



Solid Copy

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Richmond Amateur Telecommunications Society

President's message

Katrina reinforces need for public service training for all

Summer is drawing to a close, and now radio amateurs are playing a major role in the disaster relief efforts along the Gulf Coast through a number of organizations. In previous newsletters I have encouraged RATS members to consider getting training in emergency communications. Where, you might ask? Well, the ARRL has training programs which you should consider taking as do the Salvation Army and the Red Cross. Volunteers are being called for now with priority being given to those who have taken and successfully completed Level 1 training.

One has but to read the ARRL website to learn of the rooftop rescues directly attributed to amateurs. There you can also obtain contact information for the Salvation Army/SATERN website where you can submit e-mail queries regarding residents in the storm area on behalf of other individuals that will be answered by e-mail as information becomes available.

Another thing I've noticed is the fact that volunteers are being asked what type of radio equipment they could bring. Certainly a 2-meter rig and antennas for same, but the mainstay is still high frequency radio equipment. Why is this,

you might ask? As the Lieutenant Governor of Louisiana

and the Governor of Mississippi both pointed out recently on the news, the infrastructure is knocked out - the power and the telephone service, both wire and cellular. HF will get through and power for many 2-meter repeaters will be on battery backup. Now is the time for you, indeed for us all, to get our emergency plans laid in before we have a disaster here.

As for upcoming club events, there is the Heart of Virginia bicycle event in Ashland, Virginia, this Saturday and Sunday, September 17 and 18. (For more information, see www.raba.org.) We are asking RATS members to call the Club Telephone Number (see back page) and volunteer some of your time. Please leave your name, call and telephone number and someone will get back to you.

That's all for this month. Have a great time in this great hobby!

73, Jerry KJ4IT

CTCSS, subtone, PL: Call it what you will, the subaudible tone has revolutionized radio - and RATS

There is often confusion as to the characteristics of squelch systems in modern repeaters and their purpose. To begin with squelch is a receiver stage used that cuts off the audio to a speaker until a signal is received. As the repeater and base stations began to improve and the use of 2-way radio increased it became apparent that noise bursts and units on the fringe of the repeater

could key up the repeater inadvertently. In addition there was much RFI and annoying noise that could 'un-squelch' receivers. For this reason the Continuous Tone Coded Squelch System (CTCSS) was developed.

As developed by the major 2-way radio manufacturers, CTCSS required that an almost

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• • • • *Wanna sound like a LID? See inside!* • • • •

inaudible low-frequency tone be transmitted with a station's signal. This low-frequency tone was in the range of approximately 60 to 250 Hz. In order for radios in the same 2-way system to function, the tone decoders in receivers and transmitters had to be designed to function on the same sub-audible tone frequency. As one transmitter sent a signal with the tone, the receiver of the signal decoded the subaudible tone and opened the squelch, passing the received audio signal to the speaker. This was a major breakthrough in technology that is still in use today. Please note that each manufacturer has its own 'marketing name' for its CTCSS system. In the case of the new RATS Motorola repeaters, our system uses Motorola's trademark "PL" or Private-Line™.

Nowadays the technical characteristics of transmitting and receiving equipment have improved markedly, particularly with receivers; not to mention the relatively lower cost to increased performance of new amateur equipment. There is now also a massive proliferation of repeaters across the country. Frequency coordination efforts of SERA and T-MARC, to name a few, have helped to minimize interference by repeater systems on the same frequency — still, however, repeaters are affected by skip or ducting.

For many years users of the RATS 146.88 repeater have had to 'wait' for our repeater's time-out-timer to reset because mobile units in other areas, notably North Carolina and Maryland, had inadvertently timed out our repeater rendering it useless. Then there was the ever-increasing problem of RFI from ATMs, burger joint drive-thru's and other sources affecting mobile units.

For well more than ten years CTCSS encoding and decoding, along with other functions, have been available on amateur transceivers at very reasonable prices. When the current RATS 2-meter and 440 repeaters were re-coordinated by SERA for the move to the new tower site, we were re-coordinated to have CTCSS due to the significant coverage increase resulting from our increased antenna height (from approximately 398' to 700').

The move to CTCSS is consistent with the Amateur's Code to keep the station abreast of improvements in technology. Information regarding CTCSS or 'PL' usage on the RATS has long been disseminated by the club through newsletters, voice announcements on the repeater, flyers for club functions and repeater guides.

PL provides a much higher quality communications system to RATS members and other users. Please consult your radio's owner's manual for instructions on how to use this accessory. If you have any questions about CTCSS or PL, please feel free to ask any member of the Technical Committee.

A "towerful" project

by Tray Murphy, N4PAT

Kids, don't try this at home!

Hams just love a project, and even more, they love free stuff. So when Jay Silvio, N9WMU, passed on to me the contact for a tower that needed to be removed, I jumped on it. It seems that a local pharmacy had no further need of its 60' Rohn 25G tower and a commercial 4-bay VHF antenna, so I offered to remove it. The owner was glad to see it go because vandals would use it to reach the roof of the shopping center and damage AC units and the roof.

The team assembled Saturday morning March 26 at 6:45AM to start the "deconstruction". Mike Baker, N4LSP, was elected crew chief since he had the greatest amount of small tower experience. David Calder, KI4GHZ, was the climber, and Phil Davis, KD4BMQ and Steven Marsh (not licensed) were my ground crew. David and Steven are both engineering students at Virginia Tech and are Eagle Scouts from my Boy Scout troop. Neither had ever done any tower work, but both are smart enough to figure out mechanical problems, so I figured, rightly, that they would be assets. Plus, David weighs a lot less than Mike or me and would be more suitable to be on top of the rickety tower while it was being disassembled.

Mike and I got there first and discovered the tower's bottom section had been hit, probably by a backing truck, and was about 6" out of plumb. A come-along fixed that. When David arrived, Mike started his tower climbing lessons. Safety was #1. We wanted everybody in one piece when we finished. Phil, Steven and I assembled equipment, and cleared the "anti-climbing" barriers off the tower (2 2x12's and some barbed wire). Finally, David started up. The first job was to put temporary guys on the tower - it was so loose that shaking the bottom set up a standing wave of motion in the entire thing! Two air conditioners' frames and a tree provided guy anchors.

David got the gin pole in place and we lowered the 14-foot-long commercial grade antenna (4-element VHF, for 150-160MHz, Wanna buy it?). The rest of the tower was fairly easy. Section by section, David moved the gin pole down, removed the bolts

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Note: This "Rusty Bumpers" column is from the May 1993 issue of *Solid Copy*. Most of the examples used by "Rusty" have happened on the 146.88 repeater exactly as written, although some of the items are exaggerated slightly for humor. (Step 35 was written before the 1993 "no business" rule change.) Just to illustrate that good things never change, we hereby present you with a RATS classic ...

HOW TO SOUND LIKE A LID

by Rusty Bumpers, N4LID

On two meters lately, I have noticed a tendency of people making a concerted effort to sound like a LID (*i.e.* poor operator). Since this appears to be the new style in amateur radio, I thought I would present this handy guide to radio nerd-dom. The following is what I call: "How to sound like a LID in one easy lesson."

1) Use as many Q-signals as possible. Yes, I know they were invented solely for CW and are totally inappropriate for two-meter FM, but they're fun and entertaining. They keep people guessing as to what you really meant. *i.e.* "I'm going to QSY to the kitchen." Can you really change frequency to the kitchen? QSL used to mean "I am acknowledging receipt," but now it appears to mean "yes" or "OK." I guess I missed it when the ARRL changed the meaning.

2) Never laugh, when you can say "hi hi." No one will ever know you aren't a long time CW ragchewer if you don't tell them. They'll think you've been on since the days of Marconi.

3) Utilize an alternative vocabulary. Use words like "destinated" and "negatory." It's OK to make up your own words here. "Yeah Bill, I pheelbart zaphonix occasionally myself."

4) Always say "XX4XXX (insert your own call) for I.D." Anything that creates redundancy is always strongly encouraged. That's why we have the Department of Redundancy Department. (Please note that you can follow your call with "for identification purposes" instead of "for I.D." While taking longer to say, it is worth more LID-points.)

5) The better the copy on two-meter FM, the more you should phonetically spell your name, especially if it is a short and/or a common one, *i.e.* "My name is Al...Alpha Lima" or "Jack...Juliett Alpha Charlie Kilo." If at all possible, make up unintelligible phonetics. "My name is Bob...Billibong Oregon Bumperpool."

6) Always give the calls of yourself and everyone who is (or has been) in the group, whether they are still there or not. While this has been unnecessary for years, it is still a wonderful memory test.

7) Whenever possible, use the wrong terminology. It keeps people guessing. Use "modulation" when you mean "deviation" and vice-versa. And even if the two-meter FM amplifier you're using is a Class-C type amp, and thus not biased for linear amplification, be sure to call it your "linear." Heck, refer to all FM-style amplifiers as "linears." You'll be king of the "wrong terminology" hill.

8) If someone asks for a break, always finish your turn, talking as long as possible before turning it over. Whenever possible, pass it around a few times first. This will discourage

the breaker and, if it is an emergency, will encourage him to switch to another repeater and not bother you.

9) Always ask involved questions of the person who is trying to sign out. Never let him get by with a yes or no answer. Make it a question that will take a long time to answer.

10) The less you know about a subject, the more you should speculate about it on the air. The amount of time spent on your speculations should be inversely proportional to your knowledge of the subject.

11) If someone on the repeater is causing interference, you should talk about that person at great length, making sure to comment on at least four out of six of the following: (1) His mental state; (2) his family; (3) his intelligence, or lack of same; (4) his sexual preference; (5) his relationship to small animals; (6) his other methods of self-entertainment.

12) If you hear two amateurs start a conversation on the repeater, wait until they are 20 seconds into their contact, and then break in to use the patch. Make sure that it's only a simple routine phone call. It's also very important that you run the autopatch for the full three minutes. This way, once the two re-establish contact (if they do at all), they won't even remember what they were talking about.

13) You hear someone on the repeater giving directions to a visiting amateur. Even if the directions are good, make sure you break in with your own "alternate route but better way to get there" version. This is most effective if several other LID trainees join in, each with a different route. By the time the amateur wanting directions unscrambles all the street names whizzing around in his head, he should have mobilized out of range of the repeater. This keeps you from having to stick around and help the guy get back out of town later.

14) Use the repeater for an hour or two at a time, preventing others from using it. Better yet, do it on a daily basis. Your quest is to make people so sick of hearing your voice every time they turn on their radio, they'll move to another frequency. This way you'll lighten the load on the repeater, leaving even more time for you to talk on it.

15) See just how much mobile flutter you can generate by operating at handheld power levels too far from the repeater. Engage people in conversations when you know they won't be able to copy half of what you're saying. Even when they say you are uncopiable, continue to string them along by making further transmissions. See just how frustrated you can make the other amateur before he finally signs off in disgust.

16) Give out wacky radio advice. When a newcomer's signal is weak into the repeater, tell him he can correct the problem by adjusting the volume and squelch knobs on his radio. Or tell people they're full quieting except for the white noise on their signal. Or....well, you get the idea.

17) Use lots of radio jargon. After all, it makes you feel important using words average people don't say. Who cares if it makes you sound like you just fell off of Channel 19 on the Citizen's Band? Use phrases such as "Roger on that," "10-4," "I'm on the side," "You're making the trip," and "Negatory on that."

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18) Use excessive microphone gain. See just how loud you can make your audio. Make sure the audio gain is so high that other amateurs can hear any bugs crawling on your floor. If mobile, make sure the wind noise is loud enough that others have to strain to pick your words out from all the racket.

19) Be as verbose as possible. Never say “yes” when you can say, “He acquiesced in the affirmative by saying ‘yes’.” (No kidding, I actually heard that one.)

20) Start every transmission with the word “Roger” or “QSL.” Sure, you don’t need to acknowledge that you received the other transmission in full. After all, you would simply ask for a repeat if you missed something. But consider it your gift to the other amateur to give him solace every few seconds that his transmissions are being received.

21) When looking for a contact on a repeater, always say you’re “listening” or “monitoring” multiple times. I’ve always found that at least a half dozen times or so is good. Repeating your multiple “listening” IDs every 10 to 15 seconds is even better. Those people who didn’t want to talk to you will eventually call you, hoping you’ll go away after you have finally made a contact.

22) Give out repeater FM signal reports using the HF SSB R-S system (“You’re 5 by 9 here”). Sure it’s considered improper for FM operation and you may even confuse some people, but don’t let that spoil your fun!

23) Always use a repeater, even if you can work the other station easily on simplex — especially if you can make the contact on simplex. The coverage of the repeater you use should be inversely proportional to your distance from the other station.

24) If you and the other station are both within a mile or two of the repeater you are using, you should always give a signal report. (“I’m sitting under the repeater and I know you can see it from there, but you’re full quieting into the repeater. How about me?”)

25) In the same vein as the previous step, when monitoring a repeater, you should always give signal reports as if the repeater didn’t exist. (“Yep, I’m right under the repeater. You’ve got a whopping signal. You’re S-9 plus 60. That must be a great rig.”)

26) On repeaters with courtesy tones, you should always say “over.” Courtesy tones are designed to let everyone know when you have unkeyed, but don’t let that stop you. Say “over,” “back to you,” or “go ahead.” It serves no useful purpose, but don’t worry — it’s still fun.

27) Think up interesting and bizarre things to do to tie-up the repeater. The goal here is not to facilitate communications, but to entertain all the scanner listeners out there. Do something original. Try to hum CTCSS (PL) tones. Sing pager tones. You’re getting the idea.

28) Use the repeater’s autopatch for frivolous routine calls. While pulling into the neighborhood, call home to let them know you’ll be there in two minutes. Or call your spouse to complain about the bad day you had at work. After all, the club has “measured rate” service on their phone line, so they get charged for each autopatch call. Your endeavor is

to make so many patches in a year that you cost the club at least your membership dues in phone bills. That way you’ll feel you got your money’s worth.

29) Never say “My name is....”. It makes you sound human. If at all possible, use one of the following phrases:

A) “The personal here is....” B) “The handle here is....”

Normally, handles are for suitcases, but it’s OK to use them anyway. Don’t forget, this has worked just fine for CBers for years.

30) Use 73 and 88 incorrectly. Both are already considered plural, but add an “s” to the end anyway. Say “73’s” or “88’s.” Who cares if it means “best regardses” and “love and kisseses.” Better yet, say “seventy thirds.” (By the way, 70 thirds equals about 23.3.)

31) Make people think you have a split personality by referring to yourself in the plural sense. When you’re in conversation and are alone at your radio, always say “We’re” or “We’ve” instead of “I’m” or “I’ve” (i.e. “we’ve been doing this...”, “we’re doing that...”, “we’re clear”). Everyone knows you’re by yourself, but when they ask you who is with you, make up somebody important like Arnold Schwarzenegger or Bill Clinton.

32) Always attempt to use the higher functions of the repeater before you have read the directions. Nothing will work, but you’ll have great fun and get lots of people to give you advice – maybe even some of those folks from part 10.

33) Test repeater functions repeatedly (that’s why they call it a repeater). Test your signal strength from the same location several times every day. Concentrate on testing the things that really matter, like the number of times the repeater has been keyed up. That stuff is fun to track. Test the outside temperature as often as possible. The farther the temperature goes from the norms, the more often you should test it.

34) If the repeater is off the air for service, as soon as it’s turned back on complain about the fact that it was off the air. Act as though your entire day has been ruined because the repeater wasn’t available when you wanted to use it.

35) Find ways to get around the “no business” rule on autopatches. Your plan is to try and fool the repeater control operators. Invent code words your secretary at work will understand to disguise any business talk so it sounds like personal chatter. Or get to be friends with the local Domino’s Pizza manager. Make it so that when you call him on the patch and ask him to bring over the “floppy disk” you need, he shows-up 30 minutes later with a piping hot large pepperoni and sausage pie. The possibilities are endless....

Just using a few of these easy steps should put you well on the way to LID-hood. I hope these helpful hints will save you some time in your quest to sound like the perfect LID.

73, Rusty Bumpers, N4LID

“Rusty Bumpers” was a pen name. The author maintained his anonymity so he could sit peacefully at club meetings and avoid the wrath (and breath) of the uninformed. Like Deep Throat of Watergate fame, his identity will remain anonymous.

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and Steven and I pulled upward to separate the sections, then lowered them as Phil directed the tag line to keep the section away from the building and the one “aerial hazard” - a Comcast cable line coming in to the restaurant that the tower was behind. We were fortunate that the original installation crew had not crimped any of the legs, or overtightened bolts to the point they could not be easily removed.

We loaded the sections in Phil's trailer as they came down. The temp guys were removed when we got below them, and the last 2 sections were lowered by hand after the bolts were pulled from the “house bracket” holding the tower to the building (three rusty u-bolts were, in fact, its only support). Cleanup took only a short time, and we had unloaded it at my house by 11:30AM.

The tower is now resting in my yard, waiting for a tower-raisin' party. My sincerest thanks to Jay,

Mike, David, Phil and Steven for their help! The tower came down without a hitch and will soon be in amateur radio use. The first antennas will be a dual band (2M/70cm) base antenna and one for an APRS digipeater.



David, KI4GHZ, stops for a quick pose – and a demonstration of proper safety equipment. Safety First!

Tray Murphy, N4PAT, tells of the joys of upgrading

Back (waaaay back) in about 1978 I started my first real job in television, working as a cameraman for the local public station in Huntington, WV – good ol' WMUL-TV (now WPBY). We videotaped Marshall University Thundering Herd football for tape delay replay after the game. After a few months, I was promoted to master control operator, switching breaks between the PBS programming from 4 p.m. until 12 a.m. (try starting every evening for more than 18 months with “SUNNY DAY, EVERYTHING'S A-OK!”).

At that time, you had to have an FCC First Class Radiotelephone Operators License to operate a television transmitter, so in addition to me, holding a Third Phone (because I also worked at WMUL-FM, the university's 10-watter), there were two engineers, Pete K4OM (ex-WB8JYR and K8OHM) and Dwight N8EZ (ex-WB8EZR), who alternated duty in the evenings. They operated the remote controls for the TV transmitter, and handled production engineering using old RCA TR-60 and TR-70 videotape recorders. They also carried around these gray bricks in their pockets which chirped and beeped and people talked out of them. This was my first look at ham radio – in the form of Motorola HT-200 Handie-Talkies. Having had an interest in electronics and all things technical from a long way back, the equipment fascinated me. So Pete and Dwight spent the hours between breaks teaching me electronics, television, and ham radio.

I loved it. We attended hamfests, including one trip to Dayton. To say I was overwhelmed was an understatement. I spent a summer in Florida earning my First Phone, but put off the ham exams, mostly because of Morse Code. I'll freely admit it was

a stumbling block. The theory, math, and rules and regs were no problem; I lived them, worked them every day. The three of us, with other hams along occasionally, worked on FM, AM and TV transmitters all over the region, but I was only slowly learning the code. I figured I better finish it up soon and at least get the Novice ticket.

Then life changed. I moved to Petersburg, VA in late 1980 and went to work for WSEX (now WRIC). Linc, W2HIE, was my boss. He also encouraged me, and on a trip back to WV, I took the Novice exam and became KB8LJC. But alas, with little money, and living in apartments, I never got on the air.

In 1986, I decided to take the Technician exam. At the time, holding a Novice ticket meant you'd passed Elements 1 and 2 (5-wpm code and Novice theory), so all you had to take was Element 3 (General theory). But to get the General ticket, you had to pass a 10-wpm code test – so it was Technician Plus for me, which gave me limited privileges on the lower bands, but again, I never used them. I did, however, make a road trip to HRO in Woodbridge and purchased an Icom IC-2AT handheld, a mobile antenna and a few accessories, including a 35-watt amp. My first 2M contact was with Tom, W4APQ. This led to a long association with Tom Carter, K4ARO, and George, WA4GEF and many other Petersburg-area hams.

I purchased a Kenwood TM-721A from Tom and now had 2 bands to play with. He also introduced me to HF DX at his home station, and I wished I could break that 10-wpm code barrier so I could become a General. I wound up spending a lot of time

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93 years later, radio still comes to the rescue

On April 14, 1912, the worst maritime disaster in history took place with the sinking of the R.M.S. Titanic in the North Atlantic.

Later that same year a book was published entitled, "The Sinking of the Titanic and Great Sea Disasters" edited by Mr. Logan Marshall and published by L.T. Myers, Copyright 1912. Contained within the book are eyewitness accounts of survivors about that night, photographs of the ship and some of the passengers on the voyage. Also included are excerpts of testimony before the U.S. Congress by experts, one of whom was the chairman of the British Marconi Company, Guglielmo Marconi.

Of interest to amateur radio operators is Mr. Harold Bride, the surviving wireless operator of the Titanic, whose account is contained in the book, and who is quoted here.

I was standing by Phillips, the chief operator, telling him to go to bed, when the captain put his head in the cabin.

'We've struck an iceberg,' the captain said, 'and I'm having an inspection made to tell what it has done to us. You better get ready to send out a call for assistance. But don't send it until I tell you.'

The captain went away and in ten minutes, I should estimate the time, he came back. We could hear a terrific confusion outside, but there was not the least thing to indicate that there was any trouble. The wireless was working perfectly.

'Send the call for assistance,' ordered the captain, barely putting his head in the door.

'What call shall I send?' Phillips asked.

'The regulation international call for help. Just that.'

Then the captain was gone. Phillips began to send 'CQD.' He flashed away at it and we joked while he did so. All of us made light of the disaster.

The Carpathia answered our signal. We told her our position and said we were sinking by the head. The operator went to tell the captain, and in five minutes returned and told us that the captain of the Carpathia was putting about and heading for us.

Our captain had left us at this time and Phillips told me to run and tell him that the Carpathia had answered. I did so, and I went through an awful mass of people to his cabin. The decks were full of scrambling men and women. I saw no fighting, but I heard of it.

I came back and heard Phillips giving the Carpathia fuller directions. Phillips told me to put on my clothes. Until that moment I forgot that I was not dressed.

I went to my cabin and dressed. I brought an overcoat to Phillips. It was very cold. I slipped the overcoat upon him while he worked.

Every few minutes Phillips would send me to the captain with little messages. They were merely telling how the Carpathia was coming our way and gave her speed.

I noticed as I came back from one trip that they were putting off women and children in life-boats. I noticed the list forward was increasing.

Phillips told me the wireless was growing weaker. The captain came and told us our engine rooms were taking water and that the dynamos might not last much longer. We sent word to the Carpathia.

I went out on deck and looked around. The water was pretty close up to the boat deck. There was a great scramble aft, and how poor Phillips worked worked through it right to the end I don't know.

He was a brave man. I learned to love him that night and I suddenly felt for him a great reverence to see him standing there sticking to his work while everybody else was raging about. I shall never live to forget the work of Phillips for that last awful fifteen minutes.

I thought it was about time to look about and see if there was anything detached that would float. I remembered that every member of the crew had a special life-belt and ought to know where it was. I remembered mine was under my bunk. I went and got it. Then I thought how cold the water was. I remembered I had an extra jacket and a pair of boots, and I put them on. I saw Phillips out there still sending away, giving the Carpathia details of just how we were doing.

We picked up the Olympic and told here we were sinking by the head and were about all down. As Phillips was sending the message I strapped his life-belt to his back and put on his overcoat. Every minute was precious. I helped him all I could.

From aft came tunes of the band. It was a rag-time tune, I don't know what. Then there was 'Autumn'. Phillips ran aft and that was the last I saw of him.

I went to a place where I had seen a collapsible boat on the boat deck, and to my surprise I saw the boat and the men still trying to push it

When the last waves washed over her rudder there wasn't the least bit of suction I could feel. She must have kept going just as slowly as she had been.

I forgot to mention that, besides the Olympic and Carpathia, we spoke to some German boat, I don't know which, and told them how we were. We also spoke to the Baltic. I remembered those things as I began to figure what ships would be coming toward us.

I felt, after a little while, like sinking. I was very cold. I saw a boat of some kind near me and put all my strength into an effort to swim to it. It was hard work. I was all done when a hand reached out from the boat and pulled me on board. It was our same collapsible.

There was just enough room for me to roll on the edge. I lay there, not caring what happened. Somebody sat on my legs; they were wedged in between the slats and were being wrenched. I had not the heart to ask the man to move. It was a terrible sight all around—men swimming and sinking.

I lay where I was, letting the man wrench my feet out of shape. Others came near. Nobody gave them a hand. The bottom up boat already had more men than it would hold and it was sinking.

At first larger waves splashed over my head and I had to breathe when I could.

Some splendid people saved us. They had a right-side-up boat, and it was full to its capacity. Yet they came to us and loaded us all into it. I saw some lights off in the distance and knew a steamship was coming to our aid.

I didn't care what happened. I just lay, and gasped when I could feel the pain in my feet. At last the Carpathia was alongside and people were being taken up a rope ladder. Our boat drew near, and one by one the men were taken off of it.

The way the band kept playing was a noble thing. I heard it first while we were working the wireless, when there was a rag-time tune for us, and the last I saw of the band, when I was floating out in the sea, with my life-belt on, it was still on deck playing 'Autumn.' How they ever did it I cannot imagine.

That and the way Phillips kept sending after the captain told him his life was his own, and to look out for himself, are two things that stand out in my mind over all the rest.

N4PAT (continued from page 5)

on UHF, the 444.85 repeater to be exact. Contesting on VHF/UHF was great fun with Henry, N4HB, and

Wray, AB4SF, and many others.

I stayed active on VHF/UHF until work took me away from the area and the hobby for a few years, and when I got back to Richmond I decided it was time to really get involved. So late in 2004, I joined RATS. This was my first foray into "organized ham radio". Once again the longing for more privileges hit, and now the time was right for me: the code requirements had loosened, and all I had to do was find two pieces of paper. I needed my original Novice ticket to prove my passage of the 5-wpm test, and my Certificate of Successful Completion of Element 3. Despair set in. I had moved so many times since obtaining that Tech license at J. Sergeant Reynolds Community College back in 1986, that I was certain the paperwork was long gone.

At the Frostfest in February 2005, I purchased a Yaesu FT-100D all-band/all-mode transceiver. So now I was dedicated to getting that General. One night in March I was looking for the book for the old Kenwood TM721A. I remembered a folder in the filing cabinet with ham radio stuff in it. I found the book there ... and I also found the CSCE and original Novice license document! I thought I would cry! Two weeks later I attended a RARC VE session and 15 minutes after walking in the door, I was a General.

Since then, I've worked an amazing amount of DX with a very modest station: the FT-100D, a Vectronics tuner, and a full-wave 40 meter delta loop antenna. The upgrade opened up a whole new world of ham radio. I've talked to folks in Tasmania and Croatia, all over South America and Europe, and an amazing number of islands scattered here and there. I've worked about 44 different countries; over half are confirmed with QSL cards, which is a fun sideline in itself. I've talked to some of these hams multiple times, and ragchewing on HF when you are talking to someone with a completely different perspective on the world is loads of fun. I've worked special event stations around the country, and K2BSA, the Boy Scouts' special event station. There's a lot more to hear and work!

Think you're "code challenged" (and heaven knows, I am)? I encourage you to try the many software- and CD-based products to learn it. Listening to W1AW will give you real-world practice. 5 wpm is not insurmountable, even for us old farts, and the additional operating privileges will reward your diligence in short order. For me, I'm working on DXCC, saving money for more HF gear, and studying for my Amateur Extra class license. If getting on the HF bands is this great, I can't imagine how much more fun being able to use the lower end of all these bands will be! If you want to open up another realm of ham radio, stop sitting there. Study your code 30 minutes a day, and in a month's time, I'll bet I'll hear you calling CQ on 20 meters!

Join us this Friday evening!



The Richmond Amateur Telecommunications Society meets on the third Friday of the month at 7:30 PM at the West End Volunteer Rescue Squad building at 1802 Chantilly Street, Richmond. Heading east on Broad Street, Chantilly is one block past Staples Mill Road. The WEVRS building is $\frac{1}{2}$ block south of Broad on Chantilly.

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