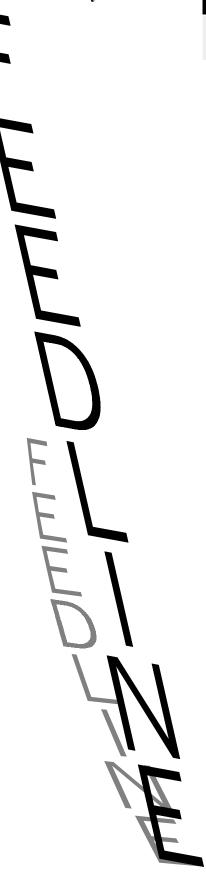
February 1997



DickFredenburg KM4SX

Licensing the family: an inexact science

When Tom twisted...er...asked me to write an article for the newsletter about getting the family members licensed, I at first balked. (Take your base.) Then I thought about it and, after clearing away the smoke, decided to give it a try. So here it is.

When I got licensed back in the late `80s, my whole immediate family, with the possible exception of my daughter, thought that speaking in code and having a ham license would be cool. My son even seriously studied the code. However, he reached a plateau early and got discouraged. Even after a "miracle use" of ham radio during a vehicle breakdown as we moved to North Carolina, after which my wife vowed we would all be licensed, nothing happened. Occasionally I would remind her of her vow, but I tried to not be pushy.

Not much else was done until my father retired. In an interest of keeping him alive (Retirement can be very unhealthy. Look at Bear Bryant and Leonard Bernstein.), I suggested he and my mother get licensed and have ham radio as another interest. I even bought him the novice book and tape. They both got licensed and hold Technician licenses now. My brother got interested and he and his wife are licensed, he as a Tech Plus and she as a Tech. My sister-in-law made a statement that her license was not to be used to shame my wife. I think I have met that condition.

My wife knows the advantages of ham radio. When she is with me and I use the autopatch or talk with somebody we are traveling with, she knows how useful that is. She also admits that each of us having a radio would be handy when we go to a mall and go to different stores or when I have to be under the house and have her turn on a certain faucet, etc. Yes, she knows the advantages, but she doesn't want to take the time to study. She hates to memorize, even church choir music, and electrical technical stuff is not her interest or aptitude.

She would take the license in a second if it were given to her without the exam.

My son is a student at Appalachian State University and loves to go hiking, especially into the Linville Gorge. He commented on his own that it would probably be a good idea to have a radio with him on those hikes in case something happened and he couldn't hike out. I seconded his comment wholeheartedly. I suggested he study and take the exam over the summer, when his brain tends to vegetate. (He worked in the produce section of Super K, but that wasn't intended as a pun, well... at first.) Anyway, he procrastinated and didn't take the exam, and now he is back in Boone with no radio.

One drawback for my wife is some of the conversations she hears as we travel. Sometimes, those on the radio really don't have anything to say, but they keep talking! And then they repeat themselves! Then they say nothing all over again but they keep the mike keyed and their mouth moving!! You've heard it; you probably even did it once or twice. I have to agree with her about some of those operators. Of course, she thinks the same thing when the discussion turns to technical subjects, but that is because she is not interested in that. Maybe with a license she would be more interested.

What is the bottom line. I don't know. As you can see, I had only limited success, and none with those closest to me. Everybody I talk with says you have to wait until the person is ready to get licensed. From what I've seen, that is the whole truth. My parents, brother, and sister-in-law decided to get licensed and, boom, it happened. My wife and son think it would be a good idea, but they won't pick up the book to even read the questions. I invite you to share your ideas that worked.

(Gee Dick, I don't know....it would be a lot harder to hide on a sunny Saturday when the Honey-do's are stacked and waiting! Ed.)

Feedline

Feedline is a member-supported publication of the Cary Amateur Radio Club and is published monthly. Deadline for submissions is the second Thursday of the month.

Editor: Tom Klimala, KM4LB 1545 Seabrook Avenue Cary, North Carolina 27511

Cary Amateur Radio Club

The Cary Amateur Radio Club meets on the fourth Thursday of the month, **7:00 p.m.** in the lower level of the Christian Life Center of White Plains United Methodist Church. The June, November, and December meetings are held off-site. Call for location of those meetings. **Next Meeting: February 27.**

1997 Officers

N9CGD Tom Doligalksi 481-1236 President N4AJF Lee Swanson 467-8128 Vice-president K4IWW 467-0224 Will Harper Treasurer N4UE Herb Lacey 467-9608 Secretary

HerbLacey - N4UE

Meeting Report

January 23, 1997

Meeting called to order at 7:31 p.m., by Pres., Tom, N9CGD. Introductions.

Treasurer's Report - Will, K4IWW

Savings: \$3,143.77 Checking: \$453.21 Cash: \$0.00

Total: \$3596.58

Dues are\$9/yr. CARC caps still available at \$4. The Fuquay Varina Dixieland Band that played for our Christmas Dinner got only their dinner. The normally get a nice fee for a performance. Will, suggested that we send them a check for \$50 and our thanks. Agreed.

Piedmont-Coastal Repeater Network (PCRN) - Mike, WB4TQD, described the Network for the benefit of newcomers. The St. Paul's repeater is new and was installed on the channel 31 tower. PCRN wants to cover NC eventually. The Charlotte repeater has been up and down with antenna problems. Probably the

next repeater on the linking system will be Boone, NC. Otherwise most everything is running fine. APPLAUSE!! [PCRN is supported by hams who appreciate the excellent repeater system we enjoy. Donations are suggested to be \$15/yr. They may be sent to: PCRN, P. O. Box 12734, Raleigh, NC 27605]

Wake Digital Communications Group (WDCG) - Lee, N4AJF, the packet linking will be down next month due to tower-swapping. North Raleigh digipeater still off the air after FRAN. We need to schedule WDCG annual meetings (two) soon.

South Eastern Repeater Association (SERA) - Frank, KE4ZEQ, now an Assistant NC Director to Danny, K4ITL, NC Director. For the newcomers it may not be apparent, but repeaters are not the pleasant operating experience in all parts of the country. We tend to take the civility we enjoy for granted.

The SERA, founded in the early 1970s, by some forward looking hams who knew that *uncontrolled growth* would bring problems. They set up the organization to bring mutual cooperation *without* FCC regulation or involvement. It is working very well. SERA published a nice SERA REPEATER JOURNAL in the middle of every quarter. Annual fee: \$8. Their web site is: www.sera.org

CARC Planning - Tom, KM4LB, is SWAPFEST Czar (Tsar???). This means he coordinates the work, he doesn't do the work!! SWAPFEST date: Sat., July 19. // Miscellaneous CARC calendar items: due to Field Day in June and the SWAPFEST in July, the Cary ARC will not hold an August meeting. // Will, K4IWW, reserved the Cary Community Center for Friday afternoon/evening, July 18, and Saturday, July 19, and the 3rd floor of the Page-Walker Hotel (VE testing) for Sat., 7/19. // Jerry, KE4QBG, putting the final details together for setting up two HF/ UHF operating positions (coax and antennas) in Town of Cary buildings for ARES use in an emergency situation. Of course, the Town will benefit from this. After FRAN, they really know they can use us. Ask our NC Section Manager, Reed Whitten, AB4W, what an unfortunate disaster has on people's appreciation of Amateur Radio.

--- Break for Refreshments ---

Frank, KE4ZEQ, presented a nice multimedia program on the downing of the two 2,000 foot towers several years ago - Ch. 5 and Ch. 28 - due to unfortunate icing conditions. Thank you, Frank for the excellent program!

n4ue

Upcoming Hamfests

TICKETS

For those of you that purchased preregistration tickets for Charlotte, they will be available at the next CARC meeting. At that meeting we will be taking orders for RARSfest pre-registration tickets: \$5 each. Make checks out to RARSfest. TABLES:

CARC has a table reserved for Charlotte - just look for the overhead sign.

RARSfest tables: See N4UE, he can save you a buck per table if we put in combined order.

Tom**DOLIGALSKI** - N9CGD

About our Club

I'm very happy to announce that Tom Klimala, KM4LB, has volunteered to be our swapfest czar. I'm sure that Tom will be contacting many of you soon to ask you to volunteer for this important activity!

Several club members have expressed interest in the club offering a Tech or Tech Plus course this summer. If you are interested in helping out with this endeavor, or know of folks interested in attending this course (XYL's or harmonics welcome!) please let me or KM4LB know. (We're thinking of tying this class to the ribbon-cutting of the ARES ham station at the Town of Cary. The publicity could help boost interest. Ed.)

The next meeting of the Cary Amateur Radio Club will take place on Thursday, 27 February at 7:30 PM. As usual, the short business portion of the meeting will be followed by special program: this month's meeting will feature a presentation by Dave Redfearn, N4ELM, on QRP rigs and kit building.

73 N9CGD

B. Scott**Andrews** KE4RHO

North Carolina Division of Emergency Management

Emerging Issues:

Low Earth Orbiting Satellites and Their Potential Impact on Amateur Radio

There has been much discussion in the communications industry lately concerning narrowbanding and other methods to make more efficient use of the radio frequency spectrum. The main reason for this has come about due to recent technological innovations in which the general public is utilizing more wireless communication devices than ever before, and an even more tremendous surge is expected in the near future when small handheld personal computers are expected to debut and change our lives dramatically.

These devices are expected to provide voice and data communications, paging, fax, e-mail, and internet connectivity all in one unit. Some visioneers are even planning methods of cashless financial transactions utilizing these devices.

Even though the aspect of this may seem intriguing to some, the availability of frequencies suitable of sending data at acceptable speeds is somewhat limited, and some of the VHF and UHF Amateur Bands have become an objects of interest to potential providers of a global satellite network based on Low Earth Orbiting Satellites, or "Little LEO's" as they are commonly called.

Little LEO satellites are a relatively new concept in satellite placement based upon cost-benefit analysis. These satellites are not launched into space via rockets as are conventional satellites, but are carried piggyback on commercial jets and fired by retrorockets into a low earth orbit (approximately 100 miles up) where they can remain for several years before their orbits decay and they burn up in the earth's atmosphere. Even though they only remain in orbit for several years, the cost is far less than with conventional satellites. around several hundred thousand dollars for an LEO satellite versus a minimum of around \$100 million for a conventional satellite. For this reason, far more companies who would normally never have the capital to put up a satellite will be able to put up several LEO's.

The potential for interconnectivity for convenience purposes has never

been so great, and as digital communications gradually infiltrate the radio spectrum, it is a given that our Amateur bands will be continuously challenged. Already, there has been much lobbying by the ARRL to save the Amateur bands from the LEO satellite and other mobile communication service providers. This will become a greater challenge as time goes by, and all hams must stick together on this issue if we ever hope to preserve some of our favorite operational bands from the clutches of the wealthy and powerful commercial radio industry.

Not only is losing entire bands of the Amateur Radio spectrum possible, it has been suggested to take only portions of the Amateur bands, and some portions of our bands have already been lost to the commercial radio industry. In order to prevent further radio spectrum loss, increased usage of these bands was necessary, prompting the ARRL to convince the FCC to allow entry into Amateur Radio without code requirements on the bands most seriously threatened.

Even though this ruling has brought many new "no-code" hams into amateur radio, we are not out of the woods yet. More aggressive experimentation will be necessary, I believe, to further enhance the possibility of retaining all our Amateur bands, especially with experimentation in digital modes, both data and voice, due to the more efficient use of bandwidth brought about by digital transmissions. As a radio industry professional, I forsee this transition to digital voice and data transmission will have to occur, and will occur whether we like it or not, especially if we do indeed lose portions of our Amateur Radio spectrum.

There are still many ways we can help. Mainly by supporting the ARRL and ARES / RACES. If Amateur Radio is continuously seen as a community benefit in times of disaster by the general public, we stand a greater chance. Let's all work together to maintain and enhance the great hobby and public service of Amateur Radio by doing our part and en-

joying a lifetime of Amateur Radio.

Further information on the LEO threat is available from the ARRL and AMSATdirect or on the Internet at:

http://www.arrl.org and http://www.amsat.org

B. Scott Andrews
4640-201 Tournament Drive
Raleigh, NC 27612
Amateur Radio: KE4RHO
Home Page: http://www.hci.net/~ke4rho
Calhoun Veterans Page:
http://www.hci.net/~ke4rho/630.html

Upcoming Events

8,9 March: Charlotte Hamfest 27 March: CARC Meeting (dues)

Program: Auction

13 April: Raleigh Hamfest24 April: CARC Meeting

Program:_____

22 May: CARC Meeting

Program: ______26 June: CARC Meeting

Program: Field Day Preparation

28, 29 June: Field Day7 July: CARC Meeting

Note Rescheduled Day!Program: Swapfest Preparation

19 July: CARC Swapfest28 August: CARC Meeting

No Bus Mtg.! Club Social Event TBA

30-31 August: Shelby Hamfest 25 September: CARC Meeting

Program: _____

23 October: CARC Meeting

Elections!

Program: WA4OOD November/December CARC Christmas Party

Call one of the club officers with your suggestions or offer to present a program

in April, May, or September.

L.A.Geddes

Remembering Fessenden

Now, when there are documentaries that lament the demise of dramatic radio, praise the work of Marconi, and laud the radio impresarios of the 1920s and '30s, everyone seems to have forgotten Reginald Aubrey Fessenden. The Canadian-born-and-educated teacher of mathematics first broadcast the human voice and music long distance on Christmas Eve, 1906.

Fessenden's lifelong ambition was to transmit the human voice by wireless. After holding posts with Edison, Purdue University, and the University of Pittsburgh, he obtained funding for wireless telegraphy from two Pittsburgh businessmen, Thomas H. Given and Hay Walker Jr. In return for sharing in his patents, they created the National Electric Signalling Co., dedicated to wireless telegraphy between the stations that Fessenden would build in New York City, Philadelphia, and Washington, D.C.

Wireless telegraphy was not Fessenden's goal, but association with it gave him the opportunity for further experimentation with wireless telephony. Given and Walker then desired to create two-way transatlantic telegraphy and directed Fessenden to develop the necessary equipment. The sites chosen for the station were Brant Rock, Mass., and Machrihanish, Scotland.

Fessenden commissioned the General Electric Co. to develop a high-frequency alternator. Although such a device was delivered, its performance did not please Fessenden so he rebuilt it to operate at a higher speed, one that generated a higher frequency (ca. 100 kHz). The alternator was then connected to the Brant Rock station antenna.

Since the Scottish station had no alternator then, Machrihanish was used as a receiving station. When the signal was received, the response was sent via the transatlantic cable and then relayed by telephone to Brant Rock. One-way telegraphic signalling to Scotland began. Soon the telephone at Brant Rock rang and the relayed message was, "Getting you, Brant Rock, loud and clear."

Later, a suitable high-frequency alternator was installed in the Scottish station and, beginning in the spring of 1906, two-way transatlantic wireless telegraphic signaling became a daily event.

Meanwhile, Fessenden had built a second experimental station at Plymouth, Mass. During off-hours, he used this station to test improvements in modulation and detection. While these tests were going on, he received a letter from Scotland in mid-November 1906 indicating that they had overheard these test voice communications. The text of the letter matched, word for word, the entry in Fessenden's log of that day.

During this time the United Fruit Co. had bought Fessenden's apparatus for receiving wireless telegraphy for the banana boats plying the Caribbean and South Atlantic. Fessenden accordingly arranged

for a demonstration to be presented at the end of a routine wireless telegraphic communication with the United Fruit ships.

At 1:00 a.m. on Dec. 24, 1906, Fessen den, his wife Helen, and technician Adam Stein faced the asbestos-covered microphone in series with the antenna at Brant Rock. First, the CQ-CQ-CQ general call to all stations was sent out in Morse code. Then Fessenden gave a short speech, after which an Edison phonograph playing Handel's "Largo" was broadcast. Fessenden then played "O Holy Night" on his violin and sang the last verse at the same time. (The others were supposed to sing along with him, but they could not. They may be recorded as the first persons to have "mike-fright.")

Fessenden finally wished his listeners a Merry Christmas and promised a repeat performance on New Year's Eve. (The performance was repeated and included vocals from his associates who had overcome their fear of the microphone.) Mail was soon received from the United Fruits' ships and a number of other ships in the North and South Atlantic. Fessenden had reached his goal!

L. A. Geddes West Lafayette, Ind.

Allan**Pelinat** KX2H

via ARNS

Some say the term "lid" came from early landline Morse telegraph days, when a common practice was to fasten an empty tobacco can, or its lid, to the armature of a telegraph sounder -producing a distinctive sound that helped the operator copy one sounder in a room of clattering sounders. As the story goes, the more skillful operators looked on the practice with disdain. And called their less-killed brethren lids.

In my days in the telegraph department of AT&T Long Lines (the mid-fifties), I had the pleasure and privilege of knowing old timers who had been landline telegraphers for railroads, brokerages, or the press. As a smart-alecky kid of eighteen who had already been a General Class ham for three years, I thought I was a good Morse operator. But of course the telegraph used landline Morse, not the American Morse we use on the radio. I eventually learned to send passable landline Morse on a straight key and to receive it on a sounder, but I never got good at it.

When I mentioned the term lid to those old timers, they didn't recognize it in the ham context. They were aware of the

Origin of the term "lid"

practice of using tobacco cans or their lids on sounders, but they didn't seem to attach any stigma it.

They did describe a wooden "listening stick" that you could put between your ear and a sounder to amplify and filter the sound when noise in the room made copying difficult. I have seen auto mechanics apply the same idea to listen to individual valves of a running engine.

from the March 1993 IBM ARC of Boca Raton (Florida) 'WB40NX"-Neal Osbom, N4PYB, Editor

Tom**DOLIGALSKI -** N9CGD

Ham Radio Internet

Web Site Selections

These days it seems as if virtually everybody is on the internet. Even if you don't want to pay for a full-fledged account with an ISP (internet service provider) there are a number of places that will give you a "free" account that will let you send and receive email (the "catch" of these services is that while you are reading or composing mail the software is displaying advertisements in a little window!).

This months column is about the Usenet mail groups. Usenet is a worldwide distributed discussion system. A variety of hierarchical groups are maintained (there are thousands of such groups). Messages are "posted" to the groups by computer users using special "news reading" software, from which they are broadcast to a large number of "news servers". Users using a news reader can read, reply and create new messages in each group. So, if you are connected to a full-service ISP (or have access to news groups through an on-line service like AL or Prodigy) you can read, reply and create messages within each group. There are a quite a few groups of interest to hams, and I'll briefly describe several of them here.

Before I discuss each group, I should mention that even if all the access you have is for email (say by using a "free" account such as described above) you can still have access to many of these groups. If you send email to listserv@ucsd.edu with the single word "help" in the body of the message, you will receive detailed instructions as to how to subscribe to digests", which are simply a large message containing quite a number of messages from each group. A digest of messages is sent once a day (assuming there is any activity that day), or when the size of the digest reaches a preset limit (thus, more active usenet mailing groups will have more than one digest a day).

As far as I am concerned the most interesting of the usenet groups for hams is the rec.radio.amateur.equipment group. Dozens of messages are posted every day to this group, each regarding a variety of issues about ham radio equipment. Examples include mod and bug reports,

operational difficulties, reviews of new equipment, etc. This group is "echoed" (bi-directionally!) by ucsd.edu as the ham-equip digest.

For the digitally-inclined ham the group of choice is rec.radio.digital.misc (gatewayed by UCSD as ham-digital) which describes packet radio. DXers will love rec.radio.amateur.dx (gatewayed by UCSD as ham-dx), while folks looking to buy or sell radios will want to subscribe to rec.radio.amateur.swap.

The rec.radio.amateur.misc group deals with more general subjects (UCSD gateways this as info-hams), while the rec.radio.info group consists chiefly of ARRL bulletins, W5YI reports, propagation bulletins, and the like. Finally, the triangle.radio group is just for local hams in the local area.

In addition to the usenet groups, there are a variety of mail reflectors that might be of interest. A reflector is just a system that receives mail messages and then forwards them on to a subscriber list. Reflectors are typically used when the mail volume is relatively light (by comparison with the usenet mailing groups, which typically involve dozens of messages a day). For example, I belong to the Yaesu mail reflector, where folks who have specific comments or questions about Yaesu products can get help. Each message to this group is also archived on a web site at http://www.akorn.net/hamradio/yaesu/

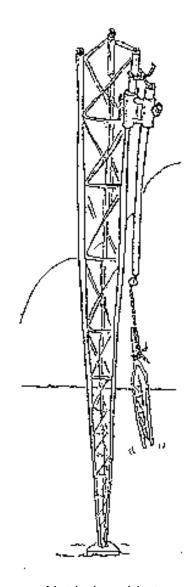
Web Site of the Month

http://www.garlic.com/oes/decpage/admin/index.htm is a web site dedicated to ARES and RACES in the San Jose California area!

Do you have a favorite ham/technical web site that you would like to let others know about? Send your site selection along with any comments to

tom@aro-emh1.army.mil

Tom, N9CGD



Not being able to resolve the matter to everyone's satisfaction, the antenna party adjourned to the local tavern to discuss physics.

Ctsy: Tom Irwin -AA0ME

jan**Avinger** N4UTT

Susan**Barton** KA6SEH via the ARNS

We're an odd lot...

Worth Repeating

Often we are so caught up in our private lives that we get out of touch with who's doing what in Ham Radio. And what do those folks do in their off the air time? This is your opportunity to fill the rest of us in so that we may double your joy or halve your sorrow.

The Avingers have lost their minds(not far to go). Harry(AB4T) has gotten a motorcycle and has been riding the neighborhood getting ready to pass his license test. Jan (N4UTT) has gotten a horse and is hoping for dryer and warmer weather. For Valentine's Day Harry replaced the battery in the base rig so that the radio could remember where the favorite frequencies were.

Bill, W4FNB, is the proud owner of a new HF rig, a Yeasu FT 990. This will keep him in touch during the Monday night HF-CARCnet. Tune into .15 at 2130 to get HF freq du jour.

So give me some more interesting catch up news for next month and we can be better in touch. e-mail me at avinger@ worldnet.att.net or via land line at 362-8870.

73, Jan, N4UTT

An architect, an artist and an ham were discussing whether it was better to have a wife or a mistress.

The architect said he enjoyed time with his wife, building a solid foundation for an enduring relationship.

The artist said he enjoyed time with his mistress, because of her passion and her mysterious ways.

The engineer said, "I like both." "Both?"

"Sure." Each assumes I'm spending time with the other. So I can spend lots of time in the shack and at my computer, getting lots of work done."

A boy was crossing a road one day when a frog called out to him, "Kiss me and I'll turn into a beautiful princess."

The boy picked up the frog and put it in his pocket.

The frog said, "If you kiss me, I'll turn into a beautiful Princess, and I'll stay with you for a week."

The boy took out the frog, smiled at it, and and returned it to the pocket.

The frog cried, "If you kiss me and turn me back into a Princess, I'll stay with you forever, and do anything you want." Again the boy took out the frog, smiled at it, and put it back.

After a long pause, the frog asked, "What is it? Why won't you kiss me?"

To which the boy answered, "Look, I'm an amateur radio operator. I don't have time for girlfriends. But a talking frog, hey, that's cool."

If you see yourself here, dial 1 800 HELP ME there still may be time!

Tom**Klimala** KM4LB

Letters from your editor

A hearty **Welcome!** and thank you to Jan, N4UTT for taking ownership of *Worth Repeating*. Please call or email Jan with fodder for the gossip cannon.

This month's mailing includes a telephone list of current and former members. I have also included instructions on how to use it to help the club! To paraphrase the late Richard J Daley,

"Volunteer early......and often!

Marcian BOUCHARD KC4TOI

QSL'ing tip from an experienced DXer:

"To reduce the chance of attracting thieves, don't include amateur callsigns on foreign correspondence. Even if you haven't included any "green stamps" your QSL may end up being torn open by someone looking for them."

"It's best to just address the envelope with just the recipient's name and address, keeping your callsign off of the return address. Save that "ARS:" stuff for the domestic mail."

Send your QSL and/or comments to 804 Queensferry Road Cary, NC 27511.

QSL of the Month

