

# CQ Chatter

Volume B2•Issue #5

Wood County Amateur Radio Club

OCTOBER 1999

P. O. Box 534, Bowling Green, OH 43402

<http://bravais.bgsu.edu/~boughton/wcarc.html>

President-WA8CWD, Larry Reitz

Vice President-WB8NQW, Bob Willman

Secretary-AA8XS, John Lagger

Treasurer-N1RB, Bob Boughton

## A Note from the Editor

Want to have some fun? The October Club meeting will be the scene of our traditional Fall fox-hunt and picnic. The idea is for the fox, who will be John, AA8XS, to locate himself somewhere in Wood County, preferably at a park or other facility with picnic tables. The fox will begin his transmissions at 5:30 pm on Monday, October 11th, beginning on the



147.18 machine. He will then move to some simplex frequency and transmit timely clues to his whereabouts. Remember, anyplace in the County is fair game! Once the fox has been located by the top 2 or 3

hunters, the location will be revealed and all participants are invited to join the fox in a picnic, with the food and refreshments provided by the Club.

So dust off your HT and in the next two weeks try to design and build a directional antenna. There are some ideas in the ARRL Handbook, or in back issues of QST. One simple antenna is a 6 in diameter loop with a 6 in length of wire clipped to the side. Another simple way to provide directionality with a rubber duckie is to stand behind it using your body as a sort of reflector.

The other big issue this month is the proposal to change the meeting night (see article in next column). In a move to make it easier for those club members who are volunteer firefighters or emergency medical service personnel, an informal poll shows that Thursdays would be better for these folks and should give us better attendance at club meetings.

As an experiment, the Thursday meeting day will be tried in November and December. The results will be evaluated and if successful, a proposal to amend the bylaws will be made. If you think this change is a good idea, the best way to make it permanent is to come to the club meetings in November and December.

73 de Bob

**WCARC Weekly Net:  
Tuesdays at 2130  
147.18 & 444.475 MHz**

**Club Meeting:  
Monday, October 11th  
Foxhunt!!  
Picnic afterwards  
Location: ???  
Start Listening at 5:30 PM  
on 148.18**

## Meeting Night Change Proposed

At last month's meeting of the WCARC, President Larry Reitz, WA8CWD, proposed that the Club change its regular meeting day to the second Thursday of the month instead of the second Monday of the month. Larry said that he had been in contact with several Club members who simply cannot make it to meetings on Mondays because of volunteer fire department or EMS meetings. A quick survey by Larry indicates that Thursdays would be better as a free night, and that perhaps a change to that day would result in having more members in attendance.

According to the WCARC bylaws, such a change cannot be made unless the bylaws are amended. Any amendment to the bylaws or the Club constitution requires direct notification of all members that the issue will be brought to a vote at the next regular meeting.

As a temporary measure, Larry proposed that the November and December meetings be held on the second Thursday just to see how the attendance goes. The meeting day will re-

*Continued on page 3*

## National Weather Service Bill Creates Storm Cloud - from QST

A provision in a bill authorizing appropriations for the National Weather Service and other government weather services has raised fears that Amateur Radio-related activities such as SKYWARN may be endangered. The provision, Section 3(c) entitled "Competition with Private Sector", also has triggered concern on the part of some that the bill could reduce the government's ability to monitor and issue severe weather warnings. Some hams already have contacted their Senators requesting them to oppose the measure, HR-1553.

Section 3(c) says the NWS "shall not provide, or assist other entities to provide, a service if that service is currently provided or can be provided by commercial enterprise." There would be exceptions if the private sector were unwilling or unable to provide the service. The provision is being championed by commercial weather services that provide fee-based "cloudy and warmer"-style and so-called "value-added" weather forecasts. Some believe the bill could keep the NWS from providing needed weather information, including storm watches and warnings, storm tracking information, and other weather-related data to ARES/RACES organizations or to emergency management officials. ■

## Pagers Available

A quantity of voice pagers is available to members of RACES/ARES at a small fraction of the original cost. The estimated total cost of the pager with crystals is \$35.00. This is a one-time charge and there is no monthly service fee. The pagers have been purchased and were re-crystalled, so they should be available soon. If you would like to be alerted to local emergency situations quickly, a pager fills the need ideally, and is a really good deal cost-wise. One of the objectives stated by the WCARC President, Larry Reitz, is to have all Wood County RACES/ARES participants equipped with pagers so that quick call ups can be made in time of emergency. For further information, please contact Larry, WA8CWD, at (419) 837-2202. ■

## WCARC

### Net Control Roster

Net meets every Tuesday at 2130

Sep 28	KB8QEW
Oct 5	N1RB
Oct 12	N8QMV
Oct 19	WD8ICP
Oct 26	KB8QEW
Nov 2	N1RB
Nov 9	N8QMV

### Brain Teasers

Answers to last week's quiz: 1-A 2-B 3-D 4-D 5-C. Now for some more:

1. What voltage gain can be expected from the circuit in Figure 1 when R1 is 1000 ohms and RF is 100 kilohms?

- A. 0.01    B. 1    C. 10    D. 100

2. What voltage gain can be expected from the circuit in Figure 1 when R1 is 1800 ohms and RF is 68 kilohms?

- A. 1    B. 0.03    C. 38    D. 76

3. What voltage gain can be expected from the circuit in Figure 1 when R1 is 3300 ohms and RF is 47 kilohms?

- A. 28    B. 14    C. 7    D. 0.07

4. What voltage gain can be expected from the circuit in Figure 1 when R1 is 10 ohms and RF is 47 kilohms?

- A. 0.00021    B. 9400    C. 4700    D. 2350

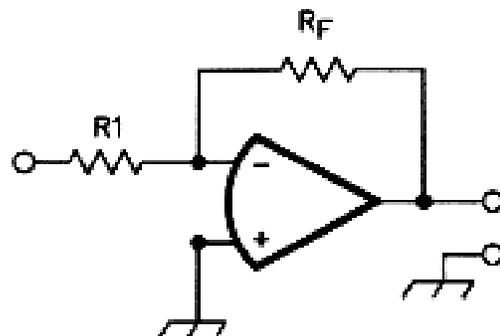


Figure 1

## October Contests

The full contest line-up for the month of October includes the following:

Sep 25-26	1500 to 1800 UTC Scandinavia SSB	80 to 10m
Oct 2-3	1000 to 1000 UTC VK/ZL/Oceania SSB	80 to 10m
Oct 2	1500 to 1859 UTC European Autumn Sprint SSB	80 to 20m
Oct 2-3	1600 to 200 UTC California QSO Party	160 to 2m all modes
Oct 2-3	2000 to 2000 UTC Ibero-America 'test	160 to 10m SSB
Oct 3	0700 to 1900 UTC RSGB 21/28 MHz SSB	15 to 10m
Oct 6-8	1400 to 0200 UTC YLRL Anniversary - CW	80 to 10m
Oct 9-10	1000 to 1000 UTC VK/ZL Oceania - CW	80 to 10m
Oct 9	1500 to 1859 UTC European Autumn Sprint - CW	80 to 20m
Oct 9-10	1600 to 2200 UTC(0500 to 1300 off) PA QSO Party - all modes	160 to 10m
Oct 9-10	0700 to 1900 UTC RSGB 21/28 MHz CW	15 & 10m
Oct 16-17	1400 to 2200 UTC Texas QSO Party - all modes	80 to 10m
Oct 16-17	1500 to 1500 UTC Worked All Germany - all modes	80 to 10m
Oct 20-22	1400 to 0200 UTC YLRL Anniversary - SB	80 to 10m
Oct 30-31	0000 to 2359 UTC CQ WW DX - SSB	160 to 10m
Nov 6-8	2100 to 0300 UTC ARRL Sweepstakes - CW	160 to 10m

Nov 12-14	2300 to 2300 UTC Japan Int'l DX - SSB	80 to 10m
Nov 13-14	1200 to 1200 UTC OK/OM DX 'Test - all modes	160 to 10m
Nov 13-14	1200 to 1200 UTC Ukrainian DX 'Test - all modes	80 to 10m

## Hamfest Calendar

**Oct 17 Ashland Area ARC** 8am - 2pm  
Ashland, OH, County Fairgrounds, Ashland, OH.  
Contact: Dave, N8UCA, (419) 289-1082.

**Oct 24 Utica-Shelby ECA** 8am - 1pm  
Italian American Cultural Center, Warren, MI  
(south of 12 Mile Rd & east of Hoover on Imperial). Contact: Debbie, KB8YYB, (810) 263-0227.

**Oct 31 Massilon ARC** 8am - ?  
Stark County, OH, Fairgrounds - I-77 at Canton.  
Contact: Terry, N8ATZ, (330) 837-3091.

**Oct 31 Marion ARC** 8am - 3pm  
Marion County, OH, Fairgrounds - Veterans'  
Memorial Coliseum. Contact: Karen, N8KE, (740)  
499-3565.

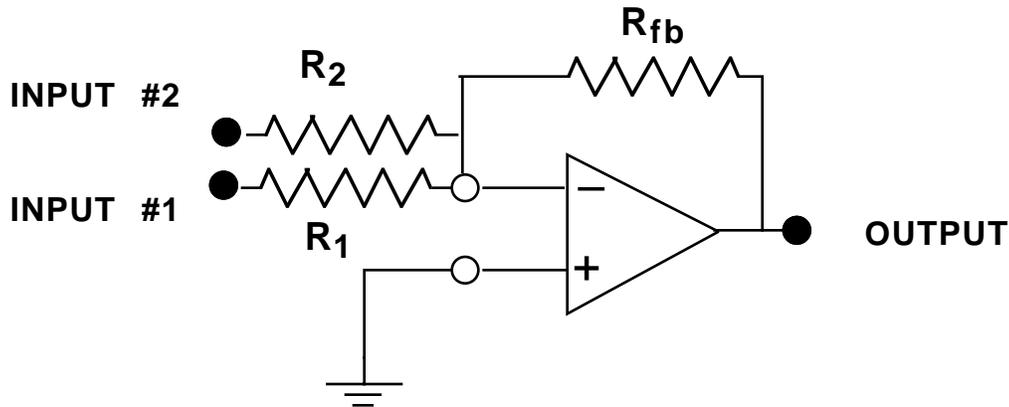
vert to Monday in January, and a decision will be made at that time whether or not to place a by-laws amendment on the table. The resolution was carried at the last meeting, so make a note: the November meeting will be on the 11th, and the December meeting will be on the 9th. The October meeting is on the second Monday as usual, that is, Oct. 11th. ■

## HF Rig For Sale

ICOM 725 all mode rig for sale  
very good condition  
contact: Earl (800) 716-4599  
pager: (419) 444-8686

## Op-Amps - What are they and how do they work?

A modification of the inverting amplifier is a circuit that will add 2 or more signals together. Called the summer, the set-up for adding two signals looks like:

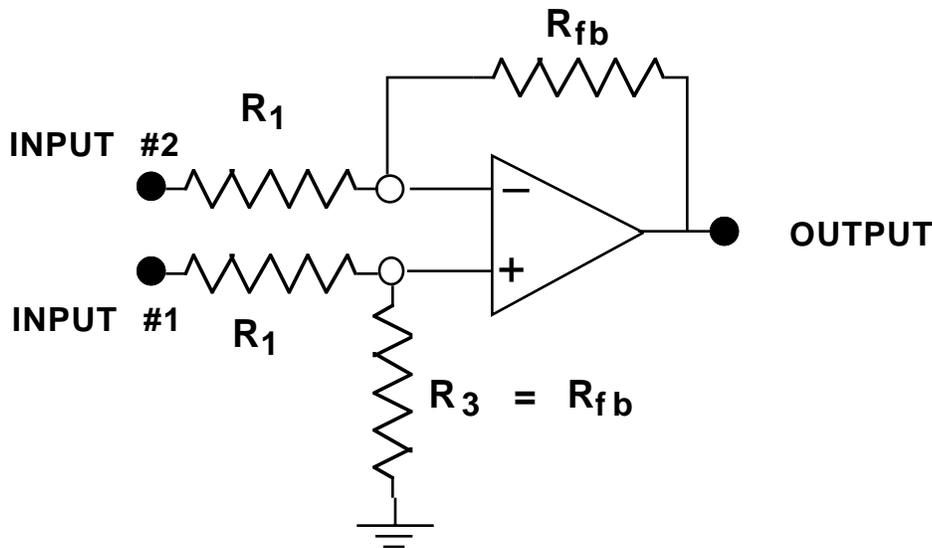


The output voltage is related to the inputs by the formula:

$$v_{\text{out}} = -\frac{R_{\text{fb}}}{R_1} \times \text{INPUT \#1} - \frac{R_{\text{fb}}}{R_2} \times \text{INPUT \#2}$$

If the 2 input resistors are picked to have the same value, say  $R$ , then the circuit gives an output that is the sum of the 2 input signals times the gain factor  $\frac{R_{\text{fb}}}{R}$ .

Another interesting circuit takes advantage of the basic operation of the op-amp in subtracting the voltage at the inverting input from the voltage at the non-inverting input. The circuit for the difference amplifier looks like:



The output voltage here is equal to the gain factor  $\frac{R_{\text{fb}}}{R_1}$  times the difference between INPUT #1 and INPUT #2. The addition of the shunt resistor  $R_3$  across the non-inverting input to ground performs two functions. First of all, by voltage division it balances the non-inverting and the inverting gains, but it also provides the same impedance to ground for both input voltages. This arrangement gives an equal offset for any common-mode signal that appears equally on both inputs (like hum for example). With this trick, the difference amplifier won't amplify an off-balance difference in the hum signal and give us an unexpected "addition" to the output.

*-next week: how do I connect this thing up in real life? ■*

## *The Offenhauer Operating Site*

photos - courtesy of WD8ICP



### *Penthouse Operations Center*

2m and 440 MHz receivers  
6m packet weather transceiver  
2m packet transceivers

### *The Rooftop Antenna Farm*



*Scenic View Looking South  
from the Offenhauer Site*

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