SHORT SKIP

Holy Grails in Amateur Radio

We may have to think back to the days of crystal sets to find the the term "Holy Grail" used by radio amateurs. It captures the spirit of an age of exploration when almost every thing was new and magical. I don't mean to imply that our times age lacking in challenge but today much of what I need can be found neat packages and it is easy to loose touch with what's deep down inside them.

A crystal set requires only a coil, capacitor and a diode but as each element is critical, building one with high performance remains a real challenge. To achieve selectivity coils must have very low loss that require multi-stranded (Litz) wire and special winding techniques. Likewise losses in an air variable capacitor are not negligible, their plates must be designed to achieve linear tuning and their shape is a not a trivial problem in mathematics.

Evolution of the variable capacitor

A common germanium diode is an easy choice but much experimentation was required in the early days to determined was how well alternative materials work. Why they work at all was not answered for many decades.

Tennanite with a copper whisker was one of the preferred combinations

Tennanite

A high performance crystal set remains a Holy Grail for many as you can tell from these informative sources,

http://www.quadibloc.com/science/freqint.htm

http://makearadio.com/misc-stuff/capacitors.php

http://www.crystalradio.net/minerals/index.shtml

http://www.crystalradio.net/

http://www.midnightscience.com/

Sounds like a CAKE topic would be to discuss a choice of a Holy Grail today. My vote would be linear amplification of multi-mode signals with a power efficiency exceeding 90%

I acknowledge this topic and references were suggested by Rene k6XW

—Ron W6WO

August Speaker

John Field will be the speaker at the August 19 club meeting. The topic is "E.H. Scott and his Magnificent Radios, 1924-1948".

John is an early radio historian. He has previously given talks to the club on the first US Army walkie-talkie, and ham radios produced by the National Company including the legendary HRO receiver.

Accidental Dot Station

An unidentified ham in Northern California who inadvertently pushed a keyboard up against his Morse keyer is likely a bit contrite right now. This after the accident wound up producing a stream of dots at 25 words per minute heard world-wide for over a week.

The signal caused what might loosely be called a minor international incident. In fact it caused a global effort beginning in TU Region 3 and eventually involving stations in Region 1 via the Intruder Watch program. It also lead to various posts to DX Clusters and Yahoo groups which eventually resulted in the suspected radio amateur being contacted via the ARRL and being asked to check his station.

Signal reports were first received in New Zealand who's ham radio community heard it and raised the alarm. Others that became involved were hams in Europe, the United States, Afica and Australia. The result was a well coordinated global High Frequency hidden transmitter hunt that resulted in a solid triangulation on the Western United States and eventually right to the front door of the station where the never ending stream of dots were coming from. Once notified, the unwanted signal quickly disappeared from the airwaves. (from Amateur Radio Newsline: ZL1GWE, NZART News)

August Raffle: Clear Out Some Clutter!

Just think how much nicer your shack will look once you've cleared out all that extra radio gear and brought it for the raffle at our August membership meeting! (Never mind where you're going to put the new stuff that you win ....) We're not limited to radio-related items--in fact, some of our most entertaining items are low tech. Remember, your surplus may be someone else's treasure!

--Kathleen, KI6AIE

CLUB MEETING FRIDAY AUGUST 19, 7:30PM

Night of Nights

Homage to Morse

Each year the MRHS commemorates 12 July 1999, the date on which the supposed last commercial message was sent in the US. On that date we pick up the thread, keep the faith and maintain the traditions of maritime radio communications so that the skills and traditions of all the radiotelegraphers who came before us will be maintained.

While MRHS station KSM is on the air every Saturday, on Night of Nights we originate stations KPH and KFS in addition to KSM. We will joined on the air by KLB, WLO and KKUI. See below for details.

You can participate by listening or by visiting the ex-RCA receive site to see the action in person. If you'd like to operate K6KPH just bring your key. No license required!

The Maritime Radio Historical Society (MRHS) is a small group of dedicated individuals who share the goals of documenting, preserving and restoring the artifacts of maritime radio history. Our area of specialization is the coast stations, ships and companies of the west coast of the United States. But anything to do with maritime radio anywhere in the world is of interest to us.

The KPH Project

Our largest project has been the restoration of ex-RCA coast station KPH which has been returned to operation under the call KSM. The station is on the air each Saturday using both Morse and RTTY.

In cooperation with the Point Reyes National Seashore, part of the National Park Service, the Maritime Radio Historical Society (MRHS)

has taken on the job of preserving the historic ex-RCA coast station KPH and returning it to the air.

More information can be found at www.radiomarine.org

New York Times story on the Night of Nights can be found at www.nytimes.com/2011/07/14/us/14morse.html?_r=2&ref=us

From a historical perspective the teletypewriter represents the evolution of digital communications from wired telegraphy. It was the genesis of texting. A technicaly trained operator was no longer required. Teletypewriters also served as input/output devices for early mainframe computers. They were the original "dumb terminals".

During my earlier days I operated CW on the national police net. We sometimes copied incoming messages directly to a Teletype keyboard, instead of a typewriter. A dedicated line connected with the remote destination terminal. The maritime stations were also connected with their customers via TTY and TWX connections.

Back in the 1960s I was the lunch guest of Edward Kleinschmidt, inventor of the teletypewriter, back in Chicago. We were discussing the introduction of vehicular teletypewriter for public safety applications.

Many of today's wonders are not new. They are great improvements.

—Wayne, KB6KN

The recent survey conducted by Tom KW6S showed a very high interest in digital modes, new versions of which which appear at frequent intervals.

Answers to questions on how they compare and what do I need to use them can conveniently be found on the following site

http://www.fmcpconservancy.org/MixW%20new%20Manual.pdf

This document is prepared especially for users of the MixW software program which can send and decode just about all current and emerging modes, (17 at the present time) including CW. You can gain a very comprehensive understanding of digital modes with or without running MixW which also incorporates many other operational tools.

MixW costs $50 but you can use a full version of it at no charge for 15 days.

I would be interested in hearing from anyone who would like to try one of the more exotic modes.

Put your keyboard where your mouth is !!!!!!!

—Ron W6WO

Very pleased to read the comments on what I posted recently and hope we can get some activity on a few of the exotic new digital modes

I mentioned MixW because it's user manual is fairly comprehensive and readable. MixW isn't for all comers but it does far more than any other combined digital mode and operations package that I have tried.

If anyone might be interested.I have a digital mode Radio-PC Soundcard interface for sale. It is one of my bettter home-brew projects with complete DC isolation via audio transformers, optical coupling of the PTT line and TX audio gain control.

The price of $50 is less than half that of the cheapest commercial alternative that I am aware of.

—73 Ron W6WO

43rd annual Race Through the Redwoods

Looking for volunteers for the 43rd annual Race Through the Redwoods from around 6:30 am until the close of the race at 10:30 or 11:00 on Sunday, August 21st.

Operators new & old are invited to join us! We provide safety and timing support for the race in Henry Cowell Park. We'll meet at 6:30 in the big Pro-Build parking lot (a change this year), be deployed to positions around the race, and then you're invited to the Felton Fire Department's pancake breakfast (we'll have volunteer passes for the pancakes).

—Thanks & 73 Dan N6RJX

Race website: http://www.racethrutheredwoods.com/

Support a Public Event

For those who haven't supported a public event (bike ride, foot race, etc) here is a brief description of the tasks (cribbed from a recent email):

Generally there are three types of positions: rest stop, SAG wagon and net control.

At a rest stop you coordinate with the staff. If they need something from the larger event staff (and don't have cell phone coverage) you'd radio it in and we'd let their logistics team know. Conversely, the radio people provide the staff information on the state of the ride (where the first and last riders are, etc). If somebody at the stop needs a ride home, you'd phone in the SAG request so one of the SAG wagons can pick them up.

As a SAG wagon you either patrol the course or hang out at a rest stop waiting to pick up tired riders or riders with mechanical/medical difficulties.

Net control is generally at the event headquarters (HQ), most likely at the start finish and you coordinate with the event manager/logistics staff to pass information to and from the field. It is a high traffic position and usually staffed by a more seasoned operator.

If you haven't operated a public service event they're good practice, help you get your "go bag" in shape and a fun way to spend a day outdoors.

—73 de Donald AE6RF

By Art Lee WF6P

CHATTER

For CW aficionados, Pat Henry, WA6PKM, sent me an interesting radio history link showing a patent issued in June 1840 for Morse Code. For a look at it go to Google and enter US Patent #1647 of June 20, 1840. Shows diagrams and a breakdown of the code development.

My XYL Donna, AB6XJ, and I always enjoy AE6KS Jeff Liebermann's replies in answer to cries for help over the K6BJ Reflector. A recent exchange when a member asking for a wheel puller went like this:

"The kind I"m thinking of is the one with arms which fit over the wheel studs and then a center threaded screw comes in the center. Often they have hammerhead shark type turning attachments which one can whack with a hammer. This is for a Morris Minor, so it will be easy once it pops loose. The hub is blocking the egress of the (frozen) brake cylinder.

Before I go rent one, does anyone have a hub puller they are willing to loan or rent?"

Jeff's to-the-point reply: "I have several 3 prong pulley removers. Is that what you mean by a "hub puller"? I also have an inertial wheel bearing puller, steering wheel puller, and monster sledge hammer. Could you be a bit more specific?

It seems that Jeff has everything anyone needs!

I recently received this email. If anyone remembers Gino (he didn't include his call sign) his email is gino@minetfiber.com

Hello Art,

Yes, I checked the Short Skip on Internet. You may remember that I was the first editor of Short Skip, and I think I was the one that came up with its name.

I am currently living in Monmouth, Oregon, and for about 1 year I was the president of the Salem A.R.C. Nowadays I don't hear from any of the hams in this area, so I

greatly miss the times during the early 1960 s when we had round table chats on 21.300 AM with anywhere from 3 to 25 operators, all taking turns. Some days one could only have 1 or 2 turns at the mike per evening. Hi!

Thanks and 73 again. Gino

It is good to hear the ARRL solicitation messages broadcast frequently over 1080 KSCO News Talk radio. It is probably due to owner Michael Zwerling's being a licensed ham. In reply to my email query he said, "Hi Art, I'm WB6VNK Emeritus."

W6ENE and friend catch a big whopper in Alaska. Cutout looks real!)

DSTAR

Today Oliver (KJ6LDD)and I made our first Digital Voice QSO using my mobile via the DSTAR 70 cm repeater. The voice quality was very crisp and clear. Oliver knows some fine tuning is possible but for now we are very pleased with the result.

We have also been communicating reliably with DV on 2m simplex between his home and mine

The next step is to complete the software set-up a which will connect our repeater to the world-wide DSTAR network. I am also keen to try the datacomm and position reporting features.

—Ron W6WO

SCCARC Board - 2011

President	Bruce Hawkins	AC6DN	689-9923
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	Doug Burklo	KI6ZIB	
K6BJ Trustee	Allen Fugelseth	WB6RWU	475-8846

MONTEREY BAY REPEATER ACTIVITY

Santa Cruz County	K6BJ 146.790- PL 94.8 Santa Cruz (linked to KI6EH)
	KI6EH 147.945- PL 94.8 Watsonville (linked to K6BJ)
	K6BJ 440.925+ PL 123.0 Santa Cruz (not linked)
	• SCCARC Net Monday 7:30 PM 146.79- /147.945- /147.180+ linked
	• SCCARC 10 Meter Net Monday 7:00 PM 28.308 MHz USB
ARES Net	SC County Wide ARES Tuesday 7:30 PM on 147.180+ PL 94.8
	and 443.600+ PL 110.9 linked
San Lorenzo Valley	WR6AOK 147.120+ PL 94.8 Ben Lomond
	• SLV Net Thursday 7:30 PM
Loma Prieta	AB6VS 440.550+ / AE6KE 146.835- PL 94.8 (linked for net)
	• LP ARES / LPARC Net Tuesday 7:15 PM
Monterey	K6LY 146.97- PL 94.8 / 444.700+ PL123 (linked for net) Monterey
	• Monterey Co. ARES Net Wednesday 7:30 PM K6LY 146.970- (PL 94.8)
	• NPSARC Net Wednesday at 8 PM on K6LY/R
LPRC	WR6ABD 146.640- PL 162.2 / 442.900+ PL 162.2 (winsystem.org)
	• LPRC Net Tuesday 8:00 PM 146.640-(PL 162.2)
	• Amateur Radio Newsline broadcast Tuesday
Santa Clara Valley Section Traffic NET Tuesday 9:00PM 146.640- (PL 162.2)	

FOR MORE INFO SEE: http://www.k6bj.org/freq.html

SCCARC Calendar of Events

ARES Meeting (prior to club meeting)	Friday	Aug 19
SCCARC Meeting	Friday	Aug 19
Cake Meetings	Sat	Aug 13, 27
Board Meeting	Thursday	Aug 25
Short Skip articles due	Mon	Sep 5
SCCARC Meeting	Friday	Sep16

MONTHLY MEETINGS.

The SCCARC Meets at 7:30 PM, on the THIRD FRIDAY of the each month (except December). Meetings are at Dominican Hospital, Education Center, 1555 Soquel Drive, Santa Cruz.

Net Control Schedule:

8/15	Byron N6NUL
8/22	Tom K6TG
8/29	Greta KI6NTL
9/5	Phil KE6UWH
9/12	Chris KG6DOZ

SHORT SKIP

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