



GUYWIRE

March 2016

A monthly publication of the RARA Inc. except July and August.

If you wish to receive or be removed from the e-mailing please contact the editor/publisher at the RARA e-mail address @ ve5rara@gmail.com

NOTE: all e-mail and web addresses are active hyperlinks

GENERAL MEETING

March 9th @ 7:00 p.m.

Regent Place Library - Regina Market Mall - 331 Albert St.

Annual General Meeting Election of Directors

**We need your
Help**

We need some help with
content

What would **you** like
to see in the GUYWIRE?

Contact the editor or publisher at:
ve5rara@gmail.com

2016 PUBLIC SERVICE EVENTS

EVENT DATE ORGANIZER

UPCOMING

RPS Half Marathon - May 1st - Terry VE5TLW
Cosmo Learning Centre - May 13 - Harv VE5AD
Queen City Marathon - Sept. 11 - Terry VE5TLW
MS Bike Tour - Aug. 15-16 - Rick VE5RJR

COMPLETED

Klondike Hike - Feb. 20th - Justin VA5RED
Maker 2015 (RPL) - Dec. 4th - Neil VA5SCA
Santa Parade - Nov. 15th - Rick VE5RJR

Minimum Discernible Difference

Amateur radio, as with most things in life, is always filled with trade-offs and compromises, particularly when it comes to matters of signal strength. Is that bigger antenna worth the extra cost? What would a few more watts buy me? Should I replace my feed line with something that has lower loss? How much more readable would I be if I added a few feet to my tower, or added a second antenna at some lower height, in order to gain a few db at the takeoff angle of interest?

In my case, it was the antenna question that first led me to try to quantify the difference in readability between two signals of comparable, but unequal strength. I was trying to decide between two antennas that differed by roughly 2 db in forward gain and by several hundred dollars in cost. My gut reaction said that 2 db wasn't worth the extra cost, but as a DXer and contester I changed my mind after I generated some audio files similar to the ones I've included here ... especially when I considered the probable reduction in background noise that the tighter pattern of the larger antenna would provide. No doubt others with different motivations or constraints would have reached a much different conclusion, but hopefully these examples may offer some small assistance to anyone faced with similar choices.

Any comments (favorable or otherwise) would be warmly received via email sent to ... Dave (at) ab7e.com. I am not an audio professional so be gentle with me.

Methodology

All of the files on this page use background noise recorded from a moderately noisy and otherwise dead 20m band within approximately a 500 Hz bandwidth (roughly 350 Hz to 850 Hz with some rolloff in the 70 Hz segments at each end). The

CW Signals were generated and recorded to .wav files using CW Player, a nice freeware application from F6DQM. Various tones and speeds were used depending upon what I was trying to accomplish, but in general I tried to choose those that I thought were mid range for the majority of people (roughly 550 Hz and 26 wpm). All audio files were converted to .mp3 format and mixed with appropriate level shifts using Goldwave, a reasonably competent audio editor.

These files were generated with decent fidelity (32 kHz and 64 kbs), but they may "play" differently depending upon individual situations such as headphone or speaker response, software equalization, user hearing response, user tone or speed preference, etc. Your mileage may vary ... a lot.

Each of the files must be downloaded from the links and played locally they won't play directly from this website. Embedding a player here would have been possible but wouldn't have given the user much control over playback, at least not with my limited knowledge of web crafting. If you fear that these may not be legitimate .mp3 files, my recommendation is that you ignore them.

Stepped Signal Strength

As a first analysis, and as could be inferred by the title of this page, I was curious what the minimum discernible difference was between two weak signals of approximately equal strength. Clearly the answer to that is a function of how close they are to the background noise level. A difference of a few db might be unnoticeable for two relatively strong signals, but if one of the signals is beneath the noise threshold and the other is above it the comparison would be more striking. I was interested in the weak signal case, so I generated this file with CW text stepped in six 1 db increments beginning more or less beneath the noise and rising above it. 0-1-2-3-4-5-6db.mp3

In my case, I could reasonably discern a difference in volume for each one db step, and my threshold of easy readability was at the third level ("two db" sent text). Your results might be considerably different.

Here is the same set of signals, except in reverse order from loudest to weakest.

Summer VE5SDH

Ham Radio Movie Gets TV Pilot

The hottest thing on TV these days might just turn out to be radio - ham radio, to be exact. Just as TV's "Last Man Standing" has given viewers a sampling of what goes on inside a ham shack, the CW Network has announced it plans a pilot for the 2000 movie, "Frequency," from New Line Cinema. In that sci-fi thriller, the son of a deceased New York City firefighter, makes radio contact with his dad over the father's old ham radio equipment after an aurora borealis alters band conditions across time.

The TV pilot recasts things with a new twist. It follows a female detective who uses her ham radio to communicate with her detective father, who'd died 20 years earlier. If all goes well, the producers may end up being more concerned about RSTs than Nielsens.

(TVLINE.COM, The CW TELEVISION NETWORK)

Terry VE5TLW

Wanted

Anyone with experience with a **Carolina Windom** antenna? If you have, would you like to write a short article for Guywire on it? The only material I have on it is copyright and I am having problems contacting the copyright owner. The antenna has gotten rave reviews and apparently runs rings around the old favorite G5RV.

Contact the editor at ve5rara@gmail.com

Interesting websites

Popular Science magazine has partnered with Google to offer their entire 140-year archive for free browsing, it includes some amateur radio related articles

March 1932, p78 Learn Morse Code
[http://www.popsci.com/archive-viewer?id=4icDAAAAMBAJ&pg=72&query=ham radio](http://www.popsci.com/archive-viewer?id=4icDAAAAMBAJ&pg=72&query=ham%20radio)

November 1941 p78 The Hams Join Up features Kay Kibling W2HXQ
[http://www.popsci.com/archive-viewer?id=nCcDAAAAMBAJ&pg=78&query=ham radio](http://www.popsci.com/archive-viewer?id=nCcDAAAAMBAJ&pg=78&query=ham%20radio)

May 1961 p112 How Earth Radio Would Launch ICBM's
[http://www.popsci.com/archive-viewer?id=ViYDAAAAMBAJ&pg=112&query=ham radio](http://www.popsci.com/archive-viewer?id=ViYDAAAAMBAJ&pg=112&query=ham%20radio)

Popular Science Magazine Archive
<http://www.popsci.com/archives>

http://www.southgatearc.org/news/2016/february/popular_science_magazine.htm

Terry VE5TLW

Notes from Here and There

From VE5RC: I was in touch with CQ Magazine on the land line today. I wanted to subscribe for 1 year. The gal on the CQ end told me she couldn't take my subscription because I am in Canada. Apparently they're having a problem shipping the magazine to Canada and this has been going on for about a year now. She took my phone number in case the problem was solved.

Bruce VE5RC

From Stan VE5C: I was thumbing through a very old radio magazine the other day. Actually I wasn't thumbing through it because it was in the form of a file on the internet. The original paper copies of the magazines are probably long gone but we have the internet to thank for preserving some of our history. Looking back on that era when radio was new and mysterious, you can't help noticing the vast strides that technology has made over the years, but I also noticed that the ordinary person of today has much more radio savvy than the people back then.

For instance, an ad in this old magazine proclaimed a new product that would rid your radio of that pesky static. It was an underground antenna! As far as I could tell from the drawing it was something like a large peanut butter can with a wire coming out of it. Instructions were to bury it two feet down and connect it to the radio antenna terminal. They claimed that the surrounding ground filtered out the static and there was even statement from an engineer attesting to the fact that he tested it in his lab and found it fabulous.

Another ad was showing a special antenna that was guaranteed to improve your reception. It consisted of something you might find on top of a Christmas tree with 50 feet of wire attached. The instructions were to mount the device at a high point and run the wire down to your radio and be sure to use all of the wire. Now we all know that the doodad on top did absolutely nothing for reception. It was the 50 feet of wire (and it could have been any wire) that did the job.

This type of shady advertising wasn't restricted to the early days. It continued into the television era where "miracle" antennas were sold to replace rabbit ears. Funny thing, none of them worked any better than rabbit ears. Fortunately today we are more tech savvy and what we don't know, we can always look up on the internet. We don't have to worry about snake

oil salesmen anymore but sometimes it's good to look back, if only to see how far we have come and how much we have learned in one lifetime.

Stan VE5SC

How good are you at phonetics?

India foxtrot yankee oscar uniform Charlie
alpha November uniform November delta echo
Romeo sierra tango alpha November delta tango
hotel India sierra Charlie oscar Papa yankee
alpha November delta papa alpha sierra tango
echo delta papa alpha sierra tango echo india
tango tango oscar yankee oscar uniform
Romeo sierra tango alpha tango uniform sierra
(In honor of our Armed Forces). -let's see who
gets it and follows instructions, but don't say
what it is! Let everyone figure it out!

Murray VE5MC

Last months puzzler

Marconi couldn't explain why radio waves could travel long distances until Arthur Kennelly and Oliver Heaviside independently predicted the existence of an ionized layer in the atmosphere which reflected signals.

Which of the following statements are true and which are false.

1. Arthur Kennelly was an academic who worked for communications companies.
2. Oliver Heaviside worked for Marconi.
3. Oliver Heaviside was a hermit who lived alone on the moors of south England .

Answer: Statement 2 is false.

Statements 1 & 3 are true.

This Months' Puzzler

What do you measure on the RIO scale?

Answer next month

Silent key

DOUG RICHARDSON VE5CMA

December 16, 1954 - February 3, 2016

It is with great sadness Doug passed away peacefully February 3rd at Pasqua Hospital with Lorna and Chantal by his side. Doug cherished family and will be deeply missed by his loving wife of 33 years Lorna, his greatest accomplishment, daughter Chantal with son-in-law Casey Schroth, the loves of his life grandchildren Caylee and Caden, and 4-legged companion Nemo. Also surviving are; brother, sisters and their families: Donald (Ellie) Richardson, Debbie Brown, Doreen Hnatiw, brothers-in-law Don MacIntosh and Gerard Hnatiw; and Lorna's sisters, brothers and their families: Clare (Ruth) Braun, Marilyn (Carlo) Barigelli, Stan (Annette) Braun, Lois (Abe) Penner, Pat (Dave) Wiens, Velma (George) Schmidt, Bernice Link, Betty (Duane) Savoie, Karen (Henry) Braun. Doug was predeceased by father Glenn, mother Blanche, sister Dianne MacIntosh, brother-in-law Robert Brown, father and mother-in-law Bill and Susan Braun. Doug's hobby passion was Amateur "Ham" Radio, where he was advanced class Morse code qualified operator VE5CMA, specializing in radio contesting continually at/with the Sask-Alta Contest group in Lloydminster. Doug also treasured: amateur photography, gardening, fantasy football and poker; his tenure with the Industrial Parks Rotary Club of Regina, twice serving as President; being a vital part of the success of Blue Chip Casino Rentals and QuickBIT Vending Systems. He earned a Bachelor of Business Admin with Distinction at the U of R, continuing his education to be a long time CPA-CMA. He contributed at Evraz Steel Mill, City of Regina Public Works, Ralph McKay Industries, and among others in his career, making lifelong friends. Words cannot express Doug's thankfulness in Lorna and Chantal's ongoing heroic, tireless efforts during his final years; ongoing encouragement and support of Lorna's family, friend Joni plus others, RQHR

Palliative Care team, and Allan Blair Cancer Centre. Celebration of Doug's life will be held at the Wa Wa Shriners Hall, 2065 Hamilton Street, Regina, SK on Saturday, February 20, 2016 at 3:00 p.m. In lieu of flowers, please make a donation, in Doug's memory to the Saskatchewan Cancer Agency: <http://donate.saskcancer.ca/page.aspx?pid=376> or Canadian Mental Health Association Saskatchewan Division: <http://sk.cmha.ca/get-involved/donate/#.Vr-OwflrLNN>