from the membership role. We do not want to do this, is a very difficult task. REMEMBER; WE DO NOT WANT TO LOOSE A SINGLE MEMBER !!.

So while you are thinking about it, please send our Treasurer Anne Ballinger you dues or at least let her know of your intentions to rejoin and we will renew your membership for another year. You can send her a check to :

Anne Ballinger N8GAF
2468 Bellevue Ave SW
Massillon, Ohio 44647

So please while you are thinking about it, send the check or come to the March meeting and renew your membership. Either way, you will not miss a single exciting event happening this year!

MARC MINUTES

February 2,2001 MARC MINUTES

The February MARC meeting was held at the Senior Center with 28 members and guests present. Don W8DEF the new President called the meeting to order at 8:05 P.M.

The Pledge of Allegiance was given and a round of introductions was made.

Our guest speaker was Mel Vye W8MV. He gave a very enjoyable slide presentation on his trip to Midway Island in the Pacific. (Midway Is., KH4, is most famous for the great WWII battle which historians say was the turning point of the war)

We then had a brief intermission for refreshments.

The meeting was called to order again by Don W8DEF. He asked the reading of the January minutes be suspended. Motion was made by Saundra N8TZB and second by Perry W8AU.

Anne N8GAF gave the treasure report. It was accepted by Perry W8AU and second by Don W8DEA.

The new Vice President Gene W8KXR then gave his report. There were doubles on the newsletters from other amateur radio clubs. Everyone was welcome to review them after the meeting. He gave an update on where upcoming HAMFEST will be held. The ARRL letter was not here yet so it could not be read.

Don W8DEF said the league has ARRL emergency communication courses available on line for a fee. We will check to see if it will be available in this area without going on line.

OLD BUSINESS

Don W8DEA talked about teaching classes for Tech. and General starting Monday Feb. 26th. here at the Senior Center. He would like some "hands on " help. Anyone having ideas contact Don W8DEA. Perry W8AU will teach the code at 6:30 P.M. and Don W8DEA and his helpers at 7:00 P.M. Don W8DEF checking with Nancy Johnson to be sure the Senior Center can be used . We need to let the public know about our classes and hope for a big turn out. Dan N8DZM will try advertising on cable T.V.

NEW BUSINESS

Rick KC8LYG asked about club shirts and jackets. Don W8DEF had gotten prices form 4 places. Engravers Gallery located at 20 Lincoln Way E. had the best prices. Dan N8DZM made motion MARC pay the $40.00 set up fee. Saundra N8TZB second it, a vote was taken and passed. Check the Feedback for more details. Saundra N8TZB thanked Don W8DEF for all his work on this.

Jack N8LCS said the M.S. walk at Quail Hollow State Park will be Sunday April 22nd. Jack will have a substitute this year Bruce AB8FB will be helping him. Keep this date in mind and sign up to help.

Anne N8GAF will be ordering Dayton HAMFEST tickets again this year, anyone needing one get in touch with her. Don W8DEA said Dover will have a bus again this year, but it will cost a little more.

Thanks goes to absent Bryon KF8UN for donating D X contesting awards catalog to the club, it will be in the Shack for all to use, and Charlie KB8STV for donating a home brew center for a dipole he had made.

Don W8DEF closed the meeting at 10:20 P.M.

The 50-50 for $15.00 was won by Gene W8KXR.
The home brew center was won by Rick KC8LYG.

Minutes by Linda K8MOO Secretary MARC

..... W8NP@QSL.NET .....

After experiencing a number of problems over the past year with the club's email account, it has been decided to activate the club's email account with our current website provider, qsl.net. Why the change ? Prior to the existence of our website the club had established an email account in an effort to aid our hamfest activities. We chose Juno mostly because it was a free service and convenient to setup. It proved to be a good idea, the first year the club received nearly 75 emails both club and hamfest related. As happens with many free services, email addresses are sold off to many other sources and before long we were receiving lots of emails, all ads to the tune of 50 every day. Spam I think its called. This became a major nuisance as I had to wade through all the emails incase there was something club related. It was time for a change. When the club's website went online we were also issued a email account although I never activated it. Completely changing over an email account isn't as easy as it sounds, the ARRL needs notified along with many other organizations that have our old email. Over time I hope to have everything switched to the new account, in the meantime I have left the old account active. Later this year I will close out the old account. So spread the word, out new email is **W8NP@QSL.NET.**

And speaking of emails, with the coming of the new year comes a new MARC membership roster and its a good time to make sure we have your current email address listed on the Roster page of the website. March is usually the cutoff date for membership, if you haven't renewed your membership with us now would be a good time to do it. If not, this will probably be your last newsletter. Sure they will continue to be available on the website but we don't want to lose you as a member ! So take a minute and drop us a check right away !. And for you new members, if you would like your email listed on the club website just drop me a line and I'll take care of it right away.

..... SKYWARN TRAINING MARCH 21st .....

The Stark County Amateur Radio Emergency Service in conjunction with the Stark County Disaster Services Agency under the direction of Ed Cox is once again sponsoring a Severe Storm Spotter Training program on Wednesday, March 21, 2001 at 7:00 PM. We are grateful to Stark State College of Technology for hosting our event again this year. This training is essential to anyone who wishes to become involved in the Skywarn Spotter program. The training is open to all interested individuals and RSVP is not required.

The program will again be conducted by Mr Gary Garnet, Chief Meteorologist of the Cleveland National Weather Service office in Cleveland, Ohio. Last years program was newly developed for the spotter program and this years will be just as informative. Weather you are new to the spotter program or a seasoned veteran, this program is a great way to enhance your skills and to help prepare you for the severe storm season.

We are planning on having Mr Marvin Secrest of M & K Engraving on hand again this year. I'm sure you have seen Marvin at numerous area hamfests, producing one of the best Skywarn Spotter badges available anywhere.

Set your calendar for Wednesday night March 21st and be sure to join us for this important pre-season training. If you can't make it to the training being offered here in Stark County, visit the Cleveland Weather Service website to see the full schedule of training being offered this year. You can find it at http://www.csuohio.edu/nws/office/spottran.html.

..... NEW STARK COUNTY DIRECTORY .....

I had the chance to get an advance peek at the new Stark County Directory at the Mansfield Hamfest. It's passed through several hands since its inception back in the 1960's when it was initially created by good friend William Parks, K8JZN (SK). After his passing Dennis Hamiliton, N8UDL took on the awesome responsibility of maintaining this directory. Dennis published an updated copy back in 1996. With his many other responsibilities Dennis could not maintain the directory and began looking for someone to carry on this tradition. Club member Jeff McKinney, KA8KIX took control from Dennis and has been working on updating the directory information. After what I'm sure was many long hours researching and updating names, addresses, callsigns, etc., the completed directory is finished. Completely redone in a bigger size, now 8 1/2 by 11 and bigger text size for us aging baby boomers, it looks great. A terrific reference tool to keep in the shack, this new edition has been well worth the wait. Congratulations go out to Jeff for completing this Herculean effort to bring us this 2001 edition. The price hasn't been set yet but we will probably know by meeting time where they will be available for sale. A big Thank you to Jeff for his work on this edition, I know Bill Parks would have been proud.

..... The new 2001 MARC SCREENSAVER .....

For some time now I've been toiling with the idea of creating a screensaver with a club theme. After some intense searching I found an inexpensive program that creates screensavers. A long as its for personal use you can make multiple copies for easy distribution. The program will create the screensaver program and make it easy to setup on anyones computer. My computer stays on nearly all day long and I have always like to have a screensaver running in the background. After a predetermined period of screen inactivity the screensaver automatically activates. Originally designed to provide a rotating image on a computer screen, they were meant to prevent a monitor from burning a static image into the screen. Present day monitors are not as susceptible to this as olders styles were but by then someone discovered a whole new cottage industry, creating screensavers. They have become popular ways to present rotating billboards on your computer while not in use. With that in mind I have taken a collection of past club pictures and combined them with a monthly rotating calendar of various amateur radio events and created the first official MARC Screensaver Version 1.0. I am in the process of making up the screensaver on a CD ROM and hope to have a few available at the March club meeting. Maybe I'll bring along my laptop with the screensaver running so you can have a look. It wasn't exactly what I was looking for but not bad for the first time. I'm already looking for ideas for next years version. See me at the meeting if you are interested in a copy.

All out of time and space for this month,
Till next time,

Terry - N8ATZ

C. A. P.

Anyone interested in flying and handling communications with U.S. Air Force Aux. (Civil Air Patrol) contact me. They do not have to be a pilot but willing to be trained as a aircrew member and some military commands.Prefer Age 12 and up but for our adult group be age 21 to meet military qualifications.

Please contact me by E-mail to : w8dea@juno.com or contact me via the 147.18 repeater or by my home phone which is:

Don Wade W8DEA
330-497-7232

for more information.

On a different note I have asked to see if we could have our own ARES & SKYWARN net separate from the 7.12 group.This request is going thru channels via the ARRL. So if you should hear anything you know it was me that sturred things up.

Thanks, Don W8DEA

SHIRTS & JACKETS

The art work for MARC is at Engravers Gallery, 20 Lincoln Way E., Massillon,Oh., phone 330-830-1274.

Golf Shirts with a pocket are in sizes up to 4XL :S to XLG aprox. $13.00, sizes 2-4XL add $1.25

Choice of colors, orange may be a different price.

Windbreakers up to size 6XL S to XLG aprox. $18.00 sizes 2-4XLG add $1.50

These are printed front and back, shirts will have name and call heat applied.

With each member placing their own order they can be sure of sizes, and calls.There will be other items to choose from by order. All printing will be at the same time. I will pick-up the orders if that will be easier and the plan is to have them before our first Public Service event of the year April 22, 01, The MS Walk at Quail Hollow..

Thanks and 73's, Don W8DEF

ARRL NEWS
PROPAGATION NEWS

ZCZC AP08
QST de W1AW
Propagation Forecast Bulletin 8 ARLP008
From Tad Cook, K7VVV
Seattle, WA February 23, 2001
To all radio amateurs

The sun continues to be quiet, and this really looks like a significant decline in activity. Average daily sunspot numbers for the first and second weeks of this month were 149.1 and 143.7, and it was 124.1 for this past week. The average solar flux for each of those same weeks also declined. It was 164.9, 150.7 and 136.1. Solar flux last Friday was 129.6. Flux values have not been this low since May 6, 2000, when it was 126.8, and prior to that on January 29, 2000 when it was 127.7.

If the peak in the cycle was in mid-2000, then these were possibly on the other side of the cycle peak.

Forecast for the next few days shows solar flux values of 150 for Friday and Saturday and 145 for Sunday and Monday. The planetary A index is predicted to be a very quiet 5 on all of those days. Solar flux is expected to dip again to around 135 on the last day of this month, next Wednesday, then rise to around 165 for the first week of March.

Scott Craig is looking for some volunteers to beta test version 3.11 of his solar plotting software. You can email him for this test only at sol@craigcentral.com.

We are about a month away from the spring equinox, when some of the best seasonal HF conditions prevail. Look for 20 meter openings later into the evening. 10 meters will probably be good for only another two months or so, so now through the equinox is probably the best time to work that band. Our path projection for this week is for 40 meters only, and only to Great Britain for this weekend's RSGB 7 MHz Contest, which is CW only.

To England, from Seattle on 40 meters, 2330-1000z (best 0200-0630 UTC), San Francisco, 0030-0930z (best 0230-0630z), Los Angeles, 0030-0930z (best around 0200z), Arizona (between Phoenix and Tucson) 0000-0930z (best around 0130z), Salt Lake City 2330-0930z (best 0130-0630z), Omaha 2130-1030z (best 0030-0630z).

The center of the continental U.S. 2130-1100z (best 0100-0700z), Minneapolis 2100-1030z (best 0000-0700z), Cleveland 2030-1000z (best 2330-0700z), Hawaii 0400-0900z (best around 0500z), Alaska open all hours, best 0330-0630z, weakest 0900z and 1530z.

Japan 1400-2300z (best 1800- 2100z), Chicago 2100-1030z (best 0000-0700z), Dallas 2300- 0930z (best 0030-0700z), El Paso 2330-0930z (best 0100-0630z), Louisiana 2230-0930z (best 0000-0700z), Birmingham, AL 2130-1030z (best 0000-0700z), Columbia, MO 2130-1030z (best 0030-0630z), Pocatello, ID 2330-1000z (best 0130-0630z).

Billings, MT 2130-1130z (best 0130-0700z), Atlanta 2130-1000z (best 0000-0700z), Nashville 2130-1030z (best 0000-0730z), Philadelphia 2030-1000z (best 2300-0630z), New York City 2000-1030z (best 2300-0630z), Boston 1930-1000z (best around 2230z.

Sunspot numbers for February 15 through 21 were 113, 133, 95, 143, 147, 119 and 119 with a mean of 124.1. 10.7 cm flux was 135.1, 129.6, 129.8, 132, 137, 145.5 and 143.6, with a mean of 136.1, and estimated planetary A indices were 5, 3, 3, 4, 6, 8 and 6 with a mean of 5.

NNNN
/EX

ARLD008 DX news

ZCZC AE08
QST de W1AW
DX Bulletin 8 ARLD008
From ARRL Headquarters
Newington CT February 22, 2001
To all radio amateurs

SB DX ARL ARLD008
ARLD008 DX news

This week's bulletin was made possible with information provided by Tedd, KB8NW, The OPDX Bulletin, QRZ DX, XE1KK, The Daily DX, 425DXnews, DXNL and the ARRL web contest calendar. Thanks to all.

MAURITIUS, 3B8. Jacky, 3B8CF, is usually QRV almost daily on 30 and 20 meters using CW between 0230 to 0400z.

RODRIGUES ISLAND, 3B9. Robert, 3B9FR, can usually be found on 20, 17 and 15 meters between 1530 to 1930z.

JAMAICA, 6Y. The DXpedition University group are QRV until March 6. They are signing 6Y8A, WT6G/6Y5, WA6O/6Y5, K0COP/6Y5, W6NS/6Y5, N6XG/6Y5 and K2KW/6Y5 with four stations on 160 to 6 meters using mostly SSB, with some CW and possibly PSK31. QSL 6Y8A via WA4WTG, others via homecalls.

SPRATLY ISLANDS. Sally, KM5EP, Dennis, AF7Y, Jerry, WB9Z, Luis, XE1L, Darryl, AF7O, Dan, NA7DB and Mike, N7MB, are planning an operation as 9M0M during the first week of March. QSL via K7XN.

EAST MALAYSIA, 9M6. Before and after their Spratly Islands operation, look for 9M6DBT and 9M6MBT to be QRV from Sabah. QSL both calls via WN7J.

THE GAMBIA, C5. DL2OE and DL7CM are QRV as C56/homecalls until March 5. Activity is on 160 to 6 meters using CW, SSB and RTTY.QSL to home calls.

CUBA, CO. The No-Name DX Group are QRV as T48RAC. They will participate in the CQ 160-Meter SSB Contest, and in the ARRL DX Phone contest. QSL via VE3ESE.

IRAN, EP. Hamid, EP3HR, has been active on 12 meters. Check 24950 kHz between 0900 to 0930z. QSL via I2MQP.

SOLOMON ISLANDS, H4. Bernard, H44MS, has been active on 12 meters starting around 1000z. He has also been active on 75 meters on 3799 kHz after 1100z. QSL via DL2GAC.

JAPAN, JA. Masa, JA6GXK, will be QRV from Meshima, Danjo Archipelago, IOTA AS-056, from February 27 to March 9 and then from March 21 to 30. Activity will be mostly on 20 and 15 meters. QSL via bureau.

MINAMI TORISHIMA, JD1. JD1BCK has been active on 10 meters usually after 0230z. QSL via JM1TUK.

WAKE ISLAND, KH9. Bruce, AC4G/KH9, has been QRV on 28018 kHz between 0945 and 1030z. QSL to home call.

PAPUA NEW GUINEA, P2. Rick, P29KFS, expects to be active from the PNG station P29PNG in the CQ 160-Meter SSB Contest. QSL via operator's instructions.

PALAU, T8. Yukio, JA6ENF, is QRV on 80 to 10 meters as T88NF until February 26. QSL to home call.

ST. KITTS AND NEVIS, V4. Alex, V47KP, will be QRV in the CQ WW 160-Meter SSB Contest. QSL via K2SB.

MONTSERRAT, VP2M. Art, N2NB, and Woody, K2UU, are QRV as VP2MDY until March 1. This includes an entry in the CQ WW 160-Meter Contest. QSL via NW8F.

MEXICO, XE. The Mexican Radio Club Satellites station XE1RCS will be QRV in the CQ WW 160-Meter contest. QSL via XE1KK.

THIS WEEKEND ON THE RADIO. The CQ WW 160-Meter SSB Contest, REF French Phone Contest, UBA CW Contest, RSGB 7 MHz Contest, CQC Winter QRP QSO Party and the North Carolina QSO Party will certainly keep contesters busy this weekend. Please see the ARRL web contest calendar for details.

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ARRLWeb: Morse, Vail and Early Telegraph Keys

Morse, Vail and Early Telegraph Keys

By Jan Moller, K6FM
Contributing Editor
February 23, 2001

Morse's invention of the telegraph motivated inventors to create a veritable garden of...

Morse, the inventor

A man of many interests, Samuel Morse was by profession a portrait painter, and a talented one. Inventing small machinery was sort of a sideline. During a boat trip in 1832 he learned that Benjamin Franklin had shown how electric current passed through many miles of wire instantly. Morse, greatly interested, wondered if electricity could be used to send information speedily over long distances. At home, Morse started to build working models to try out his ideas. He called the system a "telegraph", from the Greek, to draw-at a distance. The term had been used earlier with semaphore systems but their messages, when received, were written down by hand. One of his students, Alfred Vail, whose father had a machine shop and foundry, was interested and offered to help Morse. Together they designed a receiver that used a fountain pen to draw lines on a moving strip of paper. The design was simplified have the pen make short and long marks, "dots" and "dashes" rather than a continuous line with sideways squiggles on the paper. The foundation of the Morse Code was laid. At first, Morse assigned numbers to words in a special dictionary, each digit having its own combination of dots and dashes. A message was transmitted as groups of numbers. Later, he and Vail developed a new code where each letter, digit, and punctuation mark had its own unique set of dots and dashes. This American Morse Code was completed around 1840 and was used on landlines in North and Central America for many years. A later effort to change the letter codes containing spaces (C,O,R,Y and Z) started such an uproar among the telegraph operators that it was abandoned. In addition, the spaced letters and the long L caused problems when used with submarine cables. Operators in Europe came up with a slightly revised code that was adopted at the first International Telegraphic Conference in Berlin in 1851. This is the Continental (International) Morse code still in use today. One official revision occurred at the ITU conference in 1938. A few punctuation codes were changed to remove the last "spaced" character. [Ed note: the spaces between "dits" within a letter, and the long dash—for "L"—, do not have a counterpart in the International Morse Code used in Amateur Radio CW].

In 1838 Morse and Vail showed their telegraph to scientists and public officials including President Van Buren. A US patent was obtained in 1840. In 1843 Morse finally received congressional funding for a demonstration line between Washington, DC and Baltimore. The line was completed in 1844, worked well, and initiated the construction of commercial lines all over North America and Europe. [Ed note: The message "What hath God wrought?" was sent on this line].

The telegraph keys

What did the first telegraph keys look like? Originally, Morse wanted each message to be prepared before transmitting. He designed a tray with movable letter inserts, somewhat like a typesetter's tray. The inserts had raised ridges coded for each letter. These ridges actuated an overhead lever as the tray was moved under it. The lever had contacts that produced the electric signals. Vail, who was an excellent mechanic, made what radio hams call a "strap key", a springy brass strip that could be pushed down against a contact. This device proved that hand sending of Morse code was practical but the key was soon replaced by a sturdier lever key, Fig. 1.

Fig 2. Elegant reproduction of a camelback key. [DKIWE Photo] Vail named it the Correspondent. Remarkably, it did not have a knob! But sending batteries were low voltage and speed was not of the essence. Correspondent keys were used in 1844 on the telegraph line between Washington and Baltimore. Once commercial telegraphy started to grow, similar but more compact keys with knobs came into use. Fig. 2 shows a so-called "Camelback" key in the ornate style of that era. Fine camelback replicas are still made in Germany by DK1WE.

Fig 3. Original 1861 Oeller key, later made by L.M.Ericsson from 1876 1939. [SM4GL/SM4DXO Photo]

Operating these early telegraph keys was pretty hard work. One had to move a stiff lever between two very firm stops. In 1857, Henric Oeller, a Swede, designed a key that enabled faster sending and reduced the strain on the operators. A piece of spring steel with silver contacts was attached to the end of a solid brass arm. See Fig. 3. The leaf spring, moving between two heavy posts which held the fixed contact points, gave the key a nice, bouncy feel.

Fig 4. Early 1880s Bunnell steel-lever key. [ARRL Photo] In 1881, Jesse H. Bunnell, an American, offered his famous steel lever key design, Fig. 4. The flexing of the thin steel arm gave this key too, a good, soft feel. This lighter design literally became the prototype for most American telegraph keys and is still being produced today. Bunnell's key has been copied in countries all over the world. Western Electric Company manufactured so many of these keys that it earned the pet name "The Western Electric Key".

Fig 5. The Bunnell type-W Sideswiper, probably late 1880s. [ARRL Photo] The increased use of telegraphs in the second half of the nineteenth century produced another problem. Long hours of operating, "pounding the brass", sometimes gave the telegrapher a painful ailment called a "glass arm". To avoid this, many attempts were made to design keys that allowed the sender's arm to take a less strained position. An early effort was Bunnell's Sideswiper. Its horizontal action, Fig. 5, allowed the operator to rest his hand on the table. The most successful solution, however, was the Vibroplex or "Bug" as it was called after the company trademark. Invented by Horace Martin in 1904, it produced the dots by a pendulum motion and the dashes individually, all from horizontal hand movements. The Bug today has competition from electronic keyers that produce both dots and dashes and are run by paddle keys. Story in the July 1999(ARRL Web Extra). Spark transmission

(ED Note: this complete story can be found in the ARRL WEb Site, MEMBERS ONLY section, complete with pictures. Space here prohibits complete reproduction and we present only a portion of this story. Please refer to the ARRL web site , Feb 23, 2001)

EXCERPTS FROM THE ARRL LETTER

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The ARRL Letter
Vol. 20, No. 8
February 23, 2001
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==>LF-TO-LF TRANSATLANTIC AMATEUR CONTACT IS HISTORY

Amateur Radio history was made this month when amateurs in Canada and the UK completed what appears to be the first two-way transatlantic Amateur Radio exchange on 136 kHz. Larry Kayser, VA3LK, and Lawrence "Laurie" Mayhead, G3AQC, managed the LF feat using extremely slow CW that featured 90-second-long dits and 180-second-long dahs. The two-way contact took two weeks to complete.

"We are the first to do a two-way QSO on LF across the North Atlantic as far as I am concerned," Kayser said. "We are the ones who put the stakes in the ground; others will build on what we have done."

The VA3LK-G3AQC contact began February 5 and was completed February 19 with the reception and confirmation of VA3LK's report by G3AQC. Kayser said the participants agreed in advance to a "firewall" between them for the duration of the contact and that all QSO information was exchanged over the LF radio link.

Mayhead said it was clear from the outset that, because of the relatively short band openings, he and Kayser would have to spread the contact out over several days. "It was not easy," he said. "I stayed up late most nights—3 AM on one occasion—changed blown fuses in my transmitter six times, and reconfigured my receiver to include a narrow filter because of interference that was desensitizing it." Kayser says he once had to climb the towersupporting his wire antenna in total darkness.

The UK has authorized amateur operation on 136 kHz, with special authorization and strict limits on radiated power. While Canada has not yet authorized general Amateur Radio operation on 136 kHz, Kayser and a few other Canadian amateurs have received special authorization to experiment there.

Reception of weak LF signals typically is done using spectrographic software like ARGO or Spectran. Signals are transmitted using dual-frequency CW—or DFCW—or very slow-speed CW, also known as "QRSS." Using their particular brand of QRSS, Kayser calculated that it took nearly 70 minutes for him to send his call sign. "Certainly the information rate will improve," he said. "We did the best we could with what we had to work with over the last two weeks."

G3AQC and VA3LK were using a combination of commercial and surplus equipment at their respective stations. G3AQC estimated his effective radiated power at 350 mW, while VA3LK said he might have been at the 5 W ERP level.

In October 1998, the ARRL petitioned the FCC to create two amateur LF allocations at 135.7-137.8 kHz and 160-190 kHz. The FCC has not yet acted on the request.

==>WWV SURVEY PLANNED

The National Institute of Standards and Technology plans to survey users of WWV and WWVH later this year. The time and frequency-standard stations have been airing occasional announcements about the upcoming poll in order to start building a mailing list of survey recipients. The announcements state that NIST "is seeking information on how listeners use the broadcast services offered on the WWV broadcast," but the survey will not begin for at least several weeks.

WWV Station Manager John Lowe says the announcements are being broadcast now as a heads up and to encourage early mailing list signups. The survey itself will not be released until approved by the Office of Management and Budget, Lowe said, and he doesn't expect that to happen until May, although it could be sooner. The survey period likely would extend through the summer, he said.

According to Lowe, the last WWV-WWVH user survey was done in 1985. "We just don't know who our user base is anymore," he said. Lowe confirmed that the data collected ultimately could be used to determine whether WWV and WWVH remain on the air—especially given the popularity of NIST's other outlets, including its Web-based time server that gets in excess of 3 million hits a day.

"If we get only two people who say they're using WWV, then we've got a problem," he said. Lowe added that he does not think WWV and WWV will be shut down, and he vowed to "fight for the radio stations," if it came down to that. "But the ultimate decision is not in my hands," he said. "We have to look at our budget and our users."

Lowe strongly encouraged WWV users to get on the mailing list and to send in a survey when the time comes. He suggested, however, that more weight will be given to survey responses from corporate and institutional users of the radio service as opposed to individual users.

To be added to the NIST WWV-WWVH survey mailing list, send your name and postal address to the NIST Radio Station WWV, 2000 E County Road 58, Ft Collins, CO 80524, or e-mail the information to nist.radio@boulder.nist.gov. Lowe urged WWV-WWVH users to hold their fire until the survey begins.

WWV in Ft Collins, Colorado, and WWVH on Kauai, Hawaii, broadcast continuous time and frequency information to millions of listeners worldwide. For more information, visit the NIST Web site, http://www.nist.gov.

==>CANADIAN YOUNGSTERS SPEAK WITH COMMANDER SHEPHERD ON ARISS QSO

A dozen youngsters at Merivale Public School in Ottawa, Ontario, this week became the first Canadian students to speak with Space Station Alpha Commander William "Shep" Shepherd, KD5GSL, operating from space as NA1SS. The successful Amateur Radio on the International Space Station—or ARISS—school contact February 22 likely will be the last for the Expedition 1 crew

Amateur Radio coordinator Steve McFarlane, VE3TBD, worked in concert with his wife, Lori—a teacher at the school—to make the contact a reality. Lori McFarlane has been working with youngsters at the school for several weeks in anticipation of the ARISS QSO.

After a few unsuccessful calls, VE3TBD raised NA1SS on the ARISS backup frequency. Youngsters asked Shepherd about trash disposal and recycling aboard the ISS, procedures for dealing with a sick crew member, and what the crew does for exercise.

One fourth grader wondered why building a space station was necessary, given problems with pollution and poverty on Earth. Shepherd had a ready reply. "We live on a planet that's really kind of an island, and it's not going to last forever," he said. Shepherd said he thinks humans probably will one day need to "go places other than Earth" and that the ISS made possible the research needed to do that.

Shepherd said the crew members all missed their families and friends but he said he gets to talk to his wife via Amateur Radio "every couple of days." He also said he has photos and videos of his family aboard. Responding to another student's question, Shepherd said the crew had exercise equipment aboard, and that exercising was considered essential.

Near the conclusion of the contact, the students on hand hollered "73, Commander Shepherd!" in unison. Looking on in addition to other students and teachers were TV and newspaper reporters. It had been hoped that Canadian Prime Minister Jean Chretien would be able to be on hand, but he was occupied with a visit by British Prime Minister Tony Blair.

The Merivale ARISS contact probably will be the last school QSO for the current crew of Shepherd, Yuri Gidzenko, and Sergei Krikalev, U5MIR. ARISS spokesman Will Marchant, KC6ROL, said he expects it will be sometime in late March—after the Expedition 2 crew arrives—before ARISS school contacts can resume.

For more information on the ARISS program, visit the ARISS Web site, http://ariss.gsfc.nasa.gov.

==>IN BRIEF:

* RTTY signal in AM window being investigated: In its periodic report to the FCC Notifications Branch, The ARRL Monitoring System has asked the FCC to help identify the source of a RTTY transmission near 3.885 MHz, the 75-meter AM calling frequency. "We received numerous reports of this signal from AM enthusiasts on February 22," said Monitoring System Administrator Brennan Price, N4QX. "We have asked the FCC HF Direction Finding Facility in Maryland to determine the origin of the signal." Price said this was the first step in resolving the situation, but he notes that the signal may not be illegal. "US hams are fortunate to have access to 3800 to 4000 kHz," he said. "In many countries, this segment is used by a variety of fixed, mobile, and broadcasting services." He said that if the RTTY transmission is not coming from the US, it may be legal in its country of origin. "In that case, any resolution will have to be achieved through negotiation rather than through enforcement," he said.

* ARRL Emergency Communications on-line course again fills up fast: The ARRL course, Introduction to Emergency Communications, was fully subscribed within 72 hours of the opening announcement earlier this week. A ham in Italy has been added to the growing list of foreign students "attending" this on-line course. Plans call for offering a new course every four weeks, and a "live" classroom version of the course is now in beta testing. Formore information on this on-line course, visit the ARRL Certification and Continuing Education page, http://www.arrl.org/cce .

* D68C DXpedition at 126,000 Qs and counting: The D68C DXpedition to Comoros reports logging more than 4650 QSOs in the recent ARRL International DX Contest (CW), probably topping the current the Africa multi-two record by a significant margin. D68C has been active on 30, 17 and 12 meters as well as on 14 and 28 MHz RTTY and PSK31. The D68C will not do any satellite operation, as originally planned. The team reports occasional high noise levels on the lower bands. "We are working all we can hear. Sometimes it is really hard to hear anything at all with all the static," said John Linford, G3WGV. As of February 20, the team had 126,000 QSOs in the log, and Linford said he anticipates when all is said and done, the D68C operation will hold several new records, including total number of QSOs.—John Linford, G3WGV

The ARRL Letter is published Fridays, 50 times each year, by the American Radio Relay League—The National Association For Amateur Radio—225 Main St, Newington, CT 06111; tel 860-594-0200; fax 860-594-0259; http://www.arrl.org. Jim Haynie, W5JBP, President

CANTON / MASSILLON VE EXAM NEWS

On February 24, 2001 the Canton and Massillon held their first VE Exam session for 2001 at the EOC. This session was well attended. We had 10 people show up to take exams. Out of the 10 we had 3 new Extra Class, 3 new General Class and 2 new Technician Class licenses. One person completed his general Class written, but declined to take the code which means he did not obtain a new license. One person who was trying for General Class failed his code and written. This makes for a 90% success rate!

At this time I cannot revel the list of new licensees until the FCC is done processing the paper work and everything becomes public information, then can the list be published.

The Canton / Massillon Amateur Radio Clubs VE Exam Schedule for 2001 is; February 24
May 26
August 25*
November 24 , 2001

Please note that the August 25 session will be held at the Massillon Senior Center and not at the EOC. This is done to include the Massillon club at least once a year in the sessions to shift some of the "burden".

The VE's who did the grading this time were : Dr. Stanley Bertman W8MD, John Kocher N8ZXB, and Bruce Putnam AB8FB. Jim Farriss WA8GXM handled the paper work and issued the CSCE's. All total we had 12 VE's on hand to help at this session.

Thanks to all

de WC8W VE LIAISON CANTON / MASSILLON ARC's