The GARzette

The Official Newsletter of the Gwinnett Amateur Radio Society

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www.GARS.org

Don't forget to support our advertisers at the back of the *GARzette*.

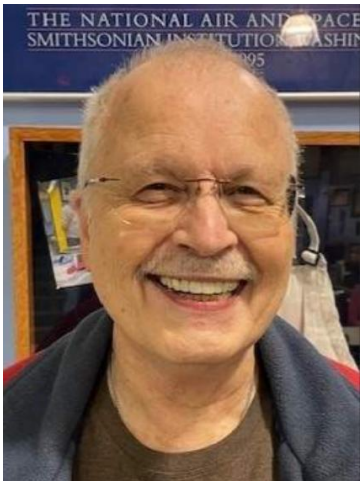
TechFest
Gwinnett Amateur Radio Society

GARS Exhibition of the Technical aspects of Amateur Radio

The next TechFest is January 30, 2027

GARS Meeting: POTA Every GA State Park Visit Adventure by Randy Tonne KN4DY
Tuesday November 10, 2026 at 7:00 PM

President's Message



From the President…

The Stone Mountain Hamfest is in the books. It was the first time it was held on a Friday & Saturday instead of Saturday & Sunday. It was also the first time in a while GARS did not do the exam sessions. I always helped with the exam sessions so it was a relief to be able to just go to the Hamfest and not have any obligations to work. I was able to join some of the forums and can say that I enjoyed listening to them and they are a good source of information on subjects you may not be an expert on (if we can ever say that about anything!).

Friday had a pretty good turnout of people walking around even though the bone yard was a lot busier on Saturday.





I was able to get to the GARS Sunday in the park in October and while it was a smaller group then in September, we had some good conversations and it is always good to meet outside of meetings and offer help and conversations. October's park outing was held at the same park as the September outing and it will be there again in November. I suspect it will move in December and maybe the only GARS outing in December since we do not have a regular meeting or workshop (Holiday Party in December).

All of the HoTY nominations are in and the Officers are going to decide who is the GARS Ham of the Year this year. We had 10 nominations this year and I feel really good about the engagement of the GARS members and also shows how being involved in GARS shows and is noticed by the other members. As a note, there were several nominations for the same person and I wish I could list all the nominated members so their contributions could be noted – maybe that is something for next month after the HoTY has been given out.

The 2026 Stone Mountain Hamfest is in the history books. This was the first year it was held on Friday & Saturday. Its lessons learned review is still to be done to determine what next year's Hamfest will look like. From just my impression, I liked having the flea market in the same building as the vendors – it all seemed to flow from one to the other easy. I also spent time wondering thru the bone yard and while I kept my wallet in the pocket, talking to bone yard crew is always an education about the stuff being sold and also an education to learn about the equipment being displayed – some of them really know about what they are selling!

The Holiday Pary is being held on the first Saturday in December (12/5/26) and there are going to be a good diner served along with some games. We are still looking for an entertainment group for the party and if you have any suggestions let Pam Brown KJ4RYV know.

Bob – K4CQO
Club President / GARzette Editor

GARS Repeaters and Other Communications

2 Meter Repeaters 147.075(+) MHz Tone 82.5 – Snellville 147.255(+) MHz Tone 107.2 – Snellville 1.25 Meter Repeater 224.580(-) MHz Tone 100.0, 1.6 MHz Offset – Grayson 70 Cm Repeaters 444.525(+) MHz Tone 82.5 – Snellville 442.100(+) MHz Tone 100 – Norcross 442.325(+) MHz Tone 100 – Buford	6 Meter Repeater 53.110 (-1 MHz) No Tone – Buford **Other Resources:** APRS 144.390 -- 1200 Baud W4GR

Notable Web Links

Ham Radio Glossary: https://noji.com/hamradio/glossary.php a very comprehensive listing provided by Noji Ratzlaff KNØJI. On his site there is also a lot of information about getting started in ham radio.

Need Help – Let GARS Elmers answer your questions

Send an email to elmers@gars.org with the subject listing the area (like Antennas, Repeaters, Digital, DMR etc.) of your query to get to GARS Elmer volunteers.

About the GARzette

The *GARzette* is the official monthly newsletter of the Gwinnett Amateur Radio Society, serving its members and other persons interested in the advancement of the Amateur Radio art.

Original articles, art, and photos are invited and encouraged. Previously copyrighted submissions cannot be accepted for reprinting unless permission from the appropriate publisher is provided in writing along with the information being submitted. If reprints are from publications allowing their unrestricted use, please include a copy of the printed permission contained in the publication.

If possible, bring your articles to the monthly meeting in Microsoft Word or rich text (.rtf) or text or HTML format or by e-mail to editor@gars.org. Artwork can be accepted in most any graphics format and can be submitted via e-mail to the same address. Alternate means of submittal can be arranged when necessary.

In keeping with the Amateur Radio spirit, permission is hereby granted for the reproduction of The *GARzette* articles by other Amateur Radio club newsletters provided that proper credit is given to the individual author and *The GARzette*.

The GARzette is published each month with the assistance of Karen KI4HPP and Kyle W4KDA who print copies for distribution, etc., Dave Bruse, W4DTR, who distributes the newsletter electronically, and Mark Prichard KN2TOD who delivers the GARzette to our local HRO store.

Deadline for submissions is the 28th of each month for inclusion in the following month's issue.

For additional information view our Website at: http://www.gars.org [PS— Articles to publish in the GARzette, either written by GARS members or published elsewhere, are always welcome. —Ed.] Newsletter Email: editor@gars.org Editor: Bob Hoffmann, K4CQO

GARS Upcoming Meetings & Workshops

GARS Meetings and Workshops are held in-person at the EAA 690 Hangar, 690 Airport Rd, Lawrenceville, GA 30046

Meetings and Workshops are OPEN to all, feel free to share your invite with others.

When GARS meetings are available, they can be found on YouTubeLive (www.youtube.com/@GarsTube/streams) each month on the second Tuesday at 7:00 PM Eastern (information also available on http://www.gars.org). Members are able to attend the GARS Executive Meeting (via Microsoft Teams) on the 1st Tuesday of the month – send an email to the GARS President (president@gars.org) for information to attend.

GARS Meetings Schedule (second Tuesday @ 7:00 PM): (these are the presentations)

- November 10th – POTA Every GA State Park Visit Adventure
- GARS Holiday Party – December 5th no regular meeting

Workshop Schedule (third Tuesday @ 7:00 PM): (these are the Hands-on Workshops)

- November 17th – POTA Every GA State Park Visit Adventure
- December – no meeting, enjoy the holiday season

GARS Meeting – November 10, 2026
POTA Every GA State Park Adventure

Randy Tonne, KN4DY, will be talking about his adventure to visit and activate all of the Georgia State Parks using his go box.

This is an achievement and seeing the steps Randy went thru to activate all of the parks will be a valuable lesson for all to see and experience the work it took to achieve this.

GARS Workshop – November 17, 2026
CubeSat

GARS workshops provide further information about the presentation given the week before on a one-on-one basis with the various presenters and there are also Elmers present on a variety of subjects to help with any questions you may have about ham radio – including help you're your equipment that you can bring in.

Elmers are always present at the GARS Workshops. Feel free to bring your questions to the Workshop. If your project is small enough to bring to the meeting, let us know in advance so we can bring tools, test gear, etc.

GARS would like to thank all the members who presented their web sites and projects during the GARS Favorite Projects and Websites presentations..

GARS Happenings

20 Years ago in the GARS, ham radio, newsletter, Gwinnett 2006 November GARzette:


The GARZETTE

- There is an interesting article listing other organizations that use "GARS" along with the associated web URLs
- McGruff the Crime Dog article talked about cyber security and protection from attacks – so there has been awareness and the beginning of efforts 20 years ago

You can always browse the GARzette archive at http://www.gars.org/newsletters. 73, Bob, K4CQO, GARzette Editor

Net Managers Corner

Monday Night 2 Meter "Want, Swap, Sell, and Information Net"
Thursday Night 440 Buford Repeater Net

GARS NEEDS MEMBERS
TO SERVE AS NET CONTROL STATIONS!

GARS is a great Amateur Radio service club with the membership and awards to prove it. Our club is very busy and active, and we use the Monday night net to get timely information out to our members. Weekly participation is needed to make our net function well. There is only a small group of very dedicated people who make the net happen each week, and we need more members to volunteer to serve as Net Control Stations (NCS) on a rotating basis.

Out of almost 300 members, there are six operators who serve as the NCS for the GARS net every Monday night. GARS can always use more volunteers In no particular order, they are:

Ray – N4GYN David – KA4KKF Don – KM4BWT Joe – KR4LQL Chuck – KK4TKJ Ed – W4BSR

To volunteer to help as a NCS for the 440 Net contact Jim O'Brien KQ4RNA.

As GARS Net Manager (Chuck KK4TKJ), I would like to have more volunteers to fill NCS positions. I do plan and post the schedule months in advance. Any conditions will be accommodated that you as a rotating NCS need to place on the scheduling of your duties. If your plans change, I can make adjustments for the schedule to work, and I will make those changes happen as soon as I am notified of a problem. As Net Manager, I also send out reminders each week to let the NCS scheduled know he or she is NCS for the next Monday night net. In short, serving as a rotating NCS is a small duty but a great contribution to the club. The "Want, Swap, Sell Information Net" begins promptly at 19:30 every Monday night and runs about 30 minutes. As a scheduled NCS, you will request the assistance of a volunteer alternate NCS each time you have Net Control. Your simple duties will be to tune in to the GARS repeater, read the script, take a few notes and forward the information to me for record keeping.

Please lend a hand and contact (Chuck) via Email (Click Here to Email our Net Manager) to help support the effort that makes GARS the great club that it is. See you on the Nets!

GARS Holiday Party 12/5/2026

Come join us for the GARS yearly Holiday Party being held at the meeting place – the 690 Hangar at the Lawrenceville Airport.

The sign-up information and the cost options to attend is located on the GARS web site https://www.gars.org/.

If you want to volunteer to help with the party, contact Pam Brown pamnbrown94@gmail.com.



Radio in the Park

WHEN: Second Sunday, NOV-08-2026 at 1:00 PM

WHERE: Bethesda Park – 225 Bethesda Church Rd, Lawrenceville, GA 30044. Look for the pavilion next to the lake and between the Senior Center and the Aquatics Center.

This is an opportunity to get out, set up your field portable radios, make some contacts together and have good fellowship with your friends in the club. We meet at 1:00 PM on the Second Sunday of every month. This is an informal event, so drop in, bring a snack or cooler, stay as long as you like, and relax with your club friends.

A calendar reminder will be sent out via our Groups.io email group prior to the event. Park outings may rotate between a few centrally located Gwinnett County Parks until we land on one which will best suit everyone who wishes to attend. Check back here for changes.

Another One in the Books – ARISS

Paul Duke STEM School ARISS Contact 10/26/2026 9:13a

Even though this is the 7th ARISS contact I've been a part of, there's still something magical about the event that unless you're there it's very hard to describe. So was the event at Paul Duke STEM High School in Norcross on Monday 10/26. This contact had a little different "feel" to it as the development of the program, the production, camera work and post-production was all done by the students' The photo on the right shows our equipment table all set up and ready for prime time. Note the prominently displayed GARS logo on the banner.



Our astronaut for the event was Joshua Kutryk, a first-time visitor to the ISS. Joshua is from Canada and was only in space a few weeks before being given this "payload." (In NASA jargon an ARISS contact is considered a payload much like any other project the astronauts work on,) The photo of Joshua is a "selfie" he took while he was talking to the students. It was posted on social media with the following quote:

> 'I **love that we have a HAM radio on the ISS. Thanks to Paul Duke STEM School in Norcross for taking the time today to chat about space exploration!** '



To watch a post-production version of the event please go to YouTube with the following link:

https://www.youtube.com/watch?v=QIEDfgMhwrw



As it goes with all of these events, it takes many HAMS to help make ARISS contacts a success. I would like to personally thank Richard Kitz, Tom Crowley, Mary Kosier from GARS and Mike Riley from NFARL. Special thanks goes to my partner in these events Daryl Young (ARISS, NFARL). Without Daryl these events wouldn't happen.

Ralph Pickwick KJ4CNC
Education Committee

Dave's Computer Tips

LibreOffice — Part 1: What Is It?

By Dave Bruse, W4DTR (with a little help from ChatGPT)



Most of us have used Microsoft Word, Excel, or PowerPoint. These programs are part of an **office suite**. But Microsoft Office isn't the only choice. One popular alternative is **LibreOffice**, and it's completely free.

What Is an Office Suite?

An **office suite** is a collection of programs for common computer tasks such as word processing, spreadsheets, and presentations.

Microsoft Office is probably the best-known example. It includes Word, Excel, and PowerPoint.

An office suite can be useful around the ham shack or for club activities. You might use one to write an article, maintain an equipment list, create a Field Day spreadsheet, prepare a club presentation, or design a simple handout.

What Is LibreOffice?

LibreOffice is a free, open-source office suite available for Windows, macOS, and Linux.

Its main programs include:

- **Writer** — word processing
- **Calc** — spreadsheets
- **Impress** — presentations
- **Draw** — diagrams and drawings

LibreOffice can also read and write standard Microsoft Office files, including Word .docx, Excel .xlsx, and PowerPoint .pptx files.

LibreOffice can also export documents directly to PDF, which is often the simplest choice when the recipient only needs to read the document and you don't want to worry about which office software they use.

That means you can usually exchange documents with Microsoft Office users even if you don't have Microsoft Office installed.

LibreOffice vs. Microsoft Office

	LibreOffice	**Microsoft Office**
Word Processing	Writer	Word
Spreadsheets	Calc	Excel
Presentations	Impress	PowerPoint
Cost	**Free**	Microsoft 365 Personal: about **$100/year**; Office Home 2024: about **$180** one-time

For most everyday documents, spreadsheets, and presentations, LibreOffice provides the features most people need.

Microsoft Office still has advantages for people who need advanced features or who work extensively with Microsoft 365, OneDrive, and other Microsoft services.

Basic Features

Writer can be used for letters, articles, reports, labels, and other documents. It supports formatting, tables, photographs, spell checking, headers, footers, and other common word-processing features.

Calc provides formulas, functions, charts, sorting, and filtering for spreadsheets.

Impress creates slide presentations with text, photographs, graphics, transitions, and other presentation features.

Draw can also be useful around the ham shack for sketching wire antenna layouts or planning backyard antenna installations.

Installing LibreOffice

Installing is simple - go to:

https://www.libreoffice.org/

Click **Download LibreOffice** and download the version for your computer.

For most Windows 10 and Windows 11 computers, you'll want the 64-bit Windows version. Run the downloaded installer and follow the prompts. The default installation choices should be fine for most users.

Linux users may already have LibreOffice installed or can install it through their distribution's software manager.

LibreOffice is free. You may be asked if you would like to make a donation, but donating is optional.

Getting Started

When you start LibreOffice, you'll see its main Start Center.

From there you can select:

- **Writer Document** to create a document
- **Calc Spreadsheet** to create a spreadsheet
- **Impress Presentation** to create a presentation
- **Draw Drawing** to create a drawing.

You can also select **Open File** to open an existing LibreOffice or Microsoft Office document.

Is LibreOffice Worth Trying?

If you already have Microsoft Office and use it regularly, you may have little reason to switch.

But LibreOffice can be a good choice for a second computer, a Linux computer, a club computer, or anyone who doesn't want to pay for an office suite.

Since it's free, there's very little reason not to give it a try.

Next month: LibreOffice Part 2 — Creating Presentations

73, Dave - W4DTR

DMR Operation Hints

DMR Connection is Different

By Bob Hoffmann K4CQO

In order to connect to a DMR Talk Group (TG) you have to tell the TG you want to listen to it – something like selecting the channel on your TV. Before I get into the details, I want to be sure the DMR idea of a TG is explained so we are on the same page.

A TG is a place where other DMR users gather with the interests the TG name implies. For example, there is a Brandmeister TG numbered 3113 called Georgia State. It is where you can likely find others living in GA hanging out. TGs can be defined by location (like 3100 which is the US or 91 which is the world) or by interest.

So, back to how to connect to a TG.

How Repeaters do it

The repeater owner sets the TGs it can access and also specifies which TG will always be available on each of the timeslots (TS). A TG always available (meaning if there is traffic on it, the traffic will be available) is called a **static** TG. For static TGs, you only have to set your receiver to the TG and be on the right TS and whenever there is traffic on the TG it will be heard on the radio. This not a timed connection and does not time-out.

The other type of TG is called a Part Time TG (or PTT). In order to connect to a PTT you have to tell the TG you want to connect to it. Setting your radio to the TG is not enough – the traffic does not know you are listening. Doing a kerchunk (a fast pushing of the Tx button and releasing) tells your connection you want to listen to the traffic on the TG. Doing a kerchunk is good practice instead of a longer Tx because you do not know if there is already traffic on the TG and the kerchunk is the beginning of listening before talking. PTT have a time-out associated with them and it there is no “I still want to listen” signal, it will disconnect. The “I still want to listen” signal is any Tx from your radio – not receiving traffic from someone else. The timeout is usually set around 10 minutes.

How Hotspots do it

A hotspot is a passthrough of the traffic to the DMR server – like Brandmeister (and will use BM for this discussion). Tuning your radio to a TG and doing the kerchunk just like a repeater connection will connect to a PTT.

For static TG connections, you have to go the server interface (like BM) and there you can set which TGs you want as static and which TS you want the traffic to be sent on. Note that not all servers support static TGs (TGIF currently does not).

So for hotspots, you control the static TG / PTT and their presentation to the radio work the same as going thru a repeater.

How Apps do it

A phone / laptop app acts like a radio and hotspot together. Apps like DroidStar use the TG connection just like a hotspot does – requiring setting up static TGs or using PTTs.

However there is an app, VoxDMR, that does not follow the hotspot mold. It uses an api connection to BM and whenever you set the TG, it will send traffic to the app – just like a static TG. Changing the setting to a different TG makes that TG traffic being sent to the app. No need to kerchunk or set a static TG on a server to receive traffic.

Apps do not have the concept of TGs on TS 1 or TS 2 – they have a single connection to the server. For ones requiring setting of static TG, they are always done on TS 2.

The Basics by Bob Schmid, WA9FBO

Real Simple Filters

de: Bob Schmid, WA9FBO



Part 1: Low-Pass

Filters are circuits that treat different frequencies differently. A **low-pass filter** lets slowly changing signals pass through while reducing faster ones. You've encountered a low-pass filter when audio sounds muffled, or when a power supply filter smooths out hum.

A simple way to build a low-pass filter is with just two parts: a resistor and a capacitor.

The basic circuit

Fig. 1 shows the resistor in series with the signal and the capacitor connected to ground. The output is taken across the capacitor.

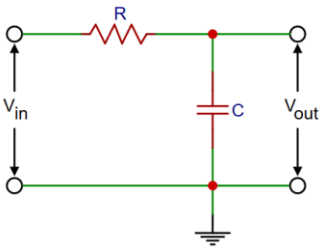


FIG. 1 – RC LOW-PASS FILTER (CONVENTIONAL SCHEMATIC)

It may help to think of this as a kind of voltage divider (Fig. 2). At low frequencies, the capacitor has a high reactance (opposition to AC), so most of the signal appears at the output. As frequency increases, the reactance decreases, shunting more of the signal to ground and leaving less at the output.

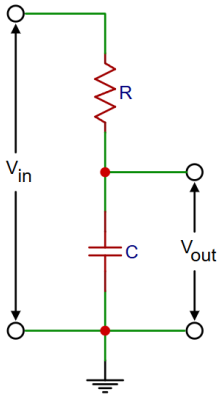


FIG. 2 – SAME CIRCUIT, SHOWN AS A VOLTAGE

Cutoff frequency

At some point, the filter begins to noticeably reduce the signal (Fig. 3). This point is called the **cutoff frequency, f_c** (sometimes informally called the *breakpoint*).

By convention, cutoff is where the output has dropped to about 70% (0.707 x) of its original voltage. In decibels, this is –3 dB. It's not a magical boundary—it's just a convenient and widely accepted reference point where the filtering effect is clearly underway.

The cutoff frequency is given by $f = 1/(2\pi RC)$, where f is in hertz, R is in ohms, and C is in farads. Using standard values, a 1.6 kΩ resistor and 0.1 µF capacitor produce a cutoff very close to 1 kHz.

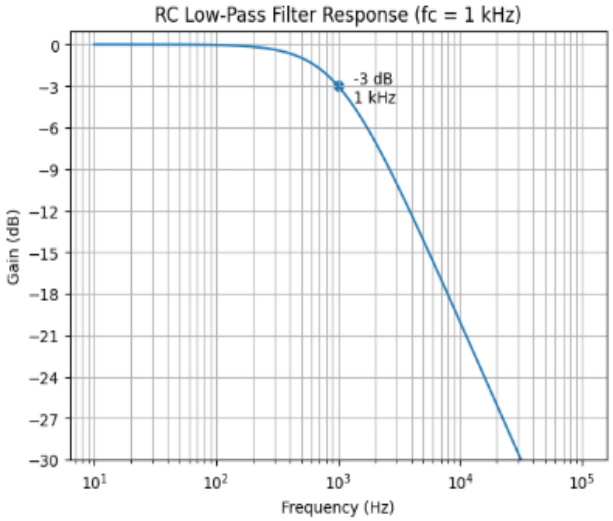


FIGURE 3 - RC LOW-PASS FILTER FREQUENCY RESPONSE

Slope and "first order"

Once past the cutoff point, the output continues to drop as frequency increases. The rate of this drop is called the **slope**.

A simple RC filter like this is a **first-order filter**, because it has one reactive component (the capacitor). All first-order filters have an ultimate rolloff of **6 dB per octave** (or 20 dB per decade) beyond the cutoff frequency. (An **octave** simply means a doubling of frequency. So for every doubling of frequency, the output voltage is cut roughly in half.)

What the response looks like

The graph shows a flat region at low frequencies (the passband), a gradual transition near the cutoff, and a steady downward slope at higher frequencies (the

stopband). The key takeaway is that filters don't abruptly "switch off"—they transition smoothly.

Real-world examples

Cable capacitance

Even a simple piece of coaxial or shielded audio cable acts like a low-pass filter. Cables have capacitance—often around 25–35 pF per foot.

A 10-foot cable might have around 300 pF. Combined with the source resistance of the equipment driving it, this forms an RC low-pass filter. At short lengths, the cutoff frequency is very high and has little effect. But as cable length increases, the cutoff frequency drops, and high-frequency response can begin to roll off. This is one reason long cable runs can dull high-frequency detail.

Power supply filtering

A power supply filter is another familiar example. Here, the goal is to pass DC while reducing ripple—typically at 60 Hz or 120 Hz. The capacitor smooths out the rapid variations (the ripple), while allowing the steady DC component to pass.

Part 2 – High-Pass

As mentioned in Part 1, filters treat different frequencies differently. A **high-pass filter** allows faster-changing signals to pass while reducing slower ones. In practical terms, it passes AC and blocks DC—something you encounter whenever stages are coupled with a capacitor.

The basic circuit

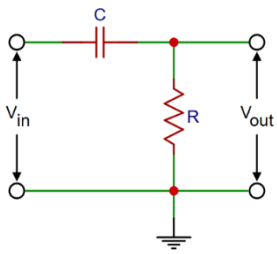


FIG. 1 – RC HIGH-PASS FILTER (CONVENTIONAL SCHEMATIC)

Fig. 1 shows the capacitor in series with the signal, followed by a resistor to ground. The output is taken across the resistor.

This arrangement behaves very differently from the low-pass version, even though the parts are the same.

At very low frequencies (including DC), the capacitor acts like an open circuit. With no current flowing, there's no voltage across the resistor—so the output is essentially zero.

As the signal frequency increases, the capacitor's reactance decreases, allowing more current to flow. That current develops a voltage across the resistor, and the output rises.

It may help to think of this as a voltage divider (Fig. 2). At low frequencies, the capacitor has high reactance, so little signal appears at the output. As frequency increases, the reactance decreases, and more signal appears across the resistor.

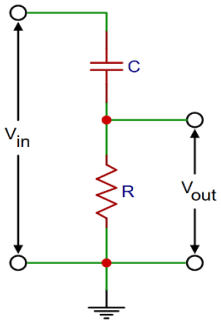


FIG. 2 – SAME CIRCUIT, SHOWN AS A VOLTAGE DIVIDER

Cutoff frequency

The point where the output becomes significant is called the cutoff frequency, f_c (Fig. 3), sometimes informally called the breakpoint.

By convention, cutoff is defined as the point where the output has reached about 70% (0.707 x) of its final value. In decibels, this corresponds to –3 dB.

As with the low-pass filter, this is not a sharp boundary—just a convenient reference point where the effect of the filter is clearly noticeable.

The cutoff frequency is given by $f = 1/(2\pi RC)$. For example, a 1.6 kΩ resistor and 0.1 µF capacitor produce a cutoff frequency of about 1000 Hz.

Slope and "first order"

Below cutoff, the output decreases as frequency decreases. This rate of change is called the slope.

This is a first-order filter, meaning it has one reactive component. All first-order filters have an ultimate rolloff of 6 dB per octave (or 20 dB per decade). Each octave decrease in frequency reduces the output to about half its previous value.

What the response looks like

The graph shows a rising slope at low frequencies (the stopband), a transition near cutoff, and a flat region at higher frequencies (the passband). The overall behavior is easier to see in the response curve.

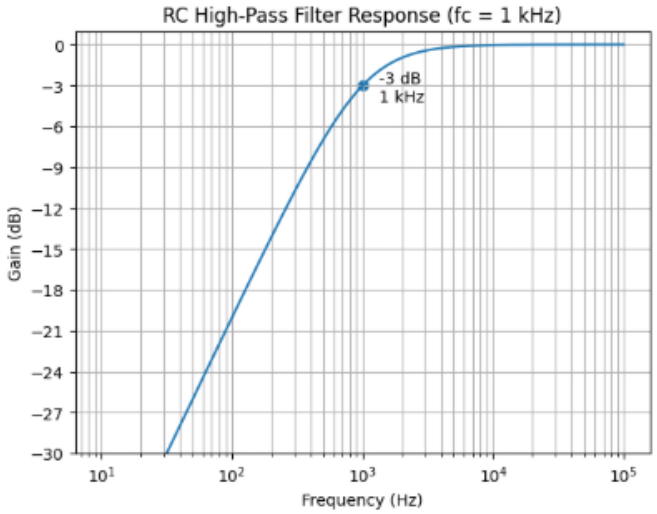


FIGURE 3 - RC HIGH-PASS FILTER FREQUENCY RESPONSE

As before, the change is gradual—not abrupt.

Real-world examples

AC coupling

One of the most common uses of a high-pass filter is AC coupling—passing a signal while blocking DC.

The coupling capacitor and the input resistance of the next stage form the filter. If the capacitor is too small, low-frequency signals are reduced, producing a “thin” sound.

Tube circuits often use smaller capacitors because their output impedance is high. Op-amp circuits usually require larger capacitors, since the effective resistance is lower.

While simply choosing a larger coupling capacitor often works in practice, it’s still worth checking the cutoff frequency—especially when driving low impedances such as 600-ohm inputs—to avoid losing low-frequency response.

Real circuits aren’t ideal

In practice, the filter is not isolated. The source has output resistance, and the load has input resistance. Together, these determine the effective R in the cutoff formula and can shift the cutoff frequency.

Buffering with a low-impedance source and a high-impedance load helps the filter behave as expected.

Component tolerances will still shift the exact cutoff frequency, but the slope of a first-order filter remains the same.

Choosing component values

The cutoff frequency depends on the product of R and C. In high-pass filters—especially in coupling applications—the resistance is often set by the circuit, so the capacitor value usually determines the result.

Pre-emphasis in practice

Filters don’t just separate passband and stopband—they also shape what happens in between.

Near cutoff, a high-pass filter is still in its transition region. Signals there are reduced, but as frequency increases, the output quickly approaches its full value, with each octave bringing a noticeable increase.

This gradual rise in higher frequencies is the basis of **pre-emphasis**. By boosting higher frequencies before transmission or recording, systems such as amateur and broadcast FM, as well as phono and tape circuits, improve signal-to-noise performance. A matching de-emphasis stage later restores the original balance.

Audio DSP Units for Vintage Radios

Vintage Amateur Radio

de Bill Shadid, W9MXQ



I am not sure how the average Vintage Radio Collector decides to use Vintage or Modern gear in any given operating session. As for me, I am serious about restoring and using older radios on a regular basis. I am just as serious about using modern equipment and regularly use it for Contesting, working DX, and participating in on-the-air user groups (nets) for my particular brand and model of radio. For most rag chewing and day to day operating, I use Vintage Radios. In fact, I have a rough schedule for what radios I use and discipline myself to use all of my Vintage Collection on a rotational basis. I admit to using the most irrational firm schedule you have ever seen. That is, I have a regular schedule to which I adhere – except when I don't!!

Today's band conditions can be challenging, as most of you know. New technology human-caused noise coupled with an increase in ham population of close to 350%[1] since I was first licensed – not to mention staggering increase in global ham radio population – couple to make the bands sometimes hard to deal with. Modern radios have many features to combat a wide variety of interference. More often than not, Vintage Radios have zero interference fighting tools, sometimes they had rudimentary interference focused features, and a few do rather well with features ahead of their time. The very famous early Collins S-Line radios (75S-1 Receiver, 32S-3 Transmitter, and KWM-2 Transceiver).



1961 Vintage Collins KWM-2 Transceiver at W9MXQ

This was also true of the very popular Drake TR-3 and TR-4 Transceivers. Those radios did have excellent mechanical and crystal (respectively) I-F filtering, but nothing more. Radios of that vintage did begin to add optional, mode related filters, notch filters, Q-Multipliers, as well as the somewhat popular Noise Limiter.

> Note: The Noise Limiter had a following among users, including this writer – but they are not to be confused with the later, quite popular, Noise Blanker. There were features of the Noise Limiter – sometimes called Automatic Noise Limiter (or ANL) that a Noise Blanker could not match.

As noted, the Collins and Drake equipment have I-F filters that do stand up quite well to today's band conditions – but other radios that used traditional tuned circuit I-F filtering are generally unable to be as functional on today's crowed bands. Let's just look at the difference in a Mechanical I-F filter in a Collins 75S-1 Receiver to that of a tuned circuit I-F filter in a Hallicrafters SX-117 Receiver – both well respected products in their day:

	Bandwidth by Mode			
	Collins 75S-1 Receiver		Hallicrafters SX-117 Receiver	
	SSB	CW	SSB	CW
-6dB Down	2.1 kHz	0.5 kHz	3.0 kHz	0.5 kHz
-60dB Down	4.2 kHz	1.0 kHz	10.0 kHz	4.2 kHz

The above shows the good and the “not so good” of many of the radios that collectors like me try to use in regular service. Given that most of us using modern radios have some level of reliance on Noise Reduction and Variable Bandwidth features in even entry level radios made today, how do we survive using an older radio? Well, survive we do and with products that deserve some recognition.

When I am on the air with one of my favorite radios and the bands are doing their best to ruin my experience, I select one of several Interference reduction devices at my disposal. While none of these devices are available brand new any longer, they are plentiful in the used market. Other models, not in my collection, remain on the market and will be referenced later in this article.

Common Interference reduction devices used here, past, and present, are in four forms:

1. Passive (tuned circuit) Interference Reduction.
   Notch Filter, and Bandwidth Control Devices to be inserted into the low-level audio path in the radio.
2. Passive (tuned circuit) Interference Reduction
   Notch Filter, and Bandwidth Control Devices with an included Audio Amplifier – connected to the Speaker Output of the radio then fed to station speaker.
3. Active (DSP – Digital Signal Processing) Noise Reduction
   Notch Filter, and Bandwidth Control Devices to be inserted into the low-level audio path in the radio.
4. Active (DSP – Digital Signal Processing) Noise Reduction
   Notch Filter, and Bandwidth Control Devices with an included Audio Amplifier – connected to the Speaker Output of the radio then fed to station speaker.

A fine example of the product line included in number 1, is Heathkit QF-1 Q-Multiplier. Produced from 1955 to 1961. These units were once found at virtually any hamfest but have become harder to locate in recent years. They are not plug-and-play. Such installation technology does not work as well with today’s hams as it did when these were new. The radio had provisions for tapping into the I-F of the host receiver as well as locating necessary operating voltages. Instructions were provided to allow for seeking out proper voltage and signal locations in a typical host.

The Heathkit QF-1 was designed to match Heathkit radios of the period – but with proper analysis, they would work with most any radio using a 455 kHz (or close) I-F frequency.

Here is now the model QF-1 appeared in 1955:



Heathkit QF-1 Q-Multiplier[2]

Active Sensitivity and Selectivity Enhancement Circuit

(Connected so it is inserted into the low-level I-F Circuitry of the radio.)
(Draws Power from Host Radio)

W9MXQ

Some years later, in 1961, Heathkit revised this unit into the HD-11 Q-Multiplier. While not pictured here, or ever used by this writer, it was essentially identical to the QF-1 except for being in a physically smaller cabinet and with an internal AC Power Supply. The HD-11 answered a problem with low cost host receivers – a lack of enough power to run an external Q-Multiplier.

While we are at it, we should discuss the Q-Multiplier[3], as a circuit. A Q-Multiplier is a circuit added to a radio receiver to improve its selectivity and sensitivity. It is a regenerative amplifier adjusted to provide feedback within the receiver. This has the effect of narrowing the receiver's bandwidth, as if the Q-Factor of its tuned circuits had been increased. The Q-multiplier was a common accessory in shortwave receivers of the vacuum tube era as either a factory installation or an add-on device. In use, the Q multiplier had to be adjusted to a point just short of oscillation to provide maximum sensitivity and rejection of interfering signals.

A Q multiplier could also be adjusted to act as a notch filter, useful for reducing the interfering effect of signals on frequencies near to the desired signal. In some receiver designs, the Q multiplier was made to also serve as a beat frequency oscillator by adjusting it to oscillate. This could be used for reception of single sideband or Morse radiotelegraphy, but in that case the circuit no longer provided improved selectivity.

The last version of the original QF-1 Q-Multiplier was the model GD-125. It was marketed from 1966 to 1971. Like the HD-11, the GD-125 is not nearly as plentiful today as the original QF-1.

Here is the GD-125:



Heathkit GD-125 Q-Multiplier[2]

Active Sensitivity and Selectivity Enhancement Circuit

(Connected so it is inserted into the low-level I-F Circuitry of the radio.)
(Self-Powered with internal 120 VAC Power Supply)

W9MXQ

One of the niceties of the HD-11 and the GD-125 is their undocumented easy interconnection to the Collins KWM-2 and KWM-2A Transceivers via a phono connector on the chassis top of those radios. (This is via phone jack, J27, on top chassis, toward the rear center, inside the radio, accessible via the opening top cover.) This is perhaps possible with other models and brands of radio.

Q-Multiplier based circuits were included in a few vintage receivers as standard equipment. National was most evident in that arena. They also marketed a stand alone interference rejection product, called the Select-O-Ject. Circuitry was similar in function if different in design to what we call a Q-Multiplier. Today, National Select-O-Ject stand-alone units are extremely rare, but they occasionally become available.

One of the best performing, non-DSP (Digital Signal Processing) interference rejection products is one from a small company called Autek Research, of Wesley Chapel, Florida. That little company was from the 1970's – before the advent of today's digital Noise Reduction and Filtering products. They were a

very interesting and technically advanced company that in their last products saw the beginning of what we today refer to as the Antenna Analysis devices. For this article we will discuss their AF-1A SSB/CW/AM Filter. I must say that in spite of the secretive nature of its design, I find its performance to be equal or superior to the DSP based that came later. Sadly, Autek Research is no longer in business.

Here is the Autek QF-1A:



Autek Research QF-1A SSB/CW/AM Filter

Active Audio Filter – with Audio Amplifier

(Connects to Speaker Output of the Radio)
(Self-Powered with internal 120 VAC Power Supply)

W9MXQ

As I indicate, the QF-1A is one of my favorites. Mine, which was purchased new too many years ago to remember, has been with me over a wide variety of vintage radios. Currently, it is most commonly used with my Hallicrafters SX-117/HT-44 Twins or my National NCX-5 or NCX-200 Transceivers. It is a good partner for the various Swan transceivers that have lived here, or still live here. The QF-1A is a rather unique setup in that while it has its own speaker audio amplifier it does not have an audio gain control. AF Gain is determined by the host radio's AF Gain setting – so one continues to use the radio to control audio level. That saves the confusion with an external device as to where to control gain.

Even though the QF-1A is actually a very early digital filter. Its smooth operation and pleasant results are very comfortable to the ear yet quite effective at the same time. For some reason, these filters were a love/hate relationship with different operators. The fact that they command later DSP reliant products prices on eBay, today, shows that there are definitely a cadre of users that love them.

I use my QF-1A to calm noise on SSB and to do multiple tone notch rejection on CW while passing the desired CW note is commendable. This was before the auto-notch feature of most DSP filters.

The QR-1A has a predecessor called the QF-1. It has a different desktop format (narrower but taller) and has a limited feature set when compared to the QF-1A. Users seem to hold them in the same high esteem as they do the QF-1A.

Another player in the noise reduction and audio processing field was an early provider of external DSP devices. Those are from a company, in St. Paul, Minnesota, called Timewave Technology Inc. I am familiar with and have experience with three of their models. The last of which only left the market a short time ago.

A early Timewave DSP Unit was the DSP-9, that very quickly became the DSP-9+. The DSP-9+ was a three mode (Voice, CW, and Data) unit that had separate bandwidth control selections for each mode.

Here is the Timewave DSP-9+ unit:



Timewave DSP-9+ DSP Audio Filter

Active DSP Audio Filter with Internal Audio Amplifier

(Connects to Speaker Output of the Radio)
(Powered from External 12 VDC)

WØAH

Use of the DSP-9+ is straight forward. One of its three modes is selected. After that, one of the modes is selected to access features of that mode, Noise Reduction and Bandwidth are selected as required in each mode. The AGC function is internal but can assist the listener by automatically adding gain to weak signals. There is a bypass function to remove the filter from the audio path.

A friend local to me, Dave, WØAH, uses his DSP-9+ with his Kenwood TS-590S Transceiver – a radio known for its very effective, internal DSP. Dave relates that the DSP-9+ adds readability. Good point there – that is what it is all about!!

Not to be outdone by the very successful DSP-9+ product, Timewave soon added a more flexible model to the lineup (without discontinuing the DSP-9+). That addition was the similar looking Timewave DSP-59+ product.

Here is the Timewave DSP-59+:



Timewave DSP-59+ DSP Audio Filter

Active DSP Audio Filter with Internal Audio Amplifier

(Connects to Speaker Output of the Radio)
(Powered from External 12 VDC)

W9MXQ

Instead of the predetermined (by Timewave) mode specific bandpass filters, the DSP-59+ allows the user to make their own determination of bandpass by two (low pass and high pass) switches. In the heat of battle, this arrangement can be confusing, but it is effective when time is taken to get it right. This model is a top contender for the best of the now fading market of DSP filters as a standalone unit.

Like the DSP-9+, the AGC feature is present and just effective in this model for bringing up weak signal levels.

Top of the line for Timewave DSP units was the DSP-599zx:



Timewave DSP-599zx DSP Audio Filter

Active DSP Audio Filter with Internal Audio Amplifier

(Connects to Speaker Output of the Radio)
(Powered from External 12 VDC)

W9MXQ

This model actually came on two forms, the DSP-599zx you see, above, and the DSP-59Y which installed in the Phone Patch slot in the Yaesu SP-5 and SP-6 Speakers, matching the FT-1000D and FT-990 Transceivers, respectively. See pictures, below:



Yaesu SP-5 or SP-6 Speaker Console

Universal Radio



Timewave DSP-59Y DSP Unit

Timewave

The panel to the right of the actual speaker was removable to install the Yaesu LL-5 Phone Patch (as shown by the blue arrow). Rear panel DSP-59Y connections appear where the rear pane Phone Patch controls and connections would have been. These seem sought after as they make a high quality station speaker with an include high performance DSP Filter.

The DSP-599zx / DSP-59Y offer the ultimate in the DSP Filter product line from Timewave. Looking at the front panel of the DSP-599zx, previous page, note the screen that serves to show the numerical settings shown on the switches in the DSP-59+ model. However, the preciseness of the adjustments, using the left two adjustment knobs, is far above the switch settings of the earlier models. Those switches are mechanical encoders so effectively offer many more switch points than the mechanical switch points of the DSP-59+. Noise Reduction is enhanced over the previous model with programmable attack levels. While layout is different, the DSP-59Y has these same features.

The DSP-599zx / DSP-59Y offer RTTY demodulation on the included screen with proper setup. Also, it includes audio circuitry to provide for two-tone testing of an SSB Transmitter as well as a random, programmable tone generator. So, a piece of test equipment and RTTY decoder as a bonus.

The smooth response of the DSP-599zx / DSP-59Y is a cut above the DSP-9+ and DSP-59+ units. For DSP Filtering, this model is my favorite. And, while I like the way the Autek QF-1A works, the extra features of the DSP-599zx / DSP-59Y make it my preferred unit for most operations.

Another provider in this business seemed to focus only on receive audio processing. That was JPS Communications, Inc., Raleigh, North Carolina. Their audio processing products have left the market, and I am not sure of the current status of the company.

Here is the first of two DSP Filter products – the NIR-10:



JPS NIRZ-10 DSP Audio Filter

Active DSP Audio Filter with Internal Audio Amplifier

(Connects to Speaker Output of the Radio)
(Powered from External 12 VDC)

W9MXQ

The NIR-10 is a good quality unit with simple and straight forward features. For most Noise Reduction features, it works well and provides good noise reduction on noisy SSB signals off the air. For simply reducing background noise on received SSB signals, it is really quite good. On CW, its preselected bandwidths are not the best for my taste but its ability to seek out errant tones on CW while not impacting the CW itself is kind of remarkable. I think – but it is my assumption only – that the natural time delay for the DSP to react is enough time for elements of a CW signal to get past the filter – which in this case is a good feature.

The JPS units – this one and the next – are very well built. While they use simple clamshell cabinetry, the components used and the fit and finish are top notch. I found the fabrication of the cabinets to be above average – showing the use of good tooling. Things like that impress me – not sure others notice!!

I found the NIR-10 to be a bit touchy as to audio settings when switching from using the Filter and when it is in bypass mode. As mentioned earlier, however, Autek Research and their QF-1A Filter are the only ones that seem to get that done right.

Like Heathkit and Autek Research, JPS Communications is not serving the amateur community – or may not even be in business. Getting parts or service, or in the case of this the JPS microprocessor controlled product, parts and firmware updates are no longer available.

The other JPS Communications DSP Filter is the NIR-12. See it here:



JPS NIR-12 DSP Audio Filter

Active DSP Audio Filter with Internal Audio Amplifier

(Connects to Speaker Output of the Radio)
(Powered from External 12 VDC)

W9MXQ

In my opinion, this external DSP Filter was serious competition for the Timewave DSP-599zx. While personal experience did not show it quite as effective, the NIR-12 was definitely a very capable unit – but priced similar to the Timewave DSP-599zx, it was better matched in performance to the Timewave DSP-59+.

The NIR-12 accepts user bandwidth programming and deals more easily with Noise Reduction attack level settings than the DSP-599zx. It also has an excellent auto notch for carrier interference. Attack smoothness of the DSP is somewhat better on the Timewave models, however. So, listening comfort suffers a bit.

To quote JPS on its NIR-12, “The NIR-12 is an advanced audio signal processor designed to provide the user with maximum flexibility to eliminate most types of interference from voice, CW, and data transmissions. The unit uses dual Digital Signal Processors (DSP) to provide simultaneous bandpass operation, noise reduction and multiple tone/heterodyne removal. The Notch filter eliminates all tones, including tune-ups, foreign broadcast carriers, CW, RTTY, etc.”

Like the JPS NIR-10, the cabinet construction of the JPS NIR-12 is exemplary. I am particularly impressed with the fitting of the LED status lamps, SIGNAL, NOTCH, and DYN PEAK that are carefully inserted just above an edge at the lower front of the cabinet.

For the final unit in this analysis, there is one unit that is still on the market as of this writing – that is the MFJ Enterprises MFJ-784B DSP Audio Filter. With MFJ announcing it departure from the amateur

radio market, it can be assumed that once factory warehouse and radio store inventory is exhausted, the MFJ-784B will cease to be available as a new product.

Here is the MFJ-784B in a front panel view:



MFJ Enterprises MFJ-784B DSP Audio Filter

Active DSP Audio Filter with Internal Audio Amplifier

(Connects to Speaker Output of the Radio)
(Powered from External 12 VDC)

W9MXQ

With 4.3 out of 5 stars on the https://www.eham.net/ website, I felt there might well be some merit in this unit. My suspicions were correct but at the same time, inconclusive. The feature set on the MGJ-784B is impressive – and, as the model designations imply, the product has been upgraded over time. In addition, this is the latest version of several previous models. MFJ has worked hard in developing the technology. For that reason, I am not ready to pass judgement on this unit until it is tested more than I have been able to do, so far. Initial tests show a product certainly equal to a high level of respect.

Construction is typical of most such MFJ products. There were no quality issues that I could note, Both internal and external appearance is quite good.

A special thanks go to Bob, W9DYQ, for his proof reading and his assistance in article development.

Thank you for reading my articles. Remember that I am open to questions and comments at my email address, W9MXQ@TWC.com. Please share your experiences the included and other external Interference reduction products..

Notes:

[1] My recollection is that there were about 250,000 hams in the United States when I was licensed in 1964. As this is written, we are approaching 800,000 hams in the United States of America. Sometimes when I am trying to test an old radio on MidCARS, 7.258.00 MHz, the other 699,999 are there competing with me!!

[2] Some details of the Heathkit QF-1A, HD-11, and GD-125 come from Chuck Pensen's book, "Heathkit-A Guide to the Amateur Radio Products."

[3] Q-Multiplier information is from the Wikipedia Foundation, to which I am a contributor.

W9MXQ

GARS Open Positions – Help Wanted

These are some of the positions that are available. If you have a background in any of these positions or want to learn them, they are available for you to fill.

- Activities Chair – includes the following types of activities that can be sponsored by GARS
  1. Fox Hunt
  2. GARS Operating Contests
  3. Winter Field Day
  4. GARS Hamfest Volunteers
- Non-Chair Activities needed:
  1. "X" discussion handler

In order to offer your help with any of these, send an email to president@gars.org or contact the President (Bob K4CQO) at one of our meetings.

GARS Education Help Needed

Joeseph Tollison KQ4YBT is serving as the GARS Education Representative for the Lilburn Middle School. Joseph needs radio contacts for the students to contact during the ham sessions for students at Lilburn Middle School. He needs people to stand by to talk to the students and ask them questions. Dates are:

Nov. 11, 2026	Mar. 3, 2027	All around 3 pm. Please help out. They really enjoyed the first day contacting our operators. Note that thanks go to Joseph for talking to the kids during the sessions – they were excited.
Dec. 2, 2026	Apr. 14, 2027	
Jan. 6, 2027	May 12, 2027	
Feb. 3, 2027		

GARS Membership Pricing

New Membership: (Licensed Adults and Seniors who have never been a GARS member)	**First Year Free**	**Youth Membership: (Licensed Youth ≤ 21) (Proof of age required)**	**Free (until age 22)**
Adult Membership:	**$30 / 1-Year $50 / 2-Years ($10 savings) $60 / 3-Years ($30 savings) $350 / Lifetime (One-Time Fee)**	**Senior Membership: (Age 65+) (Proof of age required)**	**$15 / 1-Year $25 / 2-Years ($5 savings) $30 / 3-Years ($15 savings) $150 / Lifetime (One-Time Fee)**
Join Link: https://gars.org/join		**Renew Link: https://gars.org/renew**	

GARS Membership

New Members in October

New Members: 0

Total Members as of October 31, 2026
365

Join GARS members for our:

- weekly lunch bunch at 11:00 AM most Fridays
- weekly breakfast gathering at 8:00 AM most Saturdays



Friday weekly gatherings are held at the Chilli's at:
947 Lawrenceville Suwanee Rd, Lawrenceville, GA 30043



Saturday weekly gatherings are held at the Cracker Barrel at:
75 Celebration Dr, Suwanee, GA 30024



Radio in the Park – Second Sunday at 1 PM (see https://gars.org for location)

Birthdays in November

John Bachtel (NR4JB)
Pam Brown (KJ4RYV)
Will Carson (KZ4HV)
Julia Collier
Anthony De Lucia (W4OG)
Christi Dickerson
Greg Durham
Robert Eybers (KN4WBM)
Carey Fisher (WB4HXE)
Puddin Garrison (KJ4QIB)
Eddie Geike (AK4WM)
Frederic Grant (N2FG)
Keith Griffin (KK7AQN)
Danny Kelley (KI4KXO)
Marc Lulkin (K9TOE)
Donna McCord (KM4FMW)
Patrick Mcdougal (K4GTA)
Jack McElroy (KM4ZIA)
Emma Mellichamp
Kathy Mellichamp
Linda Pace
Kevin Scott (K4GTR)
Carl Shropshire (KA5GUD)
Andre Steyn (W7ALS)
Lawrence Teper (KN4CGP)
Jim Webb (W4NTA)
Nova Whatley (KF4HLG)
Karen Whited (AB4NW)

GARS MEMBERSHIP

Your current GARS membership status is shown in the monthly newsletter e-mail towards the bottom of the message. To become a GARS member, or to renew your GARS membership, please visit our website – www.gars.org/gars/membership/. To make changes to your GARS membership (moved, new e-mail address, new phone number, etc.), please contact the Membership Chair at Email (https://gars.org/contact/) with any changes to your Membership information.

In order to report a Silent Key or member issues, use www.gars.org/gars/membership-chairman or www.gars.org/gars/email-health-wellbeing.

Membership Chair: Dave Bruse, W4DTR
Committee Members: Pam Brown KJ4RYV, John Aguirre KQ4EJV, Tee Stewart KR4GKY, Joe Iannazzone, KR4LQL.

ARRL MEMBERSHIP

To update your ARRL membership information, please visit their website - http://www.arrl.org

Local Ham Radio Meetings

In order to find a local Ham Radio Club meeting near you, please visit http://www.arrl.org/find-a-club. Contact the club for meeting information.

Donating to GARS

Your GARS donation can be used for a certain purpose by donating to one of these funds:

- GARS SK Memorial Fund for Education (to remember and honor Silent Keys);
- GARS Scholarship Fund (Administered by the ARRL for awarding scholarships);
- GARS General Fund (any club purpose).

GARS has joined the Kroger Community Rewards program (a small portion of every purchase you make through Kroger is donated to GARS).

For more information on how to sign up for these rewards programs, or to donate to GARS, visit

https://gars.org/gars/donations-to-the-club

GARS on Social Media

Discord Request:
https://gars.org/discord

Groups.io:
https://gars.org/groups.io

Visit GARS on Facebook:
https://gars.org/facebook

Follow GARS on X:
https://gars.org/x

Join GARS on YouTube:
https://gars.org/youtube

GARS Mail Address:

GARS
P.O. Box 492531
Lawrenceville, GA 30049
https://gars.org

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Bob Hoffmann, President K4CQO


Michael Stewart, Secretary KR4CVF


Glen Wendt, Vice President W3WWT


Kevin Scott, Program Manager K4GTR


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David Adcock, Webmaster KA4KKF


Ralph Pickwick, Education Chair KJ4CNC


Earl Whatley, Apparel Manager & Dacula Parade Co-Chair AF4FG


Michael Stewart, Activities – Dacula Parade Co-Chair KR4CVF


Mario Stewart, Public Information Officer KR4CUK


Bob Hoffmann, GARzette Editor K4CQO


Eddie Foust, Repeater Chair K4AIH


Mike Weathers, WAS / DXCC QSL Card Checker & Historian ND4V


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Dallas Mellichamp, Workshop Leader, Field Day Chair N4DDM


Edwin Henderson, Multimedia Chair W4BSR


Dallas Mellichamp, Georgia QSO Chair N4DDM


Neil Derryberry, Elmer Manager & IT Chair WD4NET


Edwin Henderson, TechFest Chair W4BSR


Anita Morris, Health and Wellbeing KG4AJX


Shawnee Palmeri, GARS QSL card Chairman KR4HPC


Larry McDermott, GARS Safety Chair KE4ESV

Open Winter Field Day Chair

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Kyle Albritton, W4KDA


John Davis, WB4QDX


Bill Cherepy, WB4WTN W4GR Trustee

GARS Meeting Minutes

GARS General Meeting Minutes
Tuesday, 09/08/2026

Attendees

President - Bob Hoffmann, K4CQO [GARzette Editor]
Vice President - Glen Wendt, W4WWT
Treasurer - Ralph Pickwick, KJ4CNC [Education Chair]
Secretary - Michael Stewart, KR4CVF [Dacula Parade Co-Chair]
Program Manager - Kevin Scott, K4GTR

Total Meeting Attendees: 45 (2 New Member)

Agenda

Opening Time: 7:00pm
Closing Time: 8:47pm
Membership Report: 369 Members as of 8/31/26

Programs: University of Georgia CubeSat by Annie D. (KQ4NJC)

MEMESat-1
MOCI
COSMO

Upcoming Events:

JOTA - 10/17
Park Outing -9/13
Public Safety Fall Festival - 9/12

General Information:

Dallas is the new SK Eq Chair
Still working on Techfest
Techfest Survey
Shawnee P. KR4HBS new QSL Chair

Workshop Minutes – September 15th, 2026

Attendance: 15

Workshop: No Primary Topic

Presenter: Unavailable

Brief Summary: This Workshop did not follow the University of Georgia presentation on their satellite program and the use of Amateur Radio to communicate with their satellites.

Our guest speaker, Annie Dmitrieff KQ4NJC, was unavailable for our workshop, so we discussed a range of topics: MeshCore and the Gwinnett ARES MeshCore build in September. The newly formed GARS Safety Committee and its email group on GroupsIO. Various slingshots and other antenna launchers.

Elmers are always present at the GARS Workshops. Feel free to bring your questions to the Workshop. If your project is small enough to bring to the meeting, please let us know in advance so we can gather the necessary tools and test equipment.

73 Dallas N4DDM
Workshop Chair

GARS Calendar Events

GARS Events Calendar for 2026

TechFest	February 21 2026
Winter Field Day	January 24-25 2026
Dog Show Fundraiser	March 25-29, 2026
Spring Technician HamCram	April 11&12 2026
Georgia QSO Party	April 11-12 2026
North metro area Fox Hunt	April 2026
Memorial Day Parade	May 25 2026
ARC/KARC Hamfest	June 2027
Field Day	June 27-28 2026
Summer General HamCram	July 25-26 2026
Fall Technician HamCram	October 2026
JOTA	October 2026
Stone Mt. Hamfest	October 30-31 2026
Holiday Party	December 2026

GARS Recurring Calendar

- 2nd Tuesday of the month at 7 pm (except December)
  Monthly Club Meeting
  690 Airport Rd, Lawrenceville, GA 30046
- 3rd Tuesday of the month at 7 pm (except December)
  Monthly Workshop
  690 Airport Rd, Lawrenceville, GA 30046
- 2nd Sunday of the Month at 1 PM
  Radio in the Park – location in a local Gwinnett park
- 3rd Sunday of the Month at 3 pm
  GARS Ham Exam Session
  690 Airport Rd, Lawrenceville, GA 30046
- Every Monday at 7:30 pm: GARS Want, Swap, Sell, and Information Net on the GARS 147.075 MHz repeater
- Every Monday at 8:30 pm: ARES Training on the GARS 147.075 MHz repeater
- Every Thursday at 7:30 pm: GARS 440 Net on the GARS 442.325 MHz or 442.100 repeater
- Every Friday at 11:30 am, GARS Lunch at Chilli's
- Every Saturday at 8:00 am GARS Breakfast at Cracker Barrell

GARS Calendar for November 2026 for more information go to gars.org

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2 **7:30 PM 2M Net**	3 **7:00 PM Exec Meeting**	4	5 **7:30 PM 440 Net**	6 **11:30 AM Lunch at Chili's**	7 **8:00 AM Breakfast at Cracker Barrel**
8 **1:00 PM GARS Radio in the Park**	9 **7:30 PM 2M Net**	10 **7:00 PM Meeting EAA 690 Hangar**	11	12 **7:30 PM 440 Net**	13 **11:30 AM Lunch at Chili's**	14 **8:00 AM Breakfast at Cracker Barrel**
15 **3:00 PM Ham Radio Exams, EAA 690 Hangar**	16 **7:30 PM 2M Net**	17 **7:00 PM Workshop Meeting EAA 690 Hangar**	18	19 **7:30 PM 440 Net**	20 **11:30 AM Lunch at Chili's**	21 **8:00 AM Breakfast at Cracker Barrel**
22	23 **7:30 PM 2M Net**	24	25	26 **7:30 PM 440 Net**	27 **11:30 AM Lunch at Chili's**	28 **8:00 AM Breakfast at Cracker Barrel**
29	30 **7:30 PM 2M Net**					

November **Second Sunday in the Park** at 225 Bethesda Church Rd, Lawrenceville, GA 30044

Events – ARRL Contests / Hamfests

ARRL CONTESTING INFO

From ARRL Contest Calendar
> For more information click the links <

January 2026
1 Straight Key Night
3 Kids Day
3-4 RTTY Roundup
17-19 January VHF

February 2026
9-13 School Club Roundup
21-22 International DX – CW

March 2026
7-8 International DX– Phone

April 2026
19 Rookie Roundup – Phone

May 2026 (no ARRL Contests)

June 2026
6-7 International Digital Contest
13-15 June VHF
20 Kids Day
27-28 Field Day

July 2026
11-12 IARU HF World Championship

August 2026
1-2 222 MHz and Up Distance Contest
15-17 10 GHz & Up – Round 1
8-9 EME - 2.3 GHz & Up
16 Rookie Roundup – RTTY

September 2026
12-14 September VHF
5-6 EME - 2.3 GHz & Up
19-21 10 GHz & Up - Round 2

October 2026
TBD Collegiate QSO Party
31-Nov 1 EME - 50 to 1296 MHz
19-23 School Club Roundup

November 2026
7-9 Nov Sweepstakes–CW
28-29 EME - 50 to 1296 MHz
21-23 Nov Sweepstakes–Phone

December 2026
4-6 160 Meter
12-13 10 Meter
20 Rookie Roundup–CW

For more information:
http://www.arrl.org/contest-calendar

HAMFEST CALENDAR

[Please confirm the status of a Hamfest before making plans

11/14/2026 - K4KDI Tailgate
Location: Orlando, FL
Type: ARRL Hamfest
Sponsor: South Conway Rd. Baptist Church

11/14/2026 - Montgomery Hamfest, ARRL Alabama State Convention
Location: Montgomery, AL
Type: ARRL Convention
Sponsor: Montgomery Amateur Radio Club
Website: https://w4ap.org

11/14/2026 - SPARCFest
Location: Pinellas Park, FL
Type: ARRL Hamfest
Sponsor: St. Petersburg Amateur Radio Club
Website: https://www.sparc-club.org/sparcfest/

11/21/2026 - Flamingo Net Flea at U. of Miami
Location: Coral Gables, FL
Type: ARRL Hamfest
Sponsor: Flamingo Net ARC
Website: http://FlamingoNet.8m.net

11/21/2026 - PARC Annual Swampfest
Location: Fort Walton Beach, FL
Type: ARRL Hamfest
Sponsor: Playground Amateur Radio Club
Website: http://www.w4zbb.org

12/05/2026 - Silver Springs Radio Club Hamfest
Location: Ocala, FL
Type: ARRL Hamfest
Sponsor: Silver Springs Radio Club
Website: http://k4gso.us

12/11/2026 - 12/12/2026
Tampa Bay Hamfest, ARRL West Central Florida Section Convention
Location: Plant City, FL
Type: ARRL Convention
Sponsor: Florida Gulf Coast Amateur Radio Council
Website: http://fgcarc.org

01/02/2027 - Blount County Amateur Radio Club Annual Freezefest
Location: Locust Fork, AL
Type: ARRL Hamfest
Sponsor: Blount County Amateur Radio Club
Website: http://w4blt.og

02/12/2027 - 02/14/2027
Orlando HamCation, ARRL Southeastern Division Convention
Location: Orlando, FL
Type: ARRL Convention
Sponsor: Orlando Amateur Radio Club
Website: http://www.hamcation.com

For more information: www.arrl.org/hamfests-and-conventions-calendar. When searching by division, use Southeastern: GA, AL, FL Delta: TN Roanoke: NC, SC

GARS Ham Radio Exams & Results

Upcoming GARS Ham Radio Exams



GARS Exam Sessions are held the 3rd Sunday of the month – Exam fee: $10.00 cash
(Youth age 21 and younger are FREE, but you must ask for the discount and show proof)

Preregistration is REQUIRED, Doors open at 2:45 pm, exams start promptly by 3:00pm. For more information and to preregister, please visit https://gars.org/exams/
NOTE: Our exam team only conducts electronic exams on a tablet using HamStudy and ExamTools at our exam sessions, and we supply everything.

GARS VE-Team
VEC: W5YI-VEC
EAA 690 Hangar
690 Airport Rd, Lawrenceville, GA 30046

GARS VE Team Leaders
E-mail: exams@gars.org.

September 2026 Results

The GARS VE Team exam session results from October 18th:

1 Technician tried and almost passed:
- the VE team provided a lot of support to continue his quest to get a license and hints on how to continue studying and what to do after you get your license

Special thanks to the Volunteer Examiners who made this exam session possible:

W4DTR - Dave Bruse
KM4SWL – Richard Kitz
WS3V - Bill Rudd
NG4H – Bill Beguhn
W4VNA – Lynn Hatker
K4CQO – Bob Hoffmann

Thanks & 73, bob Hoffmann (co-Team Lead)

Local Ham Radio Exams
In order to find an exam session near you, please visit http://www.arrl.org/exam_sessions/. Contact the information in the listing for further information.

MAINTAIN YOUR LICENSE
You can update your Amateur Radio license information with the FCC at their website for free - https://www.fcc.gov/wireless/universal-licensing-system. License renewal is subject to the $35 FCC fee.

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1/2 page	$150
Full page	$200

For swap items, post and see items on GARS groups.io (https://groups.io/g/GARS).

Ready to take your Ham Radio Exam?

Go to https://GARS.org/exams/ to learn more, and to register for an upcoming exam session.

Have an idea for entry into the GARzette?

Send the article to editor@gars.org and be published in next month's GARzette.