

W7TCK News

Capital City Amateur Radio Club

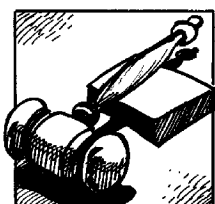
Helena, MT

John McDougall K7JM – Editor

April 2005

From The Pres...

Normally in my articles, I talk about what's coming up for the next couple of months. This month, I think I'll do something different and talk about something I'm doing for work which I hope at least some of you will find interesting.



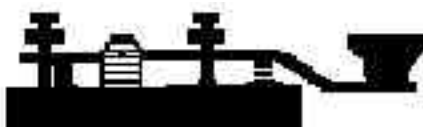
But before I do, I will just quickly mention that for the program this month, I will be giving a “digital audio primer” for lack of a better title. The intent is to provide a high level overview of the technology behind things like IRLP, PSK31, DSP noise reduction, soft radios, and dozens of other similar technologies which mix analog audio and digital processing.

Many of you know that I work for an Internet provider which provides high speed Internet via wireless technologies to various areas around the state. We have radio equipment at various locations which we use to deliver service to our customers. To date, we have lucked out and not really had to do any tower erection to

(Cont. P.2 PRES)

APRIL MEETING

Monday
April 4
 Salvation Army
 Church
 1905 Henderson
 7:00 pm.



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Upcoming Events

Some dates to remember:

Governor's Cup. June 4th

Field Day. Weekend of June 25

K7L/C Special Event Station.

Dates in July to be Determined

Glacier Waterton Hamfest. July 15-17, 2005

(Cont from P.1 PRES)

speak of. Most of the time we've been able to locate a building with a wonderful view of the area we are interested in covering. As a result, we usually don't have to erect a tower at these sites. I think the tallest tower I've had to erect in the past was a 30 foot guyed tower on top of the Hustad center in Helena. We do have a couple of other towers which we rent space on which others have erected, but nothing we've had to put up.

Which brings me to the current project. We've ended up with a site which has a wonderful view of the area we're wanting to cover. The problem is that in order to cover an additional part of the valley, we're needing to go up at least 45-50 feet to get over a ridge right next to the site. As a result, we decided to erect a tower at least 50 feet, and probably closer to 60 feet on the site.

Prior to this tower, I've been a Rohn Tower fan. The 30 foot guyed tower I mentioned above is Rohn 25G and have been happy with it. I was wanting to put up just under 60 feet of Rohn 45G at this location. The problem we ran into was related to the position of the guy wires. At this site, at least a couple of the guys would have ended up in some really poor locations, no matter which way you turned the tower. Plus, as many of you know, putting up a guyed tower can be a real pain since you basically have to do it piece by piece and guy it as you go. 30 feet is fine to do this with, but 60 feet is starting to get into the range where I just don't like to deal with it.

To solve this problem, I decided to investigate the freestanding tower options. The one I finally found which met our needs was the Titan "Light Duty" towers made by Trylon. A full height Titan is 96 feet tall, and is made up of twelve tapered sections numbered from #2 at the top through #13 at the bottom. Shorter towers simply have sections "omitted" from either the top or the bottom or both, depending on how heavy duty you want the tower.

For our tower, we elected to pick sections #7 through #13, since we really wanted a beefy tower which would support anything we might want to throw at it. With this selection, we could put up to 30 square feet on the top, or a similar surface area

elsewhere on the tower. By contrast, if we had picked the top sections, it would have been rated at only 1.5 square feet.

About the only real disadvantage of a freestanding tower (besides it being modestly more expensive), is the amount of cement required for the foundation. Unlike a Rohn tower which needs a modest hole about a foot or two around and a few feet deep, the Trylon requires enough foundation to anchor the entire tower under wind load without guys. This takes a wee bit larger hole and a wee bit more cement. For a tower like ours which has section 13 at the bottom you need a hole about 6x6x6. That's feet - not Inches. We dug the hole today, and let's just say it was definitely impressive. Tomorrow, we'll be doing the rebar work and pouring the cement. About two weeks from now, we'll have a crane out there to lift the pre-assembled tower into place and bolt it to the stub legs we will be embedding in the concrete. So far, I've been impressed with what I've seen. The sections went together without a lot of pain and everything seems just perfect. When I get it upright, I'll let you know if my impression has changed, but I really doubt that it will. Look here next month for an update.

Well, I'm about out of space. As a result, I think that's all for now.

73.

Forrest
AC7DE.

ARES Notes...

A reminder.. It is two months until the Governor's Cup Races, and time to recruit volunteer ham radio operators to assist with the event. Last year we had a good turnout and hope that we can have an equally strong response this year.



There should be no significant changes in the race courses and location of the aid stations. There may

be the usual minor problems with aid station volunteers getting set up late and leaving too early, but we have dealt with that before. There is strong possibility that CERT (Community Emergency Response Team) volunteers will be handling traffic control at some of the cross streets. Hopefully, the MCU will be ready and available for use at the finish line.

Bruce KD7UAF has volunteered to help me with coordinating the ham radio activities. Rich KC7VVZ will take care of the tee shirt and sweat shirt detail. When you sign up to volunteer, be sure to indicate your shirt style and size so that we can get our order in early. Plan on only short sleeve tees and long sleeve mock turtle neck tees being available. Sweatshirts will only be available for purchase.

We will have more information as we get closer to race day. Because the event takes place before the June club meeting, be sure to check the Tuesday night ARES net and the May Newsletter for updates. We look forward to another successful participation and the continued involvement and recognition of CCARC as one of the Supporting Sponsors of the event.

de Bob K7HLN



From The Editor

April showers bring May flowers. Let's hope and pray that is true this year. The recent moisture we have received is most certainly welcome but it is hardly enough. Keep praying for rain!

It is now April. Have you renewed your membership? If you are a dues paying member, this may be your last issue of W7TCK news is dues are not paid up. This newsletter is just one benefit of club membership. Support YOUR club.

On the home front, there is not much new news to report from last month. Still no ham shack in sight



at the Editor's QTH as I am very busy working on the family room and after that, a spare bead room. Then, comes the "Shack." The tower our President mentioned in his column would look great outside my shack! Dream! Dream!

There are many Ham radio activities planned for this summer. Come to the meeting on Monday and come to these events and get more involved in "Ham Radio."

73 and God bless you all,
John - K7JM Editor



What do Those Weird Numbers Mean?

The Phillips Code continued from last month.

Some other related stuff:

Phillips Code "19" and "31" refer to train orders. They were sowell known that the terms "19 order" and "31 order" were still in RR used in the 1970s, long after the telegraph was gone.

The abbreviation "es" for "and" derives from the Morse character "&". The prosign "SK" with the letters run together derives from the Morse "30".

The numeric code is a small part of the abbreviations outlined in the Phillips Code (developed by telegrapher Walter P. Phillips). Here are the numbers as referenced:

WIRE SIGNALS

WIRE Preference over everything except 95

- 1 Wait a moment
- 2 Important Business
- 3 What time is it?
- 4 Where shall I go ahead?
- 5 Have you business for me?
- 6 I am ready
- 7 Are you ready?
- 8 Close your key; circuit is busy
- 9 Close your key for priorit business (Wire

chief, dispatcher, etc)

- 10 Keep this circuit closed
- 12 Do you understand?
- 13 I understand
- 14 What is the weather?
- 15 For you and other to copy
- 17 Lightning here
- 18 What is the trouble?
- 19 Form 19 train order
- 21 Stop for a meal
- 22 Wire test
- 23 All copy
- 24 Repeat this back
- 25 Busy on another wire
- 26 Put on ground wire
- 27 Priority, very important
- 28 Do you get my writing?
- 29 Private, deliver in sealed envelope
- 30 No more (end)
- 31 Form 31 train order
- 32 I understand that I am to ...
- 33 Car report (Also, answer is paid for)
- 34 Message for all officers
- 35 You may use my signal to answer this
- 37 Diversion (Also, inform all interested)
- 39 Important, with priority on thru wire (Also,

sleep-car report)

- 44 Answer promptly by wire
- 73 Best regards
- 88 Love and kisses
- 91 Superintendent's signal
- 92 Deliver promptly
- 93 Vice President and General Manager's

signals

- 95 President's signal
- 134 Who is at the key?

Submitted by Dan KC7KKH



Montana Section Manager

News last updated: Fri, March 11, 2005 at 7:02 PM Summer's coming (ready or not). We all know the weather's been terribly dry and continues to give the impression it will continue. Record low moisture levels reminiscent of 1988 are already in place, and unless we experience an extremely wet Spring, fire danger for the warm months is a clear threat. Are you ready for wildfire? Do you have fuel stored close to your home? Are there trees or tall grass within 20 feet of any structures? Time to act as we proceed into Summer. Time to prepare for possible support duty in your County and others to provide communications in any way we can. Many of our ARES groups have already started to mobilize training and deployment schemes. How about yours? We still need Net Control Stations for MTN. If you have any interest in being available, please contact Jack, KD7HWV in Stenvensville for an assignment. We need as many as possible to aid in coverage this Summer should we be asked to field ops for disaster support. Thanks to all who support our nets and activities. 73 Doug, K7YD

ARRL Montana Section

Section Manager: Douglas R. Dunn, K7YD

k7yd@arrl.org



Montana QSO party

QST, QST, QST!

This is Norm, K7NCR, and I'd like to announce the Montana QSO party scheduled for the first weekend in April. This event is sponsored by the Flathead Valley Amateur Radio Club. The Phone/CW/Digital QSO party runs from 23:00 hours UTC on Saturday, April 2nd through 23:00 hours UTC on Sunday, April 3rd. The frequencies covered; 160 meters through 70 CM., no categories, but repeaters and IRLP are permitted. Exchange; RST, and state/province/country, or Montana county. If a Montana station changes counties, it can be worked again. Scoring; QSO's x S/P/C + MT counties (S/P/C and MT counties

counted only once). For more information e-mail queries to: K7NCR @ arrl.net Logs are due by May 10th to angelmelody @ centurytel.net or mailed to Norm Palin K7NCR, 68 Silver Leaf Drive, Kalispell, MT 59901. Thanks you!

End of QST!

Gateway to the Rockies Bicentennial Gathering

July 9-23, 2005 - Helena, Montana

The "Gathering" will consist of hosting the National Park Service's Corps II (traveling museum and Tent of Many Voices), educational programs and performers, re-enactors, Indian art market, outdoor exposition, musical concerts, trail tours, as well as many other special events. All events will take place at the Lewis & Clark County Fairgrounds unless otherwise noted.

July 9 and 17: Opening and Closing Corps II Ceremonies (times)

July 9-17: Daily programs hosted in the Tent of Many Voices, 12 PM- 8 PM

July 9: Odyssey West Concert featuring Montana musicians Rob Quist

& Jack Gladstone, 7:30 PM, gates open at 6:30 PM.

July 10: Native American Indian Art Market and tipi village, 12 PM- 8 PM

July 13: "The Lewis & Clark Montana Experience" interpretive trail dedication - Alive @ Five, Great Northern Town Center, 5 PM – 9 PM

July 15 and 16: Outdoor Expo (booths and vendors), 12 PM- 8 PM

July 15: Mission Mountain Wood Band Reunion Concert 7:00 PM, gates open at 6:30 PM

July 16: The Gates Musical Currents Bicentennial Concert (Gates of the Mountains- Helena National Forest, 4 PM -8:30 PM

July 17: Portal Dance Project at the hardy Bridge

(Dearborn River, I-15)

July 19: Re-enactment of Clark in the Prickly Pear Valley (t.b.a.)

July 20: Two-Camps Vista House dedication (Devil's Elbow interpretive site)

July 23: Symphony Under the Stars (Carroll College)

For more information contact Amy Teegarden at 406-495-3747 or Mary Lou Garrett at 406-442-2674

Upcoming Equipment Auction..

Lewis and Clark County will have a surplus equipment auction in the next couple of months with lots of computers, radio gear, and other neat stuff.. Among the items to be auctioned are radios and other equipment from the EOC that have been replaced with the new Kenwood radios.

The ham radio equipment being auctioned includes the following:

Alpha 77D Amplifier (220 volt)

Nye Viking Tuner

Signal One HF Transceiver

Shure Model 444D Microphone

ICOM IC-271A 2 meter All Mode Transceiver, with desk mic

2- Cross needle SWR/watt Meters

The date for the sale has not yet been set. Once it is scheduled, we will get information out to the ham radio community about where and when it will be. Only currently licensed hams will be permitted to bid on and buy the ham radio gear. More info later..

de Bob K7HLN

The W7TCK Newsletter is published by the Capital City Amateur Radio Club.

P.O. Box 1112
Helena, MT 59624

CCARC Web Page: www.w7tck.org
Editor's E-Mail: jdmcdougall@juno.com

CCARC Regular meetings are at 7:00 pm on the first non-holiday Monday of each month at the Salvation Army Church 1905 Henderson.

VE exams are offered monthly, just prior to the regular CCARC meeting, but on an appointment only basis. If no appointments are made, VE exams will not be scheduled for that month. Those wishing to take an exam should contact John Geach, KS7R, 442-7107 at least two days prior to the CCARC meeting to schedule an exam.

W7MRI Repeater: 147.82 (-offset)
Net every Tuesday at 7:30 pm local time on the 147.82 (-offset) repeater.

Return Address: Newsletter Editor
Capital City Amateur Radio Club
P.O. Box 271
Jefferson City, MT 59638

e-mail: jdmcdougall@juno.com

All expressions of opinions and all statements of supposed facts are published on the authority of the author and are not to be regarded as expressing the view of CCARC.

Biscuits and Gravy

Come to Hardee's on Saturday. Every Saturday morning between 9:30 and 11:00, as many as twenty hams show up for "EYEBALL" QSOs.

COME JOIN THE FUN!

For Sale:

To All Members And Friends Of The Butte Amateur Radio Club:

Club Member Kenny Woodrow, N7LER, has the following radio equipment for sale. None of this equipment has been on the air in years and for that reason is being offered "as is and where is".

- 1 Heathkit SB-200 Linear (1KW Model)
- 1 Kenwood 215-A 2-Meter Handheld
- 1 Yaesu FT-101B HF Transceiver
- 1 Yaesu FT-901DE HF Transceiver
- 2 Verticle Antennas, unknown make or model, probably one on VHF and the other on HF
- Other "shack items" such as meters, test equipment, and coax.

Please contact Kenny, or his daughter Kate, at 406-494-4825 to discuss further details.

First Class Mail