



Homebrew Group Newsletter
#64 October 2019

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The group has enjoyed a couple of very interesting presentations, over the last few months, from within the membership. The August meeting provided a detailed dissection of the FT8 digital mode by James VK3JPK whilst in October Bill Thomas was able to describe and demonstrate spread spectrum techniques, used in the ISM bands, for remote control and measurement. These are generally short range communication circuits, perhaps 10km for line of sight paths and high gain antennas. The overall network can extend this by adaptive relaying of messages through intermediary nodes.

For those who might not have been able to attend Bill's talk the following link will serve as a general introduction to the topic.

<https://www.maximintegrated.com/en/design/technical-documents/tutorials/1/1890.html>

- W6JL documents many projects that are easily reproduced.
<https://www.qrz.com/db/w6jl>

Thanks to Ian Downie for this link.

- Thinking about 3D printing?
<https://www.youtube.com/watch?v=GoIerzsDx7s>
- GM3SEK talks about baluns for VHF and UHF
<https://www.youtube.com/watch?v=GoIerzsDx7s>

Thanks to Eric Christer for this link.

- The humble field strength meter, has perhaps, been overlooked in recent times but it can be a powerful addition to the home lab.
http://www.arrl.org/files/file/QEX_Next_Issue/Jan-Feb2019/Alldread.pdf

- <http://www.stargazing.net/david/rpi/hrrpi.html> Make dual band VHF/UHF from a surplus cell phone mobile antenna
https://www.youtube.com/watch?v=_qw77VIs44s
- Assembling an EBAY component tester in a plastic box with a professional looking label.
https://www.youtube.com/watch?v=lgJ4Z_qLLdU
- Building a project box from scratch.
<https://www.youtube.com/watch?v=Ur6HzV1stFg>
- The Raspberry Pi and amateur radio
<http://www.stargazing.net/david/rpi/hrrpi.html>
- An Arduino based antenna analyser.
<https://github.com/jasiek/antenna-analyser>
- A kit, but with all the documentation needed to build it from scratch.
<https://www.qrpproject.de/Media/pdf/HegauUK.pdf>
- A simple digital mode interface.
<http://www.g4ilo.com/usblink.html>

SWAP or SELL SPACE

A new feature of the news letter that will allow the exchange or disposal of items for home brewing available exclusively to subscribers.

All material should be sent to Rob VK3MQ
homebrew@amateurradio.com.au

To kick start this segment off a data modem base station is offered for sale at \$20. The base station is housed in a 19 inch rack unit, which is in itself very recyclable. The transmitter and receiver are in separate modules on 450 and 460 MHz. The output power is 7watts. A power supply not included and there is no documentation.



Please send your newsletter contributions to:

homebrew@amateurradio.com.au

A thought for the week:

"There is an obvious truth that people who make things are happier than those who buy them".

Anonymous

73's

Rob VK3MQ