



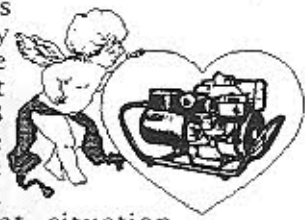
AARC OVER

Bulletin of the Austin Amateur Radio Club

January 1992

AARC-Angel Needed

The Austin Amateur Radio Club is looking for a good person who can donate a gasoline-powered generator to the club, for use in emergencies and at our Field Day site every year. We need a working unit of approximately 3 KW capacity. In the past Stu Rohre has been able to borrow a generator, but that situation underwent a fundamental change on January 1 and the generator's availability for the future is in doubt. If you can help please call club president Jim Neely at 442-4812. Thank you.



Zilker Meating

The annual AARC Club banquet & new-officer installation will be held on Saturday, January 18, 7 PM, at the Zilker Clubhouse. We will have the same Manchaca folks preparing BBQ again this year. There will be some excellent new door prizes, as well as some fabulous White Elephant door prizes. Talk in on the 146.78 MHz repeater. Come chow down with the new club officers.

New City rule: The Club cannot serve alcoholic beverages at the Zilker Clubhouse. BYOB is OK, however.

Banquet cost is \$6 per person. Please fill in the form below, or just a sheet of paper with the information, and send with your check (payable to Austin Amateur Radio Club) to AARC Banquet, P.O. Box 13473, Austin, Texas 78711. Please write the word "Banquet" and your callsign on the front of the check. (Any checks not including "Banquet" and your callsign may be forwarded to an obnoxious charity which will fill your mailbox with pleas for donations for the next 5 years.)

Deadline for mailing your check is January 8. Your ticket(s) will be waiting for you at the door when you arrive for the Banquet.

The Banquet will be held at the Zilker Clubhouse, located on the western edge of Zilker Park, same place as in years past. To get there from MoPac expressway, take the Rollingwood exit, get on the north-

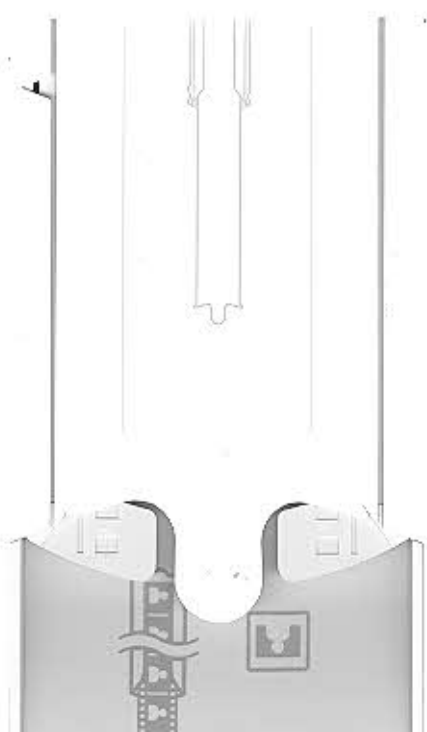
bound access road, turn west (left) under the overpass onto Rollingwood Drive westbound, go 0.3 miles, and take a narrow semi-paved road on the right. This road goes to the top of a hill, where the Clubhouse is. Really nice view of Austin and Town Lake, too!

Note: White Elephant door prizes must weigh less than 10 pounds. No magazines please...save them for Georgetown or Manchaca. You must be able to transport back home all your elephants that nobody is willing to adopt.

AARC Banquet Ticket Order

Name _____

Call _____ No. of tix _____



New Life for an Old Quad

This is a description of my successful surgery on an old boom-type quad antenna to convert it to a 5-band boomless type. Boomless designs (which resemble daddy-longleg spiders, in that all the rigid elements originate at one place) provide correct element spacing for each pair of wire loops, and so give optimal performance on each band.

After a wind storm in April brought down my 30-foot tower and tri-bander, I began the process of replacing both with a better system. A higher tower (70'), better anchors and guys, and a quad antenna were the plan if I could find the parts for a reasonable cost on the used market. I finally purchased an old Unadilla two-element quad on an eight foot boom. It wasn't exactly what I wanted, but the price was right, so I began to plan the conversion to a boomless quad.

After cutting the boom down to about one foot, and remounting the spiders, I added three foot sections of 1-1/2 inch T6 aluminum tubing to each spider arm. When bent to the correct angle, I could remount the fiberglass arms to the split tubing to create my boomless quad. The aluminum tubing is very stiff and was bent by a cooperative muffler shop using an 18 degree cardboard template I provided.

The five wire elements were made from #14 Flex Weave™ antenna wire cut to approximate length and mounted temporarily to the spreaders until the driven element and reflector were resonated. Separate wire loops were installed for 10, 12, 15, 17 and 20 meters.

The only problem tuning the elements occurred from interaction between the 10-meter and 12-meter elements. Once the 12m element was tuned correctly, the 10m tuned up easily. I discovered by trial and error that if the reflector and driven elements are adjusted without stubs or coils, length of each element is not that critical. Front to back ratios also did not change dramatically with fairly large changes in ele-

ment length. If stub tuning is used however, very small changes in stub length resulted in drastic shifts in resonance and F/B ratio. I took my stubs off and went back to tuning directly with element length.

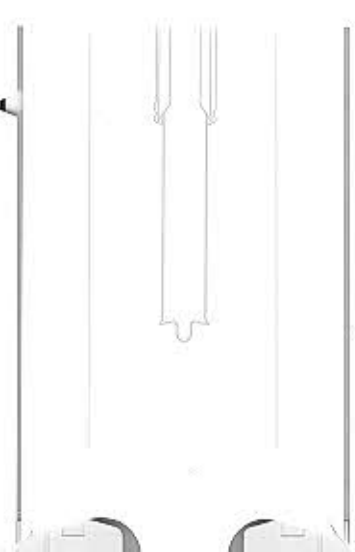
I fed each driven loop with its own length of RG-58 coaxial cables, with the addition of an 8-turn coil to keep RF off the outside of the coax. The five RG-58 cables go to a mast-mounted band-select relay, and a single length of RG-8 runs from the relay to the shack.

The quad was assembled and tuned at ground level while installed in the top section of tower lashed to the base section already anchored into concrete. I tuned the antenna slightly low in frequency (about 50 kHz), knowing the resonant frequency would rise as the antenna height increased.

The biggest trick with a quad is getting it up in the air after construction at ground level. This was solved by leaving the antenna assembled on the top tower section with the rotator and mast, and erecting the Rohn 25 tower up through the middle of the quad! As each section of Rohn 25 was added, the gin pole was used to hoist the top tower section, quad and all, up one more section. The top section and last section erected were then secured together using climbers' carabiners, aluminum ovals with a spring loaded gate (available at REI and Oshman's). These allowed quick and secure mounting of the top section while the next tower section was added. The top section was finally installed with the rotator and antenna already in place. All that remained was pulling wire and coax.

After a couple of months on the air now with the new quad I'm very pleased with the results. Gain seems consistent with the quad's reputation and F/B ratio is an honest 4-5 S units, equal to the best tri-banders I've used. I'd be happy to talk with anyone wanting more details on construction or tuning. Good contacts to you!

de Steve Bosbach, KG5BR



QUA

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Up to Here: Lots of Austin hams put in many hours of service during the Christmas floods. We had folks at the Red Cross building, Emergency Operations Center, and elsewhere. Maybe someone will pull together the facts for an article for the next AARCOVER.

From the Amateur Attorneys: Remember, it is against the rules to repeat on amateur radio (or anywhere else) something you have heard on the public service bands (police, fire dept., etc.).

Of Course: House Bill 696 mandates that all state universities must let seniors (persons 65 and over) attend classes for free. That means that you can attend any kind of course at U.T...computers, electronics, literature, anything...with no tuition. Sorry, you do not receive college credit. (Thanks to "The Bexar Wire")

Better Late than Never: The ARRL has appointed Steve Mansfield as its first public information manager. A public relations veteran, Mansfield will help spread the good news about amateur radio. "I have a chance to help others share the magic I felt [when I built my first radio]," he said on accepting the position.

RSVP: Amateur Radio NewsLine still needs funds. Contact Dr. Norm Chalfin, K6PGX, P.O. Box 463, Pasadena, CA 91102. Listen to NewsLine on Sundays, 9 PM, 146.94 MHz., right after the SwapNet.

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| Rod Moag, W0NDS, Vice President | 467-6825 |
| Pat Neff, NJ7R, Treasurer | 836-2550 |
| Rick Hendrickson, N5LJF, Secretary | 345-2200 |
| Gary Pickens, WX5Z, Activity Mgr | 454-3230 |

Committees & Positions

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| Ed Golla, K3AHS, Technical | 255-4818 |
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| <vacant>, AARCOVER Editor | 555-1212 |
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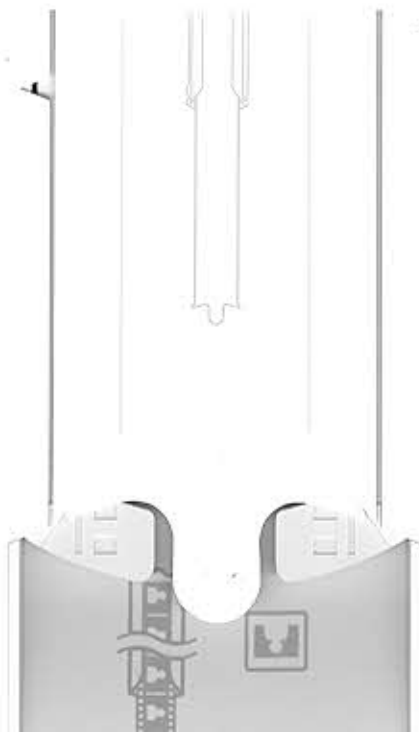
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Insects have antennae.
Hams have antennas.



Minutes

Meeting of the Austin Amateur Radio Club for December 10, 1991:

President Mike Kellam, AA5JP, brought the last regular meeting of 1991 to order at 8:00 PM. This is also Mike's last regular meeting as President.

VISITORS: Gene, call not heard; Zack, N5WBR; Gary, KA6QFB; and Cliff, WB5DYA. Welcome to all and we hope you come again.

MINUTES: The November 12 minutes were approved as printed in the last newsletter.

OFFICER REPORTS: The Secretary, Joe, N5HPC, has extra AARCOVER's.

Treasurer Amado Ramirez, N5PCP, reported that the checking account contains \$2,143.79 and we have paid all bills.

Joe Fisher, K5EJL, is the Trustee of W5KA. He has received our repeater coordination conformation form and asked if there were any changes that should be brought to his attention. There being none, the report will be filed with no changes.

The Activities Director, Gary Pickens, had two items. The first item is the January banquet. It will be held at the Zilker Park Clubhouse on Saturday evening, January 18, 1992. Tickets will be \$6.00 for each person. Tickets can be purchased starting tonight, or you may mail a check to the club mailbox. Please purchase tickets or call early, since we must make arrangements with the caterer several days prior to the meeting. The City of Austin has imposed some new rules upon us. If we SERVE or SUPPLY any alcoholic beverage, we must show insurance or financial li-

ability for at least \$500,000. So this year, we will supply coffee and soft drinks only. Also this year, we will once again have a gigantic WHITE ELEPHANT AUCTION!

Gary's second item was the result of last summer's Field Day. We operated as a one transmitter station (Class 1A). W5KA placed 46th out of 247 stations. Gary thanked everyone who helped obtain these excellent results.

NEW MEMBERS: We had no new member applications.

OLD BUSINESS: None.

NEW BUSINESS: Last month, the nominating committee presented a partial slate of nominees. These were:
President: Jim Neely, WA5LHS
Treasurer: Pat Neff, NJ7R
Activities Manager: Gary Pickens, WX5Z

These were again presented and the committee chairman made these additional nominations from the floor:

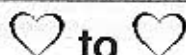
Vice-President: Rod Moag, W0NDS
Secretary: Rick Hendrickson, N5LJF

President Kellam called for further nominations for any office. There being none, Pete Jordahl, K5GM, moved that these persons be elected by acclamation. The motion was seconded and carried on a voice vote.

ANNO UNCEMENT S:

Stuart Rohre, K5KVH, told of a phone call he received a few days previous to this meeting from the Director of the Peace Corps in Haiti. She has been evacuated from Haiti and is now staying in Austin. She left the wrong phone number and did not give her full name. Stuart made several phone calls to the Peace Corps office in Washington before they gave him her name and phone number. The end





Travis County ARES [Amateur Radio Emergency Service] will participate in the annual "Heart to Heart" with the American Red Cross on February 7 and / or 8 (Friday / Saturday). Local Red Cross staff and volunteers will prepare greetings to their counterparts in other states and nations, and we will put them in correct format and get them out onto the national and worldwide traffic nets. We intend to use both voice and packet, and expect to receive some messages, too.

This is a great opportunity for folks with little or no experience in message han-

dling to learn the ropes, so they will be able to assist effectively during an emergency. And of course, as the name "American Radio RELAY League" attests, handling traffic is one of the original reasons for the existence of amateur radio.

result is that she needs to set up a ham radio link to an amateur relative of a member of her Haitian staff in order to track their welfare. If you can help, call Stuart.

John, NT5C, announced an upcoming Georgetown Swapfest on Sunday, February 9, 1992, in the San Gabriel Park Community Center. Because it is on a Sunday, it will not start until noon.

The next ARRL VEC exam session will be on January 11th.

PROGRAM: Stuart, K5KVH, presented the new ARRL video, "Hams in Space", an excellent presentation.

SECRETARY'S NOTE: This is the final set of minutes to be prepared by the present Secretary. I felt it was time for a change and asked for someone else to take over. It has been enjoyable but it is time for "new blood"! Thanks to everyone who has volunteered and helped when needed. Thanks to everyone for their patience when I did not get material out to meet a schedule or deadline. Again thanks to everyone, I plan to keep active in club affairs.

Respectfully submitted by Joe Canfield, NSHPC, AARC Secretary



For more information please check in to the ARES net on Sundays, at 6:30 PM on 146.94 MHz, and at 8:30 PM on 146.78. Or, call Joe Fisher at 926-4689.

de Miles Abernathy, N5KOB

G'Town Swapfest

Sunday, Feb. 9, 1992.

Georgetown Community Center in San Gabriel Park.

No sales before noon.

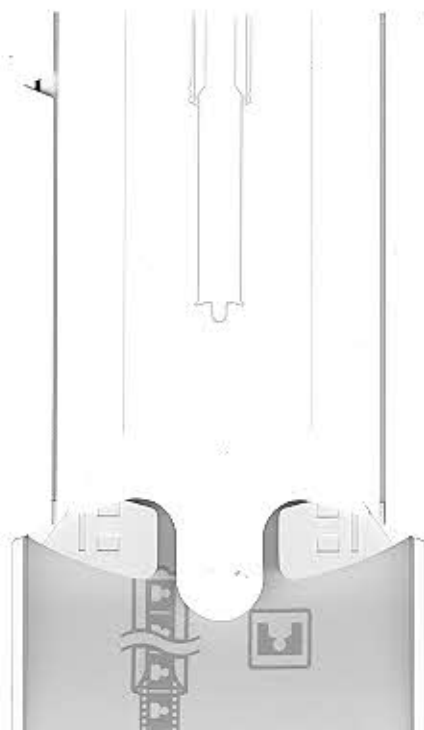
Exams in the morning, but the exact location had not been determined at press time. They may be in the Community Center, or in a nearby building.

Talk in on 145.13 MHz.

For more info and exam location please call Tom Casey, 244-6675.

Anyone having equipment suitable for use by a school amateur radio club, or knowing of a school club needing such equipment, please contact the AARC Vice President or Secretary.

ICOM states that the following models have battery-backed RAM, and will have to be re-programmed by the company when the battery dies: ICOM IC-745, 751, 751a, R71, 271, and 47. They expect the batteries to last 10 to 15 years.



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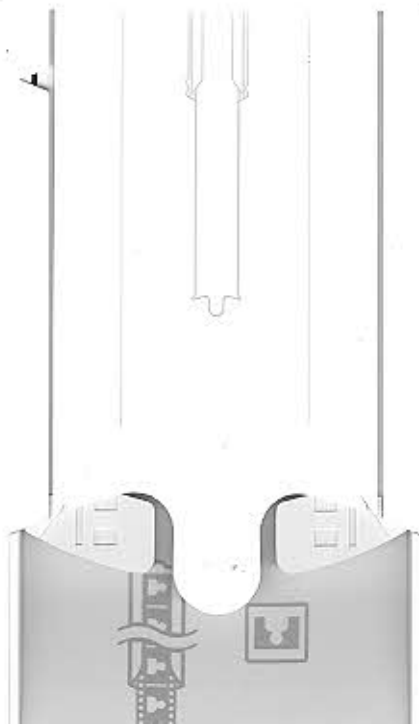
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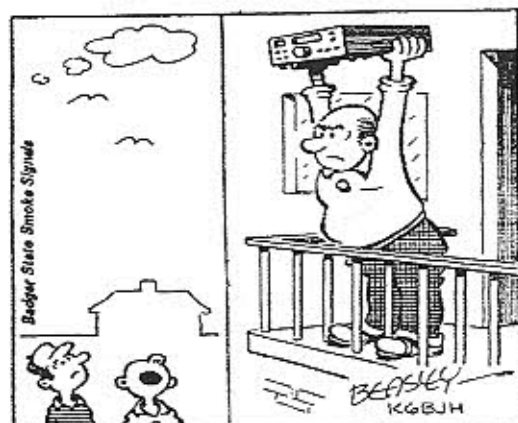
Congratulations!

Here are the results of the December 7, 1991 exams:

| Name | Call | Up to |
|----------------------------|-------|--------------|
| Cheri Smith | — | Novice |
| Ray Burke | — | Technician |
| Scott Scamardo | — | Technician |
| Thomas Yturri | — | Technician |
| Robert Luna | — | Technician |
| George Shirejion | — | Technician |
| Linda Porter | — | Technician |
| Austin Anderson | — | Technician |
| Alvin Seipple III | — | Technician |
| John Trimble | — | Technician + |
| Wm. Montgomery .KB5QPR ... | — | General |
| David Effland | N5NRE | Advanced |
| James Godwin | — | Advanced |
| James Greenwood | — | Advanced |

I would like to thank the following VE's for their valuable assistance: Gary Pickins, Bud Williamson, Mike Kellam and Michael Ruiz. The next W5YI exams should be the first Saturday of February, but at this time, that has not been confirmed. Check on the weekly Sunday swap net (9 PM, 146.94 MHz) for announcements, or call me. I can be reached at 272-8233 after 6 p.m. most days.

de Bill Wehling, KF5NB



TEN METER BAND FINALLY FOLD FOR THIS CYCLE, JOHN?

Having Fun? You Bet!

I was on one night from about 2100-2300 in the 15m CW novice band. The band seemed very dead. I didn't hear anybody. I decided to just call CQ. After a while (I'm thinking the band is really dead), I worked an SM. I am new enough that DX is still fun, even the common ones.



After that, I called CQ again for quite a while. Nothing. Then, as I was about to give up, a 4S (Sri Lanka, I had to look it up) comes back. Had a nice, leisurely QSO, but I was very excited. I subsequently worked about 10 countries (nothing else new, YL, YU, DL, LU, ...), but the strange thing is that even when tuning around between QSOs, I never heard a single W the whole time, as if everyone was politely letting me have the world to myself.

After running an errand, I got back on about a half-hour later, called CQ in the same part of the band and a guy from about 2 miles from me came back. So I set personal records for my longest and shortest distance. I tuned around, and the Ws were back. I don't really enjoy pileups, but when the relatively rare ones come back to your CQ (not even CQ DX) and you get to have a real QSO, it's pretty thrilling.

de Bruce Walker, N1IKV (licensed for 2 months)

The electric arc on the front cover is from the cover of the August, 1975, issue of the AARCOVER.

Guest Editorial

We Need Wayne!

[Note: The following Guest Editorial discusses the "Never Say Die" editorials of Wayne Green, W2NSD, publisher of "73 Amateur Radio" magazine.]



Wayne Green has to take the "outlandish" side of everything in order to force the common garden variety of Ham (overweight, introverted, and lazy) to take some action.

Hams bitch about the ARRL, but do nothing to help...never call or write to let their views be known. So the ARRL has to use "divine inspiration" to determine what their members (and non-members) really want.

Wayne complains, predicts, promises...with the hope that just one, just one little ham, will get off their dead bottoms and take some action.

How many of you have taken the time to teach a Novice class? Elmer one of the newer license folks, started a new club, tried a new mode on the air, played with new antenna design, written an article for QST, 73, etc., called the ARRL, or even...hold on to your hat.. even WRITTEN TO UNCLE WAYNE either saying YEAH or BOOOOOO???

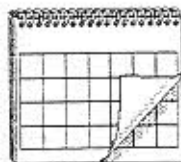
That's Wayne's role in life...hack off people so that they at least take a stand. At Dayton, I usually grab a handful of the I LOVE WAYNE stickers...just to make other hams come up and talk to me.

Yeah, we need some Waynes, otherwise the world would be a dull, boring, predictable place.

73 de Bob Biekert, KA5GLX

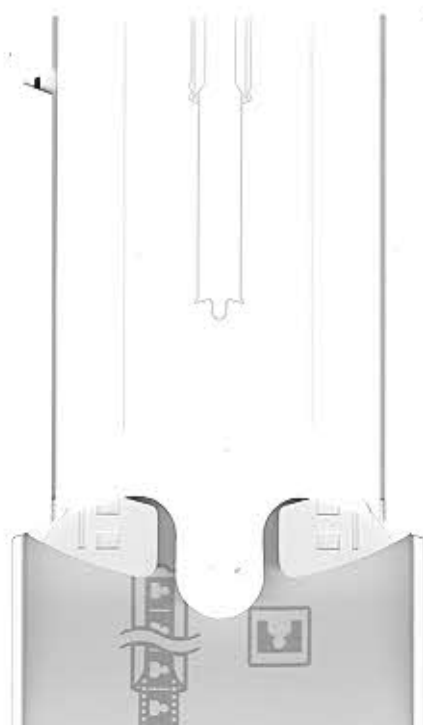
Calendar

- Jan. 11...No-Code License Class begins-Chas., WB5HOI, 263-3435.
 Jan. 11...Ham exams, 8:30 AM, Murchison
 Jan. 11...Transmitter hunt, 7 PM, 146.52
 Jan. 14...NO AARC MEETING (see Jan 18)
 Jan. 18...AARC Banquet @ Zilker
 Jan. 25...San Antonio Hamfest / Swapmeet
 Jan 25...Novice Roundup (until Feb. 2)
 Feb. 1(?)...Ham exams, 8:30 AM
 Feb. 1-8...16th Ham Colloquium, Aspen
 Feb. 4...Austin Rptr Organiz meeting
 Feb. 8(?)...ARES exercise w/ Red Cross
 Feb. 8...Transmitter hunt, 7 PM, 146.52
 Feb. 9...Georgetown Swapfest, noon
 Feb. 11...Austin Amat. Radio Club, 8 PM
 Feb. (late)...ARES wide-area wx exercise
 Mar. 3...Austin Rptr Organiz meeting
 Mar. 7...Ham exams, 8:30 AM, Murchison
 Mar. 7...3M Skywarn class
 Mar. 10...Austin Amat. Radio Club, 8 PM
 Mar. 29...Harris Branch bike race
 Apr. 11...Manchaca swapfest
 Apr. 25...Scout Expo
 June 5-7...HAM-COM, Arlington
 June 27-28...Field Day 92
 July 11...Tidelands Hamfest, TX City
 Aug. 7-9...Summerfest, Austin
 Calendar updates to Miles @ 327-1310.



Weekly Events

- AMSAT Net...Sundays, 6 PM, 224.14 MHz
 ARES Net...Sundays, 6:30 PM, 146.94 MHz
 ARES Net...Sundays, 8:30 PM, 146.78 MHz
 SwapNet, Newslines...Sundays, 9 PM, 146.94
 UT ARC Net...Tuesdays, 9:30 PM, 147.18
 LunchNet...Thursdays, BurgerTex on Airport Blvd.
 QCWA Net...Thursdays, 8:15 PM, 147.18.
 Breakfast...Saturdays, Simon David deli.
 WeatherNet...as needed, 146.94 MHz



MONITOR

**AUSTIN
REPEATER
ORGANIZATION**

PO Box 4763, Austin, Texas 78765

Amateur Radio Club

Operator of Voice Repeaters on 146.28/88Mhz., 146.34/94Mhz., 223.20/224.80 Mhz. and 449.1/444.1Mhz.

Packet Digital Repeater 145.01Mhz.

Sponsor of Central Texas Weather Net, ARO Transmitter Hunt and Swapnet

CLUB OFFICERS

| | |
|---|---|
| President.....Charlie Eichenbaum (WB5HOI) 263-3435 | Vice President..... Mike Pendley(WA5VTV) 331-5350 |
| Secretary.....Phil Steinbach (WB5SUR) 258-3215 | Treasurer.....Tenia Kinney (KA5TXK) 442-8427 |
| Newsletter Editor.....Clovis Womack (WA5DKG) 327-6571 | |

1992 Dues are Due - Tenia Kinney (KA5TXK) the club treasurer will be accepting payment of 1992 dues at the meeting Tuesday night. Dues may also be mailed to the club mailing address of P.O. Box 4763, Austin, TX 78765. Make checks payable to "Austin Repeater Organization", please note your call sign on the check.

A new series of amateur license classes will begin on January 11. There is a need for instructors and class members willing to give demonstrations to the group of students. The fall series of classes had 8 students attending and had 6 of those to gain a new license at the conclusion of the classes.

Jingle Bell Run - Thanks to all the operators that assisted with the Jingle Bell Run.

Congratulations to all those who passed a new license or upgrade this year. The effort by the XYL's and YL's is especially appreciated.



It's a QSL card—they got our message in the bottle.

I will take this opportunity to list some good used rigs to look for at hamfests for 2 meter multimode work that should be available at reasonable cost. Be advised that some rigs like the venerable ICOM 251 are in demand by UHF/Microwave types as the IF stage for transverters so may be hard to find. I'll head the list with that one...the rest should be easier to find.

ICOM 251 - A Great radio. A bit cumbersome for FM repeater work but excellent for simplex FM/SSB/CW. A real workhorse. If you can find one BUY IT. Not a good mobile rig...Too big. 10 watts out.

KENWOOD TR-751 - A fine mobile/base radio. Hot receiver! 25 watts out. You will need a 7 amp or more DC power supply.

KENWOOD TS-700A - A decent Base type unit. Analog dial (700SP is digital) 10 watts output Not real good for FM...a segment in the 145-146 MHz portion is omitted as I recall. Should be pretty cheap though.

KENWOOD TR-9130 - Mobile type. 25 watts. A little hard of hearing (get an amplifier with a pre-amp if you want a hotter RCV.).

ICOM 290A - Mobile type. 10 watts out. Same rcv as the 9130 above. Note: All the mobile types are very good for FM repeater work as well as SSB/CW That's enough for now although there are many more decent rigs out there I haven't mentioned. May get to those another time. 73 for now, Dave Jacobsen, N9DVS via GENIE & N5KOB

San Antonio Hamfest/Swapmeet January 25.

Georgetown Swapfest February 9

Bastrop County Swap Meet at Alum Creek Antique Center - February 22.

Midland-Odessa Hamfest - March 14-15.

Next VEC Exam - on Jan. 11.

ARO Newsletter: Articles are welcome for publication in the *Monitor*. Please submit your Amateur Radio related material to Clovis Womack (WA5DKG) 327-6571 or mail to 1401 Wilson Heights Dr., Austin, Texas, 78746. Text may be typewritten or MS-DOS/ASCII file format.

