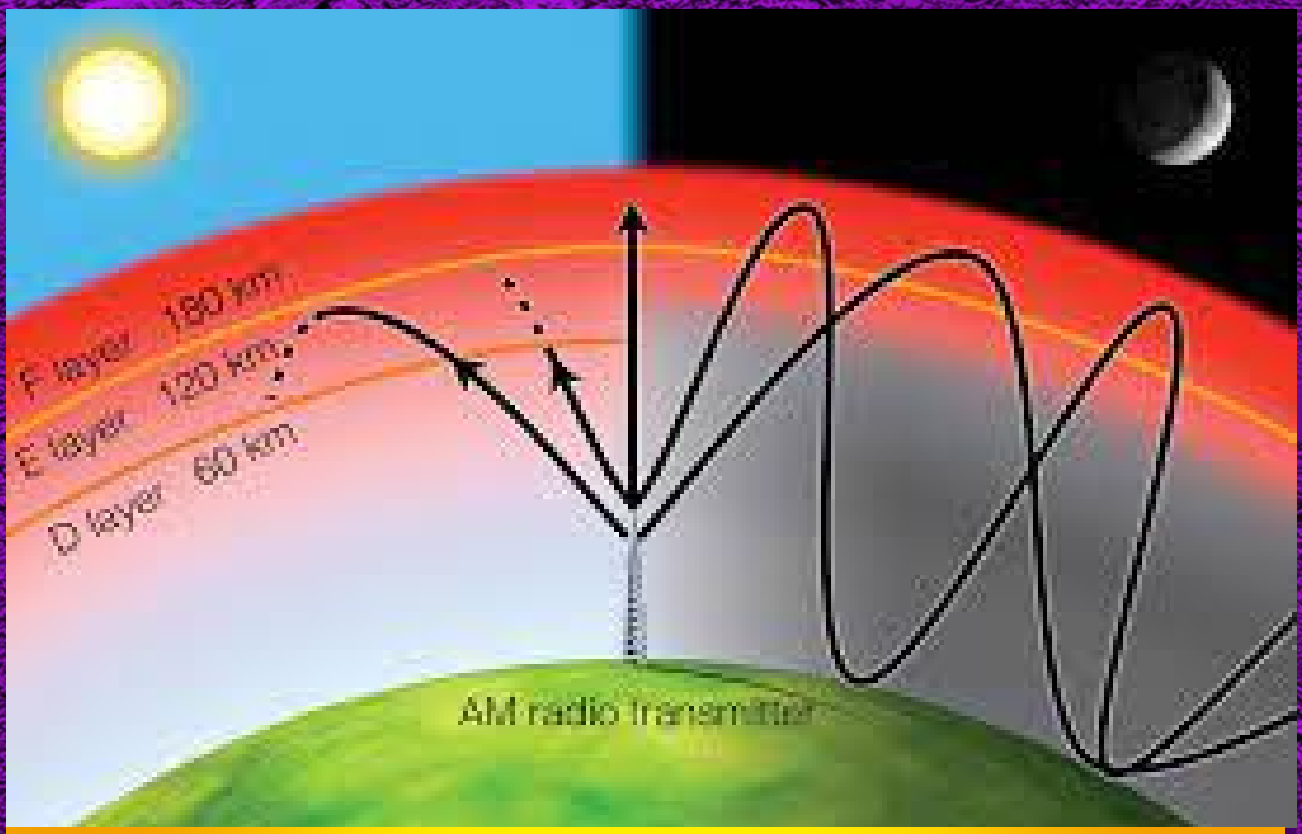
September 2021

PROPAGATION

Newsletter of the Longview East Texas Amateur Radio Club



Radio waves propagation issue

Join LETARC at our next meeting on September 25th.

In this issue

LETARC interviews

Eric Nichols KL7AJ

A look at VOACAP

Get ready for V3Y & the Texas QSO party

LETARC Activities

LETARC held our monthly meeting on August 28th. We would like to welcome John Vaughn KC5FEV and Dave West KD5GES.

LETARC played a trivia game via the website Kahoot.it with questions from the technician class pool. It is surprising how quickly one can forget questions we once knew. Our friend Dave Luchak KL7BX was the winner and received a NANOVNA. Other prizes were awarded including this reversible dog Bandana to Kari Millier KJ4URO who put it on her beautiful dog Tex.

In ARRL VE testing news Ken Nolley KG5JDD upgraded to general. Congratulations Ken!

Pictures courtesy of Kari Miller KJ4URO

Minutes from August 28th, 2021

I. Opening Ceremonies

Call to order at 0903.
Prayer and Pledge by Cliff Scott.
Introductions.
Welcome from President Ross Bennett.

II. Adoption of Agenda

Meeting agenda adopted.

III. Adoption of Minutes

Reading of minutes and finances from July meeting. No objections. Minutes adopted.

IV. Reports from Officers.

1. President Ross Bennett – nothing to pass
2. Vice President Ron Case – not present
3. Secretary/Treasurer James Bray – Will be vacating post at end of year. Nominations start next month
4. Media Director Don Gamble – September newsletter will cover Radio propagation, October will cover CW and November will be about Veterans.
5. Communications Director Jim Rogers – not present

V. Reports of the Board – no meeting was held.

1. Reports by Committees – Karen Houston reporting for repeater committee. Charging issue resolved. Unsure of grounding issue resolution.

VII. Reports by Members – Ross Bennet mentioned a new wireless protocol 802.11mc will help with locating you inside your home. Chris Crawford mentioned he and Don Gamble have enjoyed doing Parks on the Air activations. Encouraged other members to give it a try.

VIII. Recess

IX. Reconvene

X. Program: Trivia Competition using Kahoot! Great Time!

XI. Unfinished Business

A. Tailgate sale in October – Ross Bennett and John Zenter will work on location.

B. Texas QSO Sep 18 – Don Gamble asked if the club will be participating in this event. 9am to 9pm on Saturday and 9am to 3pm on Sunday. Goal is to activate as many counties as possible. Terry Johnson stated Mims would be one of the only stations operating in Marion County. Motion carried to operate from Mims.

XII. New Business

A.None

XIII. VE Testing Headcount

XIV. Monthly dinner – Sep 14th dinner will be at Cotton Path at 630pm.

XIV. Adjourn at 1022

Our friends in the Upshur Area Amateur Radio Club invite us to hear NTX Section manager Steven Lott Smith KG5VK

Monday, Sept. 13th at 7:00 P.M. LETARC has been invited to hear a special program at the Upshur club meeting presented by our ARRL North Texas Section manager Steven Lott Smith KG5VK. Steve visited with LETARC via zoom in February of 2021. The meeting will be held at the Upshur Rural Electric Coop auditorium 1200 W. Tyler St., Gilmer, TX A special thank you to UAARC president and LETARC charter member John Keith W5BWC.

ARRL Webinars

Introduction to DMR and Digital Voice by Tim Deagan, KJ8U / Thursday, September 9, 2021 @ 3:30 pm EDT (1930 UTC)

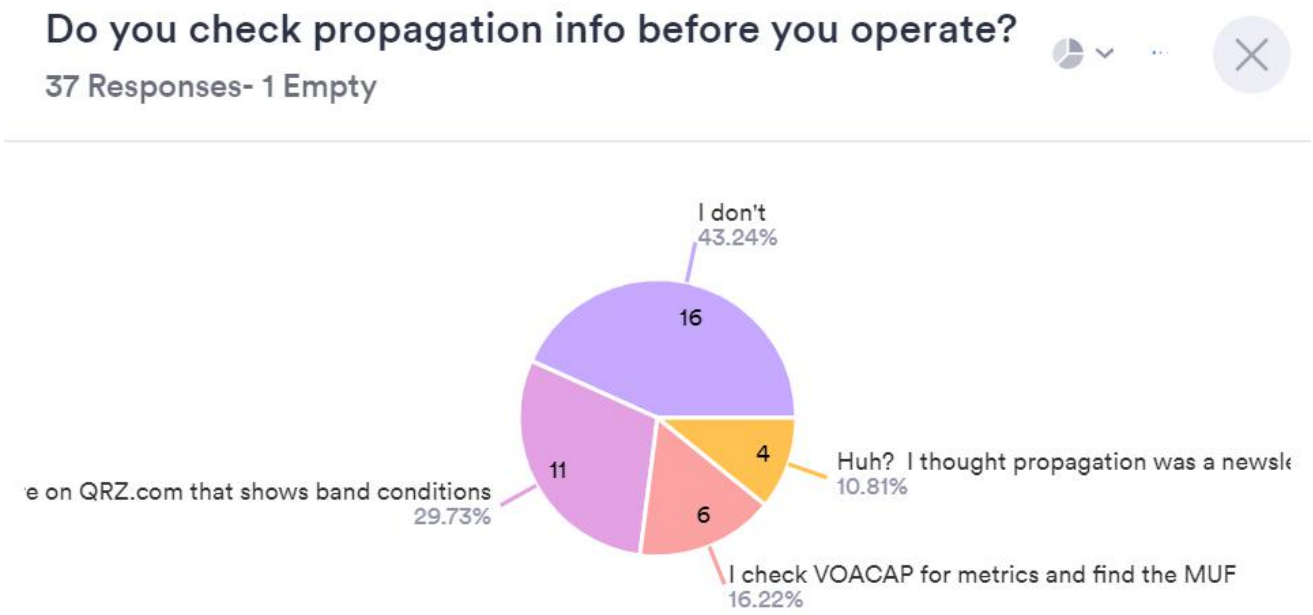
Working the Pileup, presented by Ron Delpiere-Smith, KD9IPO / Tuesday, October 5, 2021 @ 1:00 pm EDT (1700 UTC)

Click here for more information about the ARRL learning network.

LETARC Survey "Do you check propagation before you operate?"

43.2%	I don't
29.7%	I just look at the little picture on QRZ.com that shows band conditions
16.2%	I check VOACAP for metrics and find the MUF
10.8%	Huh? I thought propagation was a newsletter

We had 37 responses, thank you!



Data	Response	%
I don't	16	43.24%
I just look at the little picture on QRZ.co...	11	29.73%
I check VOACAP for metrics and find the...	6	16.22%
Huh? I thought propagation was a newsl...	4	10.81%

LETARC interviews Eric Nichols KL7AJ, author of Propagation and Radio Science and Receiving Antennas for the Radio Amateur from the ARRL

LETARC: Are you a member of a local amateur radio club? If so, what is your favorite activity or part of the club?

Eric KL7AJ: I've been a member of the Arctic Amateur Radio Club (AARC) for about 45 years, and the club has been around since the 1930s. My favorite activity is Field Day and building antennas. I've recently done a lot of experimentation on our two new LF bands, 2200 and 630 meters. Still so much to learn about those frequencies.

LETARC: Please tell us about your books on propagation, recieving antennas, and writing for QST.

Eric KL7AJ: My first QST article was "Try this Speech Decompressor" in December, 1983, QST, and I've written a over a hundred articles since then in QST, QEX, CQ, and Ham Radio(which I regret no longer exists). After a lot of years at HIPAS Observatory, and later HAARP, I was compelled to write Radio Science for the Radio Amateur, Propagation and Radio Science, and Receiving Antennas for the Radio Amateur. These three books are closely related in parts, but with different emphasis.

I've gotten a lot of great response from all three of them. Writing technical articles is a great vocation...sometimes it even pays!

LETARC: What advice would you give to an amateur who has never thought much about radio wave propagation but would like to look into the subject to become a better operator?

Eric KL7AJ: Get out of the 2-meter repeater ghetto as soon as possible. Remember even Techs have some HF privileges. Get on HF as soon as humanly possible. Learn how to read an ionogram. (Learning how to interpret Solar indices is a good thing, too, but nowhere near as important as learning how to read an ionogram). Get on the air...a LOT. There is no substitute.

LETARC: What is the most confusing or misunderstood aspect of radio wave propagation?

Eric KL7AJ: The existence of X and O propagation modes, by far. When I wrote "Gimme an X, Gimme an O" in December, 2010 QST, it was the first mention in amateur literature of X and O modes in 70 years! I am gratified that the latest editions of the ARRL Antenna Book give fair treatment of the topic....at long last!

LETARC: If a group of amateurs used your book as a study guide or a reference for a presentation, is there a section of the book that you would recommend them to spend more time on?

Eric KL7AJ: In Receiving Antennas for the Radio Amateur, I would thoroughly absorb "The amazing disappearing antenna." (Forgot the chapter number, off hand). This is probably the most detailed and compact antenna theory "talk" of any of my books. I would also recommend the chapter "The antenna as a signal source."

LETARC: Are there any resources you would recommend to understand how your radio waves work?

Eric KL7AJ: This is my absolute favorite. I show it in every electronics class. https://youtu.be/DovunOxlY1k

LETARC: Do you have any general advice you would give an amateur radio club?

Eric KL7AJ: Get with all the young science geeks! Amateur radio is the cheapest science education you can get. Always think of amateur radio as a stepping stone into a career in electronics. Set up a meaningful local scholarship program for licensed hams.

LETARC: What is your favorite part of amateur radio?

Eric KL7AJ: I've gone through a lot of cycles over the decades I've been licensed! When I was a Novice, my goal was to become really good at CW, and I thought once I got there, that's where I'd stay. I can still do 45 wpm if I'm properly caffeinated, HI. Then I got into technical writing...and I've been doing that for going on 40 years.

Most recently, I've been somewhat committed to see what I can do on 2200 meters. Many years ago a small local group did some work on the old experimental 1760 meter band, with just a few hundred milliwatts. Now that we have some actual bands down in the subterranean frequencies, we need to explore them. I like multi-multi contesting....though I'm not as hard core as some of my peers. I love resurrecting boat anchors....it's probably the one single activity that I've done continuously throughout my entire ham "career." If there's one thing I'd like to do as a ham is have my own ham radio brick and mortar store....like Henry Radio, or the original HRO. Alas, I think those days are over. I had some great time just hanging out and learning ham radio in Henry Radio's lobby. I also met Andy Devine there...one of the few famous people I ever met. He told me that once I got my General, he'd work me on 80 meters...a promise he kept! I still have the QSL card somewhere to prove it!

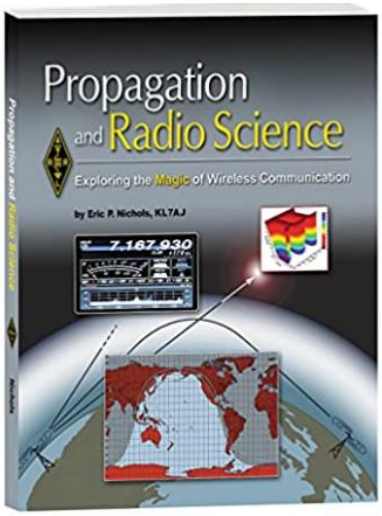
Well, there's so much more I could say, but I guess I'd better QRT for now. 73!

Eric

LETARC Thanks Eric Nichols KL7AJ!

KL7AJ's books

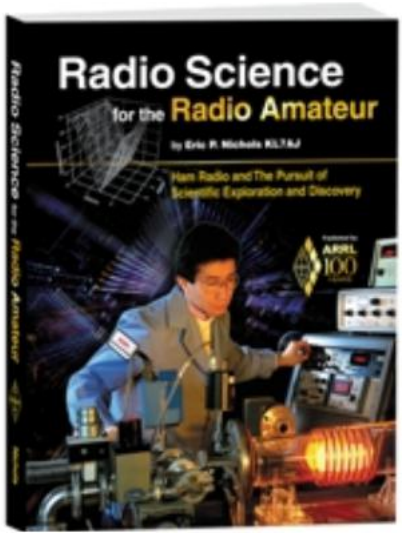
Propagation and Radio Science



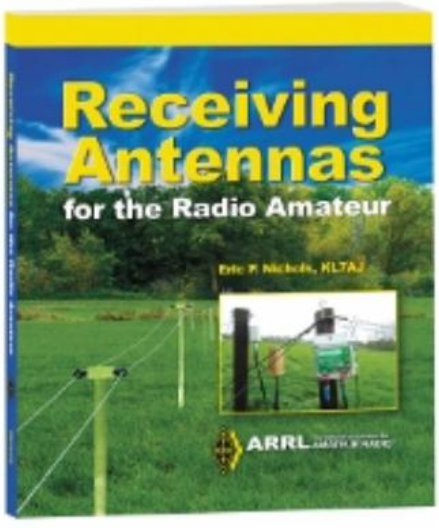
Click here to buy it on Amazon

Radio Science for the Radio Amateur

Click here to buy it from the ARRL



Receiving Antennas for the Radio Amateur



Click here to buy it from the ARRL

VOACAP

The Voice of America Coverage Analysis Program is s free professional high-frequency (HF) propagation prediction software from NTIA/ITS, originally developed for Voice of America (VOA). This is useful for finding the Minimum Useable Frequency (MUF) to make contacts on HF frequencies and to check on band conditions as a whole.

Click here for an overview of VOACAP.

Click here for point to point predictions of propagation.

George Lane's book on using VOACAP is available for download here.

VOACAP has a blog you can read here.

If you are not familiar with the Voice of America, Voice of America (VOA) is the largest U.S. international broadcaster, providing news and information in more than 40 languages to an estimated weekly audience of more than 280 million people.

Click here to learn more about VOA.

As you can tell, many hours of effort have been put into the VOACAP software. This is an incredible tool for professional and amateur radio stations.

K7RA Weekly ARRL Propagation Bulletin

Paul "Tad" Cook K7RA has written the ARRL propagation bulletin since 1991. You may have read his work in the ARRL Letter via email. Tad has coordinated 10 meter propagation beacon on the air on July 9, 2021 after several days of testing. Frequency is 28.2833 MHz, assigned by the IARU and the call sign is K7RA/B. The beacon was built by Volodymyr Skrypnyk, UY5DJ/AA7DJ and runs 11 watts into a vertical half wave dipole.

Click here to visit a directory of Tad's Propagation reports.

Carl Luetzelschwab K9LA's Propagation website

Carl K9LA's web site contains selected articles and presentations about propagation and solar topics from my writings over the years. These items are grouped into Monthly Feature, Timely Topics, Basic Concepts, Tutorials, General, 160m, HF, VHF and Contesting. Just click on the appropriate link in his site to navigate to these areas. It is nice to see propagation reports for VHF and not just HF.

Carl does zoom and skype presentations to clubs! This might be a good program for LETARC.

Click here to visit Carl's propagation site.

Texas QSO Party

The Texas QSO Party will be Saturday, Sept. 18th and Sunday, Sept. 19th. LETARC plans on operating on Saturday at our radio room at Mims Volunteer Fire Dept. in Marion County as station K5LET. The purpose of the Texas QSO Party is to provide a competitive opportunity for Amateur Radio Operators anywhere in the world to contact as many Texas stations in as many different Texas counties as possible. Awards are available for various categories.

Click here to learn more about the Texas QSO Party.

V3Y Special Event

The Straight Key Century Club (SKCC) has a CW event every January called K3Y. It has become a huge success, with over 40,000 K3Y QSOs in 2021! Several LETARC members participate in K3Y.

Building on this success, Canadian SKCC operators are going to start special event station V3Y in September. Each Canadian Province will have a V3Y station on the air and we can try to contact them all.

Our friend and LETARC charter member Lloyd Jackson WO5W has started a friendly competition to see who can get the most V3Y stations. It has been requested that we twist the arm of another friend and LETARC charter member Terry Johnson KG5WO. So get out your straight key and find those Canadian stations.

Click here to learn about V3Y and here to learn about SKCC.

Our next meeting...

Please join us at LETARC's next monthly meeting will be 9:00 A.M. on Saturday, September 25th at the Longview Fire Training Center located at 411 American Legion BLVD Longview, TX 75601. Don't forget that you can attend our meeting virtually via phone or internet. Phone # 601-516-5566 Pin 206-446-183# or google.com/mds-ndwd-cwo. Anyone interested in amateur radio is welcome to attend.

There will be a VE test session at 2:00 P.M. that same day at the Glaske science building of LeTourneau University. Walk ins are welcome. Testing costs $15.00 (soon to be $35) and you will need a government issued identification such as a driver's license, a valid email address and an FCC issued FRN number. LETARC VEs can help you get your FRN that day if you need help.

For more information about VE testing please contact John Zenter AE5OY at j.zenter@w-rg.com.

Wednesday 2 meter net

Please join us each Wednesday night at 8:30 for our weekly LETARC net on the 147.34 MHz repeater. The tone is 136.5. All licensed amateurs are welcome to check in, you don't have to be a member of LETARC. Afterward there is sometimes an informal simplex chat on 146.52 MHz.

A special thank you to

Eric Nichols KL7AJ
Mims volunteer fire department
The Longview fire training center on American Legion BLVD
Jim Perry KA5BCM for our radio room
John Zenter AE5OY and our VE team
Marty Duplissey N5KBP for his great work on the ARRL audio news
Steven Lott Smith KG5VK – ARRL North Texas Section Manager
JoAnn Keith KA5AZK – ARES Section Manager
Ross Bennett KI5SR – Gregg County ARES
David Chenault W5CWT – Rusk County ARES
John Keith W5BWC – Upshur County ARES
Tom Noe W5TDN – Gregg County SKYWARN coordinator
Jim Rogers N5VGQ – Repeater trustee
Ron Case W2RLC – letarc.org webmaster
Jim Quinn AJ1MQ – groups.io coordinator
Dr. Hoo Kim AG5ZS – Letourneau university liaison
Dr. Ron Morton KF5GMA and Carolyn Morton KF5GLT Longview CERT

Thank you for reading our newsletter. We hope to see you at our meetings and dinner gatherings and we hope to hear you on our nets. If you would like to contribute to the PROPAGATION please email Don at gambledon@gmail.com.

Please visit our website at letarc.org.

73 de Don Gamble KG5CMS.

Dit Dit

LETARC SEPTEMBER 2021

MEETINGS

OUR MEETINGS BEGIN AT 9AM AT THE LONGVIEW FIRE TRAINING CENTER AT 411 AMERICAN LEGION BLVD, LONGVIEW, TX, 75601. THERE WILL BE A VE TEST SESSION AT LETOURNEAU UNIVERSITY AT 2:00 PM ON THE SAME DAY.

REPEATERS & NETS

LETARC NETS ARE WEDNESDAY NIGHTS AT 8:30 PM ON THE 147.34 REPEATER WITH AT TONE OF 136.5

UPSHUR ARES NETS ARE THURSDAY NIGHTS AT 8 PM ON THE 146.9 REPEATER WITH A NEGATIVE OFFSET AND TONE OF 107.2

SUN	MON	TUE	WED	THU	FRI	SAT
			1 PROPAGATION LETARC net 8:30 PM	2 Upshur ARES net 8 PM	3	4
5	6	7	8 LETARC net 8:30 PM	9 Upshur ARES net 8 PM	10	11
12	13	14 LETARC dinner Cotton Patch 6:30 PM	15 LETARC net 8:30 PM	16 Upshur ARES net 8 PM	17	18 Texas QSO Party 9 AM
19	20	21	22 LETARC net 8:30 PM	23 Upshur ARES net 8 PM	24	25 LETARC meeting 9 AM
26	27	28	29 LETARC net 8:30 PM	30 Upshur ARES net 8 PM		

Upcoming amateur radio events

Sept. 4 Colorado QSO Party
Sept. 5 Tennessee QSO Party
Sept. 11 Alabama QSO Party
Sept. 11 ARRL Sept. VHF Contest
Sept. 11 North American Sprint, CW
Sept. 18 ARRL 10 GHz and up Contest
Sept. 18 Iowa QSO Party
Sept. 18 Texas QSO Party
Sept. 18 New Jersey QSO Party
Sept. 18 New Hampshire QSO Party
Sept. 19 North American Sprint, RTTY
Sept. 25 Maine QSO Party