



Bulletin



July 2020

From the Prez



Dick K5TF

Thanks to all who have worked to make the June and July ZOOM SEDXC Meetings possible. All comments that I have received have been very positive, attendance numbers and new faces in attendance have been very refreshing to me and tell me that we will survive the pandemic though unable to gather in our normal Piedmont Hospital Rich Auditorium location.

Perhaps the most exciting news that has come across my computer recently was in the July 6, 2020 issue of Daily DX which included a document dated June 27, 2020 entitled "Overlapping Magnetic Activity Cycles and the Sunspot Number: Forecasting Sunspot Cycle 25 Amplitude" by five eminent scientists who studied 270 years of monthly sunspot numbers to identify landmarks marking the start and end sunspot and magnetic activity.

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This Month's Meeting

Date/Time: Thursday July 16th @ 7:00 PM

Location: Zoom Telemeeting

Info: www.sedxc.org

Topic: Club Log and You

Speakers: Jeff Cantor K1ZN; Mike Weathers ND4V

VP's Corner



Mike ND4V

Last month's Zoom meeting was well attended. It was great to see some faces from members who can't just pick up and drive into Atlanta! So, we will try it again this month.

Jeff Cantor, esteemed author of the Nifty EZ guide to Adventures in DXing and I will show you some of the capabilities of Club Log that might help you nail down a new one.

Six meters has been hot this year. We thank Mike, K4PI for his reports from the west side of EM73. Several club members have been active on six and we look forward to hearing from them about the all-time new ones (ATNO) this season.

Chaz usually opens the Zoom meeting up 30 minutes or so before the meeting starts. Gives one time to set the lighting, check the mic, and say hi to folks as they sign in.

73,
Mike ND4V❖

INSIDE THIS ISSUE

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- 25 Years Ago in SEDXC

They have extracted a relationship between the two landmarks and conclude that the new solar cycle 25 will probably be among the strongest solar cycles ever observed. WOW! All the more reason to lay low during this pandemic, wear your facemask when you go out, and practice social distancing. I've experienced some great cycles since 1958 and sincerely hope that their "Outside-The-Consensus Forecast" of SC25 is correct.

Read it for yourselves
at <https://arxiv.org/pdf/2006.15263.pdf>

73,

Dick K5TF ❖



Ideas for Action

Each of the newsletters below from DX clubs have several articles of interest to DXing—Editor

LOW BANDS AND HOW TO PULL THE WEAK ONE OUT BURIED DOWN IN THE QRM by Vladimir Karamitrov; N3CZ.

The Exchange (Southwest Ohio DX Association), July 2020, p. 21; www.swodxa.org

"This paper is about receiving and being able to pick up that weak one sitting just above the noise level or buried in a huge pile-up on frequency and at the same time being able to cope with the presence of the static noise and all kinds of other QRM."

THE IMPORTANCE OF TIGHTENING PL-259 CONNECTORS

PVRC Newsletter (Potomac Valley Radio Club), July 2020, p. 10; www.pvrc.org

"The next four pages spawned from a thread where Frank W3LPL had been explaining optimal RF gain and preamp settings. We join Frank midstream, as he shifts to recommending wrench tightening of all PL-259 connectors..."

Any finger-tightened PL-259 in your station is an invitation to bad station performance. All PL-259 connectors must be wrench tightened to provide a reliable RF path for the coax shield. It should take only about 1/4 turn of your wrench."

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Around the Shack de N4GG



Coax Ratings

I'm sometimes admonished for over-stressing components, particularly coax. RG8-X is a case-in-point. I have run 1,500 watts on RG8-X and been told "You're not supposed to do that." I've never had any fail, but it does get warm.

Coax and other components are typically rated for one or two types of service. Those rating(s) can usually be found if you dig deep enough into the .PDF spec sheets. The ratings are:

CCS: Continuous commercial service (Usually provided).

ICAS: Intermittent commercial and amateur service (Not provided very often anymore).

Other ratings appear now and then too, such as: "Continuous ICAS." This is sometimes used to describe RTTY, SSTV and digital modes where the transmissions are "continuous" followed by some "intermittent" off time, none of which is specified. CCS and ICAS are terms of art. Continuous (CCS) means continuous, intermitted (ICAS) is taken to mean a 50% duty cycle.

These ratings began with power tubes and have continued to be used to cover new devices as they have come along. Transistors, coax, power transformers and other products all have, or should have, CCS ratings. In my experience, ICAS ratings were frequently offered years ago but less so today. It's understood that operating within the CCS rating of a component will yield its full useable life. Operating at the ICAS rating means a decrease in useful life will be expected in exchange for increased performance (power output in the case of transmitting tubes).

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SEDXC OFFICERS

President

Dick Baxter, K5TF
K5tf58@gmail.com

Vice President

Mike Weathers, ND4V
ND4V@comcast.net

Secretary

Paul Kelley, W4KLY
w4kly@bellsouth.net

Treasurer

Jeffrey Cantor, K1ZN
jacantor9@Gmail.com

Activities

Norm Schklar, WA4ZXV
WA4ZXV@arrl.net

Appointed Positions

SEDXC Bulletin Editor

Clark Macaulay, WU4B
clark.macaulay@gmail.com

Membership Committee Chairman

Bill Barr, N4NX
n4nx@arrl.net

Webmaster

Chaz cone, W4GKF
w4gkf@chazcone.com

Club Communications

SEDXC Webpage: www.sedxc.org
 SEDXC Chat Room: details on webpage
 SEDXC Reflector: details on webpage

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Treasurer's Journal

Balance on hand as of June 7: \$14,679.

73 and stay safe,

Jeff K1ZN ❖

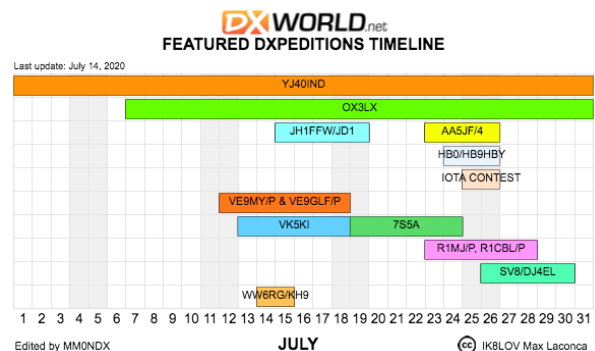


IOTA Contest, July 25 – 26

Info:
<https://www.rsgbcc.org/hf/rules/2020/riota.shtml>

DXpeditions This Month

Info: www.dx-world.net



Ideas for Action (cont.)

THE MOTHER OF ALL 6m eS OPENINGS
SCDXA Newsletter (Southern California DX Association), July 2020, p. 7
<http://www.scdxc.org>

“Maybe some of you did not hear about this! On June 22nd this year we had an opening from Europe to the West Coast on 6 meters that lasted almost 4 hours! For those unfamiliar with 6 meters this is unusual... no, it has never happened before!”

SOLAR CYCLE 25 UPDATE
www.dx-world.net

NOAA has released a new interactive tool to explore the solar cycle.

Around the Shack (cont.)

Power transformer ratings are particularly important when you consider the expense of replacing the HV transformer in a KW linear amplifier. Alpha has made some of the finest amps there are. From the advertising for their model 8410: 1500W, 100% duty cycle, no time limitation, key down forever. That's a CCS rating! Alpha amps are expensive but you get what you pay for. Their reliability and performance in amateur service (ICAS) is superb.

Hopefully, the designers of any gear you buy have dealt with the ratings of the key components and designed-in what's needed. Regrettably this is not always the case. There are 1,500 watt amplifiers that weight 30 pounds and others than weigh 90 pounds. A lot of the weight is in the power transformer. The 30 lb amplifier might, or might not, barely meet ICAS specs. The 90 lb amp might be good for CCS. If you have been around the hobby a while you have probably seen lightweight (and typically low priced) amplifiers fail. Another notoriously failure-prone product is "high power" antenna tuners. Many of these are advertised as able to do more than they can actually do. Many operate on the edge of ICAS or worse.

Meanwhile, while the internal components of our store-bought gear are selected by the designers, there are other areas where we get to pick the parts ourselves. One such area is coax and coax connectors. In February, 2019 I wrote about UHF connectors. That column in five words: "Amphenol or not at all." So, what about coax?

Here are the CCS ratings for RG8-X (Belden 9258):

-40 to +80 C
1,000 watts @ 10 MHz
370 Watts @ 50 MHz
250 Watts @ 100 MHz
190 Watts @ 200 MHz
110 Watts @ 400 MHz
75 Watts @ 700 MHz
60 Watts @ 1 GHz

There are no published ICAS ratings that I can find. This is often the case. Sticking with CCS ratings is the conservative thing to do. If we are within the CCS ratings and operating ICAS then we have margin and margin is always good...except, we may be spending more money and taking on more weight than we need to. Sometimes ICAS is all we need or can afford.

Note temperature and frequency are given for the RG8-X CCS ratings. RG8-X will not fail when carrying 1,000 watts, at 10 MHz, at +80 C for 24/7/365 continuous service. This is far removed for what we hams need. We don't operate in 85 centigrade environments and we don't transmit continuous carriers for days on end. We should be able to run more power in RG8-X, yes? Well, probably. Though not explicitly stated, the CCS ratings are for an SWR of 1:1. We don't usually operate there either. As hams, non-continuous service and reduced temperature are in our favor and increased SWR is working against us.

So, what can RG8-X handle in ICAS service? It's a good question and there is no objective answer. It depends on "everything." Ambient temperature, frequency, SWR and how "intermittent" our intermittent operation actually is. The duty cycle for CW and SSB is roughly 50%. RTTY, SSTV etc may be on and off 50% of the time but the transmissions are long – pushing us closer to needing to stay within the CCS ratings.

Let me add one more item – the CCS ratings are "guaranteed" by the manufacturers. They include a margin (sometimes called safety factor) kept in the manufacturers' hip pocket. One that is held and not revealed, but must be there to not disappoint the customer and/or cause a warranty claim. In CCS service, the 1,000 watts at 10 MHz CCS rating for RG8-X can be exceeded by some amount (taking the manufactures' margin for ourselves) but by how much? We don't know.

A good rule of thumb is the ICAS rating is between 15% and 50% greater than the CCS rating. That's a wide range, because it covers a wide range of pluses and minuses based on how we actually use something, and based on the margin the manufacturer has built in.

Okay, but after all this rambling, we need a number. I have run 1,500 watts up to 30 MHz and 2:1 SWR on RG8-X for years without a single failure. That's my best answer.

I'll throw one more item into the mix: RG8-X, in particular, is offered by many manufacturers and is made in China, the US and many other places. To me, Belden is like Amphenol. The product comes with a specific part number and specification sheet. It is "the good stuff." If you are going to push the limits on RG8-X remember that the limit will depend on who made it and where.

And another thing! How old is your RG8-X? It might matter. We don't think of coax having a lifespan, but rough use, particularly outdoors, will degrade coax and cause a loss of margin.

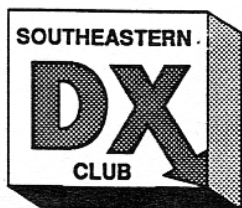
I can't tell if this column is helpful or just confusing. Consider all of the above and make a judgment call. If you are OCD, this might not be very satisfying!

73,

Hal N4GG❖

DXpedition Funding Requests

None for this month—Editor.



SOUTHEASTERN DX CLUB W4NT

*THE
SOUTH'S
PREMIER
DX CLUB*

July 1995

NEXT MEETING TIME & LOCATION

DX BANQUET!! Saturday, July 15th, 7:00 PM, Old Hickory House in the Days Inn, Roswell Rd., just inside I-285. Call Delaine or Nancy.

PRESIDENT'S MESSAGE

-Steve Schmidt, KR4DL, President

I must say that I'm flattered at my selection to fill this space in the newsletter. Then, perhaps you were just nervous about having me sitting behind you at the meetings and decided to set me up front where you could keep an eye on me. Nevertheless, you've cast your votes (at least, a few of you did) and now you'll have to put up with my ideas.

I felt compelled, as a potential candidate, to carefully review the constitution and bylaws of the club and it occurred to me that it's probably time to revise and update it. We're not meeting some of the requirements of these documents; in some cases, we may not want to meet them. There are curious ambiguities, like "...valid post-War DXCC." I think I know the War in question but perhaps it won't be obvious to our youngest members. Hey, this isn't heady stuff, I admit, but the lowest spot in the solar cycle seems a good time to address these irksome tasks. Perhaps if we get this out of the way I'll think of something more interesting. I'm looking for volunteers for help with this.

Carl Henson put on the show for the June meeting. He brought a veritable menu of selections and those present voted for Chad, a fascinating collection of bullet-riddled buildings. Carl says he only heard a few shots. Thanks, but I think I'll stick to tropical beaches!

The July meeting, of course, is the banquet as noted elsewhere in the newsletter. Please try to make it Saturday night; if not for the food, then do it to honor the recipients of the W4NT and Hall Of Fame awards and to thank the outgoing officers. I suspect I'm about to find out they deserve it. Hope to see you there!

73, Steve KR4DL

FROM THE VP

by Sonny Marsh, KE4LDJ, VP

Hello everyone! Thanks for having me here as your new Vice President. I'm excited about the year ahead, and I have plans for some very entertaining and informative programs.

I got my first Amateur license in 1955. I let that (Novice) license expire when I went to college and now, some 40 years later, I'm back in the wonderful hobby of Amateur Radio. There have been a lot of changes... so much to learn.

I'm looking forward to getting to know all of you better so say hello when I see you at the Banquet. It will be held at the Hickory House in the Day's Inn; Roswell Road and I-285 just inside the Perimeter at 7:00 PM on Saturday evening, July 15. Happy hour begins in the Bar at 6:30 PM.

Hope to see everyone there.

-Sonny, KE4LDJ

TREASURER'S REPORT

**-John Tramontanis N4TOL (outgoing)
& Nancy Draheim NK4U (incoming)**

From John: There is no treasurer's report available for this newsletter as the transition in the office is made from myself to Nancy. The next letter will include the report as usual. I would just like to say I enjoyed serving the club and its members over the past two years as treasurer and appreciated your patience and support. I guess one thing that stands out is that in these two years not one check bounced! Hi! Much unlike the average here at my work place. However, that comes as no surprise considering the fine group of folks that comprise our membership.

From Nancy: Did you know that this checking account was opened in 1950??

MINUTES, SEDXC MEETINGS 4-6/95

-Buddy Harrell, W4OUN, Sec.

Minutes From April Meeting Held 4/18/95

The meeting was called to order by Delaine, KM4FV. There were introductions by all including new members and visitors.

Jim, W4QO, reported on DXPO. Good feedback was received on the forums. There were approximately 130 present at hospitality and everyone seemed to enjoy themselves. Ed, K4SB, did a great job on this particular aspect. Thanks Ed. Also, there were about 25 people at the Breakfast.

Larry, N4TMW, provided a preliminary report on HR95. Final results were not yet available. The exhibit hall has been leased for 96 and vendors have started signing up for next years' activity. The event is expected to grow.

Ed, K4SB, informed all present that he has developed a database of available call signs for use with the new Vanity Call Sign program. Contact Ed if you are interested..

Dave Thompson, K4JRB, reported that Carl Henson, WB4ZNH had been elected to the DX Hall of Fame. Carl went on 17 DXpeditions, mainly Africa, during the 1980's. Congratulations and thanks Carl for the "new ones" you provided us.

The SEDXC was second in the 160M contest. Great job everyone.

It was reported that Bob, K4UEE is going to Easter Island this summer.

Dick, K2UFT, presented yet another Cayman Island slide show.

Minutes from May Meeting Held 5/16/95

Delaine was on vacation so Dick, K2UFT, presided over the May meeting. There were the customary introductions by everyone.

There is a bill to be paid to the Kansas City DX Group for our share of the Dayton hospitality suite. Prior to the next convention, this activity needs to be better coordinated. This should be part of the new officers responsibilities.

Phil Latta, W4GTS, was asked to poll all members of the SEDXC Hall of Fame for nominations to this august body.

AE4EZ, Kiyoshi, discussed the Ham population and DX activity in Japan. In late August, he is going to a show there and wishes to display the SEDXC flag, sell shirts and pins, and solicit overseas members. The club voted to authorize Kiyoshi to represent us and to subscribe up to \$100 to subsidize his booth. Also, it was decided we would provide pins and shirts for him to sell. Quantities to be decided later.

There were discussions of the annual banquet to be held July 14 or 15. Location to be decided at the next meeting.

The program for the night consisted of a SSB call copying contest won by John, N4TOL, and a left footed CW contest won by yours truly, W4OUN. (Phil Latta says I send better code left footed than I do normally. Very funny, Phil!)

A reminder that elections will be held at the June meeting.

Minutes From June Meeting Held 6/20/95

The meeting was called to order by Delaine, KM4FV. There were introductions by all including new members and visitors.

The first order of business concerned the "when and where" of this year's banquet. It was decided that the banquet would be held on July 15 at the same location as the regular meetings. (There should be additional information concerning the banquet in this bulletin.)

The slate of officers for the next term was presented and accepted unanimously by the club. They are:

President	Steve Schmidt, KR4DL
V. Pres.	Sonny Marsh, KE4LDJ
Secretary	Buddy Harrell, W4OUN
Treasurer	Nancy Draheim, NK4U
Activities	Dick Bentley, K2UFT
Membership	Vern Fowler, W8BLA
Editor	Rick Glisson, N4XMX

There was discussion and approval voted that Kiyoshi AE4EZ represent the SEDXC at the Japanese HamFair.

Carl Henson, WB4ZNH, provided an entertaining presentation on his DXpedition to Chad back in the mid-80's.

The meeting was adjourned at about 9:15.

73's and DX, Buddy

BEEPS FROM K2UFT

-Dick Bentley, K2UFT, Activities Director

Congratulations to our new leadership team. I'm sure Steve and company will do a super job for the SEDXC. It was my honor, occasionally a pleasure, to serve you as VP and provide some programs for you. In 95/96 I'll continue to suggest activities for the membership.

Our July/August activity was to provide Kioshi, AE4EZ, with a QSL from one of your DXpeditions along with a narrative for his use. Get them to him prior to mid-July so he can take them to the Japanese Hamvention.

Also, don't forget the Atlanta Ham Festival, July 15-16th and our own banquet Saturday night on July 15th.

73 Dick, K2UFT

DX TIDBITS

-Rick, N4XXM

The beam is up! Of course to the big guns with the multiple towers and stacked monobanders, that is a monthly occurrence. However, in the small pistol category, having any beam up at all is a major event. That fact that the beam is up a 30' pole makes it that much more challenging.

I had originally planned to put up a small tower in the back of the lot. Even borrowed Jim's, N4UCK, Rohn book to check out the requirements. Turns out that to even put up a 40' guyed tower would require a distance of 32' for the tie downs. Without taking out quite a few more big trees and staying on my property, that wouldn't work.

Thought about a free standing tower. Again, checking the book said that I needed to dig a hole 6' deep for a small one. A test dig revealed water at 2'. Not just a little mind you, but pouring in faster than I could get it out. Sort of like digging at the beach. No wonder the former owner divided the back yard in half with a fence!

After assembling the whole mess on the ground with some scaffolding supporting the antenna/rotor end, I was ready for the final act of raising this monster. Talked 6 guys from work into

coming over by mentioning something about a quick job. I didn't tell them about the swamp, mosquitoes and alligators...

To make the story short, it took 5 people pulling on the ropes forward, myself and one other pushing up with an extension ladder, and my wife standing by behind to keep the monster from sailing past the vertical position!

After a few false starts, the antenna went up generally as planned. A few elements had to be realigned after catching on a few limbs on the way up. A quick check of the SWR indicated that nothing had broken on the way up! Watch out VKØ!!

I ordered 170' of rotor cable, allowing 20' extra. Of course, after it had snaked its way through the woods, I had 2' to spare. Oh well... better than being 2' short.

I did work ZK3RW that night on 20 meters, so it must be doing something. I do try to work low power until I'm sure of all the neighbors. Tried to work my father on 20 meters in Virginia but no go so back to 40 meters. With my vertical, I have to run around 300-400 watts to rise above the noise level. We chatted for before signing and K4JAG came on for awhile. So nice to chat once for a change!

Speaking of DX, do try to work the 5A and A5 which hopefully all will be up very soon. For guys like me who have not been on long, these have not been possible. Also try to nab the 3V, they will return in August for another couple of weeks.

-CU in the pileups

Rick, N4XXM

KK4JF CLUSTER FREQS.

DIRECT CONNECTS

1200 BPS	144.93
2400	144.93
9600	145.61
9600	440.75

THRU COMDEX/COMDEX 2/ COMDEX 3

1200	145.71
2400	145.71
9600	440.75

The SEDXC Newsletter is published monthly by the Southeastern DX Club. All opinions expressed by the contributors do not necessarily reflect those of the editor, officers, or club. We welcome your opinion.

SEDXC OFFICERS

President: Steve Schmidt, KR4DL
H: 242-6142 W: 242-6140
V. President: Sonny Marsh, KE4LDJ
H: 578-1974 W: 477-0002
Secretary: Buddy Harrell, W4OUN
H: 296-7641 W: 493-2272
Treasurer: Nancy Draheim, NK4U
H: 516-4413
Activities: Dick Bentley, K2UFT
H: 393-2150 W: 913-3624
Membership: Verne Fowler, W8BLA
H: 993-2909 W: 518-4634
Editor: Rick Glisson, N4XMX
H: 352-5349 W: 522-8364

DX PACKET FREQ. (2400 baud)

W8ZF	145.63
K4KG	144.91
N4UCK	145.65, 144.97 (ARCDX)
KK4JF	145.71 (also 1200)

DX COMMUNICATION FREQ.

Simplex	147.54
Melvin	147.51
K4JPD Repeater (tone 7)	147.795/T-195/R
W8BLA/R	442.075+

NEXT MEETING

Nov. 21st 7:30 PM, Old Hickory House, Days Inn on Roswell Rd., just inside I-285