



AARCOVER

Bulletin of the Austin Amateur Radio Club

March 1992

Skywarn '92

The 3M club is offering the Skywarn Seminar on Saturday, March 7, from 8:30 AM until 4:30 PM. They hope for a big turnout, and expect to have up to a dozen guest speakers (including U.S. Weather Service, TV stations, Emergency Coordinators, Fire Departments, and the LCRA).

The location will be at the 3M campus on Highway 2222, east of Highway 620.

This is an important educational opportunity for all hams, to help us be more effective on the WeatherNet during inclement weather.

If you are interested, please contact Larry Gensch, K9MBB, ahead of time. His work number is 984-3784, home is 259-1517.

(thanks to Clovis Womack, WA5DKG)


Meeting

'Local Boy Makes Good' might be the topic of our March meeting. Joe Jarrett, K5FOG, will tell us "How to Write an Award-Winning Article." His "ChipTalker" article in the December issue of QST did just that.

The meeting will be at the Luby's Cafeteria on North Loop, a block or two west of Burnet Road, on Tuesday, March 10. It officially begins at 8 PM, but most folks get there at 7 or 7:30 and have supper together. We meet in the back room...walk as far from the cash register as you can and you will be there.



You might want to take note of the AARCOVER article contest, announced on the facing page of this issue.

 All AARC functions are Non Smoking.

Roster To the Printer



The 1992 club roster is scheduled to be finalized at the March meeting, so if you want your name to appear in this year's printed membership book, please be sure to pay your dues by then.

You can pay the Treasurer at the meeting, or mail a check for \$6 (or \$10 for family) to Austin Amateur Radio Club, Attn: Treasurer, P. O. Box 13473, Austin TX 78711. Be sure to put your call on your check, and include a note telling all the relevant facts if your name, telephone number, call sign, license class, or address has changed in the last couple of years.

QUA

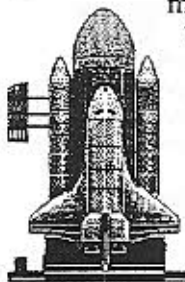
Manchaca Swapfest will be April 11 this year. Tables cost \$3, tailgate space is \$2. Contact Gary, WX5Z, at 454-3230.

Have an Icom 745? You can try a new mode by getting the 10-meter FM module. Cost from Icom is only \$26 (de K5FNI)

Check out Bob Nagy's (AA5PB) "Tech Talk" on the 145.21 MHz repeater, following the "521 Swap-Ola," Saturdays at 9 PM.

More Hams Headed for Space

The launch of the Space Shuttle "Atlantis," mission STS 45, callsign N5WQC, will send four hams into orbit. The mission will use the call N5WQC, and will be in a high-inclination orbit. Look for Dave, Kathy, Brian, and Dirk (ON1AFD) on 2 meter voice. Set your receiver to 145.55 MHz, and transmit on either 144.91, 144.95, or 144.97 MHz. 100 watts ERP is recommended. The launch is currently scheduled for March 23, but of course that date may change.



Article Contest

Write for the AARCOVER and you may win a prize! Stu Rohre suggested, and the club officers have approved, a contest for the best locally-originated technical article submitted to the AARCOVER. Deadline for entries is May 21. Already entered in the contest is KG5BR's article from the January issue, "New Life for an Old Quad."



Vanna White

First prize hasn't exactly been determined, although it could be an all-expenses-paid night on the town with TV celebrity Vanna White. If Ms. White is busy that night, the club may have to substitute another prize of somewhat lower value.

For a head start you may wish to attend the March club meeting, to hear Joe Jarrett tell how he won his technical writing award.

Please send articles to AARCOVER, 3216 Park Hills Drive, Austin TX 78746, or call Miles at 327-1310 to arrange for computer disk or modem transfer.

ARES News

The February "Heart to Heart" traffic-handling exercise at the Red Cross Building was a big success. We passed 38 outgoing messages from Austin to other cities and states, and handled 3 incoming ones. Several hams with no experience in traffic handling got a good dose of on-the-job training...better during an exercise than during a real emergency.

February also saw the Wide-Area Weather Exercise. About 28 local stations, along with a multitude of stations in 9 Hill Country networks, participated in this training exercise to bring weather information from the west into the Austin National Weather Service office, and to create a digital link to the NWS office in San Antonio. We passed 12 formal messages to and from other counties during the exercise, and even made the Channel 36 newscast!

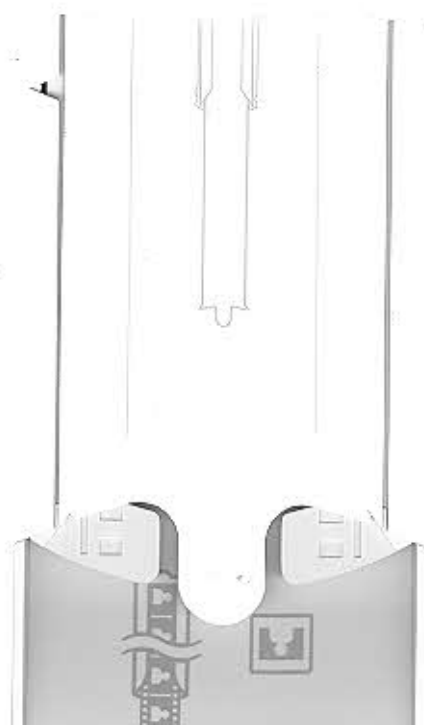


UPCOMING ARES EVENTS:

March 31: Meeting at Luby's Cafeteria on North Loop, 8 PM. This will be our regular 5th Tuesday get-together.

April 26: Harris Branch bike race. Travis County ARES will be involved. More details on the Sunday ARES nets.

ARES promotes the public-service aspect of amateur radio, by providing emergency communications for served public agencies in Austin and Travis County. New members are welcome to ARES. There are no dues or license-class requirements. The dates of these events are subject to change, so please listen to the ARES net for latest information. The net meets every Sunday at 6:30 PM on the 146.94 MHz repeater, and then again at 8:30 PM on the 146.78 repeater. Joe Fisher, K5EJL, is the Travis County Emergency Coordinator, and he may be reached at 926-4689.



Minutes

Meeting for February 11, 1992: Jim Neely, WA5LHS, opened this, his first general meeting as President, by bringing the meeting to order and welcoming everyone to the meeting. Jim started to make the "fatal" mistake of announcing this as a meeting of another local radio club. As he caught his error, Jim apologized, saying: "Old habits die hard!". Welcome Jim, but remember, this is the "Austin Amateur Radio Club". HI!

VISITORS: We had several visitors including: Bob, K5MJU; Henry, KC4JBB; Frank, WB5LYN; plus Alan and George who are waiting for their licenses.

MINUTES: The minutes of the January Banquet events were approved as printed in the AARC/OVER.

OFFICER REPORTS: The new Treasurer, Pat Neff, NJ7R, was not able to be at the meeting. We had no bank balance report but the bills have been paid. The Activities Director, Gary Pickens, reported that the Annual January Bar-B-Que dinner went well. The next scheduled club event is the Manchaca Swapfest on April 11.

NEW MEMBERS: Welcome to these new members: Jim Greenwood, K15XC/AE; Frank Eddleman, WB5LYN; Bruce Oliver, K5JTZ; Bob Bains, K5MJU; William Campbell, KB5LBM; Virgil Dobson, KB5OCK; David Walton, KB5QPS; Dr. Ronald Thompson, N5QMB; Dave Boerner, N5SHN; Marlene Doolin, N5XEJ; plus Alan Schauer, Deene Ogden, and Ruhi Arslanoglu, and Austin Anderson, whose calls "are in the mail".

OLD BUSINESS: None.

NEW BUSINESS: Jim announced that Rick Hendrickson, N5LJF, our new Secretary, announced his resignation at the last Board

meeting. Rick said that due to some unforeseen personal business, he would not be able to devote the required time to the job. The Bylaws require that an election be held to fill all vacated officer positions. Jim opened the floor for nominations for the office of Secretary. Joe Fisher, K5EJL, nominated Joe Canfield, N5HPC. A railroad job ensued as the nomination was seconded and Joe reelected by acclamation. In the absence of the Treasurer, Jim, WA5LHS, presented a copy of the proposed budget printed with a comparison to last year's budget. Joe, N5HPC, moved that a \$50.00 item be added to assist the ARES work of Joe Fisher. Joe Fisher, K5EJL, asked that this not be done at time, that at this time the money be spent on repairs and an upgrade to the W5KA station at the Red Cross building. The motion died for lack of a second. Jim noted that funds has been allocated for the station improvements. The budget was accepted after a short discussion.

ANNOUNCEMENTS: The Secretary has Amateur Call Letter License Plate applications. Rick, K5FNI, has a print-out showing the ARES net control schedule. Rick also wants to know where he can get optical character reader software for a scanner. Joe Farley, N5FQN, sponsors an amateur station at Fulmore Middle School. He reports that Don, KD9WI, has started a novice class with about 25 students. They will be needing some Elmers in the near future. Joe puts the station on the air before school in the mornings and asked for assistance in operating the station. He promises a bribe of free coffee. Pete, K5GM, asked those who know they have paid their 1992 dues, to have patience with the mailing labels stating that they are unpaid. The labels were printed almost two weeks ago. The updates will be represented on the next mailing.

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Bicycle Mobile

Several of us hams get together once a week to ride as a group. Here is a synopsis of the different rigs that we use for bicycle mobiling.

My HT is in my jersey pocket (bike shorts have no belts) in back, with a Smiley



Minutes from previous page

PROGRAM: Vice-President Rod Moag, W0NDS, formed a panel of five club members including himself. Rod introduced this 'DX cluster' of hams, all of whom have lived and operated amateur stations overseas using calls issued by their country of residence. These included, Stu Rohre, K5KVH (ex 9M2SM); Chuck Inks, W5KNA (ex 5N2ABF, YB0ABB, 4S7FB, W5KNA/CP6, and OA4AT); Curt Goodson, W4QBU (PY2ZBG); and Bruce Oliver, K5JTZ (ex PY7ZAG). Rod operated as 3D2RM in the Fiji Islands. They recounted several stories about their operating experiences, problems in getting a license, etc. Rod, thanks for an enjoyable program!

Respectfully submitted by: Joe Canfield, N5HPC, AARC Secretary.

antenna set to either 2m or 440 depending on what we're using at the time. I use the ICOM HS-51 headset (they make two, be sure to get the HS-51 as it is smaller and lighter and has the VOX built in) under my Bell V-1 helmet. It fits just fine even with my Oakleys competing for space around the ears. I suppose I shouldn't have all that RF right next to me, but the chest and abdomen are not all that sensitive anyway (brain and eyes are the ones to protect) so I doubt it's a problem. It doesn't allow me to switch bands without tweaking the antenna but I find in practice that I don't need to anyway. If I do want to switch, I just reach behind my head and pull up or push down the top two sections of the antenna.

Others in our group have helmet-mounted half-wave verticals or half-waves mounted on the bike's carrier rack; neither of these are dual-banders though. I don't know of any really good dual-bander which doesn't need a ground plane, and on a bike you ain't got one no matter how you rig it! You'd about have to put one halfwave vertical on each rear corner of your rack and use a duplexer. Too much hassle!

I've used my 24AT for 6 months now. I plug it into and unplug it from the mike and headset, external power, rooftop antenna, car antenna, etc many times a day, and so far none of the jacks shows any sign of going south. Eventually I'm sure they will, but the jacks are replaceable and hold up well. (I suppose if I were truly dedicated, I'd get a base rig and a car rig. But since I dropped about twice the price of the HT on my bike, I can't afford to!)

I recommend wearing cycling jerseys rather than T-shirts; they look better and those odd rear pockets are very handy. They're a much more secure perch for an HT than a belt, especially if you crash. And of course, ALWAYS wear a helmet! 73 es happy wheeling.

de Lee Green, KF8MO

Lightning is GHz

Lightning blasts have rise times in the PICOsecond range. This generates high frequency components in the Gigahertz range. At those frequencies, almost any kink, connection or bump in the ground wire looks like an inductance. This can cause the lightning current to literally jump from the ground wire onto other ground paths. This can largely be avoided by making the path from the lightning rod to the ground pole as straight as is practical.

This feature of ESD events (electrostatic discharge events, of which lightning is one) is a commonly misunderstood part of electrical engineering. As a result people who are trying to build electronics gadgets usually do all the wrong things when trying to protect them from ESD. Most notably, it doesn't do beans good to tie the door to the chassis with a three inch grounding strap. When ESD hits, the connection between the door and the strap cause an impedance mismatch that causes the strap to become almost totally blocking.

Strange things can happen when ESD hits. I was working in a lab once trying to debug a prototype of a large integrated circuit. It was a *large* wire wrap monster. On the other side of the lab, 50 yards away, was a guy doing ESD testing of another device. For the uninitiated, ESD testing consists of hitting the device under test with small lightning bolts. The kind that result from petting your cat on a winter day and then touching the doorknob. Because of the shape of the metal cart that the device was sitting on, and the cart's configuration, this thing was acting like a directional antenna and sending EMP's my way that were large enough to completely disrupt the system I was working on.

de Brian Cuthie, KA3BRZ

The AARCOVER

The monthly newsletter of the Austin Amateur Radio Club.

Officers

Jim Neely, W5LHS, President 442-4812
 Rod Moag, W0NDS, Vice Pres. 467-6825
 Amado Ramirez, N5PCP, Treasurer .280-1879
 Joe Canfield, N5HPC, Secretary 258-4761
 Gary Pickens, WX5Z, Activity Mgr ... 454-3230

Committees & Positions

Ed Golla, K3AHS, Technical 255-4818
 Joe Fisher, K5EJL, Emerg Coord. 926-4689
 <vacant>, AARCOVER Editor
 Pete Jordahl, K5GM, Labels & Roster 454-7889
 <vacant>, Public Info Officer

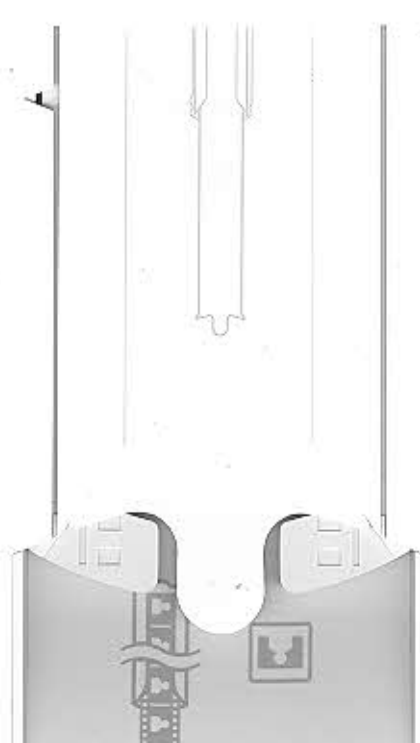
If you are able to help with a vacant position, please contact any club officer.

Viewpoints expressed in The AARCOVER do not necessarily reflect those of the club or its members, directors, or officers.

Members are encouraged to submit material for publication...mail to AARCOVER, 3216 Park Hills Drive, Austin 78746, or call Miles at 327-1310 if it is in computer format. Submissions may be edited for format, style and suitability. Deadline for the next issue is the 21st of this month. Late material will be saved for next month.

We grant permission to reprint AARCOVER articles provided that you credit the author and the AARCOVER.

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.



The Austin ATV Club

The Austin Amateur Television Club is a group interested in promoting the technical, emergency and fellowship aspects of Amateur Television. We have been meeting monthly since the Fall of 1988. We used to convene at Luby's, but now we meet at The Sirloin Stockade at 8828 Research, on the third Tuesday of each month at 7:30 PM. We thank our original publisher, Joe K5EJL, for putting out our original publication, Camera Amateura for the last two years. For a number of reasons, we thought that it would be worthwhile for more hams to be aware of the happenings in the ATV community. Each month, the Camera Amateura column in the AARCOVER tries to summarize current ATV news.

QUA

To protect your receiver's input circuitry in a high-RF environment (such as multi-operator contesting), solder a grain-of-wheat bulb in the antenna line inside the rig to act as a fuse. The resistance will be low when the filament is cold, and the bulb will burn out if too much RF gets into the circuit. The Radio Shack 272-1139 bulb (1.5 volts at 25 mA) is a good choice. (Thanks to W2PAU)



IT'S A TRUNK LID ANTENNA --- I FIGURE IT MOUNTS THERE BECAUSE IT BANGS INTO THE REAR WINDOW WHEN I PUT IT UP HERE!

ATV Club

Camera Amateura

At the February meeting, we discussed a proposal to the Austin EMO office regarding a minimum set of equipment required for the receiving of ATV signals.

...told us he is interested in combining ATV and his skydiving hobby....

Pat, WA8PLR, also reported on the state of the ATV repeater and that it now had a new transmitter and was installed in the new relay rack. It should be ready for re-installation shortly. The repeater has 439.25 MHz input, 426.25 output, with horizontal polarization, and is located in the Bee Caves Road and Loop 360 vicinity.

New ham and guest Bob Moore, KB5OUD, introduced himself and told us that he is interested in combining ATV and his skydiving hobby. He has already used a helmet camera. We planned a trial run for the upcoming weekend.

Joe, K5EJL, led a discussion of how ATV, the Amateur Radio Emergency Service [ARES] and the Austin Emergency Operations Center [EOC] work together during drills and emergencies, highlighting our activity with them last month.

Anyone interested in ATV may contact any of the following people: Bob-W8ZSX, 261-6429; Pat-WA8PLR, 263-3759; or Jon-N5MHI, 335-0220

Next ATV Meeting: March 19th, 7:30 PM, Sirloin Stockade, 8828 Research Blvd. Visitors are welcome.

de Jon Penner, N5MHI

Guest Editorial

Calendar

Bring Back License Fees

Back in 1971, when I first became a ham, the license fee was \$20 (a chunk of change then!). Then the fee dropped to \$4, then disappeared entirely. Shortly thereafter, so did courteous operating on the bands...



Actually, hunters and fishermen have the right idea. They are unique in being the only group in the US to have lobbied and voted for taxes on themselves (the Pittman-Robertson and Dingell-Johnson levies on equipment for hunting and fishing) and for

license fees. They did it right, too: the dollars are earmarked for their sports and cannot, by law, be spent for any other purpose. These dollars have given them great influence as constituencies of the relevant agencies. Much more influence than what the ARRL's jawboning and whining about 'rights' has accomplished.

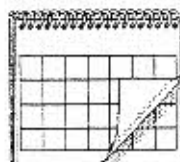
Maybe a few bucks in license fees, perhaps a small tax on ham gear, all earmarked for ham enforcement and enhancement, would establish us as a more powerful constituency for the FCC.

de Lee Green, KF8MO

Weekly Events

AMSAT Net...Sundays, 5 PM, 224.14 MHz
 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
 UT ARC Net...Tuesdays, 9:30 PM, 147.18
 LunchNet...Thursdays @ BurgerTex
 QCWA Net...Thursdays, 8:15 PM, 147.18
 Breakfast...Saturdays, Simon David deli.
 521 Swap-Ola...Saturdays, 9 PM, 145.21
 WeatherNet...as needed, 146.94 MHz

Mar. 3...Austin Rptr Organiz meeting
 Mar. 7...Ham exams, 8:30 AM, Murchison
 Mar. 7...Transmitter hunt, 7 PM, 146.52
 Mar. 7...3M Skywarn class
 Mar. 7-8...ARRL Internat DX contest, phone
 Mar. 8-14...TX Severe Weather Week
 Mar. 9...Hays Co. ARES, 6:30 PM, 147.10
 Mar. 10...Austin Amat. Radio Club meets
 Mar. 14-15...Midland-Odessa Hamfest
 Mar. 17...Austin Amat. TV Club meeting
 Mar. 19...U.T. Amateur Radio Club
 Mar. 23...Shuttle Atlantis (INSPIRE)
 Mar. 23-24...CQ WW WPX contest
 Mar. 31...ARES meeting, 8 PM @ Luby's
 Apr. 4...Ham exams, 8:30 AM, Murchison
 Apr. 5...Capitol 10K footrace
 Apr. 6...144 MHz Sprint
 Apr. 7...Austin Rptr Organiz meeting
 Apr. 10-12...DX Convention (Visalia, CA)
 Apr. 11...Manchaca swapfest
 Apr. 14...Austin Amat. Radio Club meets
 Apr. 14...222 MHz Sprint
 Apr. 16...U.T. Amateur Radio Club
 Apr. 21...Austin Amat. TV Club meeting
 Apr. 22...432 MHz Sprint
 Apr. 24-26...Dayton HamVenton
 Apr. 25...Scout Expo



Apr. 26...Harris Branch bike race (ARES)
 May 1...902 MHz Sprint
 May 2...Ham exams, 8:30 AM, Murchison
 May 5...Austin Rptr Organization
 May 7...1296 MHz Sprint
 May 12...Austin Amateur Radio Club
 May 23-24...50 MHz Sprint
 June 5-7...HAM-COM, Arlington
 June 27-28...Field Day 92
 Aug. 7-9...Summerfest @ Austin
Calendar updates to Miles @ 327-1310.

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

SKYWARN '92 on March 7. The 3M Amateur Radio Club will host the Skywarn '92 weather spotter school on Saturday March 7 from 8:30 until 4:30. Call Larry Gensch (K9MBB) at home 259-1517 or work 984-3784 for more information. Registration forms will be available at meeting or give Larry a call. The 3M Austin Center is located west on RM-2222. They are trying to arrange for a lunch to be available on site.

Midland-Odessa Hamfest - March 14-15.

Manchaca Swapfest - April 11.

The 7290 traffic net will hold their spring picnic in Fredericksburg April 24, 25, 26. There will be a catered Bar-B-Q on Saturday afternoon. Information is available by sending an SASE to Harry (W5CTZ). There will be RV parks and motels reserved for visitors. Talk-in on 146.76 with 162.2 tone or 146.50 simplex, also on 7290 KHz LSB.

Dayton HamVention - April 24 - 26.

Ham-Com in Arlington June 5 - 7

Summerfest in Austin - August 7 - 9

CAPITOL 10,000 - April 5th.



Next VEC Exam - on March 7.

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.



222-225 MHZ TEXAS BANDPLAN

222.000	EME
222.025	
222.025	CW
222.099	
222.100	National CW/SSB Calling Frequency
222.101	SSB
222.154	
222.155	Beacons
222.170	
222.171	Guard Band
222.175	
222.180	Repeater Inputs - See Repeater Sub-band Plan
223.380	
223.400	FM Simplex/FM Packet (Local Zone Option)
223.420	
223.440	
223.460	
223.480	
223.500	National FM Simplex Calling Frequency
223.520	Point-to-Point Control
223.540	
223.560	100 KHz-wide High Speed Data (Center Freq. 223.610)
223.660	
223.660	100 KHz-wide High Speed Data (Center Freq. 223.710)
223.760	
223.780	Repeater Outputs - See Repeater Sub-band Plan
224.980	
224.995	Guard Band
225.000	



222-225 MHZ TEXAS BANDPLAN

