

The Pileup

Newsletter of the CDXA

New CDXA Club Log Policies

Requirements to be included in the CDXA Club League on Club Log:

1. Must be a member of CDXA in good standing
2. Must request to be added to the CDXA Club Leagues. The request shall be processed by the Contest Manager or a board member designated by the Contest Manager.

Upon request of a non-CDXA member to join CDXA Club Leagues a return communication should be sent inviting such non-member to join CDXA which would then make that member eligible for CDXA Club leagues. Upon request of a CDXA member to join CDXA Club Leagues such request shall be granted. Furthermore a communication should be sent to the member explaining the desire of CDXA to be competitive in the Leagues. The communication should encourage that member to increase his/her DXCCC totals, with obtaining top honor role as a long term goal.

CDXA Fall Bar-B-Que

The CDXA fall Bar-B-Que is scheduled for October 14, 2017. The location will be at the home of the Blackwells.

The Blackwell's
6391 Baker Lane
Lake Wylie, SC 29710

Here is the link to the RSVP form: <https://goo.gl/uqii58>
Come early, if you would like to help with the setup & preparation ! The meal is being catered by Jim and Nick's BBQ and will consist of:

Hand Pulled BBQ Pork, Slow Cooked Whole Chicken cut Picnic style, BBQ Baked Beans, Creamy Cole Slaw, Potato Salad. As in past years, everyone is encouraged to bring a salad or dessert item to share. For 2017, we are requesting that if your last name begins with letter A-L that you please bring a dessert item, if your last name begins with letter M-Z, please bring a salad item. The price of \$15 per person includes your meal and drinks



CDXA PacketCluster & Other Communication Systems

K4MD (AR Cluster via Telnet)	k4md.no-ip.com
W4DXA (AR Cluster via Telnet)	w4dxa.no-ip.com
CDXA Repeater 147.18 MHz (+600)	W4DXA, Near Fort Mill, SC
World Wide Web Homepage	www.cdxa.org
Wednesday Luncheon (11:30 AM)	Skyland Family Restaurant, 4544 South Boulevard, Charlotte, NC

No sunspots..now what?

Bill Turner, W4WNT

As you know the sunspot cycle is on its way to its minimum in the next two years or so. As the signals disappear from the usual HF bands, what can we do to continue having fun in ham radio? Tuning across 20m or 40m phone you don't hear much activity but are there contacts being made?

Checking out the digital parts of these bands you can hear some PSK31 which can be worked with programs such as FLDigi (www.w1hkj.com) which is free or Ham Radio Deluxe (\$\$) found at www.ham-radio-deluxe.com

The interesting programs by Dr. Joe Taylor, K1JT, a Princeton astronomer whose studies of Binary Pulsars led to his Nobel Prize in Physics in 1993, have become very popular in the HF and VHF digital world. These are called WSJT modes, Weak Signal Joe Taylor, which use sophisticated algorithms to pull signals out of the noise. The signals are below the noise levels in most cases and signal reports are given in dB below the noise level. The most recent general availability release for WSJT-X (wsjtx-1.8.0-rc2) can be found at Joe's website: <http://physics.princeton.edu/pulsar/K1JT/wsjtx.html>

The best part is that these modes will work very well with compromise antennas and low power. Common power levels are 5w to 25w although occasional excursions to 50w may be needed depending on your antenna.

The most common modes of WSJT are:

JT65 and **JT9** used for HF and VHF operation.

MSK144 which is used for Meteor Scatter on 6m and above.

WSPR which is used to identify where your signal is being heard. Transmission is 5w or less.

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The purpose of the association is to secure for the members the pleasures and benefits of the association of persons having a common interest in Amateur Radio.

Members of the CDXA shall adhere to "The Amateur's Code" as published from time to time in *The ARRL Handbook for Radio Amateurs*, and shall consist of those valid licensed amateur operators having an interest in promoting amateur radio. Long distance communications (DX) is of special interest to members of the association, but said interest is not a requirement of membership.

Yearly dues are \$25.00. A second licensed Amateur family member living in the same household can join for \$5.00 for a total family price of \$30.00 per year. The total price for 3 or more licensed family members living in the same household is only \$35.00 per year. All family members enjoy full member status. Dues are payable annually in December by check or through [the CDXA website](http://theCDXAwebsite.com), to the Secretary/Treasurer:

Cliff Wagoner, W3ZL
P. O. Box 577
Davidson, NC 28036

Address, telephone, and email address changes should be directed to the Secretary/Treasurer at the above address or via email at: jew53@cornell.edu.

FT8 developed by Steve Franke, K9AN, and Joe Taylor is the newest mode designed for contest use.

FT8 was introduced in late June 2017 and has become the hottest and most active digital mode in HF with 3500 members in a Facebook group devoted to it. (<https://www.facebook.com/groups/FT8.Digital.Mode/>)

Frequencies are devoted to each of the modes by general agreement.

JT65 7.076, 14.076 MHz

JT9 7.078, 14.078

MSK144 50.260, 50.280

FT8 7.074, 14.074, 50.313

See figure 1.0 to see how a typical screen and waterfall set up looks in WSJT-X 1.8.0 rc2, which is the most current release candidate.

See figure 2.0 to see the WSJT-X Setup screen on an IC-7300.

There are several sources of information on WSJT modes, including a user guide in the WSJT-X program accessed with F1. There are Yahoo groups and Facebook groups dedicated to the various modes. While preparing for this article I found a web page written by W4AS describing these modes at http://wsjtx.net/home/wsjtx-x_team.html

Yahoo: wsjtxgroup

Yahoo: WSJT Meteor Scatter and Weak Signal Group

Facebook: JT65A Digital Mode on HF

Facebook: FT8 Digital Mode Experimental Group

Facebook: WSJT-X Community

Ping Jockey Central: <https://www.pingjockey.net/cgi-bin/pingtalk> (Used for MS and JT65 contact discussions).

PSK Reporter: <https://www.pskreporter.info/pskmap.html>

(Who is hearing me? Plotted on a world map, not just PSK but most digital modes are covered as well as CW)

So don't let the low sunspots get you down, hop on the digital train!



Expert Electronics: The new GUI for SunSDR-MB1

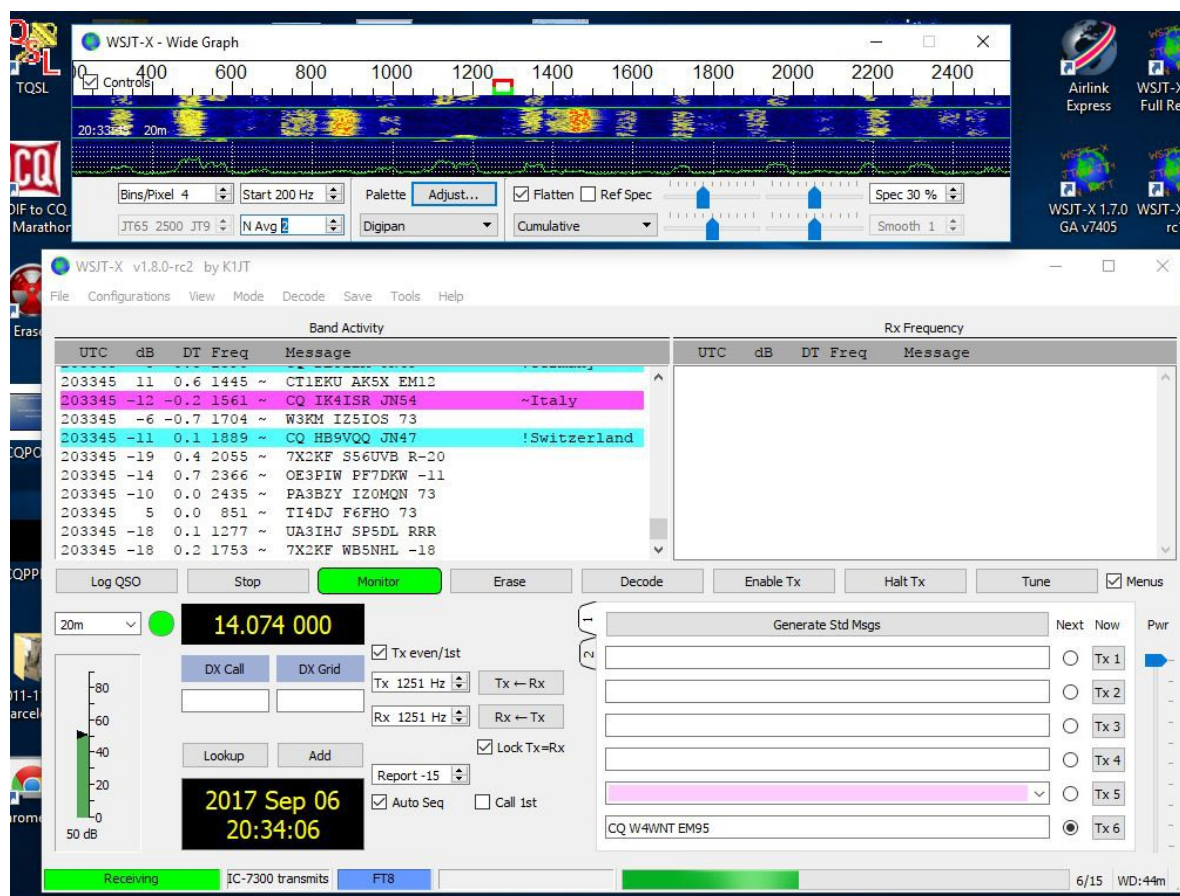


Figure 1.0, Screen and Waterfall WSJT-X Setup

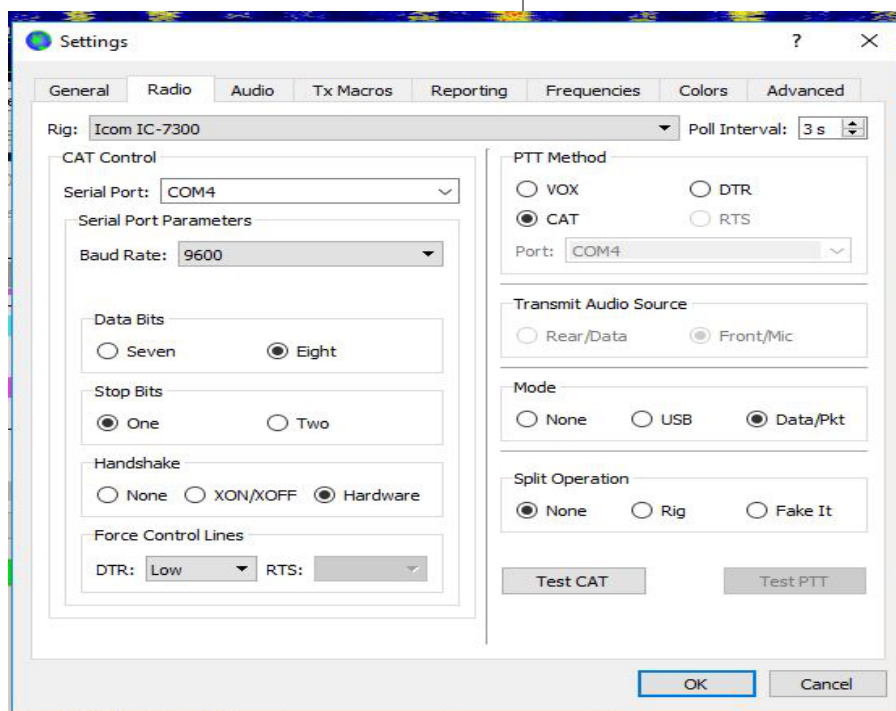


Figure 2.0 WSJT Setup Screen from an IC-7300

CDXA Scores in 2017 ARRL International DX CW and Phone Contests... CDXA Takes Third Place!

John Forbus, NV4A

The final results of this year's ARRL International DX CW and Phone contests have been published, including the results of the 2017 Club Competition. CDXA's total score in the CW and Phone contests combined was 15,246,312 points, good enough to place us third of the 40 clubs in the Medium Category this year. Listed below, in alphabetical order, are the CDXA members who contributed to CDXA's club score, in CW and Phone. The last column shows the member's place in his class in the geographic area shown and the number of entrants in that class from that area. Thanks to all who participated and helped us get a great Club result.

Special congratulations to K7BV who was #1 in the CW Single Operator Unlimited High Power for the Southeast Region (including Delta, Roanoke and Southeastern Divisions) and to W4ZV who was #1 in CW Single Operator 160 for the Southeast Region (including Delta, Roanoke and Southeastern Divisions.)

CW Scores:

Call	Score	Class	Section	Ranking in Class
AA4R	603936	Single Op Assisted Low Power	NC	1/8
AA4V	503874	Single Op Assisted High Power	SC	4/6
AD4IE	84102	Single Op Assisted High Power	NC	13/16
K2SD	189888	Single Op Assisted High Power	NC	9/16
K2SX	1076316	Single Op Assisted High Power	SC	1/6
K4KAY	146292	Single Op Assisted High Power	NC	10/16
K5EK	2062104	Single Op Assisted High Power	NC	2/16
K7BV	3199914	Single Op Assisted High Power	NC	1/16
W3GQ	1582776	Single Op Assisted High Power	NC	3/16
W3OA	965034	Single Op Assisted High Power	NC	6/16
W3ZL	121344	Single Op Assisted Low Power	NC	5/8
W4LM	8643	Single Op Single Band (40)	NC	1/1
W4WNT	47952	Single Op Assisted Low Power	NC	8/8
W4ZV	36720	Single Op Single Band (160)	NC	1/1

Phone Scores:

Call	Score	Class	Section	Rank in Class
AA4R	421632	Single Op Assisted High Power	NC	6/19
K2SD	34164	Single Op Assisted High Power	NC	13/19
K4KAY	142623	Single Op High Power	NC	1/28
K5EK	934800	Single Op Assisted High Power	NC	2/19
K7BV	1230594	Single Op Assisted High Power	NC	1/19
KC4G	58995	Single Op Assisted High Power	SC	3/5
KD4RH	16038	Single Op Assisted High Power	SC	5/5
NV4A	123444	Single Op Assisted High Power	NC	11/19
NZ4DX	3444	Single Op QRP	NC	24/28
W3GQ	672231	Single Op Assisted High Power	NC	4/19
W3OA	700533	Single Op Assisted High Power	NC	3/19
W3ZL	99450	Single Op Assisted Low Power	NC	4/9
W4QN W	21771	Single Op 80 Meters	SC	1/1
W4WNT	12210	Single Op Low Power	NC	17/28
WA3DQ S	118428	Single Op High Power	NC	3/28

CQ Publishes Results of the 2016 CQWW CW and Phone Contests

John Forbus, NV4A

CQ has published the final results of last year's CQ World Wide Contest. CDXA placed thirteenth among the 57 U.S. entries in the Club Competition. Our score was 20,816,682 points, with 37 entrants. That's not bad when you consider some of the clubs that beat us are a lot bigger than CDXA. In fact, only one club with less participants scored higher than we did. However, we can do better this year. See the accompanying article in this issue announcing this year's CDXA CW Contest Within A Contest (CWAC).

Listed below, in alphabetical order, are the calls of CDXA members who scored in the top half of their class, in CW and Phone, as listed in CQ. The last column shows the entrant's place in his class and the number of entrants in that class.

CW:

Call	Category	Score	QSOs	Zn	Cty	Rank in Class 4th Call Area
AA4R	Single Op Assisted High Power	541,508	624	88	253	2
AA4V	Single Op Assisted High Power	601,230	573	98	311	21
K2SD	Single Op Assisted High Power	128,544	276	56	150	51
K4FAN	Single Op Assisted Low Power	26,520	93	41	79	34
K4MLD	Single Op Assisted Low Power	1,855	23	13	22	57
K4KAY	Single Op Assisted High Power	105,618	272	51	123	54
K7BV	Single Op Assisted High Power	2,213,860	1,441	129	451	1
KC4G	Single Op Assisted High Power	32,984	105	36	88	74
KU4V	Single Op Assisted Low Power	112,815	209	63	144	15
KS4S	Single Op Assisted Low Power	78,880	199	39	121	20
N4PQX	Single Op Assisted High Power	160,770	248	60	173	46
W3GQ	Single Op Assisted High Power	1,400,066	1,096	110	357	3
W3OA	Single Op Assisted High Power	815,235	736	106	311	13
W3ZL	Single Op Assisted Low Power	116,991	257	51	138	14
W4TJE	Single Op Asst. 40 m	63,364	161	38	108	3
W4WNT	Single Op Assisted Low Power	32,121	115	39	90	31

Phone

Call	Category	Score	QSOs	Zn	Cty	Rank in Class 4th Call Area
AA4V	Single Op Assisted High Power	13,940	67	33	52	78
AE4VJ	Single Op Assisted High Power	142,882	270	54	145	33
K2XN	Single Op Low Power All	22,300	100	34	66	42
K4FS	Single Op Assisted High Power	6,612	48	24	33	81
K4KAY	Single Op Assisted High Power	136,746	279	69	144	15
K5EK	Single Op Assisted High Power	1,296,000	1,099	115	335	2
K8YC	Single Op Assisted High Power	26,400	107	32	64	66
KC4G	Single Op Assisted High Power	48,970	156	31	87	53
K4MV	Single Op Assisted Low Power	64,935	136	64	121	9
KU4V	Single Op Assisted High Power	206,296	330	71	170	26
KZ2I	Single Op Assisted High Power	37,760	130	43	85	60
N4PQX	Single Op Assisted High Power	1,033,659	797	117	360	6
N4UFP	Single Op Assisted High Power	111,825	254	53	122	18
NV4A	Single Op Assisted High Power	47,740	133	45	95	54
W3OA	Single Op Assisted High Power	825,246	821	103	278	8
W3ZL	Single Op Assisted Low Power	109,011	249	54	125	4
W4QNW	Single Op HP 80 M	26,163	138	21	60	1
W4WNT	Single Op Assisted Low Power	6,016	49	23	41	29

CWAC 2017**CQWW Contests In October And November: We still need more help!**

John Forbus, NV4A

It's time to get ready for the CQ World Wide contests and CDXA's Contest Within A Contest (also known as CWAC). The phone contest starts on Friday evening 8:00 PM EDT on October 27 and runs for 48 hours, while the CW contest begins at 7:00 PM EST on November 24. Note that the local times for the Phone contest are during Daylight Savings Time and the CW contest times are given in Eastern Standard Time. Once again we are offering several prizes to encourage participation in CWAC which should help our club score. The details are below, but first PLEASENOTE:

CDXA needs every member's help to improve our standings in the CQWW Club Competition. From 2002 to 2007 we made fairly steady progress in going from 20th place in the U.S. all the way up to 8th place. But in the last eight years we have been stuck outside the top 10 – we got back to 11th place in 2011. Our 2015 score of 30,355,666 put us in 14th place among US clubs. As noted in the results published in this month's Pileup, we finished 13th in 2016. As we mentioned last year, K5ZD, Randy, the former CQWW Contest Director and a top contester, gave a presentation in 2014 filled with tips on how to improve your single operator score. You can get to the video here: [Tips on Being a Better Single Operator by Randy, K5ZD](#). If you prefer reading, here's a [link](#) to a pdf version. The presentation covers a whole raft of subjects such as station layout, skills development, operating strategy, etc. Even if you've watched it or read it before, it's still worth checking out again before the contest starts.

In summary, EVERY point counts, so even if you have limited operating time, please get on the air and help us out. Even if you aren't really a contester, look at this as a chance to add ATNOs, new band/mode entities, and "year entities" for the DX King Contest. A plus is that a pretty high percentage of contesters upload their logs to LOTW, so

you'll have a better than average chance to get that needed entity confirmed. Now, for those prizes to add some additional incentive to participate:

We are bringing back the Outback Steakhouse gift cards which had been popular in the past. Remember they are also good at Carrabba's, and the Bonefish Grill.

There are prizes for both serious efforts and more casual operations:

First place prizes – Each winner will receive a \$50 Outback Steak House gift card. These will be awarded in the categories listed below. An individual can only win one prize. The Multi-op prize will only be awarded to an entrant whose score is high enough to have won one of the other first place prizes.

- Top combined Phone and CW score
- Top CW score
- Top CW score, low power
- Top Phone score
- Top Phone score, low power
- Top Multi-op score
- Top DXpedition score

Other prizes:

- 1000 or more QSO's total in the Phone and CW contests – Each winner will receive a \$25 gift card for Outback Steak House.
- 500 or more QSO's – A photo printed CDXA certificate and a chance in a raffle for a \$25 gift card.
- 250 or more QSO's – A chance in a raffle for a \$25 gift card.

Only members whose scores are eligible for the club competition as defined in the [contest rules](#) on the CQWW web site can win a gift card. That means your station must be within 250 miles of our club center, or you must be on a DXpedition and live within that radius. If you aren't sure if you are within our radius please check with me before the contest.