



Newsletter #46 Jan. 2018

- A learner's guide to Home brewing, "From Crystal sets to Side Band" by Frank Harris, KØIYE http://www.qrparci.org/wa0itp/csts_book.pdf old but still valuable.
- If you are active on echolink (or would like to be) then here are some links that may be of interest to you. <http://techlink.hamnet.ca/> (Monday 07:00 EDST - Sundays at 20:00 UTC)
- Another stand alone Antenna Analyzer you can build from Jack W8TEE and Farrukh K2ZIA with graphic and textual 3.6 inch TFT LCD display based on Arduino and AD9850 DDS. <http://ae5x.blogspot.com.au/2017/03/a-kit-in-search-of-vendor-w8tee-and.html> or <http://www.farrukhzia.com/analyzer/>
- An interesting article on half square antenna for low band but my yard is too small. http://rudys.typepad.com/ant/files/antenna_halfsquare_array.pdf
- Common Mode Chokes explained by G3SEK. <http://www.ifwtech.co.uk/g3sek/in-prac/>
- And according to Rick DJ0IP, why you must use a 1:1 Balun not 1:4. <http://www.dj0ip.de/balun-stuff/tuner-baluns/>
- For the microwave enthusiasts among us. http://www.mwrf.com/sites/mwrf.com/files/datasheets/gated/31E_0.pdf
- If you like to "play" with antenna designs for HF and particularly multi-band designs, read the controversy on the [windom_antenna] Digest number 1544 on the Yahoo Group. J=0, SWR and resonant frequency are not all that critical, it is proposed. https://groups.yahoo.com/neo/groups/windom_antenna/conversations/messages - membership of this group is required to view messages
- An introduction to Arduino and stepper motors explained, Libraries and applications for beginners. http://www.amateurradio.com/autumn-antenna-adventures-again/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+amateurradiocom+%28AmateurRadio.com%29
- Constructing a precision SWR Meter - <http://www.parc.org.za/attachments/projects/Swrmeter%20Project.pdf>
- An auto ATU based on Arduino and commercial modules for about \$100.00 by F4GOH and F1BJD. <https://hamprojects.wordpress.com/2016/12/31/hf-automatic-tuner/> Using RS485 communication, it could be positioned at the antenna and remotely controlled in the shack.
- Other projects by Anthony F4GOH - <https://hamprojects.wordpress.com/>
- And yet another antenna testing VNA meter kit. <http://radioaficion.com/cms/fa-va4-vector-antenna-analyzer/>
- Another free Circuit simulator with integrated PCB design and BOM, all in the one package. 618Mb download from National Instruments and Mouser. MultiSIM Blue 14 <http://landing.ni.com/form-download-multisim-blue-en>

- Can't buy/get the IC's in through hole style anymore, then this PCB Strip may allow you to use SMD chips instead. <https://icstripboard.co.uk/product%20review.html>
- A view of the QRP world from one Ham's (W0CH) point of view. <http://www.w0ch.net/index.htm>
- Design for a high power Antenna Tuning Unit with the possibility of auto tuning? From QEX last December. http://www.arrl.org/files/file/QEX_Next_Issue/Nov-Dec2016/MacCluer.pdf
- A simple and flexible QRP antenna (matcher!) <http://www.qsl.net/wb3gck/tuner.htm>
- SOTABEAMS announces an updated version of the WSPRLite antenna tester model, more bands - 6M to 160M, and more features. <https://www.sotabeams.co.uk/>
- The Korg Nutube Amplifier Parts 1 & 2 were described and explained in the Design Spark web site recently - something old is "new" again! https://www.rs-online.com/designspark/design-of-a-korg-nutube-amplifier-part-1-tube-basics?cm_mmc=AU-EM-_-DSN_20171113-_-DM78070-_-HB_URL&cid=DM78070&bid=489990457 different in that only low voltages are required and only low gain possible. (but not cheap at \$60.00 each)
- If you are chasing Grid Square information, then this may help you find the data. http://levinecentral.com/ham/grid_square.php and some other utilities on <http://wg7j.reinalda.net/gridmapper/help.php>
- The Arduino auto ATU's shown at the December Meeting by Glenn VK3PE based on the designs of K3NG, but built on PCB's, not ugly style. Both a QRP and 100W versions. http://www.carnut.info/K3NG_ATU/K3NG_Arduino_based_ATU.htm
- Online Engineering Education from Keysight. "Signal Generation and Digital Modulation Fundamentals" was the recent unit on December 6th Webcast with more to come this year. <https://www.keysight.com/main/editorial.jsp?cc=US&lc=eng&ckey=2908474&id=2908474&promo=1507826>
- Another Beacon Mode to try perhaps? <http://www.oz7igy.dk/pi4/>
- Join the grp-tech@groups.io to get involved in learning and building a variety of interesting projects and useful "bits". Chuck K7QO and many others lead the Group in designing and building receivers, transceivers, test equipment and other subjects intended to explain and teach the fundamentals of this great hobby of ours.
- It looks like the many Groups have given up on Yahoo and transferred to Groups.io instead, no doubt caused by the transgressions of the former, unavailability, hacking of the lists and other problems.
- Yet another Antenna Vector analyzer kit, the FA-VA4 from Funk Amateur Germany. From LF to 100MHz, about half the price of most competitors, it is a Graphical displayed unit with multiple modes, a Review on AmateurRadio.com can be read on http://www.amateurradio.com/the-fa-va4-vector-antenna-analyzer-lf-100mhz/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+amateurradiocom+%28AmateurRadio.com%29 and <http://www.box73.com/product/5> and on eHam at <https://www.eham.net/reviews/detail/13501>

- Another testing device worth building is the TDR (time domain reflectometer) for trouble shooting coax cables and other projects, with either through hole or SMD parts. <https://www.youtube.com/watch?v=l1gfUNh5PjQ&t=556s>
- A S1/S9 signal source from Norcal QRP Club, build from a kit or copy their design. <http://www.norcalqrp.org/s1s9generator.htm>

I hope you and yours have a happy and safe festive season and a better year ahead.

Ian VK3LA and the Homebrew Group.