

The South Canadian Amateur Radio Society

SCARS August meeting was held on the 11th at the Norman Red Cross. The meeting was called to order by Ken, KA5EPJ at about 9:45 with about 25 members present. Treasurer Ken, N5BEW, reported that we had about \$1215 in the account, including \$316 in the repeater fund. N5KUK reported that the minutes of the previous meeting were published in the C&E.

A meeting of club officers was held at Ham Holiday to explain the way the C&E subscription list was maintained. In order to qualify for the postal rate we use the postal regulations require that members who are not current in their local club be dropped from the mailing list. We will have to drop about 40 former members from the SCARS list.

Earl, N5MAP, has done some research on the possibility of obtaining more favorable tax status for the club but has found that some of the requirements may be difficult to meet.

N5MAP discussed some of the activities of the Field Day committee and requested another meeting to be held after the club meeting. The list of items to go into the Field Day kit is growing and some items have been offered for donation.

Leland, W5MCN, said he has the antenna about ready to put back up on the tower at the Red Cross. He says he needs to get it out of the yard so he won't have to keep moving it when his wife mows the lawn!

Much discussion took place about a replacement for our sick repeater. A used GE Master II repeater has been located and the club officers recommended the club vote to buy it. A Pledge sheet was available on the club table at Ham Holiday and we had about \$795 in pledges. This leaves us about \$200 short of enough to get the repeater. A motion was made and passed that we buy the repeater. Another motion was made and passed that we seek additional pledges to make up the remainder. WB5UUX offered to help with the immediate financing until

Apparently some of our editors didn't see the above notice on the front page of the last issue of the Collector & Emitter since they failed to get their copy to me so I am running it again along with an explanation of how we get copy each month.

I will take copy prepared about any way and then convert it to type so it can be used. It doesn't make any difference how much you have to say, a simple statement inviting new or un-new hams to your meeting or two or three, or more, pages of copy about things that have happened--it will all be used.

If you or anyone else has any questions I will try to answer them, just ask.

additional funding is obtained. N5KUK estimated it would take one to two months after the repeater is obtained to get our controller interfaced with it to allow both receivers to operate as they presently do.

After some discussion a Novice license class was scheduled. It will be held on Monday evenings at 7 PM at the Red Cross. The first class will be on September 10th.

While in Virginia recently Andi, WU5W, visited the club meeting of a DX club. She said the station looked like something that Q. R. Zedd might build with multiple towers supporting HF beams, multiple high power transmitters, etc. She also got requests for information about what happened to Zedd. It seems that someone there had gotten the C&E in the past and the ASA exploits were closely followed.

We had two visitors present this month, John N2VEX and Dave KK4OH. Both are students at the Postal Training Center.

The meeting adjourned at 10:25. Ken, N5KUK

THE COLLECTOR AND EMITTER HAS MOVED TO:

CORA Collector and Emitter
9211 N. Council Road
Apartment # 216
OKLAHOMA CITY OK 73132
PHONE (405) 720-1019
Address ALL mail to the new address:
Effective August 6 1990

kay

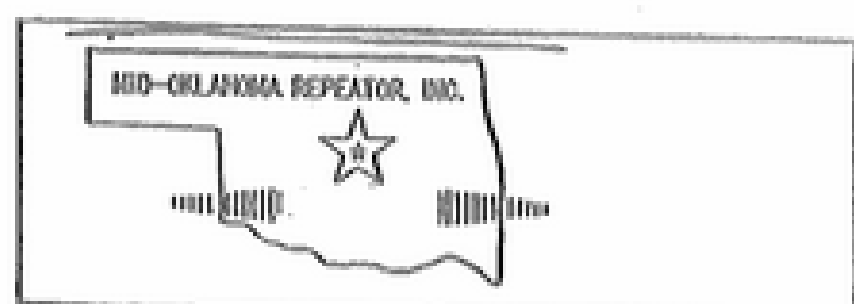
VE SESSION / SWAPMEET OCTOBER 6 IN PONCA CITY

VE session: On Saturday morning, October 6 at 0930, the KAY Co. ARC will sponsor an ARRL VCE VE session (walk-ins only) at the Pioneer Area Vo-Tech, 2101 N Ash in Ponca City. Bring your ORIGINAL license and ORIGINAL CSCE's (if applicable) and photo copies of everything to attach to your 610 form. We will not have access to a copy machine. You must present ORIGINAL documents to qualify for upgrade credit. The testing fee is \$4.95. Checks are acceptable made out to 'ARRL VEC'. There is no charge for taking the Novice exam. Contact Mark Byard, N5OGP, 405-767-2922 (work) or 405-762-1966 (evening). Talk-in 146.37/97.
Swapmeet: The Cowley Co. (KS) ARC, Kay Co. ARC and OIAR (Okla Independent Amateur Radio) will jointly sponsor a buy-sell-swapmeet Saturday 1300 in the hangar building just north of the Terminal (the building with the observation tower) at the Ponca City Airport on North Waverly Street, about 3/4 mile north of the intersection of Waverly and Hartford.

In addition, for you ham-pilots, Dennis Baier with Wichita Radio Service, Augusta KS, will demonstrate newly installed avionics on his C-182.

Bring lawn chairs, card tables for displaying your goodies and your own refreshments.

The Kay Co. ARC will furnish two \$50.00 gift certificates as attendance awards! Contact N5ANV or N5JJR. Talk-in, 146.37/97.



Last month we alluded to an automatic direction finder system for finding jammers, bootleggers, kerchunkers, or just about anyone else using a radio who needs to be located.

Most of us have seen this kind of direction finder in operation. Its on Channel 9, and they call it the Alpha System.

The system uses state of the art receivers and computer processing to pinpoint the location of lightning flashes, and, as a consequence, a lot of people watch Channel 9 during severe weather.

Consider that a lightning flash makes only one transmission during its lifetime, and that one transmission is only fractions of a second in duration, then its remarkable that an electronic gadget can pinpoint its location as quickly and accurately as it does.

Similar technology is now in use by the FCC and the U.S. Coast Guard. Its called the Fixed Automatic Direction Finder (FADF), and it is currently being used to pinpoint transmitters used to send hoax distress signals.

According to the August 1 edition of The W5YI Report, Richard Smith, the FCC Field Operations Bureau Chief, is quoted as saying, "With the FADF system, an operator can rapidly triangulate the source of radio transmissions to an accuracy of approximately one mile radius or better."

Another tool the FCC is deploying to certain field offices is a transmitter fingerprinting kit consisting of a specially modified receiver and high-quality recording equipment.

According to Smith, every radio transmitter has its own unique characteristics, and the fingerprint kit will be able match transmitters with recordings of the illegal operations.

Smith adds that the radio fingerprint kit is relatively inexpensive and quite successful.

How can a radio have its own fingerprint? Just listen.

Even through a repeater you can hear differences in different rigs--some are crisp and clear and others sound trashy. The rig may also transmit microphonics picked up in its audio section, or hum from the power supply. Mic gain may be set too high or too low; deviation may be a bit broad or a little narrow, and the microphone itself may sound a little tinny or bassy, or show too much or too little preemphasis.

Most of today's VHF gear and a lot of the newer HF rigs get their signal from a frequency synthesizer, which, by its very nature, has the same degree of error on every frequency it produces, and this can become part of the fingerprint. Then there are the spurious signals and harmonic radiation characteristics that add to the signature profile.

Have you ever looked inside your rig? What kind of tolerance did the manufacturer use for the parts? Five percent? Ten? Some of those parts may even be twenty or more percent off from what they're marked, and that, too, adds to the fingerprint.

As things are now, the FADF system and fingerprint recorders are in use to curtail hoax distress calls, but in the not very distant future amateurs will be using these techniques to police the ham bands.

Hams have been using DF techniques for years, often for the fun of it, and sometimes out of necessity--to locate jammers or other interference. The ARRL handbook has a chapter on Monitoring and Direction Finding, DF equipment is offered in various ham ads, and just about every ham magazine has, at one time or another, offered an article on DF equipment or technique.

If you have a favorite DF antenna, black box, or experience you'd like to share, give me a shout. If we get enough interest, we might do a column for C&E.

de kd5dl

N5ZNK: I used to work as a taxi driver.

WASEZY: How did that work out?

N5ZNK: Not very well. I drove all my customers away.



Hi... KB5FCF, Joel here once again to bring you the news of EARS. This time my notes are in pretty good order so this should be relatively painless.

From the top... Ham Holiday 1990 has come and gone. Again, as always it was bigger and better. A big thanks to Frank, AA5GI and CORA and all those who made it fun for the rest of us.

The EARS Board has been entertaining the idea of club T shirts for those interested. We have had jackets and patches available for some time now, but a T shirt would be a bit cooler in the summer. Tentative plans are for T shirts with the EARS logo to go for about \$10. Other versions may include long sleeve T's and sweatshirts. To order a shirt or make other suggestions call Mike Mize, K5BIX.

Once again EARS will be conducting Amateur Radio classes this fall. The first class will be held on sept 9th at St. John the Baptist Catholic Church at 9th and Littler. If you know of a prospective new ham, would like to upgrade your license, or would like to help teach a class, please call Phil Wolfenbarger, N5HIP for more information.

Now for a favorite of mine. The fall hampout is just around the corner. Tentative plans are to have the hampout at Lake Texhoma in conjunction with the Texhoma Hamfest. I dont have a date for the hamfest yet but when I do I will bring it to the monday night net. Now it is a little warm and thick for pleasant camping but when Texhoma rolls around the weather should be mild days and cool nights.

The next club meeting will be on september 16th, at 2:00 pm at the church. The next board meeting will be on september 10th at 7:00 pm at the EOC.

Continued on Next Page

1 AERONAUTICAL CENTER ARC Meets: First Thursday, Flight Standards Building, FAA, South MacArthur 7:30 pm PR Ted Anderson, NY5W 685-4016 SE Doug Teachman, W0DXA 392-5458 AsPR Harold Todd, WA5VAQ 685-3685 AsVP Charlie Greene, WA5JGU 943-5631 Editor Bill Oliver & Luke Ellis 329-6333	13 KAY COUNTY ARC Meets: 7:00 pm, Third Thursday, Sep-May, Pioneer Vo-Tech, Ponca City, OK PR John Spoon, WB5YSX VP Marsh Pronneke, WA5UBO S/T Gary Robison, WB5WMD Editor Dave Land, KD5FX 762-8616
2 CENTRAL OKLAHOMA VHF Meets: 11:00am 3rd Sat, Favorite's Cafe, 3701 S. Western, OKC PR Jack Muse, WB5ZKZ 691-1152 VP Fred Boardman, W5NL 427-2505 SE Joe Buswell, K5JB 732-0676 TR Ellard Foster, W5KE 789-6702 Editor Joe Buswell, K5JB 732-0676	14 CIMMARON ARS Meets: 7:30 pm, Second Thurs., WX5Y Playhouse, 827 S. 13, Fairview PR Leo Peil, WZ5H (405) 886-2998 VP Vern Brewer, KA5SZI (405) 227-3017 SE Dennis Painton, WK5V (405) 764-3599 TR Nadine Painton, N5FMH (405) 764-3599 Editor Jack Day, NN5Z (405) 227-3462
3 MID-OKLAHOMA REPEATER, INC. Meets: First Tues, 8 pm, listen to KA5TDA for location. PR Steve Cornman, KB5CDF VP Jim Buswell, N5BEO S/T Linda Moore, KA5NAV 799-1765 Editor	15 SOUTH CANADIAN ARS Meets: 9:30 am, Second Saturday, Red Cross Bldg, North OU Campus, Norman PR Ken Neptune, KA5EFJ 321-7789 VP Dorinda Skaggs, N5IUA 799-5363 SE Ken Brown, N5KUK TR Ken Esadooah, N5BEW 329-4667 Editor Ken Brown, N5KUK
4 OK CITY AUTOPATCH Meets: 7:30 pm, Third Tuesday, Salvation Army, NW 50 & Penn PR Robert Shaw, WA5BQX 341-4763 VP Jim Bartlett, KA5PSF 359-1299 SE Leonard Hanstein, W5MEL 789-7201 TR Larry Davis, KF5JN 722-4564 Editor Chuck Wilhite, K5NK 721-4926	16 EDMOND AR CLUB Meets: 7:00 pm, Second Monday, Various locations. PR Mark Northcutt, WD5DYI 755-4672 VP Wendell Cochran, WB5ISO 943-4308 S/T Kay Northcutt, WD5DYJ 755-4672 Trustee Dennis Orcut, WB5ISN 340-0034
5 OKLA UNIVERSITY ARC Meets: 7:30 pm, Second Tuesday (Sep-May) 119 Wilson Center, 1334 S. Jenkins PR Frank Donaldson, N5IQJ 329-4172 VP John Wustenberg, KE5N 325-2382 S/T Jim Greenshields, WD5HPU 321-9981 Editor	18 GREAT PLAINS ARC Meets: 2:15 pm, First Sunday, Woodward Public Works Bldg. PR Bob Bayless, WB0GAX (Ft. Supply) 254-3561 VP Windle Hatchett, WA5PLW 766-3561 SE Rod Ford, WB5OVT (Gage) 923-7683 TR Freida Patterson, N5EOX (WDWD) 256-2111 Editor Tammy Bowman, KB5CZU 994-5381
6 ALTUS ASSOCIATION Meets: 7:30 pm, Second Thursday, North Main Fire Station, (CD) Altus PR James Molledahl, KB5LS VP None S/T Mike Schenkel, W5VXU 482-1797 Editor Mike Schenkel, W5VXU 482-1797	19 OKLA INDEPENDENT ARC Meets: 7:00 pm, Second Tuesday Southwestern Bell Offices, Ponca City PR Vernon Treiber, Jr., N5ANV 767-6260 VP Truman Stiner, WB5MRE SE Glenn Coker, N5NFC TR Jim Del Torto, K5FLL 762-1221 Editor Mike Morriss, N5JJR 765-6260
7 BICENTENNIAL (76er) ARC Meets: 7:30 pm Second Tuesday, 1801 N. Lincoln Blvd, Parking in rear PR Bill Skipper, KB5BS 392-4612 VP S/T Jerry Sproul, N5AUH 354-2061 Editor Chris Everett, KB5GGY 364-6794	20 CENTRAL OK COMPUTER ORG. Meets: 9 am, Second Sat, Midwest City Community Center, Reno & Midwest Blvd. PR Dorothy Roberts, KB5FDS 681-5220 VP Patrick Roberts, KA5ZYM 681-5220 S Donald Fox 733-8480 T Dale Goad 341-8525 Editor
9 WHEATSTRAW ARC Meets: 2:30 pm Second Sunday, Location varies, see Club Section for details PR George Maschino, K5GGL (Okarche) 263-7614 VP N5JWK (Leroy) S/T Joe Garland, WA5FLT (Calumet) 893-2660 Editor Ralph Wilder, WA5PFK (Watonga) 623-5421	CENTRAL OKLA RADIO AMATEURS Meets: 7:00 pm, Fourth Tuesday, Red Cross Bldg, 10 & Hudson, OKC, (Back Door) PR Frank Tassone, AA5GI 341-4945 VP Dorinda Skaggs, N5IUA 799-5363 SE Jim Buswell, N5BEO TR Tom Mangham, K5LDI 677-5291
11 EDMOND AR SOCIETY Meets: Odd Months, 3rd Sunday, 2:00 pm, Edmond EOC; Dinner, even months, 3rd Fri. PR Tommie Guinn, KA5WAL 341-3886 VP Joel Beasley, KB5FCF 348-1614 SE Don Seible, N5LZE 340-4339 TR Clara Granger, KG5UG 341-2968 Editor Joel Beasley, 348-1614	

PLEASE help us keep your information up to date. What time, where, when, who are your officers, editors, and their phone #. Check YOUR entry, it can be changed.

If there appears to be a mistake - check with your club official. We can't do anything about it. Below is a sample label.

4	90/01	2
WILSON, MIKE WA5RTY		
1234 W 49		
MCCLOUD OK 74851		

The "4" means Autopatch Club, 90/01 means he is overdue. The "2" is for postal rates.

Copy should be 3 inches wide. If you can not meet that dimension, send it anyway, I will reset it.

POSTMASTER:

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CIMARRON

Ye Ed has been known to complain occasionally because of a dearth of club news to report. This past month I have found the remedy....just stay in the hospital a few weeks....its amazing how far behind you can get!

Medical technology is a wonderful thing these days...and through three different hospitals I found wonderfully caring doctors and staff in each. And friends...how wonderful to know that people miss you. CARA never fails to send cards or flowers. Truly Ham Radio is more than just a hobby...it is a family of friends.

I did manage to make a portion of Field Day. Through the efforts of Robert, N5MPH, who welded the tower support, the club was able to get a three element beam up. Dipoles were everywhere. CARA's field day exercise gets more professional every year and although we do not go for score...in case of an emergency CARA could get an efficient station on the air. Those making the Field Day a success included Steve Schoonmaker KF5SW, Terry McColl N5MLT, Curt Briggs KB5NBO, Ray Barnes AB5Z, Denny Painton WK5V, Betty Day KA5RTW, Doug Wheeler from Taloga...(sorry Doug...I didn't get your call) Nadine Painton N5MPH, Jack Day NN5Z and guests Sue Barnes, Charles and Jessie Newton and Melody Briggs and children.

Thanks to KA5RTW I got a rundown on CARA's July meeting. Members present were Ruth Simpson WX5K, Terry McColl N5MLT, Curt Briggs KB5NBO, Robert Baker N5MPH, Steve Schoonmaker KF5SW, Dennis Painton WK5V, Nadine Painton N5FMH, Leo Peil WZ5H, Vern Brewer KA5SZD, Betty Day KA5RTW, and one visitor, Robert Reese.

That brings us up to the August meeting...chaired by president Leo Peil WZ5H. Members present were Denny WK5V, Jack NN5Z, Ruth WX5Y, Ray AB5Z, Curt KB5NBO, Betty KA5RTW, Terry N5MLT, Steve KF5SW, and Tom Adams N5NOP.

CORA's HAM HOLIDAY, just passed, was the main topic of conversation! CORA is certainly to be congratulated on the way they have developed this enjoyable Ham Convention. Attendance was down a little but the convention itself was better than ever. Thank you CORA for having a much improved banquet this year.

Our newest Novice, Curt Briggs, passed his Technician grade test at the VE exam and celebrated on the event by becoming one of HAM HOLIDAY's best customers. He not only invested in a Kenwood 440 HF rig, but also a dual band base station, not to mention

Curing RFI With Beads

Radio frequency interference (RFI) problems are often encountered in telecommunications applications. These may be seen as unwanted oscillations, mutual interference between closely-spaced radios, unwanted noise in nearby telephones and the like. There is a wide variety of techniques which may be helpful in eliminating these problems.

Older solutions to RFI problems often involved metallic shielding of components and wiring, bypassing unwanted signals to ground via capacitors (parallel shunts to ground), and blocking of RF signals by installing chokes (inductances) in series with wiring leads. One of the simple, less well known techniques involves use of ferrite "beads", sometimes known as "birdie beads" (to eliminate "birdies", as unwanted oscillations are often called).

A ferrite bead usually resembles a small dowel with a longitudinal hole through the center. Made of ferromagnetic material, it acts as an RF choke when placed on a current-carrying conductor. It often provides a convenient, inexpensive means of RF shielding, suppression of parasitic oscillations and RF decoupling. In one of our assignments, we encountered RFI in a newly-installed telephone system, a result of a nearby one-kilowatt HF-SSB transmitter. Placing ferrite beads on all conductors entering the telephone cabinet and selected telephones (electronic sets) effectively eliminated the problem. Power supply leads, especially in chopper-type units, often radiate noise (RFI) which finds its way into other circuits with undesirable results. Slipping ferrite beads over the power supply conductors leaving the unit often eliminates such problems.

The impedance of a ferrite bead is a function of the ferromagnetic material, frequency and physical size. As frequency increases, permeability declines and losses increase to a peak. The bead presents a series resistance with very little reactance, reducing the chances that resonance will destroy the attenuation effect. Since impedance is directly proportional to the length of a bead, using several beads increases the effective length and attenuation. Obviously, there is a practical, physical limit to the number of beads which can be strung along a conductor in unusually severe cases of RFI.

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Since ferrite beads contain the magnetic field entirely within the beads, there is no need to separate or insulate them, generally. Some high-permeability beads are conductive and require special care in placement to avoid shorting adjacent components or conductors. They do not need to be grounded and cannot be detuned by external magnetic fields.

Ferrite beads are usually small, permitting a single conductor, or "turn", to pass through the bead. On larger beads, with larger center holes, multiple turns can be used, increasing the attenuation. Such beads begin to resemble toroidal cores. Attenuation increases proportional to the square of the number of turns.

Shown below are typical cross-sections of ferrite beads, including a rectangular "bead" for conductors in place.



The multi-hole beads require careful observation of proper winding patterns when used for multi-turn filters. Beads may be wound clockwise, counter-clockwise or criss-crossed from side to side. Each winding pattern produces a different attenuation characteristic.

Care must be taken to avoid excessive heating of ferrite beads. If bead temperature rises above the Curie point, the bead will become nonmagnetic and lose its ability to attenuate RF energy. Curie temperatures vary with types of ferromagnetic materials, generally ranging between 120-500 degrees Celsius.

In unusually severe RFI cases, ferrite beads alone may not be sufficient to eliminate the problem. In such cases, it may be helpful to add small bypass capacitors to each conductor, shunting residual RF to ground. Care must be used in selecting the proper type of capacitor, e.g. adequate breakdown voltage rating, suitable dielectric material (mica in earlier days, usually mylar or ceramic today), etc. Depending upon the particular circuitry involved, it may be necessary to use a minimum amount of capacitance to avoid unwanted effects on performance of the circuit. Placement of capacitors (at entry or exit of devices) may also affect the efficiency of the RFI prevention. Capacitors should usually be situated near the ferrite beads with which they work as a composite L-section filter. STEVE, W5VCJ

the various antennas, and lesser goodies. Christmas in August! We all dream of doing these things but seldom do we realize these dreams, so...congratulations Curt!

I had a small part in the Baptist Hams Special Events Station held in the Oklahoma Baptist Disaster Relief Van, that was parked near the convention. Amateur Radio serves the public in many different ways. The support net for the two disaster Relief vans meets on 7.274, Sundays at 2:00 local time. You do not have to be a Baptist to be a part of this net and all check-ins are welcome!

Several members of CARA attended the CORA meeting and the method of club payment for the C&E was discussed in depth. It was decided at CARA's August meeting to raise the club dues enough to pay for a subscription to C&E for all members. This will ease the burden of members who belong to multiple clubs.

Well...it looks like I have finally got to the bottom of the list. We surely hope to see more members attending the September meeting. Amateur radio keeps our frequencies by public service...the best public services are accomplished by active club members. Be there or be square!

73 NN5Z

TINA: What happened when you advertised for a husband?

NINA: I got sixteen answers, and they all were the same one.

TINA: What was that?

NINA: You can have mine.

MORE EARS

Don Seible, N5LZE, a familiar voice on the repeater, passed away recently. Taking ham classes in 1987 he had been a member of EARS for several years. Also being an Electronic Technician he helped teach ham classes last year. In 1990 Don took A board position as Secretary. All of our thoughts and prayers go to Don's wife, Donna, KB5LH6 and their family. TU & 73.

We'll miss you Don...

KB5FCF, Joel
EARS Vice Pres.

Location	Output	Offset	Call	Notes	Sponsor
Enid	29.620	-0.100	KA5EAJ	o	KA5EAJ
Tulsa	29.640	-0.100	WA5VXK	o	WA5VXK
Oklahoma City	52.525	0.155	K5JL	o	OKC AP Assoc
Mustang	53.050	-1.000	KB5XM	o PL 179.9	KB5XM
Oklahoma City	53.750	-1.000	K5JL	o	OKC AP Assoc
Oklahoma City	53.850	-1.000	K5URJ		K5URJ
Oklahoma City	53.990	-1.000	K5YGM		K5YGM
Cleveland	145.110	-0.600	WB5MPU	c	WB5MPU
Chickasha	145.130	-0.600	WA0AQO	oa	WA0AQO
Chouteau	145.130	-0.600	K5TTG	oe(ca)	K5TTG
Edmond	145.150	-0.600	KA5NNT	o	AmRedCross
Owasso	145.170	-0.600	N5NNF	o	N5NNF
Norman	145.190	-0.600	KE5EB	c (ca)	NPD ARC
Tulsa	145.210	-0.600	AB5M	o(ca)	AB5M
Blackwell	145.230	-0.600	N5ANV	ol	N5ANV
Broken Arrow	145.270	-0.600	KN5M	o	KN5M
Enid	145.290	-0.600	W5HTK	oal	Enid ARC
Lindsay	145.310	-0.600	KG5FV	o	KG5FV
Ponca City	145.310	-0.600	WD0HCO	oa	WD0HCO
Oklahoma City	145.330	-0.600	WD5HDL		Pub Safety RA
Stillwater	145.350	-0.600	WB5KQL	oe	SARC
McAlester	145.370	-0.600	KD5KV	or	PittCtyARC
Piedmont	145.370	-0.600	N5KUE	o(ca)PL-141.3	N5KUE
Shawnee	145.390	-0.600	W5SXA		Shawnee ARC
Oklahoma City	145.410	-0.600	K5VFN	oer	OK CD
Sapulpa	145.430	-0.600	KF5YP	oe	Sapulpa RptO
Fairview	145.450	-0.600	WK5V		MCARA
Sulphur	145.450	-0.600	KE5KM	oe	KE5KM
Tulsa	145.470	-0.600	AB5M	o(ca)	AB5M
Oklahoma City	145.490	-0.600	WA5CZN	olt	WA5CZN
Beaver	146.610	-0.600	WB5UOE	o	Beaver ARC
Calumet	146.610	-0.600	K5GDE	o	WhStr ARC
Hugo	146.610	-0.600	WB5TTU	o	SE OK ARA
Holdenville	146.625	-0.600	WB5OFC	oe	TriCtyARC
Cavanal Mtn	146.640	-0.600	N5ZS	oe	FSAARC
Granite	146.640	-0.600	W5CHE	o	Granite ARC
Kingfisher	146.640	-0.600	WD5GLD	oa	WA5GHK
Bartlesville	146.655	-0.600	W5NS	o	Bville ARC
Coalgate	146.655	-0.600	KA5CXT	oe(ca)	KA5CXT
Oklahoma City	146.670	-0.600	KA5TDA	o(ca)	MORI
Dougherty	146.700	-0.600	K5BMS	oy	K5BMS
Tulsa	146.700	-0.600	K5LAD	oy	K5LAD
Francis	146.715	-0.600	W7LLP	oe	WB5QYK
Clayton	146.730	-0.600	K6UML	o	SE OK RptA
Duncan	146.730	-0.600	WD5IYF	oea	ChishTrlECA
Miami	146.730	-0.600	KA5EOM	o	MiamiRpt-AP
Stillwater	146.730	-0.600	W5YJ	ol	OSU ARC
Woodward	146.730	-0.600	WA5PLW	o	GrPlains ARC
Muskogee	146.745	-0.600	W5EJK	oe	MuskogARC
Bartlesville	146.760	-0.600	W5NS	o	Bville ARC
Elk City	146.760	-0.600	WB5FBU	o	WCent OK ARC
Oklahoma City	146.760	-0.600	WB5TMW	o	Bicentennial ARC
Mounds	146.775	-0.600	WB5NJU	oel	775 Group
Altus	146.790	-0.600	WB5KRH	oel	SORA
Ardmore	146.790	-0.600	W5BLW	oe	Ardmore ARC
Miami	146.790	-0.600	K5JOA	o	Miami ARC
Oklahoma City	146.820	-0.600	K5JL	oe(ca)	OKC AP Assoc
Tulsa	146.820	-0.600	WA5LVT	oe(ca)	TRO

Location	Output	Offset	Call	Notes	Sponsor
Muskogee	146.850	-0.600	W5EJK	oel	MuskogARC
Oklahoma City	146.850	-0.600	W5PAA	oa	ACARC
Norman	146.880	-0.600	N5MS	oa	OU ARC
Tulsa	146.880	-0.600	WA5LVT	oe(ca)	TRO
Vici	146.895	-0.600	KC5OU	o	KC5OU
Broken Arrow	146.910	-0.600	W5DRZ	oea	BA ARC
Lawton	146.910	-0.600	W5KS	o	LwFt.Sill ARC
Durant	146.940	-0.600	K5KIE	o	DARA
Enid	146.940	-0.600	W5HTK	o	Enid ARC
Oklahoma City	146.940	-0.600	KA5TDA	o(ca)1PL-141.	MORI
Tulsa	146.940	-0.600	WA5LVT	oe	TRO
Ardmore	146.970	-0.600	N5AO	o	Ardmore ARC
Ponca City	146.970	-0.600	W5HZZ	oea	KayCtyARC
Oklahoma City	146.985	-0.600	W5NZS	ce	W5NZS
Pawhuska	146.985	-0.600	WB5DYR	o	Osage ARS
Chickasha	147.000	0.600	KA5TDA	ol	MORI
Tulsa	147.000	0.600	K5JME	o(ca)	AmAirlARC
Oklahoma City	147.030	0.600	WD5AII	o(ca)	Edmond ARC
Skiatook	147.045	0.600	KA5EKA	o	Gr Ctry ARA
Norman	147.060	0.600	W5OU	oa	SCARS
Pryor	147.060	0.600	WD0GST	oe(ca)	MayesCoARC
Enid	147.075	0.600	KA5EAJ	ol	KA5EAJ
Choctaw	147.090	0.600	AB5H	o	Choctaw ARC
Claremore	147.090	0.600	N5OK	ol	RogersCtyWireless
Stroud	147.105	0.600	N5HOL	o	N5HOL
Fort Supply	147.120	0.600	WB5EDD	oe	WA5PLW
Tulsa	147.120	0.600	K5EXF	oe	K5EXF
Edmond	147.135	0.600	KA5WIS	oe(ca)	Edmond ARS
Cordell	147.150	0.600	AA5ER	oe	AA5ER
Enid	147.150	0.600	W5HTK	o	Enid ARC
Grove	147.150	0.600	K5PJR	o	K5PJR
Guymon	147.150	0.600	KY5C	oe	DustBowlARC
Sulphur	147.150	0.600	KA5DAV	o	MurrayCtyARC
Shawnee	147.165	0.600	WN5Z	oe	WN5Z
El Reno	147.180	0.600	AA5GB	oe(ca)	AA5GB
Tulsa	147.180	0.600	WD5EVU	oe	WD5EVU
Seminole	147.195	0.600	K5VHU	o	SeminoleUG
Oklahoma City	147.210	0.600	K5JL	oe(ca)	OKC AP
Okmulgee	147.225	0.600	W5GA	o	Okmulgee ARA
El Reno	147.240	0.600	AC5C	o	ElRenoARC
Tahlequah	147.240	0.600	WA6EAW	o	WA6EAW
Stillwater	147.255	0.600	K5FVL	oe	K5FVL
Anadarko	147.270	0.600	WG5M	oe	CaddoARES
McAlester	147.270	0.600	N5JMG	o	N5JMG
Ada	147.285	0.600	WB5NBA	oea	Ada ARC
Bixby	147.300	0.600	WD5EVU	o	WB5EVU
Byron	147.300	0.600	WD5GJN	oel	GrPlains ARC
Purcell	147.300	0.600	WA5REL	o	CanVlyARC
Newcastle	147.320	0.600	WB5EDN	PL	WB5EDN
Muskogee	147.330	0.600	WA5VMS	o	WA5VMS
Oklahoma City	147.340	0.600	WD5AII	o	Edmond ARC
Big Cabin	147.360	0.600	WA5ICW	ol	WA5ICW
Chandler	147.360	0.600	WD5CIG	o	Bk-Jk Rpt Soc
Fort Sill	147.360	0.600	KD5RQ	o	KD5RQ
Mooreland	147.360	0.600	WB0PGD	o	WB0PGD
Enid	147.375	0.600	N5HEL	o	N5HEL
Texhoma	147.375	0.600	W0PFJ	o	Okie ARC
Wynnewood	147.375	0.600	NF5L	o(ca)	NF5l

Location	Output	Offset	Call	Notes	Sponsor
Lawton	147.390	0.600	AB5J	oa	AB5J
Tulsa	147.390	0.600	WB5NJU	o	WB5NJU
Fort Gibson	223.940	-1.600	WB5AOH	o	WB5AOH
Pryor	224.060	-1.600	WD0GST	oe	MayesCoARC
Oklahoma City	224.100	-1.600	KA5TDA	o(ca)l	MORI
Muskogee	224.340	-1.600	W5EJK	oel	MuskogARC
Oklahoma City	224.440	-1.600	K9KK	cl	Garage RN
Chouteau	224.500	-1.600	WA5NKR	oa	WA5NKR
Durant	224.600	-1.600	N5KFS	oe(ca)	ARMPIT
Stillwater	224.600	-1.600	W5YJ	ol	OSU ARC
Oklahoma City	224.620	-1.600	W5PAA	oa	ACARC
Norman	224.700	-1.600	N5KYF	c	E.Nor.RC
Sulphur	224.800	-1.600	KE5KM	oe	KE5KM
Edmond	224.840	-1.600	N5PTE	o	System 70
Broken Arrow	224.900	-1.600	W5DRZ	oe	BA ARC
Enid	224.940	-1.600	W5HTK	o	Enid ARC
Tulsa	224.940	-1.600	K5LAD	o	K5LAD
Davis	224.980	-1.600	N5HPG	oe	N5HPG
Guthrie	425.250	14.000	KA5EOS	oe	ATV Soc
Ponca City	426.250	485.000	WD0HCO	c	WD0HCO
Stillwater	427.250	12.000	WD0CTA	o	WD0CTA
Mustang	442.050	5.000	WB9VMY	e	WB5VMY
Moore	442.100	5.000	K9KK	cl	Garage RN
Oklahoma City	442.250	5.000	KG5AA	PL 141.3(ca)	KG5AA
Blackwell	442.350	5.000	N5ANV	ol	N5ANV
Oklahoma City	442.550	5.000	K5YGM		K5YGM
Oklahoma City	442.700	5.000	W5PAA	oa	ACARC
Ponca City	442.950	5.000	WD0HCO	c	WD0HCO
Enid	443.000	5.000	WD5GUG	oa	WD5GUG
Muskogee	443.100	5.000	WA5VMS		WA5VMS
Oklahoma City	443.100	5.000	WN5J	oePL-141.3	WN5J
Enid	443.200	5.000	WD5GUG	o	WD5GUG
Cleveland	443.300	5.000	WB5MPU		WB5MPU
Sulphur	443.300	5.000	KE5KM	oe	KE5KM
El Reno	443.400	5.000	AA5GB	oe(ca)	AA5GB
Tulsa	443.400	5.000	N5LWO	ocaPL-146.2	N5LWO
Oklahoma City	443.550	5.000	WD5CIG	oPL-141.3	WB5EDN
Tulsa	443.600	5.000	AB5M	oa	AB5M
Tulsa	443.650	5.000	WB5AZB	oPL-110.9	WB5AZB
Ada	443.800	5.000	WB5NBA	o	Ada ARC
Tahlequah	443.800	5.000	WA6EAW		WA6EAW
Lawton	443.850	5.000	KD5RQ	oe	KD5RQ
Oklahoma City	443.900	5.000	AD1S		AD1S
Tulsa	443.975	5.000	N5GQV		N5GQV
Del City	444.000	5.000	WR5G	oPL-141.3(ca)	WR5G
Vici	444.050	5.000	KC5OU	o	KC5OU
Altus	444.100	5.000	WB5KRH	oe	SORA
Oklahoma City	444.100	5.000	KA5TDA	o(ca)PL-141.3	MORI
Tulsa	444.100	5.000	WA5LVT	oe	TRO
Grove	444.150	5.000	K5PJR	o	K5PJR
Norman	444.150	5.000	WB5FWE	PL	WB5FWE
Oklahoma City	444.200	5.000	WD5AII	ocaPL-141.3	Edmond ARC
Tulsa	444.200	5.000	WA5BPS	o	WA5BPS
El Reno	444.250	5.000	KG5AA	o	KG5AA
Oklahoma City	444.300	5.000	K5JL	oePL-141.3	OKC AP Assoc
Tulsa	444.300	5.000	K5LAD	o	K5LAD
Claremore	444.350	5.000	WA5VPO	o	WA5VPO
Norman	444.350	5.000	N5KUK	oe(ca)	N5KUK

Location	Output	Offset	Call	Notes	Sponsor
Enid	444.400	5.000	WA5OUB	o	Enid ARC
Fort Gibson	444.400	5.000	WB5AOH	o	WB5AOH
Tulsa	444.450	5.000	WA7HDR		WA7HDR
Bethany	444.500	5.000	N5HIP	oPL-141.3	N5HIP
Cavanal Mtn	444.500	5.000	N5ZS	oe	FSAARC
Alva	444.550	5.000	WA5UTO	ol	GrPlains ARC
Purcell	444.550	5.000	NF7T	o	NF7T
Moore	444.600	5.000	KA5TDA	oePL-141.3(ca	KA5TDA
Tulsa	444.600	5.000	N5ANY		N5ANY
Oklahoma City	444.700	5.000	WD5FAM		WD5FAM
Ponca City	444.700	5.000	W5TXF	o	W5TXF
Norman	444.750	5.000	N5KUK	oe(ca)PL-141.	N5KUK
Bartlesville	444.775	5.000	WD5DWT	o	WD5DWT
Piedmont	444.800	5.000	N5KUE	oPL-141.3	N5KUE
Oklahoma City	444.850	5.000	WA5CZN		WA5CZN
Stillwater	444.900	5.000	K5FVL	o	K5FVL
Mustang	444.925	5.000	KB5XM	o PL 179.9	KB5XM
Tulsa	444.950	5.000	KA5VFY	o(ca)	KA5VFY
Kingfisher	444.975	5.000	WD5GLD	o	WD5GLD
Oklahoma City	447.575	-5.000	WB5ERN	cl	WB5ERN
Chandler	449.650	-5.000	WD5CIG	oPL-141.3	Bk-Jk Rpt Soc
Tulsa	449.875	-5.000	N5JJZ	olPL-82.5(ca)	AmAir ARC
Mustang	1282.100	-12.000	WB9VMY	e	WB9VMY

Wheat Straw A.R.C.

Ham holliday came and went. Four of the Wheat Straw members scored. WZ5H Leo drew a T shirt. His wife Ann drew a 2 meter external speaker along with a subscription to the C.Q. magazine for one year. KA5WHJ Harold drew a Astron ps20A power supply. N5ING Bertha got a locket on a gold neckless. Everyone seemed to enjoy theirselves.

Congratulations go to Venus VanLaningham, who has a new novice licence. We hope she will upgrade soon. Sorry I did not get this info in an earlier edition. Her call is AB5MPM. Watch out Ted, you might get out graded soon.

The August 12 th meeting was a covered dish dinner at Canton lake with thirty three present. We had four visitors from Oklahoma City, KP5IL Noreta, WA5R Hugh, Thevda, and Jack. We enjoyed having them, and welcome back any time. Our net is each Wednesday evening at nine P.M. Thanks to all the ladies for such good food, and there was plenty left.

In the absents of the president and the vice president, WZ5H Leo conducted the meeting. The absents were excusable, but they missed a good meeting. WA5RLP Margaret Made a motion the Christmas dinner be held December 9th. We will eat at 1:30 p.m. so meeting can start at 2:30. Some one suggested K5VRL Jim be asked to set the dinner up either at Furs west on northwest highway or at the Golden Corral in Youkon. ~~Anyx~~that we will know later in plenty of time.

N5IKN Tom made an announcement and invitation any one welcome to check in 8:00 pm Thursday evening Ares net, Sunday morning 7:00 am races net, and the weather net Monday through Saturday about 5:30 pm on or near 3900 frequency. The Thursday evening net is on 146.82-. The 7.00 am net is on or near 3997.

The next meeting will be in Weatherford, Ok. It will be our watermellon feed for refreshments after the meeting. Check in the net and find out the exact location of the meeting. At this time I do not know. It is usualy at the mead park if it is not allready taken.

WA5PFK Ralph



VHF Club
NEWS

W5LOW
*The Elmer Gookler Memorial
Station*

Minutes of July Meeting

Meeting was called to order at 12:02 p.m. by President Jack, WB5ZKZ, with 16 members and guests present.

Jack, WB5ZKZ, gave the Treasurer's report for Ellard, W5KE.

Motion passed that the Club arrange for a flea market table at Ham Holiday.

It was announced that the Aeronautical Center and VHF Clubs would hold their annual watermelon feed at the August meeting, 6 p.m. August 18 at Bethany Lyons park. Jim, K5VRL, is making arrangements.

Steve, W5VCJ, related recent HF contacts that turned out to be old friends from the days of the "big one".

Meeting adjourned at 12:17 p.m. Joe, K5JB, Sec'y

Repeater Phone Charges

At the winter Oklahoma Repeater Society, Inc. (ORSI) meeting in Edmond, the subject of Southwestern Bell's charging business rates instead of residential rates to repeater groups was discussed. Mike, N5MS, proposed and sent a letter to Mr. Robert Anthony, Corporation Commission Chairman (see below) and there was some discussion that a general letter writing campaign might be effective. By chance Joe, N6CL, made contact during a radio talk show with someone who might have been able to influence the situation. Also, Larry, W5NZS, did some work on the problem. However, at the Ham Holiday ORSI meeting it was reported that things were not moving along so the subject of a letter writing campaign was again raised.

I offered to publish in the C&E, and packet bulletin board messages addressed to ALL @ OKLA, the text of Mike's letter to give some of you ideas you might want to put in letters of your own. In addition to writing to the Corporation Commission, the ORSI members thought that it would be an excellent time to also write to the political office holders who represent you and might want to get re-elected.

Mike's letter is informative, non-threatening and unemotional and clearly expresses what we, as amateur radio operators would like the recipient to do. You might want to personalize it and update the events cited in the letter while creating your own.

Here is Mike's letter:

Feb 3, 1990

Mr. Robert Anthony Chairman
Oklahoma Corporation Commission
Jim Thorpe Office Building Oklahoma
City, Oklahoma

Dear Sir,

This letter is to request your assistance in helping amateur radio operators persuade Southwestern Bell to provide residential telephone rates to an important emergency radio communications service.

I am an amateur radio ("ham") operator. The amateur radio service is authorized by the Federal Communications Commissions as nonprofit public service. Amateur radio operators are issued licenses after passing federally administered exams that include radio theory, operating procedures and law as well as the Morse Code. It is a technically oriented hobby which provides much free public service in the area of emergency communications. For example, during recent disasters involving Hurricane Hugo and the San Francisco earthquake, amateur radio operators provided needed emergency communications and in some instances were the sole communication links into the disaster area.

Although there are several different aspects of this public service, one area of considerable value is the use of radio "repeater" stations. A repeater station is a radio transmitter and receiver located on a tower or building which acts as a "booster" station and permits communications over an area from ten to fifty miles in radius. There are approximately 175 such stations in Oklahoma and thousands across the United States. Using these repeater stations, amateur radio operators provide much needed public service in the form of storm spotting networks or the reporting of traffic accidents and other emergency situations.

Under the terms of their licenses, amateurs operate these systems on a nonprofit nonbusiness basis. Many of these repeater stations are interfaced

to telephone lines so that telephone calls can be made over the airwaves to police, or other public safety organizations. Because these stations are operated remotely, telephone lines are also used to control these stations.

The problem is that because these repeater systems are located on tall buildings or towers generally in areas of commercial business activity, Southwestern Bell charges commercial rates for these lines. Because many amateur radio operators keep these systems going at their own expense, the cost of these phone lines is considerable drain on their resources.

There is a growing trend with other telephone companies across the country to charge only a residential rate instead of the much higher commercial rate to these systems. For example, General Telephone Company of the Southwest (San Angelo, Texas), Alltel New York, U.S. West Communications in California and Carolina Telephone and Telegraph Company of North Carolina have agreed to do this. Southwestern Bell has done this in Lubbock, Texas.

I feel that this would be a useful policy in Oklahoma and would provide some relief for an important public service. This letter is to urge your consideration of a similar exemption in Oklahoma.

Thank you for your consideration

Cordially yours,

Michael Salem, N5MS

Additional information Mike provided about the Oklahoma Corporation Commission:

Oklahoma Corporation Commission
Jim Thorpe Office Building 2101 North
Lincoln Blvd Oklahoma City OK 73105

Public Utilities Division (405) 521-4114
Office hours: 8:00 a.m. - 4:30 p.m., Mon.
- Fri.

General telephone number: (405)
521-2267

And, here are some additional useful
Corporation Commission names:

Mr. Robert Hopkins, Vice-Chairman,
Oklahoma Corporation Commission

Mr. James B. Townsend, Member,
Oklahoma Corporation Commission
Joe, K5JB

More On Telephones

Mike, N5MS, suggested that we might want to make copies of his letter available to clubs who could have their members add their concurrences and mail to the Commissioners. I'll talk to Joe, WA5ZNF, about possibility of condensing and printing Mike's letter one-to-one in next month's C&E so repeater clubs, or any individuals who were interested, could copy it and send endorsed copies to the Commissioners.

Mike did make the point that it would be important to send individual copies to each of the three Commissioners since they function independently in forming opinions on what the Commission should consider as important.

If anyone has a better idea of what such a letter ought to say, get it to me in time to consider for the October C&E.

The Summer 1990 Texas VHF-FM Society Newsletter contains an article by Paul Gilbert-Snyder, KE5ZW, detailing the telephone rate scuffle over the last two years in Texas. Currently, Southwestern Bell is giving amateur radio repeater clubs residential rate but it took some hassling to re-instate that policy.

In summary, the effort started about two years ago. Several amateur radio groups in Texas, with help from the Texas Public Utilities Commission, were able to get SW Bell to re-interpret its policies and decide to charge residential rate (about \$15.00) instead of commercial rate (about \$30.00) for repeater phone lines. In February 1989, the Beeville Civil Emergency Radio League (BCERL) of Beeville TX was notified by SW Bell that it was to be changed back to commercial service. In telephone discussions that followed, SW Bell indicated that it was its legal department that advised that the amateurs be charged the commercial rate. The Arlington Amateur Radio Club was next notified by SW Bell that they were to revert to business rate. (Of the ten, or so clubs in Texas known to be paying the residential rate, only these two were advised by SW Bell of the rate change.)

The Texas P.U.C. advised the two groups to pay the phone bill under protest but to pay at the residential rate, and register a complaint with the P.U.C. In Texas this only involves writing a letter. In the spring of 1990 SW Bell was involved in a P.U.C. evaluation of reasonableness of their rates

and the amateurs took advantage of the situation and presented evidence relating to the repeater phone issue. On June 14, 1990, the P.U.C. notified the Beeville club that SW Bell was returning them to the residential rate. The VHF-FM Society article concluded with information for Texas groups that have problems getting SW Bell to apply the residential rate. Joe, K5JB

One-Land Woodpecker

(Provided by Mac, K2GKK)

Those of us who chase DX as a passion, have all shared this experience. You've got the beam pointed just so, and the finals are peaked and tweaked to output as much RF as is legal. You've listened and you've figured out the DX station's operating pattern. You're just about to key the transmitter, victory and conquest certain, when you see the S-Meter start to jump. You reach for the noise blanker, but the pulsing is just too much for the rig. The Russian woodpecker has just snatched your victory away.

The Russian woodpecker is an over-the-horizon (OTH) radar system that operates in the HF bands. It has been recently joined by an American version, also operating in the HF bands.

With transmitting antennae located in Moscow, Maine (it's too ironic not to be true) and receiving antennae located over 100 miles away in Columbia Falls, Maine this OTH system will guard our east coast. The area of coverage extends from Greenland to Cuba.

The operations center is located in Bangor, ME. From here, display signals indicate aircraft targets, automatically correlating them with all known flight plans. Aircraft not correlating are reported to NORAD (North American Air Defense Command).

Each of the three transmit antenna arrays is 3630 feet long and 35 to 135 feet high. Each transmit array is divided into six sub-arrays to handle frequencies from 5 to 28 MHz. Frequency switching is controlled by 28 individual VAX computers which input atmospheric conditions and determine the optimum operating frequency. The range of this radar system is between 500 to 1800 miles, as compared to 200 - 300 miles for conventional systems.

The coverage area is divided into three 60 degree segments. Each segment is served by twelve 100 KW transmitters

(talk about a pile-up buster). The receiving antenna array is 4980 feet long and consists of 246 monopole elements.

Lest you take comfort in the thought that this system is far away, the Maine system is only the first of four similar systems to be built. A west coast system is about 90 percent complete and has already been operationally tested. Transmitters are located near Christmas Valley in Southern Oregon and the receiving antennas are located near Tulelake, California. This system will provide coverage from Alaska to Baja California. The third system, with transmitters looking north from Alaska, is expected to be begun later this year. Finally, a system, covering the central US, looking south to cover the Caribbean area, is expected to be awarded in early 1991. This last system is expected to be paid for by funds allocated to the military for the war on drugs and will be used to spot smugglers, as well as possible enemy aircraft.

Japan and Australia have also shown interest in installing OTH systems in their countries. This brings up the possibility of a new award. HAW, Heard all Woodpeckers.

If it's been a while since you've heard the Russian Woodpecker, don't fret. His cousins are just around the corner. 73 de Tom, AA6MZ

Code Waiver Comments

(Provided by Mac, K2GKK)

I thought that I would get my thoughts on the subject of code waivers on here even though I may be prejudiced at the time. I am a General Class ham, having had my ticket for over a year now. I learned the code and think that the code is a very good thing to have in relationship to being an amateur radio operator. However, there is nothing in this world that doesn't have exceptions and amateur radio shouldn't be any different.

My father always dreamed of having an amateur radio license. At 65 years of age he studied hard day in and day out to learn the code and finally succeeded in doing so. He did this even with the fact that his hearing was very bad, was also blind, and had severe crippling arthritis to the point that he couldn't write except to sign his name or so. He was tickled to death when he finally received his ticket and no one would believe the joy that he enjoyed

when he accomplished this feat. He had been on 11 Meters at times in his life and enjoyed that until it got so bad that he couldn't bear to hear all of the garbage that was present on it. So, I worked with him until he was able to learn the code and theory. I knew that he would never get his General Class, as I watched him and realized that this would be an impossible task for him to do. I searched all possibilities. With his bad hearing, no way could he distinguish the tones at 13 WPM. With the arthritis, he could in no way write that fast even if he could. You couldn't have used some sort of light signals because of his eyesight. And considering the fact that some letters consist of 4 parts, at 13 WPM that means that it is possible to have 260 different dits and dahs in a period of one minute. According to my calculations, that comes out to about 4 per second which in no way could even the best amateur be able to distinguish with touch. So you see, I think that some exceptions ought to be made.

We as hams are a self-policing group of people and ought to be able to police ourselves on this matter also. There would probably be abuse of this, but do you really think that there is not any abuse of privileges going on now? Ham radio is FULL of it! I am sure that if I looked far enough, I could probably buy a ticket. Just listen on 80 Meters sometimes and you would think that some of them would have to buy theirs!

My father was a good, respectable man; never caused any trouble and would have contributed to ham radio in many ways if nothing else just to give a good conversation to someone who was in the need of one.

By the way, my father (KC4RLW) became a Silent Key 2 days ago and I am typing this as I sit here preparing myself for his funeral tomorrow. I'm glad, though, that he enjoyed himself in the 1 month that he had his ticket. Seems some of us are failing to remember that ham radio is also used to help our fellow man and not only to satisfy our selfish ways. So, I've probably said enough. It's off my chest now, but I will be lenient in my future decisions when a subject like this comes up again. I know! At this very instant I'm walking in those shoes. So I don't have to form any opinions just know from first-hand experience that when certain things happen, one's mind seems to face reality sometimes. Please think things over carefully from other peoples' situations instead of just your own. THEN make a decision.....

CUL and good hamming!!! Henry Clark II, KC4KZT, Hippo, Kentucky

NTS/Packet Controversy

(Provided by Mac, K2GKK)

I want to add some comments concerning the latest controversy to hit the packet network . . . the one that claims that the ARRL is somehow "anti- packet" in recent comments about NTS traffic.

First of all, I see a lot of remarks like "the ARRL no longer supports packet" or "the ARRL thinks" this or that. The league is a lot of things, a lot of members, and a lot of opinions, just like the rest of amateur radio. But the ARRL is in no way "anti-packet."

The folks making these claims about the ARRL point to the ARRL's Public Service column on page 68 in the August 1990 QST. In a sidebar, titled "BPL for Digital SysOps?", they addressed the issue of awarding Brass Pounders League status to packet BBS, RTTY mailbox, or APLINK sysops who operate automated systems through which a lot of NTS traffic passes.

BPL was created by the ARRL Communications Department many years ago to honor individual operators on traffic nets who handled at least 500 ARRL radiograms in a month. For the guys who hang out on 75 meter traffic nets, this is probably the equivalent of making DXCC. If anyone feels a bit threatened by packet, perhaps it is some of the old traditional traffic operators that have for years made up the backbone of the National Traffic System. They see an increasingly automated system that is handling more and more of the messages that they used to carefully relay "by hand." I don't know all of what went on, but perhaps these more traditional NTS operators were upset when they started seeing the major HF packet BBS stations, that handle thousands of messages, showing up on the same "honor roll" every month with the operators who still do it the old fashioned way. I imagine (although I don't know) that they let the ARRL Field Services Department hear about this.

QST said in this column that BPL is limited to those who MANUALLY pass formal message traffic. In explaining the difference between this activity and running a BBS, they used the example of a traffic net which uses a 2 meter repeater. Individual stations

who pass traffic over this repeater can count this traffic for BPL, but the licensee of the repeater may not use this same traffic in HIS count merely because it passed through his repeater, unless of course he was actually involved in originating, relaying or delivering the messages.

In closing, the article said, "Shouldn't we have a way to thank repeater and BBS sponsors for their support of our traffic handling work?". They mentioned the NTS Service Award, which is available from ARRL HQ.

How is this "anti-packet?"

I suppose what annoyed the PBBS SYSOPs the most was the statement that BPL is not for "managers of automated stations where traffic introduced by others passes automatically with no operator intervention." The poor SYSOP, who often feels that his tremendous expenditure of time and resources are unappreciated, is struck by the thought of all the times he had to readdress errant NTS messages, or set up routing for NTS traffic.

But when did attainment of BPL become such an issue with packet SYSOPs? Can't we let the traditional NTS types have "their" award? And why is the Field Services Department, whose members are active in packet, satellites and other modes, being painted as some kind of anti-technology curmudgeons?

I can understand the feelings of the packet SYSOPs, but I can see why the league made this decision.

Of course, there is nothing final in all of this. The ARRL is an organization that represents its members. I'm sure that those PBBS sysops who still feel strongly about attaining BPL status every month can let their directors know, and perhaps the policy could be changed. After writing this last week and circulating it in the local community, I decided to call the league and see how cast in stone this policy is. What I found was that the Field Services Department was not unanimous in this decision. I was also told that they will not in fact deny ANYONE BPL status who has their totals submitted by their SM, who is the one that always submits the totals. In fact, if you look in the August QST, there are several prominent packet BBS sysops still listed!

73 de Tad, KT7H

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
AUGUST S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	OCTOBER S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	 SEPTEMBER				1
2 GREAT PLAINS A R C	3 Labor Day	4 MID-OKLAHOMA REPEATER Inc OKLAHOMA INDEPENDENT	5 Full Moon	6 AERONAUTICAL CENTER ARC	7	8 S CANADIAN A R S CENTRAL OKLA COMPUTER ORG.
9 WHEATSTRAW A R C Grandparents Day	10 EDMOND CLUB	11 OKLAHOMA UNIV. ARC BICENTENNIAL (76ers) ARC <small>Last Quarter</small>	12	13 ALTUS ASSOCIATION CIMMARON A R S	14	15 CENTRAL OKLA V H F CLUB
16 EDMOND SOCIETY	17	18 OKLA CITY AUTOPATCH	19 New Moon	20 KAY COUNTY A R C Rosh Hashonah	21	22
23 1st Day of Autumn 30	24	25 CORA CORA CORA CORA	26	27 First Quarter	28	29 Yom Kippur

The Choctaw ARC will hold its quarterly Swapfest in the Midwest City Community Center on 29 September from 0800 to 1200. The Community Center is located North of the intersection of Midwest Blvd and Reno. Tables are \$3.00.

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Come one! Come All! Siren Test, Saturdays, OKC Civil Defense, 12:00 Noon, ARES, RACES, Net at 11:00, 145.41 -600 kHz, 1st and 3rd Saturdays. Weather permitting.

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