

ORC NEWS

Feb 82

EX SEZ - WA9AWO

"The time is right"; "No time like the present"; "He who hesitates is lost"; all of these are familiar cliches, of course, but they speak to the use of time, our only unrecoverable resource. Sunday, January 31, 1982 time expired for Jim Schellenberg, WA9DOT . . . as you read this the wake for Jim on Wednesday, February 3rd is a memory. Jim will be remembered by the Amateur Radio Community for his accomplishments in moon-bounce and 2 and 6 meter WAS.

I would like to leave you with the following thoughts - - -

"Life is a great bundle of little things," Oliver Wendal Holmes

"Dost thou love Life? Then do not squander Time, for that is the stuff life is made of," Benjamin Franklin

"Our todays and yesterdays are the blocks with which we build," Longfellow

"No one knows what it is that he can do until he tries," Publilius Syrus

Reflecting back on Jim Schellenberg's life brought these to mind, and one more:

"Seventy-threes and thanks for the chat," WA9DOT

Participate - it's later than you think.

Seventy Three

TABerg WA9AWO

FROM THE PREZ - WD9FQW

Welcome to a new year. May this club grow and prosper as it has in the past years.

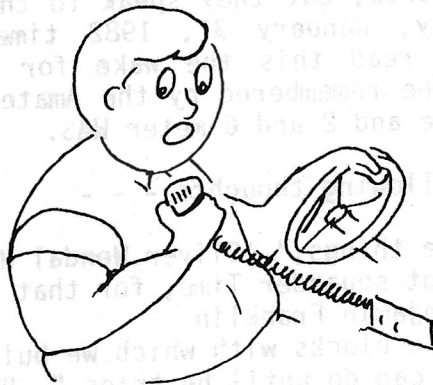
I'd like to welcome my fine staff: Ed Rate, AA9W - Vice President; Skip Douglas, KA9DDN - Repeater Vice-President; Joe Bauer, W9WQ - Secretary; and Lorraine Anderson, KA9HJR - Treasurer. They are a fine group of people, and I hope you will welcome them, new and old, and give them and me whatever assistance you can.

Being my first official opportunity, I'd like to thank some people for some things they've done. There is no order to this, so . . . Bob Williams, W9DQS, thanks for the refreshment runs. I'm sure everyone at the meetings enjoys the get-together they provide and hope you are willing to keep up the good work. Jeff Klopp, WA9USA, thanks for making sure we have our reservations for our meeting place. It sure is roomier and better than Cedarburg C.D., shelter or the Pleasant Valley School. Also, people at meetings can help us keep it by cleaning up after themselves a little better. Barry Anderson, WB9SFK, you've done a great job on the swapfests, and it looks as though another one is on its way. So we can

all enjoy it and its benefits, let's give Barry and crew all the assistance we can.

My concerns for the club are to get everyone more active in the next year. Whether it be Swapfest, Holland Days, Field Day, Sweepstakes, Walk for Mankind, or the Repeater, this is your club; and it can only be what we as a group make it. Along these lines - by now we should have had one meeting of the Repeater Operating and Technical Committee. I hope everyone can contact one of the group with his thoughts, or join in the informal meetings. Dates and times will hopefully be announced on Tuesday Nets.

Mike Behlen, WD9FQW



What do you mean they
changed the date of the
"pig-out?!" I've been
starving myself all day!

EMERGENCY GOVERNMENT BULLETIN - WA9USA

[Ed - the following WR9AAE repeater procedure is proposed by Jeff Klopp for use in county emergencies; the Repeater Operations Committee is also preparing a proposal which should be available in approximately one month]

In the event Ozaukee County Emergency Government has need for the O.R.C., repeater the following procedure will be followed:

- 1) The courthouse station, W9CQ0, will announce on the repeater that it has need of the frequency and what the emergency is about.
- 2) W9CQ0 will conduct a roll call of the County Warning and Communications Officers who are monitoring 146.97 MHz. It will be these stations which will periodically announce the situation and give instructions on how the repeater can be utilized. Short QSO's will generally be permissable.
- 3) Finally, the repeater Vice-President, or his designated assistant (WD9JIB), will be advised of the situation, and will be advised when the operation is concluded.

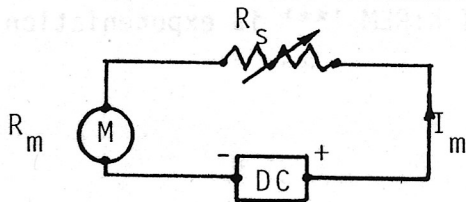
It is hoped that the above procedure will avoid any confusion which has been experienced in the past.

WA9USA

 SHUNT YOUR EXPENSES AND MULTIPLY YOUR FUN WITH METERS - W9NZF

The homebrewer has a ready source of panel meters for his projects in the selection of units at almost any hamfest. Weston, Jewett, Triplett and Simpson made an incredible number of meters during WWII. "Ah yes," you say, "but I can't find the full-scale range I need for my Zinger VII linear!" Fear not, as a basic milliammeter (or microammeter) is all you really need to start with, for measuring either current or voltage. These units come in all sorts of ranges, and are available in several diameters to fit the limits of your panel design. It should be noted that the scale may be calibrated in various units (db, vu, ma, volts, etc.) but the full scale reading of the basic movement is all we are interested in.

To determine the electrical resistance of your meter's movement, it is not advisable to use an ohmmeter, as its current output often drives the needle of the "victim" off-scale. As in the diagram below, connect a variable resistor in series with the meter movement and a low-voltage source:



I_m = Meter Movement Full scale current
 R_m = Internal Resistance of Movement
 R_s = External Adjustable Resistor

By adjustment of the supply voltage and/or the resistor, obtain a full-scale reading with the resistor at $\frac{1}{2}$ value or less . . . then measure this resistance. The difference between these two readings is the internal resistance of the meter movement (the voltage and resistor values used will vary with meter characteristics - start experimenting with low voltage and high resistance).

The full-scale basic movement sensitivity is often found on the lower corner of the scale plate . . . small print. This does not include any effects due to shunts, multipliers, or rectifiers which may be built into the case.

SHUNT - A resistance placed across (in parallel to) the meter movement to divert part of the current in order to permit a low current meter to measure a larger value.

MULTIPLIER - A resistance placed in series with the meter movement to permit a low current movement to measure a larger circuit voltage.

RECTIFIER - Usually a diode bridge to convert AC voltages to DC in order to permit the use of a DC meter movement . . . scale calibrated in terms of AC.

NEXT MONTH: Example of shunt and multiplier calculations for the home brew linear using low value DC ammeters.

73,
 Fred A. Linn NNNØBUQ/W9NZF

 MR WIZARD'S TELECOMPUTING CORNER - WA9UDZ

What is the relationship between occupied bandwidth and modulating frequency in a

an FM-modulated system? A seemingly simple question -- yet even a rudimentary exploration of the answer leads into the never-never land of Bessel Functions and LaPlace Transforms. Why not let your friendly microcomputer give you the many possible permutations in spectacular, graphical, easy to interpret form? The following program graphs the carrier, and all significant sidebands (up to 10), with their phase relationship and relative amplitudes preserved (for the Apple, the positive sidebands are blue, negative are yellow; if the carrier is negative, it is orange). This program is written in Apple microsoft, but the author would be glad to assist in translation to other dialects.

```

1  DIM S(12):HOME
4  PRINT:X=0:INPUT "ENTER MODULATING FREQ, DEVIATION (KHZ) ";M,D:M=ABS(M):
   D=ABS(D):IF M#0 THEN X=D/M:REM '#' is 'not equal'; X = modulation index
6  PRINT:FOR N=1 TO 10:REM 'gt' is 'greater than'
7  IF X gt 12 THEN PRINT:PRINT "ARGUMENT BEYOND PROGRAM CAPABILITY":GOTO 4
8  E=INT(X/4):IF N gt 14 THEN X=13:GOTO 7
9  IF X gt 10 AND N gt 1 THEN X=13:GOTO 7
10 B=1:FOR K=1 TO E:GOSUB 1000:GOSUB 2000:
    B=((-1)**K*X**(2*K))/(2**(2*K)*F*G)+B:NEXT K:REM '**' is exponentiation
15 K=N:IF K=0 THEN K=1
20 GOSUB 1000:B=B*(X**N)/((2**N)*F)
30 S(N)=B
50 PRINT "  J";N;"(";X;") = ";B
52 IF ABS(B) gt .05 THEN C=0:GOTO 55
53 C=C+1:IF C=2 THEN 60
55 NEXT N
67 IF K gt 9 THEN K=9
70 GR:COLOR=13:FOR J=1 TO 9:HLIN 0,1 AT J*4-1:NEXT J:FOR I=0 TO K:IF S(I)
   gt 0 THEN COLOR=2
75 IF S(I) lt= 0 THEN COLOR=1
76 IF S(I)=0 THEN 90
77 IF I=0 AND S(I) gt 0 THEN COLOR=6
79 IF I=0 AND S(I) lt= 0 THEN COLOR=4
80 VLIN 39-(ABS(S(I))*39),38 AT 20+2*I:VLIN 39-(ABS(S(I))*39),38 AT
   20-(2*I)
90 NEXT I
91 COLOR=13:HLIN 0,39 AT 39:HLIN 0,39 AT 0:VLIN 0,39 AT 0:VLIN 0,39 AT 39:
   HLIN 0,3 AT 19
92 FOR I=1 TO 18 STEP 2:HTAB (2*I)+3:PRINT " ";:NEXT I:PRINT
93 M=INT(10*M)/10:FOR I=1 TO 18 STEP 2:HTAB(2*I)+3:PRINT ABS(I-9)*M;:NEXT I
99 HTAB 20:PRINT "KHZ"
100 GOTO 4
1000 F=1:FOR I=K TO 2 STEP -1:F=I*F:NEXT I
1010 RETURN
2000 G=1:FOR I=1 TO K:G=G*(N+1):NEXT I
2010 RETURN

```

PLEASE SEND ALONG ANY PROGRAMS YOU MIGHT HAVE TO SHARE, c/o WA9UDZ

73,

WA9UDZ

 MINUTES JANUARY 13, 1982 - by Joe Bauer

Repeater meeting convened at 7:10 PM, KA9DDN presiding. Checking account: \$31.18, Savings: \$86.10, Late Receipt of 1981 dues from treasury, \$97.50, for a total of \$214.78. The recent cold snap did disable the repeater but thermal assist from a light bulb helped. Solutions to this problem will be pursued. WA9UDZ mentioned his inability to break dial tone on the autopatch. Apparently only one other person was having same trouble. Discussion centered on checking of deviation levels. A query was made about emergency use of the repeater taking priority over casual operations. Discussion culminated in a motion by WB9RQR that a committee be formed to consider the situation and report back to the club later. Motion seconded by WA9AWO and was carried. Meeting adjourned at 7:21 PM.

Regular meeting opened at 7:30 PM with WA9AWO presiding. Motion by WD9GNK to accept agenda for this meeting, seconded by WD9JHP. Motion carried. Moved by WD9JIB & Second by KA9CSC to accept minutes of December meeting. Motion carried. WD9FQW reminded the club of a meeting in Grafton the following evening on Cable TV. Potential TVI/QRM problems should be closely watched. WD9ISS (port) reports that he no longer gives TVI to neighbors who are on Cable TV. AA9W reports that a spurious signal from the Mequon Police repeater falls on 146.97 MHz., our repeater output frequency. Lions Club presentation by WB9OHY and WD9GDG set for February 23. WA9USA read a letter of commendation to RACES operators from the Emergency Government Coordinator for services rendered during the January 9/11 snow emergency. Moved by KA9DDN that the Secretary send a letter of thanks to Jim Taylor of Taylor Electric for the four DIGITRAN key pads that he donated to the club. Motion seconded and carried.

TREASURER'S REPORT: Receipts -- '82 dues \$245, patches sold \$2.25, Drawing \$2.00, Kitty \$14.40, Tune in World \$22.50, Bank error \$1.50, for a TOTAL of \$287.65. Disbursements -- 12/81 Refreshments \$24.32, 11/81 Newsletter postage \$11.54, Swapfest printing \$111.80, '81 dues to repeater account \$97.50, for a TOTAL of \$265.16. ASSETS -- Checking Account \$129.86, Savings Account \$1,644.48, Patches \$64.50, Cash on hand \$18.66, for a TOTAL of \$1,644.48. Moved/Seconded by WD9JIB/KA9CSC, Carried.

POST PARTY: WB9PAS calls attention to reservation form in the Newsletter - deadline is 22 February (party is 27th).

SWAPFEST: WB9SFK, brief recap of progress so far. Flyers were enthusiastically welcomed at Waukesha last Saturday.

CAPITOL COURT PROJECT: W9NHE reports progress and solicits volunteers.

The chair solicited nominations from the floor for the annual election of club officers. KC9CJ nominated WD9JHP for Repeater Vice-President, seconded by WB9OHY. Moved/seconded that nominations be closed. Motion carried. Moved by WA9TZU that the uncontested candidates be declared elected, seconded by WA9UDZ. Motion carried. Moved and seconded that the candidates for Repeater VP be allowed to make campaign speeches. Discussion followed as to amount of time to be allowed each candidate. Motion failed on voice vote and show of hands.

REPEATER VP ELECTION RESULTS - First Ballot = KA9DDN 21 votes, N9APC 25, WD9JHP 10. 2nd Ballot = KA9DDN 30, N9APC 27, 2 blank and 2' abstain. Thus KA9DDN is declared re-elected Repeater VP. Program by Ed Rate, AA9W, on the Marissa, Illinois Repeater WD9GOE, and interesting slide show with synced audio.

E.J. Bauer, W9WQ

February 10, 1982 7:30PM Ozaukee Radio Club Meeting A D G E N D A

INTRODUCTION

Secretaries Report - W9WQ, Joe Bauer (reproduced in newsletter page 5)

Treasurers Report - KA9HJR, Loraine Anderson

Committee Reports

Old Business

A. Post Party - WB9PAS, Russ Schreiner

B. Swapfest - WB9SFK, Barry Anderson

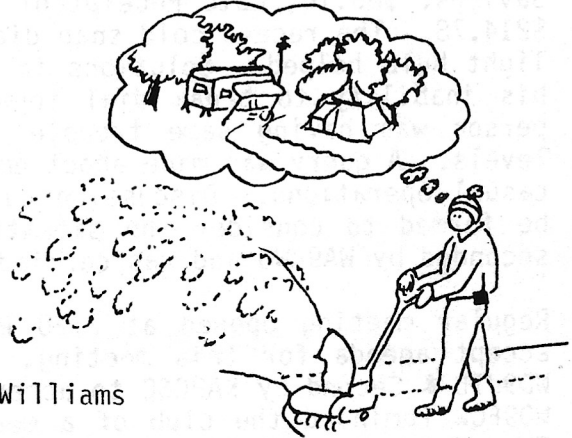
New Business

Open to Floor

Adjournment - refreshments courtesy W9DQS - Bob Williams

Program (?)

Note: The repeater's call sign is circling the drain (expires this year)!!
Now taking suggestions for renewal. Also, should W9CQO be used for repeater
call sign and Emergency Government? Ed.



Ozaukee Radio Club Inc.
P. O. Box 13
Port Washington, WI. 53074