

Announcements

Our next club meeting is on Thursday, Nov 14 at our luxurious new setting with thanks to the Path Foundation. 1915 Start time. We have several topics, but the main presentation will be by Arno, W4AKO on his VLF and other adventures in the Antarctic Regions.

Checkins

Call for Topics and if none we'll just do normal status on operating activities and projects

Call for Additional Announcements or Topics?

General News for Comment: Save for WED

Let's focus on a really significant state of affairs: Our reflector has been alive with interesting activities over the last week or so. I'll list a few and please add your comments to any of these when your turn comes around: (And sorry if I missed a few)

(and not in any particular order)

ARRL CW Sweepstakesjust finishing up; and note the Phone SS is in two weeks...

GNU Radio Conference – huge number of videos and briefings on a number of interesting topics ...

Weather Radar App – for a price, but seems worthwhile as a once only Yes, I downloaded it and will proliferate on my home and shack computers.

And BTW don't forget the skywarn training opportunities over the next several months

The real fox hunt – the 388149Khz signal seems to be causing some issues, and we'll have to see how the whole thing turns out; in the meantime, a lot of us had fun cruising around and hunting from mobiles and shacks; and some good sleuthing was

done and reported by several club members – complete with waveform captures.

Planning for the DoD/MARS tests during this early first weeks in Nov – details on WWV if you can catch it at 10M after the hour.

Technical references and very fun toys for we Hams: MicroCap, thanks, Steve K3KQ, and KiCad for PCB designers or to support your prototyping activities

Some great discussion on AM Digital Radio, and...

Tuning in Pirate Radio on Halloween (unfortunately I missed this due to the storms), and ...

News of the new SDRPlay RSP DX

Laurent, F6FVY, [tweeted about his YouTube video](#) showing how to use [his KiCAD plugins](#) for doing RF PCB design. Some of the features include automatic 'fencing' of signal paths using vias to ground plane layers, trace rounding, and more control over PCB solder masks. (get image from <https://github.com/easyw/RF-tools-KiCAD/blob/master/resources/via-fencing-preview.png>)

If you're not familiar with *KiCAD*, you can learn more from Dan's, KW4TI, presentation "[Open Source for Amateur Radio Projects](#)" made to the Raleigh Amateur Radio Society of September 10, 2019. He walks through the entire process of taking a design from schematic capture all the way to sending a Gerber file to a board fabrication house for manufacture. It's easier than ever to get quality PC boards fabricated inexpensively, and projects built this way can be less prone to wiring errors and more rugged than point to point wiring construction

- Solar storm conditions remained in place this weekend, although it didn't seem to slow down the high HF bands as there was significant activity working the contest.
- Here's another one: what was the somewhat "off the wall" recurrent theme in the '73 magazine issue of Nov, 1999. Here's a couple of hints – reminders to have your batteries fresh and checked out; and a system setting in your PC.
- **From ARRL Letter:**

MARS Members to Work with Radio Amateurs during SET and DOD COMEX 19-4

During October and corresponding with the ARRL Simulated Emergency Test (SET), Military Auxiliary Radio System (MARS) members will be reaching out to the amateur radio community to continue building working relationships and improving interoperability. As part of this effort, MARS will be promoting the use of a serial phase-shift keying protocol, Military Standard 188-110 (M110), on the 60-meter interoperability channels. Radio amateurs are authorized to use this digital mode on the five 60-meter interop channels, although M110 exceeds the allowable symbol rate that radio amateurs may use on all other HF bands.

Starting on November 2 and continuing until November 17, the MARS community will be executing Department of Defense (DOD) Communications Exercise (COMEX) 19-4. MARS members will use the exercise to continue training and refining their operator skills to provide situational awareness information, such as county status reports and weather observations.



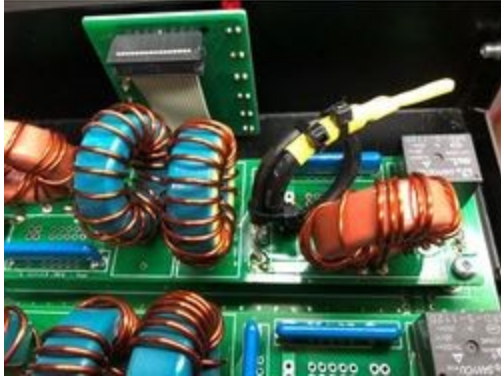
To announce the kickoff of the exercise, WWV and WWVH will broadcast voice announcements starting on or about October 31. WWV will transmit the announcements at 10 minutes past the hour, while WWVH will transmit them at 10 minutes before the hour.

- The communication exercise will culminate on the evening of November 16 with military stations sending M110 messages to the amateur community on 60-meter channel 1 (5330.5 kHz USB).
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MORE ARRL LETTERS:

Taking Advantage of Coaxial Cable Capacitance

Jeff Blaine, AC0C, had a bad capacitor in the 15-meter filter section of his 5B4AGN multiband band-pass filter, because as he puts it, "they have been treated terribly over the years." One way to damage a filter is to use power levels at the limit of the filter into a load that presents a high SWR -- especially a high duty cycle mode like RTTY. He didn't have the required small 14 pF capacitor, so he trimmed a piece of



Jeff, AC0C, used a small length of RG58 coaxial cable to replace a failed low-value capacitor in a bandpass filter. [Jeff Blaine, AC0C, photo]

RG-58 to the required value - coaxial cable exhibits a certain amount of capacitance per unit length.

"The repaired 15-meter filter runs 1.10:1 or better SWR across the band with an insertion loss of about 0.65 dB," he reports. Blaine advises that the RG-58 "can be coiled up and secured with some tie wraps" and that it should be kept away from the toroid to minimize interaction -- a half-inch is probably sufficient. This approach may work well for other applications where a low-value capacitor is difficult to obtain and space is available.

Blaine uses an L/C meter to measure the capacitance as the piece of cable is trimmed to approach the target value, and he leaves the cable

about a quarter of an inch, then trims the braid back to increase the distance between it and the center conductor. He puts shrink wrap over the end, and measures the passband of the filter section with the chassis cover in place. -- *Thanks to the ARRL Contest Update*

Revised AMSAT-NA Website in Development

[AMSAT](#) Treasurer and Vice President of User Services Robert Bankston, KE4AL, has announced that the AMSAT Board has approved his recommendations for an internet-based membership management system, the **transition to a digital full-color edition of *AMSAT Journal*, and a complete overhaul of the AMSAT-NA website.**

"I have been putting together these proposals for several months and thank the Board of Directors for the permission to move these projects forward," Bankston said at the conclusion of the 2019 AMSAT Symposium and Annual General Meeting over the weekend. He said the improvements will modernize how AMSAT serves its members and that the new membership management system will give members control over their membership accounts, allowing them to update contact information, pay dues, and register for events. He did not indicate when the updated website would be up and running.



Bankston said the new website will aim to make navigating the site more intuitive with portals for members and friends in the AMSAT community, how-to guides on getting started in amateur radio satellites, and information about current satellites and what is needed to work them.

"In addition, the program will automatically push out reminders, newsletters, and a digital copy of the *AMSAT Journal*," Bankston explained. "Transitioning to a digitally

delivered *AMSAT Journal* will allow us to provide a full-color magazine without raising the cost of membership. In addition, we will have the opportunity to provide member-only content on our website and to include back issues of our *AMSAT Journal*."

AMSAT is marking its 50th anniversary in 2019. -- *Thanks to AMSAT News*