OUR 26TH YEAR!

EPARA BEACON

VOL. 6, NUMBER 1 THE OFFICIAL NEWSLETTER OF THE EASTERN PENNSYLVANIA AMATEUR RADIO ASSOCIATION JANUARY 2022

NEXT CLUB MEETING: JANUARY 13TH

Monroe County Public Safety Center, 100 Gypsum Rd Stroudsburg, PA 18360

Welcome to the EPARA Beacon! This newsletter is published monthly and is the official newsletter of the Eastern Pennsylvania Amateur Radio Association. EPARA has served the amateur radio community in the Pocono Mountains for over 25 years. We have been an ARRL affiliated club since 1995. We offer opportunities for learning and the advancement of skills in the radio art for hams and non-hams alike. EPARA supports Monroe County ARES/RACES in their mission of providing emergency communications for served agencies in Monroe County. Feel free to join us at one of our meetings or operating events during the year. The club meets on the second Thursday of every month, at the Monroe County 911 Emergency Control Center. The business meeting starts at 7:30 P.M. Anyone interested is invited to participate in our meetings and activities.

ZOOM Meeting Info: Meetings begin at 7:30PM!

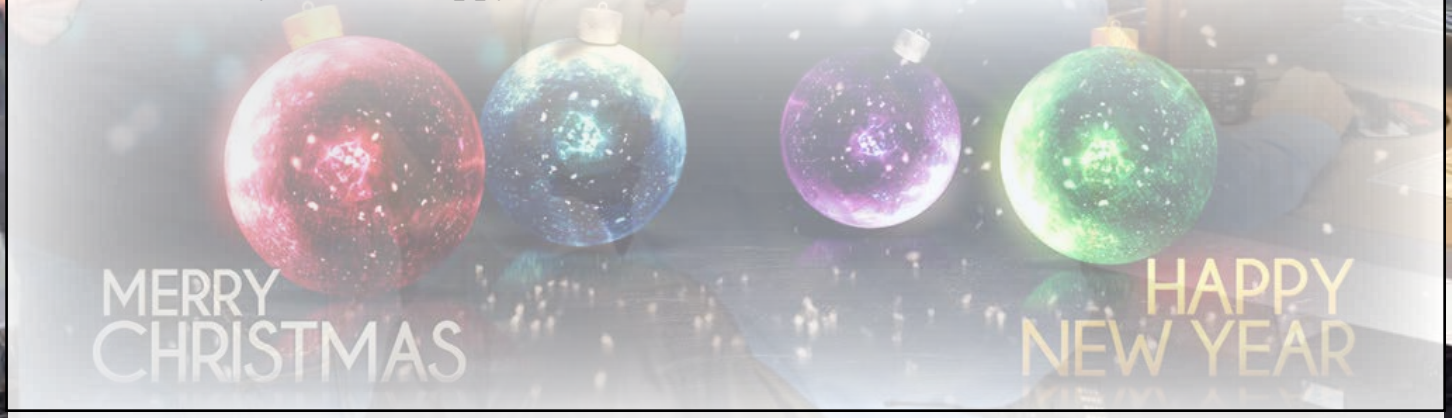
https://us02web.zoom.us/j/85463346031?pwd=bU1KcVZoaVZiVEUvdjRsUXlNNHZkZz09

Meeting ID: 854 6334 6031 Password: 244632

From The President

Happy New Year! I hope the holidays where all you wished for. As the new year begins, we will start up our VE sessions again. They are scheduled on the fourth Friday each month and begin on January 28th at 6pm. We will be rescheduling the antenna repair project at the 911 center, we had to postpone it due to high winds and snow. I will be looking for some rugged individuals to brave the cold to rehang the antenna with me. The holiday rush has me catching up on all kinds of tasks, both personal and club related. My work schedule is really cutting into my time and that means not much time to play radio. Thankfully now that the holidays are behind us, I can spend more time on my hobby and the club.

Our next meeting is on Thursday January 13, I hope to see you all there as we start off 2022. We have lots of fun and educational things planned for EPARA in the coming year!
73, and I wish you all a Happy New Year! Chris AJ3C



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What's INSIDE this ISSUE

EPARA Net list

Monroe county ARES-RACES – Sunday's 8:30 PM, 146.865 MHz, PL -100 Hz

The Monday Night Pimple Hill repeater 8:30 PM (Repeater freq = 447.275 with a - 5MHz offset) DMR TECH Net on TG314273* Time Slot 2

SPARK Information/Swap Net – Tuesday's 8:30 PM, 147.045 MHz, PL 131.8 Hz

The Wednesday Night EPARA Hot Spot DMR Rag Chew net at 8:30 PM, TG 3149822* Time Slot 2 (N3IS Talk Group)

EPARA Tech Net – Friday's 8:30 PM, 147.045 MHz, PL +131.8 Hz

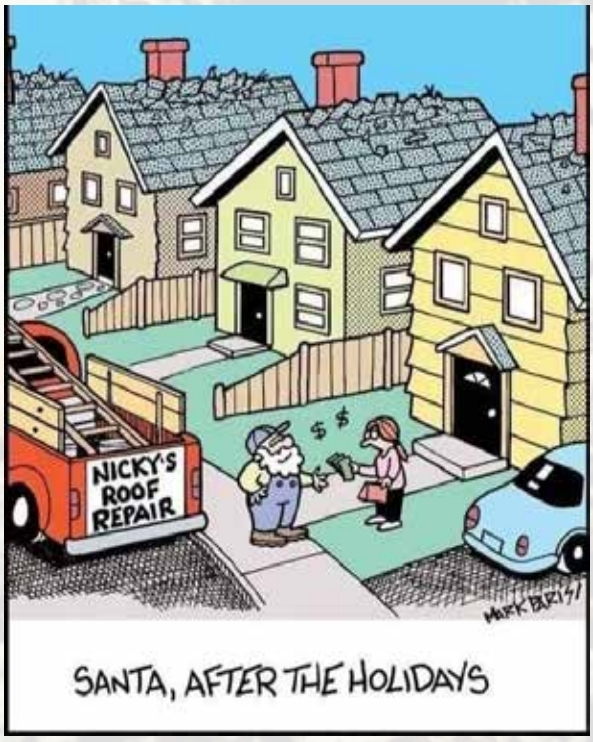
*TG = Talk Group

Announcements
AND UPCOMING EVENTS

EPARA Patches: **Club patches are in! For those that ordered them please step forward to collect them. We also have extra just in case …**

EPARA Club Dues
Club dues were due January 1st. For those that missed the chance to stay current, there are two (2) methods available to pay to help make this easy for all. Contact Scott KC3IAO via his email: KC3IAO@hobbyguild.com and you can send him a check or pay via PayPal.

VE Sessions
VE sessions are slated to begin again in January.



Amateur radio Classes
Technician classes are scheduled to begin in March, and General classes in Early summer.

Hamfest!
The date for next years hamfest has been decided and it's to be on Sunday, September 18th, 2022.

Rule #1 of Amateur Radio, it is a hobby, unless you figured out a way to fashion a living out of it.
Rule #2 of Amateur Radio, life is not a hobby and typically carries heavy responsibilities of everything that is not a hobby.
Rule #3 of Amateur Radio, never give up a LIFE event for a Ham event. You may make some great memories at the Ham event, but the guilt you may carry missing a LIFE event can be a terribly heavy millstone.
Rule #4 of Amateur Radio, as technology moves forward, so does Ham Radio - do what makes you happiest, experiment with other elements of Ham Radio as LIFE allows.
Rule #5 of Amateur Radio, it is only Ham Radio, when confused always refer to Rule #1 through #4.

Christmas Party!

TEST YOUR KNOWLEDGE!

What is the term for the ratio of the actual speed at which a signal travels through a transmission line to the speed of light in a vacuum?

A. Velocity factor
B. Characteristic impedance
C. Surge impedance
D. Standing wave ratio

Last month's answer was, A. Start by adding the losses in the various stages, 4 dB + 3.2 dB + .8 dB = 8 dB of loss in the system. However, the antenna has 10 dBd of gain. 10 dBd antenna gain – 8 dB system loss gives us an overall gain of 2 dB.
That's equivalent to a ratio of 1.585:1. The ERP is then 200 W x 1.585 = 316.98, rounded up to 317 Watts.

DMR
DIGITAL MOBILE RADIO

The EPARA HOT SPOT Wednesday night DMR rag chew is here!

Wednesday evenings at 8:30 PM local, 0:30 UTC!

Tune your DMR radios to Talk Group 3149822 TS2 to join the

N3IS EPARA Hot Spot rag chew DMR net.

Listen to the Tech Net Friday nights on the 147.045 repeater to learn more about joining this net and for upcoming ZOOM meetings announcements to learn more about programing your radios and hot spots!

To: All EPARA Members and Users of the WA3MDP Repeater System

Re: The 147.045 Repeater Malicious Interference

Over the past few years the 147.045 repeater here in Monroe County has been plagued with an increasing amount of deliberate and malicious interference. While some of this interference has been directed at some specific operators the end results has been a wide area large foot print repeater that get little to no use except for a few regularly scheduled nets.

This is not a problem that is special to just the 147.045 system. Nationwide FM repeaters (and HF bands for the matter) are also being interfered with deliberately and the FCC lacks the manpower and ability to search out the people causing the issues.

The ARRL in conjunction with the FCC reorganized the Volunteer Monitor program a while back to assist in tracking down QRM on all of the amateur bands. While some progress has been made there obviously is a lot more to be done.

A small dedicated group has been tracking the QRM locally by various means for over a year. While some of the sources have been narrowed down it is now time to get the rest of the local ham community involved.

What we are asking people to do is when you listen to the 147.045 repeater also listen to the "input" frequency which is 147.645 (no tone is required). If you should hear any of the malicious and deliberate QRM occurring, do the following:

1) DO NOT ENGAGE IN A CONVERSATION WITH THESE INDIVIDUALS.

2) If you hear farting, cat calls, high pitch cartoon voices, music, etc write down the DATE, TIME, YOUR LOCATION and APPROX STRENGTH OF THE QRM STATION. If you have a beam antenna and can provide a heading that would be great too!

3) Send your listening report to the email address LIDSonzero45@gmail.com.

ALL information will be kept confidential and with this added information we hope to narrow down the locations that have already been identified.

In closing let me assure you that the people looking for the sources of the interference are doing so with the blessing of the repeater owners. It is our desire to see the 147.045 repeater system return to the quality repeater that it used to be many years ago.

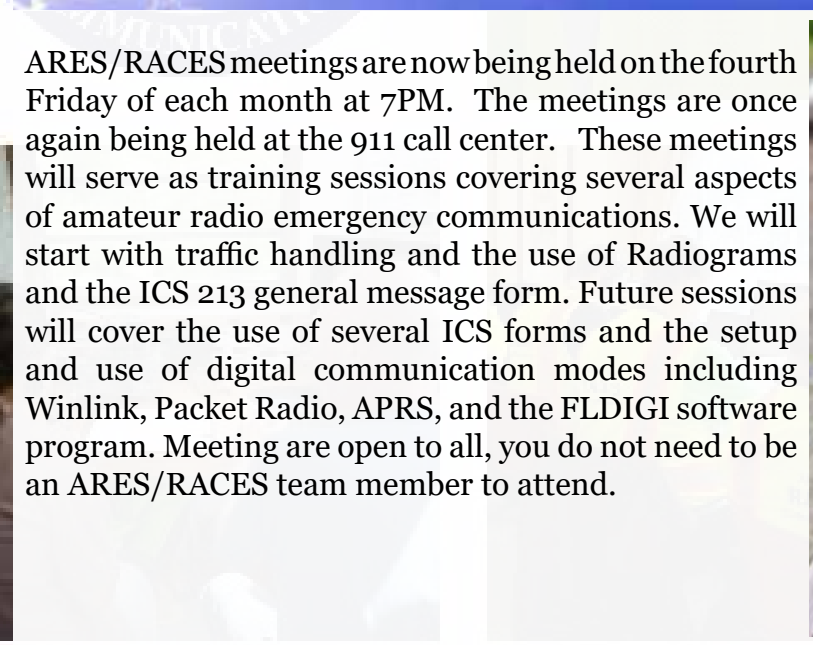
Thank you in advance for your cooperation.

VE Testing & Classes

Anyone looking to take an exam is encouraged to contact Chris AJ3C to preregister at least one (1) week in advance of the test date. If you have any questions or to register, Chris can be reached via email AJ3C@GMX.COM. VE sessions are being held the 4th Friday of each month at 6pm at the Monroe County 911 training center. Seating is limited for the time being so we can follow the health guidelines set forth by the county and state.

VE sessions are back - contact Chris AJ3C for further information!

AMATEUR RADIO CLASSES



ARES/RACES meetings are now being held on the fourth Friday of each month at 7PM. The meetings are once again being held at the 911 call center. These meetings will serve as training sessions covering several aspects of amateur radio emergency communications. We will start with traffic handling and the use of Radiograms and the ICS 213 general message form. Future sessions will cover the use of several ICS forms and the setup and use of digital communication modes including Winlink, Packet Radio, APRS, and the FLDIGI software program. Meeting are open to all, you do not need to be an ARES/RACES team member to attend.

Want to Put Your Ham Radio Skills to Good Use? Get Involved in

EmComm!

One of the missions of the Amateur Radio Service is for amateur radio operators to provide public service and emergency communications (EmComm) when needed. We act as a voluntary noncommercial communication service and pitch in to help our communities and first responders.

So, what organizations are out there for community-minded amateur radio operators and what can we do to help?

Join In

One good entry point into public service and emergency communications is to join SkyWarn, a volunteer program run by the National Weather Service (NWS) with more than 290,000 trained severe weather spotters. These volunteers help keep their local communities safe by providing timely and accurate reports of severe weather to the NWS.

Not all of these weather spotters are amateur radio operators, but many are. Amateur radio communications can report severe weather in real time. When severe weather is imminent, SkyWarn spotters are deployed to the areas where severe weather is expected. A net is activated on a local repeater and SkyWarn spotters who are Hams check into that net. The net control advises the spotters when they might expect to see severe weather, and the spotters report conditions such as horizontal winds, large hail, rotating clouds, and even tornadoes.

To become a SkyWarn spotter, you must attend a class that teaches you the basics of severe weather, how to identify potentially severe weather features, and how to report them. The classes are free and typically last about two hours. Check your local NWS website for class schedules.

ARES/RACES/CERT

Another way Hams can become involved in public service and emergency communication is to join an ARES or RACES group. Technically, these are two separate services—the Amateur Radio Emergency Service (ARES) is run by the ARRL, while the Radio Amateur Civil Emergency Service (RACES) is a function of the Federal Emergency Management Agency (FEMA). Amateur radio operators who typically take part in one also take part in the other.

To participate in RACES, you'll need to take some self-study FEMA courses in emergency preparedness and emergency-response protocols. Classes may or may not be required to participate in ARES. These requirements are set by each individual ARES group. To get involved with either ARES or RACES, ask your local club members when they meet. You can also contact the Section Manager or Emergency Coordinator for your ARRL section. To contact them, click here and find the section that you live in.

Amateur radio operators belonging to ARES (and its predecessor, the Amateur Radio Emergency Corps) have responded to local and regional disasters since the 1930s, including the 9/11 attacks, and Hurricane Katrina and Hurricane Michael, among others.

The Community Emergency Response Team (CERT) program trains volunteers—both Hams and non-hams—how to be prepared for disasters that may impact their area. They provide basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations. CERT offers a nationwide approach to volunteer training and organization that first responders can rely on during disaster situations, allowing them to focus on more complex tasks.

What Gear Do You Need?

For most local needs, a 5-watt VHF/UHF handheld transceiver is sufficient for utilizing local repeaters to relay messages and report on conditions as they exist. Replacing the radio's stock antenna with a higher gain antenna or connecting it to a magnetic mount on a vehicle will increase range significantly.

Even better is a VHF/UHF mobile radio installed in your vehicle with 25 or more watts output and a good mobile antenna. In the event the repeater loses power, you can talk over a considerably larger area in simplex mode with the extra power and a good mobile antenna.

If you work with an ARES or RACES group, you may be asked to act as a county control station. In this capacity, you'd need both HF and VHF transceivers in a fixed location, such as your house, with a good antenna system and emergency power capabilities like a generator or batteries. This allows you to make contacts within your state and throughout the U.S.

Helping Hams

Ham radio can play a key role in emergency situations. Here are a few examples:

- Ham radio connected firefighters and police departments, Red Cross workers, and other emergency personnel during the 2003 blackout that affected the northeast United States.
- In 2017, fifty amateur radio operators were dispatched to Puerto Rico to provide communications services in the wake of Hurricane Maria.
- Amateur radio operators provided communications in the aftermath of the Boston Marathon bombing when cellphone systems became overloaded.

- During Hurricane Katrina, more than one thousand ARES volunteers assisted in the aftermath and provided communications for the American Red Cross.
- During the devastating Oklahoma tornado outbreak that began in May 1999, amateur radio operators—giving timely ground-truth reports of severe weather—played a critical role in the warning and decision-making processes at the NWS Weather Forecast Office in Norman, Oklahoma.
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Credit: https://www.onallbands.com/want-to-put-your-ham-radio-skills-to-good-use-get-involved-in-emcomm/

From the Editor

Eric, N3SWR

Today is just one of those days that you literally throw in the towel - kind of like the entire year of 2021. I sure hope 2022 is better than this past year.

I woke up Monday morning to go to work and left the house at 5am. Got a phone call from my wife stating route 80 looks like a nightmare at the Jersey boarder. Just as we hung up on the call I almost slammed head on into an SUV driving west in the east bound lanes. That WILL wake you up for sure. How do you NOT recognize you're driving the wrong way is beyond me. Yes the highway was closed in New Jersey so I just said a few choice words and went home.

What does one do after avoiding a near head on collision and drinking a bunch of coffee? Work on the newsletter of course! Let's hope we all have a safe and much happier new year ahead of us!!

Special thanks to Alex KD2FTA and Doug KG3I for all the great pictures from the SSTV event !!

Eric
N3SWR

Use Your Fear. It Can Take You to the Place Where You Store Your Courage.
-Amelia Earhart

Topics of Interest

Have an idea you would like to share with your fellow hams? Interested in one of the new exotic digital modes and would like to get others interested in it too? Found a blog somewhere that you think others would find interesting? Members are encouraged to submit items of interest for publication. Submitted articles (are suggested) to be no more than a page or two in length and may be edited for content and grammar. The EPARA officers and newsletter editor reserve the right to determine which items will be included in The Beacon. The deadline for publication is the 15th of the month. The publication date will be at the end of each month. Copyrights are the property of their respective owners and their use is strictly non-profit/educational and intended to foster the spirit of amateur radio.

If you've taken pictures at an event and would like to submit them for possible inclusion in the newsletter, forward them to the newsletter editor. Please send action shots, if possible. Faces are often preferable over the backs of heads. Many hams may be way too overweight, so please consider using a wide-angled lens.

Disclaimer

The Beacon is not representative of the views or opinions of the whole organization, and such views and opinions expressed herein are of the individual author(s).

Bruce Draper, AA5B, aa5b.corral@gmail.com

Contest Corral

January 2022

Check for updates and a downloadable PDF version online at **www.arrl.org/contest-calendar**.
Refer to the contest websites for full rules, scoring information, operating periods or time limits, and log submission information.

Start - Finish Date-Time				Bands	Contest Name	Mode	Exchange	Sponsor's Website
1	0000	1	0100	3.5	AGB New Year Snowball Contest	CW Ph Dig	Category, ARRL section	www.qsl.net/eu1eu/agb_nysb.htm
1	0800	1	1100	3.5, 7	SARTG New Year RTTY Contest	Dig	RST, serial, name, "HNY" greeting	rttyops.com/index.php/contests
1	0900	1	1200	3.5-14	AGCW Happy New Year Contest	CW	RST, serial, mbr (if any)	alt.agcw.de/index.php/en
1	1200	2	1200	1.8-28	WW PMC Contest	CW Ph	RS(T), PMC abbreviation or CQ zone	s59dcd.si/index.php/sl/ww-pmc
1	1400	1	1800	144, 432	AGCW VHF/UHF Contest	CW	RST, serial, power class, 6-char grid	www.agcw.de/contest/vhf-uhf
1	1500	1	1800	3.5-28	QRP ARCI New Years Sprint	CW	RST, SPC, mbr or power	qrparci.org
1	1500	2	1500	3.5-14	Original QRP Contest	CW Ph	RST, serial, power category	qrpcc.de/contestrules/oqrpr.html
1	1800	1	2359	3.5, 7, 14, 18, 21, 24, 28, 2 repeaters	ARRL Kids Day	Ph	Name, age, QTH, favorite color	www.arrl.org/kids-day
3	0000	3	0100	1.8-28	K1USN Slow Speed Test	CW	Max 20 WPM; name, SPC	www.k1usn.com/sst.html
4	0100	4	0159	1.8-50	Worldwide Sideband Contest	Ph	RS, OM, YL, or Youth	wwsac.com/rules.html
4	0200	4	0400	3.5-28	ARS Spartan Sprint	CW	RST, SPC, power	arsqrp.blogspot.com
4	1700	4	1900	3.5-14	RTTYops Weeksprint	Dig	Other's call, your call, serial, name	rttyops.com
5	0200	5	0330	7	QRP Fox Hunt	CW	RST, SPC, name, power	www.qrpfoxhunt.org
5	1300	5	1400	1.8-28	CWops Mini-CWT Test	CW	Name, mbr or SPC	cwops.org/cwops-tests
5	1700	5	2000	144	VHF-UHF FT8 Activity Contest	Dig	4-char grid square	ft8activity.eu/index.php/en
5	1900	5	2000	1.8-28	CWops Mini-CWT Test	CW	Name, mbr or SPC	cwops.org/cwops-tests
5	2000	5	2100	3.5	UKEICC 80-Meter Contest	Ph	6-char grid square	ukeicc.com/80m-rules.php
6	0000	7	0300	7	Walk for the Bacon QRP Contest	CW	<13 WPM; RST, SPC, name, mbr or power	qrpcontest.com/pigwalk40
6	0300	6	0400	1.8-28	CWops Mini-CWT Test	CW	Name, mbr or SPC	cwops.org/cwops-tests
6	0700	6	0800	1.8-28	CWops Mini-CWT Test	CW	Name, mbr or SPC	cwops.org/cwops-tests
6	1700	6	1900	3.5-14	RTTYops Weeksprint	Dig	Other's call, your call, serial, name	rttyops.com
6	1800	6	2200	28	NRAU 10-Meter Activity Contest	CW Ph Dig	RS(T), 6-char grid square	nrrlcontest.no
6	2000	6	2200	1.8-50	SKCC Sprint Europe	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
7	0100	7	0230	3.5	QRP Fox Hunt	CW	RST, SPC, name, power	www.qrpfoxhunt.org
7	2000	7	2100	1.8-28	K1USN Slow Speed Test	CW	Max 20 WPM; name, SPC	www.k1usn.com/sst.html
8	0000	8	2359	3.5-28	PODXS 070 Club PSKFest	Dig	RST, SPC	www.podxs070.com
8	0000	8	2359	3.5-28	YB DX Contest	Ph	RS, serial	ybdxcontest.com
8	0500	8	0900	3.5-28	Old New Year Contest	CW Ph	RST, sum of age and years on the air	www.radio.ru/cq
8	1200	9	2359	1.8-50	SKCC Weekend Sprintathon	CW	RST, SPC, name, mbr or "none""	www.skccgroup.com
8	1300	8	1700	3.5, 7	RSGB AFS Contest, CW	CW	RST, serial	www.rsgbcc.org/hf
8	1800	9	2359	3.5-28	ARRL RTTY Roundup	Dig	W/VE: RST, SP; non-W/VE: RST, serial	www.arrl.org/rtty-roundup
8	2000	9	0700	1.8	EUCW 160-Meter Contest	CW	RST, name, mbr or "NM"	www.eucw.org/eu160.html
9	0630	9	0830	3.5, 7	NRAU-Baltic Contest, SSB	Ph	RS, serial, fylke/län/province/region	nraubaltic.eu
9	0900	9	1059	28	DARC 10-Meter Contest	CW Ph	RS(T), serial, DOK (if any)	darc.de/der-club/referate/conteste
9	0900	9	1100	3.5, 7	NRAU-Baltic Contest, CW	CW	RST, serial, fylke/län/province/region	nraubaltic.eu
10	0100	10	0300	1.8-28	4 States QRP Second Sunday Sprint	CW Ph	RS(T), SPC, mbr or power	4sqrp.com/SSS/sss_rules.pdf
12	1700	12	2000	432	VHF-UHF FT8 Activity Contest	Dig	4-char grid square	ft8activity.eu/index.php/en
15	0000	16	2359	3.5-28	Malaysia DX Contest	Ph	RS, age	9mdxc.com
15	1200	16	1159	1.8-28	Hungarian DX Contest	CW Ph	RS(T), HA county or serial	ha-dx.com/en/contest-rules
15	1200	16	1159	3.5-28	PRO Digi Contest	Dig	RST, serial, "M" if a member	www.procontestclub.ro
15	1200	16	1200	3.5-28	UBA PSK63 Prefix Contest	Dig	RSQ, UBA section or serial	uba.be/en/hf/contest-rules
15	1800	16	0559	1.8-28	North American QSO Party, CW	CW	Name, SPC	www.ncjweb.com
15	1900	15	2300	1.8	WAB 1.8 MHz Phone	CW Ph	RS, serial, WAB square or country	wab.intermip.net
15	1900	17	0359	50 and up	ARRL January VHF Contest	CW Ph Dig	4-char grid square	www.arrl.org/january-vhf
15	2000	16	0559	1.8-7	Feld Hell Sprint	Dig	RST, mbr, SPC, grid	sites.google.com/site/feldhellclub
16	1300	16	1700	3.5, 7	RSGB AFS Contest, Data	Dig	RST, serial	www.rsgbcc.org/hf
16	2300	17	0100	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or power	qrpcontest.com/pigrun
20	0000	21	0300	14	Walk for the Bacon QRP Contest	CW	<13 WPM; RST, SPC, name, mbr or power	qrpcontest.com/pigwalk20
20	0130	20	0330	3.5-14	NAQCC CW Sprint	CW	RST, SPC, mbr or power	naqcc.info
22	1200	23	1200	3.5-28	BARTG RTTY Sprint	Dig	Serial	bartg.org.uk
22	1300	22	1700	3.5, 7	RSGB AFS Contest, SSB	Ph	RS, serial	www.rsgbcc.org/hf
22	1800	23	0559	1.8-28	North American QSO Party, SSB	Ph	Name, SPC	www.ncjweb.com
22	1800	23	0559	1.8-28	NA Collegiate Championship, SSB	Ph	Name, SPC	www.w9smc.com/nacc
23	1400	26	0800	1.8-144	Classic Exchange, Phone	Ph	Name, RS, SPC, rig manuf/model	www.classicexchange.org
26	0000	26	0200	1.8-50	SKCC Sprint	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
26	2000	26	2100	3.5	UKEICC 80-Meter Contest	CW	6-char grid square	ukeicc.com/80m-rules.php
26	2300	30	2300	1.8-7	AWA Linc Cundall CW Memorial	CW	RST, eqpt year, input power	antiquewireless.org
27	0130	27	0330	1.8	NAQCC CW Sprint	CW	RST, SPC, mbr or power	naqcc.info
28	2200	30	2200	1.8	CQ 160-Meter Contest, CW	CW	RST, SP or CQ zone	www.cq160.com
29	0600	30	1800	3.5-28	REF Contest, CW	CW	RST, French department or serial	concours.r-e-f.org/reglements
29	1300	30	1300	3.5-28	UBA DX Contest, SSB	Ph	RST, serial, province (if ON)	uba.be/en/hf/contest-rules
29	1900	30	1900	All	Winter Field Day	CW Ph Dig	Category, ARRL section	winterfieldday.com

There are a number of weekly contests not included in the table above. For more info, visit: **www.qrpfoxhunt.org**, **www.ncccsprint.com**, and **www.cwops.org**. All dates refer to UTC and may be different from calendar dates in North America. Contests are not conducted on the 60-, 30-, 17-, or 12-meter bands. Mbr = Membership number. Serial = Sequential number of the contact. SPC = State, Province, DXCC Entity. XE = Mexican state. Listings in blue indicate contests sponsored by ARRL or *NCJ*. The latest time to make a valid contest QSO is the minute listed in the "Finish Time" column. *Data for Contest Corral is maintained on the WA7BNM Contest Calendar at* **www.contestcalendar.com** *and is extracted for publication in* QST *2 months prior to the month of the contest. ARRL gratefully acknowledges the support of Bruce Horn, WA7BNM, in providing this service.*

Amateur Radio Special Event Stations!

01/01/2022 | American Revolution - Battle of Princeton

Jan 1-Jan 9, 0000Z-2359Z, W2P, Trenton, NJ. Delaware Valley Radio Association. 14.250. Certificate & QSL. DVRA, P.O. Box 7024, Trenton, NJ 08628. Info at www.w2zq.com or on qrz.com. QSL with SASE. Certificate of Commission in the Continental Army Signal Corps for address label and $5 payable to DVRA, mailed to DVRA, PO Box 7024, West Trenton NJ 08628. www.w2zq.com

01/02/2022 | 16th Annual Straight Key Month

Jan 2-Jan 31, 0000Z-2359Z, K3Y/0-9 +, worldwide. SKCC - Straight Key Century Club. 3.550 7.055 14.050 21.050. Certificate & QSL. SKCC c/o Jeremy Downard - K8JAD, 511 W. Pottawatamie St., Tecumseh, MI 49286. K3Y/0 thru 9 plus KH6, KL7, KP4 and DX member stations in six WAC areas operating straight key, bug and cootie keys. QSL card confirms one QSO per area, up to 19 for all-area sweep. See URL for op sched/map, stats, etc. https://www.skccgroup.com/k3y

01/15/2022 | "The 415" Amateur Radio Club

Jan 15, 1800Z-2300Z, N9WH, Crystal Lake, IL. The 415 Amateur Radio Club. 7.250 14.250 146.415. QSL. The 415 Amateur Radio Club, 3208 Bay Rd, Crystal Lake, IL 60012. N9WH known as the "White House" Distinctive QSL. QSL information at www.qrz.com/db/n9wh

01/15/2022 | WHOA weekend, Scouts BSA

Jan 15, 1400Z-2000Z, W1M, Russell, MA. Western Mass Council, Scouts BSA. 7.190 10.115 14.060 14.290. QSL. Tom Barker, WA1HRH, 329 Faraway Road, Whitefield, NH 03598. Camp/outdoor program that introduces young people to various season related activities including outdoor skills and some STEM activities. Paper logging, eqsl and sase for qsl card.

01/19/2022 | 80th Anniversary of the 8th Air Force SPECIAL EVENT

Jan 19-Jan 24, 0400Z-0359Z, WW2FLY, Attica, NY. WWII Flying Fortress Amateur Radio Club. 1.900 3.850 7.180 14.250. Certificate & QSL. WWII Flying Fortress Amateur Radio Club, 3339 Stroh Rd, Attica, NY 14011. SSB and FT8 Check spotting networks to find us on HF More info at www.qrz.com/db/WW2FLY

01/21/2022 | Silent Key Memorial Weekend

Jan 21-Jan 23, 0000Z-2359Z, K5D/KF5UPC, Alice, TX. Coastal Band Digital Group and South Texas Amateur Radio Club. 14.265 7.265. Certificate. Pedro Saenz, Jr., 611 Schley, Alice, TX 78332. Remembering those who passed on. Our Silent Keys will never be forgotten.pedrojr45@yahoo.com or https://m.facebook.com/784535814939833

01/22/2022 | MRAC 105th Anniversary

Jan 22, 1000Z-1700Z, W9RH, Milwaukee, WI. Milwaukee Radio Amateurs' Club. 7.250 14.250 145.390. Certificate. MRAC Special Event, PO Box 26938, Milwaukee, WI 53226. Operating W9RH. (CQ MRAC). One of America's oldest amateur radio clubs celebrating 105 years of continuous operation. Visit our website for operating frequencies (HF, VHF, WIRES-X) and certificate information. Station will be operating from HRO-Milwaukee. For more information, visit W9RH.org. https://www.w9rh.org

01/22/2022 | Quartzfest

Jan 22-Jan 29, 1400Z-0700Z, W7Q, San Luis, AZ. Quartzfest. 7.277 +/- 20khz 14.285 +/- 20khz 28.415 +/- 20khz 14.076 +/- 20khz 7.074 +/- 20khz 28.074 +/- 20khz 21.74 +/- 20khz. Certificate. Tom Luther, 7690 W Derry rd, Kirkland, AZ 86332. https://quartzfest.org

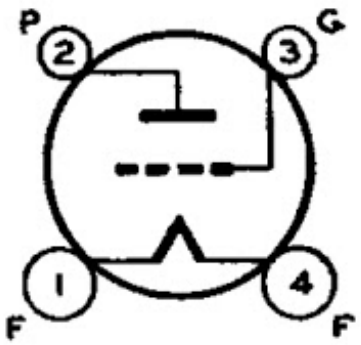
01/29/2022 | California Discovery of Gold

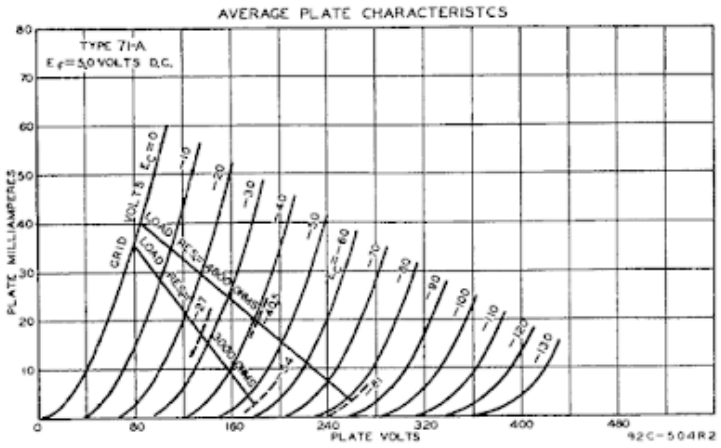
Jan 29-Jan 31, 1600Z-0001Z, AG6AU, Coloma, CA. El Dorado County Amateur Radio Club. 7.248 14.248 21.348 28.348. QSL. El Dorado County ARC, P.O. Box 451, Placerville, CA 95667. 174th anniversary of the discovery of gold in Coloma, California starting the 49'er gold rush. edcarc.net

71A Triode

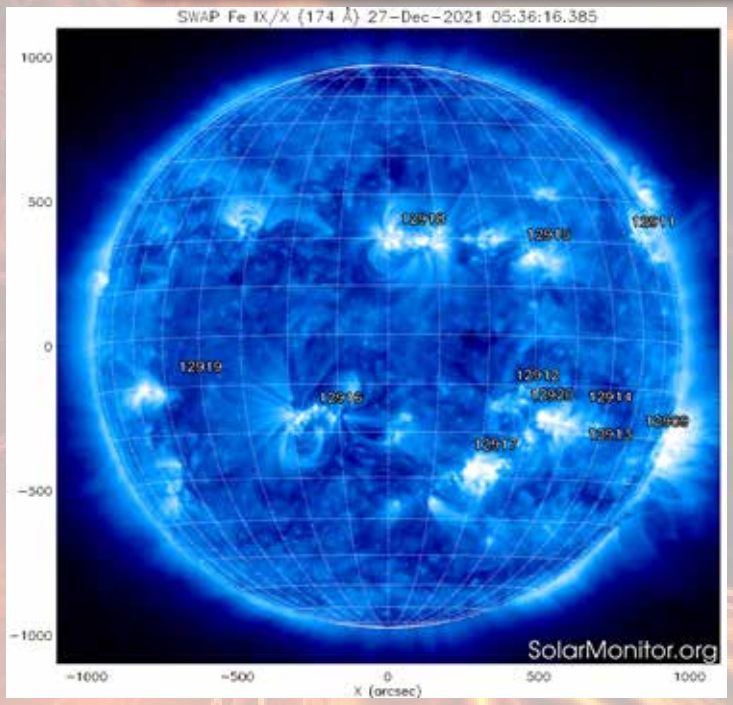
The 71A is a directly heated triode developed for use in the output stages of audio amplifiers or radios. As mentioned above it is the queen of the flea power triodes delivering output in the sub 1 Watt range only.

The 71A has a 4 pin UX4 base like other triodes. The pinout is shown on the left. It has a coated 5V filament which only needs 250mA of filament current. The maximum plate voltage is 180V. As such the tube was well suited for battery powered applications. The RCA data sheet lists a maximum obtainable output power of 790mW but closer to only half a Watt for typical operating conditions. The plate resistance is 1750 Ohms which narrows the selection of suitable output transformers. A minimum of 5k primary impedance should be used while I would rather use 7k or more. With its low amplification factor of 3 the tube still needs considerable voltage swing at the grid to reach maximum output power. In the range of up to 80V peak to peak. Nevertheless a very interesting tube and I have to admit that I never built anything with it. Could be a nice tube for a tweeter amplifier in a an active set up or a headphone amp. Of course could also be used in a full range amp with suitable speakers which would have to have a sensitivity well above 100dB.





Propagation de K7RA



December 18, 2021
Sunspots disappeared over four days, December 8-11. Average daily sunspot numbers and solar flux hardly changed at all, with sunspots at 24.4 during the current reporting week (December 9-15) compared
to 24.6 last week, and average daily solar flux shifting from 82.6 to 82.9.

By Wednesday solar flux rose to 102.5. But sunspots have come back dramatically over the past few days, with the daily sunspot number hitting 127 on Thursday, December 16. On that same day, the noon 10.7 cm solar flux reading at the Penticton observatory was 117.9 and it reached 121.5 at the 2200 UTC reading.

Geomagnetic activity was quiet. Average daily planetary A index changed from 7.6 to 5, and average daily middle latitude A index from 5.3 to 3.9.

One new sunspot group emerged on December 12, then two the following day, two more on December 15 and another two on December 16.

Predicted solar flux over the next month looks very good for this week, at 118 on December 17-21, 115 and 110 on December 22-23, 82 on December 24-27, 80 on December 28, 78 on December 29, 2021 through January 3, 2022, then 80 on January 4-10, 82 on January 11, and 84 on January 12-17. The predicted flux values then drop below 80 after January 24.

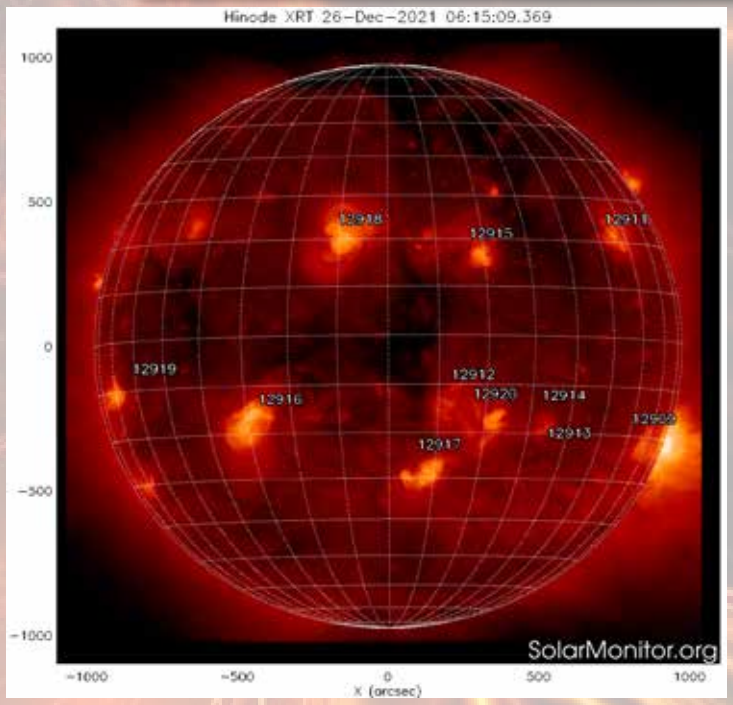
Predicted planetary A index is 8 on December 17, 5 on December 18-19, then 8, 16, 12 and 8 on December 20-23, 5 on December 24-26, then 15, 18 and 12 on December 27-29, 8 on December 30, 2021 through January 1, 2022, 5 on January 2-8, then 8 and 5 on January 9-10, then 12, 10, 10, and 8 on January 11-14, 5 on January 15-22, then 15, 18 and 12 on January 23-25, and 8 on January 26-28.

Unfortunately, propagation was poor last weekend during the annual ARRL 10 Meter Contest, not surprising with no sunspots on the two days prior to the contest and non through the weekend. On Friday night I heard no signals (with a modest dipole antenna), so I called CQ using CW just above 28 MHz, and worked one local station, only 8 miles away. I worked a few stations on Sunday across North America, and heard many TEP signals from South America.

Don't miss "Understanding an Ionosonde to Understand the Ionosphere" by propagation expert KL7AJ in January 2022 QST, currently available online.

Weekly Commentary on the Sun, the Magnetosphere, and the Earth's Ionosphere - December 16, 2021 from F.K. Janda, OK1HH.

"Solar activity has risen a little more and faster in recent days than we expected. After several smaller eruptions, the probability of an M-class solar flare increased. Although Solar Cycle 25 is still closer to the minimum, we can expect its maximum in 3 to 4 years to be higher than usually predicted. The last rise in solar activity is not long (in recent days only), after that a decline can be expected again in the last week of December.



"Although most of the active areas are located south of the solar equator and not too far from the coronal holes, we still expect only a slight increase in geomagnetic activity at the beginning of the third week of December.

"The Earth's ionosphere reacted significantly to the last rise of solar radiation by the rise of MUF. However, the hitherto stable development will be replaced by fluctuations and deformations of the daily course - which will happen immediately, probably at the beginning of the third week of December. This will be followed by a relatively significant decrease in MUF, both day and night. The decline of MUF by night will be significant if the onset of the increase in geomagnetic activity will be up during the night."

Here is a geomagnetic activity summary from Tomas Bayer, RWC Prague Institute of Geophysics of the ASCR, Prague Department of Geomagnetism, Budkov observatory, preceded by a geomagnetic activity forecast for the period December 17-23, 2021:

"Quiet: December 17-18, 22-23
Unsettled: December 18-22
Active: December 18-19
Minor storm: unlikely about December 19
Major storm: 0
Severe storm: 0

"We expect geomagnetic activity enhancement about December 18-19. We expect an unsettled to active episode, storming defect is less probable. Till this event, and also at the end of current forecast period, we expect at most quiet to unsettled conditions."

The EPARA Terrestrial 20 Meter SSTV Corner

Here are a few SSTV Images I captured on 14.230 MHz . I wanted to share some terrestrial SSTV images I captured over the past few months on 20 meters. With the sun spot cycle improving propagation, it's easier to capture images from around the region, and overseas. W1QC and I exchange a few images now and again.


K9ZXO
K9ZXO
CQ
SSTV
K9ZXO
K9ZXO

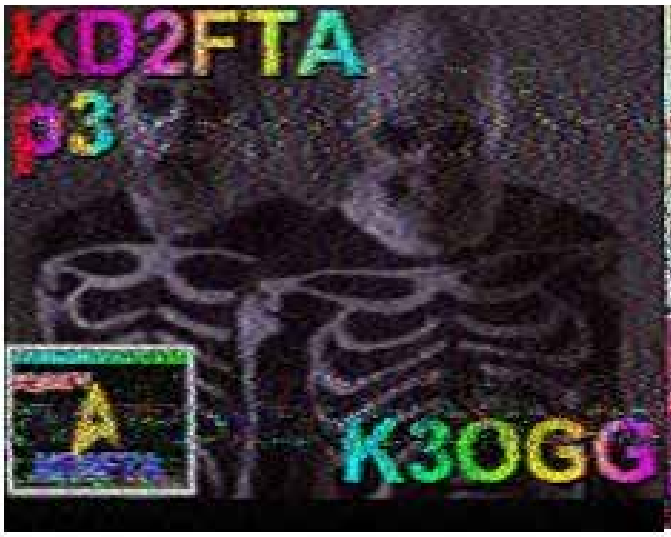

CQ
Wisconsin
W1QC


Great Scott!
Ur signal must be...
1.21
Giga-
watts!
KC2WJ
595
W1QC


CQ CQ
Daaling!
W1QC
Wisconsin


CQ
EARTH
W1QC


QSL
KD2FTA
UR 573
KM5YV
Oklakoma
2021-SEP-06 2115


KD2FTA
p3
K3OGG


73


CQ de W1QC


U R 595
(Happy Holidays)
N2NWK de W1QC


KD2FTA
Son of a Nutcracker! U R 595
W1QC


My tights are Killing Me!
73
ALEJO
KD2FTA de W1QC


Nick, I'd like a
train set for XMAS
CQSSTV
KE4URB
U R 595
KE4URB de W1QC


Peace
Bob
T
N
X
7
3
Happy Holidays
KE4URB de W1QC


Peace
Brad
T
N
X
7
3
Long
Life
KC2VVJ de W1QC


Careful Vaughn
Don't Shoot
your
Eye Out!
Happy Holidays
KO3D de W1QC


Happy Holidays
KD2UWR
DEC
21
UR 595
KD2UWR de W1QC

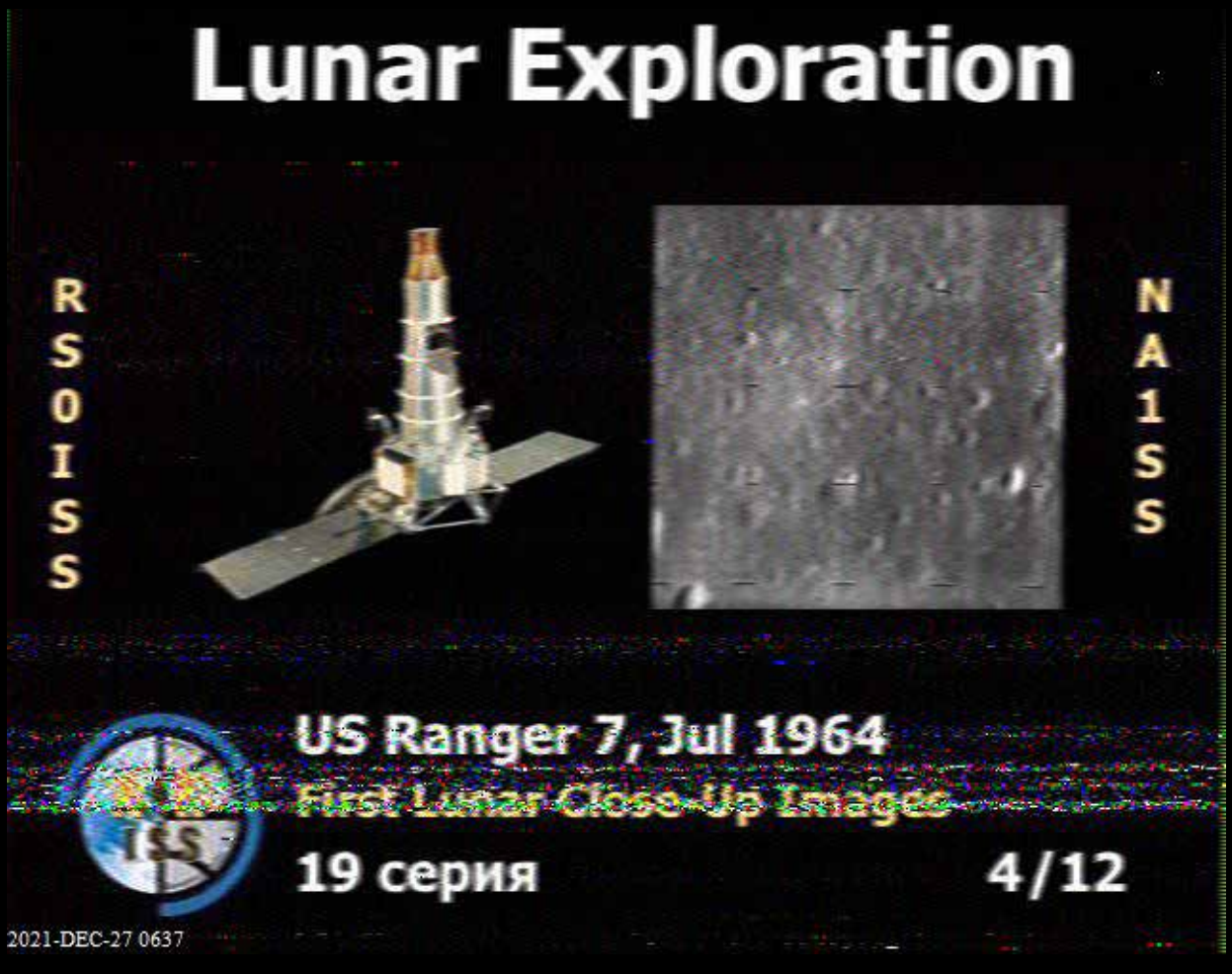
This is one aspect of the hobby that you'll enjoy by exchanging your slow scan images with other HAMs. Your image is the QSL card! You do need an HF rig, a computer, a radio interface, and of course your General ticket to participate , hi hi.

See your pictures on the frequency.

73! de KD2FTA

SSTV Pictures!

SSTV Pictures!



SSTV Pictures!

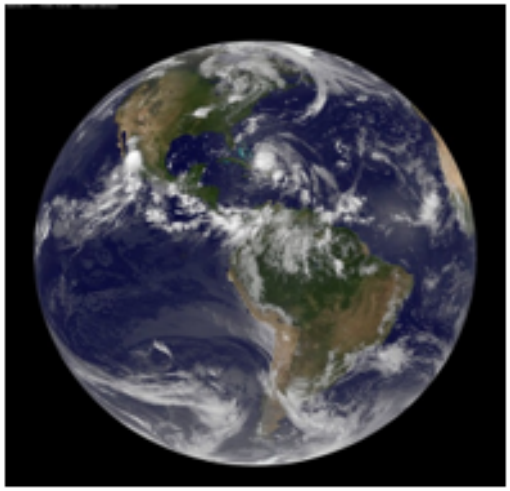
SSTV Pictures!

SSTV Pictures!

SSTV Pictures!

SSTV Pictures!

The World Wide Net de KD2FTA



It was only a matter of time before network based digital radio would enable this to happen. If you have a DMR radio and tune in every weekend you can participate in a Worldwide net! Every Saturday the net forms at 16:00 UTC on the Brandmeister network on talk group 91.

The net can last for a few hours and literally covers the entire world. Amazingly you have 600 to 700 check ins during the course of the net, and it's all done in English. How did this net begin?

From their website at: https://www.icculus.org/~hamish/worldwidecheckin/

History

The Net started in 2015 when most DMR repeaters in California switched to the then new Brandmeister Network. The Net was started by Dick K6SUU who did Net Controller duties on his own initially modelled after a similar older Net on Talk group 1 on the DMR-MARC cbridge network. Over the next Christmas/New Year period Dick went on an overseas trip and could not do net control. He asked for volunteers and Alec N1AJW and Paul VA6PW volunteered.

Since then the Net Controller Group has expanded and various people have come and gone. Today there are several net controllers, and because of the size of the net and the hours it covers, there are generally two net controller that hand it off to each other during eh course of the morning and afternoon.

Worldwide Check-In Operation

On their website here's a description of what procedures are used to check in and participate. The Net is a little like an OMISS net except that you only exchange traffic with net control. For

the benefit of newcomers to the Worldwide Check-in, here's a brief explanation of how it works. Net Control will proceed through the entire planet region by region.
Since the Net runs for a long while and some HAMS would like to check-in at the appropriate time but do not want to listen to the entire Net, here is a list of the regions in the order that they are called to give you some idea of how to judge the Net progress in time:

1) Asia and Pacific
2) Middle East
3) Europe (there are many stations and sub-regions in Europe)
4) Africa, Caribbean, Latin America (including Mexico)
5) North America (Canada and the US)

Within each region, net control will call for check-ins from groups of countries, individual countries, and, in some cases, specific parts of countries (for example, individual US call zones.) When your area is called, net control will listen for check-ins from the called area.

At specific times during the process, net control will call for late or missed check-ins from particular areas (for example, after calling all of Europe, Net Control will call for any late or missed stations anywhere in Europe.) Please check-in only when your area is called or when late or missed stations anywhere in the world are called for. Check-ins out of order cause confusion and can delay the process.

When you check in, please identify yourself using your callsign in phonetics alphabet only. This will allow the Net Control to get all check-ins more accurately and in a timelier manner. For example, Net Control would say my callsign as KD2FTA using the phonetic alphabet. Don't say your name and location.

If you have any traffic, please announce this when you check-in. You do not need to announce if you have no traffic and we would recommend not doing so to limit the time as the entire world wide check-in is tending to go rather long nowadays.

Traffic should be about DMR events, new repeaters or anything else DMR related.

This is a controlled net. All traffic must go through net control. Every few check-ins, Net Control will pause and read back the callsigns of the heard stations. If you are heard, you will be checked in and there is no need for you to continue checking in.

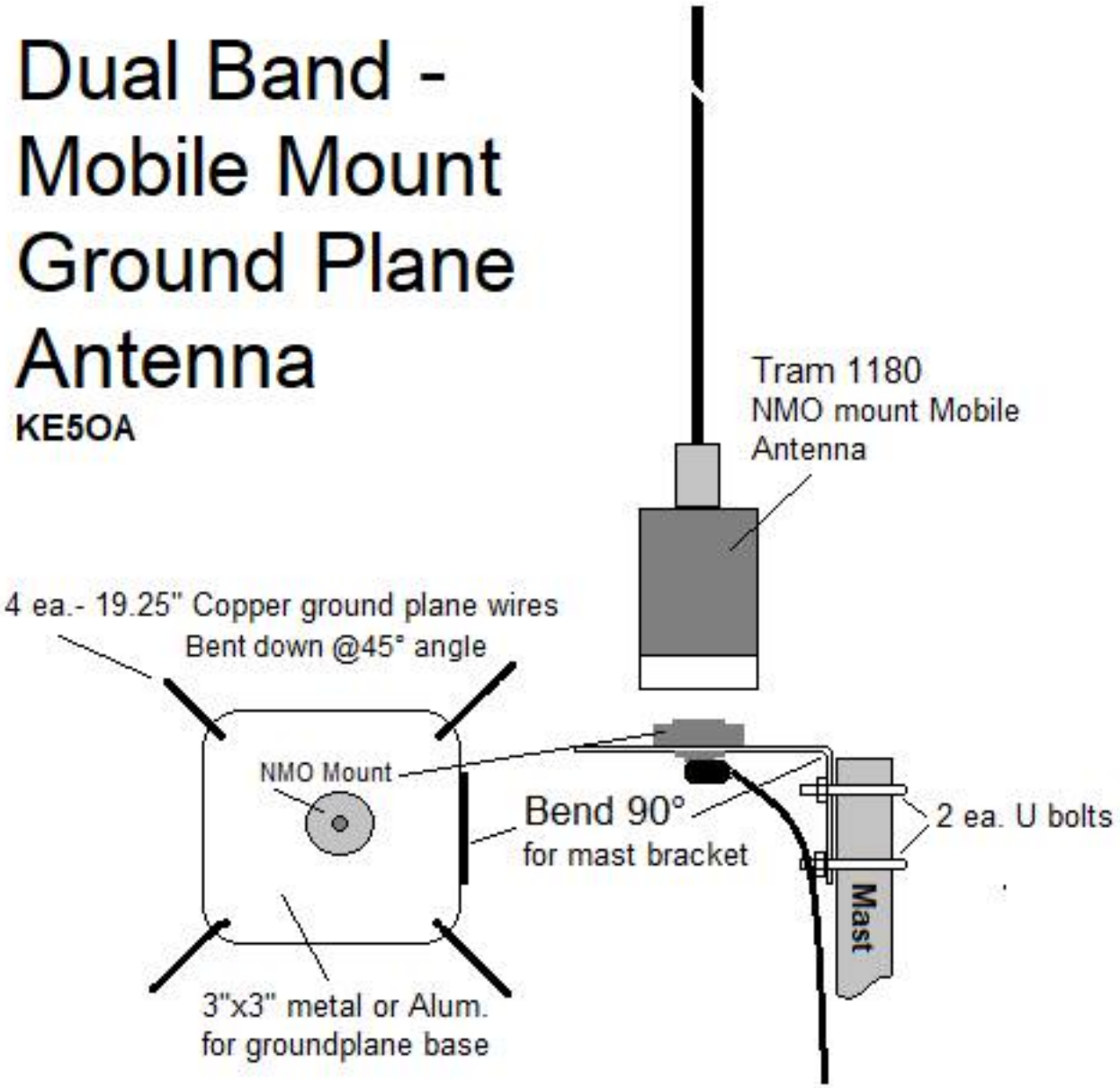
Also, please remember that we are keeping digital logs so you will be logged in the digital log even if Net Control misses hearing you due to the usual network issues.

See you on the world wide net! 73 de KD2FTA

ANTENNA ARCHIVES #42

Dual Band - Mobile Mount Ground Plane Antenna

KE5OA



MEMBERSHIP APPLICATION

E P A R A

Eastern **P**ennsylvania **A**mateur **R**adio **A**ssociation

Address: PO Box 521, Sciota, PA 18354
Email: N3IS@qsl.net
Website: www.qsl.net/n3is

Date: _____

Name: _____ **Callsign** _____

License: Novice Technician General Advanced Extra

Address: _____

City: _____ **State**: _____ **Zip**: _____

Home Phone: _____

Cell Phone: _____

Email: _____

* **Note**: We do not publicize your phone or email information.

ARRL Member: _____ **Skywarn Spotter**: _____ **ARES/RACES Member**: _____ **VE**: _____

Interests:
DX _____ Contest _____ CW _____ QRP _____ Digital Modes_____ Antique Radio Equipment _____
Building Antennas _____ Electronic Repairs _____ Elmering _____ Kit Building _____ EmComm: ____

Others: _____

How did you get interested in Ham Radio?

_____

Please list any relevant qualifications or assets you have or are willing to share/contribute to the club.

Use reverse side if needed:

_____

_____

_____

Sponsored or Reviewed by: _____ **Callsign**: _____

Membership Rates,

Membership: **$20.00** per year Spouse: **$10.00** per year
Full time Student: **$15.00** per year Senior:(Over 62 years of Age): **$15.00** per year