

Writing for Microvolt

Author's Guide

May 19, 2023

The *Microvolt* is always in need of amateur radio content. We need your ideas. We're ready to help you from concept to the printed (or electronic) page. **Don't worry about spelling, proper English, punctuation, paragraph structure, even pictures.** What do you get? The satisfaction of seeing your name and ideas in print.

1 Contents

The Microvolt is published 10 times yearly. By tradition, and cost, it is 8 pages long.

- The cover has color pictures of interest to UARC members. Past cover pictures include desert stations, antennas in the snow, antique equipment, pictures from the in-person meetings, amateur meetings.
- Page 2 lists club information, officers and other fixed information.
- Page 3 lists local information such as meetings, photo credits, license classes, beacons and SDR's, and the start of the editor's editorial.
- Pages 4-7 are content provided by UARC members.
- Page 8 is an interview with the Member of the Month, typically done by Linda Reeder. This covers their amateur radio adventure and includes their color picture.

2 Submitting an Article

You can submit a full article with pictures ready for publication, or an outline of an idea that we can help you turn into a completed product. We will correct spelling, attempt to follow Strunk and White English admonitions, and fact check if necessary.

Send your article and pictures to:

microvolt@utaharc.org

The due date for publishing the next month is the 24th of the previous month. We try to complete formatting and printing by the 1st of each month.

3 Common Themes

Microvolt has need to fill 4 pages nearly every month. Articles can range from a few paragraphs to 4 page expositions. Some common themes:

Expeditions You went somewhere interesting, did something with amateur radio and took lots of pictures.

Home Brew You built something and want to share the experience. Pictures, schematics, and results are always interesting.

Equipment Reviews You bought a piece of equipment you like, or despise. Tell us about it, how much it cost, compare it to other equipment, provide pictures.

Software Reviews You found an interesting piece of software. Tell us what you like or dislike about it. Are there operating system requirements (Windows only, MAC only, etc.), special peripheral requirements. How much does it cost? Is it Open Source?

Software Digital signal processing, Arduino, Raspberry PI are of interest. What can you do with these things that is interesting.

Book Reviews Is this book interesting to amateurs? Something that belongs on the bookshelf? Include the author's name, publisher, cost and availability. A picture of the cover is useful.

Humor We can't all be E. B. White but humorous essays about amateur radio may remind us to not take the hobby so seriously.

Communication Modes Digital, satellites, moon bounce, meteor bounce, tunneling, underground, VLF, SLF, life above 10 GHz.

Electronics Present some topic in electronics such as filter design, ECAD, CAD, how to, and so on. Design your own printed circuit boards, power amplifiers, receivers, switch boxes. Pictures, schematics, equations, building tips, needed software and equipment. However, complex differential equations and line integrals will mystify most of us.

Soap Box Something got your goat? Share it using FCC rules about strong speech.

Letters to the Editor You didn't like the editorial? Write a response as to why the editor is losing it.

This is by no means an exhaustive list. Anything you can dream up is appreciated.

4 The Text

Don't worry about formatting the text. Putting it into two columns, moving the pictures around makes all this moot.

4.1 Fonts

Starting in April 2023, the editor switched to using \LaTeX though there is no need for you to do so. We use 11 pitch fonts. If you have need for special fonts we have a limited number available. Typically:

Italics We use this for website URLs and e-mail addresses.

Bold Indicate bold text or make it bold with your word processor.

Special Symbols Most mathematical symbols and Greek letters are available.

4.2 Tables

Send a picture, just some columns of numbers or use the table drawing routines of your document processor. Wide tables will be problematic. Keep them simple and short. For example:

Meter	320 <i>pf</i>	0.082 μf
MM1000	330	0.0815
MM200	291	0.0829
East ET4410	320.5	0.08301
Keysight U1773C	320.5	0.08375
Proskit	313	0.0832
Range %	13.4%	2.8%

4.3 Equations

You can do this several ways.

1. If it's simple enough, then plain text. For example $y = c + c_1*x + c_2*x*x$ we convert to $y = c + c_1x + c_2x^2$.

2. If it's too complex, scribble it on paper and send a picture. We will format accordingly. Remember your audience.
3. Use the Word or LibreOffice equation writer if you have the time and patience but these will be converted to T_EX for publication.

5 Pictures

Remember that pictures in the center sections will be in black and white. If you have a color picture that is essential, we can include it on the cover. The e-mail Microvolt version is all in color though at a reduced resolution.

1. Photographs should be in the highest resolution JPEG image format. Other formats include portable network graphics (PNG), or Windows BMP format.
2. Schematics, graphs, original art and other line drawing types should use a lossless compression such as GIF, BMP, or PNG. TIFF (not GEOTIFF) is also permissible.
3. Pictures should not be copyrighted by someone other than the author. For copyrighted material you must have written permission of the copyright holder. As much as we'd like, no Calvin and Hobbes or IKC cartoons.

Pictures should be sent separately in their highest resolution. Indicate where they should be in the text, something like:

Here include xxx.jpg

Do not include the picture in the text, particularly if you are using Microsoft Word or Libre Office.

6 Abbreviations

Some common abbreviations and what we will do with them.

kHz Kilohertz.

MHz Megahertz.

GHz Gigahertz.

THz Terahertz.

pF Picofarad (10^{-12} farads).

nF Nanofarad (10^{-9} farads).

μ F Microfarad (10^{-6} farads). You can use uF and we supply the μ .

nH Nanohenry (10^{-9} Henrys).

μ H Microhenrys (10^{-6} Henrys). You can use uH and we supply the μ .

mH Millihenrys (10^{-3} Henrys)

μ V Microvolt (10^{-6} volts). You can use uV and we supply the μ . Use UV for ultra-violet.

mic Microphone (Associated Press Stylebook).

mV Millivolts (10^{-3} volts). Do not confuse with uV.

KV Kilovolts (10^3 volts).

nm Nanometer (10^{-9} meters).

μ m Microns (10^{-6} meters). You can use um and we supply the μ or just spell out micron (which we leave as is).

mm Millimeter.

cm Centimeter.

m Meter.

km Kilometer.

aA Attoamperes (10^{-18} amperes).

nA Nanoamps (10^{-9} amperes).

μ A microAmp (10^{-6} amperes). You case use uA and we will supply the μ .

mA Milliamp (10^{-3} amperes).