

WINTER FIELD DAY CONTACT SUGGESTIONS: JS8 Alachua County ARES(R) / NFARC

12/7/2023

Revised: Jan 9 2024

NOTE

For JS8 operation you cannot have both JS8 *and* N3FJP trying to control the transmitter. It is important to **JUST** have JS8 controlling the transmitter with CAT control. If you previously had N3FJP controlling the radio, you will need to turn that function OFF.

In N3FJP, click SETTINGS | Set up Rig Interface and then in the list under "Select Rig", pick NONE and then click DONE at the bottom of the popup dialog box.

FIRST

Enter yourself as the operator into the Logging System -- click "Operator" and enter call and initials:

The screenshot shows the N3FJP Contest Log 6.5 interface. The 'Operator' menu item is highlighted with a red box. Below the menu, a dialog box is open for entering operator information, with the 'Operator' field containing 'W4UFL' and the 'Initials' field containing 'JC'. The dialog box also has a 'Done' button. The background shows a table of recent contacts with columns for Class, Sec, Date / Time, Bnd, Mode, Country, and Initials.

Class	Sec	Date / Time	Bnd	Mode	Country	Initials
1D	SF	06/28 17:01	40	DIG	USA	LG
3D	NC	06/28 17:00	40	DIG	USA	LG
1E	AL	06/28 16:59	40	DIG	USA	LG
1E	GA	06/28 16:53	40	DIG	USA	LG
1D	TN	06/28 16:47	40	DIG	USA	LG
1D	NC	06/28 16:44	40	DIG	USA	LG
1D	NFL	06/28 16:40	40	DIG	USA	LG
1E	NC	06/28 16:38	40	DIG	USA	LG
1D	NC	06/28 16:36	40	DIG	USA	LG

SECOND

Set your BAND and MODE in N3FJP -- Click on BAND to pick the band, and click on MODE to select DIGITAL. All Digital modes are equivalent for points and duplicates. Only PHONE and CW are different modes. .

THIRD

Logging to N3FJP Winter Field Day Contest Log for JS8 appears to be largely MANUAL, the same as for PHONE or CW. There is a possible way to connect the two systems, but the only thing it enters automatically (without further typing) is the CALLSIGN. Not sure that is worth it....

HOW WE SUGGEST YOUR BUTTONS BE CONFIGURED

BUTTON	SENDS:
CQ	CQ WFD
REPLY	3I NFL (our exchange)
INFO	R 3I NFL (reply to their exchange)
STATUS	QSL 73 (You may wish to append CQ FD to this if our experience shows it works...)

If your setup is already complete, you can move directly to CONTACTS:

**RUNNING CQ WITH JS8
USING ONLY THREE BUTTONS!!**

No.	Item	Detail
1	Make sure your chosen transmit slot ("red lines") are in a somewhat "clear" area	Otherwise folks won't be able to hear your CQ
2.	Click CQ Button	It may take some seconds before it transmits because it has to wait for the start of the next interval
3	After your CQ, and the next receive interval, if someone calls you, CLICK on the one you wish to reply to-- then click INFO if they sent their exchange, or REPLY if they only gave their call sign	REPLY: Sends your EXCHANGE INFO: Sends R and your EXCHANGE
4.	Look and see if the other station returns an "R" or "QSL" or some other acknowledgement (this is important!) and hopefully they send THEIR EXCHANGE <i>either than or before</i>	If you don't see an acknowledgement, you need to send your EXCHANGE again -- click "REPLY" again. You have to see an acknowledgement.
5.	If you copy their exchange, click STATUS button to finish the contact	They have acknowledged YOUR EXCHANGE STATUS acknowledges THEIR ("QSL") and sends 73 Type in the information to N3FJP at some point and let the contact manually. If there was a lack of acknowledgement on their side, you'll have to send you
	Go back to Step 2 and call CQ again	

BUTTON	SENDS:
CQ	CQ WFD
REPLY	3I NFL (our exchange)
INFO	R 3I NFL (reply to their exchange)
STATUS	QSL 73 (You may wish to append CQ FD to this if our experience shows it works...)

**HUNT & POUNCE WITH JS8
USING ONLY TWO BUTTONS!!**

No.	Item	Detail
1	Make sure your chosen transmit slot ("red lines") are in a somewhat "clear" area	Otherwise folks won't be able to hear your ANSWER You do NOT have to be on top of the station calling CQ -- the system decodes and shows you EVERYONE in the passband.
2.	When you see a CQ, click on that station and click REPLY button	It may take some seconds before it transmits because it has to wait for the start of the next interval This will both call them, give your callsign AND send YOUR EXCHANGE
3	Watch what they send back -- you need an ACKNOWLEDGEMENT ("R" or anything similar) Hopefully they will also send THEIR EXCHANGE -- otherwise you may have to ask for it.	
4.	If you get their acknowledgement, AND their exchange, the contact is finished! Click STATUS button and start filling in the log!	STATUS will send QSL 73 to confirm receipt of their exchange and conclude the contact. In this case you probably do NOT want a CQ stuck on the end of your "status" button
	Go back to Step 2 and look for another CQ	

BUTTON	SENDS:
CQ	CQ WFD (NOT USED IN HUNT & POUNCE)
REPLY	3I NFL (our exchange)
INFO	R 3I NFL (reply to their exchange)
STATUS	QSL 73 During hunt and pounce you probably don't want any CQ appended here.

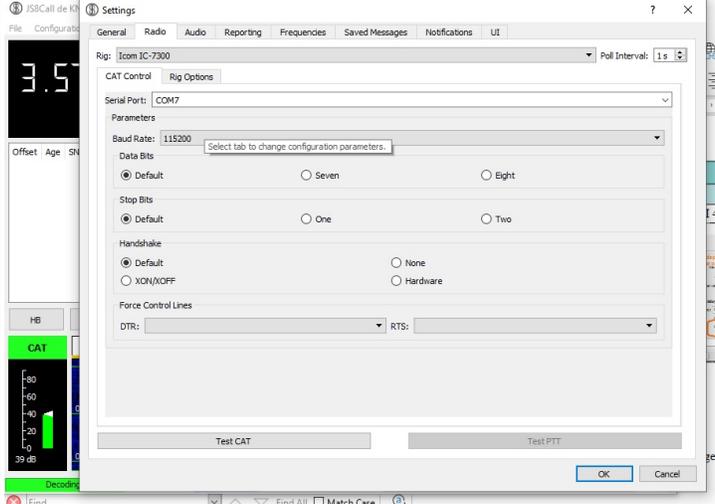
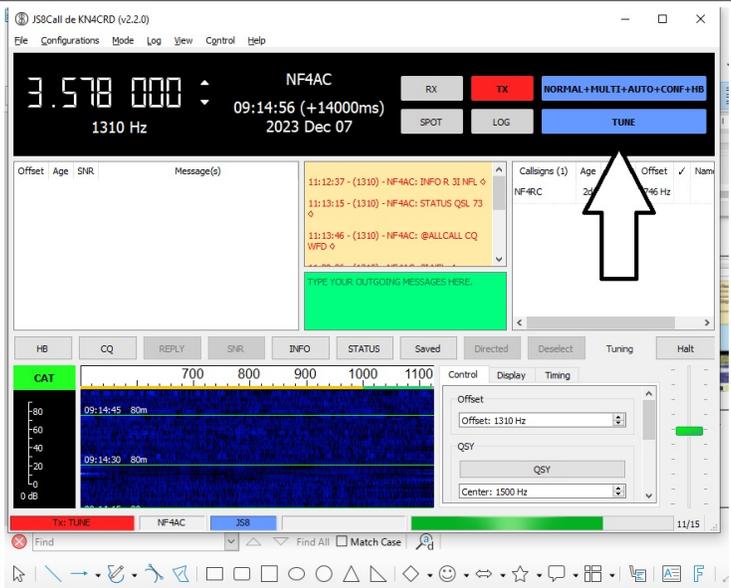
PICKING FREQUENCIES

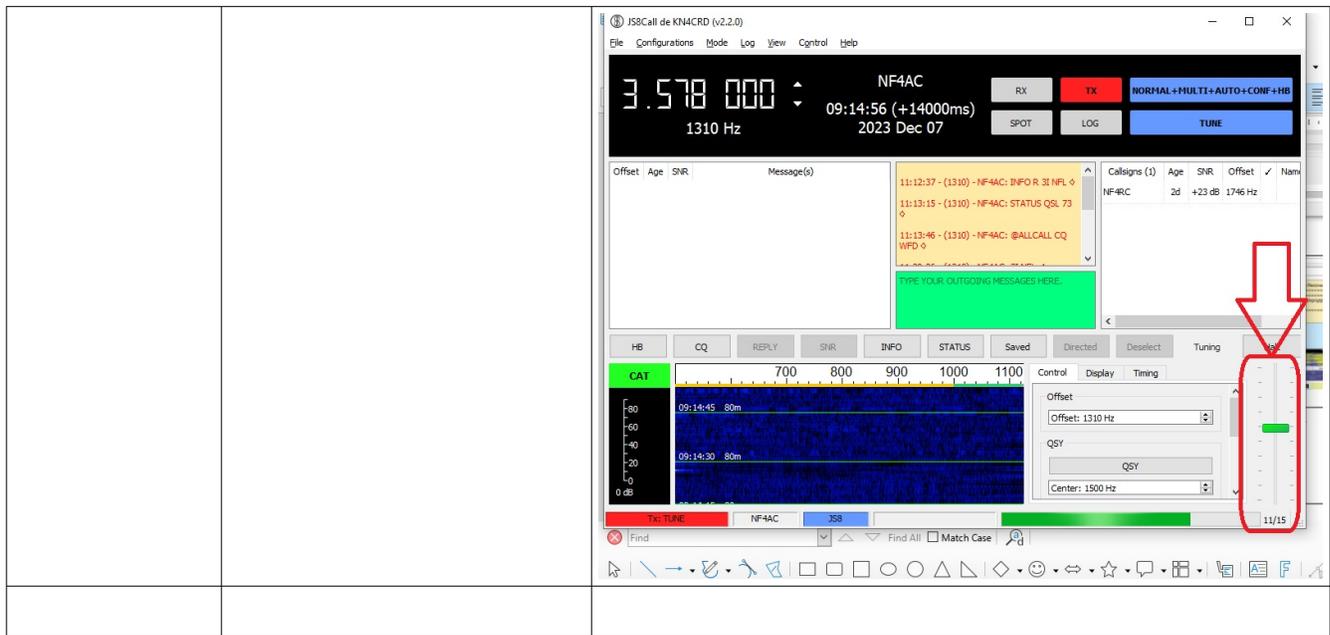
Suggested Frequencies

JS8Call has the JS8 frequencies built right in, so all you have to do is click on the desired band and it should take your transceiver right there.

MODE	TYPICAL FREQ	Comments
JS8	1.842 MHZ 3.578 7.078 14.078 21.078 28.078 50.318	Remember there is no WFD operation on 60 meters, 30 meters, 18 meters, 12 meters.
PSK31	1.838. 3.580. 7.070 or 7.080 14.070-14.072 21.080 28.120 50.290	see https://www.qsl.net/darn/PSK31.htm see https://bpsk31.com/operation/
RTTY	3.560-3.600 7.080-7.100 14.080.5 - 14.150 21.080.5 - 21.150 28.080.5 - 28.200	See: https://www.aa5au.com/rtty/rtty-sub-bands/

Setting up the Transmitter Our Call Sign is NF4AC

ICOM SETTINGS FOR JS8		
ITEM	CHOICE	COMMENT
<p>RADIO File Settings "Radio"</p>	<p>ICOM7300. We will probably have all the settings figured out but in general, we set the rigs for 115200 baud and do not use DTR or DTS as part of the transmission control, using CAT instead.</p>	
<p>MODULATION To get a solid tone, e.g. for adjusting drive modulation at the start of configuration</p>	<p>Use TUNE button on JS8 With the ICOM 7300 Transmitter set for 100 watts, you want the modulation level adjusted so that you get in the range of 75 watts output, which should involve little to no ALC visible on the 7300, and thus be WELL within the linear range of the transmitter.</p>	 <p style="text-align: center;">Adjustment of the modulation level:</p>



SETTINGS FOR WINTER FIELD DAY OPERATION

<p>SPOTTING File Settings Reporting</p>	<p>It appears to be both legal and useful to turn on "spotting" as this will send information to the PSKReporting network.</p> <p>PSKReporter https://pskreporter.info/pskmap.html is able to show CW, JS8, RTTY, and a host of other modes BY BAND so can easily find signals!</p> <p>The Incident Commander may be searching for spots proving activity on needed bands!!</p>
<p>MODE (Normal FAST 24 spm TURBO -- 44wpm</p>	<ul style="list-style-type: none"> Probably use either Normal Fast or TURBO speeds for transmitting. Set to decode ALL speeds -- you may want to answer someone at the same speed they are SENDING. It works to have an entire QSO with one station sending at one speed and the other station at a different speed as long as both stations have MULTI (MODE Enable simultaneous decoding of all speed) enabled. <ul style="list-style-type: none"> Not sure how many WFD participants will understand this, so you may have to change speed occasionally. If you right click on a station in the right hand pane, you can select the option to jump to THEIR speed. Probably want to DISABLE heartbeat acknowledgement (don't

waste time on that)

File | Settings | General

This is certainly subject to change as we gain experience with Winter Field Day, but it appears to us that:

- The emphasis is on getting exchanges across, not on requesting or sending signal to noise ratios or Maidenhead grid locators
- The primary canned texts that will be needed include
 - ability to send our exchange
 - ability to send "R" to acknowledge an exchange and send our exchange
 - ability to send QSL and 73 to indicate we acknowledge and the contact is concluded.

The JS8 screen has only a few "canned" text but we suggest using them as follows:

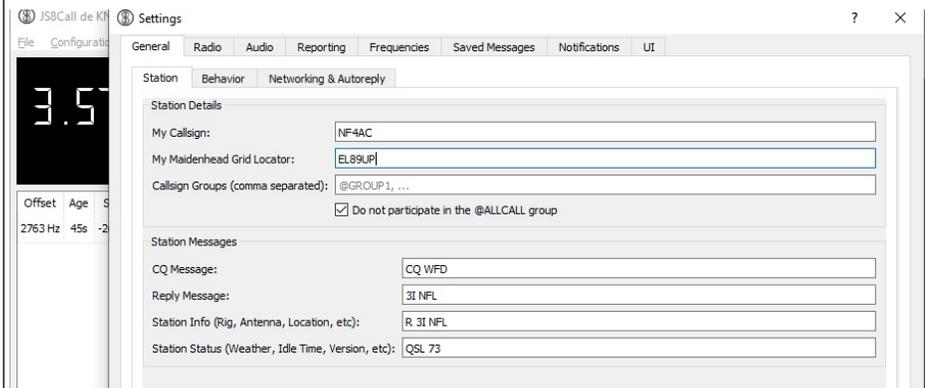
CQ Message: CQ WFD

Reply: 3I NFL (hence, our exchange)

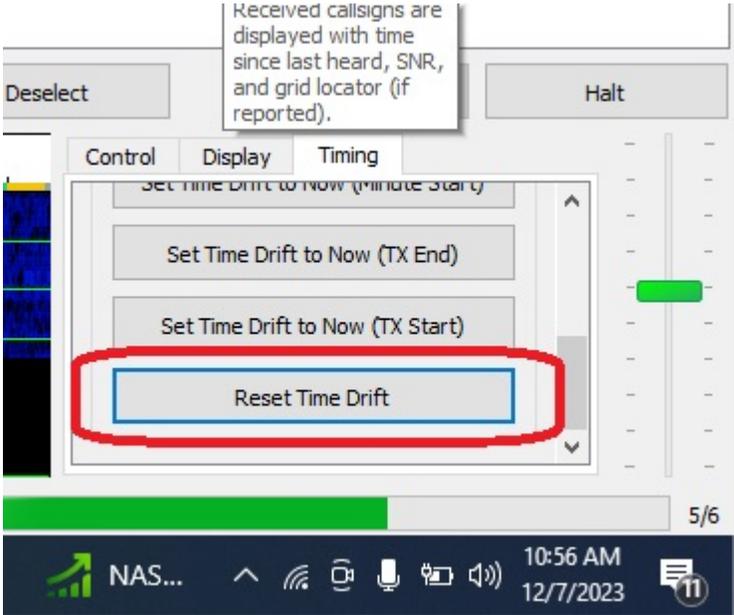
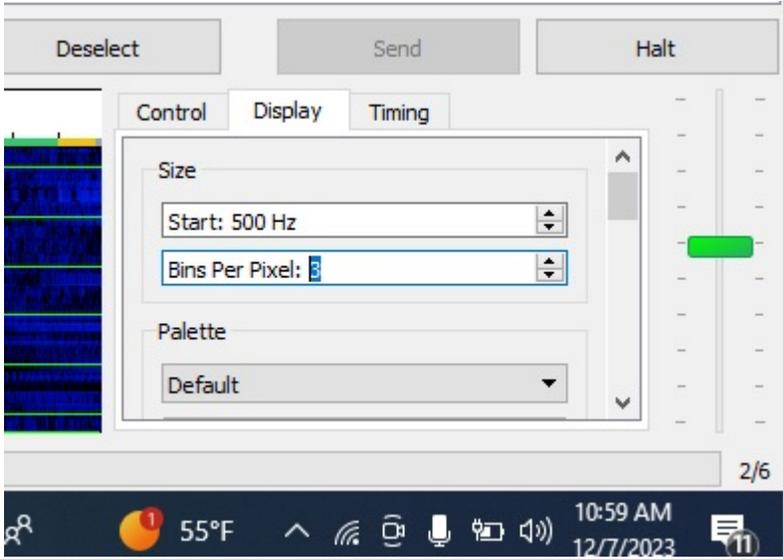
(Station) **Info:** R 3I NFL (to reply to someone who has sent us their exchange)

(Station) **Status:** QSL 73 (to acknowledge and conclude the contact)

Thus the File | Settings | General would look like this:



CQ	CQ WFD
REPLY	3I NFL (our exchange)
INFO	R 3I NFL (reply to their exchange)
STATUS	QSL 73 (You may wish to append CQ FD to this if our experience shows it works...)

<p> FONTS</p>	<p>You can change the size of the displayed fonts: File Settings UI (stands for "user interface")</p>
<p> TIME DRIFT</p>	<p>When you start, presuming we are synchronized to a gps-based time raspberry pi, you probably want to "RESET TIME DRIFT" -- tab and button, bottom right corner.</p>  <p>The screenshot shows a software interface with a 'Timing' tab selected. A dropdown menu is open, showing several options: 'Set Time Drift to Now (Minute Start)', 'Set Time Drift to Now (TX End)', 'Set Time Drift to Now (TX Start)', and 'Reset Time Drift'. The 'Reset Time Drift' option is highlighted with a red rectangular box. A tooltip above the menu reads: 'Received callsigns are displayed with time since last heard, SNR, and grid locator (if reported)'. The interface also includes buttons for 'Deselect', 'Halt', and a 'Control' tab. The bottom status bar shows the time as 10:56 AM on 12/7/2023.</p>
<p> WATERFALL FREQUENCIES</p>	<p>You can change the frequency span covered by the waterfall. You probably want 3 or even 4 "bins per pixel" so that you can see all the audio spectrum.</p>  <p>The screenshot shows the same software interface with the 'Display' tab selected. The 'Bins Per Pixel' setting is set to 3. Other settings visible include 'Start: 500 Hz' and 'Palette: Default'. The interface includes buttons for 'Deselect', 'Send', and 'Halt'. The bottom status bar shows the time as 10:59 AM on 12/7/2023.</p>

ADDITIONAL CONTEST SAVVY

1	Picking your TRANSMIT spot in the waterfall	<p>You automatically receive and decode EVERYTHING so there is no need to pick a "receive frequency". You want to pick a TRANSMIT FREQUENCY (red box) that is somewhat in the "clear"</p> <p>Faster modes (TURBO) take up more space. If the spectrum is quite full, you may need to use slower modes (NORMAL) to "fit in"</p>
2	Decoding	Be certain that you are decoding ALL speeds MULTI displayed in the upper right blue bin
3	Transmit Modulation	Be certain that your modulation is about 75watts output, with the ICOM set for 100watts -- use the TUNE button and the green slider (bottom right) to fix this.
4	If it won't transmit	Probably you havent set the auto codecs, or you don't have the 7300 set to use USB input for modulation
5	Clicking on stations	<p>It doesn't work as easily as WSJT-x which could be set to automatically answer the first station decoded....</p> <p>Nope, when you call CQ and a bunch of folks answer, you must CLICK on the one you wish to respond to!</p> <p>And if you get no answers, you must KEEP CLICKING CQ to do it again, because the fastest IT will do it automatically is every 1 minute and that is a long time to wait.</p>
6	Running a Frequency	<p>This is very easy.</p> <ol style="list-style-type: none"> 1. Click CQ until you get an answer 2. Click on the person who answered - they may even give you their exchange! 3. Click REPLY to send your Exchange by itself, or INFO to send R (acknowledgement) + Your Exchange 4. While the thing is sending, type everything you need into N3FJP during the down time 5. Click STATUS to send QSL 73 <p>Proceed back to #1</p>
7	Hunt and Pounce	