

# CENTRAL OKLAHOMA RADIO AMATEURS COLLECTOR AND EMITTER

Volume 8 MARCH 1982 Number 86

ALTUS AREA



AMATEUR RADIO  
ASSOCIATION

The Altus Area Amateur Radio Association met Thursday, February 11, 1982, at 7:30 p.m. at the North Main Fire Station. We had 16 members and 4 guests present. Those attending the meeting were: WA5CBF, KA6RTX, WD5BBO, N5AIP, WB5UMH, KA5KVU, WB5MJS, WD5BBN, W5VXU, WA5PGV, W5MCP, KA5KTJ, WB5VUM, WA5MCR and Joyce, WB5KRH, KA5MPK, Dewayne Randolph, Danny Watson, and Stan Reeves.

After a round of introductions, Loren, WA5CBF, read the bank statement. We have \$342.16 in the bank as of this date. Loren said several letters (reports) have been written and sent in the the ARRL and Leonard Hollar, WA5FSN, about the club activities.

Dwight, WB5KRH, the Emergency Coordinator for Jackson County, spoke on length of up-dating the records of the ARES membership. From the members present, he tried to get some information for his records on the emergency preparedness of the ARES membership.

Loren, WA5CBF, the Club Secretary, gave a short report on the January 30, 1982 (Winter Meeting) of the Oklahoma Repeater Society, Inc. meeting at Stillwater, Oklahoma. A packet of information was handed out containing brief minutes of the ORS meeting; a 1982 (Winter) Oklahoma Repeater Directory; a list of the area amateur radio operators; and a list of the official club members with their due dates for membership.

Dwight next spoke in the Weather Watch storm information on the WR5ANX repeater. He handed out the storm-spotters map for our area. The southwestern part of the state was supposed to have had a Storm Spotters training program on February 3, 1982 at the city auditorium. The National Weather Service was to have presented this program. It was cancelled at the last minute according to Bob Henry, WB5VUM.

Chuck Smith, WB5MJS, reported to the group on the latest developments of the linking project being carried on by the Southwestern Oklahoma Repeater Association. The link from WR5ANX to the 146.250-.850 MHz in Wichita Falls should be completed by the end of the month. He stated there would be no weather watch net conducted on .25-.85, but it is to be used as a clear frequency to Altus. The .25-.85 link will be very useful for access to the National Weather Service in Wichita Falls.

Dwight next spoke on the need for emergency preparedness. Spring is the traditional storm season for our part of the country. "Dwight! Do you really have some plumber's candles and fresh batteries for your A.M. radio?"

Loren, WA5CBF, next spoke on the need for a continuous monitoring of the repeater or monitoring the frequency of 145.695 MHz (Standard Alert Frequency for 2 meters). This frequency would be monitored for emergency communication traffic only and then shifting back to the repeater as the working frequency. 145.695 MHz would be used for those amateurs not desiring to listen to the chatter of the output of the local repeater, but still want to be available for emergency operations. Bill Flattery, KA6RTX, brought forth the idea of tone squelch and still stay on the WR5ANX repeater. Dwight said we would probably have some practice on the unified linking arrangement as far as weather watch operations and net control of the three repeaters: WR5ANX, WR5AHK, and the .25-.85 repeater in Wichita Falls. Our best net control operator is Deanna McEndree, WB5UMH. We are looking forward to her professional operating practices as net control on the Southwestern Oklahoma Severe Weather Net.

For those interested in being an "Elmer", we have two individuals who need some code practice help to pass their Novice code requirements. They are Gary Cook (482-

- 2 WHEATSTRAW meets in the snow
- 4 OKDX the "word" on DX
- 5 AUTOPATCH weather meeting
- 6 EDITORIAL - Contests - Points
- 7 KAY County has a new repeater
- 8 ACARC hosts open weather meet
- 9 DX LISTS? - ANTENNA DEFENSE
- 10 MORI meeting room full
- 11-14 STORM WARNING MAP and details
- 15 QRZ & ED. get their limbs
- 16 76'er computer update
- 17 SCARS 45 wpm copying!
- 18 CORA Report
- 19 GREAT PLAINS, the treasurer!
- 21 VHF minutes - - JB more on BC
- 22 SALEM on Op Amps

7777) and Stan Reeves (482-5907).

Those hams interested in writing. Please contact Loren Simms, Club Secretary. I need stories suitable for articles for Collector and Emitter. Please help!

Here's an idea for those club meetings. When a club has a visitor to one of its meetings, stick him or her (BE CAREFUL where, you don't want to give them a bad impression) with a "HELLO- MY NAME IS:" tag. These are available from any office supply store. Print their name and/or call sign in BIG BOLD PRINT and make them feel welcome.

Congratulations to Matt Gallandat, KA5KKP; David, KA5-KKO, and N5DCG for upgrading to Advanced. Congratulations also to Lyn Bursey, KA5KKQ for upgrading to General.

The following is a lot of trivia:

- (A) We won't tell on whose fireman's (WB5VUM) wife who set her house on fire again.
- (B) We won't tell on a certain microwave technician (KA5MPK) while cleaning his unloaded 30-.06 shot his wife's new wardrobe in the closet. How's that for a bullseye!
- (C) We won't tell on a certain communications technician (WB5KRH) who stands on restaurant tables in Hollis trying to hit the WR5ANX repeater with his HT-220 with rubber ducky.
- (D) We won't tell on a certain businessman (AJ5Q), an avid DX'er, who flies a pair of bloomers from his 2 meter antenna mast. Never did find out whose they were anyway?
- (E) We won't tell on a certain highway patrolman (KA5-KVU) who has found life on 450 MHz.
- (F) We won't tell on a certain Crowell businessman, recently retired (WA5MCS) who has found it does not pay to leap tall fences in a single bound in lumberyards.
- (G) We won't tell on WB5AFY escaping the cold weather last week by making a trip to Hawaii for business.

Don't forget next club meeting is March 11, 1982.

HERE WE COME!

Down in the southwestern part of the state, we are all excited about the new linking system being engineered by Dwight Dennis, WB5KRH, and several of his friends. The new linking system will connect two repeaters on command. The two repeaters are WR5ANX (146.190-.790 MHz) and the WR5AHK (146.220-.820 MHz) located on Wilson's mountain (near Altus) and Crowell, Tx. respectively.

The UHF linking system has been in operation since October of 1981. It has proved to be relatively cheap, easily maintained, and comparatively simple to build. Utilizing the concept of modular construction plus the extensive knowledge of systems-design, the team of Dwight and Chuck Smith, WB5MJS, has constructed a system which has not had ANY down time.

The boys down in Crowell (WA5MCR, WA5MCS, KA5KKO, KA5KKP, and W5UOV) have been thrilled with the performance and success of the project. Any conversation on WR5AHK in Crowell comes thru the WR5ANX and vice versa. It is a command link with 587 touch-tone on and "pounds" off with access available to anyone (licensed of course!).

Another spin-off project of Dwight's is the UHF link between the WR5ANX repeater to a new repeater on 146.250-.850 MHz in Wichita Falls, Texas. This project was dreamed up by Dwight and Dan Osborn, WB5AFY. This linking system was copied from the highly successful Crowell project. As in the other link, it will be readily available by touch-tone to users. This linking path should be completed within two months' time.

Another project to be established will be a UHF link path to the Oklahoma City area. One of the big problems with this path is the Wichita mountains. These mountains form a barrier between the southwestern part of the state and the central area. There is a definite

Continued on page 4



We had a real fine turn out for our Feb. meeting on Valentines Day at the Okarche High school. It was almost like a Springtime Sunday except for the snowdrifts that had not had time to melt.

We did not have much formal business. We thank Ralph WA5PFK for the permanet loan of his watt meter to keep at the repeater site. We heard some good news from Ray AB5Z about DARLA from down in sunny South Texas. She has been having small problems arise but is overcoming them. We all hope she will be able to return home before long. Leo KA5DU0 has been keeping the group up to date on her condition over HF. In fact, I understand it has become a large nightly net. The LEO DUO NET meets on 7.260 MHZ. at 0200 Zulu or 8:00pm for the rest of us.

Okarche was our host and we all know George K5GGL and respect his electronic ability but we do thank him for soliciting the help of GOLDIE when it comes to the refreshments. She certainly out did herself. Decorated heart shaped cakes and cookies galore. She told me what all was in what but it is impolite to talk with your mounth full and it is very hard to take notes with cake in one hand and cookies in the other.

Kingfisher is the host for our next meeting and you will have to tune in the Wednesday night net at 8:30 for the exact place. There is no need to hurry. WA5JHB Marvin has volunteered to be net control, so there will be plenty of time to join in. Hope to see everyone in Kingfisher March 14.

Ted WD5JNT



# SKYWARN

## MARCH

4	Edmond	16	Tishomingo
9	Ponca City	17	Madill & Bristow
10	Stillwater & Tulsa.	22	Shawnee
11	Chandler	23	Mc Alester
15	Coalgate	24	Hugo
		25	Bartlesville
		31	Muskogee

Check with your Emergency Coordinator, Civil Defense Director, or Red Cross Director for locations and times.

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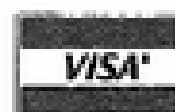
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## 840-1234



***Ask Doc, WA5CZN, about his fantastic contacts!***

Managing Editor: Joe Harding, WA5ZNF 737-1044

Circulation Mgr. Bob Graham, WB5NSV 677-8685

# CENTRAL OKLAHOMA RADIO AMATEURS, INC.

MEETS: 7:30 pm Fourth Tuesday (Except Dec.) Red Cross, Oklahoma City.

PR AD1S George Adkins 722-6195  
VP WD5JNT Ted Van Laningham 262-1675  
Se N5CIJ Frank Yohe 324-0772  
Tr K5GGL George Maschino 263-7614

# 1 AERONAUTICAL CENTER ARC

MEETS: 8:00 pm First Friday at Flight Standards Bldg., FAA Aeronautical Center

PR AA00 Robby Runyon 373-1818  
VP N5ABL Holly Holcomb 799-2539  
Se WB5UHW Jim Seignious 751-6698  
Tr K5RJR Larry Vorheis 789-9629  
EDITOR: Bob Graham, WB5NSV 677-8685

# 2 OKLAHOMA CENTRAL VHF CLUB

MEETS: 8:00 pm Third Friday, Red Cross Bldg., 10th & Hudson, Okla City

PR W5VCJ "Steve" Stevens 341-8486  
VP WD5IRB Ralph Bartow 521-8330  
Se K5JB Joe Buswell 732-0676  
Tr W5KE Ellard Foster 789-6702  
EDITOR: Joe Buswell, K5JB 732-0676

# 3 MID-OKLAHOMA REPEATOR, INC.

MEETS: 8:00 pm First Tuesday, Okla City EOC, 4600 N Eastern

PR KC5HD John Clement 943-2467  
VP W5HPR Don McDown 732-6749  
Se KA5ERZ Connie Boland 348-0123  
Tr W5K0Z Sid Gerber 737-1050  
EDITOR:

# 4 OKLAHOMA CITY AUTOPATCH ASSOCIATION

MEETS: 7:30 pm Third Tuesday, Okla City Fire Dept Training Center, N. Portland

PR N5IH Henry Israel 722-3848  
VP AD1S George Adkins 722-6195  
Se KA5BJS Judy Macdonald 672-4947  
Tr K5GL Guy Liebmann 787-9545  
EDITOR: Henry Israel, N5IH 722-3848

# 5 OKLAHOMA UNIVERSITY AMATEUR RADIO CLUB

MEETS: 8:00 pm (Sep-May) Second Tuesday Carson Engineering Center

PR WB5RQB Lee Hardy 325-4545  
VP KA5COI Peter Richeson 329-3217  
Se  
Tr  
EDITOR:

# 6 ALTUS AREA AMATEUR RADIO ASSOCIATION

MEETS: 7:30 pm Second Thursday North Main Fire Station (CD)

PR WB5MJS Charles Smith 477-1098  
VP  
S/T WA5CBF Loren Simms 477-0921  
EDITOR: Loren Simms, WA5CBF 477-0921

# 7 BICENTENNIAL ARC

MEETS: Second Tuesday, Air National Guard Will Rogers Airport.

PR KH6JTE John Galway 670-5472  
VP N5BEQ Jim Buswell 236-0368  
Se N5AUH Jerry Sproul 354-2061  
Tr WA5RAQ Bill Rogers 632-4375  
EDITOR: Bruce Goff, KC5CR 751-6276

# 9 WHEATSTRAW AMATEUR RADIO CLUB

MEETS: 2:30 pm Second Sunday. Location varies. See club section for location.

PR WA5GLD Dick Ruhl (Kingfisher) 375-4843  
VP KA5FUU Tom Johnson (El Reno) 262-5631  
S/T WA5PFK Ralph Wilder (Watonga) 623-5421

EDITOR: Ted Vanlaningham (El Reno) 364-5421

# 12 SHAWNEE AMATEUR RADIO CLUB

MEETS: 8:00 pm Second & Fourth Tuesday Shawnee City Hall (EOC)

PR WB5ZBA Earl Couch 598-3212  
VP WD5ETD Rick Wilson  
S/T KA5FBC Jim Sullivan 273-3843

EDITOR:

# 13 KAY COUNTY AMATEUR RADIO CLUB

MEETS: 7:00 pm 3rd Thursday at EOC

PR WA5UBO Marsh Pronneke 363-2526  
VP WB5NQT Pat Burnham 765-7229  
S/T WB5YRN Delbert Foiles 762-4479

EDITOR: Marsh Pronneke, WA5UBO 363-2526

# 15 SOUTH CANADIAN AMATEUR RADIO SOCIETY

MEETS: 9:30 am Second Saturday, Red Cross Bldg., North Campus, Norman

PR KU5B Jack Bickham 329-1311  
VP K5KDR Bill Oliver 329-6333  
Se AF5X Jess McKinzie 329-1543  
Tr WB5UUX Charles McCown 321-1061  
EDITOR: Sam Barrett, WA5RPP 321-2601

# 16 EDMOND AMATEUR RADIO CLUB

MEETS: 7:45 pm First Monday. See club section for location.

PR WD5DYI Mark Northcutt 755-4672  
VP WB5ISO Wendall Cochran 943-4308  
S/T WB5UIY Stan Van Nort N/L

EDITOR: Stan Van Nort, WB5UIY N/L

# 17 TRI-CITY AMATEUR RADIO CLUB

MEETS: 7:00 pm First Tuesday. Location varies. See club section.

PR WB5UBB John Warriner 379-3149  
VP WB5VLT J. B. Bills 379-3992  
S/T WB5TYW Yvonne Warriner 379-3149

EDITOR: Yvonne Warriner, WB5TYW 379-6448

# 18 GREAT PLAINS AMATEUR RADIO CLUB

MEETS: 7:30 pm First Tuesday, Basement Woodward court house

PR N5CCV Gerald Bowman 994-5381  
VP WB0PGD Ron Tice 994-2138  
Se WB0QGW Carla Tice 994-2138  
Tr KA5KAG Gerry Ford 256-5342  
EDITOR: Carla Tice, WB0QGW 994-2138

# 19 SOUTHEAST OKLA AMATEUR RADIO ASSN.

MEETS: ? ? ?

PR WB5TTV Ron Henson 326-5418  
VP WB5ULI George Weldon 326-6572  
S/T WD5FUE Orville Kaley 326-3650

EDITOR: ? ?

# OK DX

Next Meeting: March 8, 1982 Starts 6:30 P.M. or whenever you can get there at the Waterhole Restaurant, 3333 N.W. Expressway (across from Baptist Medical Ctr.)

Our last two meetings have been sparsely attended due to bad weather, holidays, lack of publicity, rickets and the plague. In March, we'll have no excuses--let's get together and share our DX resources... Elsewhere in this C & E you will find the DX'ers Lament. It arrived here anonymously and is printed for your amusement--or whatever.

## ON THE BANDS--

Checking the calendar, we hopefully will have a busy month coming up. 20 meters has been closing earlier, but 40 and 80 have been very quiet with excellent opportunities for DX contacts. Listen for these:

Date	Country
March (all)	The Colvins (W6KG, etc.) are back touring the Caribbean and South America for the Yasm Foundation. If you don't have it, chances are the Colvins will be there in the coming weeks. Listen all bands, because their signals have been excellent on 40 & 80.
March 1	ZD9 Tristin de Cunha, ZD9BV should be showing up particularly on 10 meters starting around this date. He is a commercial wireless operator-new to amateur radio, so CW operation may be expected as well. QSL to W4FRU.
March 1	4W1 Yemen. G3DYY is rumored to have operating permission. Bloody good luck.
March 6 & 7	ARRL INTERNATIONAL DX CONTEST. Exchange signal report and age of your first born male child. (Just kidding--see page 94 of December QST.)
March 16	KP1 Navassa Island -KP2A-John Ackley and the International DX Foundation group -of recent Desecheo fame-plan to be there several days-all bands-most modes including RTTY.
March 8	XXX OK DX Meeting- C'mon out--the bands always die after the contest anyway!
March 20-21	C9 Mozambique -WA4SKE, who gave the guys 7Q7LW last year will be in C9 this weekend but he as yet has no permission and no license to operate.Listen.
JULY 23,24,25	HAM HOLIDAY 1982. Will feature a DX forum-including slides from TYA11 and other surprises.

MONITOR 147.900 for DX information! If you hear something really good on the bands, break in and let everybody know! You'll be surprised how many folks are on 147.900 these days...exchanging info and working new countries.

At our March foray we will entertain a proposal that future meetings be held in the shack (ie. home) of a member. Each month we would be hosted by a different DX'er who would wine and dine the group, bore us with pictures of grandkids, home movies, QSL cards and the like. Whaddya think?

REMEMBER the MARCH 8 meeting. OK DX is not a formal club. We have no officers-no dues-no minutes. Roberts' Rules are definitely out of order. We are simply a group of folks who enjoy getting together to discuss DX, contesting and other stuff. Regardless of your club affiliation or your country total-feel free to join us at the March meeting. Good DX. de ADLS.

## FOR SALE: YAESU STATION

FT101 EX TRANSCEIVER w/ voice  
YO 100 MONITOR SCOPE processor  
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Tom Wimpy  
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Norman OK 73071

MARCH

ALTUS AREA AMATEUR RADIO ASSOCIATION CONTINUED need for such a communications path between the two areas of the state because the Spring-time storm track runs from southwest to northeast. Both areas of the state would benefit from such a system. Much work, planning, and discussion have already been made to further this vital link. Problems still need to be overcome, but progress has been made.

Two other projected linking paths from the central core at WR5ANX has been discussed. These two paths are to Memphis, Texas to the 146.250-.850 Mhz repeater and the 146.160-.760 Mhz repeater at Elk City.

All of the five systems would be interconnected and intra-controllable. Much progress has been made, but more work needs to be done before the whole system discussed will be completed.

This article is just a short informative summary of the plans of the Southwestern Oklahoma Repeater Association, P.O. Box 491, Altus, Oklahoma 73521

LCS: WA5CBF

This month's featured amateur radio operator is Don Hayes, WB5NRQ. Don lives at 508 Mockingbird, Dr., N., Altus, Oklahoma. Don is the local representative of the New York Life Insurance company. He is active in the church and several community service clubs. He serves as Disaster Chairman of the local unit of the American Red Cross.

The community service club of which he is a member is the Kiwanis.

His wife, Sherry, is a teacher at Wilson Elementary school. His youngest son, Lyle, is active in the local chapter of the Future Farmers of America. Scott, a Freshman, is attending Oklahoma Christian College. Scott is also licensed as WD5BBU.

Don has been a ham since 1976. He is an active member in the Altus Amateur Radio Association and the Southwestern Oklahoma Repeater Association. His favorite amateur activity is aiding others, such as phone patches or messages, when the time permits. Don has been instrumental in securing a self-contained mobile relief van for the Red Cross chapter of Altus.

LCS WA5CBF



DON HAYES

Wanted: Mobile H.F. antenna and accessories (prefer Hustler).

Contact: Loren Simms WA5CBF, 209 Mockingbird, Dr. N. Altus, Oklahoma 73521

## Altus Area Amateur Radio Association Members due dates:

WB5LAF :82-03	WB5KRH : 83-02	WB5PMG :82-12
WB5NRQ :82-05	WA5TXG : 82-04	WB5RQM :82-01
W5VXU :83-01	WA5CHF : 83-01	WA5ZAR :82-09
WB5MJS :82-08	WB5KPM : 82-12	N5DKZ :82-12
KB5LS :82-09	K9PNT : 82-09	KA5MPK :83-01
K5KIF :82-02	K96RTX : 83-01	KA5KVU :82-12
N5AIF :82-12	WD5BBV : 82-02	W5CCV :82-11
W5VQS :82-03	W5ZDI : 83-01	KA5KML :81-12
WA5MCS :82-06	WA5MCR : 82-05	WA5OGC :83-01
WB5WCB :82-04	W5UOV : 82-04	D.R. :83-02
		D.W. :83-02

## FOR SALE:

Brand New Amplica LNA (C band) Model CD305329, 100 degree, 50db, complete with data. This LNA has never been in service, and is latest production. If you need 100 degrees, here is your chance to get one cheap! Only \$750.00. Or, trade for something. Robby AA0O, 373-1818.

SILENT KEY: Horace Marrinan, W5AYO, of Oklahoma City, became a silent key on February 12th. He was a retired transmitter engineer for WKY Radio and Television and later KTVY Television. He had been a member of several amateur radio clubs in the metro Oklahoma City area. He held a First Class Radiotelephone License and was an Amateur Extra Class. (de WD5DYI)

COLLECTOR AND EMITTER



# WEATHER MEETING

The ninth annual severe weather warning meeting was attended by several hundred people at Channel Nine's Studio B.

Gary England did his usual fine presentation and the meeting was a successful kick-off to our preparation for the coming storm season.

The following amateurs will have assignments in the net operation:

**NET CONTROLS**  
Henry, N5IH  
George, AD1S  
Mac, K2GKK  
Guy, K5GL

**INFO CENTER**  
(Warr Acres P.D.)  
Chuck, N5SW  
Chuck, K5NK

**RADAR OPS**  
Bob, WA5BQX  
Lloyd, WB5Z0I  
Hobe, WB5MLN  
Ron, K5IGB  
Tom, N5GE  
Mike, N5DDB  
Dennis, WD5CSM

## EMERGENCY COMMUNICATION TRAILER

Merrel, WB5PTQ  
Jerry, W5UGM  
Bob, N5RC  
Dennis, WD5CSM

**MEDIA COORDINATION**  
KTOK - Don, K5SJV  
KOFM - Art, W1GOM  
Tom, KP5E

Frank, N5FM, is the overall Coordinator for all emergency operations.

The Storm watch maps are not yet available from the printer but are expected within two weeks. The maps will be changed this year to include an Oklahoma county map on the reverse side. This is particularly important since our coverage area has expanded. The OKC metropolitan area map coordinates are the same as in previous years. Anyone in the OKC metropolitan area may pick up a copy of the map at Guschke's Communications, NW 50th & MacArthur. Anyone outside of metro OKC wishing to participate in the Severe Weather Warning Nets may request copy(ies) of the map from WB5MLN. They will be mailed as soon as possible. When you receive your map, please become familiar with your map coordinates and the weather severity codes.

Net controls will insist on use of the codes as much as possible in order to assure positive communication with minimal chatter during a severe weather alert. As in the past check in when your geographic area is called, using only the suffix of your callsign. Net control will then recognize you and request your full callsign, location and any other information he needs from your area.

We are excited and pleased to have arranged direct links with repeaters in Altus and Woodward for the coming season. These links will serve a dual purpose: 1) our friends in Western and Southwestern Oklahoma can provide us with vital information on storm intensity and direction when the storm is still distant from OKC and 2) we can provide them with prompt accurate information from our sources, including Channel 9 radar, NOAA, Red Cross etc. These links should be a vital two-way boulevard of information in 1982.

A reminder to our members that the Aeronautical Center ARC is sponsoring the Skywarn meeting this year. ACARC President, Robbie Runyon, AA9O, has extended an invitation to us to attend this important meeting on March 5, 8:00 p.m. in the main auditorium of the FAA Aeronautical Center. Put it on your calendar.

The next meeting of the Oklahoma City Autopatch Association will be held on March 16, 7:30 p.m. at the OKC Fire Department Training Center, which is located on North COLLECTOR AND EMITTER

Portland (between Reno & NW 10th St.) If you are not a member, but would like to learn more about our association, please join us at our next meeting. An insurance agent will be at the March meeting to discuss renewal of the club's Equipment Floater Policy. If you have this coverage on your ham gear - or would like to learn about this protection, be sure to attend the March meeting.

The April meeting will be held on April 20th and will feature an auction! Bill, W5JYT will be our auctioneer and anything you want to sell can go on the block on April 20! Bring your ham gear, computers, widgets and watchamacallits - Bill will try to sell it - for a 10% commission (which will go to the club treasury). Donations of saleable equipment to the club would be much appreciated. The April meeting will also start at 7:30 at the Fire Department Training Center.

The Autopatch Association is in charge of dealers and prizes for Ham Holiday 1982. (July 23, 24, 25). We need to appoint a committee at once to contact dealers to firm up commitments for our convention. Any volunteers or people with ideas about dealers or prize donations should contact Henry, N5IH. We hope to expand our representative dealers this year to include computers, TV systems and solar/wind power as well as amateur radio. Please let Henry have your ideas. See you on March 16th. De AD1S.

# AUCTION APRIL 20 EVERYONE INVITED!


At last someone is finally sponsoring another great auction for the amateur radio community. The Autopatch Club (otherwise known as OCAPA, or the 22-82 bunch) invites everyone to our April 20th meeting for an old fashioned auction. Bill (W5JYT), is everyone's favorite ham auctioneer, so we all know it will be a good time.

Start putting aside your best used-but-idle equipment: this is your best opportunity to sell it, and maybe justify buying some other little goodie.

You may establish a minimum selling price for your best stuff if you wish, or just donate your junk to the auction and enjoy the fun! The club's commission is only 10% of each sale.

We will be drawing door prizes throughout the evening, and there will be plenty of jokes and good times as you see who ends up with what. Remember how it used to be?

So plan now for next month's OLD TIME AUCTION. Our meetings are held at 7:30 at the Oklahoma City Fire Department Training Center on Portland between 10th and Reno.



Appointment Preferred

**HONDA**

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3109 South High  
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TOM MANGHAM  
634-2827

TROY MANGHAM  
677-5291

1-3

MARCH

# EDITORIAL

Recently a number of DX and Contest operators received the following letter. We publish it for your information to allow you to make up your own mind. Does the ARRL "condone" questionable operations by this rule interpretation? Is unauthorized operation rampant in Extra or Advanced class sub-bands? Feel free to write your ARRL director or Communication Dept. Manager W1XX.

November 2, 1981

Mr. Mark Wilson  
Assistant Communications Manager  
American Radio Relay League  
225 Main Street  
Newington, Connecticut 06111

Dear OM:

The October, 1981 issue of QST at p. 91 reported the results of the ARRL International DX Contest, CW section, Southern Texas, single band, 20 meters, as follows:

	POINTS	QSO'S	MULTIPLIERS
K5IY (KA5CHW, opr)	345,396	1076	107
K5SF	162,240	676	80
W5NN (WB5WHR, opr)	147,168	672	73
W5UW (WD5ABR, opr)	140,685	565	83

Prior to this, I had not known that K5IY was in a "guest operator" situation. On seeing this, I checked further, and learned that the guest operator KA5CHW is a General Class licensee.

This surprised me, because during the 48 hour contest period I often heard K5IY operating in the lower 25 KC of the 20 meter CW band, working the DX stations, and I naturally assumed it was K5IY himself, who is an Extra Class licensee.

I then verified from our amateur fraternity in Houston that the K5IY station was also heard locally, repeatedly operating in the lower 25 KC, during the CW contest weekend. It was suggested that I contact the guest operator KA5CHW, and see if something could be worked out. For all we knew, he might have upgraded to Extra Class prior to the contest.

I made several attempts to contact KA5CHW but he is a salesman, and was gone out of town on business quite often, including all of last week. On Sunday morning, November 1, I reached him by telephone at his home in Houston.

KA5CHW immediately acknowledged to me that he is General Class, and that he did use the lower 25 KC of the 20 meter CW band during the contest, but said that he had understood that such operation would be permissible if the owner of the station, K5IY, was present and supervising during such operation. KA5CHW then told me that, the station being in the home of K5IY, K5IY actually was present and supervising during the operation. KA5CHW told me that part of the time during the 48 hour contest period K5IY, who is an enthusiastic goose hunter, occupied himself by re-loading over two cases of fired shotgun shells, and that during other times K5IY slept on a couch in the operating room while KA5CHW ran the station. Therefore, KA5CHW said he believes that K5IY qualifies as being present and supervising during such operation.

As stated, this information came to me yesterday morning, Sunday, November 1, and I called you this morning, Monday, November 2, to see about the matter. You requested I write you about it, and thus this letter.

On the facts, as acknowledged to me by KA5CHW himself, it would appear that:

(a) IF K5IY was not actually "present and supervising"--that is, serving as "control operator" as you explained the term

MARCH

to me--then such operation did not comply with one regulation, i.e., the General Class licensee worked in the Extra Class band; whereas,

(b) If K5IY was actually present and supervising--serving as control operator--then such operation did not comply with another regulation, i.e., KA5CHW "received assistance" as contemplated by the ARRL Rule that seeks to preserve the integrity of our contests.

I am hopeful that it will be in order either to re-classify the K5IY (KA5CHW, opr) entry, or otherwise make an amicable arrangement, whereby K5SF is approved as the top single-operator entrant. This would be fair, and reasonable.

All of us owe a debt of gratitude to those in Newington who do the hard work of grading logs. The big job is fully realized. I have been a member of ARRL continuously since 1957, and participated in the ARRL DX contests fairly regularly since 1958, formerly KA5JZY, and as K5SF since upgrade in 1978. Over this time I have developed a strong loyalty to and respect for our DX Contests, and the headquarters staff of ARRL.

There was no way I could inform you of these facts any earlier--not until the October magazine did I even know to start looking. Beaumont is 80 miles from Houston. It was November 1 before I could talk personally with the operator. I trust that all contest entrants would like to see justice done here.

73,

(Signature)  
James W. Hambright  
K5SF (ex-K5JZY)

THE AMERICAN RADIO RELAY LEAGUE, INC.

November 3, 1981

James W. Hambright, K5SF  
1945 Thomas Road  
Beaumont, TX 77706

Dear Mr. Hambright:

Since our telephone conversation this morning, I've researched the matter of a General class licensee operating a station licensed to an Extra class amateur in the Extra class subband. Here's what the FCC rules and regulations have to say on this subject (97.79 (d)):

"The licensee of an amateur radio station may permit any third party to participate in amateur radio communication from his station, provided that a control operator is present and continuously monitors and supervises the radio communication to insure compliance with the rules."

In addition, 97.103 says that a station log must contain a notation of third party traffic sent or received, including names of all third parties, and a brief description of the traffic content. Also, 97.114 prohibits third party traffic except with countries with which we have agreements.

I spoke with Mr. Motschenbacher this afternoon, and he assures me that the station owner was present and acting as control operator during the contest period. The log names Mr. Motschenbacher as the operator during the contest, and the traffic content was noted in the log (the contest exchange). Mr. Motschenbacher also assures me that he spent very little time in the Extra-class subband, and he says that he worked only DX stations in countries with which we have agreements while in the lower 25 kHz of 20 meters.

See EDITORIAL, Next Page

**kay**

COUNTY AMATEUR RADIO CLUB  
COUNTY AMATEUR RADIO CLUB  
COUNTY AMATEUR RADIO CLUB

The time has come to put some more words of wisdom out from the frozen Northern part of Oklahoma. Should wait till tomorrow to write this for the looks of the second batch of snow that we got here today it, doesn't look like I will be going anywhere tomorrow! That's about the only disadvantage to living in the country, is a road that has been along your place since you can remember, that can't be found the next morning! The advantage of this is that you can stay home & Ham all day!

Since the last article written, was in Dec. I'll try to recap all that has happened since then.

The dinner meeting in December was great, good food & good to see everyone show up. Four door prizes were given away but that's been so long ago I don't remember who won them, but they were happy, full tummy & all.

The 2 ton, 4 wheel drive van that was donated to the club a few months ago, looks like it will show up soon. The last contact with them is they were finishing the removal of their equipment from it, clean it up & its ours. Then the work will begin converting it to the Kay County A.R.C. Emergency Communications Truck.

The news now that we have all been waiting for... The Kay County ARC now has a new Repeater on the air! It's not complete yet, but we do have the basic machine up & on the air. It consist of G.E. master-pro & a WAYCOM DUPLEXER, the IDER should be here any day now & will be installed at that time. The auto-patch is in the process. The machine has a 3 min. timer on it and automatically resets as soon as you let up on your mike button. So there is no need to let the machine drop out before you start xmiting. All reports up to now have been very good on the quality & operation of it. Before long we should have the rest of it in operation & all paid up members will be given the new access code to the auto-patch, so make sure your '82 dues are paid up.

So far all money used & to be used on the Repeater has been donated to the club from efforts made in the last 6 months. I received \$1500.00 from my employer & \$300.00 was received from a Ponca City based firm with help from W5ZWM. I have the Pledge from another Ponca firm for \$100.00. I have other's to contact but will wait till we get futher along & see how much more we are going to need.

At the last meeting it was brought up that we should try to hold a novice class this spring. We have 2 or 3 interested in instructing it, but they would like to see the other club members get involved as well. As you know we could use some more Hams in the Kay County area.

To get every one back in the swing of things I saw in this past months C&E that K5SJV is running code practice on 3750 KHZ at 0200 z every night except Thursdays & Saturdays. This takes dedication to do something like this each night so hope lots are taking advantage of this opportunity.

While on the subject of opportunity Tornado time is growing near, that is if the snow will ever stop. Now stop and think, it doesn't have to be a tornado it could be a blizzard and with the weather as it is today we aren't far from one! Are you Prepared? Emergency conditions don't ask if we are ready they just happen.

Think I have run out of wisdom now and need to attend to some other things now so see you at the next meeting at the E.O.C. below the police station for the 101 room is closed for remodeling. see you at 7:00.

COLLECTOR AND EMITTER

## EDITORIAL Continued

As for your suggestion that Mr. Motschenbacher's entry should be placed in a category other than single operator because of the presence of the control operator, our contest rules define single operator as an entry where "One person performs all operating and logging functions." The control operator's presence is required to assure compliance with FCC rules and regulations; he must be present to monitor and supervise the radio communication. This does not appear to conflict with the single operator category of the contest rules and thus does not place his entry in the multioperator category.

Quite frankly, it is difficult to find a solution to this type of problem that pleases all parties concerned. Essentially it comes down to your word against Mr. Motschenbacher's. You have no actual proof that any illegal activity occurred, and none is available because the operation in question ceased at 2400Z February 21, 1981, at the end of the ARRL International DX Contest, cw. Mr. Motschenbacher says that he is innocent, and there is no proof otherwise. The ARRL Contest Branch considers the matter closed.

Sincerely,

(Signature)  
Mark J. Wilson, AA2Z  
Assistant Communications  
Manager, Contests

MJW/jjs

cc: Dennis Motschenbacher, N5DKG

Personally, I have one observation. Surely paragraph 4 of Mark Wilson's letter is tongue-in-cheek when it states "He says that he worked only DX stations in countries with which we have (third-party) agreements while in the lower 25 kHz of 20 meters." Really.

I knew I went wrong somewhere when I was contesting...I forgot my list of third-party agreements!

Let's admit it, the Contest department got caught with their rules down. de, AD1S

### DX'ers LAMENT

There once was an island named Heard  
About which we've not "heard" a word.  
No ether emits there  
Not even a Smith's there  
But wait til next year I'm assured.

And then there was 3 - C - Zero  
Travel there will make you a hero.  
Forget the list takers  
The nets and the fakers  
Cause Carl runs a tight ship don't you know!

How 'bout a rat hole called Yemen  
A DX-pedition for he-men!  
You'll sure risk your neck  
for a 5-9 log check  
And your callsign forever in heaven.

At last theres a haven in Bouvet  
Where Dieter and Karl and Fritz play.  
We'll wait for their boat  
and their plans to all float  
While Don Search and his crew say "No way!"

Robert E. Pary K4BAGC  
Manager

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6-2 **Quint V**

MARCH



I have not yet figured a "cute" name for this little literary effort each month, so it will remain untitled for now.

The February meeting and program was well received by all concerned, and our thanks to N5ABL for his very interesting and entertaining program. I am still a holdout however, but almost got excited about the computer age when Holly unveiled his RTTY/CW/ASCII whiz-bang. I got especially interested hearing some of the conversations concerning the lack of RFI from the TRS-80C machine. RFI generation from these things has been at the back of my head for a long time when used around sensitive receiving equipment...but it sounds as though the problems in that area are at least minimal on this machine system.

The March meeting will be a bit unusual...We will probably either dispense with the business part of the meeting, or at least cut it way down in favor of the very interesting program line up. The public is invited to this one, and we will have it in the main headquarters auditorium at the Aeronautical Center.

A lot of folks have worked hard to get this program set up. In case you haven't heard, we will host the annual SKYWARN program for the local area. Since the meeting night falls on the last of Tornado Preparedness week, it is most appropriate, and we will have representatives from the State & County Civil Defense organizations, the American Red Cross, the Amateur Radio Emergency Service, the National Oceanic and Atmospheric Administration, and the Central Oklahoma Severe Weather Warning Net. We've also issued a general invitation to any other persons interested in getting some SKYWARN training, and talking about the other important aspects of disaster preparedness such as "what-to-do-after-the-storm".

So, plan to be at this meeting. The timing is just about right...the "season" is just around the corner.

73 for now...Rob, AA00

#### FEBRUARY MINUTES FOR THE ACARC

The meeting was called to order at 8:00pm by President Rob Runyon, AA00. There were 33 members and guests present. The CORA report was given by Frank Yohe, N5CJL, and Holly Holcomb, N5ABL. Bob Pace, W5CJG, reported the ACARC repeater was up and well.

The March 5 meeting will be held in the Headquarters auditorium at the Aeronautical Center Headquarters auditorium at Aeronautical Center. The program will feature speakers from the National Weather Service presenting their "SKY WARN" program.

There was some confusion about an article in the last C&E concerning associate members using the ACARC facilities. Associate members have the same access and operating privileges of club equipment as full members.

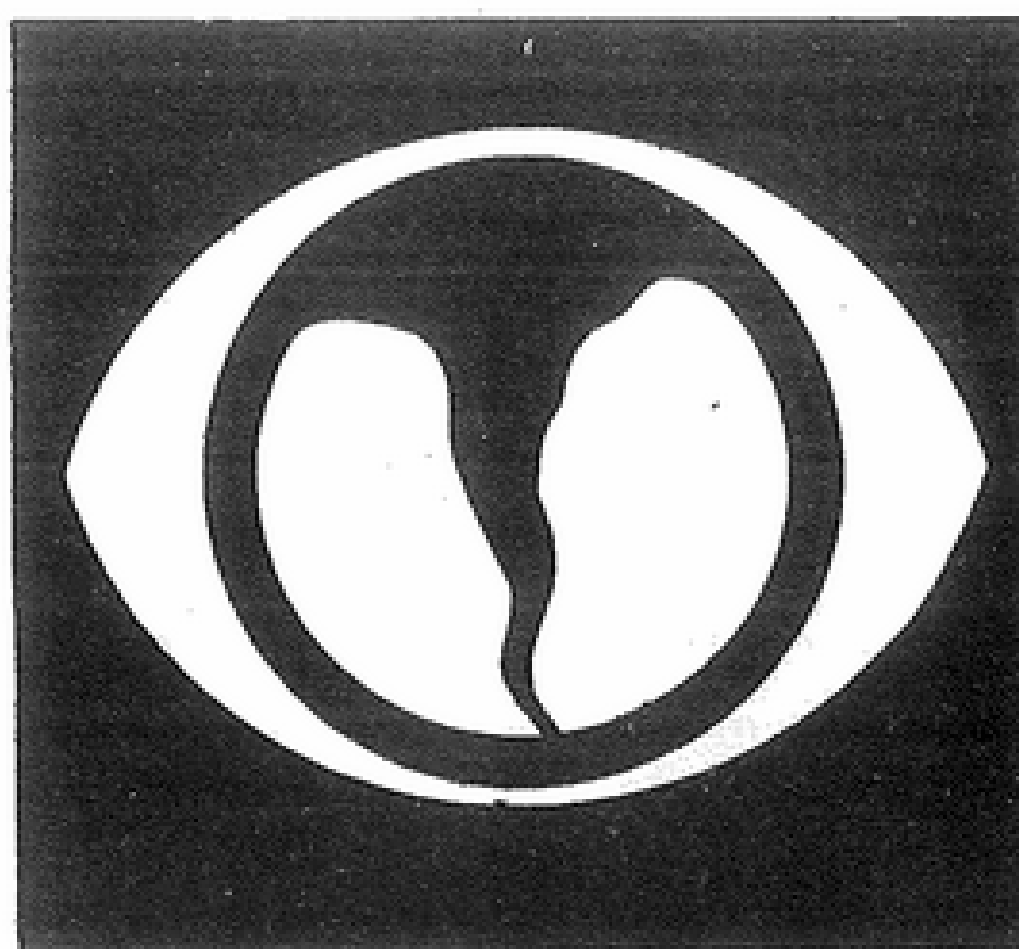
At 8:30pm the program was turned over to Hollis Holcomb for a demonstration of how the home computer can be used to augment amateur radio.

The meeting was adjourned for refreshments at 9:25pm.

Jim Seignious W5UHW  
Secretary ACARC

WANTED: Original Cloth Wrist Strap for a Kenwood 2400 Talkie. Contact Mark Northcutt WD5DYI, 755-4672 after 5:30 or at work, 478-1212, ext. 226.

MARCH



# SKYWARN

## Severe Weather Seminar

## MARCH 5TH, 8 P.M.\*

### Mike Monroney Aero.Center (F.A.A.)

#### HEADQUARTERS BLDG - 6500 S. MAC ARTHUR

- Oklahoma City -

Conducted by Neil Marchbanks, N.W.S.  
during Tornado Preparedness Week.

Program will include spotting and safety.

Sponsored by:

- \* AERONAUTICAL CENTER AMATEUR RADIO CLUB
- \* NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION
- \* NATIONAL WEATHER SERVICE FORECAST OFFICE, OKC
- \* OKLAHOMA STATE CIVIL DEFENSE
- \* OKLAHOMA COUNTY CIVIL DEFENSE
- \* OKLAHOMA COUNTY AMERICAN RED CROSS
- \* OKLAHOMA COUNTY A.R.E.S.

\*Club Meeting begins at 7:30-Program at 8.\*

**EVERYONE IS INVITED!**

#### IMPORTANT NOTICE

FOR THE MARCH MEETING WE HAVE PERMISSION FROM THE AERONAUTICAL CENTER TO USE THE MAIN HEADQUARTERS AUDITORIUM.

SINCE THE MEETING WILL BE AFTER NORMAL DUTY HOURS, THE BUILDING SECURITY SYSTEMS WILL BE ACTIVATED. THIS MEANS ENTRY TO, AND DEPARTURE FROM THE BUILDING MUST BE THROUGH THE FRONT (WEST) DOORS ONLY.

WE HAVE BEEN MADE RESPONSIBLE FOR MAKING SURE THAT PEOPLE ATTENDING THE MEETING DO NOT USE ANY OTHER DOORS, AND DO NOT LEAVE THE IMMEDIATE AREA OF THE AUDITORIUM WHILE INSIDE THE BUILDING.

PARKING WILL BE PERMITTED ALONG THE ACCESS ROAD ON THE WEST SIDE OF HEADQUARTERS, AND IN THE EAST AND NORTH PARKING LOTS. IF YOU PARK EAST OR NORTH OF THE BUILDING, YOU MUST WALK AROUND TO THE WEST DOORS (BY THE FLAGPOLE) TO GET IN.

PLEASE HELP US KEEP THE SECURITY PEOPLE CALM BY NOT TRIPPING ANY OF THEIR ALARMS. THANX.

Rob AA00

COLLECTOR AND EMITTER

To the Editor:

Having read the various damning letters in QST and other amateur radio publications I feel compelled to respond to the "Welfare Rolls" issue pertaining to DX list operations.

I fully support the legitimate list (or net) operation. We should realize that all DX "nets" are in fact list operations. How many DXCC members can truthfully state that they earned their countries without the "help" of W7PHO, P29JS, DK2OC, the Afrikaner Group--or others? After all--all of these are "list operations".

It is amusing that some of the loudest detractors of "lists" were at one time avid participants in these operations. Are these detractors acting out of jealousy? Do they want to change the rules in order to exclude others from a self-perceived shrine of achievement?

Finally, it appears that the list-haters fail to consider the wishes of the DX operator. Most of these operators use marginal equipment under the most difficult conditions and would rather go fishing before tolerating the hassle of a Stateside pileup. Many DX stations would never be heard but for the auspices of a list or net operation.

It is my opinion that the DXAC should not presume to mandate a DX operator's style or preference. Instead, let's try to achieve harmony, honesty and integrity without petty jealousy and bickering.

George W. Adkins - AD1S

Many of you have already helped us with the Oklahoma City Antenna Defense Fund and your financial help has allowed us to carry on this battle in U.S. Federal Court. To date, the following has happened in the case:

June 1981 - After his lawsuit was filed against the City and individual inspectors, criminal charges were filed against N5SW for alleged violation of the antenna height ordinance. July 1981 - At the criminal hearing, the City attorneys agreed to drop the criminal charges (until after the civil case is heard) in return for N5SW dropping the Mayor, City Council and City inspectors from the lawsuit. In addition, N5SW agreed to drop the \$25,000 monetary damages from his lawsuit.

Thus, the only issue remaining in the lawsuit is the vital issue to all radio amateurs: DOES A MUNICIPALITY HAVE THE LEGAL RIGHT TO CONTROL ANTENNA HEIGHTS AND OTHER OPERATING PRIVILEGES OF A FEDERALLY LICENSED RADIO OPERATOR? DOES FEDERAL REGULATION OF RADIO AMATEURS PRE-EMPT THE MUNICIPAL RIGHT TO REGULATE RADIO OPERATORS?

We all should work for the correct answers to these vital issues!

To date, the defense of the criminal charges and prosecution of the Federal case have resulted in considerable expense which have been borne by the OKC Antenna Defense Fund and N5SW. The ARRL has put our repeated requests for monetary assistance on their bureaucratic "back burner" for the present. They have been helpful in providing briefs to N5SW's attorney.

PLEASE, if you can help us with financial assistance--IN ANY AMOUNT-- please send your donation to the OKC Antenna Defense Fund, via:

AD1S  
P. O. Box 32735  
Oklahoma City, OK 73123

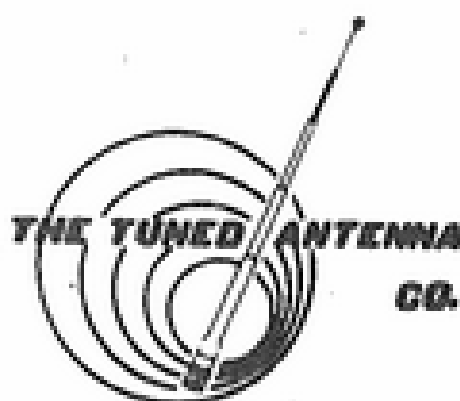
Thanks for your fraternal help. Good DX.

# NO INTEREST LAYAWAY PLAN

Would you love to have a new piece of amateur radio equipment? If your answer is yes, and you don't want to pay the so called 10% discount offered by the many 800 numbers; or the 18% interest charged by the credit card companies; we have the plan for you.

Equipment is easily available through us from the manufacturers listed below.

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CUSHCRAFT ANTENNAS  
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LUNAR ELECTRONICS  
TEN-TEC INC.



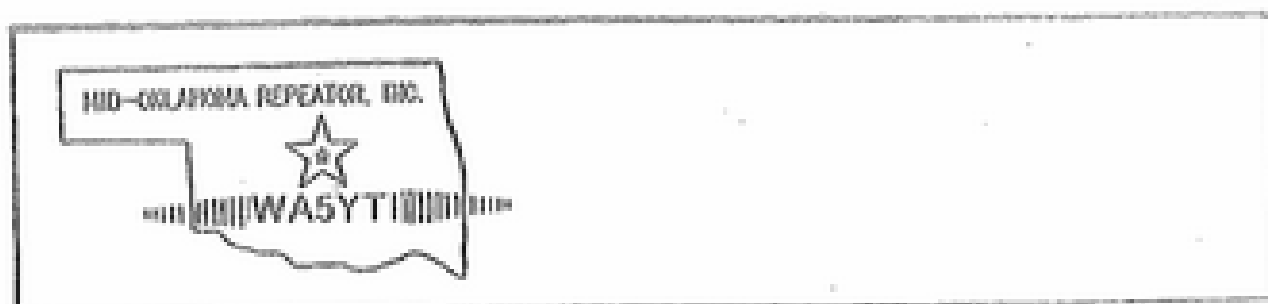
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Moore, Oklahoma 73160  
405-794-0406





Hi Everyone,

I guess that I won't be saying too much in this article, because I have a slight case of bronchitis--HI! I will however attempt to write a few lines and bring you up to date on some of the latest news.

#### UP-TO-DATE INFORMATION on:

Bob White, WB5PWZ is still making trips to the pace center each week, but he is progressing real well...

Wakefield Holley, KA5HGU has had surgery this past week on his hip, after a fall when he was cleaning his drive-way. The last report; he is in very good spirits (notice I said is, and not was--Hi!) and his having therapy each day, and thinks he may be able to go home, Thursday or Friday of this week (the 18th or 19th)

\*\*\*\*\*

I appreciate and want to thank everyone for submitting their ballots and member surveys to me these past few weeks, I haven't received all of them as of yet, but I am keeping a log of the results each day, and I plan to give the report at the next meeting. I do hope you cast your ballot, so that we may continue to have a great club.

In spite of the weather and road conditions, etc. I think everyone enjoyed our last meeting. It was quite a bit of fun too. Our program was presented by Tom Qualls, who is a professor at OSU Tech in Oklahoma City. He is now an engineer for a firm in OKC, who manufactures blood dialysis equipment. He showed us some new inventions coming into the medical field.

JUST A NOTE OF REMINDER... If your dues are due, be sure to get them paid, so that you can participate in all of the club's activities, etc... I am only reminding you, because what is good for the goose is good for the gander (mine are due in March) and I am paying mine the next meeting in March. SUPPORT OUR CLUB, KEEP IT ACTIVE, your loyal support is good to by your attendance, but as you know that is just part of it.

Well, I heard about a few up-grades this past month and they should be congratulated -- I can't remember all of them, but I think it really is great. I know one right off the top of my head, because he told me at the last meeting -- KC5GP -- do you know who it is? That's Gerald Brouphy -- alias, N5DNE, Congratulations Jerry! Only one more step to go, and you will be at the top of the list --- smartee...

It seems like I am forgetting to say something, but I can't remember right now, so until the next meeting (March 2). Keep those cards and letters (and phone calls coming in -- I want to publish your articles...

Susie KA5FED

The February meeting of MORI was great! It was a surprise to see a good crowd considering the cold temperatures and icy condition of roads.

It was recommended that we begin looking for a new meeting place that would accomodate more people. Haven't had much luck so far. The good facilities cost an arm and a bribe.

We are also investigating the possibility of voice ID equipment for the 07/67 and 34/94 repeaters. If anyone knows a cheap way to do this, please come to the next meeting and make your suggestions.

Our program was presented by Tom Qualls. Tom was a professor at OSU Tech in Oklahoma City. He is now an engineer for a firm in OKC that manufactures blood dialysis equipment. His presentation was supposed to be on analog to digital and digital to analog conversions. However, so many questions on blood dialysis came up, that time ran out before he could get into electronics.

Our program for March is on some gizmo from Motorola. Could be interesting.

Stay warm and see ya there.

John Clement, President  
KC5HD

I received this ad from from Tom, W5UOM the other day in the mail, and he asked me if I would publish it, so here it is...

FOR SALE: Cushcraft A3 Tri-Band Beam  
with 40M converter kit. New \$150.00

Cushcraft ATV5 - 80-10M  
Vertical with roof mount \$50.00

Contact: Tom, W5UOM - 794-2341 After 5:30 PM

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Will have in stock about November 25.

HARRY WATTS, KC5OU

**WATTS**

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OKLAHOMA AMATEUR RADIO SEVERE STORM WARNING NETWORK —  
146.82 MC

PROCEDURE

- 1: MOBILE UNITS AND BASE STATIONS REPORT INTO NET CONTROL.
- 2: NET CONTROL WILL REQUEST ADDITIONAL MOBILE UNITS INTO OPERATION IF AND WHEN NECESSARY.
- 3: REPORTING SEVERE WEATHER.
  - A: SPOTTERS WILL GIVE THEIR STREET LOCATION AND GRID LOCATION.
  - B: CONDITION OBSERVED WILL BE REPORTED TO NET CONTROL FROM LIST BELOW.
- 4: ALL TRAFFIC WILL BE HANDLED THRU NET CONTROL (NO MOBILE TO MOBILE COMMUNICATION).

CONDITION

- CONDITION #1 — HEAVY RAIN (ONE HALF BLOCK VISIBILITY)
- CONDITION #2 — HAIL (ANY SIZE)
- CONDITION #3 — STRONG DAMAGING WIND (50 MPH OR MORE)
- CONDITION #4 — CYCLONIC MOTION
- CONDITION #5 — FUNNEL CLOUD (TORNADO ALOFT)
- CONDITION #6 — TORNADO (ON GROUND)

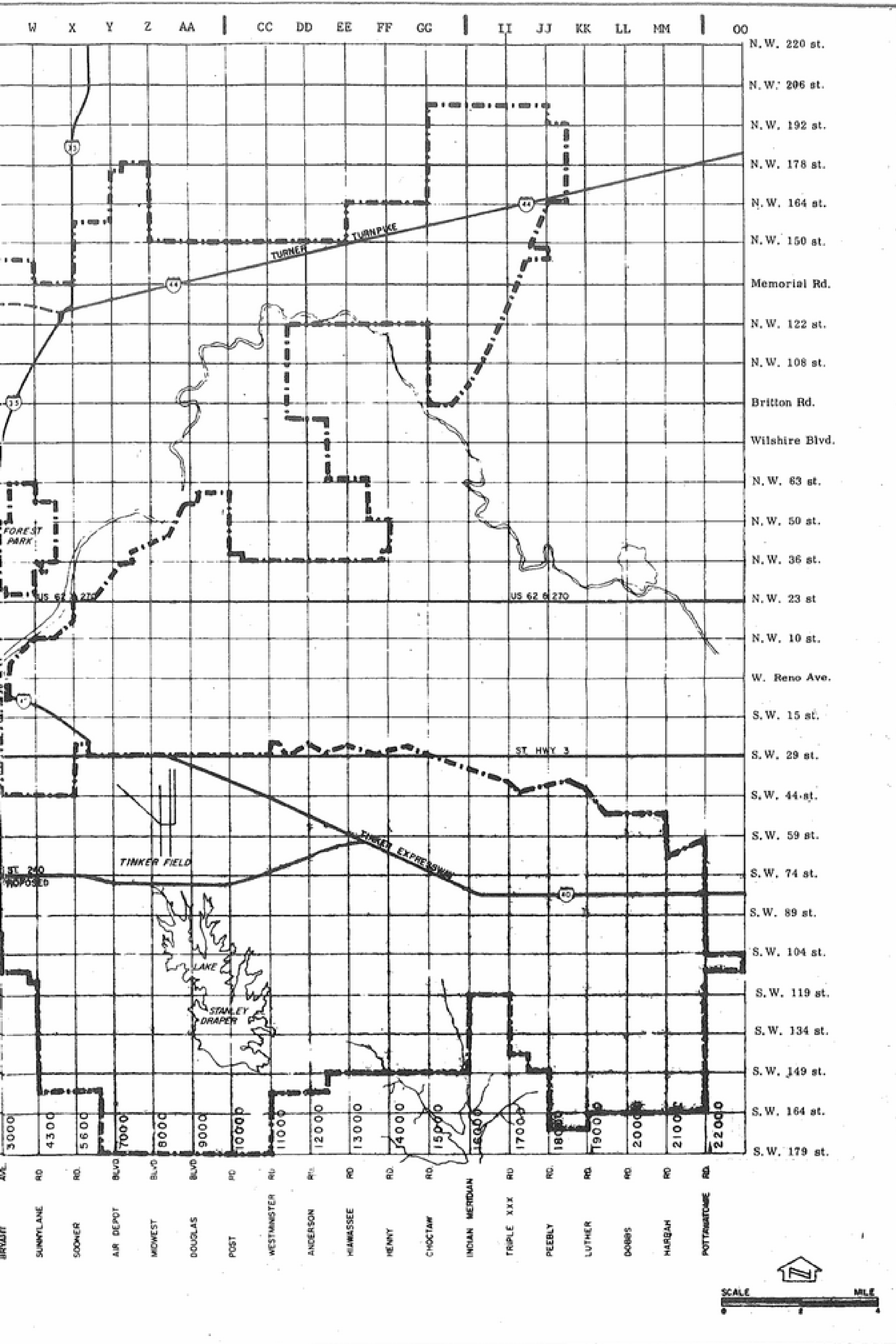
NET CONTROL LOCATION: KWTW TELEVISION STATION  
INPUT: 146.22 MC  
OUTPUT: 146.82 MC

OCAPA

CODE CHART

Code	North/South streets (west side)	Code	East/West streets (north side)
A	Gregory	T	High
B	Cimarron	U	Eastern
C	Richland	V	Bryant
D	Frisco	W	Sunnylane
E	Cemetery	X	Sooner
F	Czech Hall	Y	Air Depot
G	Mustang	Z	Midwest
H	Sara	AA	Douglas
I	Morgan	BB	Post
J	County Line	CC	Westminister
K	Council	DD	Anderson
L	Rockwell	EE	Hiawassee
M	MacArthur	FF	Henny
N	Meridian	GG	Choctaw
O	Portland	HH	Indian Meridian
P	May	II	Triple XXX
Q	Pennsylvania	JJ	Peebly
R	Western	KK	Luther
S	Santa Fe	LL	Dobbs
		MM	Harrah
		NN	Pottawatomie (east side)
		1	220th Street
		2	206
		3	192
		4	178
		5	164
		6	150
		7	Memorial Road
		8	122
		9	108
		10	Britton Road
		11	Wilshire Blvd.
		12	63
		13	50
		14	36
		15	23
		16	10th Street
		17	Reno
		18	15th Street
		19	29
		20	44
		21	59
		22	74
		23	89
		24	104
		25	119
		26	134
		27	149
		28	164
		29	179th Street (south side)

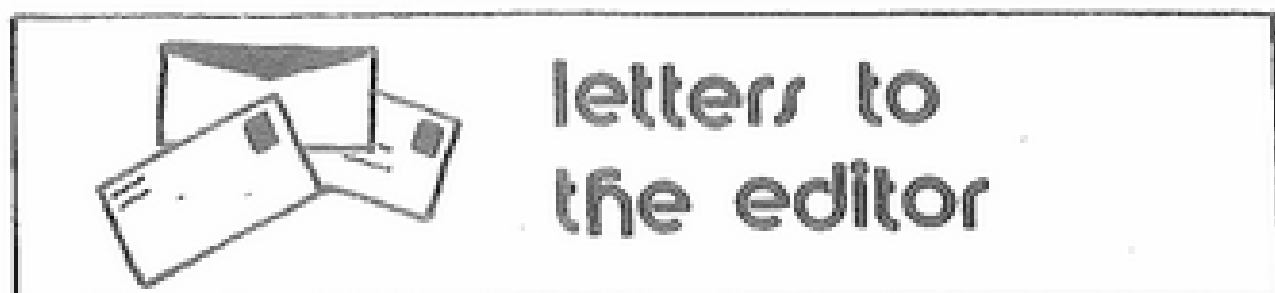




## **TORNADO SAFETY RULES**

- 1. Stay away from west and south walls, and also do not take shelter in halls that open to the south or west.**
- 2. If in a house or apartment and no cellar or basement is available, open a window or two [if there is time] on the side of the house opposite the approaching tornado. Then seek shelter on the lowest floor, in a small room, preferably a closet or bathroom in the center of the house. Wrap yourself in a blanket or mattress and protect your face and eyes.**
- 3. If you are in a mobile home, get out immediately. If there is time, proceed to an underground shelter or a steel-frame or reinforced concrete building. Otherwise, seek the lowest level available [a ditch, under a bridge, etc.] and drop to the ground immediately, making as small a target as possible and protecting your face and eyes as best you can.**
- 4. Automobiles and trucks have quite often proven to be very dangerous and sometimes fatal shelter in a tornado. When a tornado warning is sounded, do not get into your car and attempt to out run the storm. However, if you are already in a car you can usually evade an approaching tornado by moving at right angles to it. However, if you are trapped, get out of the car and seek the lowest level [ditch, under a bridge, etc.] and drop to the ground, making as small a target as possible and protecting your face and eyes as well as possible.**
- 5. All schools should have advance tornado plans which include tornado drills so all involved will know what safety precautions to take. Once the students have arrived in the pre-planned shelter area, they should quickly assume a kneeling position near the wall with their face as close to their knees or legs as possible. Their hands should be clasped behind the back of their head with the sides of their arms pulled in tightly against the sides of their head. This procedure makes as small a target as possible and affords maximum available protection to the face and eyes.**
- 6. In an office building or factory, proceed with advance plans or go to an interior hallway on the lowest level and drop to the floor, making as small a target as possible, taking care to protect your eyes and face.**
- 7. If caught out in the open, seek out the lowest spot, such as a ditch, shallow depression, creek, etc. and drop to the ground, making as small a target as possible and protecting your face and eyes as best you can.**
- 8. Absolutely avoid buildings with large free-span roofs such as auditoriums, gymnasiums, supermarkets, etc.**
- 9. Above all, plan ahead. Take action right now to determine just where you should go and what you should do, if tomorrow a tornado should become a part of your life.**
- 10. Your television and radio stations will broadcast the latest tornado information, so please do not call the television and radio stations or the National Weather Service except to report a tornado or other severe weather.**





TEXAS LETTER-WRITER BLASTS EDITOR, Q.R. ZEDD

(The following letter was received recently by KU5B, chronicler of the exploits of Oklahoma's greatest DXer, Q.R. Zedd.)

Dear Nerd,

Well, you have finally done it. A lot of us down here in Texas have tried our best to be patient with your idiocy, but we can no longer remain silent in the face of your continual boasting about Q.R. Zedd.

What you do is, you make me sick.

You must know if you are honest that we down here in Texas can always beat you in football, tobacco juice spitting, bull riding and cow chip throwing. I don't know what made you think anybody from Oklahoma could beat our best at DXing and being an all-around great fellow and terrific amateur radio operator.

Why, we have someone right here within fifty miles of my own home town of Meadowmuffin who is twice the DXer that Q.R. Zedd ever was, and our man does not live in the past and go on his old reputation the way that has-been, Zedd, does.

I speak, of course, of the great Dingfod Armstrong of nearby Cow's Bag, Texas.

Dingfod is clearly a much greater person than Zedd.

Admit it! Who was it they asked if it was all right before they done it when the ARRL decided to start life memberships? Who was it that worked the Clipperton expedition, a record 616 logged contacts a couple of years back? Who has the only recorded QSL representing a two-way SSB contact with the Red Spot of Jupiter? Who put the tong in Datong and the R.L. in Drake? Who named the KWM 380 after his own 160-meter QRP DXCC country total?

Do you give?

Let me just remind you a few more things about Dingfod. He is the son of the famous Jack Armstrong, who was the best-known of the Hudson River High boys. He worked for Wheaties back in the 30s and 40s, you will recall, and a lot of people thought ole Jack was a commercial radio show. Actually, he had a real adventuresome life, and what he did was, he remoted his daily existence via amateur radio and it just happened to get picked up by commercial interests. As it became clear to Jack Armstrong later that he was being exploited, and his ham transmissions used for profit by others, he went QRT on all bands after announcing that he was no longer the All-American Boy. That was in 1943, when he was 36 years old.

Dingfod, born between episodes of Jack Armstrong and Mandrake the Magician, came into the world with a silver inductor in his mouth, you might say. He is now 42, a heck of a lot younger than your relic, Zedd. He has worked as many countries, knows more about hamming in general, and is more handsome.

In case you don't have all the records right there in front of you, just let me set the record straight.

Dingfod presently has 627 countries confirmed on all bands between 160 and 2 meters. He was the only amateur in the world to work Thomas E. Dewey back in 1948 while Dewey was the Chicago Tribune's elected president for fifteen minutes. Dingfod is the inventor of the Yagi antenna, which of course is named after him, as well as the long wire and the ground loop, which also works with airplanes. He lives on his ranch near Cow's Bag with his beloved wife, Bubbles, and her roadshow agent, Thomas "Las Vegas" Calaricci, formerly of San Quentin. Dingfod has never used a piece of commercial radio gear and builds everything himself from scratch. His designs get stolen by commercial interests almost before his soldering iron has cooled. His present station, all homebrew, consists of six fantastic all-band, all-mode, all-American receivers, six 200-watt PEP input transmitters with special Dingfod-designed speech processors and Hostess twinkie dispensers built into the dignital displays, seven (one for standby) walk-in linears featuring ten CX-1000s each in their respective output stages, and of course the antenna farm that has been declared a national menace by the Airline Pilots Assn. of America.

Dingfod is the only amateur radio operator ever invited by President Reagan to come eat on the new china. Even Barry Goldwater, when he went, had to use a paper plate. Arthur Godfrey never got invited at all -- nor did your other pet, Bill Blast -- and as we all know, Vice President Bush hardly counts since he failed his novice test.

Speaking of Blast, you know it really makes us all sick down here the way you keep talking like HE is something, too. Him and his big shot DX net. Who does he think he is kidding? Only clods will work a new DX country on a net anyway, and we know most of those contacts are fake, and his son-in-law, Rich Little, is always in the shack.

We called Dingfod and asked him if it was all right to write you this letter pointing out his superiority, and I took down his reply on my Sony. Here is what he said, if you want a quote:

"Why, sure, son, don't mind at all...surely don't, surely don't. Only listen, boy, don't put down pore ole Q.R. too much. He can't hep it he's a has-been, and remember: we all got an obligation to be kind to the senile. You know, them Okies, they got such an inferiority complexion anyways, I would shore hate to stir 'em up. Jus' say I'm okay an' Q.R. is okay, an' we'll let 'er go at that? Roger?"

It just goes to show you how modest he is, on top of everything else!

So please, let's not have any more of that Zedd garbage from that turkey, KU5B. As Tom Landry

used to say, "Thomas, if you don't shut up, you're going to be traded," and of course you know how that came out.

Which reminds me, Dingfod is the only amateur radio operator ever that got the Dallas Cowboys cheerleaders out to cheer him on in a 10-meter contest. Put that in your logbook and smoke it!

It is only too bad there is not some way we could get your crummy Zedd and that dumb bunny, Bill Blast, together with our magnificent Dingfod Armstrong. He would blow them off the face of the earth on SSB, CW, RTTY, fast scan or slow scan, facsimile, building code practice oscillators or tin cans connected with a piece of taut thread at fifty paces.

But I suppose it will never be because Zedd and Blast know how inferior they are, and they will just sit up there in Oklahoma and Washington, respectively, and shoot off their big yaps about the old days.

Incidentally, you can't even beat us on editors. The editor of our local ham magazine is a lot older than Olde Joe Harding. He is balder, too. Telly Savalas came to our editor for bald lessons.

73,

Cappy Satyr  
Meadowmuffin, Tx.

PS: My call used to be W5AAAA, but I let it lapse in protest against incentive licensing.

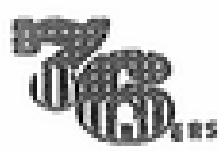
PSS: I am not saying Q.R. Zedd is senile and living in the past, but if he ever regains consciousness again, tell him Knute Rockne is no longer coaching at Notre Dame, and football teams don't use the single wing any more, and FDR isn't president, and see what he says. Ha, ha!

(Editor's Note from KU5B: We will endeavor to get a response from the great Q.R. Zedd and also from Bill Blast. In the meantime, one can only say that there are days when we wish Texas had never been discovered by that guy working for Roto-Rooter of Ardmore.)

HERE IS THE ANSWER KEY:

E . . P . . . . .  
. C . E O . . . . .  
. . N . G W . . . . .  
. . . A . A E . . . . .  
. . . . T . R R . . . . .  
. . . . . C . E E . . . . .  
. . . . . A L P . . . . .  
. . . K . O E E . M C . . . . .  
. . . . I C H T R T A . . . . .  
. . . . T L N M A . . . . .  
. . . R . E O N S . . . . .  
. . O . R . C W . . . . .  
. N . R . E . . A . . . . .  
. . U . . . . . T . . . . .  
. C . . . . . T . . . . .

Now Find The  
Quizzle



## BICENTENNIAL AMATEUR RADIO CLUB

*"To Promote Radio Communications"*

Sponsored by Oklahoma Air National Guard  
Will Rogers World Airport

A computer open house will be held at the next meeting of the 76ers Club March 8 at 7:00 in the Air National Guard Building. There has been so much talk about computers on the different repeaters in the last several months. The 76ers thought they would assemble a group of the popular models that you have been hearing about. Let you see them, ask questions, compare them or even set down and try some programming.

At the top of the list, because I am the editor, is the very popular Radio Shack Computers. The TRS-80 computers [you can only call them TRASH 80's if you own one] were the first sincere effort by a nation wide company to offer a hobby computer. The model I was their first model. They have a "New Improved" MODEL III and a brand new model that has become real popular over there where the AIR TRAFFIC CONTROLLERS used to be, THE COLOR COMPUTER.

The first successfully marketed micro-computer was the APPLE. This computer was developed by a couple of teenagers working in a garage in California. Since then it has become a nation wide market and made very popular by several APPLE Clubs.

At last [again this is the editors domain] is the HEATHKIT. Heathkit has always looked toward the business applications market. Their latest version the H-89 is becoming an increasingly popular machine. It is very effective for Accounts Receivable, Payroll Programs and there is a lot of interest toward the hobby interest.

For those hams that complain about the Appliance Operators and how some of us could not build a transmitter if we had to, there are some who build their own computers. George K5GGL way back in 1976 [this was before Radio Shack even listed a calculator in their catalog] went out and dug up a bucket of sand and bought a can of silicone spray and started building his own. He will show you his first board and how his technique improved over the next 2 years and he now has as up and running machine.

There will be at least one of these machines on display with people to answer any questions. This will be a good opportunity to compare each machine with another or to play some of those Video Games you have heard about, transmit and receive morse code, compute your Bio-rythem, plot Oscars orbit or set down and program one to do what you want it to do. See you there and bring a friend.

Ted WD5JNT



LEONARD HOLLAR, WA5FSN  
SECTION COMMUNICATIONS MANAGER

In the months past, I have written about the Phone Nets. Today, we are going to spend a little time on the C.W. Nets.

A glance at the NTS flow chart, shows that we, in the Oklahoma Section, get some of our traffic into the Section via DRN5 and the very dedicated operators that act as liason and bring this traffic to our Evening Nets.

Traffic originated in time for the evening Nets is taken to OLZ by other liason stations. From there it is relayed to RN5 and on into the night sessions of the NTS for delivery next day nearly everywhere in the nation. All of the evening Nets are CW.

This looks good on paper. But, as is the case, sometimes, in volunteer work, we come up short and there is a delay in getting the relays operating as they should.

MARCH

## FEBRUARY MINUTES

Meeting called to order at 7:15 by President John Galway KH6JTE.

1. Introductions followed.
  2. Secretary report presented by N5AUH, Jerry Sproul. Minutes approved as read.
  3. Treasurer report by WASRAQ Bill Rodgers. There was \$598.20 at this time in bank, with 71 active paid-up members.
  4. Repeater Report: Don AE5N says all is still working OK. The ID has been speeded up, so all you guys taking code practice will have to go faster.
  5. Field Day Report Chairman WB5TNW Dick Baker passed around the FD 82 volunteer list again. If you have a job you can do, just contact Dick. The site is tentatively scheduled for South OKC Junior College, as last year. The dates are June 27-28.
  6. Old Business: The purchase of a climbing belt for the club has been tabled for three months now and has been dropped due to lack of interest.
  7. CORA Report: By Ted WD5JNT, H.H. 82 is set for Myriad with format basically same as last year. Banquet will be Sat. night again this year with dance following. There have been a number of rooms set aside at the Sheraton at \$50 per night available to Hams. No limit on number of occupants. No programs Fri. night except QRM Party and registration.
- Prize drawing is to be streamlined this year to go faster with more quality prizes.
- Parking is not included in the registration fee, but it will be available under Myriad for \$1.50 per day. There is plenty of parking outside on streets.
- Ted showed us a postcard commemorating Oklahoma Diamond Jubilee and said that the state may print up some to give to Hams for QSL's this year. More later on this.
8. There was no program, but there was discussion on the March meeting in which several people will bring their computers and ham application software for demos.

Meeting adjourned.

Jerry N5AUH  
Secretary

Sam Sitton, KV5X recently took the reins as Net Manager of OLZ, and he is asking for more participation on the Net. Meeting at 7:00 P.M. Local Nightly on 3682.5 khz. They will operate at your speed so why not try it? Also, at 6:30; O.A.N. is on 3705 khz. What better place for Novices and Techs to help your code speed.

One of our 'unsung heros' is Howard Baker W5AS. Almost every night at 11:00 P.M. on the Night Owl Net on 07/67. Howard can be heard reading the latest ARRL, NASA, and other Bulletins and Propagation forecasts. These are updated daily. This is no small chore and much valuable information is transmitted. Many of our DX Hounds have their own sources. But many look to Howard for the latest. For his efforts, I feel he deserves a Well Earned "Thank You".

### Oklahoma Net Report for January 1982

Nets	Sessions	QNI	QTC	WX
O.P.E.N.	5	264	8	
O.P.O.N.	20	269	40	
S.T.N.	26	481	74	
O.T.W.N.	26	491	370	342
O.L.Z.	31	260	79	
O.N.O.N.	30	542	103	

COLLECTOR AND EMITTER

# The South Canadian Amateur Radio Society

## SCARS FOR FEBRUARY.....

The regular monthly meeting of SCARS was held on Feb. 13th at the Red Cross building in Norman. Thirteen members and one visitor were present.

Members and guest were treated to:

- a report on the Jan. CORA meeting
- a promise from AF5X that he will attend the Feb. CORA meeting as club rep.
- a report that ARRL has not responded to application for affiliation
- a special announcement concerning the March meeting.

## SPECIAL ANNOUNCEMENT.....

The March meeting of SCARS will be held on March 4th at 6:30pm at Furr's Cafeteria on West Main in Norman. This is a Thursday evening dinner meeting. There has been no decision on a program. Attendance by all members and Families is encouraged. There will be no pre-set menu-- just go thru the line and choose your own (whatever you think you can eat/pay for.)

## EXTRA SPECIAL ANNOUNCEMENT.....

After the Feb. meeting, a CW copying contest was held. In order to qualify at a given speed, an entrant was required to copy one minute perfectly. A usually reliable source told this reporter that up to nine people may have participated in the gala event, however only four of those chose to turn in the evidence of their skill. It came as no surprise that W5MCJ outlasted all of the competition by verbally repeating the sent text thru 45wpm. It is quite possible that he would have gone higher if the keyboard that was sending the CW had not verbally objected. W5OU qualified at 25wpm and just missed the 30wpm mark. N5DWN showed that she is almost ready to "go up for" her Extra Class test when she copied 15wpm with beautiful handwriting and nearly hit the 20wpm spot. KA5MIZ, Bob, will apparently soon be after his General as he blazed thru the 10wpm portion on his way to the magic plateau. A report by AF5X that he won the contest has been proven false by the testimony of several eye-witnesses, and he will be publically drawn and quartered at the next meeting as a punishment.

FOR SALE: Icom IC-290A, all-mode 2mtr xcvr. brand new, w/warranty card. \$400 call Jack, KU5B 329-1311

help me- help me- help me... has anyone out there ever installed a touch-tone pad on an FT-202R yaesu talkie???? Well, have a laugh at my expense. I cut a hole in the front of my rig only to find out that the Radio Shack TT Pad that I had bought is too thick to fit. Any help, please??? Dumb, Dumb..... Call (please) Sam, WA5RPP 321-2601

FOR SALE: Kenwood TS-520SE, transceiver with additional readout, self contained power supply. \$550.00. Ray, WB5BTT, 732-6498

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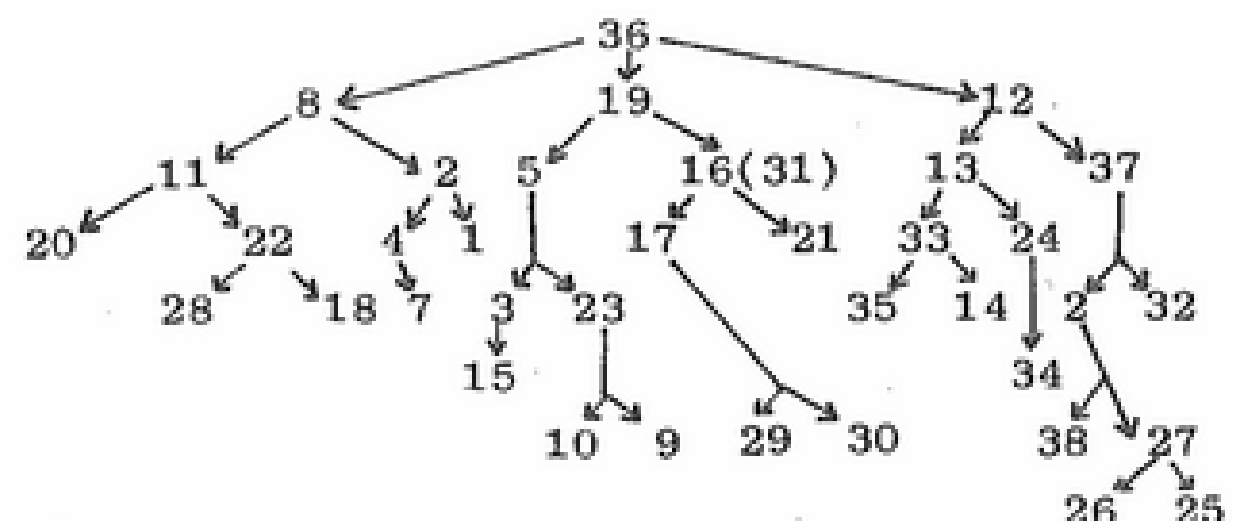
TRIPLETT - AMPROBE  
SALES

COLLECTOR AND EMITTER

## CLEVELAND COUNTY EMERGENCY NET: 1982 ROSTER

EC: AF5X; AECs: KC5CU, K5KDR, KU5B, KA5COI

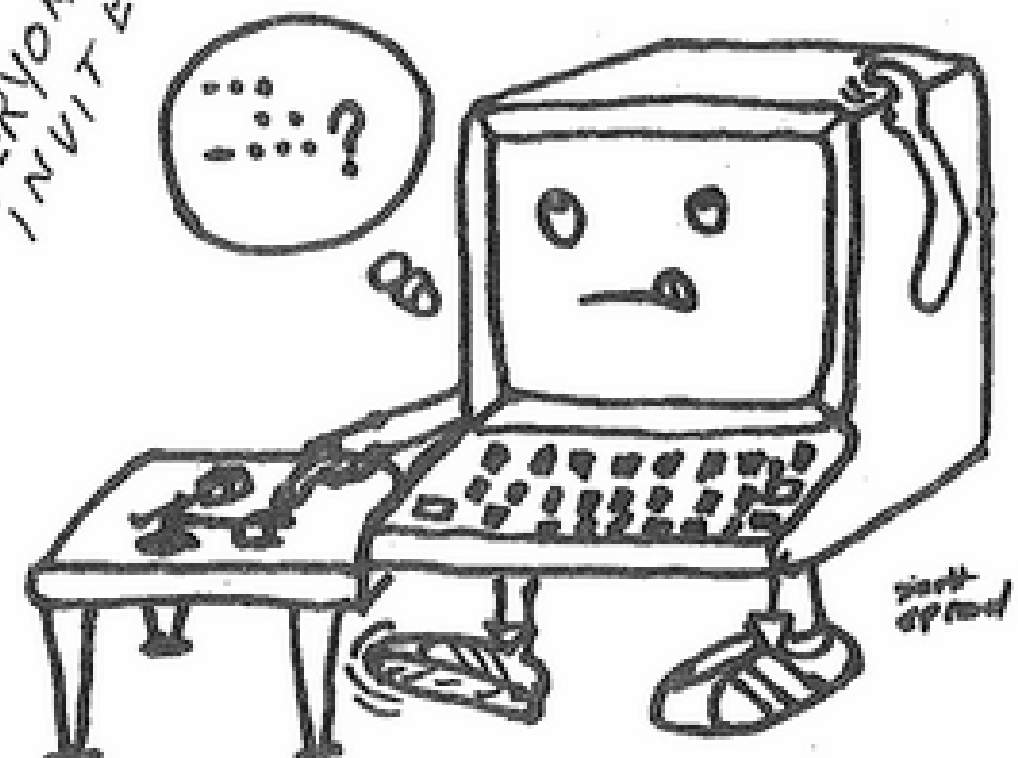
- 1.. N5ABC John Stehr, 364-8761(N)
- 2.. W5AIP Ford Michael, 321-4301(N)
- 3.. N5AMV Dean Waddell, 321-5210(N)
- 4.. N5ALG Bob Fields, 329-7391, 872-3496(N)
- 5.. W5AUX Glen Basinger, 364-0330, 329-1122(N)
- 6.. W5AVK John Nelson, 321-8566(N)
- 7.. KA5AXQ Joe Green, 364-4301(N)
- 8.. KU5B Jack Bickham, 329-1311, 325-4804(N)
- 9.. N5BEW Ken Esadoah 329-4667, 321-1650(N)
10. WD5CHG Doyle Curtis, 691-4210(M)
11. KA5COI Peter Richeson 329-3217(N)
12. KC5CU Chuck Warner, 364-9561, 364-9573(N)
13. N5DWN Linda Brandt, 321-5081(N)
14. KB5EK Wade Anderson, 794-5144, 236-6485(M)
15. W5EOD Hugh Reynolds, 329-3861(N)
16. WD5HAM Bonnie Speer, 321-7302 (N)
17. WD5HPU Jim Greenshields, 321-9841/8319(N)
18. WD9HWV Keith Kauffman, 360-7515/7509(N)
19. K5KDR Bill Oliver, 329-6333, 686-2196(N)
20. KA5KTC Allan MacArthur, 872-8578(Noble)
21. K5LDE Fred Chapman, 364-5595, 321-6858(N)
22. KA5LZN Greg Smith, 325-2418(N)
23. W5MCJ Jerry Broudy, 329-0262(N)
24. W5MCN Leland Black, 329-3222(N)
25. WA5MLT H.O. Townsend, 329-4426/7007(N)
26. N5MS Michael Salem, 321-5453, 360-1302(N)
27. W5OU Gordon Jones, 329-6075, 321-0378(N)
28. KB5QU Chris Royce, 3848, 325-6502(N)
29. WA5RPP Sam Barrett, 321-2601(N)
30. WB5SKB Don Fisher, 387-4943(N, southwest)
31. W5SQJ Jess Speer, 321-7302(N)
32. K3TGY Bill Brodie, 794-0406(M)
33. WB5UUX Chas. McCown, 321-1061(N)
34. W5UZD Louis DeStwolinski 321-3344(N)
35. WB5WJW Bob Elb 354-5523, 329-8025(N)
36. AF5X Jess McKenzie, 329-1543, 686-4861(N)
37. WB5YJP John Lewis, 794-3953, 734-3291(M)
38. KD5AH David Daley, 794-6470/1814(M)



Stations in Purcell, Lexington, Washington, and other cities are always welcome. We will not close a net until all cities represented in the net are definitely in the clear. The regular, non-emergency net meeting continues on the first Tuesday of each month at 7:30 PM on the 147.66/.06 (W5OU) rpt.. downtown Nrmn.

## 76ERS MARCH Meeting COMPUTERS AND THEIR HAM RADIO APPLICATIONS

EVERYONE INVITED!



See SEVERAL DIFFERENT BRANDS  
IN USE IN HAMMING MARCH 9 (Tues)

MARCH

## Central Oklahoma Radio Amateurs

FROM THE C.O.R.A. PRESIDENT....

Plans are rapidly taking shape for Ham Holiday 1982. The facilities committee (ACARC) did an outstanding job and we are firm on our reservations at the MYRIAD Convention Center for July 23, 24 and 25. Additionally, an agreement has been reached with the adjoining Sheraton Century Plaza for a block of rooms, meeting areas and other considerations. My hat is off to the work of the facilities committee...they have arranged to budget space in order to give us a cost savings without sacrificing the quality of our convention. The February C.O.R.A. meeting will be history by the time this column is published, but hopefully most of our programs will be solidified this month. We hope to offer new and interesting programs on solar/wind power, small computers, satellite systems, DX and contesting, and the best ladies' program ever!

It was a pleasure to have representatives from SCARS at the January C.O.R.A. meeting. Believe it or not, Q. R. Zedd actually showed along with his lifelong friend Jack, KU5B. I kissed Q.R.'s...er, ring, and got the time and frequency of his next schedule with Heard Isl. Seriously, Sam KA5RPP made a presentation of the Diamond Jubilee QSL cards recently undertaken as a club project by SCARS. It is a good looking card; a worthwhile project for any club and Sam would be happy to give you full information on how you can participate in this aspect of the celebration of Oklahoma's 75th year of Statehood.

Sam and Jack made an excellent point with me last month that I would like to pass along. Some clubs have a tough time getting folks to come to the C.O.R.A. meeting every month. Often distance and expense are real considerations to clubs outside the metropolitan area. Please remember that if it is O.K. with your club members, it is certainly O.K. with C.O.R.A. if you rotate your representatives on the executive board. Rotation of your reps would spread the duties around and perhaps some future leaders of your club might "rise" to the surface...

An expanded issue of the Collector & Emmitter is planned to officially announce Ham Holiday 1982. Pre-registration forms, etc. will be included with this "Super C & E" which will be mailed to all licensed amateurs in central Oklahoma. We hope that club editors will use the C & E as a forum to promote your club to non-members who will receive this issue. This way C & E and C.O.R.A. can help you with an exposure to all amateurs in your community. Encourage your editor to "sell" your club and its benefits in their future columns.

Please mark Ham Holiday 1982 on your calendars now. Make it a family event. There will be excellent programs for everyone plus Oklahoma's largest indoor flea market. See you there! de AD1S.

## FEBRUARY CORA MEETING NOTES - - -

It's all nice and legal now - a contract has been signed with the Myriad to hold Ham Holiday and the Oklahoma State ARRL Convention there on 24, 25, 26 July. - Yes, the ARRL has approved holding a state convention in conjunction with Ham Holiday.

Space assignments for programs, Ham, general interest and the Ladies was discussed and mostly settled. A lot of chair and table moving is involved to get the most use of space.

For you who are anxious to pre-register, the next issue of C&E will contain the forms, more details on programs, awards and the prices. As for prices the committee has done a good job in keeping them at last years level.

Here is a general outline of programs to be presented: SHIRK will meet, OKDX will DX, Night Owl will hoot, QFL will play footsie, FM'ers will have a Forum, so will the arrl. Personal Computers will be presented on an entry and on an advanced level. Alternate Energy Sources will be explored, Antennas - how - why. Satellites may orbit, CORA will have the annual meeting in hopes that the outlying clubs can attend. Oklahoma Repeater Society will hold a meeting. The Ladies + YLRL will be well taken care of.

The Grand Award will be an ICOM 730 with power supply and mike - looking at \$1000.00. The pre-registration award will be firmed up by next months issue.

What's it going to cost? - No increase in pre- and door registration. Same bargain. The Saturday night banquet, buffet style, will be \$8.00, tax, tip and everything included. After the banquet which will have an interesting program there will be a dance without additional charge.

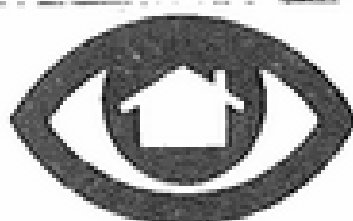
A special edition of the C&E will be mailed about 1 May to all ARRL members in the state, everyone who attended the last couple of years and of course the regular subscribers. If you know of someone we might miss and should get a copy get his name, address and ZIP to Joe or Bob.

New policy at the Myriad prevented us from making special reduced parking arrangements so everyone is on his/her own as to parking. That was one of the considerations in keeping other costs low. It's still the least expensive "hamfest" around, to say nothing of the best.

Joe, WA5ZNF



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Snew, snow, snow. The stuff had strange effects on some of our fellow "hams"! For instance one of those snowy days a group of hams and friends gathered at the Mooreland drug store for coffee. Well friends, our local top brass Gerald N5CCV came in with an empty windex bottle in his shirt pocket instead of his usual handy talky. He said his hand held was broke down and he just had to have something. What was really bad was when we caught him grabbing it and about to talk into the spray nozzle.....

Then there's the dedicated -- extremely dedicated. Club night was the night the snow began and boy was it getting deep. Club was called off but Gerry KA5KAG never got the word. He braved the slick streets and deepening snow and went to the meeting. He said when 7:30 came and no one else showed up, he got up and gave the treasurers report and then left. New folks that's dedication!

Some of our novices have been getting on the air. Darrell KA5LTX has been working CW. Also Jo Ann KA5FKW and Freda KA5PKY have been visiting on CW. Keep up the good work!

Doug WB5EGZ, working in his civil defense director shoes, gave an excellent talk to the Woodward elementary school children about safety and what to do during the up coming storm season. I might add as a teacher in one of the schools that he did an outstanding job!

A board meeting of the new officers was held. We discussed directions we wanted to go this year. Also possible activities were discussed.

Finally after some hesitation about whether to have a meeting or not because of road conditions, on February 9 fifteen brave souls gathered at the usual place for a meeting.

The secretary and treasurer reports were read and approved.

Rough drafts of the roster were passed out. Additions and corrections were made getting it ready for the final copy.

Gerald reported on the article in the December QST concerning a more active affiliation with ARRL. After much discussion it was decided to let ARRL solidify their position before action is taken.

We discussed the 82 link with the Oklahoma City Autopatch. Oren WB5EDD, owner of the local 12 machine is agreeable to whatever is good for the community. N5CCV gave a short summary how it works. Wendle WA5PLW gave further clarification on how it would work. Members present discussed various possibilities on how to get started to see how its going to work before the club goes into much expense.

Bill N5CMW made a motion to attempt to link with Oklahoma City under specific conditions. This motion was read and approved. N5CCV will contact the Oklahoma City Autopatch for their approval.

Gerry KA5KAG worked the Novice Round Up. He said he made 210 contacts. He got to talk to his brother and sister in Philadelphia. He applies for an extra on the up coming FCC tests but said he had so much fun that he just might stay a novice! (He's just joking.)

The up grade class is coming along fine. They are about ready to go take the tests. Bill N5CMW and Gerald N5CCV are going to try for their advanced. Also Nolan KA0KEK will be taking a test. Good luck to all.

K0C10 reported via WA5PLW that a covered dish picnic is being planned in late March or early April with our friends from Enid. The two clubs are swapping up dated club rosters.

73s WB0QGW



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Mr. Radar, Hobe Burgan, WB5MLN, bringing the word to about one fourth of the amateurs who gathered at KMTV, Channel 9, to learn the latest about weather reporting on 22/82. The TV camera blocked off the other three fourths. Details on page 5



Appreciation Plaques were presented to Henry Israel, N5IH and David Ferguson, K5SXJ, by Gary England representing KMTV, Channel 9 at the annual weather meeting.

EFTPEVJAICWGXMI  
 SCLEOLPBYCB DUGS  
 SVNRGWQWPWEIGG  
 TFC AUAENCZKUWPI  
 NDBDTQR RHZLBONW  
 CYMFDCTEERNIDOX  
 HTAMWNA LPITUKOO  
 HZFKGOEEOMCYICP  
 TJALICHTRTASBRF  
 IVPXTLNMAFFJBUS  
 KCDRNEONSOMIBGL  
 SEORRTCWBFNAKPM  
 UNJRLESHAITRHKJ  
 CHUCSJQRJT BKKFR  
 BCKJRS LAHTEYGM

FIND THESE HIDDEN WORDS IN THE ABOVE PUZZLE:

AMPERAGE CURRENT ELECTRON INDUCTANCE  
 OHMS POWER REACTANCE KILOWATT

Answer elsewhere this month. (15)  
 Tom Childers, N5GE

If they would have waited until 1980 to invent the safety pin, it would have had four transistors, a VFO and an on-off switch. WQCCT

Ben Franklin never could have gotten a ticket. He had the key on the wrong end of his antenna WQCCT

WANTED: Manuals for test equipment. HP-650 Test Oscillator, GR-1001-A RF Signal Generator, HP-608 (TS510AU) RF Signal Generator, HP-202A Function Generator, HP 410B VTVM, HP-430C Microwave Power meter, HP-417A UHF Detector. Please state postpaid price in letter. Bob Edlund, W5DS, Box CS-36 Route 2 Crescent OK 73028.

11-2

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Oklahoma Repeater Society Winter Meeting: 1982  
 Saturday, January 30, 1982 1:00 - 3:00 P.M.  
 City Commission Meeting Room, City Hall  
 723 South Lewis, Stillwater, Ok. Talk-in:146.13-.73

Dan Schroeder, K5FVL, President, opened the meeting.  
 Gary Shane, Secretary, read the minutes of the last meeting and they were approved.

Dan Prater, K5CAY, Treasurer, reported 312.95 dollars were in the treasury.

#### Committee Reports:

(A) Mike Salem, N5MS, Chairman of the Legislative Committee, reported on the radar jammer bill is now a state law. It has not been contested in a court case. He also discussed the CATVRFI situation and urged the members to write the FCC to voice disapproval of the relaxation of the RF leakage rules of Cable TV companies' distribution lines.

(B) Joe Buswell, K5JB, Technical Committee Chairman, reported not much activity. He said he participated in search for Bootleggers in the OKC area utilizing a new form of Doppler locator. As far as technical operations the Tulsa repeater on .28-.88 had been experiencing some interference. N5MS said that a good idea would be to have a isolator into the respective repeater systems.

(C) Dan Schroedar, K5FVL, passed out to the assembled group the latest information on the various repeaters in the state.

Old Business: None.

New Business:

(A) Leonard Hollar, WA5FSN, urged more input to him for more information to be placed in Q.S.T. He said that he did not hear enough from some of the various groups around the state. Leonard said that the net activity was about the same, but could use more participation.

(B) Loren Simms, WA5CBF, discussed the progress made on the repeater linking. He said the WR5ANX .19-.79 Altus repeater was successfully linked to the WR5AHK .22-/82 Crowell repeater. Loren said there was soon to be a link to the new .25-.85 Wichita Falls repeater. He also said some progress has been made to linking the southwestern corner of the state to the central area, but more work and coordination needs to be done.

(C) The Emergency Coordinator for Oklahoma County spoke next on the need for the Amateurs to register your ARES station with Ken Fields on the state-wide RACES network. In doing so, you would also enroll yourself on a list to be legally recognized in RACES during a National Emergency. Norris Price is the new state Civil Defense Director and Ken Fields is the Communications Officer. The state Civil Defense Agency is located in the Sequoyah Building in the State Capital Complex. RACES would be a backup for a national emergency operations as declared by the President. It is not intended to replace ARES in normal operations.

(D) Dan Schroeder, K5FVL, next spoke on the series of meetings by the National Weather Service planned for February. These programs would be on severe weather during the Spring Storm season.

The meeting closed at 4:30 P.M. The next meeting of the Oklahoma Repeater Society, Inc. will be at the Ham Holiday during July, 1982.

Let's all promote membership in the Oklahoma Repeater Society. We need more members to grow. ORSI functions as a clearing house of information and coordination of the repeater activities in the state. Membership is \$3.00 per year. Contact Dan Prater, K5CAY, 1401 E. Oklahoma, Enid, Oklahoma 73701.



## MINUTES OF FEBRUARY 1982 MEETING

Meeting was called to order by President Steve, W5VCJ, at 7:59 P.M. with 33 members and guests present. Self Introductions followed. There were several folks from distant and exotic places like Enid, Calumet and Okarche.

Minutes were approved as published in C&E, Ellard, W5KE, gave Treasurer's report, and Paul, WA5HTL, gave CORA report. George, AD1S, advised that he had just received word that Ham Holiday 82 is approved to be an ARRL state convention.

Marvin, K5HQP, reported that Quality Inn at Reno and Eastern will probably be site of the VHF Club reunion. It will be on Friday night, July 23, the night before start of Ham Holiday. One hundred rooms have been reserved at a price of \$35.00 for double occupancy. Contact Marvin if you are interested in rooms.

Bill Riddles, N5WM, gave one of his famous 6m DX presentations, covering band allocations, propagation conditions, operating habits, etc., on the band. Mike Crewz, N5DDB, assisted by relating typical experiences and good methods for catching band openings. They played tapes of three super signals from foreign beacons and five minutes of typical (?) bone-crushing signals from juicy DX from all over the world.

Bill showed some of the available awards -- 25 countries, WAC, etc., -- that he and Mike had earned. He identified a number of the group who had earned awards. Steve, W5VCJ, went into WWV's propagation reports and forecasts and told how to interpret some of them.

Steve, W5VCJ, presented Ralph, WD5IRB, a plaque with mounted gavel for his service as last year's president.

Program for next month will be a bird's-eye view of 2M FM operation in Europe. It will be presented by Paul, WA5HTL.

Meeting was adjourned at 9:02 P.M. for refreshments. Joe, K5JB, Sec'y

## TID-BITS FROM W5JJ

Carl, W5JJ, is always good for a "What's New". He submitted the following:

Attention 2-meter mobile operators! Motorola has discovered that the trunk lip conceals the AM-FM antenna on some Plymouth and Dodge cars. (To be sure, check your owner's manual.) Other cars are affected, too, says Motorola. The positioning of the antenna will cause 2-meter equipment to interfere with normal FM reception if the transmitting antenna is attached to the trunk lip.

General Electric, under contract from the United States Air Force, is in the final test stage of a giant 1.2 Megawatt over-the-horizon radar system (Just like the woodpecker??) near Moscow, Maine. It is expected to be operational sometime in 1983 and will operate in the 5-35 MHz region. Interestingly enough, our radar system is exempt from ITU guidelines protecting the Amateur spectrum because it is a military-use device. Thanks, Carl.

## MORE ON BATTERY CHARGING

I thought that last month when I ran the thing on recharging primary batteries I would be taken to task for scraping the bottom of the barrel. (Maybe I was, but behind my back!) I got several comments.

Jim, WA5LFN, called to bring me up to date on

JB JB JB JB JB JB

Electroplating. He said, as I remember, that the technique of introducing a small amount of reverse current between each half cycle of plating current was called electropolishing. I don't remember why I thought it was a good idea to use when recharging batteries but I can say that, in my limited experience, I have had less trouble with cells going bad when about ten percent of reverse charging was used. I mentioned the electric razor batteries. I also have a couple of old, old Motorola HT-200 Ni-Cd batteries that are still trucking along, never having shorted a cell. Who knows.

I may not have made it clear how dangerous it can be to mess around with 120 VAC so I will now. The charger using the light bulb and half wave rectification was a commercial unit which used a TV type interlock in the lid. Don't ever use such a circuit without protecting yourself from accidental shock. It is much better to start with a transformer and step the voltage down below 24 volts, or less before rectifying, regulating, etc. Battery charging contacts will eventually be exposed to your little fingers. Consider this: you may not kill or burn yourself but the shock might cause you to hurt yourself when you jump.

Opening shorts on Ni-Cds...Maybe it will work, and maybe it won't. In desperation I always try it. Long term success has been pretty low, perhaps 20 percent. I have zoned cells with as much as 40 amps. They opened up for sure but didn't stay open for long. I don't think there is any danger of a cell exploding but I always stand clear, or cover it if I am applying current from a really tough source like a car battery. Pressure build-up is a function of energy. Energy is a function of current times voltage times time. Limit the current pulses to one second and there shouldn't be any problem. Forty amps times one second is 11 mAh. If the short opens up, you will get that much charge on the battery anyway (neglecting losses).

Tom, K5LDI, has come up with a cute little gadget for charging his Icom BP-4 battery (which has no built-in charge socket). He took a piece of super thin double-sided PC board stock and etched away a strip on one side corresponding with the positive terminal of the battery. He etched an insulated island on the other side, drilled a hole and made a terminal which he soldered to the tip connection of a miniature phone socket. He soldered the ground connection of the socket to the foil which connects the minus terminal of the battery. The battery is charged by removing it from the radio, slipping the adapter to it, and charging with a suitable wall charger. He is also planning to make an adapter to slip on the radio to enable use of external power. How about that? Joe, K5JB

## NIFTY, LITTLE RADIO

An outfit called RCD in Norfolk NE is selling a monitor receiver intended primarily for the Police market. It has a single crystal controlled frequency and is available in low band, high band and UHF. Available frequencies include: 29.26 to 47.94 MHz, 142.25 to 171.575 MHz, and 443.55 to 494.8375 MHz. The price is \$39.95 plus \$2.00 for shipping. The outfit has a twenty day free trial period.

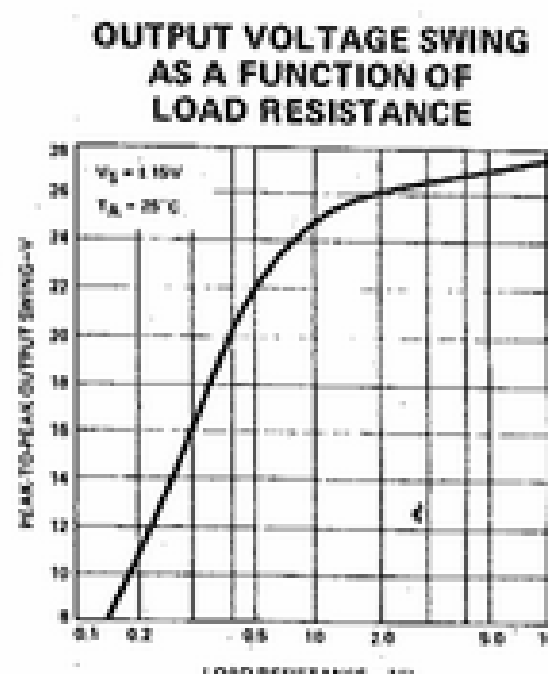
The one I have is on low band and seems to be operating better than I expected. Sensitivity is about as good as any scanner type receiver I compared it against. Battery consumption is rather high for continuous monitoring, current draw being about 15 mA. I put a belt clip on mine and it resembles a pager. Toll free tele is 1-800-228-8108 and they take Visa or Mastercharge. If you get one, tell me what you think. Joe, K5JB

## 741 and 5558—OPTIMIZING AN OP AMP

Now, I use op amps frequently. Nothing fancy. In fact, I don't spend much time looking at all those exotic Bifet's or other devices. Nope, give me the simple 741 or its dual op amp equivalent, the 5558.

I don't like messing with double ended power supplies. It is just too much trouble rounding up  $\pm V$  supplies. Plus (if you don't mind the pun), if you run a lot of devices on +12V as I do, then having all these minus voltages running around your circuit board is a pain in the rootie kazootie. Sooo, I needed some experimental data the other day to determine how much of an op amp, a 741 was when it was operated single ended. Mainly, the problem was to see what kind of output I could get from the device under low impedance or resistance loads.

I was building up an output device for a new UHF Micor receiver. I had been lucky last year at Dayton to get a rack to put the Micor in that used the regular audio squelch board. There was no line output for a telephone line or touch tone decoder, so I decided to use a couple of op amps to filter (treble deemphasize) and isolate the signals. There is only +12 V available around the Micor receiver (unless you count the +9.6V which is no help at all) so I knew that I would operate the 5558 single ended (I choose not to use the Norton amplifier 3900, I have lots of them, but I generally have to ask K5JB how they work and a man has his pride). I was wondering if a single ended op amp would drive a 600 ohm or lower load. I checked the books and found that with a full plus and minus supply (+15 Volts), the output swing fell off quite rapidly below about 1K ohms. Refer to Figure 1 below.



Now, this is for a plus and minus supply (Ugh). I thought that now was the time to generate some data for the single ended operation. There was just nothing in the books about my favorite mode of operation. Even with a 500 ohm load, the 741 would still deliver a respectable and hefty 22 volts and that is a lot of signal. This peak to peak signal translates to  $(22/2 \times 1.414)$  or 7.78 volts RMS. This becomes .120 watts or 120 milliwatts if  $P = E^2/R$  is still the formula for a 500 ohm load. That is pretty respectable to drive a line. It was also possible that the voltage swing when operated single ended would be just about half of the voltage swing with plus and minus voltage. This is what I had expected, but wanted to verify.

I set up the following circuit using a 741 op amp and scope and a Fluke 8020A voltmeter. The values for  $R_i$  and  $R_f$  were not really critical since all I wanted to measure was output characteristics of the op amp. I use a gain of 3 ( $R_i = 33K$  and  $R_f = 100K$ ) so I wouldn't run out of range with the signal generator. I later checked to make sure that this was true by changing the gain and it wasn't.

MARCH

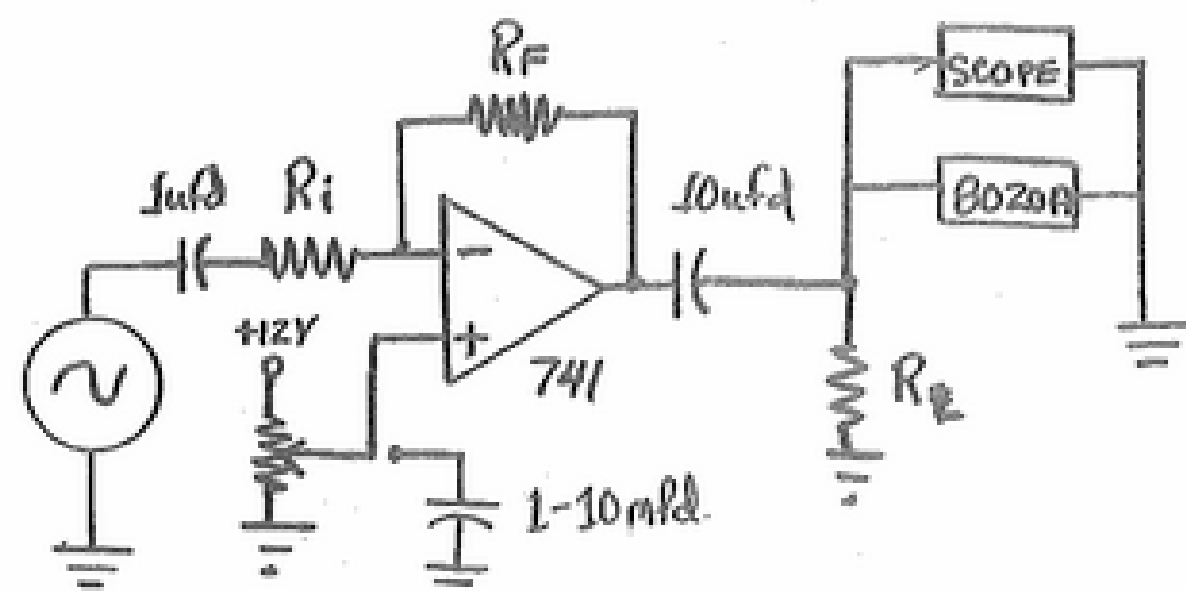


Figure 1. Experimental Setup to determine Op Amp Single Ended capability.

The Fluke 8020A was used to measure the RMS output. I set the signal into the op amp and adjusted the output until just below the point that I saw distortion on the scope. (Don't have a distortion meter). This was done for each value of  $R_L$  that I adjusted.  $R_L$  was a resistance decade box made by General Radio.

The results of the tests are as follows:

$R_L$ (Decade)	$V_{out}$ (8020A)	$V_{out}$ (Scope)
Open	3.68 V (RMS)	10.4 V (PP)
5K	3.59	10.0
3K	3.39	9.6
2K	3.32	9.5
1K	3.06	9.0
700	2.76	8.00
600	2.56	7.6
500	2.49	7.5
300	2.24	6.4
200	1.83	5.6
150	1.56	4.6
120	1.29	3.6
100	1.19	3.5
80	1.04	3.0
50	.66	1.8
30	.44	1.3
10	.15	.4

It was interesting to see that you could drive loads down to 10 ohms, but with a corresponding decrease in the available undistorted signal. At some of the lower values, it can be seen that the 741 falls off more rapidly with single ended operation. There might also be some discrepancy between the way I measured the signal and the way that the tests were conducted by Signetics.

What this means is that with a 600 ohm load, you can get 2.56 Volts RMS from the 741 op amp. Using the formula  $P = E^2/R$  yields about 11 milliwatts which corresponds to about +10.4 dbm for a 600 ohm load, not an unrespectable power level for driving a telephone line. Since the power output is proportional to the square of the voltage, it is easy to see that this 11 milliwatt signal is a considerable dropoff from a full double ended amplifier. But this is, I suppose, the price you pay for single ended operation.

If there is any interest, I will detail the circuit that I used for the output circuit of the Micor receiver. It features two different outputs, one to drive a transmitter and one to drive an auxiliary output like a phone line or tone decoder. Incidentally, if you use the circuit shown above in a single ended configuration, be sure to put the capacitor shown across the non-inverting input. I found that low level signal outputs were distorted in the crossover points. The reason I determined to be variations in the power supply voltages which were caused by voltage changes that occurred as a result of current drain. The 1 mfd voltage filtering capacitor prevented these variations from turning up in the noninverting input. The crossover point distortion is dependent upon the quality of your power supply and the level

COLLECTOR AND EMITTER

output that you need. I noticed it only with low signals of about a volt or less. If the problem persists, then you need to increase the capacitor to at least 10 mfd to eliminate the problem. The crossover distortion appeared to show up as a change that ultimately was a doubling of the frequency going through the op amp. This actually was the result of possible phase information being fed back through the noninverting input. Whatever, it doesn't make any difference, the use of the 10 mfd capacitor cleared up the problem.

Oh, yeh, the Micor circuit also features relay output for the COR and an open collector output for those who need solid state switching. The Micor circuit is a subset of a complete audio squelch board that uses Motorola's Micor Squelch circuit. This circuit features a custom integrated circuit manufactured by Motorola (who else?) that measures the quality of the signal and automatically opens or "loosens" the signal for weak signals and tightens the squelch when the quality of the signal is above a certain level. The only input required is audio from the discriminator. I designed up a circuit and began to put down a Printed Circuit card but never got it finished. This card was fairly comprehensive and was on a 4 x 5 card that had an edge connector. Bob WA5NSV finished up the layout and said that the circuit works, but has not made any changes that were needed in the art work. Maybe Bob and I can get together and get this ready for the C & E. This circuit is really neat and I put several outputs, plus COR circuits along with a speaker level output plus tone adjustments were all on the card. This could be a nice addition to those of you in the repeater business which just seems to be about everybody these days.

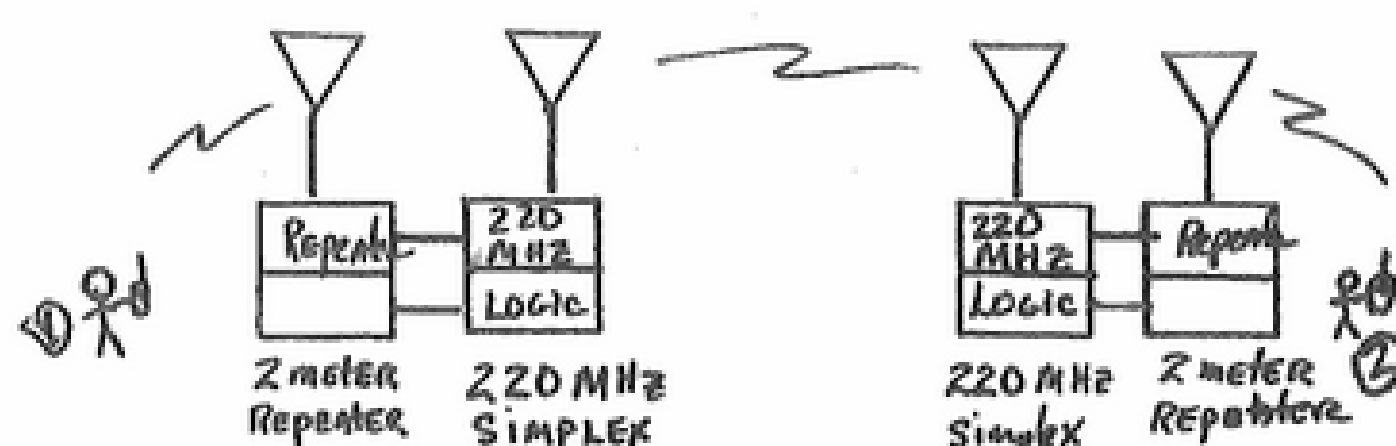
Micheal Salem N5MS

#### OKLAHOMA REPEATER SOCIETY AND LINKING A MODEST PROPOSAL

K5JB and I tooled up to Stillwater a couple of weeks ago for the Oklahoma Repeater Society Meeting. I enjoyed the trip and got a chance to see what was going on. The boys down in Altus finally got their link going into Texas on UHF and I thought that their operation was quite nifty. Dwight Dennis and Loren Simms appear to be a couple of the king pins in the operation. Dwight has been trying for some time to get a link established into Oklahoma City and some work has been done on path tests that appear to show that they could have some success, but nothing has been done. Anyway Dwight has gotten a link into Crowe (is that right?, I dunno, I left my notes at the office) that links the two locations. Loren says the link works quite well and is very convenient. It can be brought up and down at will.

I have thought of a linking proposal for stations in the metropolitan Oklahoma City area and I want to know if anyone is interested. It seems to me that it should be possible to pick a frequency on the 220 Mhz band as a linking frequency between repeaters. It would only need to be a simplex frequency and it could be used, ala 29.6 Mhz, as a remote base operation. Now just because you hear the words "remote base" don't cringe. Actually, it would be quite simple to come up with the necessary hardware to put a 220 Mhz frequency within the grasp of your repeater. A couple of tone decoders are needed to control the link and some logic and audio processing completes the project. A person could access the repeater, beep a couple of tuchtones (I say "tuch" instead of "touch" because Bell thinks that Touchtone R is a trademark of theirs and they may be right) Anyway, after the link is brought up, you could also access the 220 Mhz transceiver similarly linked to other repeaters in the area, turn on their link and access the two meter repeater on the other side of town or in the next town.

I diagram my suggestion as follows:



Now, this is really not so complicated. The two meter repeater interfaces directly to the 220 Mhz Simplex transceiver which then can communicate with the other 220 Mhz simplex transceiver located at another repeater site.

In this example, Stickman 1 can turn on his VHF repeater and turn on the 220 link, then turn on the 220 link of the second repeater and talk to Stickman 2. When Stickman 1 lets up, Stickman 2 then takes his turn to talk to Stickman 1. This Stickman to Stickman transmission is done on 220. Why did I pick 220 Mhz? Because on this band, it will be possible to link both two meter repeaters and UHF repeaters with the least possible signal desense. No duplexers are needed on the link, and all that a repeater group needs to do to join the fun is buy a 220 Mhz transceiver and interface it to the repeater. You could possibly have as many as 5 or 6 different repeater groups on the same frequency. The 220 Mhz antennas could be either omni or directional. Using directional antennas, long hauls could be possible. For example. I could put a 220 simplex system with the present OU Radio Club 28/88 repeater. This and a beam antenna at 190 feet (having access to the top of a building) means that paths into Stillwater might be possible. If I could get Dan K5FVL to invest in a similiar system in stillwater (runs deep), then walkie talkie to walkie talkie coverage might be possible between Norman and Stillwater. Not bad, huh? And the beam antenna would also be pointed in the right direction to talk to Oklahoma City to groups there.

The only limitation would be that the operation proposed here would be limited to one hop. Further linking would require additional and possibly duplex equipment. But this could be a start. And if you use a synthesized 220 rig, it would be possible to eventually upgrade to a fully agile station on 220 which could accommodate more than one conversation on 220. Any takers?

Micheal Salem N5MS


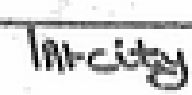











#### TWO METER REPEATER AVAILABLE

Some time ago, I obtained a GE Progress Line repeater still in the cabinet for use on the 28/88 repeater in Norman. I had big plans to upgrade the system to this repeater and to fit a microprocessor on it. Well, after studying it for awhile, my enthusiasm waned. I just recently got interested in getting a Motorola 120 watt repeater up and going and my interest in the Progress line is really waning. Is there a deserving repeater club out there that would be willing to give the OU Club its money back for this system? It is tuned up and operating in the two meter band. Build your own control circuits. Sorry, the duplexer stays in the club for the new system. Call me at 321-5453 or 360-1302 if interested.

Micheal Salem N5MS

FOR SALE: WB5YWO Still has a TR-2400 in excellent shape with accessories for sale that is looking for a new home. Please don't let Jim cry into this radio, it will corrode. Call him at (405) 377-0498 for info. For those who don't know, a TR-2400 is a Kenwood two meter synthesized walkie talkie with keyboard entrv. Nice radio.

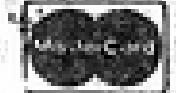

N A M H A P P E N I N G S REFER TO CLUB SECTION FOR SPECIFICS

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	 USAF MARS 1	<b>MORI</b>  2 <span style="border: 1px solid black; padding: 2px;">G P</span>	3	4	 SKYWARN PROGRAM 5	6
7	OK DX 4650C. 8	 9 	10	11 	12	13 
14 	15 	16 	17 <b>EDIT</b> COLLECTOR LIMITED	18 <b>kay</b> 	19 	20
21	22	23 	24	25	26	27
28	29	30	31	<b>MARCH</b>		

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