



The **HOTLINE**

Official Newsletter for the
Heart O' Texas Amateur Radio Club
Waco, Texas

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March 2008

Radio Jeopardy!

by Ed Middlebrook, KC5NT



And now for something completely different...

Yes, it's the first competition of its kind (and possibly the last) as we find teams to compete for prizes and fame. This will be a "kick back" and have a good time event as we watch to see just how much old-timers and newbies alike know about their favorite hobby. The format will be done in a manner similar to the famous TV game show, but will involve teams of 4 or 5 players. Put on your thinking caps and dust out the cobwebs from the 'ol attic as you prepare for this month's meeting!

President's Corner

by Rodney Baden, K5YKC

Yesteryear In Amateur Radio (Based on article from *Mother Earth News*)

It used to be that any old shortwave receiver could be used to eavesdrop on ham activities—as long as the unit covered reasonable chunks of the 3 to 30 MHz frequency range. Then in the 1950's amateur radio operators switched their voice transmission from AM to the more efficient single sideband (SSB) mode.

You see, in AM voice transmission a constant frequency carrier signal is transmitted along with the sidebands above and below that "contain" the actual voice modulation. When that signal reaches a receiver, this carrier helps to demodulate (or make sense of) the two voice sidebands.

In the SSB mode, on the other hand, the transmitter sends out no carrier at all, and only one of the two sidebands. This allows the radio builder to put all the transmitter power into just one sideband. The receiver generates an artificial carrier within its own circuitry. This circuit is called a Beat Frequency Oscillator, or "BFO." The BFO also allows Morse code signals to be heard as on-off tones rather than a starting and stopping rush of noise.

Most modern shortwave receivers come equipped with a BFO—but many broadcast-type receivers of yesteryear don't have this feature. Fortunately, it's easy to add BFO to such a set. Since most post-1930 receivers use 455 kHz IF amplifier stages, the radio can simply generate a 455 kHz signal and couple it into the receiver's IF amplifier. If the radio uses a crystal-controlled oscillator to produce the signal, you can be sure the frequency will be very close to the necessary 455 kHz—and won't have to tune or calibrate the oscillator. Such a BFO circuit can be built—by anyone with a little electronic experience.



Rodney, K5YKC

Rodney Baden, K5YKC
HOTARC President

LAST CHANCE to renew your HOTARC membership!

Dues for 2008 are due by **March 31**, if you haven't done it yet...send it **now!**

...and please complete the [Membership Renewal Form](#), too! Thanks!!

For the Record...

HOTARC Meeting of Members February 28, 2008

HOTARC's February Meeting was called to order by Rodney Baden, K5YKC, Thursday, February 28, 2008 at 7:00 pm at the Kultgen Automotive Center of the TSTC Waco campus. Chaplain Dell Bredemeyer KE5MZS opened the meeting with a prayer.

Present were fifteen full members, one family member and 8 visitors. Visitors were: Michael Mortimer of Bruceville, Larry White of Axtell, Paul R. Moore of MT. Calm, Karl Funk WB5WAM and Joseph Funk AF5D of Robinson, Mark E Stapp of Waco, Clarence W. Hammer KL7CH of Anchorage, AK and Jerald W Tollison KD5JML of Woodway.

A motion to approve the Minutes for the January meeting as published in the HOTLINE was recognized from John Chamberlain AC5CV, with second by Mike Ross N5MVL. The motion was approved by the members.

A motion to approve the January Treasurer's Report as published in the HOTLINE was recognized from Ed Middlebrook KC5NT, with second by Wally Lavender WA5QPE. The motion was approved by the members.

Committee Reports

- **ARES:** No News
- **Trailer:** Trailer could use an oil change and prep for the Susan G. Komen Race for the Cure on May 3rd.
- **Repeater:** Norris Martin KB5SLI reported that everything is working. K5YKC noted that possibly a loose coax cable was causing some static on the ARES Net one night as the winds were blowing 50+ mph. K5YKC received the official signed contract from the Department of Public Safety for the repeater. He noted that we are the first in the state to have a repeater at a DPS office. K5YKC reported that a free D-Star upgrade had been ordered that would remove the need for a static ip address. A motion to reimburse Lynn Gustafson KD5DZU \$15.00 for the cost of shipping the software by registered mail was recognized from N5MVL with second by KE5MZS. The motion was approved by the members.
- **D-Star:** No news
- **Web page:** AC5CV reported that everything is working well.
- **ATV:** David Bush KC5UOZ reported that the ATV repeater is well and the SkyCam is still not working
- **Education:** K5YKC reported that the dates for the HOTARC Technician class are March 29th and April 5th from 8:00-4:30. The class includes 2 meals, refreshments and the study book for \$30.
- **Public Relations:** No news
- **Special Events:** KE5MZS will be net control and AC5CV will handle signups for The Race for the Cure. KC5NT and K5YKC will get things in order for this years Field Day. There is a need for a new Special Events Coordinator.

New Business-

- **New Members:** New member applications were received from Joe Funk, Roy Henager and Gerald Tollison. A motion was made by Rusty Keyes AD5JY with second by John Chamberlain AC5CV for Joe Funk. A motion was

The Treasurer Reports...

Heart O' Texas Amateur Radio Club Treasurer's Report, February 2008

Beginning Account Balance		\$ 5,896.45
Income		
Dues	\$ 220.00	
Donation	50.00	
Interest	<u>1.15</u>	
TOTAL Income	\$ 271.15	
Expenses		
Web Server donation	\$ 100.00	
Shipping	<u>15.23</u>	
TOTAL Expenses	\$ 115.23	
Ending Account Balance		\$ 6,052.37
Outstanding (as of 3-19-2008)		
<i>Credits:</i> Dues, \$60.00; Technician Class, \$90.00		
<i>Debits:</i> (none)		
<i>Actual cash on hand:</i> \$6,202.37		

Submitted by
Norris Martin, KB5SLI
HOTARC Treasurer

made by Bill Cox W5JRM with second by Mike Ross N5MVL for Roy Henager. A motion was made by Scott Hamilton K5ZOH with second by Larry Bush W5NCD for Gerald Tollison. All motions were approved by the members.

Motion to adjourn was recognized from KE5MZS at approximately 7:36 pm.

The program this evening consisted of a video titled "The Science of Audio," by Bob Heil.

Submitted by:

Jeremy Neal KE5PRG
HOTARC Secretary

Severe Weather Season 2008

by Ed Hynan, KC5KNI,
McLennan County Emergency Coordinator

Bakers Dozen Weather Net activation procedures remain the same. National Weather service will request spotter activation when observed or potential severe weather threatens the area. The Net is automatically activated any time a severe thunderstorm or a tornado warning is issued for McLennan County. As the storm season nears, please be aware of conditions that could lead to Net activation. Monitor local television, radio, and the National Weather Service Weather Radio for potential severe events. The Net will be activated from the Waco-McLennan County EOC or by one of the ARES Net Control Stations until the EOC can be opened.



Things can happen fast when spotting. As activation is a result of a warning, reports should relate directly to the type of warning issued. For severe thunderstorms, winds of more than 50 mph and any size hail (using coins for size) should be reported with exact location and time of occurrence. For tornados, wall clouds, wall clouds with rotation, funnel clouds, and tornados on the ground should be reported, again with exact location and time of occurrence. In the case of an actual tornado on the ground, direction and speed of movement are needed. Report any visible damage and/or injuries associated with either type of storm. All other weather related reports should be held until requested by net control.

Good training and continued excellent spotter participation should see us through the severe weather season.

Weekend Technician Classes

by John Chamberlain, AC5CV

The Education Committee will deliver two weekend training sessions—**Saturday March 29 and April 5**—for anyone interested in earning their first amateur radio license. It's too late to register for this session, but if you know anyone who might be interested, direct them **to our web site for more info for future classes**.



Following the sessions, the HOTARC/BARC VE team will offer a Technician exam just for the students of this class.

Renewing Amateur Radio Call Plates

by John Chamberlain, AC5CV

Amateur radio operators in Texas have long had the privilege of special "Radio Operator" automobile license plates for their vehicles with amateur radios. The special plates display their call signs for a mere \$1 processing fee. And, here's a little known fact: if you happen to own two vehicles with radios in them, you can actually have identical plates with your call sign **on both vehicles!** Yes! Two vehicles with the same plates!



In the past you had to pay that annual \$1 fee separately from your annual registration fees. Beginning with March 2008 renewals, **both those payments will be handled as a single renewal/registration** for your vehicle. No more need for two checks and two stamps.

The HOTLINE is the monthly newsletter of the Heart O' Texas Amateur Radio Club (HOTARC), Inc., a nonprofit corporation, chartered by the State of Texas and principally located in Waco. It is permissible to use any of the original material contained herein, provided proper credit is given to the source.

Edited and Published by John Chamberlain AC5CV, AC5CV@arrl.net

HOTARC 2008 Board of Directors

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Director (2010): Ed Hynan KC5KNI, 666-4873, KC5KNI@arrl.net



2008 Board of Directors

Back: KD5SMC, KC5NT, N5MVL, KC5KNI
Front: K5YKC, KD5KJU, KE5PRG, KB5SLI

Club Repeaters

145.15 MHz (input at -600 kHz, tone 123 Hz)
146.88 MHz (input at -600 kHz, D-star)
146.98 MHz (input at -600 kHz, tone 123 Hz)
ATV: 421.25MHz (Cable 57), input 439.25 MHz (Cable 60)

VE Testing

Next session is Saturday April 26, 2008 10:00 AM. **Location:** Baylor's [Rogers Engineering and Computer Science Bldg](#) (#63 on the map), Room 109. **Bring:** 1) testing fee of \$14 (cash only); 2) a photo ID (two for first-time licensees); and for already licensed amateurs: 3) current license *and photocopy of it*; and 4) photocopy of any relevant CSCE.

Contact: Dr. Linda Hynan, AC5QQ at 666-4873 or Linda.Hynan@UTSouthwestern.edu.

Meeting Notice

The March Meeting of HOTARC will be at 7:00 pm on Thursday March 27, 2008 in the [Kultgen Automotive Center](#) of the TSTC Waco Campus. Meetings generally last about 75 minutes consisting of fellowship, general Club business, and an interesting program. Visiting hams, family members, and prospective hams are welcomed!

Technician license classes: Saturdays: March 29 and April 5

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FIRST CLASS MAIL

Visit our web site at:
hotarc.org