County Hunter News

January 1, 2018 Volume 14 Issue 1

Welcome to the On-Line County Hunter News, a monthly publication for those interested in ham radio county hunting, with an orientation toward CW operation.

Contributions of articles, stories, letters, and pictures to the editor are welcomed, and may be included in future issues at the editor's discretion.

The County Hunter News will provide you with interesting, thought provoking articles, articles of county hunting history, or about county hunters or events, ham radio or electronics history, general ham radio interest, and provide news of upcoming operating events.

We hope you will enjoy the County Hunter News. Feel free to forward, or provide links. Permission is given for copying or quoting in part or all provided credit is given to the CHNews and to the author of article.

CW County Hunter Nets run on 14.0565, 10.122.5, and 7056.5, with activity occasionally on 3556.5 KHz. Also, there is SSB activity now is on 'friendly net' 7188 KHz. The cw folks are now pioneering 17M operation on 18.0915. (21.0565, 24.9155, and 28.0565 when sunspots better). Look around 18136 or for occasional 17M SSB runs usually after the run on 20M SSB. (21.336 and 28.336)

You can see live spots of county hunter activity at ch.W6RK.com

For information on county hunting, check out the following resources:

The USACA award is sponsored by CQ Magazine. Rules and information are here:

http://countyhunter.com/cq.htm

For general information FAQ on County Hunting, check out:

http://countyhunter.com/whatis.htm

MARAC sponsors an award program for many other county hunting awards. You can

find information on these awards and the rules at:

http://countyhunter.com/marac information package.htm

The CW net procedure is written up at:

http://www.wd3p.net/ch/netproc/netproc.htm

There is a lot more information at <u>www.countyhunter.com</u>. Please check it out.

Back issues of the County Hunter News are available at www.CHNewsonline.com

Want county lines on your Garmin GPS?

http://pages.suddenlink.net/w4ydy/hamlinks.html#County

Download the file to a flash card that fits in your GPS unit, turn it on, and the county lines should appear!

De N4CD, Editor (email: telegraphy@verizon.net)

Notes from the Editor

1) N4CD Rumblings

Winter officially started on the Winter Solstice....and a few days later in TX the winter weather moved it as cold front after cold front came through. Up north over 40 inches of snow fell in Glacier National Park – and that storm headed east over the holiday weekend. January is often the 'coldest' month of winter so we have to get through it. Mobile activity is down a bit with the winter weather and shorter days, but a few trips

over the holidays are taking place.

Propagation? Up and down – mostly down – with not many spots on 15 or 17m these days. Every now and then the index kicks up a bit – and despite that, contacts are being made on the upper bands – look at the results for the 10m contest later. The grid challenge should spur some activity as each band counts toward totals.

Dayton Hamfest Update

Hamvention® reports that the Greene County Commissioners and the Greene County Fair Board have approved the construction of a new building at the Greene County Fairgrounds and Expo Center, the new Hamvention venue in Xenia, Ohio.

"Greene County officials have decided to move forward with construction of a new building, as it will continue to expand their presence in the region as a world-class Exposition Center," Hamvention Spokesperson Michael Kalter, W8CI, said in a news release. "Hamvention certainly benefits from the decision to expand the Expo Center footprint. Construction is planned to be complete ahead of Hamvention 2018, and [the new building] will be used for the event."

In addition to the new structure, another building on the property, previously known as Fairgrounds Furniture, is being vacated and will be available for use by Hamvention in May 2018. Additional details are forthcoming.

Kalter said Hamvention has been told that the additional floor space will cover an area larger than the tents Hamvention used for some activities in 2017.

"Although this decision was made to expand opportunities at the Expo Center, Hamvention is grateful for the support Greene County, Xenia Township, and the city of Xenia," Kalter added.

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Sadly, no one has volunteered to be forum coordinator next year so likely there will not be a County Hunter forum. My recollection is Pete, K4QFK had it back in the

1980s...not sure who if anyone before him. After many years, KJ8V, Dave took over for years and years – then Bob, N4CD had it for a decade. Tim, W8JJ, has had it quite a while and is giving it up with too many other things going on. It's not a whole lot of work – simply recruiting one or two other presenters -a short introduction – and getting the forum passes out to the people the day before the hamvention. There still might be time if someone would step forward.

Book Review of the Month

Radio Pals on the T-Bar Ranch – 1953

This month we're back in the 1950s with the Radio Pals on the T-Bar Ranch – another in the series of Jim, Tom and Porky out of Seattle Washington. During the summer, they are fortunate to be able to spend a month on the cattle ranch of an uncle near Tombstone, 500 miles from their home. Naturally, they pack up their HF ham gear so W7ZZZ will be on the air from the ranch. In addition, they bring along a pair of 2m walkie talkies that can be worn under clothes.

The three boys arrive – and find the cattle rustlers have been active and the losses continue to mount. They learn the basics of horse riding, rounding up the cattle, branding the cattle, and general ranch procedures. A nearby tree at the farm house provides a nice anchor point for their 80m long wire antenna which should get them back to their home town and a nearly ham to their parents so they can keep in touch. (Long distance telephone is expensive in the early 1950s!). They keep a daily sked on 80M CW.

No one has been able to solve the mystery of the disappearing cattle. Clue by clue, the Radio Pals discover that the ranch foreman, recently hired a few months back to find the cattle rustlers may be involved. In fact, he may be the leader of the group! They go about step by step to find out how, why and when.

One night when the rustlers plan a big take, Jim, one of the radio pals, goes out to where the fence has been cut and repaired several times - this at 3am in the morning – and sees the rustlers at work. He's in touch with his brother at the ranch and tells him to call the

sheriff to get the lawmen out here. Alas, the phone line is cut. However, the Radio Pals have a ham radio and use it to talk to a 'local' who can call out the troops with a call to the police. They arrive – and all ends well.

Short two or three hour read – not on line yet – good for the youngster crowd. Enjoyed it.

On the Road with N4CD

One of the awards you can work for within the Parks on the Air program is the YOFF sponsored award of making more than 200 contacts from parks. So far I had done it 10 times – mostly in the NPOTA days when you could get a couple hundred with good conditions and a 'rare' never activated park. This year it has been tough. Unless you stay in the park for hours and hours, like Norm, N9MM and Gary, N5PHT who camp overnight in parks – sometimes for a few days, it's tough to get 200 at one sitting other than a contest weekend perhaps. However, you can visit the park multiple times and add the QSOs together.

So – a short trip was planned up to Hagerman National Wildlife Refuge 61 miles from the N4CD up in Grayson County. Takes a bit over an hour to get there. Every Wednesday the CW Ops group has three mini-tests – one very early in the morning, one late in the evening, and one mid -day – 1900z to 2000z. Often you can snag 20-30-40 QSOs between 20 and 40m if things are working well. I'd plan on using that to get some of the needed Qs for this park. I had worked 137 QSOs so far in two visits to this park. Needed 63 more.

Some info on the park – from the park website:

Hagerman National Wildlife Refuge was established in 1946 as an overlay of a portion of the Big Mineral arm of Lake Texoma in north-central Texas. Consisting of about 12,000 acres, the refuge provides a variety of habitats for birds and wildlife.

Canada, snow, white-fronted, and Ross' geese along with pintail, mallard, gadwall and other ducks use refuge impoundments and fields as stop-over and wintering grounds. Just 75 miles north of Dallas where the Red River etches the boundary between Oklahoma and Texas, migratory birds by the thousands take up winter quarters or refuel for long journeys. Some species spend the entire winter 'loafing' on the refuge,

including, Ross's, Greater White-fronted and Canada Geese. At times, as many as 10,000 geese can be seen in one field. Ducks such as mallards, northern shovelers, green-winged teal, and northern pintail are commonly seen on refuge waters during fall and winter months.

Although they take top billing, birds are not the only attraction. Colorful wildflowers and prairie grasses provide seasonal food and shelter for wildlife. Butterflies, meadowlarks, and dragonflies flutter through the summer landscape. Bottomland hardwoods along the creeks attract a variety of wildlife including white-tailed deer, bobcats, river otters, turtles, and fox squirrels. Listen for the howl of coyotes at dusk.

Hagerman National Wildlife Refuge was established on lands originally purchased by the U.S. Department of Army Corps of Engineers (COE) for the Denison Dam Project-known today as Lake Texoma. Being located in the Central Flyway, one of four migratory bird "super highways", was an important factor in deciding to create a refuge here. The refuge lies just on the Texas side of the Red River, which divides the Lone Star State from Oklahoma. This region is where the gently rolling blackland prairies meet the hilly terrain of the eastern cross timbers. Of the nearly 12,000 acres that make up the refuge, about 8,700 acres are uplands and the remaining 2,600 acres are wetlands. This diversity of habitat, actively managed by refuge staff, creates ideal conditions for a wide variety of wildlife and plants.

So I left the house at 11:30 headed that way and arrived 12:30 local time. Had a half hour to get set, grab a snack, make a few county hunter contacts first. Mary, AB7NK and Neil, K7SEN were in AL. Caught them on 20M SSB – and followed them down to 40M SSB. That's four contacts in the log. Ran on 40M SSB after their run and put another 12 in the log with WY8I, KB8OMB, K5GE, K4PLB, WA9DLB, WA3QNT, WD5CSK, KB6HWD, W8TZA, KC3X/m, W4YDY and K5WAF in the log. That was off to a good start.

Switched over to CW on 30M and 18 more went in the log. 36Qs so far of the 63 needed. Now it was 1900z and the CWT was on. Back to 20m and the band was hopping. Started at one end of the pile calling CWT, and went up the band working everyone over S5 or so. I had to turn the Noise Blanker off – the signals so strong that they would modulate the CW up and down the band with the blanker on. Not a problem – I was in a quiet place and the Malibu is quiet RF wise. 46 went into the log fast. Whew.....reached my goal.

During the CWT I tuned across 14044 and there sat a DX station – well, didn't recognize

the call and it took me 5 minutes of listening to decipher it after I had worked it. 3XY4D. Whoa. Is that even a real call? He wasn't strong – but I got him in one call – before a pile up hit – and half the time he was buried with folks calling on top. Yep, he was sending 3XY4D at 30 wpm or more. Well, I'd log it and move on. Could be some rare DX. Or for all I know, just a prefix for a special event in Canada or Mexico or some place common.

At 2000z the CWT ended. Switched over to 20M SSB for another 23 QSO. Ran on 40m cw for another 6 and a park to park with Ray, KC3RW, and finally caught Kerri, KB3WAV in another park on a Park to Park contact on 20M. (Last month Kerri and Ray picked up N4CD in MD and we activated two parks there).

Wow...over 130Qs in the log in 2 ½ hours. At this location you have good internet service with helps. If you can spot, folks show up! If not – it's a lot tougher to get noticed.

As I sat there working away, thousands and thousands of snow geese would fly nearby – landed 300-500 feet from my car in grass fields and chomp away. Some would leave, others come. It was a good time for bird watching! Temp was 57 but nice sunny day in the afternoon. Thanks for calling in. Headed home at 3pm arriving home a bit after 4:15pm. The sun was already headed toward the horizon – darn these shorter days. Oh well. By the time this goes to press, we will be past the Winter Solstice and on to 'longer days'.

So – if you are a CW operator and can handle short exchanges at 25-30 wpm – the weekly CWT gives you a chance to add in QSOs to reach the '44' number for park activation – and can help toward that 200 number. Or....on a bad day – help you get 10 for an activation. Every Wednesday – 1900Z to 2000Z for the mid day session.

ARRL International Grid Challenge

The ARRL International Grid Chase Kicks Off with the New Year!

Ready, set, go! The ARRL International Grid Chase 2018 gets under way on January 1 UTC (New Year's Eve in US time zones). The objective of the year-long event is to work stations on any band (except 60 meters) in as many different Maidenhead grid squares as possible, and then upload your log data to ARRL's Logbook of The World (LoTW). Many hams are familiar with grid squares from the VHF/UHF and satellite realms, and everyone lives in one. An online calculator by David Levine, K2DSL, can determine your grid square. Enter a postal address, ZIP code, or a call sign, and the calculator will return the grid square for that location. Each new grid square contact confirmed through LoTW will count toward your monthly total.

Any contact you make in 2018 can count for your Chase score; as long as the other operators participate in LoTW, you'll get credit automatically when they upload their logs. This means that contest contacts will also count, as will contacts with special event stations, or other on-air activity that uses LoTW to confirm contacts.

There are no restrictions on modes or bands, as long as they are legal. Satellite contacts are valid for the Chase. The event is open to all radio amateurs. Complete details of the ARRL International Grid Chase 2018 appeared in the December 2017 issue of QST

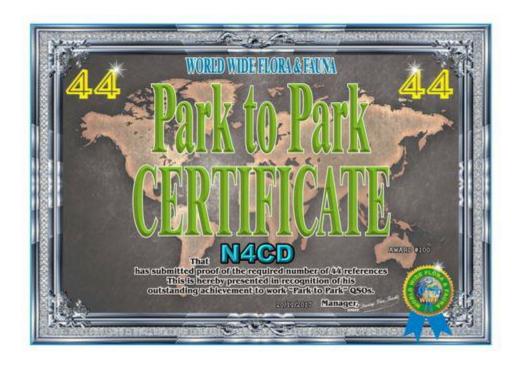
courtesy ARRL Weekly Newsletter

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Details appeared in the previous issue of the County Hunter News Too.

WWFF Awards – Parks on the Air

The WWFF program has dozens of awards with nice certificates you can earn. Here's one awarded to N4CD for 44 Park to Park contacts – those made from a park to another operator in a different park.



The US version of WWFF is now splitting away from the European power center – and will soon have it's own database to track US centric awards. There were some issues with getting log corrections and creating new awards for the US parks. Stay tuned. It really doesn't affect park hunting so keep looking for the parks and working them. With the Grid Challenge, there should be even more activity.

ARRL 160M Contest

Wow- quite a year for 160M operation – and well over 100 logs were received. Top operators made 1600 QSOs in the contest working 35 to 50 countries. Compare it to the 10M contest results a bit later in this issue! Over 100 logs submitted – most with more than a couple hundred QSOs each.

Didn't see too many county hunter type calls in the results – but saw lots of familiar calls from Park chasers and NPOTA chasers from last year.

From the 3830 contest reflector:

N8II – fixed – WV

I was tired and contest weary. I needed catch up on chores both Friday and Saturday. A pity, because I did better than ever before with DX mults and overall rate running LP. Average rate was 113/hr, and 25 DX mults only outdone LP by K7SV in many more hours. Thursday before the contest was much better than recent nights into EU and that continued into Friday. about 80% of DX mults called me, and some were pretty loud; e.g. SV3RF heard under a continuous run of USA/VE. The west coast was about average to slightly above average signal levels; CO and TX were pretty loud here. Before shutting down 2nd night I tuned for mults/Q's hearing N3RC in SF and SCV who could not hear me, worked all other mults I heard as I recall.

DX worked: C6 CO DJ EA EI EU F G GM HA I LA LY LZ OH OH0 OK OM PJ2 RW3 S5 SP SV UR ZF.

Thanks for all of the calls and spots; spots/RBN probably really helped with western sections and DX countries not to mention the high rates. It would be nice if this contest did not immediately follow the heavy November contest line-up.

73, Jeff

KN4Y 9Q 7 mults

I bowled in the Florida State Senior games in Clearwater FL. I like to do the 160-meter contest so I tried operating mobile parked on the motel parking lot. I called and called and only a few heard me. But I can say I participated.

P.S. I got a Gold medal in Singles in my age group.

Jamboree on the Air

Maybe you got your start in ham radio as a Cub Scout or Boy Scout. Thousands did back in the 1950s with the Radio Merit Badge – and went on to shortwave listening and a ham license along the way.

The ARRL sponsors an event each year to get various Scout groups together and on the air. The report this year from the ARRL Newsletter:

JOTA "Alive and Doing Well," Although 2017 Participation Down from Last Year Nearly 8,000 Scouts got on the air for the 60th Jamboree on the Air (JOTA) over the third weekend in October, National JOTA Coordinator Jim Wilson, K5ND, said. This week, Wilson released the 2017 JOTA report, which declared, "Radio Scouting and Jamboree on the Air are alive and doing well." Facilitating the October JOTA activity were more than 900 radio amateurs at 525 stations.

"Propagation wasn't our friend, but, even so, [radio amateurs in] almost 90 countries and all 50 states engaged in conversations with Scouts during the weekend," Wilson said. "In addition to HF, VHF, and UHF, many Amateur Radio digital modes were in use, as well as online Jamboree on the Internet channels."

The tally for JOTA 2017 was 7,872 Scouts on the air, which, Wilson pointed out, was down from the 10,761 who took part in JOTA 2016, but more in line with 2015's participation. Reports were filed by 226 JOTA locations.

"The Boy Scouts of America National Radio Scouting Committee will be exploring several improvement projects for 2018," Wilson said. These would include establishing a JOTA Frequency Task Force to explore updated frequency listing and operating recommendations, looking into new ways to alert participants in real time about other JOTA stations that are on the air.

The Radio Scouting Committee's work in 2017 resulted in the introduction of new Radio Merit Badge requirements, which included a new option for Amateur Radio Direction Finding (ARDF) -- or "foxhunting." The panel also developed documents to help Scout leaders incorporate radio and JOTA in their unit activities.

Wilson pointed out that the K2BSA operation at the 2017 National Scout Jamboree in

July introduced Amateur Radio to nearly 2,500 Scouts, with 305 earning the Radio Merit Badge."

Getting Set for the Grid Challenge

Hopefully by now, you've signed up for the ARRL Logbook of the World and are ready to go for the Jan 1 start date. Maybe you found your old ICOM grid map they used to give out at hamfests for free - or bought a Grid Map from ARRL to track things. If not, there are lots of resources on the web. The large laminated ARRL map is \$15 and the smaller 11x17 maps are a buck apiece. Your local ham store might carry them.

To start with, you can determine what grid square you are in from www.QRZ.com – and also the grid square for most other US/VE stations. Just type in the call and look under detail information. If you aren't registered there – time to do that – it's free. Then you can see the detail information – including any email address, the grid square and county.

So if you are going out mobile:

One link useful to determine grid square boundaries

http://qthlocator.free.fr/

type in the grid designator at the bottom and it will show the grid. You can zoom in to see where the boundaries are. For example, if you type in EM13, you'll see my home grid. Type in EM14 and you see the grid north of me. You can zoom in to find grid corners if you want to go out mobile and put out grids (along with counties) or see where the grids are for the counties you plan to run. (However, don't give out grid information on the air if you aren't willing to upload the QSOs to LoTW. You'll just make folks frustrated when they don't get confirmations in LoTW.)

Another useful link is

http://www.levinecentral.com/ham/grid square.php

Here, you can type in any address, town, city, state or national park and get the grid for it. Type in your home address or zip code – and it will return your six digit grid. You only need the first four for this event – like a DL88.

I downloaded (freebie) Hamgrid to my Android smartphone. Tells me on the road what grid I am in using GPS. There are apps for the iPhone, too

Year End CW Stats

CW Stats to Dennis, KK7X

Once again, it is time to get your CW year end stats in to Dennis. You can follow this link for a handy dandy on line form to fill out:

https://docs.google.com/forms/d/e/1FAIpQLSeiXji-sjAIaEDjlWOBN6qVXIi07TrMgGiF8XklVhaOQDj3iw/viewform

Or you can email them to him at

mailto:Dennis@KK7X.us

Count up your totals for the Nth time worked as of Dec 31 and send them in. When Dennis is done correlating things, we'll print the results here!

Get your results in by end of month – PRONTO!

ARRL 10M Contest

Yes, there was a contest and many of the big guns did very well despite a lack of solar activity. Top scorers made over 350 contacts, most made a whole lot less. Band opened

for hour or two – with some DX openings.

From the 3830 reflector:

KN4Y - fixed - FL 27Q 16 mults

I called and called and occasionally I made a QSO.I got so excited I would have to go to the bathroom. But I did get a few shelves re-arranged, a few drawers straightened and the floor vacuumed. The outside temperature was in the 30's, so this was a good choice of activity.

NX5M - high power multi op -318 cw Q -74 ssb mostly cw

HORRIBLE! Flew a drone for a while. Shot some boring video. At well. Speechless!

KT4Q - FL 242 qso 47 mults

For all except 1st hour and a half, contacts were a struggle. Fairly dismal conditions here in Central Florida. Nevertheless it was a good time and great to have Chris-WF3C run the controls for a majority of the CW contacts. Good thing because I only ended up with 30 phone contacts which would have made for an embarrassing log. I guess these type of conditions are what we have in store for us over the next few years.

Straight Key and Bug Night/Day

January 1 Hosts Events for Legacy Keys

Every day is a good day to send CW, but January 1 is reserved for Straight Key Night (SKN), sponsored by ARRL. Enjoy CW as it has been sent and enjoyed since the earliest days of Amateur Radio. The 24-hour event begins at 0000 UTC on January 1 (New Year's Eve in US time zones) is not a contest but a day dedicated to celebrating Amateur Radio's Morse heritage. Participants are encouraged to get on the air and enjoy conversational CW contacts, preferably while using a straight key or a semi-automatic key ("bug"). No points -- everyone's a winner. Submit your votes for best fist and most interesting QSO.

The First-Class CW Operators' Club sponsors a concurrent event, FOC Bug Day. FOC asks participants to send a description of the bug or bugs used, a list of stations worked, and a vote for best bug fist heard, to FOC Bug Day Manager Benny Owens, K5KV.

AMSAT will sponsor its second-annual satellite CW Activity Day on January 1. This year's event is dedicated to the memory of Pat Gowen, G3IOR. No rules -- just have fun. Operate CW through any ham radio satellite. The use of straight keys and bugs is encouraged, but not required. -- Thanks to Ray Soifer, W2RS, and Benny Owen, K5KV

courtesy of ARRL weekly Newsletter

On the Trail of Regens

An interesting regen set showed up on Ebay. Normally I don't look at 'broadcast sets' – as probably a few million of them were made in the 1920s – as there were only two types of sets available up until 1926 or so when the first superhets came out. There were dozens of manufacturers and hundreds of variations from one tube to 4 and 5 tube sets with a regenerative 'detector' and following audio amp tubes.

In the mid 20s, new tubes came out that worked on higher frequencies – and 'shortwave broadcasting' started. With the invention of the screen grid tube, you had a more stable RF amplifier for the weaker signals on the 'short waves'.

If you scan the ad pages in QST in the 1920s, you'll see 'plug in coils' appearing in the 1925/1926 time frame – allowing you to change the frequency range from the broadcast band to something else. Up to this point, there really wasn't much reason to have them

as 99.999% of radios were used to pick up standard AM broadcasts. Commercial sets for the ship to shore folks would tune down to $15~\rm KHz - 3000~meters - usually using the same set of coils – switched around with taps. That was probably less than 0.1% of the market.$

So....I was scanning the Ebay ads and noticed a TECO set from 1925 with a plug in coil. Hmmm......likely this one could also take other coils to tune the short waves – back then going up a couple of MHz to 8 or 10 MHz. That was 'way way up' for a triode tube that often was unstable. Here's a picture of it.

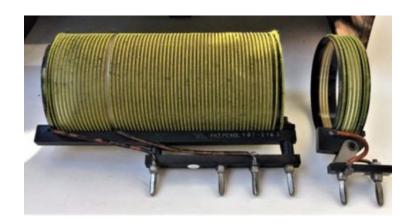


TECO 3 tube regen set

The Ebay listing stated:

"Antique TECO Battery Operated Radio. Made circa 1925 by Klitzen Radio Manufacturing Co. of Racine WI, under the alternative name of TECO [Triangle-

Electric Co]. This is possibly one of the last models produced by Klitzen before their final dissolution. The cabinet, consisting of a frame to hold chassis and face, is in good condition with wear reflecting its nearly 100 years. The front Bakelite panel is elegantly engraved, including the TECO logo. Two large controls are neatly marked, with a smaller center filament control. The chassis also shows the engraved TECO logo. The three globe 201-A vacuum tubes are for display only. "



What is unusual about this is the plug in col assembly. This one likely tunes the BC band. I'll have to get some good tubes (01As) and fire it up one day to see. Typical of the day, it would take a 60-100 foot antenna and a good ground to hear 'well'. That for the BC band where stations are 'powerful'. You'd need that plus to get much on shortwave – but the international broadcasters often did put in good signals with megawatt transmitters and high gain antenna arrays. First order of business will try to hunt down some of the other plug in coils. I've seen ads for them in QST – finding them may be a totally other thing! Hi hi. The large coil is connected to a horizontal bar that has 4 pins – and marked secondary/tickler. The smaller primary coil can pivot away a bit to control how much coupling you have into the detector. Your only operating control other than 'tuning' is the feedback capacitor for regen, and the 'filament control'. Since it has a Bakelite front panel, hand capacity would be a BIG issue – meaning two hands on the knobs at all times trying to tune something in.

A regen set with 201A tubes with plug in coils for short wave is very unusual. I'll robably never see one again for a long time. After 1926, the screen grid tube came out which changed the industry (tetrode tube) — with the added grid that improved stability tremendously and offered much higher gain sets did cover shortwave. Even better, the pentode tube was just around the corner, too. The times were a'changing.

If you ever run across the plug in coils for this, give N4CD an immediate jingle. I'd love to get the shortwave ones.

On the Road with N4CD II

December hit and one of the cold fronts came through dropping temperatures 20 degrees and sending night time temps down to the 30s. It was a dreary Wednesday and I decided to head on up to Caddo National Grasslands in Fannin County, TX – about a 75 mile drive from the QTH. Propagation conditions were miserable with the SFI at 67, the A index at 29 and the K at 3. That's usually bad news and not a time to be out mobile. The Geomagnetic storm had been going on for a day and would continue another 2. Oh well. The one advantage of Wednesdays, if you are a CW operator, is the CW Open Test which runs 3 times a day on Wednesday – too early, mid day 1900-2000z and then too late – in the evening.

The temperature was at 50 degrees when I left at 10am to head up there and it took 1 ½ hours of mostly good highway to get there. Other than 'nature' there is not much there – a little parking area with a dock – might hold 10 or 12 cars – and that's about it as far as I can tell. No one was there and no one came while I was there. Only half a dozen cars passed by on the road, too. It's pretty far out in the 'boonies' and you won't find any Verizon internet there – despite their map that shows coverage. So you are are on your own to get contacts.

I was there once before and made 74 contacts – more than enough to activate it. Now with a repeat visit, the goal would be to run the total up to 200 – the next level with this and maybe another one to get there.

Conditions were miserable and not many folks tuning the bands. I started on 20M CW on 14041. Fortunately, two of the 'band tuners' were listening – VE6UX and W6LEN and caught up with 17Qs on that band with a friendly spot. Switched to 30M and added in another 7 there. Nothing doing on 40M. Then I hit the County Hunter Frequencies KA7ICF was listening along with W7OLY who spotted me on the W6RK page. That brought out NF0N, N5PR and WO8L. Nothing doing on 30M CH frequency. Called

for five minutes – no takes. Worked W8TZA ad K0FG and WA3QNT on40m.

Tried calling and calling on 14336. Nope. Not a peep. Checked radio – full power out – just no one listening and no one looking. Half a dozen nets on the 20M band heard – but that was it- maybe one rag chew but the rest of the band – dead.

Not even enough QSOs so far for a good 'activation' but the CW Open was coming up. This is a weekly 'test' on Wednesday for CW operators. It zips along at 30 wpm or more. My keyer speed is set at 26 and I'm one of the slower ones – hi hi.

In an hour I added in another bunch on 20m and 40m. No 30M in this test – just the regular bands. You exchange name and CWO number or state. Many signals were S9 plus, some plus plus meaning I either had to put the attenuator in, or turn off the noise blanker – otherwise the strong signals would modulate everything on the band. Ran the total up to 83. Called a few more times after 2pm (2000z) but no takers so headed on home. Dreary day but a day on the radio is better than a day watching re-runs on TV.

My total is not near 200Q yet. Will take another visit someday. It's one of the closer parks to my house – but, dang, no internet so you have a challenge. Maybe the 2018 ARRL Grid Challenge will help – that park is over in the next grid – EM23.

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Weekly CW Test

Every Wednesday, the CW Test is held for 3 hour sessions – with the most popular for the US being 1900-2000z. So how much activity is there? And how many people can the good ops at good stations work in that hour?

Looking at the 3830 contest reflector:

For the Dec 6 1900z test

Scoring is simple. It is the total number of QSOs times the unique stations you worked out of that total. So if you worked 100 QSOs and that was 75 different stations (contacts with 25 of the same callers on a different band) – your score would be 100x75.

Top claimed score was AA3B, who worked 164Q and 138 mults. Right behind was N1LN with 166Q and 132 mults. That's better than 2.5 QSOs per minute. Needless to say, they are zipping along at 30-35 wpm at times. The exchange is short – your name and your CWT number, if you have one, or your state if not. A few people get on with single digit numbers, most are in the 4 digit area like 2157.

KM4FO made 34 contacts on 40m and stayed there for the contest. The same people tend to show up each week. Remember, these folks are in counties, too! With band conditions the way they are, helps to make all the contacts you can and maybe catch a new county or two doing it. If you are activating a park, it helps you reach the magic 44 number.

Anyone is free to join in. Once a year they drop the speed to no more than 20 wpm.

LoTW to Support CQ's WPX Award

From the ARRL Newsletter Dec 15, 2017

Participants in CQ magazine's Worked All Zones (WAZ) award program will soon be able to use the Logbook of The World (LoTW) system of ARRL, the national association for Amateur Radio, to apply for the WAZ award and its endorsements, ARRL and CQ announced on December 14.

Amateur Radio operators will be able to use LoTW logs to generate lists of confirmed contacts to be submitted for WAZ credit. Standard LoTW credit fees and separate CQ award fees will apply.

Implementation, documentation, and internal testing of the link between LoTW and WAZ is complete. ARRL and CQ are now assembling a team of external beta testers to assure that the link is ready for widespread use. A separate announcement will be made when LoTW's support for CQ WAZ is available to everyone.

Logbook of The World is ARRL's electronic confirmation system for Amateur Radio contacts. It provides a confirmation when both stations in a contact submit their logs to

the system and a match between the logs is confirmed. LoTW has supported the CQ WPX Award program since 2012.

"I am very pleased that participants in the CQ Worked All Zones award program will finally be able to use Logbook of the World confirmations in their applications for WAZ awards and endorsements," said CQ magazine Editor Rich Moseson, W2VU, adding that "WPX program participants have made excellent use of this service for the past five years and we look forward to providing it to WAZ program participants as well."

"We are excited about the prospect of supporting CQ magazine's WAZ program through Logbook of The World, as it is something that many ham radio operators have been asking for," said Greg Widin, K0GW, ARRL First Vice President and chair of the Logbook Study Committee. "We believe this partnership will enhance the Amateur Radio experience for many practitioners."

Worked All Zones is the second-oldest active Amateur Radio award program, behind the International Amateur Radio Union's Worked All Continents (WAC) award.

de N4CD

It sure would be nice if CQ and ARRL got together on the USA-CA County Award! Confirmed counties via LoTW. No more need for MRCs and great for DX stations to work to 500, 1000, 1500, etc to all counties.

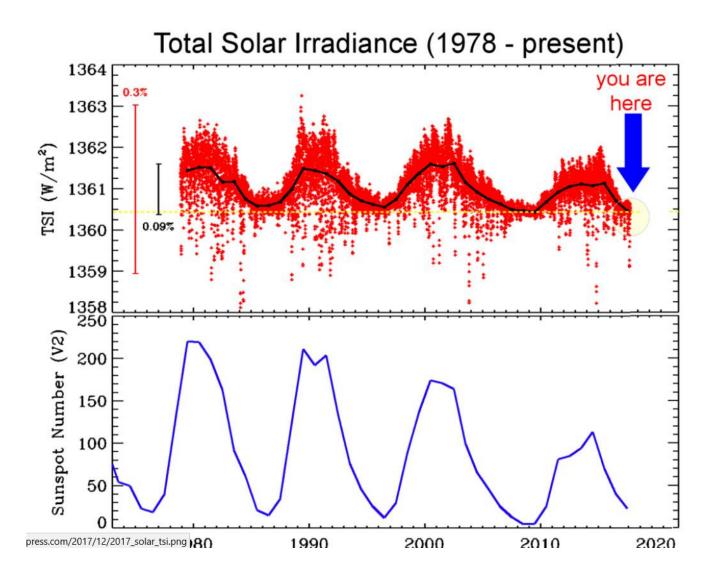
Sunspot Cycle Update Info

As the sun gets successively more blank with each day, due to lack of sunspots, it is also dimming. According to data from NASA's Spaceweather, so far in 2017, 96 days (27%) of the days observing the sun have been without sunspots.

Today at Cape Canaveral, SpaceX launched a new sensor to the International Space Station named TSIS-1. Its mission: to measure the dimming of the sun's irradiance. It will replace the aging SORCE spacecraft. NASA SDO reports that as the sunspot cycle

plunges toward its 11-year minimum, NASA satellites are tracking a decline in total solar irradiance (TSI).

Across the entire electromagnetic spectrum, the sun's output has dropped nearly 0.1% compared to the Solar Maximum of 2012-2014



In the top plot, we drew the daily average of measured points in red (so there are a lot of points, 14187 to be precise). On the left is a red vertical bar showing a 0.3% change in

TSI. The black curve is the average of TSI over each year. The dashed horizontal line shows the minimum value of year-averaged TSI data. The vertical black bar shows the 0.09% variation we see in that average. The bottom plot shows the annual sunspot number from the SIDC in Belgium in blue. Source: NASA Solar Dynamics Observatory Mission Blog.

What do we learn from these plots? First, TSI does change! That's why we stopped calling it the solar constant. Second, as the sunspot number increases, so does TSI. But the converse is also true. As the sunspot number decreases so does TSI. We have watched this happen for four sunspot cycles. This waxing and waning of TSI with sunspot number is understood as a combination of dark sunspots reducing TSI below the dashed line and long-lived magnetic features increasing TSI. SORCE has even observed flares in TSI.

Third, the horizontal dashed line is not an average, it is drawn at the lowest value in the year-averaged TSI data (that happened in 2009). When there are no sunspots the Sun's brightness should be that of the hot, glowing object we always imagined it to be. We would expect TSI to be the same at every solar minimum. There is much discussion over whether the value of TSI at solar minimum is getting smaller with time, but it is not getting larger.

These data show us that the Sun is not getting brighter with time. The brightness does follow the sunspot cycle, but the level of solar activity has been decreasing the last 35 years. The value at minimum may be decreasing as well, although that is far more difficult to prove. Perhaps the upcoming solar minimum in 2020 will help answer that question.

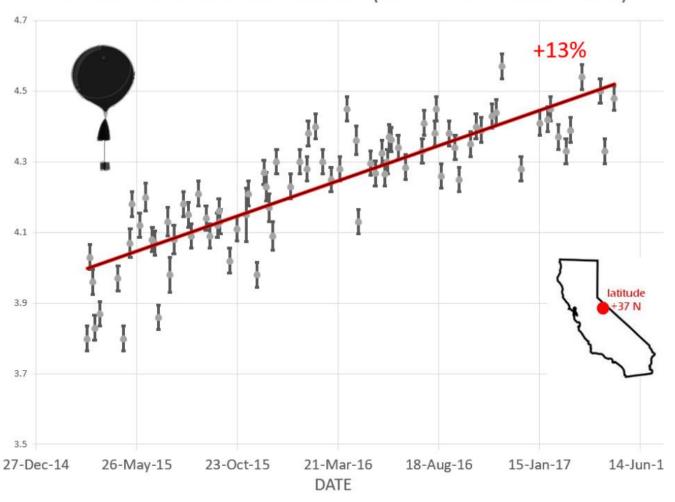
The rise and fall of the sun's luminosity is a natural part of the solar cycle. A change of 0.1% may not sound like much, but the sun deposits a lot of energy on the Earth, approximately 1,361 watts per square meter. Summed over the globe, a 0.1% variation in this quantity exceeds all of our planet's other energy sources (such as natural radioactivity in Earth's core) combined. A 2013 report issued by the National Research Council (NRC), "The Effects of Solar Variability on Earth's Climate," spells out some of the ways the cyclic change in TSI can affect the chemistry of Earth's upper atmosphere and possibly alter regional weather patterns, especially in the Pacific.

NASA's current flagship satellite for measuring TSI, the Solar Radiation and Climate Experiment (SORCE), is now more than six years beyond its prime-mission lifetime. TSIS-1 will take over for SORCE, extending the record of TSI measurements with unprecedented precision. It's five-year mission will overlap a deep Solar Minimum

expected in 2019-2020. TSIS-1 will therefore be able to observe the continued decline in the sun's luminosity followed by a rebound as the next solar cycle picks up steam. Installing and checking out TSIS-1 will take some time; the first science data are expected in Feb. 2018.

In other news, as the magnetic activity of the sun decreases, influx of Galactic Cosmic Rays (GCR's) increase as has been observed by balloon measurements over California:

STRATOSPHERIC RADIATION (MAR 2015 - MAY 2017)



Why are cosmic rays intensifying? The main reason is the sun. Solar storm clouds such as coronal mass ejections (CMEs) sweep aside cosmic rays when they pass by Earth.

During Solar Maximum, CMEs are abundant and cosmic rays are held at bay. Now, however, the solar cycle is swinging toward Solar Minimum, allowing cosmic rays to return. Another reason could be the weakening of Earth's magnetic field, which helps protect us from deep-space radiation.

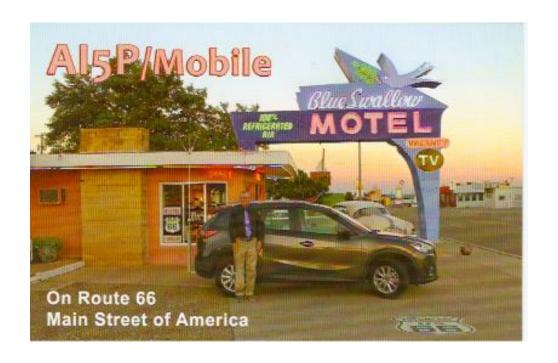
The radiation sensors onboard our helium balloons detect X-rays and gamma-rays in the energy range 10 keV to 20 MeV. These energies span the range of medical X-ray machines and airport security scanners.

The data points in the graph above correspond to the peak of the Reneger-Pfotzer maximum, which lies about 67,000 feet above central California. When cosmic rays crash into Earth's atmosphere, they produce a spray of secondary particles that is most intense at the entrance to the stratosphere. Physicists Eric Reneger and Georg Pfotzer discovered the maximum using balloons in the 1930s and it is what we are measuring today.

Note from Rick, AI5P

I will be mailing out this special QSL card for those that worked me during my Route 66 Adventure last June-July. The cards are made out for the first contact with each station either on SSB or CW or both. No reply card is necessary unless you would like to send me one. If you don't get your card or you would like to have a different county/state confirmed, let me know via rickai5p@gmail.com and I will send you one. It was a great adventure and I appreciate all the contacts!

73 Rick AI5P/Mobile



Mobile Activity in December

At the beginning of the month:

Mary/Neil AB7NK/K7SEN were in TX winding their way slowly back to AZ.

Mark, N2MH was running counties in VA and headed home to NJ.

Pete, N4UP was in MD putting them out

During the month, parks were run by AI5P in NM, KB3WAV/KC3RW in TN, MD, PA, K0ATZ in MO, N9JF in IL and MO, N5PHT in TX, N9MM in TX, KA9JAC/KB9YVT in WI, KA2LHO in FL, AE4RM in FL N4EE in SC, N4EX in NC, W5MIG in TX, WD9Q in IN, K6DWE in NV,

Ed, KN4Y, ran counties in FL.

Jack, K0MAF was headed down through WV, VA, NC on his way to FL.

Bill, K0DEQ noted out and about in MO

Fred, K0FG, headed east – ran a lot of IL, IN, OH counties. Then into PA, NJ, MD, DE, WV, through lots of KY back to home in MO.

Jim, N9JF, noted up in WI.

Jim, AF5CC was busy in MO and IA.

End date Dec 23

Awards Issued

USACA #1263

Dick, WA9OUE

December 2, 2017

MARAC Awards are still backlogged and none were issued as of publication date.

Upcoming Events for County Hunters

Hamcation - Orlando

Feb 9-11

A few County Hunters show up for the big event – one of the top hamfest in the country.

Date for 2018 MICHIGAN MINI is April 26 – 27 & 28th..

It will be held at the Holiday Day Inn West Bay Beach Resort again in 2018 with room rates of: \$93.96 plus tax per night if reserved by March 25th, 2018.

West Bay Beach – Holiday Inn Resort 615 East Front Street • Traverse City, Michigan 49686 Phone: (231) 947-3700 • Fax: (231) 947-0361 Toll Free: (800) 888-8020)

You can reserve on line right now...info on the marac.org web page. Ed, K8ZZ and W8TVT, Joe, would appreciate folks reserving early to help defray the necessary expenses involved in putting this event on each year.

Dayton Hamvention – at Greene County Fairgrounds – Xenia OH

May 18-20

Hamcom Dallas Hamfest

June 8 –9