



# AARC OVER

## Bulletin of Austin Amateur Radio Clubs

Austin Amateur Radio Club  
Austin Amateur Television Club  
Austin Repeater Organization

February 1993

ISSN 1067-0262

### Club Meetings

#### Austin Repeater Organization

Will meet Tuesday, February 2, 7:30 to 8:30 PM, at Luby's Cafeteria on North Loop (about a block west of Burnet Road). Topic: "HOTERA Packet Weather Network," by Williamson County Emergency Coordinator Brad Rehm, KV5V. While the official start time is 7:30, most folks get there early and eat supper together. See ARO Monitor on page 4.

#### Austin Amateur Radio Club

Meets Tuesday, February 9, 7:30 to 8:30 PM, at Luby's. Topic: "Hams and Other Nuts in Early Broadcasting," presented by Dewey (Durell) Roth, K5KZQ. Stories and schematics of super power transmitters, tapes of early hucksters selling goat glands and other essentials, details of the first phased array, and more! All AARC events are non-smoking.

#### Austin Amateur Television Club

Meets Tuesday, February 16, 7:30 to 8:30 PM, at Luby's. Topic to be announced.

### Up in the Air

Three ham radio balloons are in the news. One did not fly, one flew but didn't go anywhere, and one will soon float around the world! You can log it on 20 meters.

•The North Texas Balloon Project's flight scheduled for January 9 was postponed due to bad weather at the Cleburn airport. The package would have carried telemetry / beacons on 28.322 and 144.29 MHz. Launch net on 7.155 MHz (+/- for QRM). Along with ground teams, a private aircraft would have been used for recovery. Date and time for the next launch attempt will be put out on packet. (de N5XBH @ W05H.#DFW, TX.USA.NOAM)

•The BIG balloon flight from Texas to Florida went up successfully Tuesday morning, January 12. The \$10,000 payload (lifted by a \$10,000 balloon) was put together and launched by hams and students from Utah State University, as a university sponsored project. It rose to 82,000 ft., with outside temperatures of minus 60 to minus 70 degrees. Everything would have gone well, except the wind didn't go at all! The balloon hovered much of the day over Orange, Texas. Finally, after midnight, the balloon was cut down over Melville, Louisiana. (de Andy MacAllister, WA5ZIB)

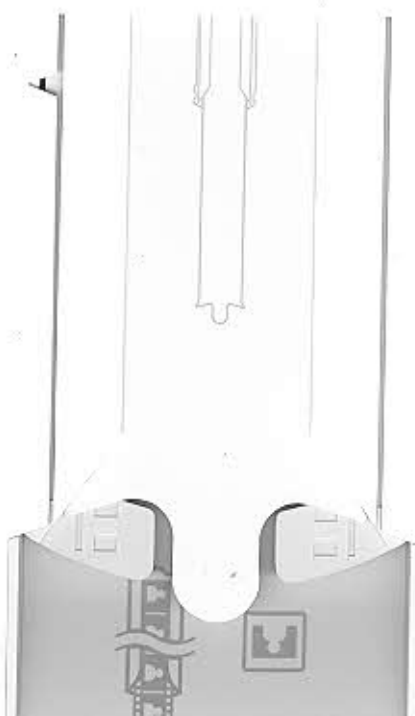
•"EarthBreeze," the round-the-world balloon built by Wisconsin Amateur Radio

*continued on page 13*

### Brainstorm!

The Amateur Radio club at St. Andrews School in Jackson, Mississippi has broadened its efforts to attract female students. To that end, it has relocated the club station from last year's site — the boys' restroom. (de "Magnolia Report" via ARNS)

Dump Vanna White? Story on page 7



## Busy ARES Meeting, Many Upcoming Activities

Joe Fisher, K5EJL, called the December 29 Amateur Radio Emergency Service (ARES) meeting to order, about an hour after members were reminded by a pager activation exercise. Rick Herndon, K5FNI, reminded all Net Control stations to send in their reports promptly. He explained that, if you are NC, the person to your right on the schedule is first backup, and the person to their right is second backup. Members were asked to use standard ICAO phonetics, as a help to the Net Control stations.

**Check-Ins:** Joe Fisher discussed the importance of checking in regularly to the Sunday evening nets...it lets us know who is still alive, has a functioning radio, and is interested in ARES. During June-August, 65 different stations checked in, leading to an estimate of 50 current active ARES members.

**Officers:** Travis County ARES officers:

- Joe Fisher, K5EJL, Travis Co. Emergency Coordinator
- Rick Herndon, K5FNI, Asst. EC for Operations
- Alan Schauer, N5ZFG, Asst. EC for Publications
- Pat McGuire, WA8PLR, Asst. EC (liaison with City of Austin Emergency Operations Management)
- Stu Rohre, K5KVH, Asst. EC (liaison with American Red Cross)
- Jim Neely, WA5LHS, Asst. EC (liaison with National Weather Service)
- Dave Effland, N5RNF, Asst. EC (liaison with Salvation Army)
- Alvin DeVane, WB5HZQ, Ex Officio (liaison with Austin Police Dept.)
- Hal Henegar, W5MDL, Ex Officio Public Information Officer (tel. 836-2012)

**Media:** On the topic of Public Information, members were requested to notify Hal Henegar as soon as they learn of a potentially-important event involving ama-

teur radio. Also, if you are contacted by the media during an emergency, refer them to Hal. Joe explained that information flow during an emergency can be chaotic and unreliable, and the directors of our served agencies do not want to be surprised by statements made to the media by ARES members.



**Smart Radios:** Jason Hernandez, KB5VIN, tel. 990-3662, is studying how to alert owners of newer, "smart" rigs that have built-in paging capabilities. He needs photocopies of the owner's manuals, and some on-air testing will be needed.

**Tone Boards:** Ron Johnson, WA5RON, tel. 255-1144, has information on tone-squelch boards that can be installed inside rigs, or added outboard. These are circuits that will turn on the speaker of your rig when a pre-determined alerting tone is received. He says they are made by Selectone and Communications Specialists. Ron offers to provide technical assistance on installations.

**Pagers:** Ron and others noted that you should leave your pager on at all times, even in its charger [otherwise, what is the point of having it?]. A charged battery will operate the pager for 3 or 4 days continuously. Replacement batteries are available for about \$6 from Mobilecomm (454-4558).

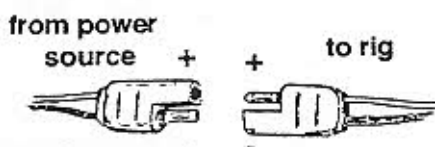
**Badges:** We need to be readily identifiable during emergencies, as some of our served agencies have tight security procedures. Badge holders have been received. They are clear plastic, have a pocket in front for your ARES membership card and one in the back for a copy of your ham license. New membership ID cards are in the works.

*continued on next page*

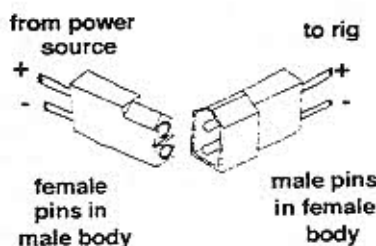
**Skywarn:** Training in severe weather observation will be given by the National Weather Service on March 6 at 3M (on 2222 near 620). Free. Class lasts all day, but come even you can only spend half a day. ARES role will likely expand in importance as the NWS closes more local offices.

**Operations Manual:** Alan Schauer, tel. 328-6940, distributed 10 copies of the alpha version of the Travis County ARES Operations Manual. If you received one, you are duty bound to review it and return comments to Alan ASAP. The final version should be ready by the next meeting. Binders for the manual are on order.

**Power Connectors:** Rick Herndon did an informal survey of 12 VDC power connector standardization. About 5 persons each had installed either the Molex / Radio Shack (ARRL standard) or the automotive connector (WA5RON) on their equipment. If you haven't, here is the information:



**WA5RON 12 VDC Connectors**



**Molex 1545 (Radio Shack 274-222)**

**ARRL Standard 12 VDC Connectors**

**Heart to Heart:** This February 10-11 exercise at the Red Cross building (a block south of Robert Mueller Airport main gate) provides education and practice in mes-

*...ARES role will likely expand in importance as the NWS closes local offices...*

sage origination and handling. Send a Valentine's Day greeting to your brother-in-law (the one who still owes you money). Please contact Joe Fisher, tel. 926-4689, if you can participate.

**Emergency Lights:** Miles Abernathy, N5KOB, suggested that members purchase one or more emergency lights for their ham shacks and other parts of the house. He recommended the Hemco Model CL-100 "Battery Operated Utility Light," available for \$2.94 at Builder's Square. It hangs on a nail or screw, uses D-cells, and looks like a smoke detector with a pull chain. A pair of Rayovac "Alkaline Maximum" D-cells can operate the 1.8-watt bulb for about 24 hours, and are good because they retain 85% of their original life even after 5 years in storage. Don't hang the light farther than 2 or 3 feet from your desktop if you intend to use it for reading and writing...it is pretty dim, useful mainly for general room illumination.

**Coming Activities:** Heart-to-Heart exercise, Feb. 10-11; Wide Area Weather Exercise, Feb. 27; Skywarn Class, March 6; Capital 10K, April 4. Next ARES meeting at 7:30 PM on March 30 at Luby's.

The ARES nets meet every Sunday evening at 6:30 on 146.94 MHz and at 8:30 on 146.78. If you would like further information, please call Joe Fisher, K5EJL Travis County Emergency Coordinator, at 928-4113. New check-ins are welcome.

de Miles Abernathy, N5KOB

# ARO MONITOR



PO Box 4763, Austin, Texas 78765

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 - Phil Steinbach (WB5SUR) 258-3215

Vice President - Jeff Schmidt (N5MNW) 255-6753

Secretary - Paul Parker (N5ZLX) 467-7070

Treasurer - Tenia Kinney (KA5TXK) 442-8427

Editor - Anne Bathurst Click (KB5RHA) 451-7667

## HELPING HAMS

One day in early January, a Georgetown ham heard someone on the 147.06 repeater mention that he needed some information. The Georgetown ham hadn't talked on 2 meters in a long time, let alone the .06 repeater. He did have, however, the information that was needed. So he dropped what he was doing and quickly adjusted a 2 meter antenna he had. Then he ran outside and attached it to a ladder, so he could make the .06 repeater from Georgetown. It worked! (although he wasn't sure it would.) Here's proof, again, of what good folks are in ham radio. If you know a helping ham

story, please let me know, so I can share it with all our members.

My address and phone number are included in this newsletter elsewhere.

de Anne, KB5RHA

## FAREWELL AND TREMENDOUS APPRECIATION TO MILES ABERNATHY (N5KOB)

Miles is retiring as Editor of the AARC-Over. He has given huge amounts of his time and talent in preparing an outstanding newsletter. Miles, we will miss you.

At the same time, we welcome Steve Means (N5PSW) as the new editor. Congratulations, Steve.

TRANSMITTER HUNT - Feb. 6, 7 pm

## AUSTIN REPEATER ORGANIZATION FEBRUARY MEETING

Luby's on North Loop - TUESDAY, FEBRUARY 2, 1993 -- 7:30 PM

PROGRAM: HOTERA PACKET WEATHER NODE PRESENTATION  
BY BRAD REHM (KV5V)

## Minutes of the Austin Repeater Organization Meeting 1/5/1993

The meeting was called to order by Phil Steinbach (WB5SUR) at 7:30 pm at Luby's North Loop Cafeteria. There were 85 people in attendance.

Guests and visitors were introduced.

The minutes as published in the Bulletin of Austin Amateur Radio Clubs (AARC-OVER)/(ARO MONITOR) were approved as read.

The Treasurer, Tenia Kinney (KA5TXK), reported a checking account balance of \$6,272.93.

The engineers' report was that all equipment was operating ok except the digipeter.

Activities Report included:

Heart to Heart Exercise will be February 10 & 11. Volunteers were requested. They are to contact any of the ARES staff.

Announcements included:

AARC bar-b-q Saturday, January 9 at Zilker Clubhouse.

New class for Novice License beginning January 9.

The QRP kit building class beginning January 23.

Buddy (WB5ELV) announced the theft of his HT and asked everyone to be on the lookout for it.

There was no old business.

New business included:

A suggestion was made that ARO look into the possibility of replacing older additions of Amateur Radio Handbooks in the public libraries with newer versions. After some discussion, it was decided the secretary would write to AARL to see if they might consider this a promotional activity where they would furnish the manuals.

Jim Neely (WASLHS) made a motion that ARO initiate replacement of the obsolete amateur radio equipment in the Red Cross Building, by an amount not to exceed \$1,000. The motion was seconded by Stuart Rohre (K5KVH) and passed.

A suggestion was made that the existing equipment at the Austin Red Cross Building be installed in the Williamson County Building in Round Rock. This matter will be researched.

Meeting adjourned at 7:45 pm.

A program on trouble shooting was given by Jeff Schmidt (N5MNV).

Minutes respectfully submitted by the secretary, Paul Parker (N5ZLX).

## ACC AMATEUR RADIO CLUB

meets January 26, 1993 at 7:30 pm at the Northridge Campus, Room 3207. All hams are welcome to attend, whether they are ACC students or not.

## THERE'S STILL TIME TO ENROLL IN THE CLASS FOR NOVICE LICENSE

The new class for novice license got underway Saturday, January 9. The class size is more manageable this time. Approximately ten students are enrolled. No class was held Sat., January 16, due to it being a holiday weekend. The class only costs \$3, and enrollment is still open. Spread the word!

## CALLING ALL ELMERS

Please listen up, veteran hams. I was a new ham not that long ago. I was lost and confused. Sounds pathetic, but it's true. I was overwhelmed at all I felt I needed to learn. I knew I could ask questions, but I didn't want to appear a total idiot in front of what seemed like some highly intelligent folks.

I appeal to you to reach out to new hams—you know them by their calls.

1. Catch them at a meeting or on the radio. Give them your phone number. Try to remember how you felt as a beginner. Then be available for new folks who have questions, but are afraid they will look stupid if they ask them.

2. Submit an article on an aspect of ham radio you know about. Rough copy is fine. Or dictate it to me—I'll write it. The important thing is to let us benefit from your experience and knowledge.

3. Call Charlie Eichenbaum (WB5HOD) and volunteer to do a class presentation—short or long. Working with students can be very rewarding. You often get back more than you give.

We have some fine Elmers in Austin who have given unselfishly and repeatedly to fellow hams. We also have some veteran hams who sit quietly through meetings, go home, and generally keep to themselves. We newcomers don't want your blood or your money—just a little of your time to learn so that one day we can be good Elmers, too.

We look up to you and respect you for what you know. Please share. Thank you.  
de Anne, KB5RHA

## ASK ANNE

(Real Honest Answers from KB5RHA. If I don't have the answer, I'll research until I find it.)

Several new hams have asked me how to use the autopatch. Here's a summary of commands for the AARC and ARO autopatch. (Some privately owned repeaters have autopatches, too, but that's not public information.) This information was taken from the AARC/ARO directory which contains a list of additional commands besides how to access the patch.

### AUTOPATCH

146.78 MHZ    146.88 MHZ

Phone patch access (max 3 min.)

\* + Phone No... \* + Phone No.

Extend patch for 2 more minutes

7\*.....n/a

Hang-up the phone

#.....#

Custom hang-up code

7 + 3 digits.....n/a

Redial last number dialed

7\*.....n/a

### SPECIAL AUTODIAL NUMBERS

146.78 MHZ    146.88 MHZ

Emergency 911.....911

Repeater

Trustee 119.....913

Weather

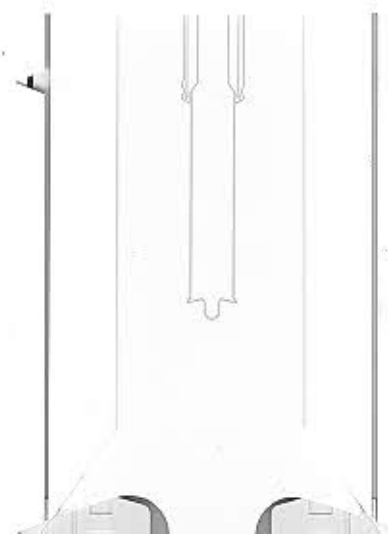
recording 910.....910

Send your questions to:

Anne Bathurst Click, KB5RHA

3105 Mohawk Road

Austin, Tx 78731



## How to Open a Yaesu FNB-4 Battery Pack

Some hams have reported bad experiences in attempting to open Yaesu FNB-4 battery packs to replace bad cells. I've successfully opened several FNB-x cases. My method is very simple, but does require patience to prevent damage to the case. The procedure I used is as follows:

1. Cut the white label with a sharp knife by following the case separation line. DO NOT remove the nut on the charging connector.

# YAESU

2. Pry the case halves apart by placing a thin, wide blade screwdriver into the case line on the label end. Sometimes it is necessary to separate the black band from one case half with a knife tip when it is evident that glue has penetrated the joint. NOTE: The black band is permanently attached to one case half.

3. Use continuous pressure, not excessive force, to separate the case halves. Concentrate the separation procedure primarily on the label end of the case. The steady pressure will allow the glue to cold flow and release its grip.

4. Yes, a frustration level will occur, but then success will appear as the glue gives up after a few minutes.

5. Make a note of where the wires attach to the battery and thermal switch. Also note the pack orientation.

6. Connect the replacement cell pack into the case and attach the wires per your note in step 5.

7. If you wish to test the new pack before re-gluing the case, close it and charge the cells, attach to the radio for the test.

8. If satisfied, place a spot (1/2 inch dia) of clear RTV on each side of the cell pack and press the case together and place it under a weight for a short time until the RTV cures. Because of the reduced amount of glue, the case will have a more flimsy feel than previous to replacement, but will perform like the original.

9. For the next replacement, the RTV will give up much easier than the original glue.

10. Enjoy your new cell pack.

de Hugh Wells, W6WTU

## Move Over, Vanna?

It has been reported that some recipients of the AARC/Over are less than satisfied with the grand prize in the Vanna White Technical Article Contest. These persons claim that "a night on the town with Vanna White" is not an adequate incentive.



In order to correct this inequity, consideration is being given to modifying the rules to provide for an alternate prize, if so desired by the winner. The new wording might be: "...a night on the town with either Vanna White or Tom Sellick. Of course, if Ms. White or Mr. Sellick has something else scheduled that night, the club might have to substitute a prize of somewhat lower value."

Please make your opinions on this matter known to the club officers.

If negotiations with Mr. Sellick are not successful, we will contact Doogie Howser.

## Minutes of January AARC Meeting / Banquet

Annual Dinner of January 9, 1993: About 81 members and guests met at the Zilker Park Clubhouse on Saturday evening, January 9, 1992 for fun, fellowship, and a Bar-B-Que Dinner. The normal program and format is usually skipped for this meeting.

President Jim Neely, WA5LHS, introduced the officers elected last month. These are: Jim Neely, WA5LHS, continuing as President; Rod Moag, W0NDS, unable to attend but continuing as Vice-President; Dave Marschall, KG5ND, also unable to attend but continuing as Treasurer; John Weber, KF5OY, Secretary; and Steve Sparks, KB5RSY, Activities Manager.

Following the introductions, the new and retiring Activity Managers proceeding with the drawing for several door prizes. The prizes and the lucky winners were: Milly, N5WQG, chose a Cushcraft AR2 2-meter antenna; George, W5TXP, has a new 1993 ARRL Handbook; Steve, KG5IG, picked the

coupon for the new QRP kit building class (includes a kit); Polly, WB5FIP, has a new MFJ dual band antenna; Henry, N5QDD, chose a repeater directory; Hal, W5MDL, has a new ARRL Antenna Handbook (Hal said this is the first time he ever won anything!).



Also Eva, XYL of W5SYT, took home a MFJ 24 hour clock; Henry, N5QZV, picked the ARRL Operating Manual; Paul, N5ZLX, has a new HiGain handi-talkie antenna; WA5LHS passed; Jimmy, WB5KXK, took home a coupon for 100 QSL cards from Pflugerville's Little Print Shop; Jack, N5TLW, picked a coupon for 1000 WX9X QSL cards. Miles, N5KOB; Jason, KB5VIN; John, son of N5TLW; each picked Kenwood hats. Mike, KB5RBW; Linnett, XYL of Jason; Phil, KA5PBH; each took home a year of QST magazines.

Submitted by: Joe Canfield, N5HPC, AARC Secretary. 73 and 30

## Concrete Evidence

I worked as a gopher in an automotive garage for several summers back on the 1970's. The mechanics there swore that a normal automobile battery set on concrete would quickly self-discharge, but one set on wood would not.

My dad and I, who were on good terms with them, challenged them to a \$10 bet: We'd place two identical, new batteries on the floor, one supported by the Holy Piece Of Wood and the other exposed to the Wrath of the Evil Concrete. On a daily basis, we took specific gravity and voltage measurements on the batteries and graphed the results. We discussed load testing, but everyone felt that voltage

along with SG of each cell was quite sufficient. We did this for two or three weeks, after being assured by everyone there that the "exposed" battery would be dead in about a week. This was the 70's, so \$10 was a fair bit of money. Needless to say, we won the bet - the two batteries were indistinguishable in their characteristics.

Mystical tales explaining the unknown often take on nearly immortal lives of their own. This is the 1990's. If you go to any garage, you will notice that when mechanics remove a battery, they inevitably set it on a piece of wood.

de Kim Elmore, N5OP

## Radio Robbery

Buddy Brannan, KB5ELV, was riding an Austin city bus Wednesday, Dec. 30, at noon and talking on his HT. A guy on the bus asked him about the radio and Buddy gave him a demo. The guy liked it so well he asked to look at the radio and ripped it off. Jumped off the bus and left Buddy on the bus.



Here is a description of the thief, as given by the bus driver: Black man, 28 to 35 years old, dark complexion, medium height (5'6" or 5'7"), medium build, short haircut (no afro or anything like that). It happened at the end of the #10 South 1st route (approx. William Cannon and S. 1st).

The radio is a Yaesu FT-470 dual-bander, serial number 450452, with its stock battery pack (almost dead). No leather carry case. For identification, memory channel 19 is programmed for 410.00 and channel 20 is 470.00 MHz.

If you should encounter this radio, please contact the Austin Police Department, or Buddy at (512) 452-6172, or (via Internet) at [davros@ccwf.cc.utexas.edu](mailto:davros@ccwf.cc.utexas.edu).

## ZIP Codes Changing

Some 5000 persons lining in ZIP codes 78731, 78758, and 78759 have new ZIP codes. If you are affected, please remember to notify your amateur radio club(s), to ensure that you keep getting your AARC/Over.

## Bastrop Swapfest

Saturday, February 27, early AM until afternoon, at the American Legion building on Hwy. 21 near the state park. Exams will be given.

de James Robbins, N5OUJ

## NEW LANS CORNER

### What Is Q?

*When I studied for the various tests I never really got a good grip on what exactly Q is. What does it really represent? How important is it? How much does it effect stability and how broadband a coil is?*

Coils and capacitors are basically short-term energy storage devices. Unfortunately, they are not lossless. Q is simply the ratio of energy stored to energy lost.

The loss can be represented by a loss resistor, either in series or in parallel with the coil / capacitor.

If in series, the equation is  $Q = X/R$ , where R is the loss resistance and X is the reactance:

If the loss is modeled as a parallel resistor, the equation is  $Q = R/X$ .

In either case,  $X(\text{of a coil}) = 2 \pi F L$  and  $X(\text{of a capacitor}) = 1 / (2 \pi F C)$  and  $\pi = 3.14159$ , F = frequency, L = inductance, C = capacitance.

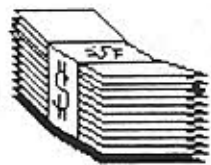
When you combine a coil and capacitor to make a tuned circuit, the total Q combines the effects of L and C. In most cases, the coil is much lossier than the capacitor, so capacitor losses can be ignored.



Q is important in a tuned circuit because it determines the 3 dB bandwidth: Bandwidth = Frequency / Q. So, the higher the Q, the narrower the bandwidth.

"Unloaded Q" means the Q of the coil and capacitor by themselves. "Loaded Q" adds in the effects of circuit resistance and any other losses due to stray coupling, etc. If the Q of a circuit is too high, just add more resistance.

de Al Bloom, N1AL



**HUCK'S COUNTRY STORE****The Blonde-Haired Little Girl**

The work of a volunteer license examiner (VE) is a mixture of joy and sadness: How nice it is to tell an examinee, "You passed!" On the other hand, "I'm very sorry" is deeply felt grief.

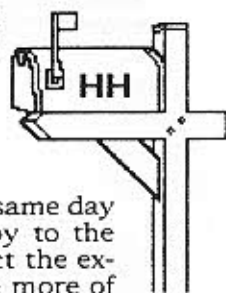
Along the way we have some special joys. Let me tell you of one. A pretty little blonde-haired girl was taking the Novice exam. I was told this was about her third attempt at the theory. She had previously passed the code, after several trials. She waited patiently while the papers were graded, then smiled and asked if she had passed. Indeed she had! What a joy to tell this little lady, "Your license is on the way."

She asked, "How long?" "About six weeks is the typical time." "I hope it will take only four weeks, because then I will still be ten years old."



That exchange makes it all worth while to this old examiner!

How about a group of you hams ganging up on an examination session! If a group of you all upgraded on the same day it would add additional joy to the hearts of those who conduct the exams. And further, lets have more of you become volunteer examiners for the furtherance of Ham Radio.



de Huck Huckabee, AA5BU, who wishes to apologize to the little girl for not remembering her name

*Huck is an accredited License Examiner with both the ARRL and W5YI, and is active with both exam groups in Austin. He has been on the air since before World War 2, holding calls W5KCI, D4AER, A5KCI, W4PPY, KF5ZR and AA5BU. Huck is 72.*

**PacPals International**

Combine pen pals with amateur radio and you get...PacPals! "PacPals will act as a clearinghouse for establishing packet radio pen-pals on a global scale." Each participating school will have a "communications manager" who ensures proper formatting, mailing and reception of student mail. You can request more information about PacPals from WQ1F@KD2AJ.#NENY.NY.USA.NA.

If you would rather just correspond, the West Bend (WI) High School Packet Club is looking for packet penpals. Everyone is invited to send messages to WD9IJT@KC9BK.WI.USA.NA.

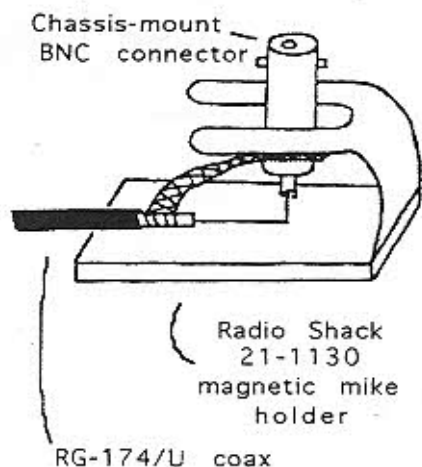
de Steve Loeffler, WB9ZRE via BSSS

**Stray Currents**

Short Waves: A solid-state replacement for traveling-wave tubes is being developed at Goddard Space Flight Center. A group of 18 IMPATT diodes can amplify a 61 GHz signal from 1 milliWatt to 6 watts. If this is a little too low in frequency for your taste, you might be interested in the use of Barrier/n/n+ varactor frequency multipliers, which can get you going at frequencies up to 1 THz (1 TeraHz = 1 million MHz, a dipole for 1 THz would be about 1/3 of a millimeter long). Both are described in the August, 1992, issue of NASA Tech Briefs magazine, available free to qualified subscribers from NASA CASI, Manager TU Division, PO Box 8757, Baltimore MD 21240.

## Mobiley Duck

This simple ultra-compact, low-cost mobile mount is great for vacations. It offers a vast improvement over using a hand-



held inside a vehicle, yet fits in your pocket when you travel by air.

Assemble the components as shown, and use epoxy or silicone to seal around the coaxial cable and provide strain relief. Attach a BNC male connector with RG-174 adapter to the free end of the coax, which should be about 6 to 10 ft. in length.

To use the mount, remove the rubber duck from your hand-held and attach it to the BNC chassis connector. Put the mag mount on the roof of the vehicle, and bring the coax in to your rig. RG-174/U is so small, just 1/10 inch diameter, that you can close the car door on it without harm. At 144 MHz, its loss is less than 1 dB per 10 feet.

de Bill Pace, KB8ZM, via Kanawha ARC & ARNS

*[Editor's note: Don't use this on a moving vehicle unless you have tested thoroughly to make certain it won't blow off. This non-local article is not an entry in the Vanna White Technical Article Contest.]*

## New AARC/Over Editor

Steve Means, N5PSW, has been chosen to be Editor of the AARC/Over, beginning with the next issue. Steve was first licensed at age 22. His primary interests include packet radio (particularly, TCP/IP), Amateur TV and M.A.R.S. He works for the Texas Department of Information Resources. Steve operates a computer bulletin board, Balcones Fault Line, which you can access at 452-2135.

Speaking for myself, I have enjoyed my role of putting together the AARC/Over until a "real" editor could be found. I could not have done it without the help of many folks. Particular thanks to Joe Canfield, N5HPC. We are fortunate that Steve Means brings experience at the frontiers of communications to his new job, and I am sure we will all be well served by his appointment.

-30- de Miles Abernathy, N5KOB

## Packet Bridge Test

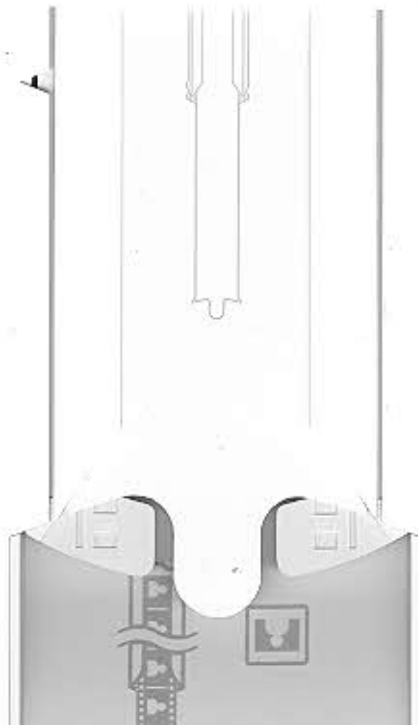
I am testing out a convers bridge on 145.09 MHz. The bridge has "channels" which allows you to have several conversations going on with different people at one time.

You access the convers bridge by connecting to KB5RSY and selecting "C" at the BBS prompt. You will be placed on channel 0 and allowed to speak with the other users. Type "/H" for help.

You may try to connect to KB5RSY-1 for direct bridge access. I am not sure if this will work for everyone, but you can try it because it will not hurt anything.

I would like to find out if people in Austin are interested in this type of service. Please leave a message if you have a comment.

de Steve Sparks, KB5RSY



## Radio Plates Letter

Mr. William D. Pool  
Special Plates Supv.  
TEXAS DEPT. OF TRANSPORTATION  
DIV. OF MOTOR VEHICLE REGISTRATION  
Austin, Texas 78779-0001

Dear Mr. Pool:

This is to go on record as a complaint against the most UNimpressive new Amateur Radio (Radio Operator) license plates.

PLEASE, when the next special plate dies are made, let's go back to the BOLDER, and much easier to see plates. You see, the main purpose of the Radio Operator plates are for emergencies. When floods, hurricanes, tornadoes, and such strike, the Hams go on site to aid in communicating from the disaster scene. Officials need to be able to see and identify our vehicles from a distance, therefore they should be as BOLD as possible.

Thank you for your immediate concern with this small problem. While interfacing with Texas Amateur Radio Operators, to the person, we are all quite displeased with these new "skinny-lettered" special plates.

Thanks for allowing me, as an American Radio Relay League official, to sound off concerning this.

Sincerely,

Hal Henegar  
Amateur Radio W5MDL  
Austin, Texas

### **WB5WPZ, SK**

Johnny Simpkins, Sr., WB5WPZ, a friend to many Austin hams, died on December 31, 1992. Our sympathies to his family.

## NASA Select

The National Aeronautics and Space Administration plans 7 more Space Shuttle launches this year. Feb 25, Mar 23, Apr 29, Jul 09, Aug 26, Nov 16 and Dec 07. If you would like to



monitor, you can pick up the NASA Select Channel on Satcom F-2R, Transponder 13 (72 degrees West) with a satellite dish. Some cable TV companies carry it, but not Austin CableVision. Some VHF repeaters carry the audio, including these in Texas: Arlington, 145.310 and 448.750 MHz; Dallas, 146.60; Houston, 146.64; and El Paso, 448.650.

If you are stuck in Austin without a satellite dish, turn on the HF rig and tune to W5RRR Johnson SFC (Clear Lake TX) on 3.850 MHz LSB, 7.227 LSB, 14.280 USB, 21.350 USB or 28.495 USB. You can sometimes hear the Houston VHF repeater from Austin.

If you prefer your news straight from the source, check out these frequencies when the Shuttle is overhead: 145.550 MHz (SAREX, Shuttle Amateur Radio Experiment, Feb., Mar., & April 1993 missions only; also MIR voice and packet), 259.000 (Air to Ground or Suit to Orbiter), 259.700 (Shuttle Primary Air to Ground, also Suit to Orbiter), 279.000 (Suit to Orbiter and Suit to Suit)

de Ozzie, N4SCY, and John, KD2BD

## License Delay

The FCC has asked Volunteer Examiners to advise those taking Amateur exams that 120 days from the date of the exam is the approximate time it takes to receive a license from the Commission. The FCC asks that inquiries from applicants not be made until at least 90 days after the exam.

de ARRL via Jim Greenwood, AB5EK

## January ARRL / VEC Ham Exam Results

Here are the results of the ARRL / VEC exam session of January 9, 1993, at Murchison Middle School. These individuals obtained or upgraded their license as listed below:

NAME	CALL	UPGRADE
Kenneth K. DeBower	.....	Extra
Robert P. Basinger	.....	Advanced
Coy C. Day, Jr.	.....WB5TFM	Advanced
Robert A. Kosa	.....N5LCO	Advanced
Ronald E. Zobel	.....N5QFM	Advanced
Jim M. Seiders	.....	General
Hans J. Slawik	.....	General
Lisa L. Dario	.....	Tech Plus
Chester L. Kelley	.....	Tech Plus
John P. Springer	.....N5ZYG	Tech Plus
Jas. H. Trevarthen, Jr.	.....	Tech Plus
E. Van Zelfden, III	.....KBSUGO	Tech Plus
Francisca P. Aristizabal	.....	Technician
Hugh W. Boothby	.....	Technician
Steve Contreras, Jr.	.....	Technician
Charles E. Malone	.....	Technician
Peter J. Ohlhaber	.....	Technician
Sonia Santana	.....	Technician
Marc C. Suttles	.....	Technician
Frederick W. Walczyk	.....	Technician

A total of 25 candidates took exams. Besides the above upgrades, two candidates passed one or more exam elements, but did not upgrade their license.

### VE EXAMINERS

Gene Hinkle	.....KSPA
Roy Miller	.....W5FOZ
Joe Thiel	.....N5SMN
Dick Ber	.....KB5BBU
Bill Pierson	.....K5TMS
Andy Williams	.....AB5FZ
Sanford Musgrove	.....W5FIT
Jim Greenwood	.....AB5EK
Larry Gunter	.....WB5BEK

The next ARRL / VEC exams will be held at Murchison Middle School, 3700 North Hills Drive, in north Austin, on Saturday, March 6, 1992 @ 9:00 AM (please arrive by 8:30 AM)

If you have any questions regarding the upcoming exams, please contact me at 473-3526 (work) or 345-7281 (home).

de Larry Gunter,  
WB5BEK

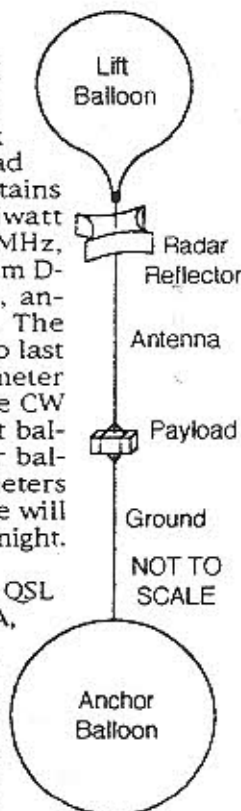


### Up in the Air from page 1

Balloon Association (WARBA), is scheduled for launch on January 30 or 31 from Hillsboro, WI. The 4" x 5" x 7" EarthBreeze payload weighs only 16 oz., yet contains a barometer, a 50-milliwatt transmitter on 14.317 MHz, voltage regulator, two lithium D-cells, 2-ft. radar reflector, antenna and counterpoise. The power supply is expected to last for one month. The barometer modulates the speed of the CW beacon. Both the upper lift balloon and the lower anchor balloon have maximum diameters of 33 ft. Operating altitude will be 80,000 ft. day, 70,000 ft. night.

To receive an EarthBreeze QSL card, mail reports to WARBA, Rt. 1 Box 235A, Hillsboro, Wisconsin 54634. Your report should include time and date of reception, beam heading (if possible), and the time duration (to the nearest 1/10 second) of this segment of the CW transmission: WB9SBD/BCN BALLOON PSE QSL

de Steve Loeffler, WB9ZRE, and Badger State Smoke Signals



**EarthBreeze**

## AARC Information

Austin Amateur Radio Club, Inc.

### Officers

Jim Neely, W5LHS, President ..... 442-4812  
 Rod Moag, W0NDS, Vice Pres. .... 467-6825  
 Dave Marschall, KG5ND, Treasurer . 834-1779  
 John Weber, KF5OY, Secretary ..... 280-1082  
 Steve Sparks, KB5RSY, Activity Mgr 251-7791

### Committees & Positions

Ed Golla, K3AHS, Technical ..... 255-4818  
 Joe Fisher, K5EJL, ARES Coord. .... 926-4689  
 Steve Means, N5PSW, A/Over Ed. .... 452-7240  
 Hal Henegar, W5MDL, P.I.O. .... 836-2012

If you are able to help with a vacant position, please contact any club officer.

The Austin Amateur Radio Club, Inc., maintains a repeater with open autopatch and emergency power on 146.78 MHz, and an emergency HF / VHF station at the American Red Cross Building. Membership dues are \$6 per calendar year (\$10 for a family). Please contact an officer if you would like to join the club, and come on down to the next meeting.

## AARC/Over Information

ISSN 1067-0262, CODEN AAOVE3. © Austin Amateur Radio Club, Inc. and / or the Austin Repeater Organization.

Viewpoints expressed in *The AARC/Over* do not necessarily reflect those of any club or its members, directors, or officers.

Members are encouraged to submit material for publication...mail to the Editor at 4800 Caswell, Austin 78751, or upload to Balcones Fault Line BRS at 452-2135, or to N5PSW via packet. Submissions may be edited for format, style and suitability. Deadline for the next issue is the 14th of this month. Late material will be saved for later months. Permission granted to reprint AARC/Over articles provided that you credit the author and *The AARC/Over*.

## Stray Currents

The Austin node of the Southwest Link System (formerly called West Texas Connection) has shifted down to 146.44 MHz simplex, retaining the 88.5 Hz tone. The Southwest Link System is a group of repeaters covering much of Texas. (de Dan O'Hara, W5AMP)

Texas VHF-FM Society meets in College Station on February 6. Swap fest in the morning, meeting in the afternoon. Talk in on 146.82 MHz. (de Ron Johnson, W5RON)

Computerized Smith Chart: Motorola offers software which includes a graphical Smith Chart. Motorola's Impedance Matching Program (MIMP) also has other capabilities. Requires an 80286 or better with 640K and VGA. Freeware. (de RF Design, 1/93)

NEWTON BBS: Argonne National Lab has begun an electronic BBS for science teachers and students. Teachers can get ideas for classroom demos and field trips, students can "Ask a Scientist." Tel. 708-252-8241, also available over Internet. (de Science News)



GIVE ME A SHOUT, FRED, SO I CAN TRACE MY LITTLE HANDHELD --- I THINK I DROPPED IT IN THE CHILI POT!

*Guest Editorial*

**Robbed!**

Would you want to come home and find out that you had been robbed? That is one of those things that none of us would like to have happen. But, it seems that some of us need to place it in the front of our minds rather than the back.

You should never announce your absence from home over the air. At the same time that also applies to announcing someone else's absence. Please remember that other

non-hams are listening to our transmissions. Not all people are honest, and in several cases they listen just to find out when someone will be gone.



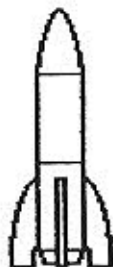
So just remember, the next time you have a strong interest in when a person will be gone from home, give them a landline. When you

do know a person is out of town, don't tell anyone else over the air.

Please help your fellow hams by keeping that type of information off the air.

de Nancy Rector, KB500X, Hill Country ARC's newsletter editor

**High Power Rockets**



If you are interested in rockets, there is Hill Country Tripoli, a group of High Power Rocketry (HPR) folks in Austin. They launch rockets large enough to require special permits to buy and fly, needing launch / recovery areas with "square miles of flat, treeless land." Sometimes Amateur TV payloads are carried. Their next launch is Feb. 27/28,

just west of Houston. For more information call Stu Barrett, 255-6052.

**Calendar**

- Jan 30...Kit Building Class (2nd session)
  - Jan 30/31...EarthBreeze balloon launch
  - Jan 30-Feb 7...Novice Roundup
  - Feb 2...Austin Rptr. Organization meets
  - Feb 6...Ham exams, 8:30 AM, Murchison
  - Feb 6...TX VHF-FM Society meet & swap
  - Feb 7...Williamson Co. Swapfest, noon
  - Feb 8...School Club Roundup
  - Feb 9...Austin ARC Meeting, Luby's
  - Feb 10-11...ARES Heart to Heart
  - Feb 16...Austin Am. TV Club
  - Feb 20...QCWA, 11:30, Wyatt's
  - Feb 20...South Austin W5YI Exams
  - Feb 20-21...Intl DX Contest, cw
  - Feb 23...ACC ARC meets (495-7186)
  - Feb 27...Bastrop Swapfest & Exams
  - Feb 27...Wide Area Weather Exercise
  - Mar 2...Austin Rptr. Organization meets
  - Mar 6...Ham exams, 8:30 AM, Murchison
  - Mar 6...Skywarn '93 @ 3M
  - Mar 6-7...1993 TAPR Meeting, Tucson
  - Mar 9...Austin ARC Meeting, Luby's
  - Mar 16...Austin Am. TV Club
  - Mar 20...QCWA, 11:30, Wyatt's
  - Mar 20...South Austin W5YI Exams
  - Mar 23...ACC ARC meets (495-7186)
  - Mar 30...ARES meeting @ Luby's
  - Apr 10...Manchaca
  - Jun 4-6...Ham-Com 93, Arlington
  - Jun 26-27...Field Day
- Calendar updates to Miles @ 327-1310.*



**Weekly Events**

- ARES Net...Sundays, 6:30 PM, 146.94 MHz
- ARES Net...Sundays, 8:30 PM, 146.78 MHz
- SwapNet, NewsLine...Sun., 9 PM, 146.94
- Lunch...Thursdays @ Holiday House #4
- U.T. Net...Thursdays, 7 PM, 145.21
- QCWA Net...Thursdays, 8:15 PM, 147.18
- Breakfast...Saturdays, Simon David deli.
- 521 Trade/Tech Net...Sat., 9 PM, 145.21
- WeatherNet...as needed, 146.94 MHz