



IREDELL

WIRELESS



W4SNC

Published monthly as a service to the Iredell County Amateur Radio Community
 By the Iredell County Amateur Radio Society (ICARS)
 P.O. Box 142 Statesville NC 28687

ICARS WEBSITE www.icarsonline.org

President: Larry Earle, WD4LXC~~**Vice President:** Margie Persons, KE4YWO
Secretary: Tim Misenheimer, KC4MJC~~**Treasurer:** John Lamson, WB4WRY
Members-at-Large: Lee McClure, KE4ERH~~Mike Bryan, WA6KWW

Wireless Editor, Tim Misenheimer KC4MJC
 Special thanks to Mike Gaither, KC4KSX for printing the Iredell Wireless.

September 2004

**The Iredell County Amateur Radio Society will meet at
 Julia's Tally House *Thursday September 9, 2004.*
 Come and eat at 6:00pm. The meeting starts at 7:00pm.**

	2 Meter FM		SSB Net
	Wednesday		Saturday
DATE	146.685 at 9:00 PM	DATE	28.468 at 9:00 PM

09/08/04	KD4III	09/11/04	W4RTW
09/15/04	KG4WWQ	09/18/04	KC4MJC
09/22/04	KE4GEK	09/25/04	N4ACF
09/29/04	W4SDT	10/02/04	W4UFO
10/06/04	KF4AEX	10/09/04	WD4LXC
10/13/04	KE4NUN	10/16/04	W4DON
10/20/04	N4IB	10/23/04	AG4AU
10/27/04	KD4WNY	10/30/04	W4UFO

**2004 Iredell County Amateur Radio Society
Meeting Minutes
August 12, 2004**

The Iredell County Amateur Radio Society met at Julia's Tally House for the monthly meeting. There were 8 members and 2 guests present. President Larry Earle, WD4LXC, called the meeting to order at 7:00 PM. Larry first asked if everyone received their copy of the Iredell Wireless newsletter. John Lamson WB4WRY Then noted that at last months meeting, (July 8), the group discussed sending Mike Gaither KC4KSX a donation of \$75 in appreciation for printing the Iredell Wireless newsletter for the club, at no cost. The club voted to do so. John was also acting secretary last month. He apologized for not including this vote in the minutes last month. The club voted to amend the minutes of the July 8 2004 meeting to reflect this correction. A motion to accept the amended minutes of the July 8 2004 meeting was given, seconded and then approved. Larry next asked for the treasurers report. John Lamson WB4WRY, reported a beginning balance of \$444.35. One check written to John WB4WRY for Field Day food in the amount of \$60.00. John noted that he gave ICARS a bargain. One deposit of dues \$15.00. leaving the balance of \$399.35. A motion to approve was made, seconded and approved. Margie Persons, KE4YWO sent e-mails of appreciation to the two gentlemen who helped ICARS with the balloon Rally. They are also going to present a program on Fox Hunting at the September meeting. The club voted to give Larry Earle WD4LXC permission to sale club equipment to ICARS Member, Don Summers, W4DON. After much ragchew on various topics the meeting was adjourned.

Respectfully submitted, Tim Misenheimer KC4MJC Secretary

Editorial Comment

The articles on the next two pages are copied from the SERA Repeater Journal, August 2004 issue. We as a club and repeater support group need to discuss this issue and make our opinions known to SERA and the FCC. Don Summers, W4DON had this to say,

As for my comments you can quote me as [recommending that our repeater remain an "open repeater". No tone access required unless the FCC R&R's requires it.] This is my final comment for now.

I have to add that I agree completely with Don.

Tim Misenheimer KC4MJC

SERA Summer Board Report

SERA Board votes for mandatory tone

If your repeater doesn't use tone access, don't complain to SERA about interference. And if you complain to Riley instead, when he asks SERA if you're coordinated, SERA's answer will be a qualified "no."

That's one of the decisions reached by the SERA Board at their summer session at a new location in Sevierville, Tennessee in June. The Board also amended the Coordination Policy & Guidelines (CP&G) to make it easier to de-coordinate repeaters that are not on the air, looked for ways to improve the speed and efficiency of coordination, supported the larger (and more expensive) *Repeater Journal*, and shuffled a few positions. Here are the details:

ALL TONE ALL THE TIME

Mississippi Director Steve Grantham AA5SG moved that SERA amend the CP&G's to require tone (CTCSS or DCS) on receive and transmit on all new FM voice repeater coordination's, and on all existing voice repeaters by July 1,2006 (two years), on all VHF/UHF bands.

In discussion, Board members asked what would happen if a repeater owner chose to continue to operate without tone. Would they be automatically de-coordinated? The answer was "no. but...". SERA would not entertain an interference complaint from the owner of any repeater who chose to remain carrier access.

Some repeater owners experiencing interference from a co-channel neighbor bypass SERA and send a complaint directly to Riley Hollingsworth at the FCC. Hollingsworth usually asks the owner if the repeater is coordinated, and verifies that with an inquiry to the coordinating body (SERA typically responds to several such inquiries each year). In this case, SERA's reply would be that the repeater had been coordinated, but the owner chose to operate outside the conditions of coordination by not using tone access. SERA would expect that to be interpreted as a "no."

A few SERA staffers wanted to point out that tone was not a cure-all for repeater interference problems. Tennessee Assistant Director Tim Bern- WB4GBI discussed the time and expense involved for a repeater owner, especially an owner who had several repeaters that were not already set up for tone. He also noted that tone did not really solve problems, it only masked them. A strong enough interfering signal would not key up a tone-access repeater, but it would still degrade or block signals on the input. *Repeater Journal* Editor Gary Pearce KN4AQ commented that tone was "traveler hostile" - that is, someone driving cross-country has a hard time keying tone access repeaters. See his Squelchtale editorial on page 60 for a complete discussion.

Motion passes: the motion passed unanimously, and becomes part of the CP&G. SERA has a "tone plan" with several tone frequencies prescribed for each geographical area (www.sera.org/ctcss.html#District). Some repeaters follow it, and some don't. New repeaters would be expected to choose a tone from the plan, but non-conforming existing repeaters would be grandfathered.

This article copied from the SERA Repeater Journal August 2004 issue, Page 5

"What does tone access mean? The CTCSS ACCESS mode (Continuous Tone Coded Squelch System) limits access to a repeater by requiring that a continuous sub-audible tone of the required frequency be present on the user's signal."

SQUELCHTALE

Tone Deaf

I couldn't help myself with the headline for this column. It just seemed too cute and natural. But the fact is that I agree with the SERA Board's decision to "sort of require some form of tone squelch on all repeaters. (Those of you who start in the back of the magazine should see page 5 for details.) If you're running a carrier squelch repeater these days, and you're hearing users on a co-channel repeater now and then, you don't have much of a complaint. Nobody can expect that clear a channel anymore. Tone can help.

BUT... tone also introduces problems. Maybe more than it solves, though they're probably smaller.

We interrupt the flow of this column to head off some e-mail. Let me qualify things a bit. Nothing in this column - or SERA's action - should be interpreted to justify the bozo who runs 50 watts from a base station to talk on the local repeater. Or the lucky ham with a 90 foot tower who's only FM antenna is a high-gain omni sitting at the very top, so that's all he uses. These guys are likely to cause problems for their co-channel neighbor repeaters. They're not following good Amateur practice, and only they can take the steps needed to cure the problem they cause.

So what kind of problems can tone cause?

My catch phrase, invented on the spur of the moment at the Board meeting, is that it's "traveler hostile." I've been treading the route between Raleigh and Knoxville twice a year for a while now, with a GPS and the Street Atlas mapping program running on my laptop. I'm getting to know the repeaters along the route pretty well. But if I don't put all the repeaters, with all the tones, in memory, I can still get stuck not having a tone ready and waiting. Reading the data on my map, and programming the tone in the radio, is a good way for a solo driver to run out of pavement at an inconvenient time. I'll blow zero point zero on the breathalyzer, but Officer Friendly will be justified in stopping me to see why I've been meandering across the lanes.

I've graduated to a Yaesu 8900 quad-band mobile with 800 alphanumeric memories and computer programming. I thought I'd be smart and put in all the North Carolina repeaters with all their tones. That means most channels go in at least twice, and some three or even four times, on six. two and 440.

I have outsmarted myself - it's confusing as hell. With practice, I might get the hang of it. Or I might figure out a better channel arrangement that's easier to use. I have the tones programmed, but I'm spending way too much time looking at the display figuring out what memory/frequency/tone I've got dialed in. And outside the state, it's back to square one. There's a name for me when I'm driving by Anytown, listening to a repeater with an unknown tone: SWL.

I think I'm quite the radio jock, but while I was airing my gripe at the meeting, one of the Board members quipped something about how KN4AQ needs to learn how to use his radio. How embarrassing. I was told I needed to figure out the "tone sca

feature. Thanks... I know tone scan. The picture on the cover shows the buttons on a new Icom T-90 HT, and the lower left button is tone scan. This radio does it right. Just hold that button for a second, and the radio goes looking for any tone. You don't have to change tone modes, or turn on decode or anything else. You can still hear the conversation in progress while it hunts. So if the repeater is sending tone, it will find it. Other radios aren't so easy to use. The 8900 makes me turn on tone decode (so I can't hear the conversation), then step through a couple menus, and finally press a scan button. Nothing the solo driver should be doing. Manufacturers might think about dedicating some of that precious panel space to tone scan.

And the repeater might not be on the air. And if it is it might not be sending tone. And if it isn't sending tone I might be able to hear a station on the input, but maybe not. Blah, blah, blah.

Pile it on: tone's a mask, not a cure. Sometimes a mask is the best you can do, but you, and your users, should know it. Speaking of users, user education will be fun on a newly toned repeater.

The snide comment about my own skills notwithstanding, I have little sympathy for the ham who says the radio's too complicated and can't program a tone. Just how much ammunition do you want to give the guys who complain that the hobby's been "dumbed down"? Getting your ticket isn't the end of learning, it's the start. So learn. (You Extras on the CW DX Honor Roll don't necessarily know tone all that well, either, so wipe that smirk off your face.)

Little sympathy for the ham who's radio doesn't have a tone encoder. I have an Icom 2AT with no tone. It's a museum piece on my shelf. Radio's are cheap today. If you truly can't afford one, I do feel your pain, but we can't stand still for you. No sympathy for the guy with the commercial radio who's got to pay the shop to reprogram it. You knew that going in.

Things that can help - a short list: voice ID'S that announce the tone. Even better - beacon it, even if the repeater isn't in use. Sounds like a "message of interest to hams" to me, though it'll drive the locals nuts after a few weeks. Regional tone. All the repeaters in a geographic area use the same tone. Just don't make that area more than 100 miles in diameter. Make sure the repeater transmits the tone. Accurate listing in the directories. And did I mention better tone-scan on radios?

Communicator Ready-To-Go Kit



- 2 meter HT with rubber duck antenna
- 2 meter mag mount antenna
- BNC adapter for HT to mag mount antenna
- Cigarette Lighter cord & extra fuses for it
- Homemade Cigarette Lighter to car battery adapter
- Garden Tractor battery or gell cell or other emergency power source
- Trickle charger or other charger for emergency power source
- Street map of county
- Flashlight & extra batteries
- Change of clothes
- Sunscreen
- Extra 25' of coax cable with connectors
- Barrel connector to mate mag mount cable to extra coax
- Small first aid kit, personal medications, and hygiene items
- Rain gear
- Bug repellent
- ARES ID
- Misc tools *
- Speaker mike *
- Pen & paper

*optional

- Rick Darby , Past NE GA DEC

15 Nov 98