



AARC/OVER

Bulletin of Austin Amateur Radio Clubs

Austin Amateur Radio Club
Austin Amateur Television Club
Austin Repeater Organization

October 1993

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ARRL Moves on Three Washington Fronts in Protection of Amateur Radio Privileges

In a blizzard of comments to the Federal Communications Commission, the American Radio Relay League (ARRL) has:

- o Supported, in principle, an FCC proposal to place the responsibility for the content of messages on their originator and the "first forwarder" in an amateur network;
- o Opposed a proposal to allocate the frequency 449 MHz to future wind profiler radar systems; and
- o Opposed a proposal to include yet another service, Automatic Vehicle Monitoring, in the 902-928 MHz band.

In all three cases, the League filed initial comments; reply comments will follow.

AMATEURS' RESPONSIBILITY FOR CONTENT OF MESSAGES

On July 1, 1993, the ARRL filed comments with the FCC on their proposal to change the responsibility for the content of amateur messages relayed by the high-speed networks.

The FCC's proposal, in PR Docket 93-85, was (Continued on Page 4)

Ham Radio at the Movies

You don't have to see the movie, "Man Without a Face" to notice this one... it can be seen in the previews if you know where to look. The house owned by the teacher (played by Mel Gibson) has a back foyer or patio with QSL cards over the door. The camera never gets close enough to make out call signs, but the format and pattern are unmistakable (and they're in those clear (Continued on Page 4)

Club Meetings

Austin Repeater Organization

meets on Tuesday, October 5, 7:30 to 8:30 PM, at Luby's Cafeteria on North Loop, one block west of Burnet Rd. Everyone is encouraged to come early and have supper together.

Austin Amateur Radio Club

will meet on Tuesday, October 12, 7:30 to 8:30 PM, at Luby's on North Loop.

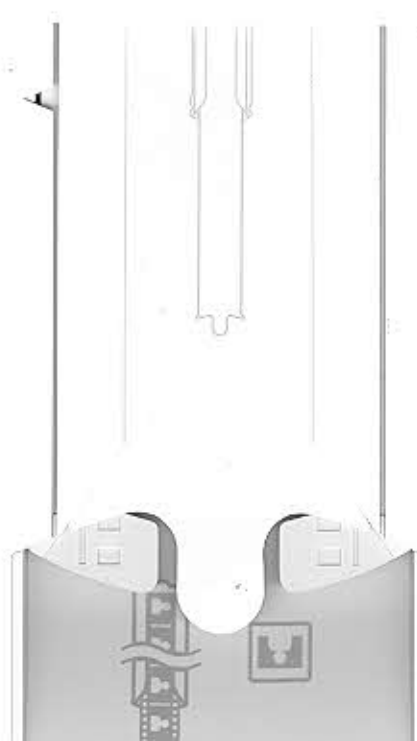
Austin Amateur Television Club

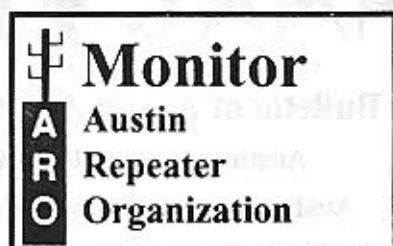
will meet on Tuesday, October 19, 7:30 to 8:30 PM, at Luby's Cafeteria.

Austin QCWA

meets on Saturday, October 16, 12:00 PM, at Luby's Cafeteria.

The AARC/OVER is published monthly in Austin, Texas





P.O. Box 4763, Austin, TX 78765

Amateur Radio Club

Operators of Voice Repeaters on

146.28/88, 146.34/94, 223.20/224.80, and 449.1/441.1 Mhz

Packet Digital Repeater 145.01 MHz

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

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
Newsletter Editor	Mickey McInnis	KB5YAC	339-0344

Minutes of the Austin Repeater Organization Meeting September 7, 1993

The meeting was called to order by Vice President Jeff Schmidt [N5MNW] at 7:42 PM at Luby's North Loop cafeteria. There were approximately 80 people in attendance.

Guests and visitors were introduced.

The minutes as published in the September 1993 *ARO Monitor* were approved as printed.

Announcements included:

Jim Neeley, [WA5LHS] announced the Walk for Diabetes on Oct. 3.

Steve Sparks [KB5RSY] announced the

Manchaca swap meet on Oct. 23.

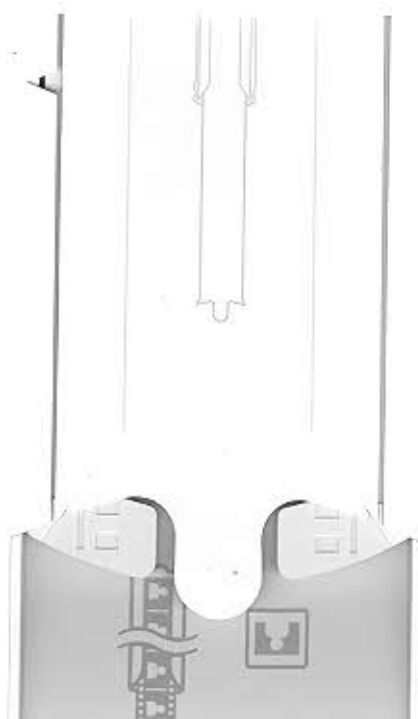
Charlie Eichenbaum announced that Tech/Tech Plus classes would start on Saturday, Sept. 11 at Murchison Junior High School.

It was announced that the ARES Packet net made its debut on Monday Sept. 6. Members with packet stations are urged to join.

David Marschall [KG5ND] announced the Vanishing River cruise.

Awards:

Gene [KB5UGO] was recognized for his forgetfulness and gullibility by being given the first (and hopefully last) Concrete Frisbee trophy.



Old Business: none

New Business: none

Meeting adjourned at 7:56 PM.

Submitted by
Paul Parker [NSZLX]

Secretary

Next Meeting

The next meeting will be Tuesday, October 5, 1993 at 7:30 PM at Luby's Cafeteria at North Loop and Burnet Rd.

The planned presentation for the meeting is about impedance matching.

Transmitter Hunt

A transmitter hunt is scheduled for October 9, 1993 at 7:00 PM. The hunt frequency will be 146.52, with coordination on 146.94.

ARES Net

The Travis County ARES (Amateur Radio Emergency Service) net meets every Sunday night at 6:30 PM on the 146.94 repeater and at 8:30 PM on the 146.78 repeater. Any amateur interested in emergency communication is invited to join.

Swap Net and *Newsline*

There is a swap net held every Sunday night at 9 PM on the 146.94 repeater. The swap net is followed by *Newsline*.

Information on ARO's Repeaters

All of ARO's repeaters are open access. Any amateur is invited to use them, except during nets, when a designated net control operator is in charge of repeater usage.

146.88 offset -600 KHz has a phone patch. Use "*" to bring up the patch, and "#" when you have completed the call. You can dial "911" (no star needed) for access to local emergency services. "Speed dial" 3 digit access codes are available to ARO members for frequently dialed numbers.

146.94 offset -600 KHz is used for the weather net at the request of the National Weather Service. It is also used for the Swapnet and *Newsline* at 9PM Sunday.

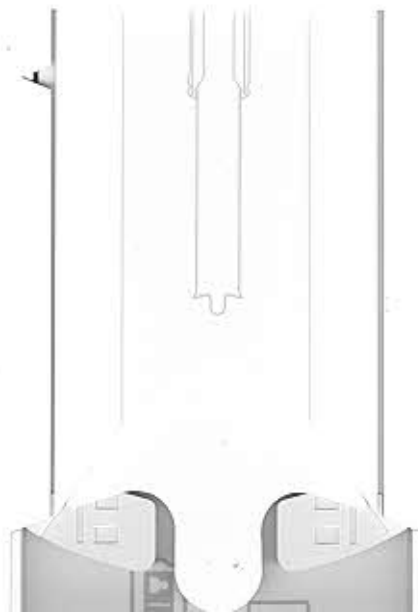
224.80 offset -1.6 MHz is available.

444.10 offset -5 MHz is available.

ARO maintains a Packet Digital Repeater on 145.01 MHz.

Other events

The Ham Expo '93 will be held in Belton, TX on Saturday, October 9, 1993 at the Bell County Expo center. Time: 7-2 Talk-in 146.82 MHz



...at the Movies (Cont'd from Pg. 1)

plastic "QSL holders" that have been advertised in the back of radio magazines for years). The movie contains no other references to the hobby.

de Paul W. Schleck, KD3FU

Jamboree on the Air

The Jamboree on the Air (JOTA), October 16-17, is an informal operation. Anyone is welcome to participate in it, including Girl and Boy Scouts and amateurs not associated with scouting in any way. It is mainly an opportunity for young people to talk with each other and experience the world of ham radio first hand. It is an excellent program.

Dates are always the third weekend of October, 0000Z Saturday to 2400Z Sunday. This year it is October 16-17. Some of the frequencies are 28.365, 21.360, 14.290, 7290 (and an 80m freq). Conversations are up and down the band from those points. All amateurs are encouraged to open their shack to Scout groups for this event. Your local Scout Office can give you names of leaders. Girl Scout offices may not be aware of this program, but many of their units do participate.

de Milt Forsberg

League Takes Actions...(Cont'd from Pg. 1)

in response to a number of petitions for rule making, and would establish "a compliance policy for amateur stations participating in automatic message forwarding systems, to hold the licensee of the station originating a message and the licensee of the first forwarding station primarily accountable for violative communications."

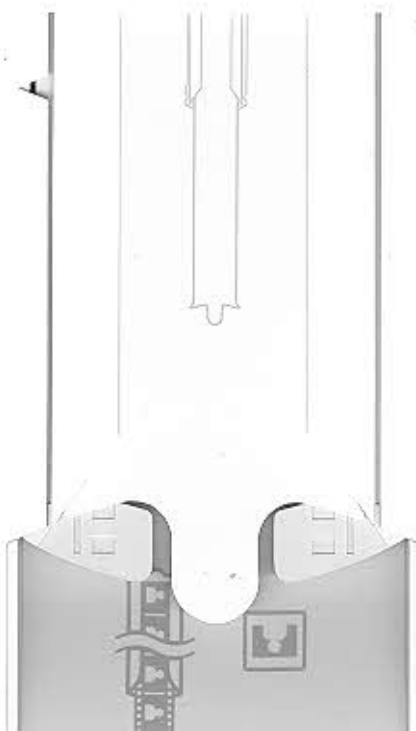
The petitions were filed following an incident in early 1991, when the operators of several amateur packet bulletin boards were cited by the Commission for forwarding what was characterized as a "commercial" message.

The proposal would modify current FCC rules, which provide accountability for each licensee for every transmission from the licensee's station, regardless of the configuration of the system of stations in a data network or whether the station is in repeater operation.

"The League supports the Commission's proposal to more specifically define the proper limits of accountability for both repeaters and message forwarding systems," the ARRL filing said. "This proceeding is timely, and is aimed at facilitating the development of rapid data networks and other systems in the Amateur Radio Service. The proposed rules, if modified slightly... will remedy the lack of clarity in the degree of accountability of amateur stations in repeater operation and those participating in message forwarding systems.

"The League believes that the Commission has arrived at the proper policy limitation on liability of individual amateur stations for inadvertent retransmission of messages which may violate Commission content regulations. It has placed the repeater owners, and the participants in a message forwarding system, in the proper positions relative to the prevention and elimination of improper messages, according to their actual ability to prevent or eliminate an offending message.

"The Commission should clarify," the League said, "the nature of the obligation of the first forwarder in a message forwarding system, so as to permit either an authentication arrangement with respect to the originator of the message, or a message screening
(Continued on Page 10)



AUSTIN AMATEUR RADIO CLUB MEETING

Jim Neely, WA5LHS, President, brought the meeting to order on August 10, 1993, at 7:30 pm at Luby's on North Loop.

VISITORS: The following visitors introduced themselves: Hal, AD5L, and Dave, WD5FZG.

MINUTES: The minutes of the July 13, 1993, meeting were approved as printed in the AARC/OVER.

OFFICER REPORTS: Dave Marschall, KG5ND, Treasurer, reported that the checking account balance was \$1858.77 and the postal account balance was \$411.10. Ed Golla, K3AHS, Technical Committee Chairman, reported that everything is working. Steve Sparks, KB5RSY, Activities Manager, reported that the Club's Field Day activity had lots of people and a good turnout. There were about 2300 contacts. Steve also reminded the club that our Manchaca swapmeet will be October 23, 1993, and he needs lots of help. Please call Steve and volunteer your services. Steve wanted to move the Club's annual banquet and installation of officers in January to Manhattan's in Round Rock, Texas, and change the time to Sunday afternoon. Discussion followed. The problem with holding it at Zilker clubhouse is that no one helps out. At Manhattan's everything will be catered. The issue of smoking came up and by a show of hands it was decided to have no smoking at the event. By a show of hands it was determined that most members present wanted to continue the tradition of holding the event on Saturday night. It was moved, seconded and passed to try Manhattan's in Round Rock, Texas, for this event. Steve Sparks will arrange the date and time of this event and report back to the Club at a future meeting.

NEW MEMBERS: Steve Truitt, KC5APB, Chuck Dear, KB5YKJ, Michael McCann, WA5SQD, and Gary Hanson, KC5BHB, were accepted as new members.

OLD BUSINESS: Rick Herndon, K5FNI, a committee of one that is researching the expansion of the sound system reported that he had located some equipment at a pawn shop.

NEW BUSINESS: Rick Herndon, K5FNI, wanted to know who had done the annual inventory of the Club's equipment as required by the bylaws. These bylaws require that the Activities Manager perform this task. Steve Sparks has not done it yet. Stu Rohrer, K5KVH, announced he had looked into the matter of the two Butternut antennas that had been donated to the Club in 1981 and 1982 and he was unable to locate them or determine whether they had been sold. President Jim Neely announced that several local hams that were members of no club frequently used the Club's repeater and he asked for volunteers to monitor the 146.78 MHz machine and write down the calls of those using the machine and give the calls to him. Jim and Dave Marschall would compare the calls to the membership roster and invite non-members that frequently use the repeater to join the Club. Mickey McInnis, KB5YAC, announced that he had the W5KA sign and lights from Field Day in his garage.

ANNOUNCEMENTS: Jim, WB5IMB, announced that the Quarter Century Wireless Association meets the third Saturday of the month at the Luby's on North Loop at 11:30 am. Dave, N5RNE, had a piece of traffic for Georgetown that needed delivering. Steve Sparks announced that Summerfest had about 1000 attendees and he and Jim Neely thanked the Summerfest committee.

(Continued on Page 14)

AUSTIN AMATEUR RADIO CLUB MEETING

Jim Neely, WA5LHS, President, brought the meeting to order on September 14, 1993, at 7:29 pm at Luby's on North Loop.

VISITORS: The following visitors introduced themselves: John, KB5VIW, Mike, WB4HUC, and Gene, KC5AQY.

MINUTES: The minutes of the August 10, 1993, meeting were approved as distributed prior to the meeting. These minutes will also be printed in the AARC/OVER.

OFFICER REPORTS: Dave Marschall, KG5ND, Treasurer, reported that the checking account balance was \$1466.70 and the postal account balance was \$444.21. Ed Golla, K3AHS, Technical Committee Chairman, reported that everything is working but there is an unidentified noise on the Club's 146.78 MHz repeater and he is checking it out. President Neely gave the Activities Manager's report for the absent Steve Sparks, KB5RSY. The Club's fall swapmeet will be at the Manchaca fire station on October 23, 1993. It will start at 8:00 am **THERE WILL BE NO EARLY START.** W5YI ham exams will be given at 9:30 am. Talk-in will be on 146.78 MHz. **THE SWAPMEET WILL BE OVER BY 1:30 PM.** Tables cost \$5.00 each and tailgates cost \$4.00 each. Park in the large lot east of the fire station. **DO NOT PARK AT MCCOY'S OR ALONG THE RIGHT OF WAY.** The Club's annual banquet and installation of officers will be January 15, 1994, at MANHATTAN'S in Round Rock at FM1325 and I35. It will start at 6:00 pm with a social hour and dinner will be served at 7:30 pm. The first keg of beer is on the house and any subsequent kegs are at Club expense. There will also be a cash bar. The entree is chicken milanaise. The cost is \$10.00 per person. Steve Sparks needs a head count by December 15, 1993.

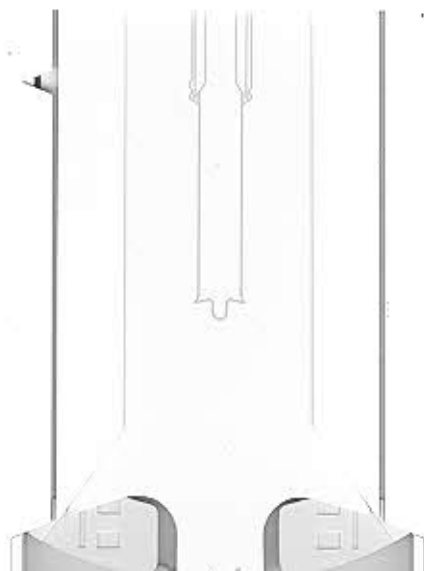
NEW MEMBERS: The following persons were accepted as new members: Greg Worthington, AB5NG, Wayne Hayes, awaiting call, Hal Miles, AD5L, Phil Burkes, KB5VYS, Jim Bittick, KC5BHF, Michelle Bittick, KC5BHE, Michael Cheselka, N5UVV, David Hoge, WD5FZG, Adam Coronado, N5SZB, and David White, KC5BMY.

OLD BUSINESS: None.

NEW BUSINESS: None.

ANNOUNCEMENTS: Dave Marschall, KG5ND, announced the third annual West Texas DX bash and the Odessa hamfest. Mark Murray, KA0RLS, reported that a new ham in Arlington, VA, wants QSO's with hams in Austin where his sister lives. Contact Mark for further details. Joe Canfield, N5HPC, took up ARES logs for the absent Rick Herndon, K5FNI. Joe also announced that the next ARES meeting will be November 30, 1993, at Luby's on North Loop. Hal Henegar, W5MDL, passed out literature on resolutions regarding amateur radio that are pending in the U.S. Congress. He urged Club members and any other hams to write Senators Kay Bailey Hutcherson and Phil Gramm and Representative Jake Pickle and request that these lawmakers support the resolutions. Hal said to write the letters in our own words **DO NOT SEND FORM LETTERS.** Hal also read a proclamation signed by Gov. Ann Richards that designated September 18, 1993, as National Amateur Radio Awareness Day in Texas. Dale Efland, N5RNE, announced that the ARES Simulated Emergency Test (SET) will be October 16, 1993. President Neely reported that he had received a notice from Massachusetts law enforcement that a young abducted ham may be in Texas or Tennessee. The ham is thirteen years old and his name is Nathan and his callsign is WZ1W. If you have

(Continued on Page 15)



The Austin Amateur Radio Club
Annual Banquet
at

Manhattans Restaurant
on Saturday, January 15, 1994
6:00 pm for drinks and conversation
7:30 pm for dinner

The Menu:

Chicken Milanese

Roast Chicken over Fetticini

Beef Stir Fry

Beef Strips with Broccoli and a variety of vegetables over brown rice

Tossed Salad

Chocolate Mousse

Beverages: Soft Drinks, Iced Tea, Coffee

Bar Drinks: The first keg of beer is free! (flavor to be announced)

Cash Bar: Beer \$2.00/bottle Wine \$2.75/glass Mixed Drinks \$3.25

Margarita \$3.50/12 oz. \$2.75/9 oz

Cost: The cost is \$10 per person. It is very very important to get an accurate head count. Mail your check/money order to Austin Amateur Radio Club, P.O. Box 13473, Austin, TX 78711, by Dec. 15

Manchaca Swapfest

&

Amateur Radio Exams

sponsored by the Austin Amateur Radio Club

on

Saturday, October 23, 1993

Swapfest opens at 8:00 A.M.

Exams begin at 9:30 A.M.

TALK IN ON 146.78, AARC CLUB REPEATER

Selling and Table Information:

Manchaca is now held between 8 am and 1:30 pm. Setup is between 6:30 am and 8:00 am. There will be NO selling during the setup time. Only people who have purchased a table or tailgate space will be allowed to enter the swapfest area, during the setup period. The new rules will be strictly enforced.

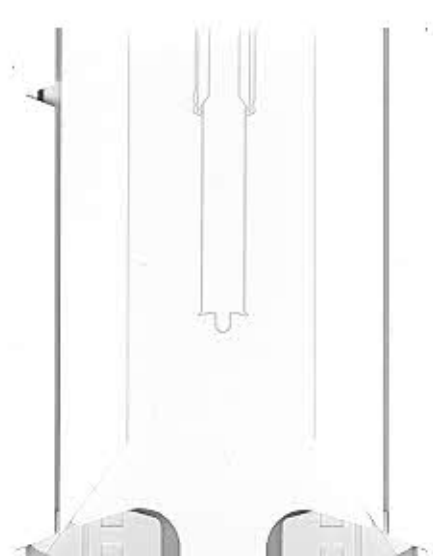
Tables - \$5.00 each Tailgate spaces - \$4.00 each

Exam Information:

The exams are provided by the South Austin W5YI group. They will be held in the room above the cafe starting at 9:30 a.m. Exams for all license classes will be given

PARKING IS AVAILABLE IN THE FIELD NEXT TO THE CAFE. DO NOT PARK IN MCCOYS PARKING LOT. *Your car may be towed away!!!*

Contact Steve Sparks @ 512-251-7791 with questions or comments



Huck's Country Store

By Huck Huekabee - AA5BU

In The Days Before The SWR Meter

The inexpensive SWR Meter has given Ham Radio a technical boost that we never imagined possible. This simple device has touched all of us by easily helping solve antenna and feedline problems. This is one of the great blessings to all Amateur Radio Stations!

What was it like in the days before SWR? My early experience with Ham Activity was in the late 1930's, and my first ticket was in 1940. I passed through the late era of Tuned Grid - Tuned Plate (TGTP) oscillators as a CW Transmitter. Most Hams were on CW. Only "The Very Rich" were able to have an AM rig.

The TGTP oscillator was self-excited, and everything in the world caused frequency drift. The keying was so poor that speed above hand-key operation was not possible. The best antenna of that era was the "Zep."

Those were the days that German Zeplin Airships made regular runs to the USA. Our Zep antenna was like that of the airships; except our Zep was inverted. On the airship the feedline hung straight down, and the antenna trailed the feedline. Our inverted Zep feedline went up, with the antenna on top. Somehow we never called the antenna system an "Inverted Zep" as we call one of the current antennas - "Inverted V."

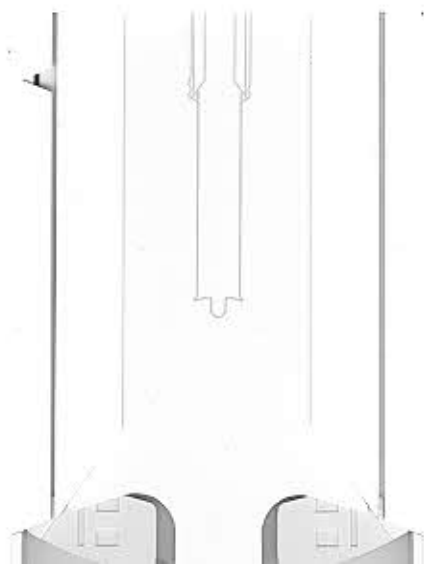
There was a simple test that we knew to determine if our antenna "was right." No one knew why the test worked, but most everyone knows the theory today.

The TGTP oscillator was connected to the feedline with a double pole knife switch. The switch would be alternately opened and closed, and the oscillator frequency observed. When coupling and tuning was adjusted so the frequency remained the same during open and close of the switch, the antenna was said to be "right." This was so true that these old rigs running what we call QRP today worked good!

What we did not realize was that when the antenna presented a pure resistive load to the oscillator the frequency did not shift! In essence this was similar to antenna adjustment to lowest SWR that we do today.

Yes, Ham Radio has come a long way in the past half century. Who knows what the next 50 years will bring? We older Hams will miss that; but you younger Hams are in for a great future!

de Old Huck - AA5BU



League Takes Actions...(Cont'd from Pg. 4)

provision. Either should be deemed sufficient to discharge the control operator's obligation to exercise control as a 'first forwarder.'

"Also, the definition of 'repeater' and the identification of the 'first-forwarder' bear some modification as well," the League said.

A Varied History

The League's lengthy and comprehensive comments note that before the establishment of automatically controlled packet radio networks in the Amateur Service, the Commission had faced the development of voice repeaters. These were well-suited to automatic control, which the FCC authorized in 1975. The Commission ultimately was persuaded to change its initial plan for recording and monitoring repeater transmissions (for enforcement purposes), saying that amateurs' long history of self policing would be expected to suffice.

Thus, "closed" repeaters were allowed to operate under automatic control without a monitoring requirement and "open" repeaters were required to have real-time monitoring or recording for later review. In 1978, this policy was re-emphasized, when the FCC simplified licensing requirements for complex amateur systems, including repeaters.

But in 1982 the allocation of accountability for message content changed abruptly, when James C. McKinney, chief of the Private Radio Bureau, held that an amateur who operated a voice repeater would be just as accountable for a content violation as the originator of the message.

This holding was in response to a petition two years earlier seeking to change the amateur rules to exactly the opposite - that the repeater operator would *not* be held responsible

When asked to reconsider, McKinney went

further, saying that since the licensee of an amateur station is responsible for its proper operation, then a "necessary corollary" to the FCC rules is that "if one is responsible for something, it must be under one's control."

McKinney concluded that "control" is not severable into technical control, content control of messages the repeater licensee originates, and content control of messages originated by repeater users.

In an FCC Order released April 23, 1982, McKinney said that violation of FCC rules on repeaters should be countered by the repeater licensee; to prevent them from happening again, and said that might even involve shutting down the repeater.

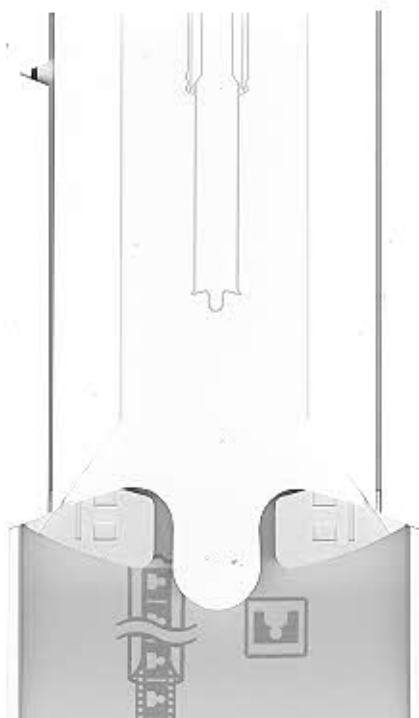
"We are not persuaded that repeater operation is sancrosanct and that it needs to be kept open at all costs, when to do so is to allow the retransmission of violative communications," the FCC order said.

New Problems with Packet

When the development of extensive packet radio networks accelerated in the mid-1980's, the FCC adopted a Report and Order (in Docket 85-105) to permit amateur digital communications under automatic control on VHF frequencies. But local control was required for third party traffic, a requirement to which the ARRL took exception, since it would not allow for digipeaters and other intermediate relay stations.

The FCC then agreed to a temporary waiver of its rules to eliminate the local or remote control operator requirement for packet communications only when the ARRL AX.25 protocol was used.

The League now points out that with this 1986 action the FCC "understood that only after-the-fact screening of messages is possible since the control operator of a given station can only indirectly supervise the
(Continued on Page 11)



League Takes Actions...(Cont'd from Pg. 10)

station transmissions."

The FCC's 1986 action seemed, the League said, to revert to the Commission's policy on voice repeaters *before* the changes instituted by the Private Radio Bureau in 1982. But it was a brief reversal, however, because in 1990 an ARRL request to allow automatic control of *all* third party VHF communications (rather than only AX.25) was denied by the FCC.

The League asked in a petition for rule making that the responsibility for message content be solely that of the originating station, but the FCC would not propose such a rule, saying that "all rules apply individually to each amateur station in [a] system, not to the resulting system. Each station licensee and each station control operator is as responsible for the messages transmitted as those retransmitted by the station."

Now the League, suggesting that policies have been "uneven" over the years, has called for a "zero-based review" of amateurs' accountability for message content.

Enforcement Issues

The League listed several matters "not subject to significant debate":

- o While the originator is the root cause of a violative message, it can be difficult to identify that station within a message forwarding system. In the past there has been a burden of proof on the FCC to make the identification, and that same difficulty stifles amateurs' ability to police themselves, always a plus.
- o Data messages, unlike voice repeater transmissions, tend to take on a life of their own as they propagate through a system; the violation

continues.

The League agrees with the FCC that holding accountable station licensees beyond the originating station is justified, but the methods used must be fair and not stifle the development of future, more advanced amateur systems.

But the nature of the "first forwarding station" should be revised, the League said. It should be to "establish with reasonable certainty the identity the identity of the amateur station originating a particular message." In other words, the first-forwarder should be responsible for message content only if the originator cannot be identified.

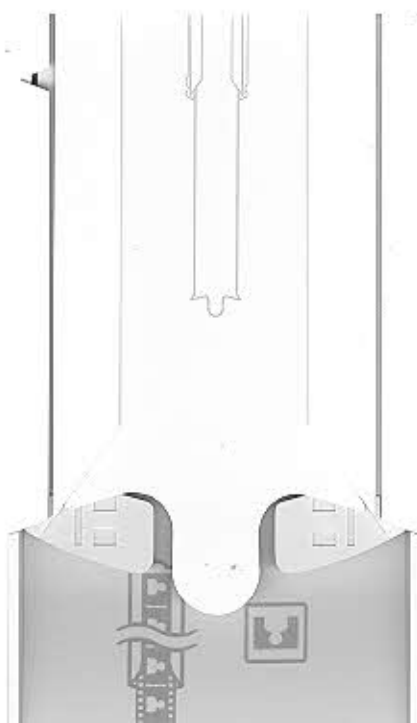
The definition "first-forwarder" also needs to be clarified; it should be, the League suggested, the first upstream store and forward system in the message forwarding network (and not, for example, a digipeater located between the message originator and the first BBS-type station).

Finally, the definition of a "repeater" in the new rules should distinguish between traditional repeaters, which receive and transmit simultaneously, on separate receive and transmit frequencies, and automatic message forwarding systems.

FCC AIRS PLAN TO RELOCATE WIND PROFILER RADARS

The League has told the FCC that a proposal to allocate the frequency 449 MHz for wind profiler radar systems should be based only on careful coordination processes and site selection, to avoid interference to amateurs, who share on a secondary basis the band 420-450 MHz with government (military) radiolocation operations.

On April 1, 1993, the FCC issued a Notice of Proposed Rule Making (in ET Docket 93-59) to make the allocation, and asked for comments on whether wind profilers should also be accommodated in the 915 MHz band (Continued on Page 12)



League Takes Actions...(Cont'd from Pg. 11)

or elsewhere.

The League told the FCC that the 420-450 MHz band is heavily used by the Amateur Radio Service, especially for FM repeaters, it being the second most popular VHF/UHF amateur allocation; 5,159 repeaters in the band are listed in the latest *ARRL Repeater Directory*.

These repeaters are used for public service communications, especially in metropolitan areas, and are important in the connection between Amateur Radio and the SKYWARN severe weather warning system, the League said.

The League said that it appears possible that the government wind profilers could be used in this band without disrupting existing amateur operations, but only with proper coordination. The League noted that it already has an agreement with the National Weather Service, the government agency that would operate wind profilers, covering support of emergency communications.

In order to provide both public service communications and to assist agencies like the NWS, amateurs have invested large sums of time and money for the 420-450 MHz band, the League said. "There is therefore an apparent need to include interference protection criteria for amateur stations in the the 440-450 MHz band in any site selection plan for wind profilers, so that individual repeater stations are not driven off the air," the League said.

Siting is Critical

On the other hand, non-governmental profilers should not be permitted to operate on 449 MHz, the League said, since while government profilers likely would be located away from metropolitan areas, that would not be true of profilers operated by universities or other non-governmental licensees, thus greatly

increasing the possibility of interference to existing amateur repeater and other operations.

The League cited its assistance to both domestic and international allocations committees that deal with wind profilers, noting that there are currently no allocations for them. It is arguable, the League said, that profilers should be logically be operated within radio bands allocated to meteorological aids service, since that is what they are. But profilers now operating experimentally at 404.37 MHz have proven unacceptable since they interfere with earth-to-space satellite links at 406 MHz.

The U.S. government advisory groups decided to recommend allocating 449 MHz to wind profilers, since that was at the upper band edge of a current allocation for government radiolocation services, "clearly not a good choice" from the viewpoint of the Amateur Radio Service, the League said.

Assuming that it is necessary for economic reasons or otherwise to choose a single frequency for wind profilers, the League said, it would have suggested a more thorough study of alternative frequencies within the 440-450 MHz band

For example, the League said, 446 MHz might have been a better choice from amateurs' point of view, that being in the middle of the 445-447 MHz "gap" between repeater inputs and outputs.

The League said that if existing 404 MHz experimental wind profilers were to move to 449 MHz, interference to amateur repeaters in certain locations will result. But by site selection, coordination of which is being developed between the League and the government; such interaction with amateur repeaters can be avoided.

On the other hand, the League said that such interaction might not be possible with (Cont'd on Page 13)



League Takes Actions...(Cont'd from Page 12)

non-governmental profilers, and that if they are permitted at 449 MHz they should be prohibited in metropolitan or suburban areas, where disruption of amateur public service and emergency communications "is a virtual certainty."

The League also pointed out that technical standards for wind profilers, including bandwidth, have not yet been completely specified, making it unfair for the public to be asked to comment on their allocations. The League requested that the Commission issue a "Further Notice" to provide such information.

Profilers at 915 MHz

In addition to the proposal for a wind profiler allocation at 449 MHz, the FCC's NPRM also announced a Notice of Inquiry for input regarding an allocation in the range 902-928 MHz.

The League said that adding a 12.5 MHz wide channel centered on 915 MHz for profilers to the services already there would add to an "already uncomfortable melting pot of uses." Adding profilers to a proposed AVM addition to the band would "bring the band closer to 'gridlock' status," the League said.

For this reason, the League said, the FCC should not act on wind profiler radars at 915 MHz without taking into account the possible impact of its proposal to allocate AVM systems there. "The allocation of both would work a distinct hardship on the Amateur Radio Service," the League said.

(More information on wind profiler radar systems appears in *QST* for March 1992; April, 1992, page 22; and June, 1992, page 48.)

ADDING ANOTHER SERVICE TO CROWDED 902-928 MHz

"Adopt no rules without further study," the ARRL has recommended to the FCC, in a

Commission proposal to expand the use of Automatic Vehicle Monitoring (AVM) systems in the 902-908 MHz band.

The proposal, in PR Docket 93-61, would allow the expansion of AVM systems through the creation of a new location and monitoring service (LMS) in the 902-908 MHz band. Amateurs already share this band with government radio location, fixed, and mobile services, in addition to industrial, scientific, and medical (ISM) equipment and various non-licensed, low power "Part 15" devices.

The FCC said in its Notice of Proposed Rule Making that such an expansion of AVM "could lead to rapid congestion of available spectrum," and asked if they could handle any increased congestion.

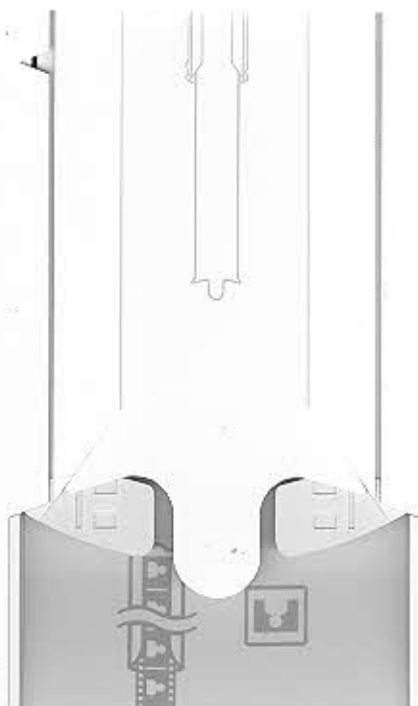
"If not," the FCC said, "commentators should offer potential solutions, short of removing Part 15 users and amateur operations from the band, or placing stricter limits on the operations in this band."

The League said that no action should be taken until the FCC has studied the potential for interaction between AVM and wind profiler radar systems, the suitability of AVM operations for highway safety systems in a crowded RF environment, and the alternative technologies available for the same purpose served by AVM and Location and Monitoring Services.

In order to protect other users of this crowded allocation, the League said, the Commission should not expand frequencies available for AVM/LMS at 902-908 MHz but rather continue to limit such operation to 903-912 and 918-927 MHz.

And "in addition to [a] vast array of different users of the 902-908 MHz band," the League said, "the Commission is currently considering another user," namely wind profiler radars.

(Continued on Page 15)



AARC Information

Austin Amateur Radio Club, Inc.

Officers

Jim Neely, WA5LHS, President442-4812
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

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. Come on down to the next meeting!

Committees and Positions

Ed Golla, K3AHS, Technical 255-4818
Joe Fisher, K5EJL, ARES Coord.926-4689
Steve Means, N5PSW, A/Over Ed. ...452-7240
4800 Caswell... Austin, TX... 78751
Hal Henegar, W5MDL, P.I.O. 836-2012

AARC Minutes - Aug (Cont'd from Pg. 5)

It was moved, seconded and passed to adjourn. President Neely adjourned the meeting at 7:54 pm.

PROGRAM: Rod Moag, Vice-President, introduced club member Zeke Harvey, W5NFC, who talked about satellites beginning with OSCAR 1 on September 15, 1961. Zeke explained about transponders and inverting transponders and 9600 baud packet. The frequencies for OSCAR 21 which is easy to work are uplink 435.016 MHz and downlink 145.983 MHz.

Respectfully submitted

John Weber, KF5OY, AARC Secretary

AARC/Over Information

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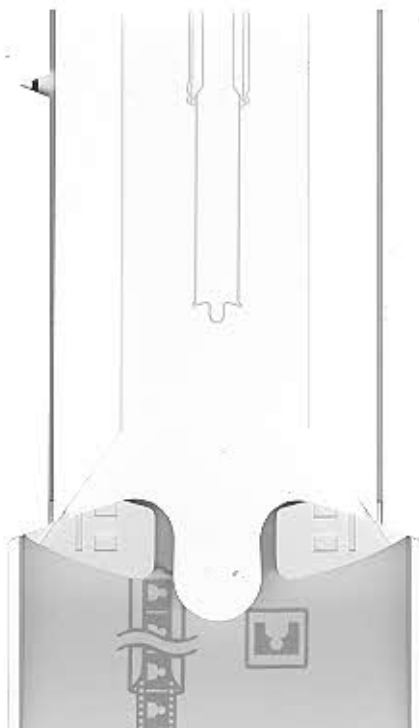
Members are encouraged to submit material for publication... send material to the Editor at 4800 Caswell, Austin 78751 or by packet on the N5PSW BBS - 145.09 MHz. Submissions maybe edited for format, style and suitability. **Deadline for the next issue is the 14th of this month.** Late material will be saved for later months. Permission granted to reprint AARC/Over.

Calendar

Oct. 5... Austin Rptr. Organization meets
Oct. 9... Ham Expo '93 - Belton
Oct. 12... Austin ARC Meeting at Luby's
Oct. 16... QCWA meets at Luby's, 12:00
Oct. 16-17... JOTA - see article on pg. 4
Oct.19...Austin Am. TV Club meets
Oct. 23...Manchaca Swapfest and Exams
Nov. 2... Austin Rptr. Organization - Luby's

Weekly Events

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



AARC Meeting Minutes... Sept. (Cont'd)

any information or have seen this person contact law enforcement. DO NOT ATTEMPT TO APPREHEND HIM OR HIS ABDUCTOR.

It was moved, seconded and passed to adjourn. President Neely adjourned the meeting at 7:53 pm.

PROGRAM: Rod Moag, W0NDS, Vice-President, attempted to give a short introduction for Frank Edwards, KB5WOA, a club member that works at Arrowsmith Industries. Frank's topic was microprocessors. Frank discussed the MOTOROLA 6800 through 68040 series and the INTEL 8086 through 80286 series of chips. He also explained that Motorola and Intel took different approaches to the architecture of their chips.

Respectfully submitted,

John Weber, KF5OY

AARC Secretary

League Takes Actions...(Cont'd from Page 13)**Band Use on the Increase**

The League said that although amateurs have been able to share the band with AVM stations operating under interim rules since 1985 (when U.S. and other ITU Region 2 amateurs gained access to the band), since that time both amateur and AVM use of the band has grown.

Expansion of AVM/LMS in the band would "significantly reduce" its utility for amateurs at a time when they are increasingly looking to the band in the face of "intense growth" of Amateur Radio licensees and the "concurrent saturation" of the lower UHF and VHF amateur allocations.

"The continued availability of the entire band for amateur use is critical," the League said, especially in accommodating weak-signal propagation experiments and the development of amateur television.

The League noted that when the FCC reallocated 220-222 MHz from the Amateur Service to commercial users in 1991, it, the FCC, emphasized the continued availability of 902-908 MHz to amateurs. To significantly reduce the utility of 902-908 to amateurs by adding yet another service within it "would constitute a breach of the Commission's previous assurance to the Amateur Radio Service" and would "ill serve the public who benefit from amateur radio," the League said.

Saying that the Commission in its proposal already had established an intention not to place stricter limitations on current users of the band, "the Commission must, by the same token, avoid rules which would, *de facto*, reduce the availability of the band for those users, or to make sharing significantly more difficult than it is at present."

Finally, the League said that while amateurs (and others as well) have been able to share the 902-908 MHz band it is obvious that all services in a frequency-sharing environment must be "extremely robust" in order to survive. The League said that the constitution of the 902-908 MHz band had been essentially unplanned, and that its users must be able to accept significant amounts of interference and to "operate with the flexibility that such an interactive RF environment demands."

The League said it appears unclear that AVM technology is suited to such an environment.

The reply comment date for this NPRM was July 14, 1993.

-The ARRL Letter, 7/10/93

-Badger State Smoke Signals, Aug. 1993

