

SCARS NEWS

SCARS monthly meeting -- was held March 12, at the Red Cross building, in Norman.

The meeting got underway around 9:28 a.m., when the new president, Don, KJ5KB, called the meeting to order. There was 55 members and guests present. As we have done in the past, Don asked for a roll call with everyone present giving their name, callsign and if anyone had anything to trade, sell or give away or any other remarks, do it at that time. In the group were some of the new hams that had gone through the class sponsored by SCARS. Welcome and glad to have you as a member of SCARS.

NEW meeting place for SCARS -- the Red Cross room that SCARS usually uses will be used by the Red Cross for the next 3 months and Don, KJ5KB pulled a few strings and secured a room for us at the weather service. SCARS will meet there for the months April, May and June. July's meeting will move back the Red Cross center. Don promised us that he would either have someone direct us or there would be signs posted.

Old business - Ken, N5KUK, gave the report from the radio committee that was formed to look into what kind of radio that SCARS would need to upgrade the radio room. He reported that the committee would recommend a Icom 2410 dual band, with a Astron power supply. Total cost would be around \$700 to

\$750.

Bill, N5UMH gave the treasurer's report and said when he left home the club had \$820.44 but had received several club dues after he had arrived. Bill left me a message on packet stating that SCARS had a total of 92 paid up members.

A report was given on the progress of the post card mailout and its still in the works. Mark, N5HZR, has prepared the labels, so I guess I better get busy and get the cards printed. Speaking of Mark, Sharlene, N5MKF was present at the meeting this month. Mike, WG5C also reported that the SCARS PBBS was up and doing quite well and he hopes to eliminate the problem he has had with his tnc so it won't lose its memory. He said that to use the PBBS, connect to WG5C-1 and follow instructions. Also, while were on the subject of old business, the club recognized Don, Bill, Ken, Jud, Gary, Mark and Ed for their help and support and teaching the recently

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Student Inventors Exhibit - Bill would have been proud!

Believe it or not, the special event station at the Oklahoma capital building, in conjunction with the Oklahoma Student Inventors, came off with only the usual visits from Murphy.

Starting at 7am, in 10 degree temperatures, 2 vertical HF antenna's were erected on the north grounds of the building. The first visit by Murphy came when the packet station couldn't connect from inside the building so the VHF packet station antenna later to be moved outside also. We ran 3 coax runs nearly 200 feet each from the capital rotunda out the north entrance to the antennas.

With antenna's, coax runs, and equipment in place, it was time to fire up the HF rigs and check things out. Here came Murphy again. In the rush to set things up, I let my son set my rig up, and he crossed the polarity on my new CW keyer, which really let the smoke out, and ended our hopes for CW contacts. Murphy also established band conditions for the morning. He also designed the Senate chamber PA system. Our 40m sideband was driving a audio engineer nuts trying to locate the source of interference. Our RFI wasn't a problem, because the senate session didn't start until that afternoon.

We also found a bad connector at the base of one HF antenna. It was taken down, brought the bottom inside the door (it was to cold outside to solder), and repaired.

The Student Inventors Exhibitions were conceived by Bill Enter KB5NUA who passed away last year. The special event station was his idea to expose the young

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OKC Swapnet & Part 97.113

The following portion of FCC Rules Part 97 govern SELL, WANT, and TRADE type actions by amateurs on the air and in packet BBS bulletins.

Please note that the trustee, officers, and members of the Oklahoma City Autopatch Association (OCAPA) are in agreement regarding their prohibition of ANY quoting of prices during the Oklahoma City Swap-n-Shop Net on the OCAPA 146.82 repeater.

The officers and trustee of OCAPA interpret the statement "on a regular basis" in Part 97.111(a)(3) to mean a maximum of six (6) items total in any given 30 day period. Exceptions MAY be granted (with prior approval) by officers of OCAPA for exceptional cases (such as a one-time estate sale). Abuses of this policy may result in the banning of the violator from the net.

PART 97 - AMATEUR RADIO SERVICE

97.113 Prohibited transmissions.

(a) No amateur station shall transmit:

(1) Communications specifically prohibited elsewhere in this Part;

(2) Communications for hire or for material compensation, direct or indirect, paid or promised, except as otherwise provided in these rules;

(3) Communications in which the station licensee or control operator has a pecuniary interest, including communications on behalf of an employer. Amateur operators may, however, notify other amateur operators of the availability for sale or trade of apparatus normally used in an amateur station, provided that such activity is not conducted on a regular basis;

73 DE Mac/K2GKK @
K2GKK.#OKC.OK (145.05)

Here's another one which I think would be good for inclusion. As usual, what I submit is for credit to OCAPA.

I AM A HAM

BY BARB, AA3DV
DEDICATED TO RUSS, AA3CH

Being a ham is a very
special treat,
So many people to talk with
and to meet.

Never a dull moment when
driving a car,
Talking, laughing & listening
near or far.

Tuning the low band rig is
such a big hit,
To talk with the world by a
dah and a dit.

When disaster strikes the ham
is always there.
To relay messages from his
ham shack chair.

Family and friends who are
waiting to hear,
That everything is okay from
ones held dear.

Computer BBS is part of
the fun,
Talking through a keyboard is
for everyone.

to the special ham in my life
who introduced this hobby
to me. I hope you enjoyed Many a time
ham goes
out of his way,
To work public service events
for a day.

How it makes us feel so very
good to give,
Something to the community
where we live.

EDITOR- Scott Walsh, N5NYS

Editor Emeritus
Joe Harding, WA5ZNF

Dear Subscriber,

PLEASE help up keep your information up do date. Check your entry on the back page. If there appears to be a mistake, check with your club officials and have it changed

Dear Secretary/Treasurer,

When you need a change of any sort to your membership, your must fill out completely a membership slip. Watch for the date you received their money and the date the subscription expires. Have your slips, or a list of deletions submitted by the 22nd of each month. If there is anything about the C&E subscriptions you need to know, please contact Tom Mangham, K5LDI at (405) 677-5291.

Story information, as well as letters to the Editor should be sent to:

Scott Walsh, N5NYS

600 Annawood Dr.

Yukon, OK 73099-2008

or left in their entirety on the BBS at (405) 354-3241, N81,1200-14.4k. You can also leave your article with K5JB on 145.01 packet.

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Altus Area Amateur Radio Club: We're still here!

Altus Area Amateur Radio Club- What's up in our little corner of Oklahoma! The monthly meeting of the A.A.A.R.C. was held on Thursday night the 10th of March starting at 19:30 in the basement of the Altus North Main Fire Station. The meeting was under way with the introduction of all club members and visitors who were in attendance and as usual, there was standing room only. Boy have we grown during this past year. Dwight Dennis (WB5KRH) thanked all who were involved in the Tornado exercise held on March the 4th and said that there were many favorable comments about the quick response and participation throughout the entire exercise.

Two guest speakers were present for the night's meeting and presented the Altus Club with two very interesting subjects. First on the agenda, was Terry Mahorney (KB5LLI) who explained the recent linking of the 444.100 repeater as part of the South West Independent Repeater Association (S.W. I.R.A.) which greatly improved the channels of severe weather reporting for the southwest section of the State. Following Terry was another Terry, this time it was Terry Redding (WB5LMJ), who is presently an educational advisor to the ARRL. Terry expressed his concern that amateur radio is a valuable learning process. School age children will identify with the untapped potential of our great hobby if they are exposed to the different avenues that make radio communications so versatile in today's society. Terry invited everyone to the Educational workshop on April 8th which will focus on helping teachers and school systems place amateur radio in the classroom.

Following our two guest speakers for the evening, Dotty (KC5EEO) passed on the "Alligator Award" to Vallie (KC5AHX) and thanked her for her continued sup-

port and willingness to get all the YLs more involved in Amateur radio. Vallie is now a two-time holder of the "alligator" and will face the chore of deciding who's fate is next for the coveted reptile who sports no ears! Announcements were made about the upcoming V. E. test sessions as well as the Lawton and Oklahoma City Hamfests. Under new business for the evening, the membership decided to alternate between a monthly breakfast and monthly luncheon by having a lunchtime meeting one month, followed by a breakfast get together the fol-

Our next monthly meeting will be held on Thursday evening the 14th of April at 19:30 (7:30 PM for those with only half a clock) North Main Fire Station in Altus.

lowing month.

KB5ZCK (John) brought up an item for future consideration on the subject of award certificates. John stated that he has heard of other clubs that design their own awards for working a certain number of contacts within the surrounding area. Examples given might include "Worked Altus on all Bands" or a cer-

tain number of verified contacts within a county on specified bands. This issue will be discussed among the operators and readdressed at the next club meeting.

George, (the mighty voice of artha, AA1IJ) suggested the possibility of the club buying a piece of test equipment that could be made available for the membership to use such as an analyzer, dummy load, freq. counter, etc. Opinions were mixed on this issue due to concerns of liability and cost of the item to be purchased. This topic was tabled until the next meeting for further discussion.

Future events was the closing topic on the night's agenda and chairpersons would be needed for two of our forthcoming biggies. George (AA1IJ) volunteered to ramrod this year's communications support for the annual Quartz Mountain Bike Race and James (AB5NT) along with Jim (AB5FS) threw their hats into the ring for focal points on this year's Field Day activities. Our next monthly meeting will be held on Thursday evening the 14th of April at 19:30 (7:30 PM for those with only half a clock) North Main Fire Station in

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Inventors Exposition continued...

(Continued from page 1)

inventors to the hobby of ham radio. Most of the attending kids came by to ask questions. Several brought their parents back with more questions.

In the end, 14 contacts were made on HF (all on 20m). I want to thank Lee Nelson KC5CYJ, Shannon Brassfield KB5RBX, Jason Brassfield C5EQB and C.R. Baker KC5CYI for taking off school and operating the station. I also want to thank Brad KJ0W, Tom WA9AFM, Cheryl KB5WQR, Ray W9NHB, John KC5DRI, Mike KB5WHJ, Lee N5KXI, Jeff WD0GTY, Bill K5SKA, Steve N5ZYB, Mike KB5WIC, Larry N5SOY, Bob WA9FCT and Rick AB5ON for their help and contributions to the event. (If I forgot anybody, I apologize.)

In all, I think everything went great and a good time was had by all.

John Brassfield N5SAM

OCAPA minutes, news and goings on...

MINUTES OF THE OCAPA MEETING March 15, 1994

The meeting was called to order by Brad KJ0W at 7:30pm.

The minutes of the last meetings, January and February, were read by John N5SAM, seconded and passed.

Treasurers report for February was read by Mike N5VIT, seconded and accepted.

TECHNICAL COMMITTEE

Mike N5VIT reports the back-up power system is ready to be installed.

FIELD DAY COMMITTEE

Perry KB5TOT and Jeff WD0GTY are the committee rep's and plans are under way for 1994 Field Day. Hal KB1ZQ is requesting equipment from Tinker.

EQUIPMENT COMMITTEE

Ed WA5YDF discussion about needs for equipment trailer inventory. MOTION to purchase 500' of RG213 coax with remainder to be sold at club cost to members. Seconded and passed.

PUBLIC SERVICE/INFORMATION COMMITTEE

Tom WA9AFM told about the special event station at the state capitol and that he had sent articles and pictures to QST.

SALVATION ARMY

Tom N5TCG reports that repair continues to the Salvation Army trailer.

CORA

Chuck K5NK reports that Ham Holiday plans are progressing.

NEW BUSINESS

John NJ1V announced that Igor KU0J will make a presentation at a special meeting of OKDX Association, Monday evening the 21st at the Salvation Army.

A spring picnic will be held at Don KC5BRO's on April 23. A hf rig will be setup, fishing, games and fun. Listen on 146.82 for details.

Larry KF5JN recommended a special event station for this fall. Further discussion in the future.

How come no one ever tells another operator that he is 38% white noise?

OLD BUSINESS

The Leonard Hanstein Memorial Scholarship Fund was established with Tom N5TCG and Larry KF5JN as chairmen. MOTION to establish the fund at \$500 with fund raising by donation and raffle and be awarded at Ham Holiday. Seconded and passed.

Tom WA9AFM reviewed the By-laws and Constitution for the group again. Some minor

corrections were made with final approval and vote for implementation at the April 1994 meeting.

ATTENDANCE 38

Meeting adjourned at 8:40pm

John Brassfield N5SAM
Secretary

There are times when an amateur is noisy in the repeater and often asks for a signal report as to how he is making the repeater. This is often due to the fact he or she is too far from the repeater site, or they are using a hand held and conditions are not good for such a location. Often times the operator on the other end will come back with a statement such as, "Well, you are about 50% white noise."

Now I have never understood exactly how this operator is able to measure white noise in a percentage and be correct. The percentage is always a multiple of 10, it's either 30%, 40%, 50% and so on. How come no one ever tells another operator that he is 38% white noise?

Well, this problem will shortly be solved. One of our club members who developed a meter and obtained a patent that will accurately measure the percentage

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Altus Amateur Radio Club News Continued...

(Continued from page 3)

Altus. Nothing further to come before the membership, the meeting was closed

at 20:49. Yes Joe (W5CCV), tell Irene that we did miss you at the meeting and maybe even those brownies also.

73, Mike, KC5AWB!

(Continued from page 1)

successful novice and tech classes. I did receive more information from Jim but lost the information. It seems that since the first of the year, there has been 52 people that has become new hams or upgraded.

New Business -- It was bought up that some of the members of SCARS should be and would be readily available to help some of the new hams setting up their equipment. Several hams raised their hands to volunteer to help anyone if help is needed. So, all you new hams, if you need help or have questions, just ask the club for help. Someone will be more than happy to give advice or help.

UHF Repeater -- Without a drum roll or fanfare Ken, N5BEW, threw the switch that turned on the new UHF repeater on Friday, March 4th at 2:40 PM. The repeater is located atop the press box at the football stadium and it seems to have a good coverage. The frequency is 443.700. Bill, K5KDR, still thinks it was a plot against him since he doesn't have a UHF radio.

Ed, N5US reminded everyone that wants to upgrade and needs code practice, to listen in on Tue., Thur., and Saturday nights at 8 PM on 145.21 for code practice. Ed also mentioned that the Boy Scouts would be holding a Camporee here in Norman on or about April 16th and asked for volunteers to help by using their equipment or their time to set up a ham station for demonstration purposes. More on this activity later and if you are interested, please let Ed know.

Jackets -- Mike, N5SOF, good to see you back after several weeks of absence, announced that he is looking into the possibil-

ity of having some jackets made up again. Several styles and color of jackets are available. More on this matter later, but if you want one or need some prices, let Mike know.

CORA report -- Don gave the CORA report and for the benefit of the new members, gave an explanation of what CORA is and what part they play in the ham community.

Charlie, WB5UUX, made the motion that the meeting adjourn. Meeting adjourned at 10:09 am.

Weather spotters -- Matt, N5CKJ, made arrangements with John Dutch, N5OQY and along with 8 other hams met at CiCi's Pizza on Friday, March 11, to discuss the upcoming storm season and how John would like things handled down at the EOC. John said, "they have moved the 911 emergency back-up system down in the area were the hams use to be and the radio equipment will have to be moved and setup and tested." Mike, WG5C was volunteered,

Don has a quick pointer finger, to have a look at the equipment and to see what will have to be done to get it back on the air.

At the regular Saturday meeting, Dennis, KC5EVH, from the weather service, gave a short talk on storm spotting. Along with his slides, Dennis said that the technology has grown a lot in the last few years, they still want and need spotters out in the field. He said they will have more on this later as the season gets here. Also he said that at the next month's meeting they will show us some of the equipment that is used at the weather station. So come to the meeting next month and we can have a peek at some of the equipment. Speaking of storms and

spotters, in case a storm does come our way, spotters will be needed to ask and go out and do some spotting. Its strictly a volunteer, but in case you can't go out you can listen in on the .06 repeater.

-30-

Keith - KB5FCI

Ham Holiday '94
July 30, 31st
PreRegister Today
for only \$6 !!!

Love Poem Cont...

(Continued from page 2)

I'm so proud to be Barb AA3DV,
 Being a ham is so wonderful to me.

This poem was written from my
 heart to show my appreciation.

Thanks for reading it.

 Barb AA3DV @ AA3CH.#EPA.PA.USA

Via the Packet BBS System
 Edited for C & E by K2GKK

(Continued from page 4)

of noise on an operator's signal. The Alright Company in Tuttle has contracted with our member to manufacture these meters which can be connected to one's two meter radio so that an accurate report can be given when asked for. When an operator asks for a signal report, all one will have to do is take a look at the digital meter and report an accurate noise percentage back to the transmitting station.

Contrary to popular belief, the noise isn't always white. For those of you not in the know, there is also blue noise, red noise or a rainbow of many colors. One of the local amateurs, namely Doc Goodhead, W5CZN, at one time manufactured vertical J antennas which were always painted blue. If a person was transmitting using one of Doc's vertical J's, he would no doubt have blue noise on his signal.

Suppose an operator wanted to paint his antenna to match the color of his surroundings, the noise would undoubtedly come out the color he had painted his antenna. Not only will this new meter be able to accurately measure the percentage of noise, it will also be able to distinguish the color of the noise.

Should anyone be interested in purchasing one of these devices after they appear on the market, keep a watch out for an advertisement in one of the local amateur magazines or out local Collector and Emitter.

Another item which will soon be on the market and be standard equipment on most two meter radios should make a lot of folks happy. It is my understanding that the

Kencom Company, a relatively new Japanese manufacturer of high quality radios has already started installing this item on their radios. scents will be available such as skunk and garlic. No need to try and disable the scent, for the radio will not transmit without the canister of scent in place.

One of the pet peeves of many listening operators is the manner in which some amateurs speak. One of the most abused phrases many folks use is "YOU KNOW." How many football players can say an entire sentence without saying the words "YOU KNOW" while being interviewed on radio

or television? Makes the listener pretty smart doesn't it? Now we have a couple of amateurs in the club, no calls mentioned, who really abuse this phrase. I have counted up to five "YOU KNOWS" in one sentence, and often times they will repeat the phrase two times without saying anything else. Last of all, we have the fellows who think they are so funny they laugh at everything they say. Boy do we have some laughers on the repeater. It doesn't make any difference if it is something serious or not, a good laugh or "he he" comes between every few words.

And then there is the word "UH", that is if you can call it a word. There is one amateur, once again, no call mentioned, who really makes me tired listening to him. He uses more "UHS" than the afore mentioned "YOU KNOWER" and that's pretty bad. It almost sounds like he's gasping for breath. Next is the word "WE". I would estimate that over 90% of the time an amateur is transmitting, especially in his automobile, K5NK

that he is alone. Either this person has a mouse in the car with him or the word "I" isn't in his vocabulary. I think it would be very interesting if some of us would carry a recorder with us and tape some of our transmissions and play them back to see how we sound.

It is my understanding that these devices will be available at John's Candy Store, 84th & South Young's Blvd., around April 1.

Alright Company Presents...

Are You Tired of those annoying "UH's" and time costly "Laughs" that always seem to get on the repeater, just when you were having fun? Come to Ham Holiday and see our booth. We'll give a live demonstration of how our new device can save you time and aggravation on the air. Turn to page 12 and fill out the registration form and send it in. See us at Ham Holiday on July 30-31st!!

The Alright Company



At any rate, this new device will be built into the microphone. Every time a transmitting operator uses the word "Uh, "YOU KNOW", or "WE", the microphone will squirt out a small stream of liquid which will have the odor of freshly peeled onions, causing the operator to cry like a baby. Various

EARS NEWS...

Greetings! Hopefully spring temperatures find everybody with a smile, fishing pole and a few QSL cards to pack around. The increasing amount of daylight time (almost) motivates one to do a little antenna work now if that ground rod can be located...

St. Patrick's Parade

Predictably, EARS has been an active group with a parade, siren test as well as club and board meetings. On Saturday March 12th approximately 15 EARS members, with solicited support, provided organization and communication for the St. Patrick's Day parade. Alton, KB5LIC, mentored the EARS effort in the parade which was punctuated by a wedding entourage and "Sooner Schooner" walkers (Yes, it broke down again. Is there a WIGGER message?) The parade was described as going "very smooth" and "without a hitch." Kudos to all involved with the EARS effort in the parade.

Board Meeting

Then, on Wednesday March 16th, the EARS Board met at the Edmond EOC to review and plan club activities. We even had a brief spelling review and learned that some of us had been flagrantly misspelling a club officers name. Those silly i letters can sure be misplaced for y's - rumor is that the next board meeting we will have another spelling review session.

Scholarship Report

Barbara Kiespert, KB5DGH, gave us an overview of the EARS scholarship while noting good response to the scholarship promotion which appeared in the Collector and Emitter. Her scholarship promotions have sure been sharply done and create a good image for the scholarship effort by EARS. Good work, Barbara. We look

forward to learning of the EARS Bertha Watson Memorial Scholarship winner! Thanks to all who have contributed time and dollars to this endeavor.

Nets...

Richard, KJ5GU, discussed the Monday night net, net-control operators, and an idea or two about the net. Richard is seeking a couple of folks who want to serve as net control or back-up. It really is a pretty painless activity which can hone speaking, conducting and presentation skills. Volunteering to be a net control can be a nifty way to serve your club and participate in a little self-improvement program. Big chief tablets are but an option. Speaking of nets, we often forget the siren test net -'tis monthly, on the first Saturday and is conducted by Edith Vaughn, KA5YPX. This club activity provides a regularly scheduled way in which the club helps the City of Edmond determine storm siren operating efficiency - guess that is jest abt what a siren test is (what superlative thinking on my part.)

Emergency Services

While doing the siren test EARS members practice on-the-air controlled net protocol so this skill can come in to play in the event of an unscheduled need for amateur radio support. In the recent City of Los Angeles communication snafu do ya know who advised the mayor? It was no Darrel Gates, Darrel Strawberry or his other brother Darrel - it was an amateur radio operator.

So we use the nets to keep the powder dry. Speaking of keeping the powder dry, there was a recent emergency service volunteer meeting (March 15th) at the Edmond EOC - this was a make-up meeting because of heavy snow the previous week. We are now in a get ready mode for the Spring storm season so be alert because for those

trained as well as the uninvolved changes in amateur communication protocol can quickly occur when the City of Edmond calls for help. Mike Mize, KB5BIX, or appointed representatives will lay the groundwork when duty calls so listen and then listen some more -' cause ya cannot learn when talkin'. Be sure and get with Mike if you want to be a part of the EARS emergency system team. A wide variety of interest, activities and locations are available for ya: it certainly is no all storm spotting.

Club Meeting

EARS had a club meeting on Sunday March 20th at St. John's - what a nice facility we get to use. The church stewards are quite accommodating to the club's needs. Did that air conditioner feel good or what at the club meeting? Frank Tassone, AA5GI, presented a letter of thanks to EARS from AA5GI for the use of the club's repeater for the Night Owl Net- the NON will shortly return to a MORI repeater. Lee, KA5WIS, advised the club that the repeater links "were working well: and that the West link would be activated " in the near future."

Want to work on your 5wpm code? Report to St. John's at 1400 hours on Sunday 10 April 1994. Frank will hook you up with code instruction. His licensing class will wrap with code so be listening soon for new club members.

Upcoming Events

Board Meeting - April 13 Edmond EOC 7:00p.m.

Dinner Club Meeting - Saturday April 16th
Pepe's 6:30p.m.
73 de John, WB5SYT

HamHoliday '94
PreRegister on Page 12

Don't be Square ! The "Half-Square" is where it's at ! !

Few projects in ham radio are so economical yet so intriguing to new hams and veterans alike, as that of wire antenna design and construction. Here, one of our newest GEARS members shares his excitement over an HP antenna you may want to try. -ed.

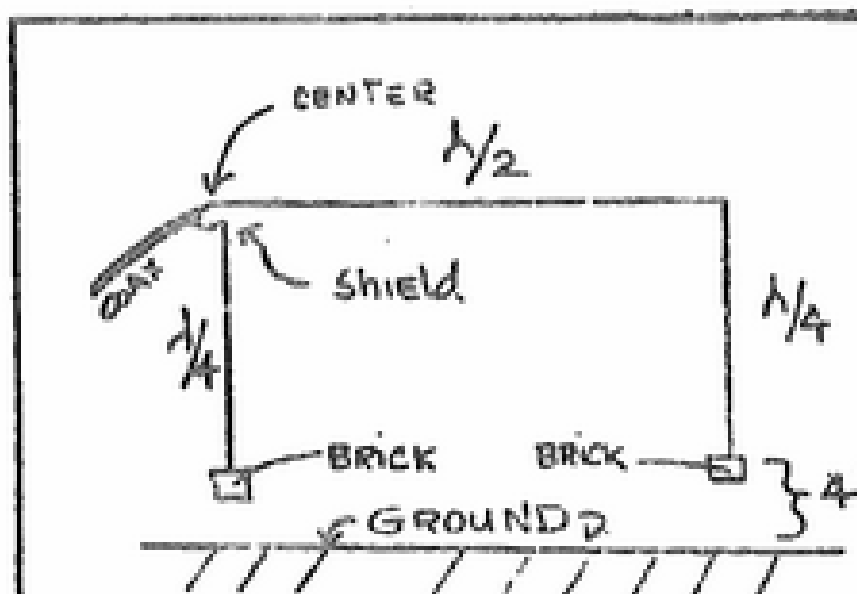
THE HALFSQUARE ANTENNA by KN6MC Robert Vogt

When the novice ticket arrived in January of 1993 the 10 meter band was in a more cooperative mood than it is in today. That very first phone QSO was with N5QQK, Bob Ingram, in Vicksburg, Mississippi. We swapped antenna stories on 28.423.07 at 2040 UTC on January 31, 1993. A fond memory never to be forgotten! A phone call to Bill Pope, W6TKE, provided the address of N5QQK. Soon a makeshift QSL card was on its way. Soon the USA map on the wall was dotted with pins. A Japan map as well as a Canadian and an Australian map soon adorned the walls of the ham shack.

This leads to a discussion of the antenna that was put to heavy use on 10 meters for a number of months. The antenna remains a mainstay on 10 meters today. The antenna is the half-square. It all started from reading an advertisement by Antennas West of Provo, Utah. After reading the article it was but a brief time and my first halfsquare was in the manufacturing stage. Comments made in the advertisement by Antennas West are supported in a technical building article on a halfsquare covering 12 and 17 meters. The article was written by N4PC, Paul Carr. See page 40 of the September, 1992, issue of CQ Magazine. According to N4PC the original halfsquare was designed by Woody Smith, W6BCH, shortly after WWII. Halfsquare antennas are commercially available for bands down to 80 meters.

Before I describe how very simple and easy to build the halfsquare is let me quote from a couple of sources. Antennas West says "Beats a vertical hands down", "You'll hear the halfsquare rejecting signals arriving at angles greater than 45 degrees (that means signals coming from nearby out to 500 miles)", "This is a DX-grabbing antenna". The article in the September,

1992, issue of CQ says "It is a simple, economical DX antenna". The article in CQ describes an instance where Ben Vester, K3BC, had a bobtail curtain which suffered a broken horizontal phasing line near the center vertical radiator. After the mishap apparently great performance occurred. This was attributed to the increased low angle of radiation at the



Two phased verticals provide broadside gain and rejection of high angle interference. *Caution!* These are upside-down 1/4 wave verticals, with the RF High Voltage point at the bottom ends. Keep out of the reach of people and pets! -ed

expense of the gain attributable to that lost third element.

My halfsquare antenna is a permanent placeholder at my QTH. Soon I will be building the 12/17 meter halfsquare as described in the CQ article. That design requires stub matching which will write another chapter in my antenna building career, although I have stub matched a couple of 2 meter antennas.

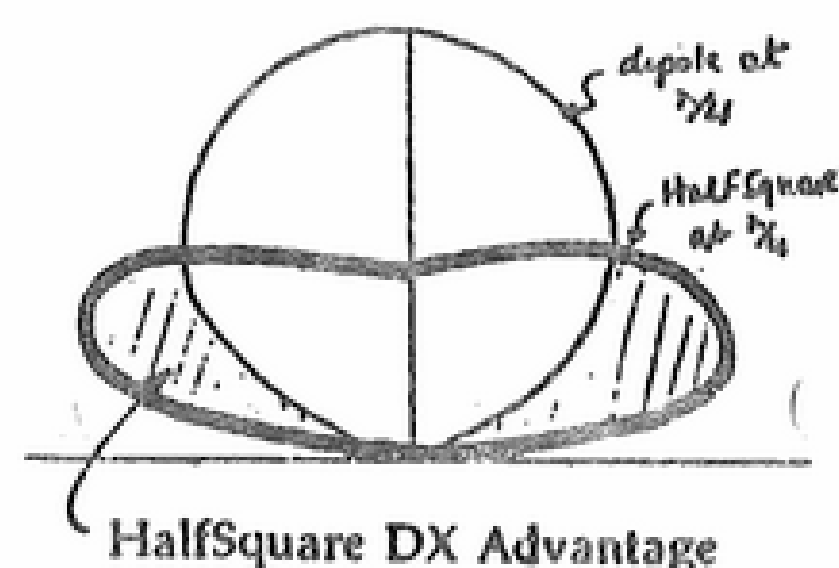
Now on to the building of the halfsquare. The halfsquare is a horizontal physical half-wave length of wire with a single vertical quarter-wave element hanging from each end. Looking at this upside down halfsquare from the broadside, the horizontal portion and the right vertical section are continuous, with only a 90 degree bend in the wire at the right corner. The left corner is broken. It is at this corner that the antenna is fed with 50 ohm coax, the shield going to the vertical element and the center to the horizontal section. I put a brick at the base of each of

the two vertical elements to keep things nice and straight and true. The antenna is strung on each side of that horizontal section by either insulators or other non-conductors. Four inch sections of PVC at each corner will be the way I build future halfsquares. I used solid 10 gauge copper clad wire which is overkill. For my yet to be built 12/17 meter halfsquare I will use 14 gauge enamel covered wire as I find it to be easy to work with. As far as height, the bottom of my bricks are four feet off the ground.

The SWR for my 10 meter half-square is as follows:

28.000=	2.1:1	28.660=	1.0:1
28.300=	1.3:1	29.000=	1.8:1
28.400=	1.2:1	29.450=	3.0:1
28.500=	1.1:1		

Vertical Radiation Pattern



Locally, in Paradise, Al Albertson, N6XY, has a 15 meter and a 40 meter halfsquare. Al works a lot of CW. He gives both antennas good marks. Al's antennas were built and installed by Harold Williams, W6ICO. Also, if you would like to talk to Pago Pago, American Samoa, you will find KH8BB, Nonito S. Que, operating a halfsquare. He tells me he is on 28.490 each Friday at 3:00-4:00 pm our time.

If you are a halfsquare user give me a call and I will compile a roster of local halfsquare users. Maybe we are greater in numbers than one would expect! Soon I will have my 12/17 meter halfsquare up and I can share my experiences with those who may be interested.

Happy antenna building,
KN6MC (aka Robert Vogt)



VHF Club
NEWS
W5LOW
*The Elmer Guekler Memorial
Station*

Minutes of March Meeting

Meeting was called to order by President J, KB0QJ, at 12:00 P.M. with 25 members and guests present. Motions passed to approve minutes as published in the C&E, and to approve Treasurer Ellard, W5KE's, report.

Charlie, WA5JGU, gave the CORA report and announced that he had some copies of the new FCC form 610 that superseded all older ones. Ray, W5TY, announced that he had a new great grandson, who is so new that Ray didn't know his name. Ray also announced that there would be a Vintage Radio Club show at the OSU Tech facility on Portland April 9.

Motion was passed that the VHF club take its turn in helping to assemble and mail the C&E. With this done, meeting adjourned at 12:14 P.M. Fred, W5NL said he would give a short presentation next month, describing his freighter adventure. Joe, K5JB, Sec'y

Stale Packet BBS Mail

For the last month I have been filling in with the packet radio bulletin and message forwarding process for central Oklahoma. When Dave, WB5FWE, shut his BBS down, he sent all his posted messages to me, and since that time most of the recipients have not checked in to read their mail. Now, the mail has been transferred to the K2GKK BBS (more below). The stations still having mail held (as of 3/23/94) include:

AB5MP	KB5WIC
WB5FWE	N3GAF
N5HZU	KP4ERY
N5TKT	WD5DYI
W5OLI	AA0O
N5SOF	AC5B
WB5WID	N5VYN

If your call is on this list, if you haven't already done so, connect to K2GKK-4 on 145.05, after introducing yourself do RM and then do KM.

K2GKK (the BBS), K2GKK-4 (the call sign) will now handle all the in and outgoing messages and bulletins. The K5JB BBS on .05 will revert to its previous file server mode. Joe, K5JB

G-TOR from Kantronics

This was copied from Compuserve's Hamnet. It contains some advertising hype but nevertheless should be informative.

#: 251393 S9/Packet Radio 19-Mar-94
10:14:31, Sb: #G-TOR/Digital Comm.
Fm: HamNet SysOp Scott W3VS
76703,407 To: All [Provided courtesy of
Don Stoner, W6TNS of NARA]

G-TOR Has Hams Buzzing by NARA Staff

Most newcomers have heard of RTTY or radio teletype. This was the first digital communications system adopted (and adapted) by Amateurs, if you don't count CW. The major fault with RTTY was that there was no provision for error correction. What you got was what you got and unless the receiving station asked for a correction, errors remained in the received message.

AMTOR, which stands for AMateur Teleprinting Over Radio, provides error correction and has become very popular on the Amateur bands. The automatic repeat request (ARQ) mode is similar to the ACK/NAK information exchange that is used when we download programs from BBSs. Another mode provides forward error correction (FEC) sends each transmission block twice.

Kantronics, of Lawrence, Kansas, has recently introduced a new mode that is catching on very quickly, called G-TOR. This new HF mode is now standard in the KAM Plus and the KAM Enhancement Board. The acronym stands for Golay-TOR and was named for M.J.E. Golay.

His error correction code was used by Voyager to transmit error-free color images from Jupiter and Saturn. This coding scheme provides the basis for G-TOR. G-TOR's fast, error-free data transmission capabilities can be attributed to the unique combination of several techniques including 1) full frame data interleaving, 2) on-demand Huffman compression, 3) run-length encoding, 4) variable baud rate capability, 5) 16-bit CRC error detection with Hybrid ARQ and 6) Golay forward error correction coding. Together in G-TOR, these techniques combine to provide fast, error-free data transmission in a mode that resists interference and reduces multi-path effects.

In more than 100 tests comparing G-TOR and Pactor, G-TOR outperformed Pactor at least two to one. In poor band conditions, which would normally hinder data transfer on most modes, G-TOR remained relatively unaffected and at times transmitted data nearly four times faster than Pactor. In Kantronics's tests, during which they transferred more than one million bytes error free, the average character/second rate for G-TOR was 23.7 compared to an average of 8.64 characters/second for Pactor. Based on information cited in the article by Van Der Westhuizen.

To protect data from noise bursts during transmission, G-TOR makes use of a concept known as interleaving, similar to the approach used in the audio compact disc. Through interleaving, the bits of each data character are dispersed across the frame and then rearranged upon reception. Therefore, if a burst error occurs on the HF channel, the damage will be spread out into small pieces across the entire frame rather than mutilating large, nonrecoverable sections. Usually only one or two bits of a segment will be damaged, making the entire transmission easily recoverable.

With Huffman, certain letters are assigned a code shorter than the original 8-bit ASCII character. At times, however, Huffman compression may produce

more bits than the original message, so G-TOR is designed to use Huffman encoding "on demand," that is, only when the compression actually reduces the total number of bits. Run-length encoding functions similarly, but assigns a single code to those characters which have been repeated. Through these two compression methods, the average number of bits for a message is reduced, often as much as 30 or 40%.

During transmission, G-TOR automatically operates at one of three baud rates, 300, 200, or 100, whichever is optimal given the quality of the link. The G-TOR protocol adjusts the baud rate to ensure maximum throughput regardless of band conditions. Initially, data transfer occurs at 100 baud, but if transfer proceeds smoothly, the baud rate increases to 300. In the event of persistent interference or poor band conditions, G-TOR will automatically adjust to 200 or 100 baud. When band conditions improve or interference subsides, G-TOR again operates at 300 baud.

Once data is received and rearranged (de-interleaved), G-TOR uses 16-bit CRC error detection with a Hybrid ARQ scheme to detect and correct errors in transmission. The CRC code is calculated by the receiving station, and this code must match the CRC code that is transmitted with the original data. If the CRC codes do not match, indicating that errors have occurred, the hybrid ARQ system requests transmission of the correction bits. These are then combined with the damaged data bits in an attempt to recover the original data. The Golay error correction coding can correct 3 out of 12 transferred data bits, and damaged information is most often quickly and accurately restored without requiring retransmission.

The G-TOR mode may be used in a variety of applications including MARS and portable operation, since the G-TOR protocol permits up to 10 characters for a callsign, allowing MARS calls or special identifiers.

If you would like more information on G-

TOR, write to Kantronics, 1202 E. 23rd Street, Lawrence, Kansas 66046, telephone (913) 842- 7745 or FAX (913) 842-2021.

G-TOR is a trademark of Kantronics Co., Inc Portions of this material supplied by Kantronics Co., Inc., Copyright 1994. Reprinted with permission. Reference: Van Der Westhuizen, Mike, ZS6UP, "A Practical Comparison Between Clover and Pactor Data Transfer Rates," CQ, February 1994:40-42

Hidden Terminal Explained

Right in the neighborhood of the previous posting there was one that I thought was a good explanation of the biggest problem in packet radio, the Hidden Terminal Syndrome. Here it is:

#: 251325 S9/Packet Radio 19-Mar-94
01:32:26, Fm: Norm W2JUP 74055,140
To: Don Stoner, W6TNS 70371,111 (X)

"Hidden Terminal Syndrome" is unique to packet radio. It occurs whenever a station transmits a packet frame that is NOT heard and decoded by "everyone" on a given packet channel. Because of the CDMA (Ed: Normally called "CSMA", Carrier Sense Multiple Access) technique that packet uses (in which the packet controller is literally prevented from transmitting any time it thinks it hears a packet on the channel), some stations that run low power don't put out enough signal to be audible by everyone else on the channel, and other stations will literally transmit right on top of the weaker station, usually colliding with that station on the channel. The result is that neither station is decoded correctly and both stations retry their frames.

As an example, assume that you're running a packet BBS at Location A. Assume also that Station B is 3 miles away running 50 watts. Assume that Station C is 10 miles away running 5 watts. Now which station will you hear best? Which station's frames will you decode successfully? Assume also that both Station B and Station C transmit packet frames at

the same time. The weaker station of course "hears" you as well as the stronger station. And because it's own transmitter is inadequate, it never gets a frame through. All it does is send "retrys" over and over until it times out. Meanwhile, its frames are doing nothing but creating collisions and causing general chaos on the channel.

We need to re-evaluate the FCC's rules on power in this context. In packet radio, what really IS the "lowest power necessary to establish and maintain communications"??

The answer - as usual - may NOT be obvious: packet radio can be most effective when used VIA a legitimate full-duplex repeater. I run into my first experience with a real packet repeater out in Tucson in 1983, the first time I went to a TAPR meeting. It completely eliminated ALL of the "Hidden Terminal Syndrome"!

Lost in Cyberspace

Fred, W5NL, wanted to share the following with you. It was written by Dave Barry, published in his *Washington Post Magazine* magazine column, *Wit's End*

People often say to me: "Dave, as a professional columnist, you have a job that requires you to process larve quantities of information on a timely basis. Why don't you get a real haircut?"

What these people are REALLY asking, of course, is: How am I able to produce columns with such a high degree of accuracy, day in and day out, 54 weeks per year?

The answers is: I use a computer. This enables me to be highly efficient. Suppose for example, that I need to fill up column space by writing BOOGER BOOGER BOOGER BOOGER. To accomplish this in the old pre-computer days, I would have had to type "BOOGER" five times manually. But now all I have to do is type it once, then simply hold the left-hand "mouse" button down whild "dragging" the "mouse" so that the "cursor" moves over

the text that I wish to "select"; then release the left-hand "mouse" button and position the "cursor" over the "Edit" heading on the "menu bar"; then click the left-hand mouse button to reveal the "edit menu"; then position the "cursor" over the "Copy" command; then click the left-hand "mouse" button; then move the "cursor" to the point where I wish to insert the "selected" text, then click the left-hand "mouse" button; then position the "cursor" over the "Edit" heading on the "menu bar" again; then click the left-hand "mouse" button to reveal the "edit menu"; then position the "cursor" over the "Paste" command; then click the left-hand "mouse" button four times; and then, as the French say, "*Voila*" (Literally, "My hand hurts!")

If you need this kind of efficiency in your life, you should get a computer. I recommend the kind I have, which is a "DOS" computer ("DOS" is an acronym, meaning "ROM" which means "way beyond normal human comprehension").

It was invented by Bill Gates. He is now one of the wealthiest individuals on Earth -- wealthier than Queen Elizabeth; wealthier than even some people who fix car transmissions -- and do you want to know why? Because he's the only person in the world who understands "DOS." Every day he gets frantic phone calls:

BUSINESS EXECUTIVE: Our entire worldwide corporate accounting system is paralyzed, and no matter what we type into the computer, it replies, "WHO WANTS TO KNOW? (signed) 'DOS.'"

BILL GATES: Ha-ha! I mean, sounds pretty serious.

BUSINESS EXECUTIVE: We'll give you \$17 million to tell us how to fix it.

BILL GATES: Okay. Press the "NUM-LOCK" key.

BUSINESS EXECUTIVE: So THAT'S what that thing does! Thanks! The check is on the way!

My current computer, in addition to "DOS", has "Windows," which is another invention of Bill Gates's, designed as a security measure to thwart those users who are somehow able to get past "DOS." You have to be a real stud hombre cybermuffin to handle "Windows." I have spent countless hours trying to get my computer to perform even the most basic data-processing functions, such as letting me play "F-117A Stealth Fighter" on it. I have personally, with my bare hands, changed my "WIN.INI" and "CONFIG.SYS" settings. This may not mean much to you, but trust me, it is a major data-processing accomplishment. Albert Einstein died without ever doing it.

I am not the only person who uses his computer mainly for the purpose of diddling with his computer. There are millions of others. I know this, because I encounter them on the Internet, which is a giant international network of intelligent, informed computer enthusiasts, by which I mean, "people without lives." We don't care. We have each other, on the Internet. "Geek pride," that is our motto. While you are destroying your mind watching the worthless brain-rotting drivel on TV ("Dave's World," Monday Nights, CBS, check your local listings), we on the Internet are exchanging, freely and openly, the most uninhibited, intimate and -- yes -- shocking details about our "CONFIG.SYS" settings.

You would not believe how wrought up we get about this type of thing, on the Internet. I regularly connect with a computer group that has a heated debate going about -- I am not making this issue up -- the timing of Hewlett-Packard's decision to upgrade from a 386 to a 486 microprocessor in its Omnibook computer. This has aroused enormous passion. People -- some from other continents -- are sending snide, angry messages to each other. I'm sure some participants, even as we speak, are trying to figure out if there is a way to alter their CONFIG.SYS settings so they can electronically punch their opponents in the

mouth. This debate has been raging, soap-opera-like, for months now, and I have become addicted to it. I tune in every day to see what the leading characters are saying. You probably think this is weird, but I don't care. I am a happy nerd in cyberspace, where nobody can see my haircut.

English Lit. Lesson #101

(Edited from a packet BBS bulletin)

We'll Begin With BOX, and the Plural is BOXES, But the Plural of OX Should Be OXEN, Not OXES, Then ONE Fowl is GOOSE, But TWO are Called GEESE, Yet the Plural of MOOSE Should Never Be MEESE;

You May Find a Lone MOUSE, or a Whole Lot of MICE, But the Plural of HOUSE is HOUSES, Not HICE.

If the Plural of MAN is Always Called MEN, Why Shouldn't the Plural of PAN be Called PEN?

The COW in the Plural may be COWS or KINE, But a BOW, if Repeated is Never Called BINE, And the Plural of VOW is VOWS, Not VINE.

And Speak of a FOOT and You Show Me Your FEET, Yet if I Give You a BOOT, Would a Pair be Called BEET?

If One is a TOOTH, and the Whole Set are TEETH, Why Shouldn't the Plural of BOOTH be BEETH?

If the Singular is THIS and the Plural is THESE, Could the Plural of KISS be Nicknamed KEESE?

Then ONE May be THAT, and THREE Would be THOSE, Yet HAT in the Plural Would Never be HOSE, And the Plural of CAT is CATS, Not COSE.

We Speak of a BROTHER and Also of BRETHREN, But Though We Say MOTHER, We Never Say METHREN.

The Masculine Pronouns are HE, HIS and HIM, But Imagine the Feminine, SHE, SHIS and SHIM.

So the ENGLISH, I Think, You All Will AGREE, Is The Most WONDERFUL LANGUAGE You Ever Did SEE.

This message was sent by Gary, N0Z0I

Heh, my spell checker had a time with that one!
Joe, K5JB



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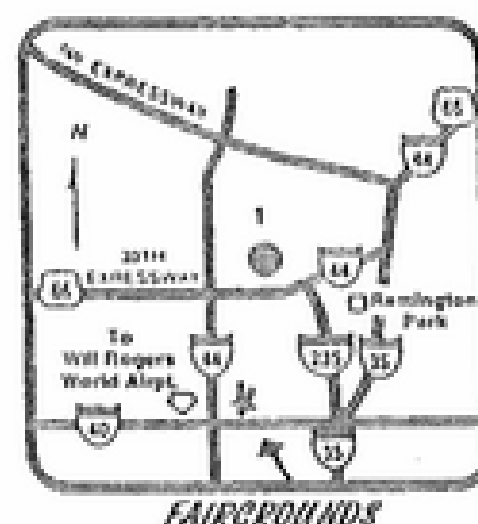
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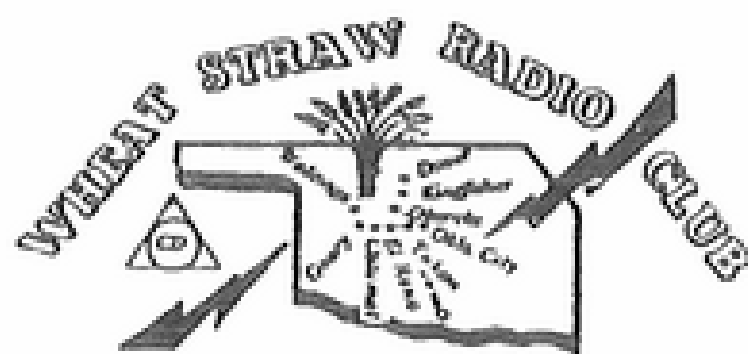
Total \$ _____

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March Wheat Straw Meeting

First I wish to apologize to our president Joe, WA5GHK, for the mistake that came out last month, announcing that Ray, AB5Z, called the Canton meeting to order. How it happened, I do not know.

The March 13 meeting was called to order by Vice President Leo, WZ5H. We had a fine group of 35 present, including three visitors.

Visitors were Frank Spann, WB5RLG, and Wendy, KB5VDG. Frank got interested in amateur radio at an early age of 12 years old. Frank does wood finishing work in a wood shop in El Reno. Wendy works with the Rainbow Bible study, along with taking care of her youngster. She has had her license for about a year.

Congratulations to Wanda Claunch, who passed her technician license test on March 12. We are all happy for her. Now she is awaiting those call letters.

Ray, AB5Z, made a motion that the club caravan to Mooreland April 10, having our meeting by having the caravan. Motion was seconded and passed. Jim, N5VDY, made a motion that we meet at McBee's steak house and leave from there at 8:00 a.m. It was seconded by Ray, K5LLX, and carried.

Leo, WZ5H, has reserved the Canadian shelter at Canton for the covered dish dinner and meeting to be held in August - more about that later.

The discussion that began last month about eating fried chicken at Eischen's Bar in Okarche, was continued. Ray, AB5Z, made a motion that we all go to Eischen's the evening of May 14. Wanda is to check and find out what time they can handle us. The motion was seconded and carried. The way we will be served

and what one gets with the chicken was all thrashed out. There will be one chicken per couple. Sounds good to me.

About that time the meeting was adjourned for refreshments. Being only four days until St. Patrick's day, some of the ladies had adopted the traditional St. Patrick decor. There was a tremendous amount of refreshments brought in from each town, it seemed. We all ate more than we should have -- I know I did. Thanks again Ladies.

Morning Prayer

by Homer C. Ford

Daybreak with stars lit still,
Pale moon glowing over yonder hill,
Sunrise showing high in the eastern sky,
Greets the farmer in pasture or meadows high.

Creator lead me in the straight and narrow way,
A little more loving than yesterday,
Guide my thoughts, words and deeds,
To follow the path Your Son leads.

Thanks for your son who died on the hill,
Arose and ascended to continue Your will,
Who made it possible for sinners like me,
With blood-paid fare to eternity.

Guide and lead us to glorify You in every way,
Living lives that would be acceptable to You today,
Help us to love neighbors as I love me,
Praising You for life's blessings given perpetually.

Watch over family, relatives and friends,
And keep us safely 'til this day ends,
When we add the milestone this day brought,
Me have given love that you have wrought
Amen

From the WSYI Report

Master Frequency File

A book written by James Tunnel and Robert Kelly, WA6GEL, contains every

known (and unknown) VHF/UHF (25 MHz to 2.1 GHz) frequencies and call signs used by the Federal government, (the military, FBI, DEA, Secret Service, Customs Service, Internal Revenue Service, and much more). They have even included the code names and signals used to obscure those officials being protected.

This article gave the price of the book and shipping information, but I felt the amateur radio operators have no need for such. I am not going to copy that, or the publisher's name. A book of this type should not be legal, in my opinion.

Foundation for Amateur Radio, Inc.

This organization, a nonprofit corporation in Washington, plans to have forty nine scholarships for the 1994-1995 academic year. Licensed amateurs may compete for these awards if they plan to pursue a full time course of studies beyond high school. The scholarships are from \$500 to \$2000. For more information write to:

FAR Scholarships
6003 Rhode Island Avenue
College Park MD 20740

All requests for application must be post-marked before April 30, 1994.

FAR scholarship chairman is Hugh A. Turnbull, W3ABC, who also serves as the ARRL Atlantic Div. Director.

Canadian Ham Numbers Grown 62%

On April 30, 1990 Canada restructured its amateur service to include the no-code license. In 1987 more than 60% of all Canadian amateurs were over 50 years old. That percentage is now 54%. 9.6% of all Canadian amateurs are under 30 years old.

Al Gross, W8PAL

Invented the hand held walkie talkie. His patent number is 2,698,380. His CB radio was in the 460 MHz band, and his station call sign was 19W0001, the first CB license issued. It was issued on

March 22, 1948.

Gross was the first to experiment up in the VHF/UHF ranges. (Ed: probably "one of the first".) He was a very active amateur radio pioneer experimenter, and got his license in junior high school.

Al Gross at age 76 is still experimenting in radio, and is a Senior Engineer with Orbital Sciences Corporation, and is deeply involved in the implementation of a two way Low Earth Orbit (LEO) mobile communication and position determination satellite system. It seems he has many projects to do before retiring.

CB Radio, Shady Grove Truck Stop

The CB store in Road Forks, New Mexico, asked the FCC to drop the \$7,000 fine that was imposed for offering the sale of an amplifier for CB since the sale was not made. FCC rules prohibit the sale, lease, offering for sale, importation, advertising, or distribution of any external power amplifier capable of operation between 24 and 35 MHz.

The FCC said a sale need not take place for a violation to occur. The FCC did reduce the fine to \$5,600 since the store had no prior violation record.

FCC Levies More Fines

Some of us around the USA had better watch our lingo. The FCC has levied more than \$437,500 in fines against broadcasters for airing indecent material during the Howard Stern show in late summer of 1993 between 6 a.m. and 11 a.m. Total fines on the Howard Stern show are more than \$2 Million dollars.

ARRL/VEC 1994 Test Fee

The 1993 VEC test fees have increased from \$5.60 to \$5.75 for 1994 per paying candidate, per sitting. The 1994 increase is based on a 2.7% CPI increase.

It is the ARRL/VEC policy that no fee be charged to any applicant taking the 1A or 2 elements only.

Two ARRL National Exam Days in 1994 October 30, 1993 was the first ARRL sponsored National Exam Day (NED) with a big thank you for the 97 VEC teams that participated. 792 candidates were given 1448 elements. 389 earned new licenses or upgraded, a 62% pass rate.

With success like the first NED, ARRL has set two dates for 1994. The spring date is May 14; the fall date is October 29.

This announcement should give an enthusiastic start to those who have been thinking about studying up for a test.

The VEC teams planning on participating should think about getting the test session request for test materials in. Any reader wishing to take a test should contact a VE in your area.

New FCC Form 610

Beginning March 1, all applications to the FCC must use the new Form 610. To me it looks like a shorter and simplified form. None of the seven previous 610 forms will be accepted after March 1, 1994.

Individuals wishing to order a new 610 from the ARRL/VEC must send a SASE.

Electronic Form 610 Possible

In June of 1993, the FCC discussed with the VECs the possibility of filing the new 610 form electronically. Since then it has been mentioned at some ham conventions.

After the new computer system is up and running the commission envisions a short turnaround for amateur licenses. The FCC says 2 or 3 days possibly for processing applications submitted to an FCC BBS system. You must understand that this system is yet to be developed.

If you need to present a Doctor's certificate for code exemption, please contact your VEC well in advance.

Camel Trophy '93

In the February issue of QST I read a very interesting story. If you are an ARRL member then you get QST. Turn to page 29 for the full text.

This four wheel drive off-road expedition was held in Sabah, Malaysia, starting and finishing at the State Capitol, Kota Kinabalu. There were 30 Land Rovers transiting more than 1,000 miles of jungle, tracks, and trails.

The communications were handled by the South Midlands Communication team, headed by Richard Diamond, G4CVi, and supported by Richard Mumford, G8SVC; Mike Deveraux, G3SED; Andy Cook, G4PIQ; and, Adrian Collins.

The convoy consisted of 16 international two-man teams competing in the Land Rover Discoveries. They were specially equipped for rafting, video, film, medical, and plenty of communication equipment, in fact, more than 3.9 tons of it.

Connected to the satellite system was a Ricoh portable FAX machine. They ran 2 meter up through 160 meter bands. On a trailer they had an 80 foot tower.

The food, tents, and supplies were sufficient for a 17 day trip. Don't you know that it was fun?

You DXers would have had a bang working DX with them. They made 6,000 contacts. One station was located 14,000 feet up on a mountain.

Amateur Radio at Jamboree 1994

Plans began a year ahead for the National Jamboree Staff. The 45 hams would make up the amateur radio staff. There were about 5000 other staff for the Jamboree.

Most of the hams worked a week setting up poles for towers, antennas, and radio equipment, a lot of wiring, cables and power generators. There were four sixty

foot poles put up.

Ed Crow, 4B8DDE, did most of the climbing, drilling, and installing steps on the poles to make them easier to climb. That is referred to as stepping the poles. Ed had brought a pickup and trailer loaded with about everything that he could think of.

The radio shack started out to be a tent 15 feet wide and 30 feet long. The instructors were prepared to teach the radio merit badge.

The staff worked hard hunting tables, moving them in, and painting cabinets. They put up a repeater that was loaned to them. They were lucky that there was a satellite station that they could use.

K2BSA was an elaborate station consisting of VHF/UHF, a complete packet station, BBS, HF packet, RTTY/AMTOR, and additional three HF stations. Most of the equipment used was loaned or donated by loyal manufacturers and dealers such as Curtis Brown, WB4KZI. Ham Radio Outlet in Woodbridge VA, ICOM. Kenwood, Yaesu, and Ten-Tec all loaned radios. AEA, Alinco, PacComm, Cushcraft, Hygain/Telrex, Radio Works and TX/RX Systems provided antennas and other equipment.

Jerry Friedman, WA2FQA, of Computer Center, in Ithaca, New York provided all the computers to run the satellite positions.

Cooper Industries donated all the coax cable and rotator control cables. All the cables are used permanently at K2BSA station in Dallas TX.

At 4:00 a.m. Monday morning the diesel trucks rolled in with 27,000 scouts all at once. Most of them had been on the road for a week.

More scouts rolled in on Tuesday morning bringing the total to over 30,000. About all the scouts had their camps set up by noon. They were full of energy and there to have a good time.

Well, the radio merit badge counselors expected about 250 scouts to register during the week of camp. Over 200 courteous scouts signed up to take the radio merit badge the first day.

The counselors were excited but they started a new class every hour.

There were all kinds of test equipment for the scouts to study and get hands-on experience.

Each scout had to build a project in the field of radio. Heathkit donated 250 wireless microphone kits; FAR Circuits donated circuit boards and parts for code practice oscillators. More than 700 scouts started the radio merit badge but 244 completed the course by Wednesday. This was five times more that completed the radio merit badge than in the 1989 Jamboree.

The classes had to be extended to evening classes. Much more space had to be acquired.

The station handled more than 2,200 pieces of message traffic and made over 2,100 HF QSOs.

The staff had to settle on Mondays, Tuesdays, and Thursdays and Friday evening, with permission to use mess tents to hold classes.

The exam session Saturday evening was busier than Friday's long line. 212 people took 171 exam elements at the Jamboree, ending up with one new Novice, 49 new Technicians, six upgrading to Technician plus, two upgrading to Advanced, and one to Amateur Extra.

If you ever get the opportunity to go with a Scout troop to a Jamboree, do so. It is the most unforgettable experience, with the greatest sight you may ever see.

(Personal Editorial)

Sorry, but I have not read my C&E 100% yet. I was grateful to have the opportunity to read the articles from the packet BBS, edited by different amateurs. I am

not naming them because I would hate to leave someone out.

I feel we need all kinds of interests. Every club should have an article in the C&E each month. We should strive to make it a better paper. If it costs more, so be it -- I am willing to pay for my paper. I would rather have a paper that we can be proud of, because we made it.

The editors, through kindness of their hearts, are working hard at it. You who live close I ask to please help them. Oklahoma City has many people who have the equipment and education to do the job.

Think of your time in terms of this analogy: What if you had a bank account that started each day with a balance of \$10,000, but at the end of the day was reduced to zero, no matter how much you spent out of it during that day. None of the previous day's money would carry over to the next day. But you could withdraw money every day, invest it in other activities, and thus grow in total wealth.

Each day you have a only 24 hours deposited in your life's account and none of that time will be carried over to the next day. How you invest that time determines how much value it adds to your life. Don't let your time run out on a given day without opening up your heart with kindness and industry. Help make this paper a great success. The editors need you. Thanks, Ralph, WA5PFK

Poor Froggie!

A ten year old boy was down by the crick when he was able to capture a neat little frog. As soon as he had the frog in his grasp, the little animal spoke up! "Hello there!" said the frog, "If you kiss me I will turn into a beautiful princess!"



The little boy put the frog in his pocket and the frog protested, "Aren't you going to kiss me?"

"Heck no" said the boy. "I am only 10 years old. I would much rather have a talking frog than a princess!"

(heard somewhere --- Joe, K5JB)

1. Aeronautical Center ARC Meets: First Thursday, Flight Standards Building, FAA, S. MacArthur, 7:00PM Pres: Dick Russell, KE4DCL Sec/TR: Brad Nelson, KJ0W 793-9470 VP: Harold Todd, WA5JGU 943-5631 Ast/VP: Charlie Green, WA5VAQ Editor:	6. Altus Association Meets: 7:30 P.M. Second Thursday, North Main Fire Station (CD), Altus Pres: Jim Romines, K15YY VP: NONE Sec/Tr: Bob Heron, KE4BN Editor: Jim Romines, K15YY	14. Cimmaron Amateur Radio Society Meets: 7:30 P.M. second Thurs. WX5Y Playhouse 827 S. 13, Fairview Pres: Terry McColl, N5MLT 227-3672 VP: John Medley, N5WVU 227-3534 Sec: Dennis Painton, WK5V 764-3599 Treas: Nadine Painton, N5FMH 764-3599 Editor: John Medley, N5WVU 227-3534
2. Oklahoma Central VHF ARC Meets: 11:00 A.M. 3rd Sat., Golden Skillet 3401. N. Classen Blvd, OKC Pres: J. Frank Feilds, KB0QJ 789-8469 VP: Bill Noland, WA5FWD 354-5018 Sec: Joe Buswell, K5JB 732-0676 Treas: Ellard Foster, W5KE 789-6702 Editor: Joe Buswell, K5JB 732-0676	9. Wheatstraw Amateur Radio Club Meets: 2:30 P.M. 2nd Sunday Location Varies Pres: Joe Hyatt, WA5GHK 375-3783 VP: Leo Peil, WZ5H 886-2998 Sec/Tr: Joe Garland, WA5FLT 893-2660 Editor: Ralph Wilder, WA5PFK 623-5421	15. South Canadian ARS Meets: 9:30 A.M. Second Saturday, Red Cross Bldg. North OU Campus, Norman Pres: Don, KJ5KB VP: Mike Winkel, N5SOF 366-8639 Treas: Bill, N5UMH Sec: Keith, KB5FCI Editor:
3. Mid-Oklahoma Repeater, Inc. Meets: 1st Tuesday, 7:00P.M., Favorite's Cafe, 36th and S. Western, OKC Pres: Scott Walsh, N5NYS 787-3804 VP: Larry Benedict, N5VYC 728-7824 Sec: Earl Draper, KJ5HN 787-1207 Treas: Robert Moose, N5QKI 720-0073 Editor: Dean Ward, N0PAD 681-4606	11. Edmond Amateur Radio Society Meets: Odd months, 3rd Sun, 2pm Edmond EOC; Dinner Even Months, 3rd Fri. Pres: Lee Vaughn, KA5WIS 348-2961 VP: John Thomason, WB5SYT 340-1798 Sec: Kay Sage, KB5LDO 341-8978 Treas: Sue Snyder, N5VWI 341-8753 Editor: John Thomason, WB5SYT 340-1789	16. Edmond AR Club Meets: 7:00 P.M. Second Monday Various Locations Pres: Mark Northcutt, WD5DYI 755-4672 VP: Wendell Cochran, WB5ISO 943-4308 Sec/Tr: Kay Northcutt, WD5DYJ 755-4672 Trustee: Dennis Orcutt, WB5ISN 340-0034
4. Oklahoma City Autopatch Assn. Meets: 7:30 P.M. Third Tuesday, Salvation Army Bldg. N.W. 50 & Penn. Pres: Brad Nelson, KJ0W 793-9470 VP: Tom Webb, WA9AFM 737-6716 Sec: John Brassfield, N5SAM 685-8070 Treas: Mike Begley, N5VIT 732-2827 Editor: Tom Webb, WA9AFM 737-6716	Central Oklahoma Radio Amateurs Meets: 7:30 p.m. 4th Tuesday, Salvation Army Bldg 50th & Penn, OKC (back door) Pres: Rick Masters, N5WNR VP: Kathy DeGraffenreid, AASRU Sec: Jim Buswell, N5BEQ Treas: Tom Mangham, K5LDJ 677-5291 Editor: Scott Walsh, N5NYS wk. 787-3555	18. Great Plains ARC Meets: 2:15P.M. First Sunday, Home of N5LRR 2914 Osage Dr, Woodward Pres: Bob Bayles, WB0GAX 254-3561 VP: Andy Taylor, N5LRR 256-4017 Sec/Tr: Rod Ford, WB5OVT 923-7683 TR: Freida Patterson, N5EOX 256-2111 Editor: Phillip Perry, N5QCN 938-2453

April 03 - May 14, 1994

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Apr 3 2:15 PM Great Plains Daylight Savings--set ahead 1 hour Easter	Apr 4	Apr 5 7:00 PM MORI	Apr 6	Apr 7 7:00 PM - 8:30 PM Aeronautical Center	Apr 8	Apr 9 9:30 AM SCARS VE TEST Lawton Hamfest
Apr 10	Apr 11 7:15 PM EARC	Apr 12	Apr 13 EARS Board Meeting	Apr 14 7:30 PM Altus Cimmaron	Apr 15	Apr 16 9:00 AM VE Test 11:00 AM VHF Club EARS at Pepe's
Apr 17	Apr 18 6:00 PM - 8:00 PM VE TEST	Apr 19 7:30 PM OCAPA	Apr 20	Apr 21	Apr 22	Apr 23  C&E DEAD- LINE
Apr 24	Apr 25	Apr 26 7:30 PM CORA VE Test Bethal Acres	Apr 27 Passover	Apr 28	Apr 29	Apr 30
May 1 2:15 PM Great Plains MORI VE TEST	May 2	May 3 7:00 PM MORI	May 4	May 5 7:00 PM - 8:30 PM Aeronautical Center Cinco de Mayo	May 6	May 7
May 8  Mother's Day	May 9 7:15 PM EARC	May 10	May 11	May 12 7:30 PM Altus Cimmaron Ascension Day	May 13	May 14 9:30 AM SCARS VE TEST