

The Nugget



Mother Lode DX/Contest Club

The Newsletter of the Mother Lode DX/Contest Club

MEETING DATE, LOCATION & PROGRAM

We have Rich Cutler scheduled to present a "contesting 101" talk at the next meeting scheduled for March 21 at Noon.

This meeting will be held at Rich's office, **World Financial Group, Inc. 310 N. Cluff Avenue, Suite C3 Lodi, CA 95240.** See the **MLDXCC website** for map.

This meeting should be especially interesting to us newer testers, since it covers tips, tricks and techniques that he has used through the years to earn some great scores! After the meeting we will move over to "Habanero Hots" for lunch.

MLDXCC DUES

Our dues are voluntary; however you must pay dues, \$15/yr, to be eligible for any club awards.

A quick look at our financial status shows us just about breaking even for the year. We started the year with \$ 1346.48 and ended with \$1655.26. That looks good at first glance, but \$ 400 of that came from sale of an antenna and proceeds from Visalia Contest Dinner so we ended year with a small loss. We cannot always count on those resources. Our expenses each year are;

\$ 200 for club liability insurance, \$ 250 to Northern California DX Foundation, \$ 244 for plaques, prizes & awards. These figures, while close, are subject to final analysis by Treasurer.

Dues are \$ 15 per calendar year. They can be brought to meeting or mailed to Carolyn at P.O. Box 273, Somerset, CA 95684-0273.

MLDXCC Meeting Dates:

March 21th.

No April meeting

May 16th

No December meeting

2015-Officers

Shirl Rose - AA6K President

Bob LeClerc - KR6N Vide-President

Dick Wilson - K6LRN Secty

Carolyn Wilson - K6TKD Treasurer

Steve Allred - K6SCA BoD

Rick Casey - W6RKC BoD

Bob Hess - W1RH BoD

Ken Anderson - K6TA BoD



Photo from the January 31st Meeting

I want to send a big "thank you" to the MLDXCC members who took on the large task of helping sell most of K6KM's ham radio equipment. Rick, W6SR, was the leader of the effort with lots of help from Dave, W6DE, Bob, W1RH, and Norm, N6JV. Several trips were made to Yankee Hill to gather up radios, keyers, an amplifier, and numerous other items that were then sorted, checked out, photographed, advertised on the internet, and sold. Rick kept excellent records of what was sold and to whom and sent me emails of the progress. Others made trips to remove towers and take away antennas, all coordinated by the MLDXCC crew. The Mother Lode Club can be very proud of members like this, and I wanted to express my gratitude for their great effort to help our station. Bill would have appreciated this so much.

Ginny Snider, N6RER

FROM THE PREZ

Greetings to all. I have not been too active on the bands recently. I had to spend about 2 weeks in New Hampshire babysitting my 4 year old grandson. Now I know why Bob/W1RH came back to California. The weather alternated from cold & snow to colder & snowier and back again.

I wish to compliment all of our members for their efforts in increasing the MLDXCC standing in Club Log. We have moved up from 44th place to 37th place in the Club Log rankings. I'd like for our members to continue chasing DX

and moving our club up in the ranking. Keep up the good work!

Congratulations to all who worked K1N Navassa Is. Our club made a substantial number of QSO's as documented in an email by WA6NHC. The K1N expedition marked a new phase in amateur radio for me as I made my 1st RTTY DX contact. Only 99 more to go for DXCC.

There is plenty of good DX to be worked in the coming months. As I write this Eritrea/E30FB, the Dem Rep of the Congo/9Q0HQ, and Malawi/7QAA are the big expeditions that are on the air and there is the possibility of North Korea/P being activated in the near future. In the meantime we have the usual contests to keep us busy.

I hope to see a large turnout for our meeting in Lodi on the 21st. You won't want to miss Rich/WC6H tell us how he gets so many QSO's in the contests he enters. 73 de **Shril, AA6K**

THE VP SEZ

Hello to all MLDXCC members. I hope everyone had a chance to work EP6T on at least one band or mode. No luck here. I heard them pop out of the noise a couple times on 20m CW but that was it. I was able to work K1N on 12, 17 CW and 15 phone so happy about that. Right now listening for E30FB. Nothing heard so far. Speaking of K1N, we have a commitment from John K6MM to speak at the July 25 MLDXCC meeting. I'm sure he will have a few behind the scenes stories of the K1N DXpedition to Navassa. The plan will be to have this meeting in the south area.

Getting ready for the ARRL DX SSB this weekend. I need to mix that in with having the Grand boys over Saturday thru Sunday morning. I'm good on 10m and 15m, but need to get a Vee up for 20m. The joys of stealth antennas.

We have Rich Cutler scheduled to present a contesting 101 talk at the next meeting scheduled for March 21. This meeting is also to be held at his office in Lodi. This should be especially interesting to us newer contesters covering a few tips, tricks and techniques that he has used to earn

some great scores. Then we can move over to Habanero Hots for lunch.

It looks like The Amateur radio parity act has been re-introduced by the the original author Rep. Adam Kinzinger. The new number is HR-1301. There is also a form letter from the ARRL that you can send to your local Congressman. There are 12 co-sponsors so far from both side of the Aisle. I might mention that I was at Congressman McClintocks town hall meeting at Oak Ridge High school in El Dorado Hills a couple weeks ago. I was able to talk to him at the end of the meeting and he said he would have no problem supporting this bill. His District Chief of Staff took my info and asked that I forward him any status updates I hear about. Fingers Crossed. I'm happy to have stealth wires up in the trees but aluminum in the air would be nice too. 73, **Bob, KR6N**

Treasurer's Report

First, my apologies for errors made in the January report. Please make the Following corrections:

Income – add dues paid by K6BEW, \$15.00
Change Rick's call from K6SR to W6SR.
Corrected Balance January 2015: \$1802.06

There was no financial activity in February:

Balance February 2015: \$1802.06

Humbly submitted,

Carolyn Wilson, K6TKD
Treasurer

From: **Bob Wilson, N6TV**
Sent: Friday, March 06, 2015 6:57 PM
Subject: **K3 Technical Article for the MLDXCC Newsletter**

As many of you may know, the Elecraft K3 has a terrible CW jitter problem (bad CW timing) on TX if you transmit faster than 37 WPM, unless you enable CW QRQ mode. This problem exists even if you use semi-breakin mode instead of QSK. To read Bob's complete article, go to the following location:
<http://mldxcc.org/n6tv-k3.pdf>

We would like to extend a personal invitation to you and Members of your Club to attend the International DX Convention 2015 in Visalia, California on April 17-18-19, 2015.

IDXC 2015 will be our 66th annual International DX Convention. DXers from around the world will gather once again to meet their fellow DXers, attend interesting and informative programs, see the latest in new products from the top vendors – and have a chance to win some great raffle prizes!

Full details of IDXC 2015 are at this website: <http://www.dxconvention.com/>

Editor's Notes de Rick, W6SR

Hi all.....

Well..... the ol' bands have not been great lately, with lots of solar events, disturbed conditions, and even a few radio black-outs. And when the conditions were not disturbed, the SFI numbers fell so low that 10 and 12M were unusable.

Last week's ARRL Phone contest had totally miserable conditions for the entire contest, so I (and many others) just stayed away.

This week, those of us needing the E30, Eritrea, on the higher bands have not done well either, I got lucky and managed just one QSO on 10, 15 and 17M. Remember, a few weeks ago when the K1N guys were so EZ to work on 160M-10M? I guess we should be thankful for that, since many of us will not be vertical for the next operation, Hi HI.

I added a few new (to me) items in the ol' ham shack, an Ameritron AL-1500 Power amp and an Elecraft K3 transceiver. These were added after my Icom PW-1 power amplifier took a dump in early February. Dave, W6DE also had a similar PW-1 problem, however, his is now back on the air and operating FB. He has been helping me get my PW-1 diagnosed and repaired, which I hope to complete this week. Also I installed a home-brew 30M rotating dipole on the tower. It works several dB better than the fixed 30M inverted "V" it replaced.

All of K6KM's radio equipment and antennas have been sold, and the towers have been taken down and removed. We still have a few Rohn 45 parts and grounding items available. E-mail me for details. Thanks to all MLDXCC members who purchased items from his estate.

As far as operating goes, I picked-up 3 new band countries from the K1N guys, and another two from E30 as well as Ey8MM on 17, bringing my DX Challenge total to 2725. At this point any new ones are few and far between. My RTTY total keeps rising, all via LOTW, and are now at 126, a 6 country increase from last month. . CU all at the next meeting.....**de Rick, W6SR**

The following is the latest installment of a multi-part series that was suggested by Dave, W6DE. It was compiled and written by W2XOY; I found it very interesting and hope our readers do as well. de Ed.

The History Of Amateur Radio Chapter 15

The Technician license is, by far, the most popular class of license now held in the amateur community. Most new hams start at the Technician level, to the extent that proposals have been made to eliminate the Novice license as unnecessary. The amateur community accepts the Technician, especially the Technician Plus, as an acceptable mainstream license, either as a steppingstone to a higher class license, or as an end in itself. But it wasn't always like this. For the first 25 years of the Technician class license's existence, it was an official outcast, set apart by the FCC as separate and distinct from the other amateur classes. Why were Technicians considered second class? To answer this question, we must go back to 1951.

On July 1, 1951, the FCC replaced the class A, B, and C licenses with the Advanced, General and Conditional classes and created three new licenses—the Extra, Technician, and Novice. The FCC was specific about the purpose of the Technician class license, as shown in the following quote: "This class was established expressly for serious minded experimenters who need spectrum space in which to air test their equipment. It was not established as a communications service and should not be regarded as a stepping stone between the Novice and General operator classes. The Technician class of amateur license has as its purpose the provision for serious amateur experimenters to explore the higher frequencies and otherwise contribute to the art".

Thus, the Technician was an experimenter, not a communicator. For this reason, the FCC initially allowed Technicians privileges only on frequencies above 220 Mc. The FCC did not intend for the Technician to engage in casual conversations on the air. Other than allowing a Technician to simultaneously hold a Novice license (which

at that time was valid for only one year and non-renewable), it was expected that the Technician operator would stick to experimentation, not communication.

Although many of the early Technicians were indeed pure experimenters, many others obtained the license as a means to communicate without having to pass the 13 WPM code test. These "Technician communicators" became restless with the limited frequencies available above 220 Mc., and wanted access to the more mainstream VHF bands at six and two meters. They were joined by a small number of "Technician experimenters" who also wished access to 50 and 144 Mc., for the purpose of studying Sporadic E skip, building equipment for these bands, or even using their license for radio control.

Thus, in early 1955, a proposal was submitted to the FCC to allow Technicians access to six and two meters. Knowing that the FCC regarded the license as an experimental one, these proposals avoided mentioning "communication"—rather phrases such as "greater experimentation" were used. The ARRL supported Technician access to six, but not two meters. In announcing their decision, the

ARRL stated that six meters was far less occupied than two meters, and could use the influx of Technicians to study the band, and thus contribute to greater understanding of the unique characteristics of 50 Mc. The ARRL went on to say that permitting Technicians on two meters would appear to make the Technician license too attractive. Many amateurs also wrote the FCC on this--some said that Technicians should have full access to all frequencies above 50 Mc., while others opposed the move, citing the FCC's original intent for this license, and expressing fears that by allowing Technicians to use six and two meters, they would become mere communicators.

On April 12, 1955, the FCC amended Part 12 of the rules and regulations to give the Technician class operator six but not two meters. The fears of those opposed to Technician communicators were amplified in 1958

when, at the peak of the sunspot cycle, thousands of Technicians used F layer skip on 50 Mc. to work vast amounts of DX--with some earning the W.A.S. award. Nevertheless, allowing Technicians on six meters had a beneficial effect--it helped populate a band that was underutilized, and it allowed a greater study of E and F layer skip. For this reason, early in 1959 another proposal was submitted to the FCC to allow Technicians full access to the 144 Mc. band. This time the ARRL agreed. They stated that things had changed since 1955 and

Technicians on two meters would benefit not only the advancement of the radio art, but would also allow all classes of amateur licenses to share at least one voice band in common, as Novices had access to the 145-147 Mc. segment of two meters. Despite the ARRL's support of Technicians on two meters, there was opposition. Again, the argument as to the purpose of the license was brought up. Many amateurs wrote to the FCC stating that a Technician was an experimenter, not a communicator, and that the license should not be used for the routine exchange of communications. One ham complained that Technicians were rag chewing and not experimenting. A few amateurs not only wanted Technicians kept off of 144 Mc., but asked the FCC to incorporate their statement as to the purpose of the license into Part 12, presumably so that Technicians caught "communicating" rather than "experimenting" could be fined or have their licenses suspended.

Others, including the ARRL, did bring in valid "experimental" reasons to allow Technicians on two meters. Once again, the FCC compromised. They restated their official position that a Technician was an experimenter, not a communicator. However, they acknowledged that VHF studies could be made on two meters, and that it was beneficial to have one common meeting ground for all classes of license. Thus, on August 21, 1959, Part 12 was amended to allow Technicians access to the 145-147 Mc. segment of two meters--the same subband that Novices had.

And so Technicians entered the 1960s as a distinctly second class license. They were not eligible for RACES station authorizations. They could not hold many ARRL appointments. And, despite the ARRL support of full Technician access to all frequencies above 50 Mc., the FCC's official position had not changed. Although no Technician was ever actually fined or suffered a license suspension for the "crime" of communicating, many hams felt that Technicians were merely "glorified CBers" who were violating the spirit, if not the letter of the law.

In our next installment, we will see how a new, short lived VHF magazine, and an official change in the ARRL's viewpoint, helped bring about a gradual acceptance of Technicians as "real" amateurs. I hope to see you then.

The History Of Amateur Radio Chapter 16

In our last installment, we saw how, when the FCC created the Technician class license back in 1951, their intention was to give it a separate and unique purpose. The Commission stated that the Technician class license was

established expressly for serious minded experimenters who needed spectrum space in which to conduct their tests. It was not established as a communicators' service and was not to be a stepping stone between the Novice and General class licenses. The original Technician class operator only had privileges above 220 Mc. In 1955, they were given six meters and in 1959, the 145-147 Mc. segment of two meters. Getting additional frequencies for Technicians was difficult--the petitions could not mention "communications" as a reason, but rather had to show that there was a need for additional experimentation on the six and two meter bands. Because of the "experimental" nature of the license, Technicians were not allowed to become RACES stations. They also faced some discrimination by a few higher class amateurs--in fact, several proposals were made to the FCC to "punish" Technicians who used the airwaves to communicate, rather than to experiment.

In 1962, two events occurred. First, the FCC denied petitions to give Technicians the 29.5-29.7 Mc. segment of ten meters as well as full two meter privileges. In rejecting these petitions, the FCC said there was "considerable misunderstanding" about the role of the Technician class, and restated the "experimenter" policy they had issued in 1951.

Also that year, a new amateur publication hit the market--"VHF Horizons." Concentrating on six meters and above, this magazine was full of technical articles, construction projects, contest information, and VHF news. But it was the editorial content of "VHF Horizons" that broke new ground. For the first time, an amateur magazine called for a rewrite of FCC policy. They wanted Technicians to be considered full-fledged amateurs and not just experimenters. Naturally, this caused controversy in the amateur community. Technicians who considered themselves communicators flocked to this new publication, while some higher class amateurs condemned it and restated their position that "communicating" Technicians were violating FCC policy. Unfortunately, "VHF Horizons" was not able to turn a profit, and expired after only two years. In 1967, the FCC instituted "incentive licensing". While the actual frequency loss by Technicians was minimal--just the first 100 kc. CW segment of six meters--the FCC still struck a blow to those wishing to remove the "experimenter" status from this license. The FCC once again turned aside requests to expand Technician privileges to the full two meter band. In addition, the FCC also removed two meter voice privileges for Novices and took away the right for an amateur to simultaneously hold a Novice and Technician license. According to the Commission, too many Novices were operating two meter

voice, were not increasing their code speed, and were upgrading only to Technician instead of General when their Novice license expired. Once again, the 1951 policy was restated.

However, despite the FCC's position, thousands of Technicians were on the VHF bands as communicators. With the rise of two meter FM, new Technicians were taking to the airwaves every day, mostly with surplus wide-band commercial equipment. Recognizing that the role of this class of license had evolved, the ARRL Board of Directors met on November 1, 1969 and came to a decision. In an editorial in the December 1969 issue of "QST" entitled "Technicians as Communicators", the ARRL's new position was stated--Technicians were no longer just experimenters, but rather full fledged communicators. The ARRL proposed that they be given the full two meter band, the 29.5 to 29.7 Mc. segment of ten meters, and the ability to once again hold a Novice license simultaneously. The ARRL put these proposals before the FCC in a petition.

The FCC did not immediately respond to this petition, but rather, in 1971 issued an odd ruling in which they stated that a Technician class amateur could not use a repeater in which the input was in the Technician subband of 145-147 MHz, but the output was above 147. Nevertheless, since the repeater subband in the early 70's was 146-148 MHz and the Technician was not allowed above 147, the FCC was under pressure. On October 17, 1972, Technicians were given the 147-148 MHz segment of two meters. The FCC denied Technicians ten meters, Novices privileges, and the 144-145 MHz portion of two meters, but the door was opened. With thousands of Technicians on two meter FM, the FCC then moved slowly towards full VHF privileges for them, realizing that the "experimenter" designation was obsolete. In 1975, Technicians were given Novice frequency privileges. When the new repeater subband was opened at 144.5-145.5 MHz, Technician privileges were expanded to 144.5-148. The FCC also realized that Technicians could no longer be excluded from RACES operation. In 1976, the FCC eliminated the "mail order" status of the Technician exam and required applicants to show up at an FCC examination point.

Finally, in 1978, Technicians received full two meter privileges. In the eyes of the FCC, they were full-fledged amateurs. In 1987, the exam was made easier by splitting element 3--the General written exam--into 3A for Technician and 3B for General. This is why those Technicians licensed before March 1987 only have to take the 13 WPM code test to upgrade to General. Also in 1987, Technicians received sideband privileges in the 28.3

to 28.5 MHz segment of ten meters. And, in a final act of "Technician Liberation" in 1991, 40 years after the license was established, the code-free Technician was created. So, if you meet a Technician who has been licensed since the 60's, treat him or her with dignity and respect, for they have suffered and endured years of being ostracized so that today's Technicians can enjoy full VHF/UHF privileges.

In our next installment, we will look at the development of repeaters and repeater regulations. I hope you will join me.

The History Of Amateur Radio Chapter 17

Repeaters...It seems they are everywhere, and they are. Several thousand amateur repeaters operate on our bands from 29.5 MHz all the way thru the microwave range. In fact, there are more amateur repeaters in the U.S. & Canada than there are AM Broadcast Stations. How and when did this evolve? Let's take a look at the development of repeaters in the Amateur Community.

If you had to guess when the first repeater came on the air, what would you say? 1970?, 1965?, 1955? Try 1932!!! It was in the early 30'S that the first "Duplex Phone Relay Stations", (as they were then called), came into existence. W1AWW & W1HMO set up a manned relay station in a 90 foot wooden lookout tower near Springfield Mass. They used a super-regenerative receiver tuned to 60 MC (the top of the old 5 meter band), and a modulated oscillator transmitter on 56 MC, (the bottom of the band). Stations in Connecticut, Massachusetts or Rhode Island could transmit on 60 MC, and have their signals manually rebroadcast on 56 MC.

This relay station, of course, was in operation only when amateurs were on duty at the lookout tower. Fully automatic repeater operation was still over 30 years away.

In the 1950'S and early 60'S, there were a few AM repeaters on the air in California. But for the most part, VHF operations in the 1940'S thru the late 60'S were on AM phone in the simplex mode, with a handful of sideband stations thrown in. Using crystal controlled transmitters with about 10 watts, and single conversion superhets, the typical VHF operator had a range of 10-15 miles, not counting any band openings.

There were a handful of FM stations of course, but the development of FM as a mainstream amateur mode of communication had been pushed aside by sideband. As early as 1940, QST had construction projects for a complete 112 MC FM station, but FM took a back seat in 1947 when sideband appeared. Now, however, thanks to an FCC edict, it was about to make a comeback.

In 1960, the FCC issued new requirements for the users of VHF commercial

frequencies. Over the period from 1960 to 1970, commercial users gradually phased in narrow band (5 KC deviation) equipment to replace the wide band (15 KC) transceivers they had been using. Rather than revamp the older equipment to meet the new standards, they simply purchased new radios. The old units made their way to the surplus market, where they were quickly snapped up by amateurs. Converting this equipment to ham frequencies was relatively easy, and soon hundreds of stations were operating on 52.525 MC and 146.940. Why those frequencies? Well, 52.525 was the lowest 6 meter frequency on which wide band FM was allowed, and 146.94 was chosen to accommodate Technicians who weren't allowed above 147 MC. Thus, these became the first "calling Channels".

It wasn't long before some surplus commercial equipment was revamped into repeaters. Unlike the 1932 setup, these were fully automatic devices, with no need for a control operator to be present. This, however, presented problems. Part 97 at that time contained no provision for repeater operation, and it was unclear as to whether it was legal to operate a repeater without a control operator present. Many proposals were presented to the FCC to clarify the rules in regards to repeaters. FM and repeaters received considerable publicity in 1969 when Hurricane Camille caused widespread destruction in the Gulf Coast and Virginia. This was the first time mobile rigs, FM and repeaters were used extensively in an emergency. FM activity increased in late 1969 and early 1970 with the ARRL's announcement that it no longer considered Technicians to be just experimenters, but rather full fledged Communicators. Also adding to the popularity of FM was the introduction of the first commercial rigs for the amateur market, from manufacturers such as Galaxy, Clegg, and Drake. By 1970, it was clear that coordinated, legal growth of FM and repeaters was necessary.

In early 1970, the FCC proposed its first repeater rules. They were as follows:

On 6 meters, repeater inputs would be from 52.5 TO 52.7, with the outputs at 53.0 to 53.2 MHZ.. For 2 meters, repeater inputs would be authorized from 146.3 to 146.6, and the corresponding outputs would be from 146.9 TO 147.2. On our 220 band, the input/output subbands were 223.1--223.3 and 224.1--224.3, while on 440 repeaters would be authorized on 447.7--448.9 for inputs and 449.1--449.3 for outputs. (By the way, it looks like the 1970 FCC proposal contained a typo in the 440 MHZ segments). "Whistle on" or other coded access would be required--

carrier activated repeaters would NOT be allowed. No cross band, linked or chain repeaters or multiple outputs would be allowed. The maximum power permitted was 600 watts input (about 400 watts output). And, finally, the FCC declined to allow fully automatic repeater operation, the proposed rules required the licensee of a repeater station to be in attendance at the transmitter or at an authorized fixed control point and to monitor all transmissions of the station.

The proposed repeater rules appeared unduly restrictive to many hams. Except for 2 meters, each band had only a 200 KHZ wide input/output window. On 2 meters the input/output subbands were 300 KHZ wide--but 2/3 of the repeater output subband was above 147 MHZ--where Technicians weren't allowed!! The FCC had still not acted on the ARRL's 1969 proposal to open all VHF frequencies to Technicians. When the FCC was questioned on the legality of a Technician using a repeater whose input was within the 145-147 subband, but whose output was above 147, they said the Technician operator COULD NOT USE THE REPEATER. The FCC went on to say "the licensee of such a repeater should sit there with the latest Callbook showing license class and keep his finger on the NO-NO button". (Yes, this is an actual quote). So much for liberal repeater rules.

Despite the FCC's rather restricted proposed rules, repeater operations flourished throughout 1970 & 1971. Over 200 repeaters were on the air by 1971, almost all of them in the 146--147 MHZ range so they could be used by Technicians. But, with the uncertain status of future FCC rules, the lack of national frequency standards, and the inability of Technicians to operate the full 2 meter band, a dark cloud hung over the FM world.

In our next installment, we will review the ARRL's national plan for 2 meter FM, as well as the revised FCC rules on repeater operation. I hope you will join me.

"William Continelli, W2XOY, Copyright 1996, 2001, All rights Reserved. Reprinted with permission."

Member News, Items For Sale & Feedback

Hi Gang.....

I'm selling my Icom 765 back-up radio, with instruction manual. I recently purchased a K3, so my Icom 756 Pro III will become my back-up radio. The 765 works and looks great, it is a late S/N O4087, and has ALL the Icom recommended mods. installed. As well the optional 250Hz filter, and the

pass-band tuning/IF shift mod. The 765 is still a very good contest radio, and is in the top 20 best receivers ever tested by Sherwood engineering. It's well above the Icom 7600, 7700 & 7800, Pro III, as well as the K2 and FTDX 3000. Check it out for yourself on the Sherwood Engineering website.



Asking \$700 or best offer + shipping, radio may be seen and tested at my QTH in Placerville. More pictures are available on request.....de Rick, W6SR e-mail ricksamoian@outlook.com or phone me at (530) 344-9085

For Sale

I have a variac and plate transformer that I wish to sell. The details on the transformer are written on it. And the ratings of the variac are also listed.



The transformer measures:

H - 8 1/4

W - 10 3/4

D - 9 1/4

And weighs 115 pounds.



Best offer on each

Thanks, Bob, W1RH w1rh@yahoo.co

It's the end of the contest; you're leaning back in the chair, looking over the score, wondering, "How did I do?"

Many contesters go to a website called 3830scores.com, a modern day gathering place to compare scores and exchange comments.

The site consists of two parts; score entry & scores listing. If you just want to look at scores, pick a contest from the menu at top of page and listings will appear below. If you want to post a score look for submittal forms on the left side of page. Fill in or check off the various boxes, make comments and look for the 'submittal' button at the bottom of page. To get a copy of your submittal, check the box at the top next to your email address. This gives you a copy

for your records or to pass along to club reflector, for instance.

Note the club listing window. It will give you listings for a particular club.

These are 'claimed' scores, subject to sponsor's log checking process.

Check back often during the first few days after contest as others will be adding their scores to the site.

Tip via K6LRN (thanks Dick)

I need a computer keyboard with the older round connector (pre USB). **Tnx, Roger W6PKB**

K6IJ on the move.



GM guys, the 40 foot container is here and many of the antennas are on the ground. Still up are the LP, six meters and a 4 element 10 m Will play with ARRL DX SSB as NH6P.



Pictures attached of the antenna farm are now ready to packed up for CA. Starting March 17th I will be living in

Pine Grove. So I look forward to seeing everyone again real soon. Good luck in the ARRL DX SSB.

Our HI Property is still for sale (see below)

Hi All, about the only info that is new is that the home here is still for sale, priced for quick sale, call 808-557-9022 or email for details.



The property is three acres with a new 4000 sq. foot home. Large Radio Shack with full bath and extra bedroom, plus 4 more bedrooms and 2 baths. A number of records have been made from this very quiet site.

We are asking \$485k for the home and that includes the 100 foot (permitted) tower, a four square, and 30 foot Rohn tower next to the house. Also it has a net metering solar system 4KW, power bill is \$20 per month. We can also do private financing. I really do not want to leave but my wife wants to be closer to friends and family. If your interested we can give all the details.

Email kh7y@alohabroadband.net or call 808-557-9022. Aloha, Fred, KH7Y now K6IJ

Tube of the Month de Norm, N6JV

LD 12

From 1939 to 1941 the German Military was busy producing effective RADAR equipment. The Germans were confident that they would win the war so directed that no new (expensive) projects would be started that couldn't be completed in a year. They were put into "panic" mode in 1943 when they found that the allies were using very high microwave equipment. Some German scientists were formed into the Bevollmachtigter fur Hochfrequenzforschung (BHF was easier to say) to produce competing microwave frequency tubes.



The Americans had been using a type of "lighthouse" planar triode for a high frequency oscillator that was usable into the mid microwaves. The Germans improved on this by making planar triodes that were coaxial and could be directly placed into cavity circuits. These tubes were also special in that they had ceramic insulation. This wouldn't be common in the U.S. until after 1950. These tubes used the "LD" prefix and the LD 12 was probably the best known. It had a removable anode cooler so the tube could use alternate cooling methods if necessary.



In 1945 when the war in Europe ended, members of the BHF ran for the American and British lines. Those that didn't make it were soon "employed" by the Russians. Few tubes were more actively developed than the LD 12. The Russians produced a long series of "look-alike" triodes that are still available today. Some were designed for pulse oscillators and some for conventional amplifier service. Pulse tubes have a GI prefix and GS tubes were

for amplifiers. Hams have discovered the GI-7B to be particularly interesting. It has a dissipation of 350 watts and will handle very high voltage. It has been used to replace hard to find sweep tubes in old amplifiers. The first example is an LD 12 from 1944 and the second is a GI-11B from 1978. Not much difference after 40 years.

Visit the museum at N6JV.com
Norm N6JV

**Mother Lode DX/Contest Club
Minutes for meeting January 31, 2015**

The meeting at Mountain Mike Pizza in Martell was called to order by President Shirl at 12:10 PM.

Introduction and roll call of officers found all present.

Introduction of members followed. There were 23 people present

Treasurer's report showed a balance of \$1655.56 on hand.

There was a discussion of dues policy. Moved, seconded & carried to maintain dues optional with fiscal year to run July 1 through June 30. As a result, dues paid in 2015 will be good until June 30, 2016. Policy of only dues paying members to be eligible for club awards is maintained.

California QSO Party was discussed with no action taken.

Application for membership of Dennis Moore NJ6G was presented. Dennis was voted in unanimously.

Vice-president Bob (KR6N) presented schedule of meetings for 2015. Next meeting is to be held on March 21. Some suggested venues for meetings were presented with Rio Vista as a possibility for a 'joint meeting' in July or August. Dick is to consult with Fred Leoni, president of REDXA & Rick Karlquist president of NCCC about details, etc.

Moved, seconded & carried to enter 'club competition' in ARRL DX contests in February & March & CQ WW WPX contests in February, March & May.

Dick is to compose an article for 'Nugget' on 3830.com.

Ken said DL6RAI has bought AI6V's contest QTH in Aruba & is available for rental. Also said we should make sure not to miss K1N operation as there will likely not be another one for at least ten years.

There were short discussions on RTTY RU & contest software without action.

Happy birthday was sung to K6LRN.

Meeting closed at 1:27 PM PST.

Attendess:

ND6S	Ray
W6SR	Rick
NJ6G	Dennis
WA6NHC	Rick
K6TKD	Carolyn
K6SCA	Steve
W1RH	Bob
W6RKC	Rick
KR6N	Bob
K6TA	Ken
K6KO	Kay
AA6K	Shirl
W6VMT	Verne
K6LE	Rick
K6QG	Lyle
N6JV	Norm
K6BEW	Brandt
WC6H	Rich
KI6YYT	Emilia
WB6BET	Jim
N6RK	Rick
K6LRN	Dick

Dick Wilson K6LRN
Secretary, MLDX/CC

UP-COMING DX and Dxpeditons

Click the link below to display up-coming Announced Dxpeditons:

<http://www.ng3k.com/Misc/adxo.html>

QST de W1AW

DX Bulletin 10 ARLD010

From ARRL Headquarters

Newington CT March 12, 2015

To all radio amateurs

This week's bulletin was made possible with information provided by the OPDX Bulletin, 425 DX News, The Daily DX, DXNL, Contest Corral from QST and the ARRL Contest Calendar and WA7BNM web sites. Thanks to all.

VIET NAM, 3W. Wolfgang, DL5MAE is QRV as 3W2MAE from Phan Theit until March 27. Activity is holiday style on 20 to 10 meters using CW and SSB. QSL to home call.

MALAWI, 7Q. Members of the Black Mamba Contest and DXpedition Team are QRV as 7QAA until April 1. Activity is on the HF bands using CW, SSB and RTTY with two teams active at different dates and times. They also plan to be active in the upcoming CQ WPX SSB contest. QSL via N7RO.

TONGA, A3. Nobuaki, JA0JHQ is QRV as A35JR from Tongatapu, IOTA OC-049, until March 16. Activity is on 30 to 10 meters using CW and SSB. QSL to home call.

ANDORRA, C3. Amateur radio operators here are using the C35 prefix until the end of May 2015 to commemorate the 35th anniversary of the Unio de Radioaficionats Andorrans.

THE GAMBIA, C5. Dominic, M1KTA is QRV as C5/M1KTA until March 17. He is active mainly on the newer bands using CW and SSB. He will also be active in the RSGB Commonwealth CW contest. He also plans to be QRV as C5/M1KTA/p from Bijol Island, IOTA AF-060. QSL to home call.

CAPE VERDE, D4. Lukas, HB9EBT will be QRV as D44TEG from Santiago Island, IOTA AF-005, from March 15 to 27. Activity will be on 40 to 10 meters using CW. QSL to home call.

ERITREA, E3. Members of the SEISA/Foundation for Global Children are QRV as E30FB from the capital of Asmara until March 17. Activity is on 160 to 10 meters using CW and SSB with four stations. QSL via M0URX.

NORTH COOK ISLANDS, E5. Jorgen, LA5UF is QRV as E51UFF from Manihiki, IOTA OC-014, until March 17. Activity is on the HF bands using low power. QSL direct to home call.

SOUTH COOK ISLANDS, E5. Nick, ZL1IU is QRV as E51IOU from Rarotonga, IOTA OC-013, until March 21. Activity is holiday style on the HF bands. QSL direct to home call.

SOLOMON ISLANDS, H4. Christian, EA3NT is QRV as H42NT from Bellona Island, IOTA OC-127, until March 14. QSL via M0OXO.

THAILAND, HS. A group of operators are QRV as E20HHK/p from Koh Maeo Island, IOTA AS-145, until March 15. Activity is on the HF bands using CW, SSB and RTTY. QSL via E20HHK.

GREANADA, J3. Bob, G3PJT is QRV as J34G until March 25. Activity is on 80 to 10 meters using mostly CW. This includes an entry in the RSGB Commonwealth CW contest. QSL to home call.

MINAMI TORISHIMA, JD1. Take, JG8NQJ is active as JG8NQJ/JD1 from the weather station here until mid June. He is active on the HF bands using mainly CW in his spare time. QSL direct via JA8CJY.

BRAZIL, PY. Special event station PQ450RIO is QRV during March to celebrate the 450th anniversary of Rio de Janeiro. QSL via bureau.

SWEDEN, SM. Amateur radio operators of the 7th district in Sweden are QRV as SF90IARU until the end of August. QSL direct via SM7HZK. In addition, amateur radio operators of the 6th district in Sweden are QRV as 7S90IARU until the end of August. QSL via SM6JSM.

EAST KIRIBATI, T32. Kenneth, KH6QJ is QRV as T32AZ. Activity is on the HF bands. His length of stay is unknown. QSL to home call.

PALAU, T8. Shigeto, 7K2TTJ will be QRV as T88YD from Koror Island, IOTA OC-209, from March 14 to 18. Activity will be on 80 to 6 meters using CW, SSB and various digital modes. QSL to home call.

NAMIBIA, V5. Nigel, G3TXF, is QRV as V5/G3TXF from Omaruru and will be active in the RSGB Commonwealth CW contest. QSL to home call.

BERMUDA, VP9. Mike, G3VYI is QRV as VP9/G3VYI until March 19. Activity is holiday style on the HF bands using CW. He plans to be active in the RSGB Commonwealth CW contest. QSL to home call.

THIS WEEKEND ON THE RADIO. The All Africa International DX Contest, QRP CW Fox Hunt, NECK RTTY Sprint, NECK Sprint, Nary DX Contest, RSGB Commonwealth CW Contest, F9AA SSB Cup, AGCW QRP CW Contest, Louisiana QSO Party, QRP ARCI Spring Digital Sprint, EA PSK63 Contest, TESLA Memorial HF 80-Meter CW Contest, QCWA QSO Party, Idaho QSO Party, North American RTTY Sprint, UBA Spring 2-Meter Contest and the Wisconsin QSO Party will certainly keep contesters busy this upcoming weekend.

The Bucharest Contest and Run for the Bacon QRP CW Contest are scheduled for March 16. CLARA HF Contest is scheduled for March 17. QST de W1AW

Click on the Hyperlink below to check-out the MLDXCC scores in the latest contests.

<http://mldxcc.org/scores.html>

UP-COMING CONTESTS (complete)

For the latest contest info. click on the following link:

<http://hornucopia.com/contestcal/contestcal.html>

March 2015

+ BARTG HF RTTY Contest 0200Z, Mar 21 to 0200Z, Mar 23
+ CQ WW WPX Contest, SSB 0000Z, Mar 28 to 2400Z, Mar 29

April 2015

+ Missouri QSO Party 1400Z, Apr 4 to 0400Z, Apr 5 and 1400Z-2000Z, Apr 5
+ Mississippi QSO Party 1400Z, Apr 4 to 0200Z, Apr 5

+ Montana QSO Party 1800Z, Apr 4 to 0559Z, Apr 5
+ JIDX CW Contest 0700Z, Apr 11 to 1300Z, Apr 12
+ New Mexico QSO Party 1400Z, Apr 11 to 0200Z, Apr 12
+ Georgia QSO Party 1800Z, Apr 11 to 0359Z, Apr 12 and 1400Z-2359Z, Apr 12 19
+ Nebraska QSO Party 1200Z, Apr 18 to 0200Z, Apr 19 and 1700Z-2300Z, Apr 19
+ Michigan QSO Party 1600Z, Apr 18 to 0400Z, Apr 19
+ North Dakota QSO Party 1800Z, Apr 18 to 1800Z, Apr 19
+ Ontario QSO Party 1800Z, Apr 18 to 1800Z, Apr 19
+ ARRL Rookie Roundup, SSB 1800Z-2359Z, Apr 19
+ Florida QSO Party 1600Z, Apr 25 to 0159Z, Apr 26 and 1200Z-2159Z, Apr 26

May 2015

+ 7th Call Area QSO Party 1300Z, May 2 to 0700Z, May 3
+ Indiana QSO Party 1600Z, May 2 to 0400Z, May 3
+ Delaware QSO Party 1700Z, May 2 to 2359Z, May 3
+ New England QSO Party 2000Z, May 2 to 0500Z, May 3 and 1300Z-2400Z, May 3
+ CQ-M International DX Contest 1200Z, May 9 to 1159Z, May 10
+ CQ WW WPX Contest, CW 0000Z, May 30 to 2359Z, May 31

The K7RA Solar Update

QST de W1AW

Propagation Forecast Bulletin 11 ARLP011

From Tad Cook, K7RA Seattle, WA March 13, 2015

To all radio amateurs SB PROP ARL ARLP011 Propagation de K7RA

For the second week in a row, average daily sunspot numbers were down. From ARRL Propagation Bulletins 6-10 the average sunspot numbers were 139, 81.6, 54.6, 59, and 54.1. Over the past week the number was all the way down to 32.

Also for the second week in a row, average daily solar flux had a trend, but this one was up. Average daily solar flux from ARRL Propagation Bulletins 6-11 were 151.1, 144.1, 121.4, 116.3, 122.9 and 127.8. These averages cover dates from January 29 through March 11.

Predicted solar flux is 128 on March 13-14, 130 on March 15-16, 135 on March 17-19, 125 on March 20, 120 on March 21, 115 on March 22-23, 110 on March 24-27 and 115 on March 28-31. Solar flux then goes to a high of 125 on April 2-15, then drops to a low of 110 again on April 20-23.

Predicted planetary A index is 30, 20 and 12 on March 13-15, then 10, 20, 15 and 10 on March 16-19, 5 on March 20-21, then 15, 20 and 8 on March 22-24, 5 on March 25-26, then 15, 30, 25, 12 and 10 on March 27-31, then 8, 10, 15, 12, 18 and 12 on April 1-6, 8 on April 7-8, and 10 on April 9-10. Going all the way out toward the end of the 45 day forecast, planetary A index for April 24 is expected to be 30. As you can see, forecasters predict similar active geomagnetic conditions seen as previous solar cycles turned downward. The current sunspot cycle peaked about a year ago.

OK1MGW of the Czech Propagation Interest Group predicts geomagnetic conditions will be quiet to active March 13, mostly quiet March 14, quiet to unsettled March 15, quiet to active

March 16-18, mostly quiet March 19-20, quiet to unsettled March 21, quiet to active March 22, active to disturbed March 23, quiet to unsettled March 24, mostly quiet March 25-26, quiet to unsettled March 27, active to disturbed March 28-29, quiet to unsettled March 30 through April 2, quiet to active April 3, quiet to unsettled April 4-5, quiet on April 6, and mostly quiet April 7-8.

OK1MGW believes most increases in solar wind are unpredictable during this period, but some peaks are expected March 16-17, 22-23 and 28-29.

Last Saturday, March 7 at 2222 UTC emerging sunspot 2297 produced a strong solar flare. Although not aimed toward Earth, it produced an extreme ultraviolet flash on our Sun's horizon, which ionized upper layers of Earth's atmosphere and caused an HF radio blackout over the Pacific below 10 MHz.

On March 8, Spaceweather.com reported, "It may seem strange, but solar flares can be both good and bad for radio communications. It all depends on the frequency. Below 10 MHz, signals were strongly attenuated. At higher frequencies, however, the reflectivity of the ionosphere was increased, allowing improved over-the-horizon communications. Ham radio operator Bob MacKenzie of Ottawa, Canada, shares this anecdote: 'Only minutes after the M9 flare on March 7th, I was able to work three amateur stations in Japan using just 5 watts of single-sideband power and a single-element vertical antenna in my backyard. It's a rare event to work Japan so easily with such little power on phone and not Morse code. The annual ARRL International DX Phone contest was on at the time so there were plenty of DX stations on the air, making this observation of unusual propagation possible.'"

Unfortunately, the report did not say what frequency this occurred on, or what Bob's callsign was, and searching a perhaps incomplete database of Canadian hams turned up nothing, so I could not contact him for more information.

Spaceweather.com also reported a flare at 2353 UTC on March 9, which produced an HF radio blackout over the South Pacific. They provided this map showing the area of the blackout:

http://spaceweather.com/images2015/09mar15/blackout.jpg?P_HPSESSID=alissn9afq2fo83ra83v7hq8o4

They provided another map for a brief March 11 blackout at 1622 UTC:

http://spaceweather.com/images2015/11mar15/blackout.jpg?P_HPSESSID=fk3snaqp9j5ruqj488fkmdbik2

If you would like to make a comment or have a tip for our readers, email the author at, k7ra@arrl.net.

Sunspot numbers for March 5 through 11 were 31, 37, 20, 23, 29, 42, and 42, with a mean of 32. 10.7 cm flux was 130, 127.4, 137.8, 124.2, 122.9, 120.9, and 131.7, with a mean of 127.8.

Estimated planetary A indices were 6, 13, 20, 11, 6, 5, and 9, with a mean of 10. Estimated mid-latitude A indices were 5, 9, 17, 7, 6, 4, and 8, with a mean of 8.

The MLDXCC NEWSLETTER

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2015 Officers of the MLDXCC

President, Shirley Rose, AA6K

roses1@prodigy.net

Vice President, Bob, KR6N

kr6n@comcast.net

Secretary – Dick, K6LRN

k6lrn@arrl.net

Treasurer, Carolyn Wilson, K6TKD

k6tkd@arrl.net

Director, Bob Hess, W1RH

w1rh@yahoo.com

Director, Rick Casey, W6RKC

w6rkc@arrl.net

Director, Ken Anderson, K6TA

k6ta@volcano.net

Director, Steve Allred, K6SCA

k6sca@volcano.net

QSL Manager, Norm Regan, WA6SJQ

qsl@att.net

Publicity Chairperson, Brandt Woodard, K6BEW

k6bew@yahoo.com

Nugget Editor, Rick Samoian, W6SR

samoian@directcon.net

Webmaster, Norm Wilson, N6JV

n6jv@n6jv.com

ARRL Awards Checkers

Ken Anderson, K6TA

(including 160M cards)

Rick Samoian, W6SR

(including 160M cards)

Note: ARRL Card Checkers can check DXCC, WAS and VUCC Awards.