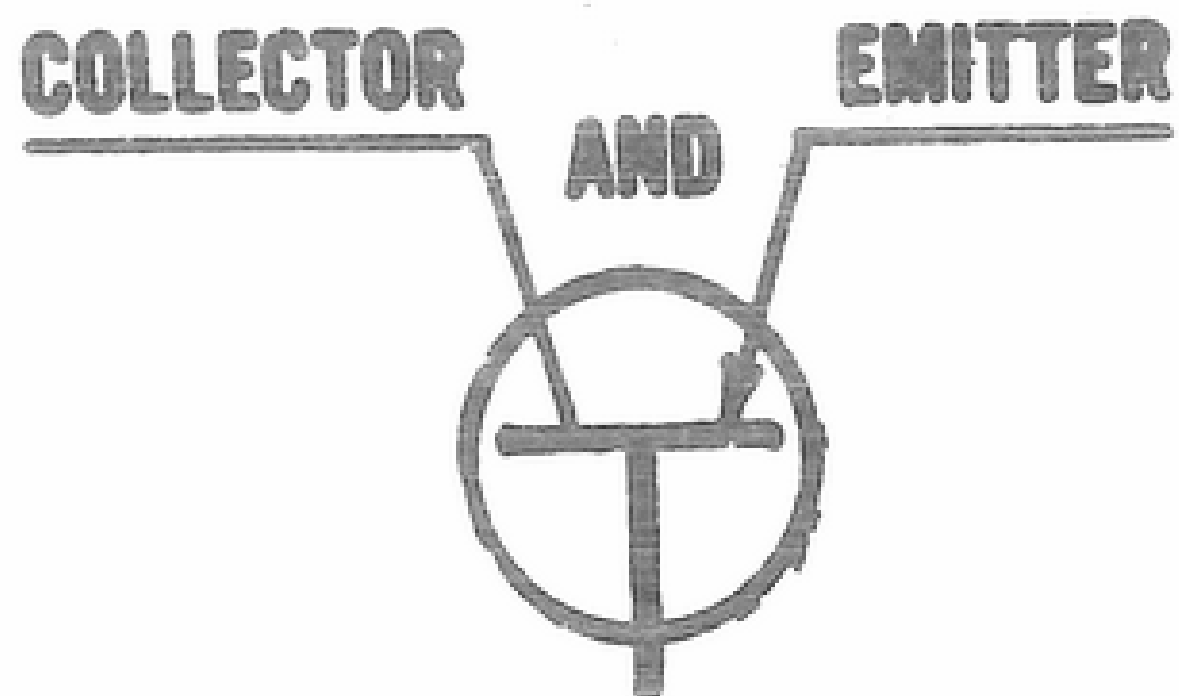


# Central Oklahoma Radio Amateurs



Volume 1

JUNE 1975

Number 4



## AMATEUR OF THE MONTH

Meet Gary, WA5ETV, OCAPS Amateur of the month. Story on page 3.

The CORA Collector and Emitter is published monthly by CORA for the participating Amateur Radio Clubs in the Central Oklahoma area. Material contained herein may be reprinted without prior permission with credit given this publication. Address all correspondence to CORA Collector and Emitter, Box 15013, Oklahoma City, OK 73115.

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Editor for OCVHF	Joe Buswell	WA5TRS	732-0676
Editor for OKCAP	Larry Dillard	WB5CWB	685-4065

Central Oklahoma Radio Amateurs (CORA) Inc. was organized to enhance the cooperation of Oklahoma Amateur Radio Clubs in sponsoring activities of mutual interest to the Clubs and Radio Amateurs. Participation in specific CORA activities is optional with the individual Clubs. CORA officers are:

President	Ken Kendrick	WB5ECJ	751-4917
Vice President	Gary McCormick	WA5ETV	946-2898
Secretary	Ellard Foster	W5KE	789-6702
Treasurer	Bob Williams	WB5LHR	789-0987

Participating clubs for CORA Collector and Emitter:

#### AERONAUTICAL CENTER AMATEUR RADIO CLUB, INC.

Postal Station 18, Oklahoma City, OK 73169

Meetings: 8:00 p.m. on first Friday each month, Flight Standards Building, FAA Aeronautical Center. Club Station W5PAA.

President	Bob Ashby	W5HXL	942-5375
Vice President	Al Prince	WB5KCU	789-1160
Secretary/Treasurer	Bill Oliver	K5KDR	329-6333
Asst to President	Ken Ford	WB5KHU	528-8770

#### OKLAHOMA CENTRAL VHF AMATEUR RADIO CLUB, INC.

323 N. W. 10, Oklahoma City, OK 73103

Meetings: 8:00 p.m. on third Friday each month, American Red Cross, 323 N. W. 10. Club Station W5LOW.

President	Carl Drumeller	W5JJ	789-3788
Vice President	Tom Stinson	W5OZE	942-3714
Secretary	Jef Casey	WB5GWB	528-0252
Treasurer	Ellard Foster	W5KE	789-6702

#### MID-OKLAHOMA REPEATER, INC.

Meetings: 8:00 p.m. Tuesday of first full week each month, Oklahoma City EOC, 4600 N. Eastern. WR5ADE 34/94  
WR5ADF 07/67

President	Bill Noland	WA5FWD	354-5018
Vice President	Jim Kearns	WA5LFN	751-6035
Secretary/Treasurer	Don Graham	WA5TAW	733-3044

Mail dues to Sid Gerber, 829 E. Bouse, MWC, 73110

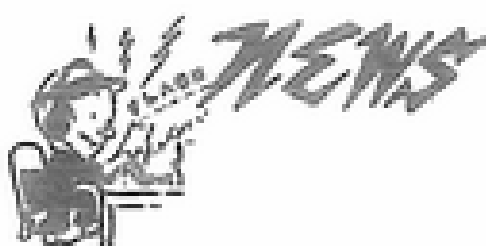
#### OKLAHOMA CITY AUTOPATCH ASSOCIATION, INC.

Meetings: 8:00 p.m. on third Monday each month. WR5ACB 22/82  
147.81/21

President	Frank McCollom	WB5JBL	751-3577
Vice President	Larry Dillard	WB5CWB	685-4065
Secretary/Treasurer	Jim Denman	WB5EOL	681-6048

7705 S. Charlotte Drive, Oklahoma City, OK 73159

Subscription Price: \$3.50 per year to non-affiliated club members



## AMATEUR OF THE MONTH

THIS COLUMN IS TO BE DEVOTED TO RECOGNIZING THOSE AMATEURS WHO ARE MEMBERS OF THE OKLAHOMA CITY AUTOPATCH ASSOCIATION WHO, IN THE PAST DID, AND IN THE PRESENT ARE DOING SOMETHING CONSTRUCTIVE FOR THE HOBBY, COMMUNITY AND THEMSELVES THROUGH AMATEUR RADIO. BEING NEW TO AMATEUR RADIO MYSELF, I HAD HOPED THAT YOU MORE EXPERIENCED WOULD ANSWER MY CALL FROM THE LAST ISSUE AND GIVE ME THE NAMES AND BACKGROUNDS OF THOSE WHOM YOU THINK SHOULD BE HONORED; HOWEVER, NO SUCH LUCK. SO, ONCE MORE, WE NEED YOUR HELP.

GARY McCORMICK, W4SETV, BECAME AN AMATEUR AT AGE 13 AND WITHIN A FEW MONTHS HAD EARNED HIS GENERAL CLASS. IN JANUARY OF THIS YEAR, GARY PASSED HIS EXAM FOR ADVANCED CLASS. WHILE STILL AT OKLAHOMA STATE UNIVERSITY IN STILLWATER, OKLAHOMA, WHERE HE RECEIVED HIS DEGREE IN ELECTRONIC ENGINEERING, HE BUILT THE REPEATER THAT WAS TO BECOME THE 22-82 MACHINE. HE LATER BROUGHT THIS MACHINE TO OKLAHOMA CITY AND BUILT THE FIRST AUTOPATCH FOR 22-82.

FOR HIS OUTSTANDING SERVICE TO THE HOBBY AND ADVANCING 2-METER FM IN THIS AREA, THE AUTOPATCH CLUB VOTED HIM A LIFETIME MEMBERSHIP BEFORE THE CLUB BECAME INCORPORATED. GARY, AT PRESENT, IS THE OCAPA REPRESENTATIVE TO CORA AND, THIS YEAR, WAS ELECTED VICE-PRESIDENT OF THAT ORGANIZATION.

HE HAS NEVER GIVEN ME ANY EXCUSES FOR NOT DOING ANY CLUB CHORE THAT I HAVE ASKED HIM TO DO. HE IS CURRENTLY WORKING ON THE 450 MHZ REPEATER FOR THE CLUB -- WORKING 432 MHZ SATELITE -- ACTIVE ON 2-METER SSB AND 6-METER SSB -- HAS WORKED SOME ON MOON BOUNCE -- EXPERIMENTED ON DESIGNING AND BUILDING ANTENNAS -- AS WELL AS HIS WORK ON 2-METER FM.

GARY LIVES IN OKLAHOMA CITY WHERE HE HAS HIS AIR-CONDITIONING BUSINESS. HE IS MARRIED TO THE FORMER BARBARA HOWE AND THEY HAVE 2 CHILDREN. -- A GOOD CITIZEN AND A GOOD HAM -- I AM PROUD TO HAVE HIM ON THE TEAM. WB5JBL

JIM, WB5EOL, THE CLUB SECRETARY, HAS PRINTED A NEW UP-TO-DATE ROSTER. COPIES WERE HANDED OUT AT THE MAY 19 MEETING. ANYONE WHO DID NOT ATTEND AND WANTS A COPY SHOULD CONTACT ANY OF THE CLUB OFFICERS. JIM ALSO WISHES ANYONE FINDING ERRORS OR DELETIONS TO CONTACT HIM AS SOON AS POSSIBLE.

WB5JHB MARVIN STOKES RT 2, BOX 3 CALUMET, OKLA 73014  
WAS LEFT OFF THE NEW ROSTER

NEW MEMBERS TOO LATE FOR THE NEW ROSTER ARE LISTED BELOW. PLEASE ADD THEM TO YOUR LIST.

WB5LJQ	MIKE McCRARY	BOX 32559	OKLA CITY	73132	751-4052
W5PDH	FRANK ARNOLD	608 HOLLOWAY DR	MIDWEST CITY	73110	737-2582
WB5LPT	JACK SMITH	3028 CHETWOOD DR	DEL CITY	73115	677-1816

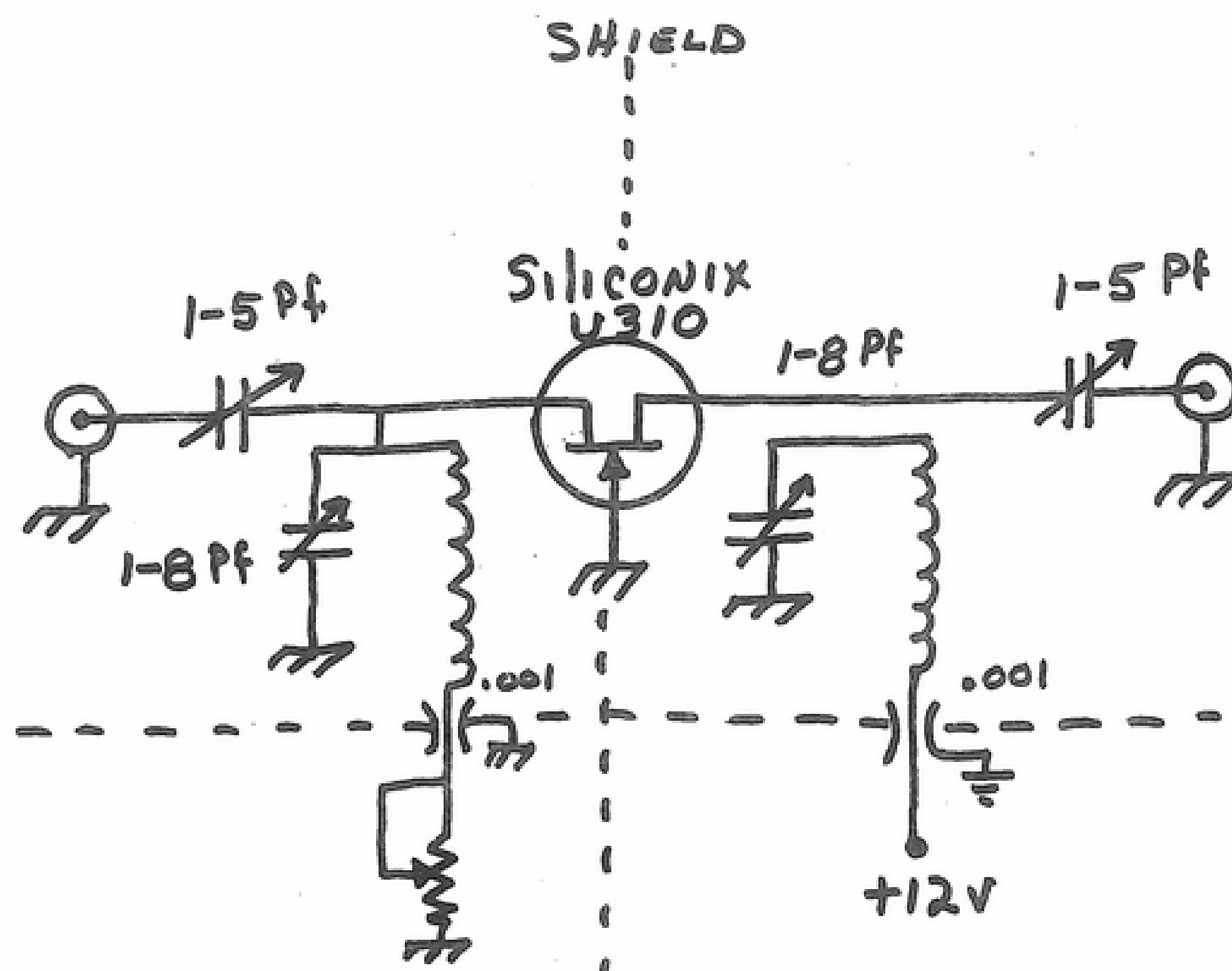
NEW STORM NET GRID MAPS ARE AT THE PRINTERS AND SHOULD BE READY SOON.



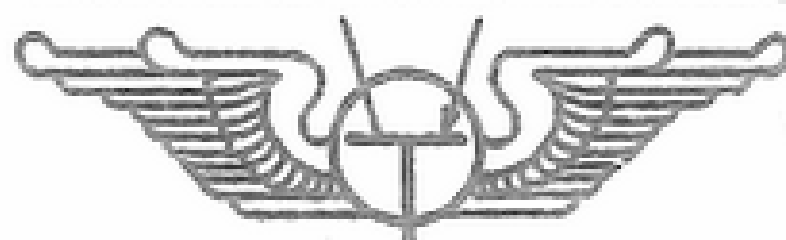
THE COMBINED REPEATER CLUB MEETING FOR JUNE WILL BE HOSTED BY THE AUTOPATCH GROUP AND WILL BE HELD JUNE 16 AT THE REGULAR MEETING PLACE AT 7:30 PM. FOR THOSE WHO DO NOT KNOW, OUR REGULAR MEETING PLACE IS THE OKLAHOMA MILITARY ACADEMY AT NE 36 AND GRAND BLVD. IN OKLAHOMA CITY. THE PROGRAM WILL BE A FILM AND SPEAKER ON SUBJECTS OF A GENERAL INTEREST NATURE -- NOT NECESSARILY ABOUT AMATEUR RADIO. GUESTS ARE WELCOME. WB5JBL

### A SUPER LOW-NOISE 2M PREAMP

The following circuit is courtesy of WZAZL. This device uses the SILICONIX U310 device. It is now being used by most of the serious EME stations now in operation. It will give 13 to 15db gain with a noise figure of 1.5db. Noise Figures of 1.3 are not uncommon. This device sells for approximately \$5.00 and the performance is very good for the dollar. Try one of these for increased sensitivity on 2M.



BOTH COILS 5 TURNS ADJUST POT  
FOR 10 MA. STATIC CURRENT. THEN  
REPLACE WITH FIXED RESISTOR. WA5UNL



W5 PAA

## THE PRESIDENT'S CORNER

Writing this under extremely distracting conditions, there's no telling how it will come out. The "Porta-Shak" is parked on the shores of Lake Thunderbird with the balmy breeze carrying the appetizing aroma of the neighbor's steaks grilling over their campfire, while I impatiently wait for my charcoal to get ready.

The 75 meter inverted vee is gracefully stretched from the trailer to two convenient trees and the SBE-34 is picking up signals from all over. The two meter whip on the "Porta-Shak" is full quieting into the OKC repeaters while the TV antenna is pulling in solid color from all local channels. I sure enjoy getting back to the "simple life" and roughing it in the great outdoors! Charcoals ready, excuse me while I put the steaks on.....

I don't know what all this has to do with Amateur Radio except that it's a good way to keep the equipment checked out under portable operating conditions. It is also nice to check into the traffic nets and keep in touch while enjoying a weekend or more of roaming.

Field Day is coming up June 28/29. Charley, WA5JGU, our representative on the CORA Field Day Committee reports that the Lake Overholser site has been reserved again for this year's operation. Make your plans now to participate and let Charley know that you will be there to help. Traditionally, we have been a little light on operators to keep going full blast through the wee hours of the morning. This year CW contacts count double, so we need to concentrate on CW. All CW operators take note. Also, the "traveling" Trophy, sponsored by the Wheatstraw ARC, for highest score on 6 and 2 meters should come to OKC this year - how about it?

The Oklahoma Amateur Picnic/Campout at Lake Overholser picnic shelter is coming up June 21/22. This is a fine opportunity for a casual weekend of unstructured relaxation and "eye ball" QSO's with amateurs coming in from all over the State. Traditionally, the cover dish dinner Sunday noon has been the only scheduled event. Would a weiner roast Saturday night be an appropriate addition this year? Let me know what you want.

See you all at the meeting Friday.

73  
Bob W5HXL

Beware of NiCad Memory

Just a reminder if you have NiCad batteries in your walkie talkie or other portable appliances. They have a "memory" such that if you run them down just a little bit then recharge, they start believing that is all they should put out and will go dead long before you expect them to. The solution - periodically discharge them then give them a full charge.



# MINUTES OF ACARC MEETING HELD 2 MAY 1975

The meeting was called to order by Bob Ashby, W5HXL, at 2007 CDST. There were 24 members and guests present. President Bob asked each to introduce himself but to withhold comments because of the expected long program. Among the new faces were Bob Rogers, WA5EEZ, and "no-calls" Gene, Fred and Brady.

George Lagaly reported on estimates received for the sandblasting of the Club emergency power trailer. Motion was made, seconded and passed to allow an expenditure of \$50 for that purpose.

W5HXL advised that in absense of Charlie Greene, WA5JGU, he would report that the field-day site has been reserved. One of the objectives for this year will be to get the VHF trophy away from the Wheatstraw Club.

Howard Ridgway, W5WSW, reported on the tornado near Cordell. WA5FWD added that there were no injuries, although property damage did occur.

Don Templeman advised all those present to check the addresses on their Collector and Emitter, so "purification" of the lists can be performed.

President Ashby asked for assistance in removing a mess of printed wiring boards that was cluttering the W5PAA "shack".

Billy Oliver, K5KDR, introduced his fellow townsman, H. O. Townsend, WA5MLT, as speaker for the evening.

H. O. presented what he called a one-hour condensation of the two-week course he teaches at the US Postal Training Center. It covered the Multi-position Letter Sorting Machine, of which the Postal Service has between 750 and 800 in use. He said one such machine can sort about 35,000 letters per hour, 110 hours per week. There are 4 such machines in Oklahoma City and 8 or 10 in Dallas. It requires 18 to 20 people to operate one machine, plus one maintenance man for each two machines.

The discussion was illustrated by projected pictures so the audience got a good idea of the size and complexity of "contraption" and the logic systems built into it. Although the amount of electronics is small, H. O. stirred up good interest and gave us a good insight on automation of mail handling.

The meeting was adjourned about 2140 CDST for coffee, doughnuts and scrounging among the PCB's.

Ellard W. Foster, W5KE  
for Billy J. Oliver, K5KDR, Secretary/Treasurer

FOR SALE: The Oklahoma Civil Air Patrol has about twenty T-278/U VHF transmitters which they have agreed to sell to amateur radio operators for the low price of \$5.00 each. For conversion to a 50-60 watt SSB linear, see May issue of 73 Mag, Page 108. For further information or purchase, Call Don Graham WA5TAW, Tele: 733-3044.



## Club NEWS

W5LOW  
The Elmer Gooder Memorial  
Station

### FROM THE PRESIDENT

#### COMMITTEES OF ONE

A HEARTENING RESPONSE WAS RECEIVED FROM THOSE PRESENT AT THE APRIL MEETING. THE PROPOSAL WAS THAT EACH MEMBER CONSIDER HIMSELF A COMMITTEE OF ONE CONSTITUTING A PROGRAM COMMITTEE. THIS BROUGHT OUT DISCUSSION CONCERNING JUST WHAT NATURE OF PROGRAMS WERE DESIRED.

HERE ARE SOME THAT WERE SUGGESTED:

1. SATURDAY MORNING COFFEE AND CHATTER SESSIONS. THIS RANKED HIGH, BUT NO PERSON VOLUNTEERED TO TAKE OVER COFFEE DUTIES WHEN W5HXL WAS NOT AVAILABLE FOR HIS PUBLIC-SPIRITED SERVICES. SUCH A SESSION ALSO OFFERS OPPORTUNITY FOR CLEAN UP WORK ON THE SHACK AND EQUIPMENT.

2. HIDDEN TRANSMITTER HUNT. FUN, BUT NO INDICATION OF HOW MANY MEMBERS HAD EQUIPMENT FOR THE SEARCH. AND WHO HIDES THE TRANSMITTER? SUCH DETAILS CAN BE WORKED OUT BY THE APPROPRIATE VOLUNTEER COMMITTEE OF ONE.

3. CARAVANS, WITH 146.52 AND 146.94 MHZ INTERCOMMUNICATION. SOUNDS GOOD. WHEN? WHERE TO? WHO CAN GO? OVER WHAT PERIOD OF TIME? AGAIN, AN IDEA WORTH PURSUING BY A CONCERNED COMMITTEE OF ONE.

4. NON-TECHNICAL PROGRAMS BUT RADIO-RELATED. HOW TO CHASE DX. THE HISTORICAL DEVELOPMENT OF RADIO. THE BACKGROUND OF AMATEUR RADIO. I WILL PRESENT PROGRAMS OF THE LATTER TWO BUT WANT TO BE SURE THAT THE SUBJECT DOES NOT PUSH ASIDE MORE PERTINENT PROGRAMS.

5. TECHNICAL PROGRAMS, THE HEART OF AN AMATEUR RADIO CLUB, FOR IT IS THE COMMON BOND OF AN INTEREST IN RADIO THAT WELDS SUCH DIVERSE PERSONALITIES INTO A COHESIVE GROUP. JOE BUSWELL VOLUNTEERED FOR ONE OR MORE. JIM WILLIAMS CAME UP WITH THE SUGGESTIONS OF A NON-AMATEUR ... THAT IS, NOT A LICENSED RADIO OPERATOR ... CONSTRUCTOR TALKING ON A SOPHISTICATED RECEIVER. HE WAS ASKED TO ARRANGE FOR SUCH A PROGRAM. THE WHOLE SUBJECT OF TECHNICAL PROGRAMS WAS EXPLORED IN SOME DETAIL. SOME WANTED CONSTRUCTION PROJECTS. SHOULD THESE BE MODERN, "STATE OF THE ART" TYPES INVOLVING NEW COMPONENTS AND INNOVATIVE TECHNIQUES? YES, SOME SHOULD BE OF SUCH NATURE. BUT, TOO, THERE WAS A DEGREE OF INTEREST IN SIMPLE PROJECTS, SUCH AS THOSE THAT COULD BE BUILT FROM PARTS FOUND IN THE AVERAGE HELLBOX.

WE'RE EMBARKING UPON A TRIAL PERIOD, A PERIOD THAT'LL DETERMINE JUST HOW INTERESTED MEMBERS ARE IN THE WELL-BEING OF OUR CLUB. THAT INTEREST WILL BE DISPLAYED IN THE DEGREE OF ACTIVITY OF EACH MEMBER AS A "COMMITTEE OF ONE" SERVING AS PROGRAM COMMITTEE.



Club  
NEWS

W5LOW  
The Elmer Gooder Memorial  
Station

SOME PARTS OF OUR FUTURE PROGRAMS ARE NAILED DOWN. FOR JUNE, WE'LL HAVE A COMBINED SOCIAL MEETING PLUS ANTENNA ERECTING PARTY AT THE FIELD DAY SITE. FOR JULY, WE'RE INVITING THE ACARC TO BE OUR GUESTS AT OUR USUAL MEETING PLACE. WE'LL WANT, OF COURSE, A REALLY GOOD GENERAL-INTEREST PROGRAM FOR SUCH A MEETING. FOR AUGUST? WELL, IF ANY ONE IS WELL ENOUGH RECOVERED FROM THE STATE ARRL CONVENTION TO DRAG THE BODY OFF TO A CLUB CONCLAVE, WE OUGHT TO SEE THAT SUCH AN AMBITIOUS SOUL IS REWARDED WITH A GOOD PROGRAM.

IDEALLY, OF COURSE, WE SHOULD HAVE PROGRAMS ESTABLISHED WELL IN ADVANCE. EACH ISSUE OF C-E SHOULD CONTAIN THE CURRENT AND THE FUTURE MONTH'S PROJECTED ACTIVITY. CAN WE ...READ THAT AS YOU... MAKE REALITY OUT OF THIS IDEAL?

IF MEMBERS WILL CARRY ON THE WILLINGNESS AND THE SEARCHING ATTITUDE SHOWN AT THE APRIL MEETING, OUR CLUB WILL BE ASSURED OF A PROGRAM FOR 1975 THAT WILL MEET SELF-ESTABLISHED GOALS. LET US NOT FORGET, HOWEVER, THAT IT TAKES THE UNFLAGGING INTEREST AND THE UNCEASING EFFORT OF EACH MEMBER, AS A COMMITTEE OF ONE, TO ACHIEVE THOSE GOALS. CARL, W5JJ

MINUTES OF MAY 16 VHF CLUB MEETING

The meeting was called to order at 8:03 p.m. by President, Carl Drumeller, W5JJ. The minutes of the April meeting were approved. Fourteen members and two guests were present. Self introductions and comments were made by each member.

State EC, Leonard Hollar, WA5FSN, presented certificates to Ken, WB5KHU, Joe WA5TRS and J.W., WA5KFT, for their service during a recent emergency.

Field Day chairman, J.W., WA5KFT, reported that a pick-up will be needed to carry a 55 gallon drum of gasoline to the Field Day site.

Station trustee, Ken, WB5KHU, reported that the 80 and 40 meter antennas at W5LOW have been repaired. He asks that anyone operating the TR-3 retune it to 3900 after use. Also, after receiving over \$100 in pledges from members, Ken has ordered an Icom IC-22 for the club station. Pledges are still being accepted.

The program was presented by Claude Cox, designer and builder of a fourteen band receiver with digital readout, and a frequency counter.

the meeting was adjourned at 9:16 p.m.

Jef Casey, WB5GWB, Secretary

WANTED - Will buy (or trade for) Heat-Sink type (metal) plate caps for 813s - need four. Also urgently need a 3:1 interstage audio transformer, screw terminal type preferred, for replica of my first receiver. Jess Speer 321-7302.



MEMORANDUM OF AGREEMENT  
ON  
DIVISION OF EMERGENCY SERVICE RESPONSIBILITIES  
FOR AMATEUR RADIO ORGANIZATIONS WITHIN THE  
OKLAHOMA CITY METROPOLITAN AREA

1. We, the undersigned, duly authorized by our respective organizations to represent them in this agreement, certify by our signatures the acceptance by our organizations of the responsibilities outlined below and concur in the division of these responsibilities as listed. We also pledge the resources of our organization and the members of our organization to fulfill these responsibilities insofar as possible.

a. OKLAHOMA CITY AUTOPATCH ASSOCIATION, INC.

(1) Will organize, operate, and control the Central Oklahoma Weather Warning Net (COWWN) on the WR5ACB (146.22/146.82 MHz) repeater for the purpose of severe weather information only.

(2) Will organize, operate, and control an informal net as required on the WR5ACB (147.81/147.21 MHz) repeater for the purpose of handling health, welfare, and morale messages only.

b. MID-OKLAHOMA REPEATER, INC.

(1) Will organize, operate, and control the Central Oklahoma Disaster Control Communications Net (CODCCN) on the WR5ADE (146.34/146.94 MHz) repeater for the purpose of handling Disaster Control information in direct support of official organizations only.

(2) Will organize, operate, and control an informal net, as required, on the WR5ADF (146.07/146.61 MHz) repeater for the purpose of handling health, welfare, and morale messages only.

(3) Will provide an operational 2 meter FM station at the American Red Cross Western Division office under the call sign WA5YTI for use by licensed operators to access the COWWN and the CODCCN.

c. OKLAHOMA CENTRAL VHF AMATEUR RADIO CLUB

(1) Will maintain and operate Amateur Station W5LOW at the American Red Cross Western Division office for transition of information between the local VHF nets and HF medium and long distance communications nets in support of American Red Cross functions.

(2) Will, upon approval of Oklahoma County Civil Defense authorities, maintain and operate the Oklahoma County Civil Defense communications van when deployed to the disaster or emergency scene.

d. UNIVERSITY OF OKLAHOMA AMATEUR RADIO CLUB

- (1) Will organize, operate, and control an informal net, as required, on the WR5\_\_\_ (146.28/146.88 MHz) repeater for the purpose of handling health, welfare, and morale messages only.
- (2) Will maintain and operate a portable operating location at the National Severe Storms Laboratory to provide information from and access to the COWWN and the CODCCN in support of NSSL functions.
- (3) Will maintain and operate a portable operating location at the University of Oklahoma Meteorology Department to provide information from and access to the COWWN and the CODCCN in support of their functions.

e. AERONAUTICAL CENTER AMATEUR RADIO CLUB

- (1) Will maintain and operate Amateur Station W5PAA at the FAA Aeronautical Center for transition of information between local VHF nets and HF medium and long distance communications nets.
- (2) Will organize and identify specific amateur stations/locations with VHF and HF capability to provide extensive interface capability between local VHF nets and HF medium and long distance communications nets.

f. OKLAHOMA CITY AMATEUR RADIO AND ELECTRONICS CLUB (WESTERN ELECTRIC)

- (1) Will organize, operate, and control an informal net, as required, on the WR5ADZ (146.16/146.76 MHz) repeater for the purpose of handling health, welfare, and morale messages only.

2. Activation of any of the formal or informal nets on a repeater is the responsibility and authority of the Emergency Coordinator ( or designated individual) for that repeater organization. Should circumstances dictate, each repeater identified for health, welfare, and morale message service can, upon coordination with the appropriate Emergency Coordinator, be declared a dedicated net as an extension of either the COWWN or the CODCCN. The Net Control Station of the extension net will act as interface to the formal net.

3. Each organization will develop appropriate written plans and procedures for operation of nets on their repeaters and make them available for bulk distribution to members of all organizations. Lists of HF/VHF interface stations and similar information will also be made available.

4. Membership in any one organization will not preclude any licensed amateur operator from volunteering for and participating in any aspect of emergency service conducted by his organization or any other organization party to this agreement.

5. Changes to this Memorandum of Agreement will be made by attachment of a written change signed by the authorized individual from every organization party to the Agreement. Proposed incorporation of new capabilities into the agreement will be prepared and coordinated by the organization developing the new capability.

SIGNED AND DATED

*Donald E. Graham* 19 Sep 74  
DONALD E. GRAHAM WA5TAW  
Emergency Coordinator  
MID-OKLAHOMA REPEATER, INC.

*Tony Merritt* Sept 28, 1974  
TONY MERRITT K5CFM  
Emergency Coordinator  
OKLAHOMA CITY AUTOPATCH ASSOC, INC

*Joe Buswell* Sept 19, 74  
JOE BUSWELL WA5TRS  
Emergency Coordinator  
OKLAHOMA CENTRAL VHF AMATEUR RADIO CLUB

Emergency Coordinator  
AERONAUTICAL CENTER AMATEUR RADIO CLUB  
*Edward E. Ridgway*, W5

*Shutale*  
Emergency Coordinator  
OKLAHOMA CITY AMATEUR RADIO AND  
ELECTRONICS CLUB (WESTERN ELECTRIC)

Emergency Coordinator  
UNIVERSITY OF OKLAHOMA AMATEUR  
RADIO CLUB

*W. T. H. H.*

Well, we finally got the Emergency Data Cards ready for distribution. These cards are intended to speed up and smooth out the assignment of volunteers to the various services that the Oklahoma City area clubs have volunteered to provide. The cards will be used in conjunction with the Memorandum of Agreement signed by all clubs which divides the various services by club primary interest. A copy of the Agreement and an E.D. Card is enclosed in this Newsletter. Each card should be filled out completely, stamped, and dropped in the mail. The cards received will be copied and copies sent to the Emergency Coordinator of the club responsible for the emergency service which you list as Number 1. This, of course, will not preclude your participation in any other of the services. It will just give the Emergency Coordinators a list of volunteers from which to work. It is hoped that this pre-planning and organization will allow the amateur radio services in Oklahoma City and its suburbs to respond more rapidly and more effectively during the inherently confusing disaster periods. We thank you for your assistance and cooperation in achieving this.

Don Graham, WA5TAW



Club  
NEWS

VSLOW  
The Elmer Goodier Memorial  
Station

FRIDAY NITE SOCIAL - ALL AMATEURS

BRING WIFE ...OR GIRLFRIEND, AS APPROPRIATE... AND GRUB OUT TO LAKE OVERHOLSTER, JUNE 27, THE FRIDAY NIGHT BEFORE FIELD DAY WEEKEND. THE VHF CLUB WILL BE HAVING A SOCIAL MEETING, CONSISTING OF SET UP OF TENTS AND GEAR FOR FIELD DAY, FOLLOWED BY A PICNIC. THE BIGGIE THAT REQUIRES A LOT OF HANDS IS THE COOK TENT.

NO OFFICIAL BUSINESS IS EXPECTED TO BE CONDUCTED - ONLY THE MONKEY VARIETY.

EVERYONE IS INVITED - FESTIVITIES START AT 6 PM, OR SOON THEREAFTER.

HOMEBREW

I MUST SAY THAT I AM MORE THAN A LITTLE BIT SHEEPISH ABOUT MY HOME BREW EXPERIENCE AFTER SEEING THE RECEIVER AND COUNTER CLAUDE COX BROUGHT TO THE MAY MEETING!

I CONSIDER MYSELF SOMEWHAT OF A 'HOMEBREWER', HAVING BUILT A FEW LITTLE THINGS LYING AROUND MY SHACK, BUT COMPARED TO CLAUDE'S EQUIPMENT, MY STUFF IS COBBLED UP JUNK. NOT 'JUNQUE' BUT 'JUNK'. THE PATIENCE HE MUST HAVE TO WORK OUT ALL THOSE LITTLE DETAILS AND DEVELOP THEM INTO THE FINAL, FINISHED HARDWARE IS EXTRAORDINARY. I FELT THAT, AFTER EXAMINING THE RECEIVER AND LISTENING TO HIS EXPLANATION OF WHY AND HOW HE DID CERTAIN THINGS CERTAIN WAYS, I HAD MET AN ARTIST, A TRUE CRAFTSMAN AND A REAL GENTLEMAN.

I'M NOT DISCOURAGED THOUGH- JUST A LITTLE HUMBLLED. LIKE MOST OTHERS, THE MAJORITY OF MY PROJECTS NEVER GET PAST THE DOODLING PHASE. YOU CAN REST ASSURED THAT THE NEXT TIME I'M TEMPTED TO SLING SOMETHING TOGETHER, I AM GOING TO BE REMINDED OF CLAUDE AND HIS CRAFTSMANSHIP. I DON'T THINK I'LL EVER IMPRESS HIM - MY GOAL WOULD BE TO TRY AND MEET HIS APPROVAL!

ALL THE GUSHING FLATTERY ASIDE, I HOPE THAT JIM K5VRL PASSES ALONG MY APPRECIATION TO CLAUDE FOR HIS PRESENTATION AND HIS EXEMPLARY CRAFTSMANSHIP. JOE, WA5TRS

A recent interesting bargain cropped here in Oklahoma City. Radio Shack had a number of their Realistic MINI Weather radios on sale for \$7.95. These little receivers can be very easily modified for use as 2M repeater monitors. To modify the units, the following changes are made: Add ten picofarads to C1, C4, and C10. Replace C37 (C38 in some units) with a five picofarad unit. Then tune the unit to receive the repeaters in the upper middle of the tuning range by squeezing (or spreading) the oscillator coil. At the time of this printing, over fifteen of the units have been modified and have proved quite sensitive, even if not terribly selective. It sure makes an inexpensive way to provide a monitor for the Severe Weather Net during this stormy time of year.

Don Graham WA5TAW



## TECHNICAL REVIEWS

W 5 J J



TELECOMMUNICATIONS, Apr, courtesy of W5KE, delves into comparisons among different types of modulation for dependable radio communication. Never delude yourself into thinking F3 or A3J necessarily are the only ones to be considered!

HAM RADIO, May, is devoted to antennas. By far the best is the first article; be sure to read it, especially the first paragraph on page 9! The idea presented on shunt-feeding grounded towers involves much more time and effort than "cut and try". There are some questionable assumptions in the item on "bow-tie" antennas. The loop antenna for reception seems to be regaining popularity after a hiatus of 50 years!

73, May, describes a novel moisture detector. The author (authors?) confuses one with "We wish to thank our XYL....." Did this ex-young and ex-lady female practice polyandry? The interesting series on telephones is continued. Wayne tells how to pick a good cassette recorder for SSTV work. Some out-of-the-ordinary (and good) ideas for use on a regulated power supply are presented. A complete and detailed guide for purchasing VHF FM transceivers covers nine pages! There are a number of articles for "digital diddlers", some for SSTV addicts, and even for a "cloud 9" type on ether.....Wayne tries for something for everyone!

WORLD RADIO NEWS, Apr, relates many instances of assistance to the public by radio amateurs. (The editor tries to delete "ham" as an equivalent to "radio amateur".) One article tells of a W6's experience of operating while in Europe. You should cut out and preserve the section on legal decisions upholding an amateur's right to use his licensed station! It may save you legal fees when waved under the nose of an obstreperous neighbor (or City Attorney). Another good item concerns public relations. WA6PIU plugs the use of CW Nets for traffic; there's no doubt that they're faster and far more accurate than voice nets. WB6QHL evaluates various code-teaching methods.

AMATEUR RADIO, Mar, (boat mail from Australia takes time), shows an elaborate assault upon the problem of automobile ignition interference. Another article describes a year-long daily schedule between VK and G on 14 MHz, analyzing the factors affecting such communication.

CQ, May, kicks off with a superb history of the National HRO receiver, relating much of the status of receiver "state of art". W9EGQ, in his Novice Section, passes on info on transmission lines that would enlighten many holders of General and Advanced Class licenses. WA2NDM gives detailed instruction on building a counter prescaler.

QST, May, as always offers many excellent technical articles. Be sure to read the one on designing with transistors. Another good one is on an active AF filter. Limited-space antennas, by W2JPN, makes informative reading, too.

RADIO COMMUNICATIONS, Apr, has its greatest interest in its Technical Topics, receiver design getting the greatest play. Another item deals with VLF and ELF communication, using techniques similar to those used by the Signal Corps in the Kaiser War. Parametric amplifiers and varactor frequency multipliers get a short but quite excellent treatment. There's an unusual device for the SSTV addict.



## TECHNICAL REVIEWS

W 5 J J



AMATEUR RADIO, Feb (delayed by a fire in print shop), has words, sometimes confusing, on tuning a quad antenna. VK2ZA describes an unusual technique for ensuring that large drilled holes will be truly round. VK3BM shows his phased vertical antenna system for 1.8 and 3.5 MHz. VK5NN describes a 600-ohm AF filter with a sharp cut-off below 210 Hz.

SHORT WAVE MAGAZINE, Apr, gives building details for a 3-watt 1.8 to 7 MHz two-transistor transmitter. The output coupling system is a bit unusual. The conclusion of a two-part article on a transverter for 432 MHz covers tune-up.

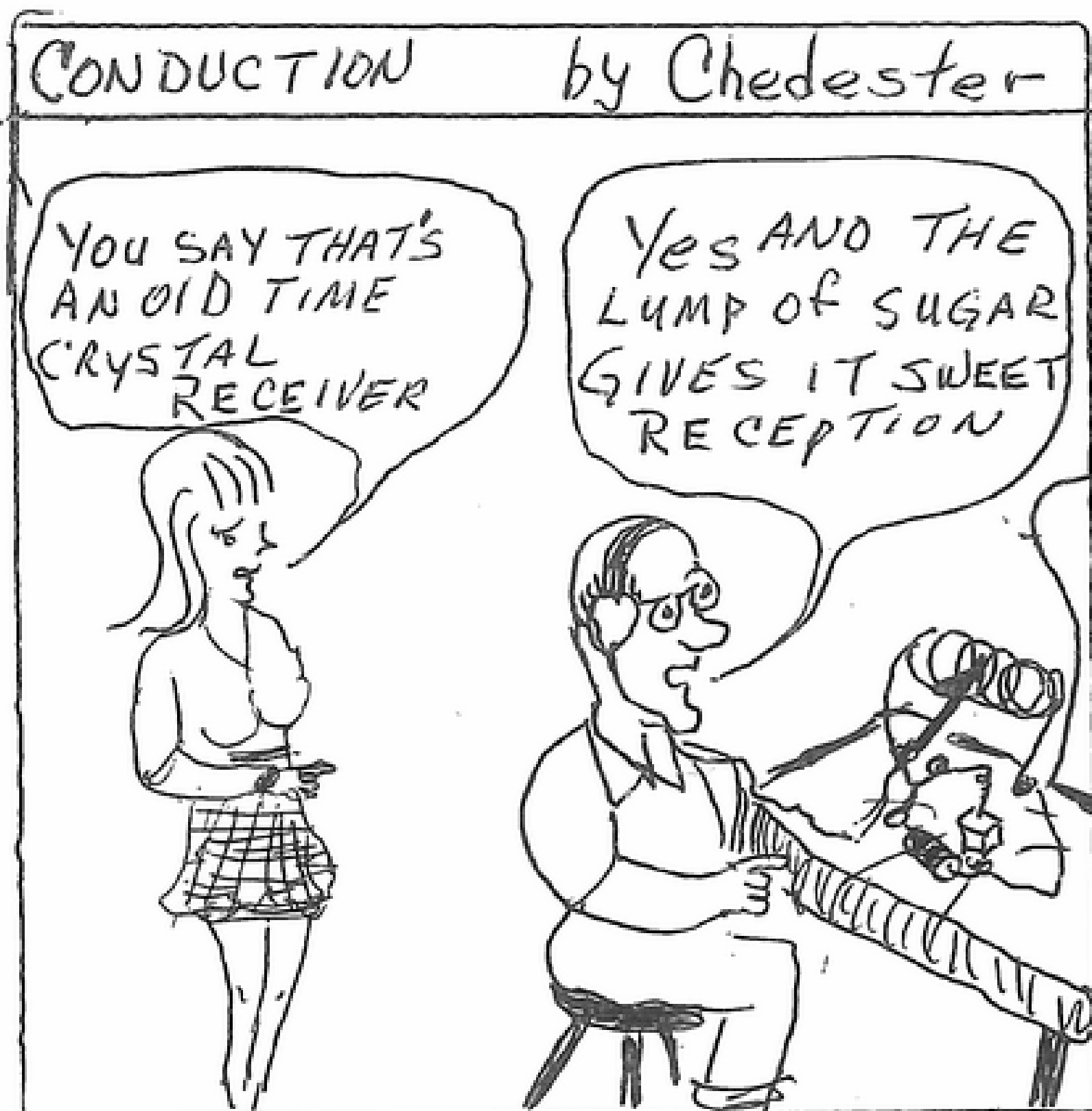
ELECTRONIC ENGINEERING TIMES, 5 May, announces the discovery of superconduction in a polymeric solid, suggesting that superconduction may be more widespread than formerly believed.

PRACTICAL ELECTRONICS, Jun, has these: Designing Power Supplies, Biasing Transistors, Getting Started with Op Amps, and Active AF Filter for CW.

Diodes, Transistors, and Inductors: Those free diodes, transistors and inductors in the "grab bag" at the May ACARC meeting are easily identified. The diodes are 200 PIV at 0.25 A, the transistors all are P-type germanium, and the inductors check 1 mH on a GR bridge.

FOR SALE: Drake SPR-4 Communications Receiver with DC power supply cord and calibrator. This receiver is like new and it has a built in speaker, but I will let it go with a new Drake MS-4 speaker for \$375. Drake W-4 wattmeter (new) for \$40.

Bill Jones W5LTJ  
721-5334



### HOT GEAR FOUND - IN POLICE CARS

Two of 40 missing FM radios were recently found being used in New Jersey police cars. The sets were stolen from New York Con Ed last year. The whole situation came to light when the company that sold the stolen radios refused to service one of the sets and the owner wrote to the manufacturer... only to learn that his set was listed as stolen. That was one service job they should have handled... for free.

from HOTLINE, May 16, 75

## TECHNICAL TOPIX

### CO-AX CABLE FACTS IN A NUTSHELL

Compiled by T. H. Stahl, W8MO

Item 1. The outer jacket on co-ax cable is very important in determining what the life span the cable is. Cable with vinyl jackets come in two types: Class 1 - contaminating type originally used on cables such as RG-8/U, RG-58/U and RG-59/U. This jacket material when manufactured kept flexible by incorporating a platisizer or extender. Unfortunately, as soon as the cable is jacketed, the extender starts to move from the jacket thru the shield braid into the polyethylene insulation around the center conductor. This causes the polyethylene to change its insulation characteristics with increasing electrical losses. These losses can be readily measured after a year or two. Thus the older cables, particularly surplus cable that is old is no great bargain at any price.

Item 2. Later cables have used what is called a Class 2A jacket. This material is long lived, abrasion resistant, not damaged by sunlight, it can be buried for underground runs, and best of all is non-contaminating to the polyethylene center conductor insulation. All of these advantages add up to a useful life for the cable of 10 to 20 years (how does that sound?) and the Class 2A jacketed cable has not, I repeat, has not increased the cost of the cable to us, the amateur using co-ax cable. Examples of these cables are RG-213 replacing RG-8, RG-58C/U replacing RG-58/U, RG-59B/U replacing RG-59/U, etc.

Item 3. With RG-8/U no longer being a MIL-SPEC cable, the shielding no longer has to be made so well. The result is cheapened shielding, less density of the braid. This has been cheapened to such an extent that if you bend the cable the braid spreads to leave holes in it so you can see the inner insulation. Therefore, it behooves us to refuse to purchase NON-MIL-SPEC cables. As frequencies get higher, there would be more and more RF leakage thru these poorly made cables. The manufacturers did not cut the price on the NON-MIL-SPEC cables, merely cheapened them.

Item 4. Theoretically foamed insulation on cables should increase their efficiency. However, they are none of them made to MIL-SPEC as far as shielding, do not have Class 2A jackets and, unless the foam is gas filled to keep moisture from oozing thru the jacket into the foam, are not desirable. Losses go up very rapidly if moisture gets into the foamed insulation.

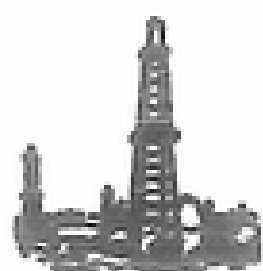
To conclude, stick with late types of co-ax using Class 2A jackets, leave the foamed co-ax to TV types. Jacket type for a co-ax can be checked in the cable makers catalog. Cable jacketed with 2A jacket is normally no more expensive than the older NON-MIL-SPEC cables.

Compiled from "AMPHENOL" and "TIMES WIRE & CABLE ENG." data.

(Reprinted from DARA Bulletin)

### OKLAHOMA AMATEUR RADIO PICNIC/CAMPOUT

This has become an annual affair at the Lake Overholser Picnic Shelter. It is scheduled for June 21/22, 1975, one week before field day. This is a completely informal affair, with no planned activities other than a covered dish dinner at noon on Sunday. Overnight camping is permitted, so plan on bringing your trailer, camper or pup tent and spend a weekend of leisurely loafing and "eye ball" QSO's, or come out and visit as your time permits.



## MID-OKLAHOMA REPEATER INC.

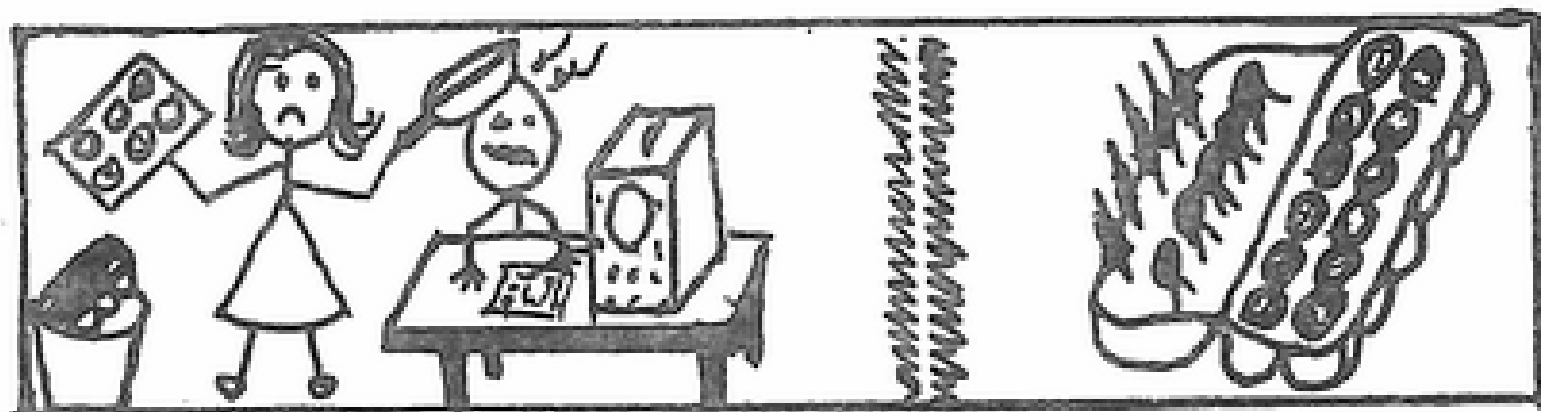
The next scheduled MORI meeting will be July 8, 1975. Please note that this month we will meet with the Oklahoma City Autopatch Association. Please check their section of this paper for details.

There will be an Executive Committee meeting June 3, 7:30 P. M. at ECC.

MORI has a new Vice President! It's Jim Kearns, WA5LFN. I am personally looking forward to working with Jim and I know that you are also.

You never know who you will find on two meters and where! We had a wedding at our house this past month and our oldest daughter is now living in San Diego. To make a long story short, on my return trip from moving her out there, I decided to detour through Los Angeles. So, last Sunday morning while pulling onto the interstate to head back home, I heard a very familiar voice and call, WB5JDZ. It took a few seconds to realize that it was Mack from here in our own bunch. He was heading for home with his Trans-Con Truck, 2 meters and all! It made a long lonesome drive not only a lot shorter, but much more interesting with stops for coffee and good eyeball. I think his co-driver, Walt, will be joining our ranks very soon. 2 meters was great both ways - the people were very friendly and helpful, saving us a lot of time in road advice and just good, time passing conversation. Thanks, Mack, for a nice day and for some very much needed electrical tape to cure a nagging shorted wire. I enjoyed the trip, all 2789 miles of it, but am very glad to be home where I can maybe settle down to doing some things at the QTH.

See you at Field Day, June 28/29 at Lake Overholser Site!  
WA5FWD - Bill



If your wife won't let you use her muffin tins for sorting small components and hardware, perhaps you can snatch the egg cartons before she throws them away. The styrofoam kind are best because you can stick wires into them and line up resistors in order. Also, if you must stop your work before you finish, the cartons make nifty storage containers.

### WA4SAM THEFT

One of the most experienced car alarmers going has his car arranged so when someone tries to break into it the horn goes off, a siren starts up, and the lights blink off and on. When it was stolen the other day the thief made the cleanest getaway in ham car history ... according to WA4LCL.

from HOTLINE, May 2, 75



The data below contains the schematic and instructions to hook up the various pads to your transmitter., However, the tone level should be set by a meter before using the patch. Jim (WB5EOL), or Bob (K5PJU) will be glad to help you. Also, at 7:30 P.M. on regular meeting nights, you can set your pads at the meeting place.

	DIAL FREQUENCY MATRIX			
FREQUENCY	1209	1336	1477	1633
697	1	2	3	FO
770	4	5	6	F
852	7	8	9	I
941	*	0	#(A)	P

	FREQUENCY LIMITS	
FREQUENCY	LOWER	UPPER
697	677	717
770	748	792
852	827	876
941	914	968
1209	1174	1244
1336	1297	1375
1477	1434	1520
1633	1586	1680

### EXTERNAL CONNECTIONS

#### 35C3A DIAL

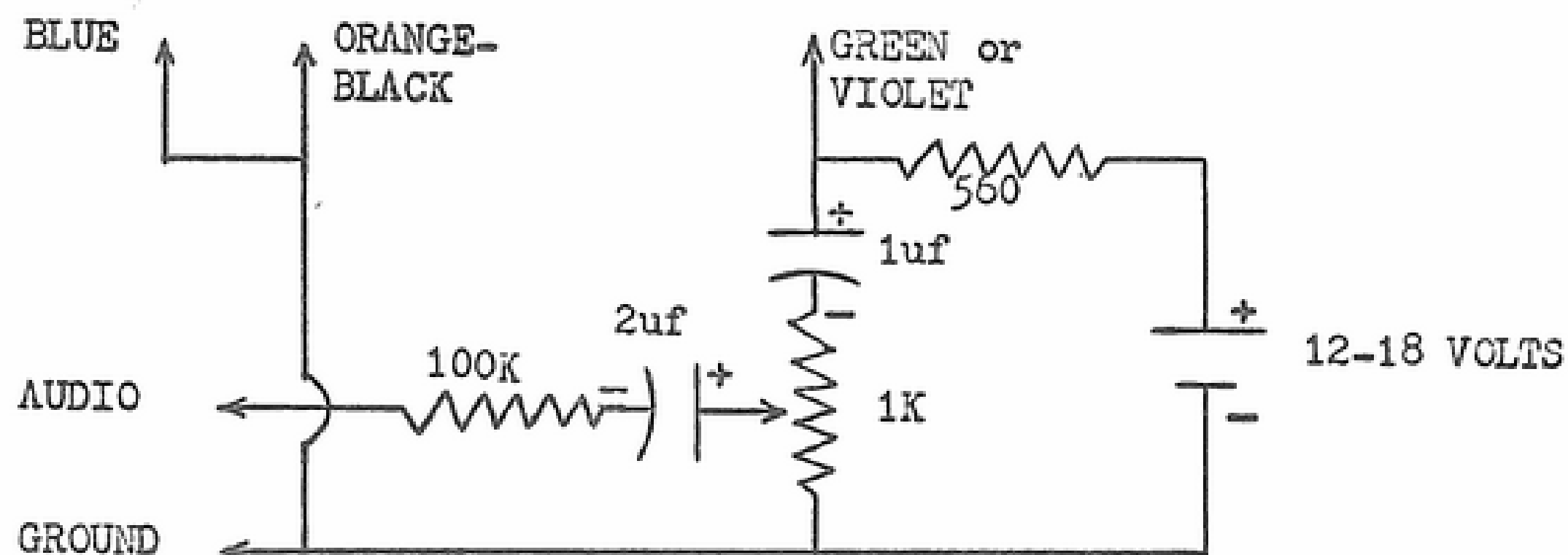
Connect RED-GREEN to BLACK  
Connect GREEN-WHITE to GREEN

#### 32G, 35AD4A or 35Y3A DIAL

Connect RED-GREEN to BLACK

#### 66E3A DIAL

Connect ORANGE to BLACK  
Connect RED-GREEN to BLACK  
Connect GREEN-WHITE to GREEN



## AN EDITORIAL

There has been a noticeable increase in QRM at or near the W1AW operating frequencies in the past several months. There is no doubt that all of us are to some extent guilty of interference with other stations, and I am fully aware that all licensed amateurs have equal claim to the frequencies chosen by W1AW to transmit code practice. However, it is also well known to us that W1AW uses these frequencies for those amateurs and would-be amateurs to become proficient in code. Not only does this QRM bother code practice, but also the official bulletins, Oscar, and propagation data. W1AW does not lay claim to these specific frequencies - as stated each month in QST. These are approximate frequencies. I assume that the operators at W1AW listen prior to starting the code practice sessions so as not to cause QRM. This seems to occur only on frequencies chosen by W1AW as there are other stations transmitting code practice and there is much less QRM on these stations.

I am not waving the banner for ARRL, but do feel that a small percentage of apparent intentional QRM may be some people who have an axe to grind with the league. If this is so, there are other means of settling their differences without causing grief for those other people who are using the services of W1AW to further their code proficiency and or copy the other data furnished by the league. There is mention of this in the April 1975 issue of QST on page 83. In this article a format of a letter that could be used to answer those stations who cause QRM is presented. This would no doubt have some impact on helping reduce the problem.

Don Templeman WN5NIY  
Editor, ACARC


The Mustang EOC has installed a 2 meter transceiver which is used to monitor the weather net and report weather information from this area. The station is operated by Jim Russell (K5HXX) who is the Civil Defense Director for Mustang.

The EOC is new and was completed late in 1974, it is an above ground structure designed to withstand tornadic winds. It is located directly behind Mustang City Hall.

We use our own spotters stationed around the perimeter of the city who are in constant radio contact with the EOC on the cities high band frequency, as well as monitor the sheriff's office in Chickasha and El Reno.

When a tornado is spotted and the alarm is sounded we use the Civil Defense Rescue Unit, Police cars, fire trucks and other city vehicles equipped with lights and sirens to notify residents to go to the cellar. This requires a lot of time so the earlier we get the warning the more time we have to notify the public.

Gary Shidell (WB5JBK)  
Deputy Director

JUNE HAM HAPPENINGS						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3	4	5	6 ACARC meets	7
8	9	10	11	12	13 CORA	14
15	16 MORI - AUTOPATCH Joint Meet (Page 4)	17	18	19	20	21 CAMPOUT- Swap Shop See Pg. 12
22 PICNIC Page 12 	23	24 Edit C & E	25	26	27 ALL CLUB PICNIC OVERNIGHT (Page 9)	28 FIELD DAY
29 FIELD DAY	30					

See page 2 or as indiceted for details.



Aug 2/3      Oklahoma HAM HOLIDAY &  
                  ARRL State Convention  
Oct 24/26    Texoma Hamarama

CORA    COLLECTOR & EMITTER = Box 15013, Oklahoma City OK 73115

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