THE MONTHLY PUBLICATION of the GREEN MOUNTAIN WIRELESS SOCIETY

AN ARRL SPECIAL SERVICE CLUB

KEY KLICK's

VOLUME # 36 ISSUE #04 **APRIL 2021**

WHAT IS SKYWARN?

The effects of severe weather are felt every year by many Americans. To obtain critical weather information, NOAA's National Weather Service (NWS), part of the U.S. Department of Commerce, established Skywarn® with partner organizations. Skywarn® is a volunteer program with nearly 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 National Weather Service. Although Skywarn® spotters provide essential information for all types of weather hazards, the main responsibility of a Skywarn® spotter is to identify and describe severe local storms. In the average year, 10,000 severe thunderstorms, 5,000 floods and more than 1,000 tornadoes occur across the United States. These events threatened lives and property. Since the program started in the 1970s, the information provided by Skywarn® spotters, coupled with Doppler radar technology, improved satellite and other data, has enabled NWS to issue more timely and accurate warnings for tornadoes, severe thunderstorms and flash floods.

Skywarn® storm spotters are part of the ranks of citizens who form the Nation's first line of defense against severe weather. There can be no finer reward than to know that their efforts have given communities the precious gift of time--seconds and minutes that can help save lives. While the main role of a storm spotter is to be their community's first line of defense against dangerous storms, they also provide important information to NWS warning forecasters who make critical warning decisions. Storm spotters play a critical role because they can see things that radar and other technological tools cannot, and this ground truth is critical in helping the NWS perform our primary mission, to save lives and property.

Many people ask how they can become a member of Skywarn. In most cases, Skywarn isn't really something you become a member of. Skywarn is a concept based on having citizen volunteers help their community and the NWS by observing and reporting hazardous weather occurring in their area. Anyone can be a storm spotter and submit reports directly to the NWS. If you are interested in becoming a member of an official local Skywarn storm spotter network, you'll probably want to contact your city or county emergency management office for information. Many communities have organized networks of storm spotters, often made up of amateur radio operators, fire departments, law enforcement or other volunteers. These local networks may have very specific training and membership requirements, so check with your local officials to see how you might be able to get involved.

The program does not offer official ID badges nor are they required for a person to participate.

Do I need an amateur radio license to be a storm spotter?

It depends on your community and how involved you want to be. You don't have to be an amateur radio operator to make a severe weather report, but many spotter networks are made up of dedicated amateur radio operators who use radio to coordinate their local network and to relay reports to the NWS. If you're interested in learning more about amateur radio, visit this site.

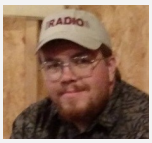
How do I report severe weather?

In many communities, spotters are expected to report directly to their local emergency management office, fire department or law enforcement office. Those reports are important for local officials who need to make decisions regarding local warning systems or deal with storm damage or flooding. Local officials will usually relay your report to the NWS in Norman.

If you are not affiliated with a local spotter group or are unable to contact your local officials, you can submit a storm report directly to our office using the methods described here.

INSIDE

PREZ-SEZ



FOREST N1BBQ

APRIL 2021

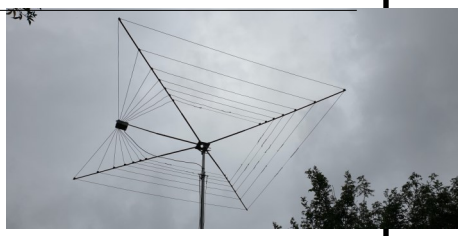
Happy spring everyone!

I hope everyone has been able to get out to enjoy some of the nice days.
Of course as I'm writing this, it's cold, raining and with spitting snow, but this should be short lived! I know many are planning antenna work and some are looking forward to getting out for remote operation.
I apologize about my lack of presence on the air, The MINT just went through a giant move from one end of their building to the other and gained about 6k square feet of shop space. This is great for everyone involved but my time has been dedicated to getting their IT systems moved, new wiring installed, cameras, door card swipes installed and all that stuff. I'm hoping to have that stuff wrapped up here soon and be able to focus on Field day and the repeater some more.
I'll see everyone at the meeting! It looks like we will yet again meet on Zoom. Watch for email and Facebook notices
7 3 for now,
N1BBQ

COB WEB ANTENNA ... HOW HIGH?

by: DX Commander
An Interesting series of YouTube videos about an antenna you can hang at just 6-Feet high.
https://m.youtube.com/watch?v=3PnEsgFcYOE

HOW TO BUILD A COB WEB ANTENNA:



http://www.hamblog.co.uk/building-a-cobweb-antenna-and-testing-it-with-nanovna-with-video/

April 2021 GMWS ARES NET CONTROL SCHEDULE:

The GMWS ARES Net is held Monday evenings starting at 7:30 PM on the 147.045 repeater (+/- 600 kHz, PL=100Hz). Please check the schedule to see if a given net is for training, or "rag chew."
Note you can also find the *complete* ARES Net Control Pre-Amble by request on the air or email. Anyone can print it and follow along!

Special thanks to Mike, AA1PR for taking the 5th week of March NC.

05APR2021	NJ2VT PETE
12APR2021	N1BBQ FOREST
19APR2021	W1SFR STEVE
26APR2021	AB1CH ANN MARY

We are lucky to have a number of Net Control Operators but, we could use a few "Floating" Operators to cover for times when regular operators are away or need a break. Please Contact Forest N1BBQ

VERMONT ARES NETS

By Pete, NJ2VT

There are a number of opportunities for you to become involved in Vermont ARES/RACES Nets, which are held each week on the bands and frequencies listed, below. Note you do not have to be an ARES or RACES member; all you need is a valid amateur radio license, and an interest in community service. Here is the schedule for reference:

Monday schedule:

1400 - 1500 (2:00 PM - 3:00 PM) 3815 kHz +/- QRM, followed by digital tests and drills on an 80 meter frequency TBD during the phone net

19:30 – 20:00 (7:30 PM – 8:00 PM) 147.045 MHz, -600kHz offset, 100Hz tone. This is the GMWS/ARES District-6 Net.

Tuesday schedule:

1900 - 1915 (7:00 PM - 7:15 PM) UHF linked system (Northeast FM Repeater Association)
1915 - 1930 (7:15 PM - 7:30 PM) 1996 kHz + /- QRM (160m)
1930 - 2000 (7:30 PM - 8:00 PM) VHF FM linked repeaters (Lincoln 145.470, Cabot 146.820, Killington 146.880)
2000 - 2015 (8:00 PM - 8:30 PM) DMR Statewide Vermont talk group

Thursday:

7:00 – 7:30 PM 146.550 simplex test with FM and MT63-1KL; contact anyone you can
7:30 – 8:00 PM 7085 kHz +/- QRM, Thor22
8:00 – 8:30 PM 3570 kHz +/- QRM, Thor22
8:30 – 9:00 PM UHF linked repeater; check in with FM voice, then do drills with MT63-1KL

Due to a recent change in personnel, Vermont ARES is actively looking for additional net control operators to run the VHF and UHF nets on a rotating basis. The Tuesday evening UHF net is short and sweet (it only runs 15-minutes), and the VHF net is much like our own GMWS net, and runs Tuesday evenings from 730-8pm. We have a net 'preamble' you can edit and use, and can provide guidance to get you started. If you'd like to try your hand as net control, please contact Zack, KZ1K.

Note there are already some GMWS members that act as Net Control stations for the above nets, on a rotating basis. The only nets that might interfere with GMWS activities are the Tuesday evening nets, some of which will coincide with the monthly GMWS meeting. Even with that potential 'conflict,' there are many other chances for you to participate! Put your radios to work, and enhance your emergency communications skills. Nets give you a chance to make sure your equipment is in good working order, and just by their nature will help build your communications skills. We hope to hear you on a Vermont ARES net, soon!

Green Mountain Wireless Society Minutes

Green Mountain Wireless Society
Regular meeting minutes 0MAR2021
Zoom Meeting Online Event

Feb Minutes approved

Treasurer report approved - made motion for repeater location rent for the Heleba Farm, passed

Repeater update - W1SBW has been working on an EchoLink / All-Star node, currently connected part time to our repeater via RF from his home QTH. Once weather is more conducive to working outside we hope to move it to be a direct connection at the repeater with N1BBQ.

VE Session - mid -April, targeting the 17th, updates at next meeting.

ARES / RACES update, Mike Meehan gave us a rundown on some of the nets happening and is hoping to get more involvement. Cathy NQ1B is the person to talk to.

Field Day - Hopeful we can do something this year more in person, ARRL is planning to keep the group points system they had last year as well as limiting D and E stations to 150 watts, Lorri offered food! more details to come

The May meeting is our annual meeting including elections, we still really need a secretary. dues will be due July 1

Forest N1BBQ

The Capital Region Weather Net 7 AM Monday thru Sunday

By Pete NJ2VT and Ann Mary AB1CH

The Capital Region Weather Net recently mentioned on the Monday GMWS NET is hosted by the Warren County Radio Club, and can be found every day, from 7-730am on any of their linked repeaters:

- Prospect (Lake George, NY) 146.730MHz, 100Hz PL
- Burch Hill (Hebron, NY) 146.775MHz, 146.2 PL
- Gore (North Creek, NY) 147.135MHz, 123.0Hz PL

Pete NJ2VT reports from his QTH, “Prospect is usually the best, but the path varies, depending on weather conditions. Gore is usually a good bet, too. Burch Hill is blocked for us, for the most part, but occasionally I'll hear it.”
Up in Chippenhook, I recently accessed the system and made good contact through a memory named Gore2 but the NC Op reported he could hear a tone associated with the Burch Hill repeater. So if you do not succeed with one setting try the others. It eill be interesting to see what happens as the seasons change.

Anyone who whishes to check into this weather NET is welcome. You do not need a fancy weather station and can report as much or as little data as you have. It is actually advantageous to check into various nets, even crossing borders. (provided you have legal operating privileges) It is advantageous in the event of an emergency to know various operators; even from outside of your area; before the craziness and confusion of an emergency situation. By not knowing a group's procedures you can hold up the flow of information and possibly cause a station with life threatening information to be blocked from getting into the net. It is also a given factor that if NC or other operators recognize your voice they will be more apt to hear a call that is marginal. If nothing else, they will be more aware to listen for your report.

Fortunately, we do not get the kinds of disasters that other areas get but it is all the more important to keep our skills honed and active. Checking into nets are one way to stay in touch and make sure our stations are functioning properly. Thanks' to Pete NJ2VT for his data contribution for this article.
And a note from Frank W1AD: Gore sits nice and high on the other side of the Champlain Valley. Ed: AB1CH Ann Mary

A HISTORY LESSON ON WHAT WE TAKE FOR GRANTED TODAY.....

History Of The Car Radio

Seems like cars have always had radios, but they didn't. Here's the story: One evening, in 1929, two young men named William Lear and Elmer Wavering drove their girlfriends to a lookout point high above the Mississippi River town of Quincy, Illinois, to watch the sunset.

It was a romantic night to be sure, but one of the women observed that it would be even nicer if they could listen to music in the car. Lear and Wavering liked the idea. Both men had tinkered with radios (Lear served as a radio operator in the U.S. Navy during World War I) and it wasn't long before they were taking apart a home radio and trying to get it to work in a car.

But it wasn't easy: Automobiles have ignition switches, generators, spark plugs, and other electrical equipment that generate noisy static interference, making it nearly impossible to listen to the radio when the engine was running. One by one, Lear and Wavering identified and eliminated each source of electrical interference. When they finally got their radio to work, they took it to a radio convention in Chicago.

There they met Paul Galvin, owner
of Galvin Manufacturing Corporation. He made a product called a "battery eliminator", a device that allowed battery-powered radios to run on household AC current. But as more homes were wired for electricity, more radio manufacturers made AC-powered radios. Galvin needed a new product to manufacture. When he met Lear and Wavering at the radio convention,
he found it. He believed that mass-produced, affordable car radios had the potential to become a huge business.

Lear and Wavering set up shop in Galvin's factory, and when they perfected their first radio, they installed it in his Studebaker.

Then Galvin went to a local banker to apply for a loan. Thinking it might sweeten the deal, he had his men install a radio in the banker's Packard.

Good idea, but it didn't work –

Half an hour after the installation, the banker's Packard caught on fire. (They didn't get the loan.) Galvin didn't give up. He drove his Studebaker nearly 800 miles to Atlantic City to show off the radio at the 1930 Radio Manufacturers Association convention. Too broke to afford a booth, he parked the car outside the convention hall and cranked up the radio so that passing conventioneers could hear it.

That idea worked -- He got enough orders to put the radio into production.

WHAT'S IN A NAME: That first production model was called the 5T71.Galvin decided he needed to come up with something a little catchier. In those days many companies in the phonograph and radio businesses used the suffix "ola" for their names - Radiola, Columbiola, and Victrola were three of the biggest. Galvin decided to do the same thing, and since his radio was intended for use in a motor vehicle, he decided to call it the Motorola. But even with the name change, the radio still had problems: When Motorola went on sale in 1930, it cost about $110 uninstalled, at a time when you could buy a brand-new car for $650, and the country was sliding into the Great Depression. (By that measure, a radio for a new car would cost about $3,000 today.)

In 1930, it took two men several days to put in a car radio -- The dashboard had to be taken apart so that the receiver and a single speaker could be installed, and the ceiling had to be cut open to install the antenna.

These early radios ran on their own batteries, not on the car battery, so holes had to be cut into the floorboard to accommodate them. The installation manual had eight complete diagrams and 28 pages of instructions. Selling complicated car radios that cost 20 percent of the price of a brand-new car wouldn't have been easy in the best of times, let alone during the Great Depression. Galvin lost money in 1930 and struggled for a couple of years after that. But things picked up in 1933 when Ford began offering Motorola's pre-installed at the factory. In 1934 they got another boost when

Galvin struck a deal with B.F. Goodrich tire company to sell and install them in its chain of tire stores.

By then the price of the radio, with installation included, had dropped to $55. The Motorola car radio was off and running. (The name of the company would be officially changed from Galvin Manufacturing to "Motorola" in 1947.)

In the meantime, Galvin continued to develop new uses for car radios. In 1936, the same year that it introduced push-button tuning, it also introduced the Motorola Police Cruiser, a standard car radio that was factory preset to a single frequency to pick up police broadcasts.

In 1940 he developed the first handheld two-way radio -- The Handy-Talkie – for the U. S. Army.

A lot of the communications technologies that we take for granted today were born in Motorola labs in the years that followed World War II. In 1947 they came out with the first television for under $200. In 1956 the company introduced the world's first pager; in 1969 came the radio and television equipment that was used to televise Neil Armstrong's first steps on the Moon. In 1973 it invented the world's first handheld cellular phone.

Today Motorola is one of the largest cell phone manufacturers in the world.

And it all started with the car radio.

What happened to the two men who installed the first radio in Paul Galvin's car?

Elmer Wavering and William Lear, ended up taking very different paths in life. Wavering stayed with Motorola.

In the 1950's he helped change the automobile experience again when he developed the first automotive
alternator, replacing inefficient and unreliable generators. The invention lead to such luxuries as power windows, power seats, and, eventually,

W1SBW SIMPLEX GATEWAY

An internet connected radio system can expand the capabilities of a simplex VHF/UHF base station. Recently, I launched a "simplex gateway" in Pittsford, Vermont. This is called a gateway because the RF base station is connected to the internet via a Raspberry Pi with an Allstar node image built in. This gateway is connected to a virtual node that I maintain in "the cloud." The connection allows use of Voice over Internet Protocol (VoIP) to connect to other nodes, gateways or individual stations all over the world.

Any mobile station within a 20-25 mile range or an HT within 5 to 10 miles can access this gateway on 147.645 (simplex) with tone 123.0. I anticipate building a better antenna that should improve the range. If you are out of RF range, you can use Echo-Link or Allstar applications on a PC or smartphone to connect to the node. It is not unusual to see10 or more nodes or stations connected at a given time. As this is being written, there are 30 Allstar nodes and 2 Echolink stations connected. Often you will hear stations from England and all over the US. On Sundays at noon (EDT) there is a world-wide net with stations connecting from many time zones.

The Allstar Node number is 48386, The Echolink Node is W1SBW-R with a node number of 670890. Ultimately, a similar connection is planned for the 147.045 repeater. In the meantime, I will occasionally move the local station frequency to the 147.045 repeater pair. A remote user has to wait for the repeater to stop transmitting before they get a transmit button available, so there will a slight delay when EchoLink users make a connection.

Feel free to use the system and report feedback to me at W1SBW@yahoo.com

7 3, de W1SBW

ED Note: Send Key Klicks news of your radio experiences too!

HELP WANTED!!!

ONE TIME EVENT!!!

In honor of the GMWS renewal issue I have been asked to publish a hard copy of KK and mail it to a large mailing list. I will need one-time help for a few hours around the End of April.
It takes many hours to publish Key Klicks...My computer takes 4-5 seconds to register every stroke or click.
I don't have a printer and cognitive processes are slipping!

JOB DESCRIPTION: Picking up Key Klicks from the printer. Folding newsletter and affixing labels and stamps then stapling them and dropping them in the mail box.
Please email me at : AB1CH@nfmra.org
If you do not hear back from me in a reasonable amount of time please try again! TY your patience.
ED: Ann Mary AB1CH

Southgate Amateur Radio News

New station on the Falkland Islands

The Falkland Islands will have a new operator in May...

."I will be deploying to the British Forces South Atlantic Islands (BFSAI), Mount Pleasant Complex, Falkland Islands, at the end of April after two weeks quarantine here in the UK.
The Falkland Islands Communications Regulator has issued me with the full temporary license VP8ZMS valid from now until my expected departure at the end of August 2021.
I hope to be active using the RAFARS club station shack (VP8RAF & VP8FIR), but I am taking my own FT-817, digital interface and some basic dipole kit just as backup.
Details of Rigs/power/modes & Bands I will try to publish here, VP8ZMS Twitter Page (https://twitter.com/Vp8Zms) as well as operating times and other info I find interesting!
If time permits, or for a special occasion I will activate VP8RAF, but QSL cards etc are not in my control with that call.
I am in the process of setting up LoTW & ClubLog for the call, and will be issuing paper QSL Cards via the Bureau on my return to the UK.
My main focus of operating is of course to have a go at being the 'Rare DX' for once, but also to promote awareness of the Royal Air Force Amateur Radio Society (RAFARS, of which I am the serving members representative - https://www.rafars.org/council_members/), the Falkland Islands and the RAF/BFSAI."
Matthew, M0ZMS

http://www.southgatearc.org/news/2021/march/new-station-on-the-falkland-islands.htm?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+AmateurRadioNews+%

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Car Radio from Pg 1 air-conditioning. Lear also continued inventing. He holds more than 150 patents. Remember eight-track tape players? Lear invented that. But what he's really famous for are his contributions to the field of aviation. He invented radio direction finders for planes, aided in the invention of the autopilot, designed the first fully automatic aircraft landing system, and in 1963 introduced his most famous invention of all, the Lear Jet, the world's first mass-produced, affordable business jet. (Not bad for a guy who dropped out of school after the eighth grade.) Sometimes it is fun to find out how some of the many things that we take for granted actually came into being! Submitted by Frank W1AD

The company's first aircraft, the Learjet23

In February 2021, Bombardier announced the end of production for all new Learjet aircraft in 2021, with the continuation of support and maintenance for aircraft currently in service.[3]

[3] Victor, Jon (February 11, 2021). "Bombardier announces the elimination of 1,600 positions and end of the Learjet". Montreal. https://montreal.ctvnews.ca/bombardier-announces-the-elimination-of-1-600-positions-and-end-of-the-learjet-1.5304555

Lobstercon2021! is ON!

I sent this to the QRP-L group and my QRPmeKits group...so the tuna is out of the can: Lobstercon2021! is ON! My first LobsterCon gathering was in 1999 so this will be my 23rd straight LobsterCon! We ALWAYS have a great time even when it is pouring down rain.... I think in the last 4 or 5 years now, we have had pretty good weather so crossing my fingers that we will have another fine weekend. LobsterCon! is more of a social event that a radio operating event. 'Conners do operate but the social gathering is bigger than operating. I think I can safely say that XYLs and little QRP tykes enjoy LobsterCon! as much as the QRP'ers. So talk among yourselves and see if you might want to enjoy a summer weekend on the mid-coast of Maine this year....
I have confirmed the TPB&C reservations and according to the trends it looks like we can meet safely though we might still have to take some precautions. I did host a LobsterCon last year but due to stringent travel rules, we were only 10 Lobstercon'ers strong. It looks like this year can be somewhat 'normal'.
The page is up: http://www.qrpme.com/?p=product&id=L21
and I'm ready to start taking names...
I have lost track of who paid in advance for 2020 but didn't get to come. YOU may be one so please confirm.

Rex W1REX

HELP WANTED!!!

ONE TIME EVENT!!!

Low Wages volunteer position but your editor will be very grateful!

Please see page: # 6

ED: Ann Mary AB1CH

LOBSTERCON 2021
ALL HAMS WELCOME
REGISTER NOW SEE PAGE #7

MANY THANKS TO OUR CONTRIBUTORS!!
SCOTT W1SBW; FRANK W1AD; PETE NJ2VT;
FOREST N1BBQ; REX W1REX

MARK YOUR CALENDAR ~NETS:

EVERY MONDAY:
ZONE #3 VT RACES NET, 444.550 (+PL 110.9) 6:30 PM
GMWS/ARES NET, 147.045, 7:30 PM
GMWS/W1AD 10M NET 28.333 8PM(BANDS PERMITTING

EVERY DAY:
VERMONT PHONE TRAFFIC NET, 3857 MHZ, 7:30 PM
VT/NH TRAFFIC NET, 3539, 7:00 PM
NEW ENGLAND PHONE NET, 3955 6:30 AM

EVERY SUNDAY:
VERMONT PHONE EMERGENCY NET, 3976, 8:00 AM
ACARA ROUNDTABLE 147.36 (100 HZ) 8:00 PM
(ALL TIMES ARE LOCAL)

UPCOMING VE SESSIONS:
BURLINGTON AREA VE RALPH KD1R 802-878-6454
GMWS CONTACT TIM WA1VT … TIMABRAHAM@GMAIL.COM
OR FOREST N1BBQ -- TECHIEFOREST@GMAIL.COM

NEXT REGULAR GMWS MEETING :
TUESDAY APR13 @7:00PM ZOOM TALK-IN 147.045 T -100
https://m.facebook.com/W1GMW-Green-Mountain-Wireless-Society-741253585940162/

Please send News, Stories, thoughts to ED @ AB1CH@nfmra.org!

PO BOX 84
Rutland VT 05702