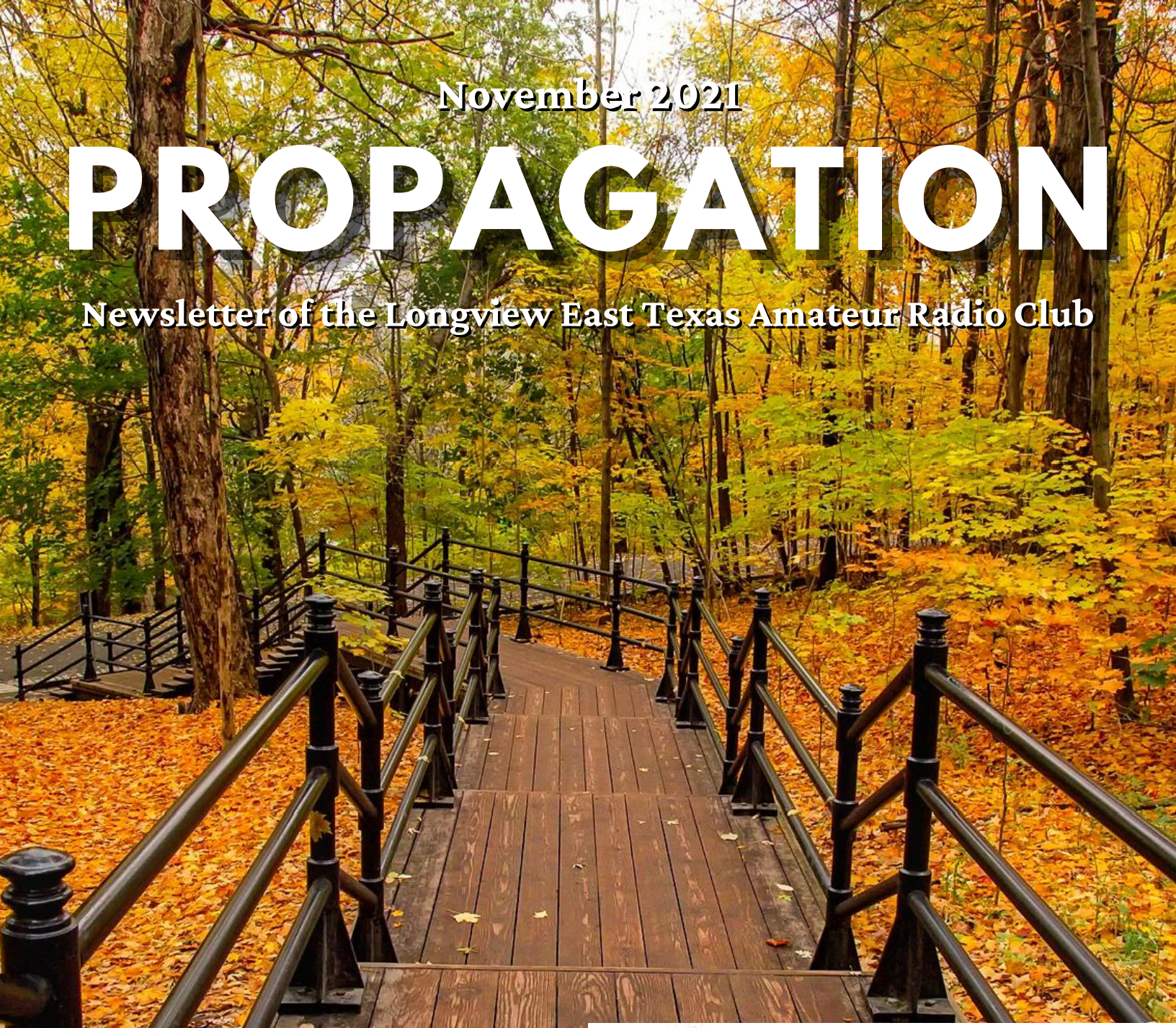
November 2021

PROPAGATION

Newsletter of the Longview East Texas Amateur Radio Club



LETARC intveriews AMSAT Vice President Paul Stoetzer N8HM

Lance McNeel W5TWM starts a 3.805 MHz net

Dr. Bob Heil K9EID speaks to LETARC on Nov. 20th

AMATEUR RADIO IN SPACE

AMSAT®

LETARC would like to thank all of our Veterans and their families for their service. Happy Veteran's day.

LETARC Activities

LETARC held our monthly business meeting on Saturday, Oct. 23rd. It was a short meeting as there was no presentation.

In ARRL VE testing news Tara Roach of Hughes Springs, TX earned her technician class license and Brad Siepman of Benton, LA proved that he previously had a general class license and provided the paperwork proof to be granted his general class license again.

Meeting minutes

I. Opening Ceremonies
Call to order at 0907
Prayer and Pledge by John Zenter
Introductions
Welcome from James Bray

II. Adoption of Agenda
Meeting agenda adopted

III. Adoption of Minutes
Reading of minutes and finances from September meeting. No objections. Minutes adopted.

IV. Reports from Officers.

1. **President Ross Bennett – not present**
2. **Vice President Ron Case – not present**
3. **Secretary/Treasurer James Bray – nothing to pass**
4. **Media Director Don Gamble – always needing/wanting info for newsletter**
5. **Communications Director Jim Rogers – not present**

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

VI. Reports by Committees – no meetings held

VII. Reports by Members – none

VIII. Recess

IX. Reconvene

X. Program: none

XI. Unfinished Business

A. Tailgate sale on October 9th was obviously not held. Possibly in spring.

XII. New Business

A. Possible storage for club equipment.

B. The following nominations for board members have been made

1. President – Richard Brown (Karen Houston nominated)
2. Vice President – Don Gamble (Skip Brown nominated)
   Bert Sharp (Richard Brown nominated)
3. Secretary/Treasurer – James Bray Incumbent (Skip Brown nominated)
4. Media Director – Don Gamble Incumbent (James Bray nominated)
5. Communications Director – Jim Rogers Incumbent (Don Gamble nominated)
   Karen Houston (Richard Brown nominated)

XII. VE Testing Headcount – enough VEs available.

XIV. Monthly dinner – November 9th 6:30 pm Cracker Barrel

XV. Adjourn at 0924.

Updated list of officer candidates since our meeting

President - Ross Bennett KI5SR and Richard Brown K5RRB
Vice President - Bert Sharp KI5DYI
Secretary/Treasurer - James Bray KG5OFX
Media Director - Don Gamble KG5CMS
Communications Director - Jim Rogers N5VGQ and Karen Houston KM5A

Thank you to James Bray KG5OFX for providing the meeting minutes.

Dr. Bob Heil K9EID will visit with LETARC via Zoom on Saturday, Nov. 20th

LETARC is excited to welcome ham radio legend Dr. Bob Heil K9EID to our monthly meeting via Zoom on Nov. 20th. We will project the Zoom meeting at the Fire training center for those that can join us in person. Dr. Heil is going to visit with us about getting started on AM, his pine board projects featured in Ham Nation and QST, Heil Sound products including the PRAS EQ receiving system, and give advice for local radio clubs.

Dr. Heil has an incredible ham radio history and he is very generous with his time by helping amateurs and clubs. Please join us on the 20th and look for a Zoom invite via our groups.io page if you can't make the meeting in person.

Our friend Lance McNeel W5TWM creates a regional net on 3.805 MHz Sunday nights at 6 PM local time

Lance was kind enough to send us some info about this net -

As to the 80 Meter net, I just wanted to do something to accomplish a few things and in no particular order:

1. Encourage Technician class Hams to upgrade.

2. Encourage more general (no pun intended) use of the HF bands.

3. Investigate the NVIS propagation in East TX for possible needs in a communication emergency or difficulty. (NVIS typically is best below 6 Megahertz so 80 and 60 Meters should (and are) be the best bands for regional NVIS comms.

Incidentally, speaking of 60M, after establishing this 80 meter net as a regular even for a while I do plan to have a once a month 60M net instead (or transition to it after first round of check-ins possibly) to allow and encourage area hams to utilize the 60M band as well.

4. Encourage and help any hams who wish to build antennas for HF to do so and test them out in this venue.

Finally, I will just paste the text that I typically use at the beginning of the net in case you can gleam anythign else from it.

Welcome to all to this regionally focused, but open to anyone, 80M weekly net. My name is Lance and my call is W5TWM (Whiskey 5 Tango Whiskey Mike). I am located in Longview, TX and this net will be open to anyone wishing to check in who currently holds a General class Amateur license or higher. The primary purpose of this net is to connect hams in the East Texas area, promote interest in technician class upgrades and to promote and encourage the general use of the HF bands

Tonight's net will be a controlled net and I will be your net control for the evening. Please feel free to give your call sign phonetically if you wish when checking in.
We will limit the time of this net to 30 minutes as there is a regularly scheduled Smith County 10 Meter net at 8pm on Sundays and we want to not interfere there.

The format will simply be check-ins, followed by a round robin format where we you can report your location and any other information you wish to bring to the net such as information about your radio or antenna setup if desired.

So welcome to the East Texas Regional 78.78 Meter Evening Net here on 3.805Mhz.

So this is W5TWM and if you wish to check in tonight, come 3 at a time now with your call sign only please.

I expect this net to be regional as NVIS is typically limited to basically the equivalent of the greater East Texas area. It overcomes terrain obstacles and allows for comms with our regional hams that could be critical in a time of crisis.

https://www.electronics-notes.com/articles/antennas-propagation/ionospheric/nvis-near-vertical-incidence-skywave.php is not a bad introduction to it if interested.

Well I guess that's about all there is and thanks for the opportunity to tell you a little about it.

For now time is 6:00 pm local time Sundays on 3.805 Mhz (technically 78.78 Meters). If this continues to grow in popularity I may move it to another night such as a Tuesday, but not anytime soon.

73,

Lance W5TWM

Thank you to Lance for providing this info and for creating this network. Join them on Sunday nights to try out your NVIS capabilities.

Buddy W5DW and Don KG5CMS operate at Daingerfield State Park

Buddy and Don met up at Daingerfield State Park early on October 18th. Although several antennas were deployed a 17' whip attached to a table was the only one used. The park was activated (at least 10 contacts) on 5 watts CW and then more contacts were made on SSB with 100 watts. We plan on going back the morning of Nov. 22nd and all are welcome.

Don KG5CMS operates on 20 meters at Daingerfield. Photo courtesy of Buddy Walker W5DW.

Rusk County Amateur Radio Club Foxhunt

On October 16th the Rusk County Amateur Radio Club hid two transmitters in Henderson, TX. The club had recently constructed a three element 2 meter Yagi antenna from tape measures from a design brought to the club by Mike Brian K0MEB. A 70 CM transmitter was hidden in Fair park (where we started the hunt) and a 2 meter transmitter was hidden in another location in Henderson. David Chenault W5CWT did a great job organizing the event and hiding the transmitters. It was a smart idea to have a walking hunt and a driving hunt and to use different bands.

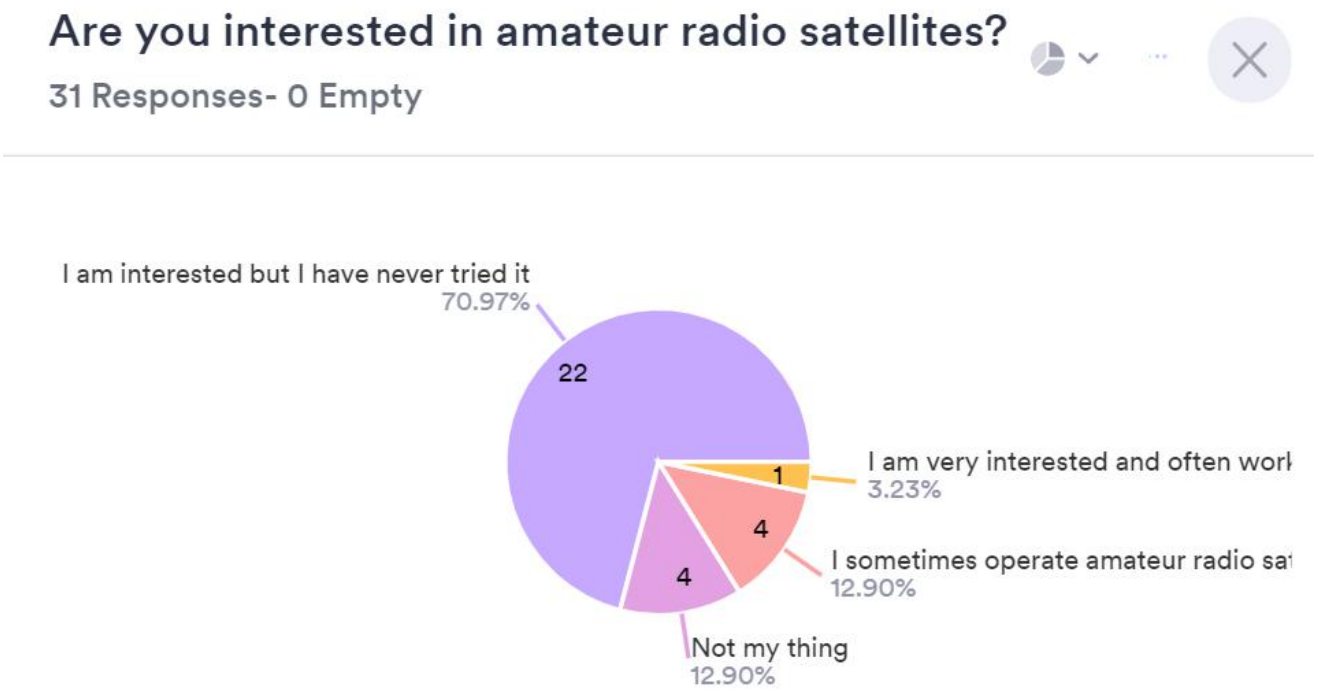
Gary Jarvis KI5GPN of Henderson shows his portable Yagi antenna before the foxhunt

W5KD is awarded HOY

Our ARRL North Texas Section Manager Steven Lott Smith KG5VK has announced that Willis Teague Jr. W5KD of Weatherford, TX has won Ham of the year for the North Texas section. Congratulations Willis.

LETARC Survey "Are you interested in amateur radio satellites?"

71 %	I am interested but have never tried it
12.9 %	I sometimes operate amateur radio satellites
12.9 %	Not my thing
3.2 %	I am very interested and often work the birds



Data	Response	%
I am interested but I have never trie...	22	70.97%
Not my thi...	4	12.90%
I sometimes operate amateur radio s...	4	12.90%
I am very interested and often work ...	1	3.23%

LETARC interviews AMSAT Vice President Paul Stoetzer N8HM

Paul N8HM has won so many awards and activated so many grid squares via satellite radio that it would take this entire newsletter to list. Please check out his QRZ page to see all that he has accomplished. Paul is very active in all things AMSAT and he was kind enough to grant LETARC this interview.

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

Paul N8HM: I'm a member of the Potomac Valley Radio Club, a contesting club in the area. I do enjoy HF and VHF contesting, though I have not been as active as I once was. Pre-COVID, I enjoyed the lunches and other get-togethers with local hams.

LETARC: How did you get started in amateur radio satellites?

Paul N8HM: I've been interested since I got my license in 1999 and tried listening to a couple of FM satellites with my HT and a long whip antenna without success around that time. In August 2011, ARISSat-1 was deployed from the ISS and I enjoyed receiving the voice and SSTV transmissions it sent. This led to me purchasing an Arrow Antenna and eventually building my portable satellite station up. I live in an apartment building in southwest Washington, DC, so I am not able to set up a home satellite station. All of my satellite contacts have been made portable.

LETARC: Please tell us about your work with AMSAT and why amateurs and clubs should support AMSAT.

Paul N8HM: I've been AMSAT's Executive Vice President since 2017 and also serve on the Board of Directors. The past year and a half have really been a whirlwind with the retirement of AMSAT's office manager, Martha Saragovitz, after over 40 years of service to the organization and the subsequent closure of our physical office space in the Maryland suburbs of Washington, DC. AMSAT was really the first organization to demonstrate to the world that small satellites could do useful work and we've really been somewhat of a victim of our own success since we're now competing with hundreds of companies and organizations that sprung from those demonstrations in the 1970s and 1980s for launches. Our current satellite project is called GOLF, for "Greater Orbit, Larger Footprint." The goal of GOLF is to develop and test technologies to take us back to high orbits in a CubeSat form factor - which is really the only way we can get an affordable launch. It's a big technical challenge to try to fit the functionality of satellites with launch masses of 150 kg into a form factor with masses between 4 kg and 8 kg. Hams have involved amateur radio in virtually every endeavor that you can think of - flying airplanes, sailing boats, hiking - and it's natural that we want to continue amateur radio's involvement in space. After all, the first private, non-government use of space was by radio amateurs with OSCAR 1 in 1961.

LETARC: What advice would you give a beginner interested in satellites? Are there any resources or gear that you would recommend?

Paul N8HM: Read as much as you can about it and always listen for a while before attempting to transmit, The best resource to get started is AMSAT's Getting Started With Amateur Satellites book, available as both a print or digital edition at https://www.amsat.org/product-category/amsat-books-and-dvds/

LETARC: Your QRZ page lists an amazing amount of QSOs across a tremendous amount of grid squares and DX entities. Please tell us about some of your favorites.

Paul N8HM: I need to update that at some point. It's been a while! There are quite a few of my favorites. For satellite - my first QSO with UT1FG/MM while he was sailing off the coast of Chile stands out as does my first DX QSO to PV8DX and my first QSO to Europe with G3VKV. Others include breaking a massive pileup for 4U70UN at UN Headquarters with just my FT-817's 5 watts and managing to be K1N's second satellite QSO from Navassa Island during the February 2015 DXpedition. Working the 488th and final grid square in the United States for AMSAT's GridMaster Award was also a highlight. Given the terrain of CM79, only very high passes are workable from there, which means very low passes here on the east coast. I went to a good high spot looking west for a 4 degree pass of AO-7 and was able to make the QSO.

For HF QSOs, a couple stand out - in February 2001, when I was living in Michigan, I worked D68C at 0100Z on 10M FM. That was at the height of the sunspot cycle and I only had 100 watts and a vertical. It was quite something to make such a DX QSO at that time of night on 10 meters - and using FM no less. My other favorite was working VK0EK on Heard Island from here in Washington, DC on 30M RTTY with my MFJ magnetic loop on my balcony. I have a very clear view to the south and it worked well for me to make that QSO.

LETARC: What are the biggest problems that AMSAT has to overcome?

Paul N8HM: Limited resources - both in terms of money and volunteers are our biggest challenges, but the evolving regulatory environment is probably the largest. Even if we had the resources to pay today's launch costs and were able to replicate AO-10 or AO-13, we would not be allowed to launch them as those satellites lacked the capability to dispose of themselves by re-entry or transfer to a disposal orbit at the end of their mission. Fulfilling orbital debris mitigation requirements on an amateur budget is a tricky problem to solve.

LETARC: What advice would you give a local radio club?

Paul N8HM: Reach out to new hams and avoid "gatekeeping." No one can possibly know everything about amateur radio when they are just getting started and new hams will ask questions that sound "dumb" to those who have been around a long time. Try to be tolerant. I know I haven't always been perfect in this regard!

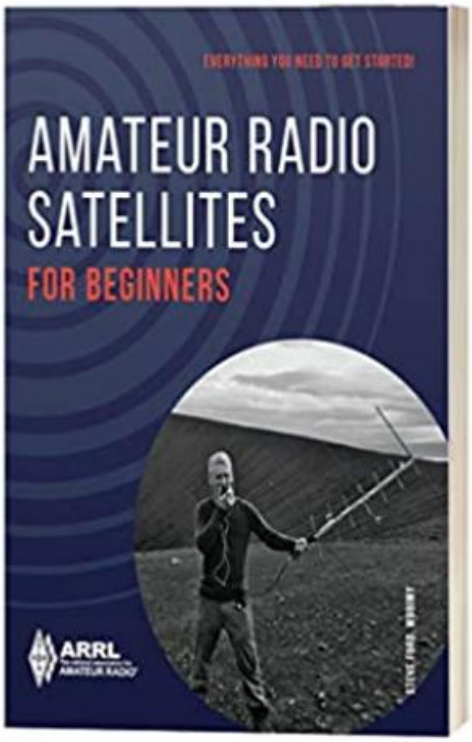
Hope these work for you!

73,

Paul, N8HM

Thank you Paul N8HM!

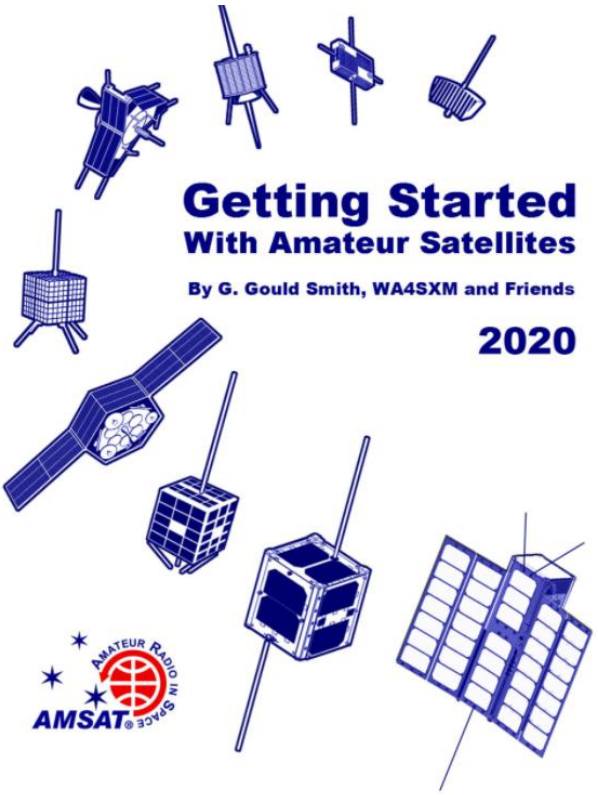
Books on amateur radio satellites



Amateur Radio Satellites for beginners by Steve Ford WB8IMY

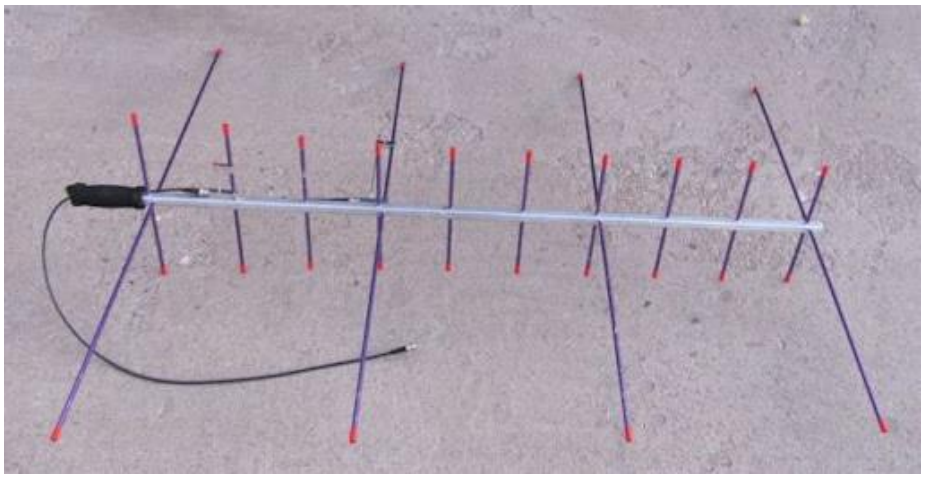
Buy it from Amazon buy clicking here.

Getting started with amateur satellites by Gould Smith WA4SXM



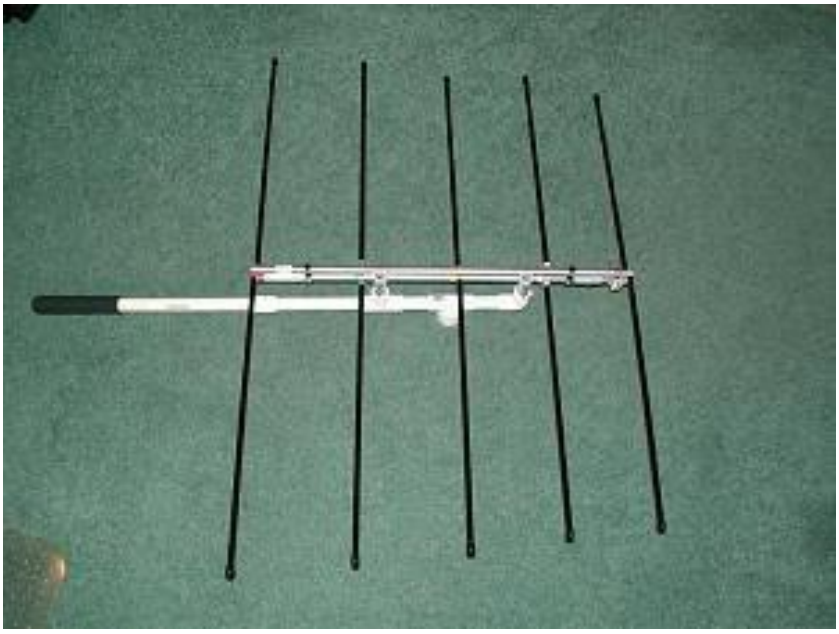
Buy it from AMSAT buy clicking here.

Amateur radio satellite antennas



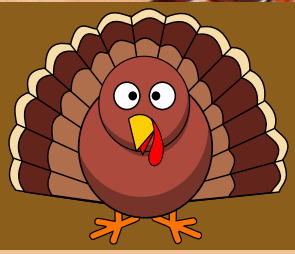
One of the most common satellite antennas is this dual band 2m/70cm Yagi made by Arrow. Visit their site by clicking here.

The other most common antenna is this dual band 2m/70cm Elk periodic. Visit their site by clicking here.



Consider joining AMSAT.

Visit AMSAT's site by clicking here or by going to amsat.org



Our next meeting

Please join us at LETARC's next monthly meeting which will be at 9:00 A.M. on Saturday, November 20th 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.

LETARC 2 meter Wednesday 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.

LETARC is thankful for -

AMSAT Vice President Paul Stoetzer N8HM

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

73 de Don Gamble KG5CMS.

Dit Dit

LETARC NOVEMBER

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

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

Upcoming amateur radio events

Nov. 20 ARRL EME contest

Nov. 20 ARRL Sweepstakes contest, SSB