

# Natural Radio

*News, Comments and Letters About Natural Radio*

**May 2013**

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Solar Cycle 24 has been somewhat of a flop with only sporadic activity, despite the horrific predictions by mainstream media. Some researchers are predicting a double-peak cycle with the next peak occurring in the fall. We'll see.

Terrestrial weather has also been as strange. We've had a very cold spring with lots of rain. There was about ½ inch of snow on the ground Friday morning, which happened after a massive storm system came through on Wednesday and Thursday leaving much of Northern Illinois and more of the Midwest under water.

My wife and I started up the wet vacs at about 3 am on Thursday and finally the seepage stopped over twelve hours later. Fortunately the water comes in on the unfinished side of our basement so we were able to keep the finished side relatively dry with only a couple of damp spots on the carpet which dried out quickly. Many others weren't so lucky, especially those near rivers, most of which rose to record levels.

I am really dying to get out of the house and get some more vegetables in the ground. I planted a few rows of greens a couple of weeks ago which have sprouted, but there hasn't been a lot of growth due to the cold wet weather. We are expecting 60 degree weather today, but then more cold and rain.

***Ken Cornell's Low and Medium Frequency Radio Scrap Book*** – This past month, there has been a surge of interest in this book on the VLF\_Group after one of the members purchased a set of these books on eBay. Ken Cornell, W2IMB was an active VLF experimenter, member of the LWCA and frequent contributor to the Lowdown. He published, I think, ten editions of his Scrapbook before he passed away in 1997.

At that time I made a somewhat cursory attempt to locate his heirs and get the rights to publish the book, but couldn't find any information. There are many who would like to see the books made available again, but this cannot be done without permission of the current copyright holder.

Does anyone have any information about who would own the rights on these books? I didn't know Ken personally, so I don't know if he had any children or other heirs but I would assume they now have the rights to these books. I am assuming that there still may be someone who reads this who was a friend of Ken's and might have some contact information. Please write or email me if you do. Even though these books are somewhat dated, there is a wealth of information in them for VLF and Natural Radio experimenters, and it would be good to have permission to re-publish these books or make the information publicly available online.

***Natural Radio Receivers*** – Many of the inquiries we get online at the VLF\_Group are about where to buy a Natural Radio Receiver. I haven't updated the list in a couple of years, so here are the ones available that I know about. Please let me know if you aware of any others.

**WR3 Model VLF Whistler-Receiver.** Steve McGreevey's receiver has been sold since 1991 and is probably the most popular receiver. This is a rugged, compact, carefully build and field tested receiver. Tested circuit boards without the antenna and enclosure are also available. <http://www.auroralchorus.com/wr3gx2.htm>

**Inspire VLF-3 Receiver Kit.** The INSPIRE receiver has been popular with students and those who want to build their own receiver but don't have the experience to do it from scratch. This unit is less compact and rugged than the WR3 but it has some filtering capabilities. <http://theinspireproject.org/default.asp?contentID=27>

**North Country Radio ELF Earth Receiver.** The North Country Radio ELF Earth Receiver is available assembled or in kit form. Although I have not tested this receiver, it appears to be a good solid receiver for the beginner. <http://www.northcountryradio.com/Kitpages/elfrcvr.htm>

**LF Engineering L-600S H-Field Loop Receiving System.** The LF Engineering L-600S H-Field Loop Receiving System is probably the only readily available manufactured Loop Receiver. A loop antenna may aid in interference reduction, and will also perform better in areas with lots of trees or other structures. I have an earlier version of this receiver which performs well. <https://www.lfengineering.com/products.cfm#Misc%20Electronics>

**Sistel Explorer E202.** This is the commercial version of Renato Romero's receiver. It is a well-built portable unit with many advanced features. You can read about the design at <http://www.vlf.it/romero2/explorer-e202.html>. The site below is where to purchase the commercially built receiver. [http://www.comsistel.com/product.php?id\\_product=16](http://www.comsistel.com/product.php?id_product=16)

There are links to all of items on the [naturalradiolab.com](http://naturalradiolab.com) website if you don't want to bother typing in the individual URLs.

***Build-Your-Own Components*** – For those of you who build your own receivers, most components are relatively generic, but here are some sources for the harder to find ones that might not be in your junk box.

If you need it now, your local Radio Shack store has a variety of molded plastic and formed aluminum project boxes, hardware, components and prototyping circuit boards. They also carry a whip antenna P/N 20-006 with a BNC connector that will work for a home built receiver or a replacement for your WR-3 antenna. LM-386 ICs are still available in-store, but it appears that JFETs are available online only.

Hammond Manufacturing, [www.hammondmfg.com](http://www.hammondmfg.com), makes a variety of cast aluminum boxes both painted and unpainted that are perfect enclosures for both handheld and fixed receivers. These enclosures, as well as most other electronic components are available from Mouser Electronics, [www.mouser.com](http://www.mouser.com), and Digi-Key, [www.digikey.com](http://www.digikey.com).

On other interesting source for unique components is the Electronic Goldmine, [www.goldmine-elec.com](http://www.goldmine-elec.com), which has a ever-changing variety of surplus electronic components at bargain prices. If you like building and experimenting, you'll find something here.