

AARC/OVER

Bulletin of Austin Amateur Radio Clubs

Austin Amateur Radio Club
Austin Amateur Television Club
Austin Repeater Organization

ISSN 1067-0262

August 1995

Club Meetings

Austin Repeater Organization
Tuesday, August 1, 1995 7:30 PM.

Austin Amateur Radio Club
Tuesday, August 8, 1995 7:30 PM
Topic: Travel for DXpeditions

Austin Amateur TV Club
Tuesday, August 15, 1995 7:30 PM

All these organizations meet at Luby's Cafeteria on North Loop, about a block West of Burnet Rd. We meet in the back room, about as far from the cash register as we can get. Visitors are welcome, whether licensed hams or not.

Upcoming Events

Austin Summerfest August 4-6, Wyndham Southpark Hotel

AARC Fall Swapfest at Manchaca September 23

Silent Keys

Jack Kutzenko [N5RKI] died July 1st, after a short illness. He was 76 years old. Jack was an Austin resident for 6 years, moving here from Westfield, New Jersey. He was a very active member of the Balcones Lions club. He is survived by his wife Ronnie, daughters Linda Vitas, Marilyn, and Louis Holste of Lubbock, and his grandchildren Karen Spencer and Jackie Vitas.

Jack served in military headquarters in Europe in World War II. He was very active in Chaverim, a radio club for Jewish ham operators.

Charles Stokes [N5GFX] died suddenly July 10th. Charles was a electronics manufacturer's representative for 25 years. He is survived by his wife, Kathy, and a 13 year old son.

J. P. Bill [ND5C] well known as "Preacher Bill" on the 7290 net, became a silent key recently.

"Just Plain Bill" as he preferred, was known for having performed ham radio marriages during his religious career. Doing "I do's" by radio could only happen in Texas! Bill will be missed for his active contributions to hamming.

Recollections of Doc Vance

Doc Vance [W5DCS] became a silent key just as a prior AARC/Over was going to press, and since it had been awhile since he was active in local clubs, I am indebted to his friends in QCWA and to Zeke Harvey [W5NFC] for these recollections they have shared with me of this ham who made a contribution along with Zeke to Texas ham call sign license plates. Doc was a well known downtown Austin dentist some years ago, and very open in his practice to patients no matter their ability to pay.

He was a practical sort and could be found repairing his office equipment when the patient load was light. This even included doing plumbing overhauls.

He had one of the most powerful home brewed 75 meter AM phone rigs of the time, that could be heard state wide. During the push to get the ham license plate bill through the legislature, the strategy of Zeke and the group working this problem was to go over to Doc Vance's shack in the evening, and as Doc or others would work hams statewide, a list was consulted to determine who the state legislator for that ham was, so the ham could send a personal message of support for the bill to the legislator for that area. In this way, QSL's in vast quantity were directed to the Texas Legislature in support of the bill. The night Zeke remembers, Doc was letting someone operate his rig as he observed with a mighty cigar in his mouth. As the evening progressed, 75 became more crowded, and to overcome the QRM, the operator kept turning up the modulation on the AM rig when a repeat was requested. The cigar moved around with more and more agitation until Doc suddenly exclaimed to the operator what an (excessive) amount of current the advanced audio was causing the rig to deliver!

Of course, the efforts of Zeke and Doc were successful in the ham radio plates we enjoy today. Thanks Zeke, and all of you, for sharing your recollections. We owe all who have gone before and helped this hobby our Thanks.

de Stuart Rohre [K5KVH]

July Austin Repeater Organization Meeting

The meeting was called to order by Jeff Schmidt [N5MNV] Vice President at 7:39 PM July 4, 1995, at Luby's North Loop Cafeteria. Surprisingly, on the firecracker night, there were 26 present. Five visitors were introduced.

The minutes of the June meeting were approved.

Treasurer's Report

none

Technical Report

none

Old Business

Stu Rohre [K5KVH] reminded the group of the need for radio manuals for public libraries.

New Business

None

Announcements

Austin Summerfest needs volunteers to assist in talk-in.

The meeting adjourned at 8:01 PM.

Respectfully Submitted
Warren Anderson [N5XUG]

Secretary

Austin Amateur Radio Club July Minutes

President Stuart Rohre, K5KVH, brought the meeting to order at exactly 7:28 pm July 11, 1995. The meeting was held at Luby's cafeteria on North Loop.

Visitors

We welcomed three visitors.

Minutes

The minutes of the June 13, 1995 meeting that were printed in the AARC/OVER were amended. The amended minutes were then approved.

Officer Reports

Treasurer John Weber, KF5OY, reported the checking account balance of \$1,254.32 (this figure includes \$ 45.00 for our Austin Public Library Book Project), and a postal account balance of \$875.34.

Technical Committee Chairman Ed Golla, K3AHS, reported no problems with any AARC equipment.

Activities Manager Frank Edwards, KK5IA, said that our next upcoming event is the Manchaca Swapfest in October. Also, he mentioned that the Field Day log results

are not yet in.

New Members

New or renewing members voted in were: Rick Loveman, KC5NUS; Roger Pfluger, KC5OJJ; Don R. Lee, WB5TVU; Clay Noren, AB5WY; Frank Donaldson, N5IQJ and Alvia Donaldson.

Welcome to the Club!

Old Business

We now have \$45.00 in the Austin Public Library Book Fund. Further donations are needed (and welcome). Please make your checks payable to the "Austin Amateur Radio Club" and write "APL book project" in the memo section so the treasurer knows where to direct the funds.

New Business

None.

Announcements

SK The Amateur Radio community has lost two of its finest Hams: E. Charles Stokes, N5GFX; and Jack Kutzeno, N5RKI. They will be sorely missed.

Get in on it while there's still time! The Central Texas Wing of the Confederate Air Force will be presenting its annual Gathering of Memories air show August 19-20, 1995. This air show (in case you haven't heard about it) features vintage aircraft from WW I, WW II, and thereafter. Ham Radio Operators have a special opportunity to watch the goings on in exchange for our communications services. Lunch and refreshments will also be provided. There are a limited number of operators we can use per day, so if you are interested, know somebody who might be, or if you just want more information, please contact: David Sprague, KB5ZEG, AARC Vice President, at 259-7282; or Gene Van Zelfden, KB5UGO, AARC Secretary, at 338-4729.

Victoria Swapfest August 19, 1995.

Program

Vice President David Sprague, KB5ZEG, introduced Robert Cantu, Supervisor for 911 operators. He came to tell us what kind of reports they need from us as mobile operators.

Submitted with pleasure,
Gene Van Zelfden, KB5UGO

Red Cross Grant

Thanks to a grant from State Red Cross, (which specified what rig could be had), W5KA, club station of Austin Amateur Radio Club at Central Texas Chapter, American Red Cross, has received a Kenwood TS-140, with Astron 35 Amp power supply.

The new unit was picked up June 21, and Frank Edwards KK5IA, Activities Mgr. and I checked it out on the W5KA tri band beam. Florida was worked on both 20M and 10M SSB, one contact in Clearwater, the other in Tampa. Thus, we are



in good shape for Hurricane season, for that end of the Gulf.

Incidentally, for those who thought the sun spot lows meant no more 10M, Yesterday and earlier this week have been welcome exceptions. 10 stayed open nearly to dark; and from my K5KVH QTH on the all band Gap Titan vertical, I worked Ohio and Va. on ten SSB as well, after leaving W5KA.

Does anyone have or know of a 500 Hz CW filter for sale to fit the TS-140? Non Kenwood sources are of interest, as they may offer better performance per dollar.

de Stuart Rohre [K5KVH]

Library Book Donations

How do people who want to learn more about Ham Radio do so? Often the way to discover more about a new topic is a visit to a local library branch. However in the city of Austin this would more likely lead to outdated sources of information or no information at all. In an effort to provide a permanent source of information to the public the Austin Amateur Radio Club decided to stock area libraries with the latest editions of introductory texts about Amateur Radio.

The minimal plan calls for 12 *Now You're Talking* books to be donated and distributed around the city. Radio Shack will provide the books at a 20% discount off the regular \$19 price per book. That lowers the price to about \$19. However AARC funds for the next year are already assigned and can not be spared. So now it is up to individual Amateurs to step up and give something back to the hobby.

The AARC is accepting contributions of any amount to cover the expense of buying these books. Please send a check made out to the AARC with "Library donation" written in the memo field of the check. Any and all funds over the amount required to purchase the *Now You're Talking* books will be used to stock libraries with additional materials such as the Operating Manual. Please take this opportunity to help Amateur Radio recruitment.

de Robert Barron, KA5WSS

Field Day 1995

Field day was held on June 24-25, 1995. The Austin Amateur Radio Club held our field day at Doss Elementary School. Thanks to all who helped with setup, breakdown and operation. We had a great time and got some great experience for the usual difficulties in setting up emergency or simulated emergency station. I highly recommend all hams get involved in field day. Don't forget to get involved in the setup portion of field day. Experience in setting up a station in emergency conditions can be a lifesaver.

The Quarter Century Wireless Association had a station at McNeil High School.

Jeff Schmidt [N5MNW] reports that some of his Technician class students, made their first contacts at Doss, including a Hawii contact.

Several of the local field day setups received press coverage this year.

Special thanks go to Frank Edwards [KK5IA], our long suffering activities manager, Chuck Dear [KB5YKJ], who helped arrange access to the Doss site, and many others who loaned equipment, provided food, or assisted in setup or operation.

Preliminary results indicate approximately 427 contacts and approximately 1800 points.

One thing that was apparent to me is that the club needs a better generator. The generator we use is not club property and it is very old and cantankerous.

de Mickey McInnis [KB5YAC]

ARES Net Controls

We need more net control stations for our ARES nets. Net control stations need to run the net 4 times a year, and be backups net control stations 8 times a year.

We strongly encourage stations who are not experienced net control stations to sign up and become experienced. Training emergency operators is one of the most important functions of the ARES nets. In real emergency situations, you may need to be net control on the spur of a moment. It would be good to have some experience as net control in this situation.

Contact Rick Herndon, [K5FNI] on an ARES net, or call him at 454-1670.

New and Improved AARC/Over Format

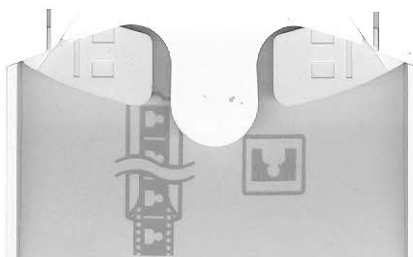
Well, it's definitely new. I hope you agree it's improved, or at least not a step down. When the postal rates changed last time, we got a big increase in mailing costs for the AARC/Over. One of the things we discovered was that changing the physical size of the newsletter to fit into the post office's "letter" classification saves us considerable mailing costs.

I'm also considering some other changes to the format. Your suggestions and even constructive complaints are most welcome.

I would like to include more information of local interest, since there are other sources of national interest ham news. Please send articles, suggestions for articles, or other information of interest to the Austin ham community. Don't assume just because an event is widely publicized that I'm going to include it in the newsletter. I've let several things slip by that I probably should have included, but didn't think of in time. Please keep in mind that there are several weeks of delay between putting the newsletter and the date that the newsletter arrives at your door. The deadline for publication is Thursday after the AARC/Over meeting, but articles or information received later may be put in if I can fit it in.

Mail submissions to Mickey McInnis at 1519 Charolais Drive, Austin, TX 78758, or e-mail to mcinnis@austin.ibm.com (Internet), 339-0344. E-mail is preferred.

de Mickey McInnis [KB5YAC]



Bylaws

The first section of the AARC bylaws was printed in the June AARC/over. This is the next section. There are more sections to come.

BYLAWS OF THE AUSTIN AMATEUR RADIO CLUB, INC., A NON-PROFIT CORPORATION

Adopted November 14, 1979

ARTICLE IV

BOARD OF DIRECTORS

4.01. General Powers. The affairs of the Club shall be managed by its Board of Directors.

4.02. Number, Qualifications and Tenure. The number of Directors shall be five, who shall be the President, Vice-President, Secretary, Treasurer, and Activities Manager of the Club. The President shall serve as the Chairman of the Board of Directors and the Vice President shall serve as Vice-Chairman. The tenure of each Director shall run concurrently with that Director's term as officer of the Club, and shall terminate when a successor for that office has been elected and qualified at an annual meeting of the general members of the club.

4.03. Meetings. The meetings of the Board of Directors shall be at the same time and places as the meetings of the Executive Committee as described in Article 3.04 herein. An action taken or resolution passed at a concurrent meeting as described above shall be considered the act or resolution of the Board of Directors and shall be recorded as such in the minutes of the meetings of the Board of Directors.

4.04. Quorum. A majority of the Board of Directors shall constitute a quorum for the transaction of business at any meeting of the Board.

4.05. Vacancies. With the exception of the position of Chairman of the Board, any vacancy occurring on the board shall be filled by election held by the Board as soon as practicable. The Vice-Chairman shall become Chairman should a vacancy occur in the position of Chairman. All elections by the Board shall be for the unexpired term of the position.

ARTICLE V

OFFICERS

5.01. Officers, Election and Term. The officers of the Club shall be a President, a Vice-President, a Secretary, a Treasurer, and an Activities Manager. The officers shall be elected annually by the general membership at the annual meeting of general members of the Club and shall take office at the first meeting following the beginning of the fiscal year.

5.02. President. The President shall be the chief executive office of the Club. The President shall preside at all meetings, shall have the general active management of the business and affairs of the Club, and shall see that all resolutions and orders are carried into effect. The President shall, in general, perform all duties incident to the office of President.

5.03. Vice-President. The Vice-President shall in the absence or disability of the President, perform all duties and have the authority and power of the President.

5.04. Secretary. The Secretary shall keep the minutes of the meetings of the members and of the Board of Directors in one or more books provided for that purpose; give all notices in accordance with the provisions of these bylaws or as required by law; be custodian of the corporate records; keep a register of the post office address of each member; and, in general, perform all duties incident to the office of Secretary.

5.05. Treasurer. The Treasurer shall be the custodian of all moneys and securities of the Club. The Treasurer shall receive and give receipts for money due and payable to the Club from any source whatsoever, and deposit all such moneys in the name of the Club in such banks or other depositories as shall be selected by the Board of Directors. The Treasurer shall make entries in, and be the custodian of, accurate financial records of the Club and shall be responsible for all corporate financial reports required to be made by the Club. The Treasurer shall, in general, perform all duties incident to the office of Treasurer.

5.06. Activities Manager. The Activities Manager shall be responsible for the supervision, logistics, and operation of all official Club activities and shall be the Chairman of the Activities Committee.

5.07. Removal. Removal from office of any officer shall be by vote of not less than two-thirds of the voting membership, voting upon a written petition to remove, signed by any general member and presented to the President at least thirty days prior to the meeting at which such removal is brought before the membership.

Huck's Country Store

The Big Mac is Better than Dynamotor Hash

In this era even a little child knows the Big Mac and the Golden Arches. But who of us recall living on Dynamotor Hash and SOS in the Big War? The old timers know french toast, commonly called SOS, but only the radio operators lived on a steady diet of dynamotor hash. That has is not a food for the body, it's the mortal enemy of the human brain.

Radio gear of the big war era was all tube equipment which required high voltages of around 250 volts for each receiver and about 1000-2000 volts for each transmitter. For portable and mobile operation, these voltages were generated with an electric motor driven generator. A dynamotor was a motor-generator in a single unit. This was a brush type motor and a brush type generator. Typically these were high speed devices with a steady ring of sparks around the generator commutator. In many cases the dynamotor transmitted a stronger signal than did the transmitter it powered! The high pitch acoustic noise would drive the operator crazy on transmit, and the electrical noise would crash his brain on receive.

Radio operation was mostly tone modulated CW in an attempt to override dynamotor has. The distant station could usually hear the sender turn on his dynamotor before he started sending! Add to this the noise from a brush type generator and vibrating contact regulator on the vehicle. It's no wonder that most of the radio operators went crazy.

That's all in the past. Now we dine at the Golden Arches, drive cars with little or no electrical noise, use low voltage solid state radio, carry a hundred watts in a package smaller than a shoe box and never meet with dynamotor has.

Year by year our radio equipment becomes better, smaller, more reliable, and more fun. If you liked the "good old days" of ham radio, you never experienced a steady diet of dynamotor hash!

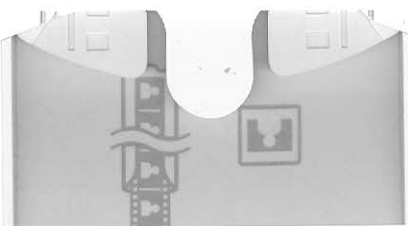
de "Old Huck" Huckabee, [AA5BU]

Most Recently Issued Callsigns

The following is a list of the FCC's most recently issued call signs as of July 1.

District	Group A Extra	Group B Advanced	Group C Tech/Gen	Group D Novice
0	AA0YM	KG0YF	++	KB0TFM
1	AA1NW	KE1CJ	N1VMF	KB1BSX
2	AA2YB	KG2DH	++	KB2VEV
3	AA3MC	KE3UD	N3VJSJ	KB3BJX
4	AE4KB	KT4AM	++	KF4BKY
5	AC5DP	KK5QZ	++	KC5POU
6	AC6OK	KO6XW	++	KE6VTW
7	AB7LI	KJ7PS	++	KC7MBY
8	AA8UB	KG8SR	++	KC8AIK
9	AA9PJ	KG9DI	++	KB9KZC
N. Mariana	KH0S	AH0AW	KH0ED	WH0ABC
Guam	WH2P	AH2DA	KH2OF	WH2ANM
Midway	++	AH4AA	KH4AG	WH4AAH
Hawaii	++	AH6OD	++	WH6CWI
Amer. Samoa	AH8O	AH8AH	KH8CJ	WH8ABB
Alaska	++	AL7QC	++	WL7CNX
Virgin	WP2R	KP2CF	NP2IG	WP2AHY
Puerto Rico	++	KP4ZU	++	WP4NAB

++All call signs in this group have been issued in this area.



Club Information

Austin Amateur Radio Club, Inc.

P.O. Box 13473, Austin, TX 78711-3473

Officers

President	Stu Rohre	K5KVH	255-3932
Vice President	David Sprague	KB5ZEG	259-7282
Treasurer	John Weber	KF5OY	280-1082
Secretary	Gene Van Zelfden	KB5UGO	338-4729
Activity Manager	Frank Edwards	KK5IA	255-6753

Committees & Positions

Technical	Ed Golla	K3AHS	255-4818
ARES Coordinator	Joe Fisher	K5EJL	926-4689
Public Information Officer	Hal Henegar	W5MDL	836-2012

Austin Repeater Organization

P.O. Box 4763, Austin, TX 78765

Officers

President	Phil Steinbach	WB5SUR	258-3215
Vice President	Jeff Schmidt	N5MNV	255-6753
Secretary	Warren Anderson	N5XUG	346-0186
Treasurer	Bill Montgomery	AB5HP	478-7928

Please contact a club officer, attend a meeting, or mail us to join either Organization

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 and other readers are encouraged to submit material for publication. Mail to Mickey McInnis at 1519 Charolais Drive, Austin, TX 78758, or e-mail to mcinnis@austin.ibm.com (Internet), 339-0344. Submissions may be edited for format, style and suitability. Deadline for the next issue is the Thursday following the AARC meeting. Material may be saved for later months. Unless otherwise noted, permission is granted to reprint AARC/Over articles provided that you credit the author and the AARC/Over.

The Austin Amateur Radio Club, Inc. Membership dues are \$8 per calendar year (\$10 for a family). Joint ARO/AARC dues are \$15 per year.

AARC 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.

The Austin Repeater Organization dues are \$8 per calendar year. Joint ARO/AARC dues are \$15 per year. Family membership is \$10 per year.

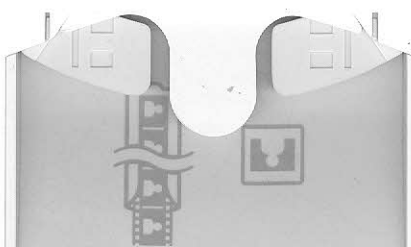
ARO maintains the following repeaters.

146.88 MHz offset -600 KHz has a phone patch. 146.94 MHz -600 KHz is used for the weather net at the request of the National Weather Service. It is used for the Swapnet and Newsline at 9 PM Sunday. 244.80 MHz -600 KHz 444.10 MHz +5 MHz . 145.01 MHz is the packet NetROM node, KB5PM-1 or alias AUS.

ARO maintains a TCP/IP gateway, ausgw.wb9khl.amp.org on 145.670 MHz. For AX25 connections, use WB9KHL-1.

Autopatch Use

The 146.78 and 146.88 repeaters have open autopatches. Press "*" and dial the phone number to place a call. Do not unkey after the "*". When finished, press "#" to hang up the phone. Dial "911" (no "*" needed) for emergency services. Please transmit your callsign before using the phone patch.



Calendar**August**

- 1 ARO Meeting @ Luby's 7:30 PM
 4-6 Austin Summerfest
 8 AARC Meeting @ Luby's 7:30 PM
 15 AATVC Meeting @ Luby's 7:30 PM
 19 QCWA meeting @ Luby's at noon
 19 ARO Transmitter hunt 7 PM
 19 Victoria Swapfest
 22 Ham Exams, St. Ed's 327-6184
 26 CTDXCC Little Walnut Library 7PM

September

- 23 AARC Fall Swapfest at Manchaca

Periodic Events

Sun	6:30 PM, Travis CO ARES net	146.94 MHz
Sun	7:30 PM, ARES Packet	145.78 MHz
Sun	8:00 PM, Williamson ARES net	146.64 MHz
Sun	8:30 PM, Travis Co. ARES	146.78 MHz
Sun	9:00 PM, SwapNet	146.94 MHz
Sun	(after Swapnet) Newsline	146.94 MHz
Sun	(after Newsline) Vertical SSB net	144.225 MHz
Wed	8:30 PM Vertical SSB net	144.225 MHz
Thurs	7:00 PM, UTARC Net,	145.21 MHz
Thurs	11:30-1:00 Lunch At Holiday House	
Sat	7-8:30 AM Breakfast at Simon David Deli on Great Hills Trail	
Storm	WeatherNet	146.94 MHz

Most Austin radio club meetings are held at Luby's Cafeteria on North Loop.

The Austin Repeater Organization meets on the first Tuesday of each month at Luby's at 7:30 PM.

The Austin Amateur Radio Club meets on the second Tuesday of each month at Luby's at 7:30 PM.

The Austin Amateur TV Club meets on the Third Tuesday of each month at Luby's Cafeteria at 7:30 PM.

The Quarter Century Wireless Association meets on the third Saturday of each month at Luby's at noon.

The ARO transmitter hunt occurs at 7 PM on the Saturday following the ARO meeting. The hunt frequency is 146.52, with coordination on 146.94. 8/12*, 9/10, 10/7, 11/11, 12/16. (* Not normal week)

Ham exams are held at 8:30 AM on the first Saturday of most months at Murchison Middle School. Odd numbered months have been scheduled in advance. Sessions are planned, but not yet confirmed, for even numbered months. The August testing session will be held at Summerfest.. 9/2, 11/4.

Ham exams will be held at 2 PM in Fleck Hall room 109 at St. Edward's University 3001 South Congress Avenue on the third Saturday of each month. 8/19, 9/30*, 10/21, 11/18, 12/16. (* Not regular week)

The ARO swapnet is transmitted Sunday at 9:00 PM on the 146.94 repeater. Newsline, an amateur radio news program,

follows the swapfest. The swaplist is copied to WB5GHJ's packet BBS shortly after the swapnet is over.

A vertically polarized SSB net follows Newsline on 144.225 MHz. Another session occurs at 8:30 PM on Wednesdays.

The Travis County ARES net meets every Sunday night at 6:30 PM - 146.94 MHz and 8:30 PM - 146.78 MHz. A packet session is held at 7:30 PM on 145.78 MHz unconnected mode.

Face-to-face meeting ARES meetings are held on the fifth Tuesday of months with a fifth Tuesday at 7:30 PM at Luby's Cafeteria on North Loop 8/29, 10/31.

The CTDXCC Central Texas DX Contest Club meets at 7:00 PM at the Little Walnut Creek Branch Library 835 W. Rundberg on the 4th Monday of each month. 7/26, 8/30, 9/27, 10/25, 11/29.

New GigaHertz Records Set

Special Bulletin 29 ARLX029
 >From ARRL Headquarters
 Newington CT July 13, 1995
 To all radio amateurs

SB SPCL ARL ARLX029
 ARLX029 Record set at 3456 MHz

Extraordinary conditions for tropospheric propagation in the US Midwest have resulted in a new overland record on the amateur 3456 MHz band.

At 1224 UTC on July 12, Al Ward, WB5LUA, in Allen, Texas, worked Gary Morhlant, WA0BWE, in Maplewood, Minnesota, a distance of 841 miles. The previous record of 736 miles was set on May 1, 1992, between WB5LUA and W9ZIH, in Malta, Illinois.

As is often the case, this record-breaking activity began lower in frequency, with an initial contact between WB5LUA and WA0BWE on 432 MHz, with signals "59" both ways, according to Ward. An equipment problem forced them to skip 1296 MHz (where the overland record is 1287 miles).

2304 MHz came next, and the first Texas-Minnesota 2304 MHz QSO (where the record is 940 miles). Contact was then "easily established" on 3456 MHz. WA0BWE was running about 5 watts; WB5LUA was running 100 watts to a 5-ft dish at 65 feet.

On July 13, excellent tropospheric propagation continued in the midwest, with perhaps more distance records to come as a result. Thanks to WB5LUA for prompt reporting of these developments.

Summerfest Volunteers Still Needed

Please contact George Dallas [N5ZLV] at 837-5925 (H) or 838-6546 (W) if you can help with security (Checking for tickets at the door). Contact June Parchman at 832-1350 if you can help with Talk-in.

