



*North Fulton  
Amateur Radio League  
NFARL eNEWS  
May 2016*

[www.nfarl.org](http://www.nfarl.org)



**FIELD DAY IS  
ALMOST HERE!**

*John Kludt - K4SQC*

The fourth full weekend in June is just around the corner and that can only mean it is time again for ARRL Field Day! While technically an "operating event" Field Day is without a doubt the biggest "non-contest, contest" on the amateur radio calendar. It is a time to back our gear and head to a public place to demonstrate to the community our ability to provide communications support. It is a time to see how many phone, cw and digital contacts we can make. It is a time to provide education to Boy Scouts and interested would be hams. And mainly it is time to just have fun with all of the different ways that radio can be played.

Last year the North Fulton Amateur Radio League captured first place in category 3A. We ran three simultaneous transmitters (3) off of generators (A). This is a very competitive class and NFARL did a great job pulling together to accomplish this feat. This year will continue along the same lines as last year. But in the spirit of learning and evolving we are going to try some new things. The CW station under the leadership of Gregg , W6IZT, is going to be sporting its own beam with dipoles for 40m and 80m. The mixed mode station under Joe, N7QPP, will be making a real effort to run up the number of QSO's (Q's in contester slang) using PSK. The satellite station under Daryl, K4RGK and Lori, K4UPI is greatly improved and will even be fitted with an L band (1.2Ghz) uplink just in case Fox-1Cliff or Fox-1D are active on L/v mode.



In an effort to learn something new, we have decided to use N1MMLogger+ as for our log. N1MMLogger+ is the most used contesting software. It has a number of built in features that make it extremely efficient in events where Q's need to be made rapidly. A copy will be set up before the next two club meetings so you can get a feel for what is involved. Yes, it may cost us some points but another aspect of Field Day is trying new things out and this seemed a very logical next step. And, yes, it is a free logging package!

Last year we tried running a 4<sup>th</sup> station using a different call sign for those who wanted to get some experience with running (sitting a single frequency and calling "CQ" and letting the masses come to us). This was not a points station in that Q's made on this station did not count toward the NFARL total score. There was some interest but it was not overwhelming. We are considering a similar effort this Field Day focused on Saturday between 1400 hrs. and 2200 hrs. Whether or not this happens depends on expressed interest from you. If you have interest in this activity, please contact Nathan, K4NHW at [k4nhw@arrl.net](mailto:k4nhw@arrl.net)

Field Day is always a fun outing. From setting up, to operating, to the Saturday night picnic to taking everything back down on Sunday there is something for everyone to do. On behalf of the 2016 FD team, we certainly hope to see each and every one of you at the Waller Park Extension in Roswell the last weekend in June, June 25-26.

## ***NFARL Upcoming Events and Dates***

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- **Every Sunday — NFARES net** - 8:30 PM - 147.06 MHz (+) PL 100
- **Every Monday — Tech Talk** - 8:30 PM - 145.47 MHz (-) PL 100  
Check NFARL Nets [website](#) for "how to."
- **Every Wednesday — Hungry Hams Lunch Bunch** - 11:15 AM  
Slope's BBQ, 34 East Crossville Road, Roswell.
- **Every Wednesday — Youth Net** - 7:00 PM - 145.47 MHz (-) PL 100  
Check NFARL Nets [website](#) for "how to."
- **Every Thursday — YL Net** – 8:00 PM - 145.47 MHz (-) PL 100  
Check NFARL Nets [website](#) for "how to."
- **Every Saturday — Royal Order of the Olde Geezers (ROOG) Lodge No. 1**  
9:00 AM - Reveille Café, 2960 Shallowford Road, Marietta (at Sandy Plains and Shallowford). Everyone is welcome: You don't have to be "old" or a "geezer" to join this breakfast get-together.
- **Second Tuesday — NFARES Meeting** - 7:00 PM  
Fellowship Bible Church, 480 W. Crossville Road, Roswell.
- **Third Tuesday — NFARL Club Meeting** - **May 17th**, 7:30 PM.  
Pre-meeting activities begin at 7:00PM.  
Location: [Alpharetta Adult Activity Center at North Park](#)  
13450 Cogburn Road, Alpharetta, GA 30004  
Meeting topic: D-STAR presented by Tim K4RA
- **Fourth Tuesday — NFARL Executive Team Meeting**  
May 24th, 7:00 PM  
12200 Crabapple Road, Alpharetta, GA 30004  
Meetings are open to all NFARL members. Space is available on a first arrival basis.
- **Second Saturday – VE Testing**  
NFARL provides Amateur (Ham) Radio test sessions once per month at the Alpharetta Adult Activity Center. Please check our [website](#) for up to date testing information.

## ***Multi-Club Fox Hunt Wrap-up / Kyle, W4KDA***

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Sixteen teams competing as individuals or representing their clubs entered the 2016 North Georgia Fox Hunt. The 2m fox was on the edge of being heard at the starting point near Roswell.

The Doppler Assisted class of hunters began arriving at the site in Cumming about 45 minutes after the hunt began. Once on sight, the hunters learned that the fox was a just cross band repeater and the real fox was on 70cm. The foot chase began!

Congratulations to Robert KI4SBL, Catherine KI4SBK and Patrick N4ZAX from the North Fulton Amateur Radio League for finding the fox first in the Doppler Assisted Class.



**Doppler Assisted Class Fox Hunt Winners  
NFARL Members Bob KI4SBL and Pat N4ZAX**

About 3 hours after the hunt began, teams from the Classic RDF Class began arriving onsite. They too switched gear quickly and began hunting the 70cm fox.

Congratulations Nick N0NCQ for being the first to find the fox representing his Alford Memorial Team. His teammates were Mike KK4KHS, and Mike KK4NZE, along with their non-ham guest Patrick in the Classic RDF Class.



**Classic RDF Class Fox Hunt Winners  
Alford Memorial Team of  
Nick N0NCQ, Mike KK4KHS Mike KK4NZE and Non Ham Patrick**

The 2016 North Georgia Fox Hunt was great fun. GARS sponsored awards will be presented to the two teams at one of their future club meetings. Bravo folks! Well done!

I'd like to extend a special Thank You to Bill WB4WTN, Dave W4DTR, and Larry AB4NX for their tireless and invaluable efforts with this adventure."

More photos of the hunt are available [Here](#)



## FD 2016 "Get-on-the-Air" Update



Reminder to all newly licensed Technicians (and unlicensed individuals) - the GOTA station is the perfect opportunity to experience operating above your current license class!!! Grab a friend or two, reserve time...prepare to learn and gain exposure to the next level of operating under the guidance of Bill K4WSW and Mark KK4FOF. We are making it very easy for you to "Get on the Air" - register, attend, operate.....experience Field Day the NFARL way.

The station operates for 24 hours, band conditions are looking good - so don't think no one will be operating at 2AM.....this Annual National Event is 24 hours, hundreds of stations will be on the air!!!



Again this year, any GOTA station operator making 20 or more logged contacts; a GOTA Field Day pin (see image above) will be given in recognition of the achievement "on the spot". We had 12 operators earn the GOTA Pin at FD2015, we want to exceed that number this year; additional GOTA award levels at 60 and 100 contacts!!!

See Registration Links on NFARL website to preview operating schedule and secure your operating time - plenty of time slots are available!!!

Contact either [Mark](#) or [Bill](#) if you have any questions pertaining to GOTA or Field Day – we look forward to seeing you at Field Day 2016!!!

# NFARL Field Day T-Shirts Available !

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## Introducing the 2016 NFARL Field Day T-Shirt

Look your best at Field Day in your brand new custom designed NFARL Field Day T-Shirt. Designed by Jim W4QO & sure to be a collector's item as it commemorates our 2015 Field Day Class 3A 1st place finish.

Shirts are \$12 each and will be on sale until June 7<sup>th</sup>.

They will be hand delivered at our June 21<sup>st</sup> meeting, June 22<sup>nd</sup> Hungry Hams, or at our Field Day operating location at Waller Park Extension, 160 Dobbs Drive, Roswell on June 25<sup>th</sup> and 26<sup>th</sup>.

Place your order in the Mart at <http://nfarl.org/mart/NFARL-2016-FD-TShirt>

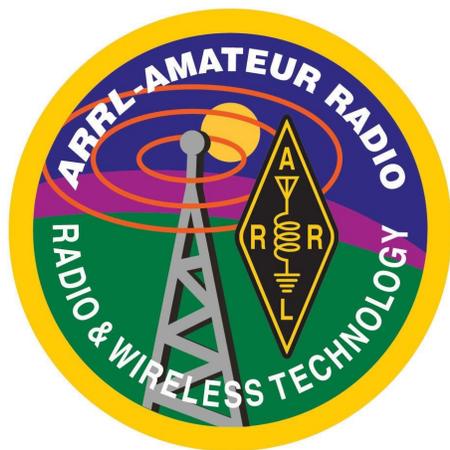
2016 NFARL Field Day T-Shirt



## Girl Scouts Patch Program / Cathy Freeman, KI4SBK

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'The ARRL and the Girl Scouts of the USA have developed a fun patch program on radio and wireless technology for Girl Scouts at the Brownie or higher level.



NFARL's Laura Northrop (KJ4ECA) and Cathy Freeman (KI4SBK) were part of the project team led by Debra Johnson (K1DMJ) from ARRL. Jill Galus (KB1SWV), along with James Neufell (K2GMT), Steve Sant Andrea (AGY1K), and James Youngberg (K1NKR) made significant contributions to the text and overall design of the program.

Girl Scouts and their leaders can follow the link <http://www.arrl.org/girl-scouts-radio-patch> to get started. Please share this with local Girl Scouts and offer to help them earn the patch if you can.

NFARL has participated in the Girl Scouts of Greater Atlanta STEM Expo for the last few years and plans to participate again this October.

Stay tuned for more details from ARRL and NFARL on how you can help local Girl Scouts earn this patch and learn about amateur radio!

## ***Meeting Program Update / Mike Birmingham, K4LJG***

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Our monthly club meeting features a presentation of interest to club members. Here is a quick review of our upcoming programs.

### **May**

Tim, K4RA, did such a great job in January that we have asked him to return this month to discuss D-Star.

### **June**

Our Field Day chairman, Dr. John Kludt, K4SQC, will provide details on NFARL's field day plans for 2016. John did a fantastic job last year and I can't wait to hear what he has to say about this year's Field Day.

### **July**

Are you wondering about what all the excitement is about DMR Radio? John Burningham, is an expert on DMR radio. You won't want to miss this!

### **August**

Open

### **September**

If you are looking for a complete logging software package, then Ham Radio Deluxe is for you! Our very own Neil Foster, N4FN is a beta tester and an expert on Ham Radio Deluxe. This is a great program. If you are already using the program, Neil will show you many of the features that you might not be using. So whether you are a beginner or an old pro, you need to be there!

### **October**

Barry Kanne, W4TGA, will present "Stone Mountain Holiday Present". This tells the story of the RF interference caused by the holiday decoration lights on the TV tower. It details how we found out about the problem, how we defined the extent of the problem and the measurements and impact on operations on the mountain."

### **November**

Be sure to visit HamJam 2016! The HamJam event will take the place of our regular monthly meeting this November.

We are looking for ideas of what you, the membership, would like to hear at the August meeting. This is your time so let me know what you are interested in. You can email me at [k4ljg@nfarl.org](mailto:k4ljg@nfarl.org) with any ideas.

## ***NPOTA—An Aspiring Adventure / Ruth Willet, KM4LAO***

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CQ National Parks on the Air, CQ National Parks on the Air... Those simple words are some of my favorite words to hear or speak.

National Parks on the Air (NPOTA), the yearlong celebration of the Centennial of the National Park Service, has been the perfect way for me to get on the air with HF. Visiting national parks has been one of my hobbies for several years now, so being able to visit them over the radio has deepened my appreciation for these rich national treasures. I was surprised to discover, due to my participation in NPOTA, exactly how many units of the National Park Service there are, such as national battlefields, historic sites, trails, memorials, monuments, and seashores.

My primary occupation with National Parks on the Air has been chasing parks. I passed the General license this past January. My first NPOTA QSO was on February 1st, and since then my park chasing has taken off! NPOTA is such an easy event to make a QSO in; virtually every day I can hear someone activating a park unit. For me as a relatively new HF operator, it is wonderful to learn from the activators how they handle pileups and it is such a thrill when I finally make contact! Since that first QSO, I have made over 110 NPOTA QSO's on both SSB and CW. I simply love the flexibility of being able to work parks on either mode! I have so many wonderful memories already, including my first SSB and CW NP QSO's, working a NP in a new state and getting ever closer to SSB Worked all States, making new friends daily through a love of national parks, passing 100 park units worked, and the personal thrill of working an activator 6 different times in 5 days at 5 different parks on both SSB and CW! I have worked a number of units that I have visited in person, including Yosemite, Yellowstone, Zion National Park, Mount Rushmore, Shenandoah National Park, the Blue Ridge Parkway, and Cape Hatteras National Seashore, but I have worked so many more that I have never seen. Now, because of National Parks on the Air, I know of them and want to explore them in person since I have worked them on the radio!



But chasing parks is only half the story because there would be no parks on the air without the activators! On April 28th, Chuck KK4TKJ, Donna KM4FMW, and I had the pleasure of activating Kennesaw Mountain National Battlefield Park. It was my first activation and was a total blast. When we arrived at the park, we stopped by the visitor center and then explored the park for a little while before starting our activation. I enjoyed seeing the park as it was my first time visiting. Then we drove up to the top of Kennesaw Mountain to operate! We started out on 40 meters with me calling and Chuck logging and made over 20 QSO's. Then we switched to 20 meters for the rest of our activation. In no time at all we had a pileup, the biggest I have had to date as an operator. It was so much fun working through the pileup, knowing that all these hams wanted to work me primarily because I was activating a park unit! By the end of our activation we'd logged over 65 QSO's and, most importantly, had a terrific time!

National Parks on the Air is fun and challenging, a wonderful way to learn new things while chasing or activating park units. I know one of the reasons why my HF experiences have been so fantastic is because of National Parks on the Air. Whether chasing parks or activating them, I eagerly await the adventures National Parks on the Air will bring me the rest of this year and beyond!

## **NFARL Mentors Work with MSA Students / Martha Muir, W4MSA**

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The students in the ACE class at Mill Springs Academy have had the pleasure of some of NFARL's great mentors coming out and working with them on various aspects of ham radio in these final weeks of the school year.

Chuck, AE4CW, worked with the students on Ohm's law, guiding them through some problems and variations on its formulas. At the next session, Chuck had the students working with pieces from some Snap Circuit kits and some of the multi-meters that members of NFARL had donated to the school to measure the resistance going through various circuits.



Tim WK4U came in two days to introduce fox hunting / radio directional finding to the students. On the first day, Tim hid 'the fox' somewhere on campus before coming in to the classroom. After a brief explanation of what they were about to do and how to do it, the students went out the door loaded with the two Yagi antennas Tim brought in plus an assortment of HTs. Students quickly discerned that they needed to head up hill. They got in the neighborhood of the hidden fox but lost faith in interpreting the signal correctly before Zach KM4QIV found it behind a bale of hay. The transmitter was hidden three more times that day and was found by Zach, Zach, and Grace KM4QIW (Zach had hidden the fox the last time). Students were getting pretty good at this.

Tim came back for the next class, this time having hidden two transmitters further from the ACE classroom – way further. The students clambered out the door, up the hill, down the hill, ending up on the baseball field on the lower part of the campus. The hunt was then on to find the other fox by switching frequencies. Much time was spent tracing the signals near the dumpster. Sean KM4SWI picked up a piece of PVC pipe and shook it, heard something inside, but then put it back down. A few minutes later, Colin KM4SZO picked up the same pipe and opened it, finding the second fox.

John K4SQC came in to work with students on digital communications but the station computer would not cooperate even after working with it for nearly an hour. So, instead, John spent class time talking with the students about how they can get involved in the NFARL Field Day.



Wes W3WL came in to talk about the many contributions of Nikola Tesla. As part of their appreciation of his work, they got to work with Wes' Tesla coil. They really enjoyed lighting pieces of paper with it. Afterwards, Wes gave the students an introduction to CW. They took to that straight away and were tapping out their names in no time. Of course, Wes' presentation included plenty of his jokes and puns.

Mike AD4MC came in to work with the students on being more efficient and skillful with their HTs. As he told the students "using a dual band 'modern' HT is definitely not intuitive." Mike went over details about using HTs, including programming memories for both simplex and repeater use.

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One more word of thanks to the ham community who have been responding when my students call out on the radio, 'playing radio' as I call it, to gain experience operating on the air. Some days it's just getting on the air when a class happens to have a few spare minutes and other times, it's 'what we're doing in ACE today.' The veteran hams who have joined us in these conversations have been very kind and patient with the newer members of the ham community.



Members of the Mill Springs Academy Radio Club would like to thank the members of NFARL for all their continuing support and friendship.

## ***Jamboree On The Air / Neil Foster, N4FN***

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Jamboree on the Air is the largest Scouting event in the world. In a typical year over 1 million Scouts participate with over 11,000 stations operated by 20,000+ amateur radio operators in operation from 150+ countries around the world.

The National Radio Scouting Committee develops and maintains a great deal of JOTA supporting information online at [Jamboree-on-the-Air](#) in addition to all the information and [USA Reports](#) posted on this site. You can see video reports of past year's activities below.



The official dates for 2016 are October 14, 15, 16. Note that JOTA officially begins on Friday evening at the start of the weekend.

73  
Neil N4FN  
Member National Eagle Scout Association  
Unit Commissioner, Atlanta Area Council BSA

## ***Activities / Daryl Young, K4RGK***

While every time of year is great for Ham radio summer is

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when it really heats up, and NFARL is the place to be! Please help us represent our great club at the Atlanta HamFest on Saturday June 4th at Jim Miller Park. Plan to stop by the NFARL table in building A and see everyone.

Field Day is coming soon and many NFARL members have been working very hard to ensure NFARL members have a great time, have opportunities to work radio in the field and of course defend our Class 3A leader position from 2015. Most of all Field day is about being with your fellow club members and having a great time. Please be sure to join us at Waller Park Extension on June 25th and 26th. We are always looking for more folks to join in the fun and help make this a great event. Please contact [John K4SQC](#) or [myself](#) if you would like to be a part of Field Day but just don't quite know how to get involved. We will find a place for you!

NFARL will once again sponsor and lead Georgia in the 13 Colonies QSO event in July. Stay tuned to NFARL eNews and our [website](#) for more information.

## ***Field Day Phone Station / Nathan Wood, K4NHW***

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Since I've been introduced to ham radio, Field Day has to be one of my favorite events of the year!

In years past, I've spent field day being mentored by some top notch DX'ers. Last year, I thoroughly enjoyed participating with North Fulton for the first time ever. This year, I've been asked to be a co-captain of the SSB station! I am extremely humbled by this request!

My goal this year is to serve the NFARL team to the best of my abilities and hopefully exceed our success from last year! I'm honored to be assisting my fellow co-captain, Steve, KS4KJ with Chuck, AE4CW as a mentor in this endeavor! As details are released, you'll be hearing more in the near future of how you can participate in this year's Field Day as well. Till then, take care and 73's!

⇒ *Editor Note: We would like to have more articles from the membership. We are always looking for comments, stories, experiences or plans related to Ham radio that our readers may enjoy. Please email [eNews@nfarl.org](mailto:eNews@nfarl.org) with anything our readership may like to hear about. Do not be concerned with literary proficiency, our editing and review team will make you look good!*

## ***US Islands Awards Program / Terry Joyner, W4YBV***

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On May 14 the U.S. Islands Awards Program is having its annual One Day Island Get-A-Way. This is a great day for you to make 100's of contacts with small islands all over the US and Canada. I have worked this outing for years and it is great fun for all.

If you have ever thought about collecting islands this is your chance to start!

I will be going up to Lake Lanier and setting up my station on Pine Island # GA-031L for the day. The island is part of Lake Lanier Resort Park. I hope to leave Roswell about 8:00 a.m. and return around 5:00 p.m. on Saturday.

I have room at this time for 2 more club members to help with operating the radio and paper logging. We will be on 20 and 40 -M SSB. This will be a Club event using the NF4GA club call. The admission to the island resort is \$15.00 for our vehicle and I am picking that up. For more info please contact me Terry Joyner at [w4ybv@yahoo.com](mailto:w4ybv@yahoo.com) or 770-993-8502.

If you cannot make this island trip save the dates Aug. 27 and 28. Our next island outing will be the U.S. and Canada island QSO Party, I came in 4th last year though the Florida rain ran us off after three hours!

## ***Backup Power at Home / Tim Romashko, K4RA***

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I have often discussed getting a backup generator just in case the power goes out at home. For some reason, I have been getting quite a bit of mail advertising generators for sale. The major brand names are not cheap and rarely go on sale. The ones I see advertised in sale flyers are no-name or the store brand. These less-known brands can still be ok depending on what you are planning to use them for. Remember that you often get what you pay for so buying a generator that is advertised as a 5000 watt output may not have all that power for a constant draw. Sometimes the marketing department gets ahead of the engineers and boasts a wattage figure and you need to read the fine print to see that the actual continuous power output may be a bit less, sometimes quite a bit less than advertised. If you buy a name brand (Honda, Kohler, Guardian or Rigid and others) you'll get a pretty good product. The unknown brands offer less

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performance for a much cheaper price and are probably made in China. If it means getting a no-name brand or not getting one at all, you will have a unit that is better than nothing but will certainly have limitations.

When buying a generator have a clear plan for how you expect to use the power. If you expect to run the entire house, get a 15 Kilowatt (15,000) or larger. Big appliances take a lot of power to run them. Air conditioners are the worst power hogs and we can live without them unless you have a severe medical condition. Electric ovens, ranges and dryers are next in line for big power draws. Being on back-up power probably means not being able to use the hot tub either. You can get by with a smaller unit in the 4000 to 5000 watt range if you limit the number of things you try to run at the same time. This will save you money and also make the generator easier to store when not in use. In addition, a mid-size generator uses less fuel while running. Fuel is always a consideration because you need it to run the unit and nothing is open to buy fuel when the power is out.

Remember that not all generators are good for running electronics. The better generators will have "Inverter" technology that produces cleaner power that electronic devices need. This is especially true of computers. Get the best unit you can afford, get a smaller output power with cleaner power if budget is an issue.

Something else you may consider for an alternate power source is solar power. Solar panels are getting better and better in the power they can generate and what they cost as well. This is good because there are no moving parts in a solar panel, they are quiet and need no fuel to pump out 12 volt power. You can't plug your toaster or curling iron into 12 volt power but you can charge a battery and all you need is direct sun light. Solar panels do nothing at night so a battery is need to store charge during the day when the sun is out. That power can be used at night for lights and small appliances. 12 volt power is what your car has so you can still do a number of things with 12 volts. You can charge your portable electronic devices and run small electric appliances with the help of a power inverter. A power inverter takes the 12 volt power and converts it to 120 volt alternating current just like the wall outlet in your home or office.

Solar power systems can be had for as little as \$100 and the sky is the limit on the upper end (think 5 figures). Again, the cost varies on the capacity and ability of the system. Some systems have portable solar panels making the whole system portable in the event you need to bug out of the house. Solar panels that mount to your roof are also gaining popularity. These systems can reduce the amount of power you buy from the power company and that means a lower electric bill. The more elaborate systems connect to the power grid and can actually spin your power meter backwards if you generate more power than you use. This means the power company is buying power from you at retail price! This is a great concept but also means that you need to install a large system that will cost a bunch of hard-earned cash. These systems are great but have return on investment numbers of 10 years or more. Some never do pay for themselves.

Technology is marching forward and all sorts of new inventions are appearing on store shelves. Some older inventions are becoming cost-effective now that technology is catching up. Solar power is one good example. LED lights are another example of a technology that has been around for years but is just now is getting affordable and usable. Replace the lamps in your home with LEDs and your power consumption will go way down but still give you the same amount of light. By installing LED lamps, you reduce your overall power needs and that means you need a smaller backup power system to run it all.

Plan carefully and purchase wisely and you just may make it through the next power outage without being in the dark.

Be safe, plan ahead and live well.

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## Club Repeaters

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Frequency—Description	P.L. Tone	Location
145.470 (-) EchoLink Node 56086 NF4GA-R	100 Hz	Sweat Mountain
147.060 (+) Primary ARES Repeater	100 Hz	Roswell Water Tower
224.620 (-) Joint Venture with MATPARC	100 Hz	Sweat Mountain
443.150 (+)	No Tone	Roswell Water Tower
444.475 (+)	100 Hz	Sweat Mountain
927.0125 (-)	146.2 Hz	Sweat Mountain

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